The Governance of Land Use in the Netherlands

THE CASE OF AMSTERDAM

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Foreword

How land is used affects a wide range of factors – from day-to-day quality-of-life factors such as the availability of food and clean water and the length of daily commutes, to the long-term sustainability of urban and rural communities, including the possibility for climate change adaptation and mitigation. How governments regulate land use and address public and private investment, how competencies are allocated across levels of government, and how land use is taxed, are critical for all of these things and more.

This study of the governance of land use in Amsterdam illustrates the importance of responsive and collaborative approaches to addressing such issues as housing demand (particularly affordable housing), the need for high-quality public amenities, the importance of transportation investments and the possibilities for sustainable urban development, including a circular economy. The Netherlands, and Amsterdam in particular, are renowned for collaborative and consensus-based approaches to spatial management that have arisen in part due to a century-long tradition of water management. Metropolitan Amsterdam is a highly polycentric region and its commitment to co-operative governance has been critical to the region's success. But with a growing population and economy, the present informal approach to metropolitan governance may struggle to meet the challenges ahead.

This study takes place in the midst of an important new legislative change to the spatial planning framework in the Netherlands. The new Environment and Planning Act adopts an innovative and flexible approach to spatial management – one that challenges planners to embrace highly inter-sectoral approaches to spatial development, and encourages experimentation and flexible uses where appropriate. As the new act is implemented, other OECD counties will likely look with interest at this novel approach. The case of Amsterdam also highlights the importance of thinking about spatial development in a holistic way – considering not just those elements that are part of the formal land-use planning system, but also the wide range of policies beyond it that impact spatial developments. Fiscal relations and instruments are among the most important in this regard.

This study examines Amsterdam's fiscal environment and proposes additional tools to help the city meet its spatial development goals. It further points to the urgency of effective metropolitan governance and the need for this function to evolve beyond the current informal approach. Finally, it discusses the implications of the new Environment and Planning Act, including the need for its implementation to be properly resourced and the heightened importance of effective public engagement.

This report is part of the OECD's Regional Development Policy Committee's and its Working Party on Urban Policy's and the Working Party on Rural Policy's programme of research on the governance of land use. This study of spatial and land-use planning in Amsterdam is the fourth of several land-use studies that the OECD has undertaken. This report, together with other governance of land-use case studies, have in turn informed *The Governance of Land Use in OECD Countries: Policy Analysis and Recommendations*

(2017), which provides policy analysis and a synthesis of the main recommendations from OECD work on land use. The OECD has also produced a companion volume to this report – *Land-Use Planning Systems in the OECD: Country Fact Sheets* (2017) – which provides a descriptive overview of land-use planning systems across OECD countries.

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Acronyms and abbreviations

Barro	Spatial Planning (General Rules) Decree *Besluit algemene regels ruimtelijke ordening*
Bro	Spatial planning decree *Besluit Ruimtelijke Ordening*
CBS	Bureau for Statistics *Centraal Bureau voor de Statistiek*
CPB	Bureau for Economic Policy Analysis *Centraal Planbureau*
EC	European Commission
EU	European Union
FUA	Functional urban area
GDP	Gross domestic product
GLA	Greater London Authority
IAO	Informal Consultation Amsterdam Agglomeration *Informal Agglomeratie Overleg Amsterdam*
ICT	Information and communication technology
MIRT	Multi-annual Infrastructure, Spatial Planning and Transport Programme *Meerjarenprogramma Infrastructuur, Ruimte en Transport*
MRA	Amsterdam Metropolitan Area *Metropoolregio Amsterdam*
NZKG	North Sea Canal Area *Noordzeekanaal*
ÖROK	Austrian Conference on Spatial Planning *Österreichische Raumordungskonferenz*
PBL	Environmental Assessment Agency *Planbureau voor de Leefomgeving*
PRES	Regional Economic Structure Platform *Platform Regionale Economische Structuur*
PRO	Planning Platform *Platform Ruimtelijke Ordening*
RAI	Regional Authority Index
RDA	Regional development agencies

SCoT	Territorial Coherence Plan (France) *Schéma de Cohérence Territoriale*
SME	Small and medium-sized enterprise
SVIR	National Policy Strategy for Infrastructure and Spatial Planning *Structuurvisie Infrastructuur en Ruimte*
TDR	Transfer of development rights
WABO	Environmental Act (General Provisions) *Wet algemene bepalingen omgevingsrecht*
WGR	Joint Regulations Act *Wet gemeenschappelijke regelingen*

Executive summary

Assessment

Amsterdam and its metropolitan area are dynamic and growing, and face significant land-use pressures

Amsterdam has a growing economy, dominated by its services sector, and is well connected to the rest of Europe – its port and nearby international airport are European hubs. The city's population is anticipated to increase by 23% between 2016 and 2040 (from 845 100 to 1 042 200), mostly due to internal and international migration, and an estimated 70 000 new residences will be needed by 2040.

This growth presents many opportunities for the city to make more effective use of its underused spaces and to upgrade buildings and infrastructure. However, it also creates challenges in terms of how to balance among the different uses for land – businesses, industry, infrastructure, green space, amenities and housing (especially for low- and middle-income residents and students). The city is entering a period of intensive investment that will shape its landscape, built environment and relations with other municipalities for years to come.

Amsterdam has ambitious spatial planning objectives and a strong planning tradition

The city's strategic spatial plan is grounded in the idea that economic development and environmental sustainability are mutually reinforcing aims. The plan has multiple goals: increasing housing density, transforming mono-functional areas into mixed-use (residential and commercial) developments, improving regional transport, increasing the quality of public space, investing in green space, and preparing for a post-fossil fuel era. Planners in Amsterdam have a tradition of taking initiative and they have a strong culture of mutual co-operation, rooted in a century of water management.

Effective metropolitan governance will be critical to the city's success

Amsterdam is part of a much larger metropolitan area with multiple urban centres; in fact, the Amsterdam Metropolitan Area (MRA) is one of the most polycentric metropolitan regions in the OECD. Only one-third of the area's population lives in Amsterdam. Like the city, the metropolitan area is also growing; by 2040, it is expected to increase by 20%, and an estimated 250 000 new residences will be needed. Currently, it is governed by an informal co-ordination body with representatives from 34 municipalities, 2 provinces and the regional transport authority itself, composed of 15 municipalities.

The body has a limited budget and no binding mechanisms. The regional transportation authority covers just 15 municipalities.

The 2016 Environment and Planning Act will challenge planners to work in new ways

The 2016 Environment and Planning Act merges 26 separate acts, including the former Spatial Planning Act. As of 2019, municipalities will adopt one plan for the entire territory, encapsulating all applicable zoning regulations and administrative laws. These new plans will be much broader, integrating rules and regulations for the governance of land use across a number of policy areas – nature, water, construction, living, sustainability – and will speed up decision making for new developments. This will demand new ways of working and new technological approaches.

Recommendations

The Amsterdam Metropolitan Area needs more capacity to meet its spatial development goals

Municipalities in the MRA have a long history of effectively working with one another through informal partnerships. However, this informality comes with limited resources and a small administration. Recent steps by the MRA to establish a more permanent common bureau and to increase member contributions are positive, but insufficient, and the budget and staff remain small. The MRA should enhance the capacity of the metropolitan scale – this could entail increasing municipal contributions and/or establishing a more formal governance framework.

The Amsterdam Metropolitan Area should develop mutually agreed upon targets among its members and conduct ongoing monitoring and assessment

Mutually agreed upon targets will help the MRA achieve its core goals and report on progress. The MRA should also enhance the currently *ad hoc* monitoring and assessment of spatial developments. This will help ensure that there is a detailed dialogue between members up front on such key issues as when and where developments should occur, and by establishing political commitments; it will also hold members accountable.

Municipalities need resources to implement the new act

The new Environment and Planning Act will demand new ways of working, new technologies and different skills. Implementation will require ongoing monitoring and adjustment to new processes. It is anticipated that the national government will provide funds for training, but there are currently no provisions for new resources for municipalities in line with their changing functions. As the act is implemented, resource needs should be assessed and adjusted.

Amsterdam could make better use of fiscal instruments to influence how land is used

Fiscal instruments can provide powerful incentives for how land is used. Amsterdam has adopted differentiated parking and tourist taxes to reduce pressure on its city centre. However, it does not employ fiscal instruments in others areas, such as to encourage density, nor does it fully capture the real estate value or the added value from municipal investments. Much more could be done in this regard – e.g. density bonuses, land-value capture tools and congestion charges. Because the national fiscal framework can limit own-source municipal revenue, the adoption of new or expanded fiscal instruments may require national support.

It will be important to strengthen public engagement and ensure transparent processes

Amsterdam already has a strong commitment to deliberative planning, but the new act will increase the importance of this function even more. There will be a more active relationship between developers, public authorities and residents. Protracted engagement efforts would hamper more timely developments, but the planning process could easily become beholden to more powerful groups with the resources to achieve their agendas. This is the inherent risk within a more flexible approach. Decisions about land use need to navigate power asymmetries and need to balance the demands of inclusiveness, timeliness and flexibility. The city will need to play the role of fair broker and be extremely transparent about how regulatory requirements are being met and how and when stakeholders are included in decision making. These functions should be assessed and, if necessary, improved upon as the act is implemented.

Assessment and recommendations

The greatest pressures for land development and protection

A growing city with many land-use demands

Amsterdam, together with its surrounding municipalities, is an economic driver in the region and country. Its dynamic, services-dominated economy includes both major international firms and small start-ups. The city and region are well connected to the rest of Europe by rail, air and sea. Its large nearby international airport and port are European hubs. It is a place where people want to invest, work and live and especially visit, with tourism numbers growing further each year.

Present population trends show consistent growth in both Amsterdam and the metropolitan area over the next two and a half decades. The expectation is that the city will grow from 834 713 in 2016 to just over 1 million in 2040. This projected population increase of approximately 23% to 2040 comes upon sustained population growth over the past decade and a half. Population growth is expected across the Amsterdam Metropolitan Area as well – an increase of 20% to 2040.

The city's growth dynamics are creating major pressures in terms of how land is used. Already a reasonably dense city, Amsterdam has few areas into which it can expand. These space constraints limit the availability of land for new developments. Amsterdam has much higher population density than its neighbouring municipalities at 4 954 inhabitants/km^2 of land in 2015; the next highest population density is in Haarlem at 1 757 inhabitants/km^2 of land. The city also has low average home occupancy – at 1.97 in 2015, which is lower than any of its metropolitan counterparts.

The resulting rising house prices threaten the city's affordability, particularly for middle-income households which do not qualify for social housing. Meanwhile, the large social housing sector struggles to keep up with demand for affordable housing. The popularity of Amsterdam with tourists places pressure on the city's historic centre and threatens the capacity of the city's core to maintain a diversity of residential, economic and social functions.

There are long-standing debates about where expansion could occur, particularly in the area bordering the airport. Further, population growth is placing increasing pressures on the transport network which is so critical to the polycentric region's success. The demands on the city's land (and that of the broader metropolitan area) are many, and growing. The solutions to these issues will require a collaborative approach across levels of government, and from the public and private sectors.

The need to accommodate new residents and maintain affordable housing is one of the greatest challenges that Amsterdam presently faces

If housing demand cannot be adequately met in Amsterdam, there is a risk that house and private rental prices will rise to such an extent that many residents will no longer be able to afford to live there. Businesses are also affected. Such constraints can make it harder for firms to operate, find employees and maintain competitiveness while paying salaries that can compensate for higher house prices.

Land-use planning has an important role to play in meeting housing demand by opening up new areas for development, transforming existing spaces and uses, and encouraging increased density for more efficient use of space. Land-use regulations detail what can be built where, and the length of time a project takes to receive planning permission; this in turn affects construction costs, which are ultimately borne by the homeowner/renter. In these ways land-use planning and regulation influence the supply and cost of housing.

Housing prices in Amsterdam are significantly above the national average. Monthly expenditure for a dwelling with less than 75 metres of usable space was EUR 979 in Amsterdam in 2015 versus EUR 793 for the country as a whole. Private market rents have also risen in Amsterdam in recent years. Amsterdam has a larger private rental market than the national average (at just over 20%, versus 7% nationally). In 2015, the average private market rent was EUR 745.

In contrast to the Dutch housing sector as a whole, Amsterdam has a much lower proportion of owner-occupied housing (30% versus 60% nationally), and consequently a larger social rental stock (at roughly 50% versus 33% nationally), and a larger private rental market (at over 20%, versus 7% nationally). Amsterdam's large social housing stock is one of the reasons that the city has low rates of spatial segregation – low-income residents are relatively evenly dispersed among the city's neighbourhoods. In 2015, the average social rent was EUR 496 per month while the average market rent was EUR 745. It bears noting the income threshold to qualify for social rent is EUR 34 000 or below.

Recent changes to the social housing system have introduced income-based rent increases for middle-income individuals. The purpose of these changes is to incentivise those with higher incomes in the social housing sector to move, thus freeing up space for lower income residents. Since 2011, only households with an income below a certain middle-income threshold can access the social housing sector, whereas in the past this threshold was set higher. Demand for social housing remains high. As a result of these reforms, demand for private rentals, and scarcity, have pushed up unregulated rents. Demand for rental housing is set to increase as a further reduction of mortgage interest relief and tighter loan-to-value requirements force first-time buyers to wait longer to build a down payment. Further, a new social housing levy for landlords with more than ten units has been introduced; the share of commercial property holdings by housing associations has been reduced; and the sale of properties to the private market has been liberalised. The size of the housing stock held by housing associations has declined in recent years in part because of these changes.

There are competing pressures for land use and protection in the region

City planners estimate that there is currently enough space to meet growing housing demand by transforming unused or underused spaces such as excess office space or former industrial lands. Ingeniously, the city has come up with some unique solutions, such as the creation of residential islands in its bay which are critical in meeting the

housing needs of a growing population. However, in the coming years, much more housing is needed in both the city and surrounding areas. There is also a need to have space for public amenities, businesses, cultural spaces and so on.

For developers, concentration areas are more difficult to develop than expansion districts because there are often many more parties and stakeholders involved than is the case with an expansion district; to a certain extent, higher market prices compensate for that disadvantage. However, questions remain as to whether this housing demand can feasibly be met and whether the region can avoid developing large housing districts in areas that are now green. Housing demand also raises questions about the height and density of new developments. In order to accommodate a growing population, taller apartment buildings may be warranted than have previously been permitted, encouraged or deemed desirable.

The huge volume of urbanisation over the past 60 years has shown that pressures for expansion are strong. Despite long-standing consensus about buffer zones and noise contours, certain areas are under increasing pressure to develop. There are also growing tensions between uses of agriculture, green space and natural amenities on the outskirts of the city. Owing to demographic and socio-cultural developments, recreation outside the city is expected to rise by 30% to 2040. The number of tourists coming to the region is growing by 8% a year, and they increasingly visit areas outside of Amsterdam's city centre.

There are also growing conflicts with the agricultural uses of land surrounding the city. Large-scale farms that serve the global markets in the peatland meadow areas (which are often of great cultural and historical significance) do not combine well with the spatial and environmental goals of maintaining an open countryside, ensuring sustainable water management, preserving biodiversity and reducing CO_2 emissions.

Projected climate change impacts – more frequent and severe storms and flooding together with rising ocean levels – challenge established and new land uses. The Netherlands has a long history of flood management and invests in strengthening primary water defence lines along the sea coast and elsewhere. In terms of climate change mitigation, there are ambitious plans for sustainable energy development in the region which require land in some cases; for example, the space requirements for more wind turbines in Flevoland and increasing land requirements to accommodate "solar fields". These uses, in turn, need to be compatible with water management. There are also plans in Amsterdam to transition to a "circular economy" and in doing so, reduce waste of all kinds (e.g. recycling construction materials, capturing wasted heat from manufacturing or industrial processes).

Aligning land use and transportation investments

New road and public transport investments are increasing the metropolitan area's connectivity, particularly for growing areas, such as the area surrounding the airport which has become a major employment hub. However, there are inherent tensions between economic development, job creation and connectivity on the one hand, and environmental protection, congestion and liveability around such major hubs such as the Schiphol Airport and port and their surroundings on the other hand. While these tensions have long been apparent, increasing activities of these industries together with population growth further challenge the ability to reach balance between different users and usages.

There is growth across all forms of mobility in the city of Amsterdam due to population and employment growth and increasing numbers of tourists, which is putting pressure on all forms of transportation, including sustainable transportation. The majority (63%) of Amsterdammers use their bicycles on a daily basis. Just over a third of traffic movement in the city is by bike, compared to 22% by car and 16% by public transport; in the city centre, 48% of traffic movement is by bike.

A major task for local transportation is to balance the interests and needs of different users – e.g. bicycles competing with e-bikes or mopeds and pedestrians competing with bicycles for street space. Further, there is a need to balance sustainably with accessibility; that is, as automobile dependence lessens, to match or exceed the accessibility of the car through sustainable transport options. How land is used – density, dedicated infrastructure, mixed-use neighbourhoods – is a critical factor in achieving this balance.

Tourism is transforming land uses in Amsterdam's urban core

Amsterdam has a strong and growing tourism industry. Hotel room occupancy is increasing and is growing faster than the national average. In 2014, the Amsterdam Metropolitan Area took in 42% of the hotel bookings in the country. The scale of Amsterdam's tourism has a large impact on the city and its neighbourhoods, particularly the central area where the vast majority of hotels and tourists concentrate. Excessive numbers of tourists can detract from the liveability of an area by increasing congestion and placing stress on local infrastructure, including water systems and waste management. It can also limit the diversity of businesses and shops in the city, particularly in the centre of the city, creating a place that then loses meaning and connection to the daily life and needs of its residents.

Further, the growth of accommodations in the unregulated tourist economy can contribute to rising private rental costs in certain neighbourhoods. Presently there are an estimated 14 000 Airbnb flat rentals on the market in Amsterdam. Available data are largely composed of estimates based on listings and information from the main rental platforms. Amsterdam has compiled and mapped information from public listings to help understand the scope of Airbnb listings in the city and their prevalence in specific neighbourhoods. However, there is presently limited research on the impacts of this phenomenon on housing affordability and Airbnb is just one of the many companies worldwide that provide such services. A recent study of these effects in New York City found that for each of the top 20 neighbourhoods for Airbnb listings in Manhattan and Brooklyn, average rent increases were nearly double the citywide average from 2011 to 2015. Cities such as Berlin and Barcelona have adopted strict regulations to combat this effect.

Amsterdam owns the majority of the city's land and has a ground lease system

Since 1896, the city of Amsterdam has kept most of its land: it still owns approximately 80% of all the land within its boundaries. On a large percentage of this land a ground lease has been granted. This means the city remains the owner of the land while the ground lessee or leaseholder is entitled to the benefit of the use of the land for a long period, in return for a ground rent (canon) payable at regular intervals. Until 2016,

the city had a system of a ground lease with periodic revision - the amount of the ground rent was specified at the beginning of each new 50-year term.

In 2016 Amsterdam shifted to a perpetual ground lease system. In this new system, the city calculates the amount that leaseholders have to pay for the use of the (built-up) land it owns only once and for all time. When the city issues ground for new development an eternal ground lease contract is issued. For existing contracts, the city offers the possibly to ground leasers to transfer the existing contracts (of 50 years) into perpetual contracts. This provides leaseholders more clarity about the cost of their ground lease. The ground rent is then only indexed annually (inflation). While the new perpetual system will enable the city to capture value from change of use at the point when that change is occurring, it will no longer capture changes in value over time to be used for public benefit.

A spatial and land-use planning system in the midst of change

The Netherlands has self-binding strategic spatial plans for each level of government

The Spatial Planning Act (2008) is the main framework legislation for spatial planning in the Netherlands. It, together with its accompanying regulations, provides the legal basis for structure plans, land-use plans and project plans. The two major types of spatial plans in the Netherlands are structure plans and land-use plans. By law, all three levels of government must prepare structure plans that outline their main spatial policy objectives and the policies to pursue them. Structure plans are strategic spatial plans.

Structure plans are self-binding – in other words, the plans of an upper level government are not legally binding on that of a lower order one. However, where there are disagreements between levels of government, the provincial or national government can issue ordinances that request a change in lower level plans to conform to higher level plans. If the lower level does not comply, it can be forced through directives ordering it to do so. Further, national and provincial governments can directly impose land-use plans on municipalities. Horizontal co-ordination at all three levels of government occurs through the legal requirement to co-ordinate spatially relevant decisions between the responsible public authorities at the respective level of government.

The framework documents are flexible so that they can serve the needs and interests of each level of government and community as it sees fit. Each jurisdiction is free to decide its contents. However, spatial planning tools and instruments are the same for all levels of government. Apart from this, governments are free to choose a form that best suits the spatial subjects, the method of work, and their own political and administrative culture.

The spatial planning system as a whole operates to a high degree on the basis of trust that actors across various scales will implement the desired spatial objectives, such as the protection of green space, and work closely with each other to meet emerging challenges. For Amsterdam, one of the greatest current challenges is to build more housing to meet the needs of a growing population.

The National Structure Plan: – "a competitive, accessible, livable and safe Netherlands"

The National Structure Plan is a strategic spatial vision for development that focuses on issues that are important for the entire country as a whole. It describes eight major goals for the government to the year 2040 and sets three national objectives to the year 2028. The National Structure Plan aims to reduce duplication between levels of government; make the regulatory system less complex; and devolve as many responsibilities for spatial planning down to the relevant subnational governments. In turn, the national government maintains core functions across 13 areas of national importance.

This represents a major policy shift for spatial planning at the national level. While in the past the national government played a key role in urban planning by, for instance, prescribing percentages of built land in inner city areas, or defining national buffer zones and objectives for restructuring, it only intervenes now in the urban regions around major transport hubs and ports and will only act in co-ordination with local and regional authorities.

North Holland's Structural Vision – "quality through versatility"

At the provincial level, North Holland's structure plan (North Holland Structural Vision 2040) responds to anticipated spatial conditions over the longer term. The plan covers all subjects with spatial implications: the economy, environment, landscape, nature, spatial quality, agriculture, water, traffic and transport, and cultural history. The level of detail on each subject differs, with far more attention given to the province's three main areas of interest: 1) climate change adaptation and mitigation; 2) sustainable development; and 3) spatial quality, which includes the preservation of cultural and natural landscapes and green reserves around cities.

The regulation attached to the vision contains some rules that municipalities need to take into account, for instance, it includes rules about the protection of green buffer zones and the protection of rural spaces from urbanisation (unless shown to be absolutely necessary).

Amsterdam's Structural Vision – "economically strong and sustainable"

Amsterdam's Structural Vision (2012-40) sets an ambitious programme of spatial development for the territory which is at once based on existing spatial structures, changes that are presently taking place and planned future need – the most pressing of which relates to accommodating future population growth. It is grounded in the central idea that economic development and sustainability are mutually reinforcing aims.

The city aims to: increase density in order to accommodate an estimated 70 000 new dwellings between now and 2040; transform monofunctional areas into mixed-use ones; enhance regional transportation and increase the number of links between nodes; increase the quality of public space through high design standards and by allocating more space to walking and biking; invest in the recreational use of green space and water and make it more accessible; and prepare for a post-fossil fuel era.

Land-use plans are the main legal zoning instrument. They form the basis upon which planning applications are decided. Zoning plans are elaborated on the basis of extensive study and public engagement and are updated every ten years.

A decreasing role for active land-use planning in the city

In the Netherlands, land use is much more than "passive planning" (waiting for someone else to take the initiative, and then trying to influence that); it includes "active planning" (taking the initiative to make the desired change come about). The city acquires land, prepares it for construction and use and then issues the land to the market. The role that the city takes on this regard is not statutorily defined.

However, active land-use planning is being practised somewhat less of late. The city's spatial development strategy is shifting from being supply driven to being demand driven. The city will reduce the risks it bears by taking on smaller scale projects and adopting a phased approach to new developments. This changing role for public-led development is particularly impactful for certain types of developments, such as industrial estates, for which municipalities have been the main providers. With a shift in the scale and scope of projects pursued by active land-use planning, there is an increasing need for private sector developers and investors to be more involved in realising the city's spatial development objectives.

The new Environment and Planning Act will create major changes for spatial planning and the governance of land use

In 2016, a new Environment and Planning Act (*Omgevingswet*) was adopted which creates a significant change to the planning framework in the country. The act merges 26 separate acts into 1; merges 120 Orders in Council into 4; and simplifies over 100 ministerial regulations in order to create greater coherency.

The new act will come into force in 2019 and municipalities are preparing now for this change. The aim of the new act is to further integrate the rules and regulations for the governance of land use across a number of policy areas – e.g. nature, water, construction, living, sustainability – and to speed up decision making for spatial projects.

A major change at the municipal level is the adoption of one plan for the entire territory that will encapsulate all applicable zoning regulations and pertinent administrative laws. All local land-use plans will be transferred to the Environmental Plan and local governments will have a period of ten years to transform them. Over time, it is anticipated that some areas will have a high degree of protection, such as heritage sites, while others will have far fewer rules and constraints and be more open to experimental and flexible uses.

The new act ushers in a departure from the philosophy of "static planning". As such, it builds on key strengths within Dutch spatial planning – namely a high degree of trust between actors, a culture of co-operation both among municipalities and between levels of governments, and a commitment to core planning values. The idea of flexibility in terms of how land is used supports such important agendas as Amsterdam's shift to a "circular economy" – a life cycle approach for waste resource/by-product management.

Co-ordinating land use at the metropolitan scale

Effective metropolitan governance is critical to the region's success

Amsterdam is one of the most polycentric regions in the OECD – there are multiple urban centres in the wider functional urban area (FUA). Amsterdam's FUA – the territory across which people live, work and commute – encompasses 57 municipalities in total. Of

this, eight cities beyond Amsterdam form the metropolitan area's urban core while the remaining form the commuting zone. The city's FUA population was 2 452 659 in 2014, which is much higher than that of the city of Amsterdam alone, which stood at 810 937 (2014). In such regions, agglomeration advantages shift from local urban systems towards a broader metropolitan scale, leading to more dispersed employment functions, amenities and services. In greater Amsterdam, polycentricity has been driven in large part by growth in automobile commuting and an expansion of the roads network.

From the location of transport infrastructure to the preservation of green spaces and the costs of housing there are a myriad of interactions that connect Amsterdam's metropolitan area. The management of land across this space requires a co-ordinated approach. On day-to-day planning matters, Amsterdam city officials work closely with other municipalities in the region, the provinces and water boards. Also, the city of Amsterdam is part of a regional transportation body (Transport Authority Amsterdam), which is a formal consortium of 15 municipalities with policy and grant-funding powers to address regional transportation issues (excluding trains). Prior to 2015 this organisation was a city-region and had a wider range of functions.

Broader metropolitan-wide governance has evolved since the 1970s through various forms of informal co-operation and yearly conferences. Presently, the Amsterdam Metropolitan Area (Metropoolregio Amsterdam, MRA) is an informal partnership of 33 municipalities, the provinces of North-Holland and Flevoland, and the regional transportation body. The MRA's work is focused on three priority areas: strategic planning, traffic and economic development.

Beyond metropolitan interdependencies, there is a strong dependency on national law and resources to achieve spatial planning objectives; on regional agreements to co-ordinate legally binding planning instruments within the MRA, such as the new environmental visions; and a strong dependency on national housing market regulations and regional agreements to maintain affordable housing and low rates of spatial segregation within the MRA. Thus, effective multi-level governance across national, regional and municipal partners is also critical and the MRA is an important platform through which to achieve this.

Short- to medium- and long-term agendas drive the work of the Amsterdam Metropolitan Area

The MRA has developed both short – to medium – and long-term agendas to guide collaborative action. For example, the MRA agenda outlines the need for 250 000 homes to be built between 2016 and 2040 across the metropolitan area. The MRA's long-term agenda, "Development Scenario for the Amsterdam Metropolitan Area in 2040", informs the structural visions drawn up by municipalities and provinces as well as regional policy. It was elaborated through a highly involved process of metropolitan consultations in 2007.

The development scenario provides a diagnosis of trends in the region and describes key spatial, social and economic tasks for the future around the themes of: climate change; environment, energy and sustainability; the economy and globalisation; accessibility mobility and infrastructure; demography, socio-economic development and leisure; and the metropolitan landscape. It is, however, important to note that the MRA's short- and medium-term agendas are not part of an agreed upon planning routine with regular reviews, and while they inform municipal plans, they are not legally binding upon them.

The Amsterdam Metropolitan Area has a very small administration and limited resources to tackle common challenges and develop co-ordinated actions

Meeting growing housing demand, developing new spaces for business and industry and increased transportation connectivity demands co-ordinated responses. Municipalities in the Amsterdam Metropolitan Area have a long history of working with one another through informal partnerships. This has generally worked well in the past. However, this informality comes with limited resources and small administration, which limits the metropolitan governance function. The day-to-day work of the organisation has been fulfilled in large part by seconded public servants from the largest municipalities and the provinces.

Recommendations

Aligning resources with spatial planning ambitions

Use a broader array of fiscal instruments to shape spatial outcomes

How land is used is the outcome of a complex array of interactions. While the planning profession has many tools with which to shape land use, there are other elements beyond the purview of the planning system that can equally have influence. One of the most important such elements is finance – from the incentives that local governments face based on national subventions to targeted fiscal incentives such as density bonuses that encourage desired behaviour. Fiscal systems, instruments and tools affect land use in a wide range of ways. Such incentives should at minimum be aligned with spatial development objectives or better yet, structured to specifically encourage desired outcomes, such as transit-oriented development.

Amsterdam presently uses few fiscal instruments to shape spatial outcomes. It has adopted parking taxes that vary depending on the level of congestion in the city (parking in the centre costs more than that which is further out), combined with special rates for residents. This is a well-structured system. Amsterdam also has a tourist tax which is set at 5% (for vacation rentals including for Airbnb accommodations). The city aims to create a differentiated tourist tax with a higher tax rate for hotels in the centre and lower ones further out that may help reduce the concentration of tourism in the historic centre. This is a prudent policy.

However, in other elements of spatial policy, fiscal instruments are lacking. For instance, the city does not currently employ any fiscal instruments to encourage sufficient density despite this being a critical spatial objective in order to meet growing housing demand. There are many other fiscal instruments that could be drawn on in order to complement spatial development objectives, such as brownfield redevelopment incentives which create an important inducement for private developers to take on projects in areas that can be more expensive to develop because of the presence of existing structures, the need for soil remediation, higher land costs and complex ownership rights. Road congestion pricing could be used to encourage transit-oriented development.

The expansion of most fiscal instruments requires a change to national law (the Municipalities Act). The national government has recently displayed interest in fiscal reform at the local level. For example, a new type of property tax and residential tax is

being considered. Within these discussions, the city of Amsterdam has indicated an interest in adopting a "green property tax" that would link property taxation to home energy efficiency. Thus, there are ongoing discussions between the national government and Dutch municipalities about how such reforms might proceed. Within this discussion it is important to consider the interdependencies between the system of local taxation and finance as a whole. Beyond this, alignment with local spatial development objectives is also critical.

Making the most of public investments – land-value capture mechanisms

A consequence of Amsterdam's current economic strength is a steady increase in the value of land and property within the city and region. Most notably, this is reflected in a steep rise in housing prices. The long-run prosperity of Amsterdam requires that the city continue to provide high-quality public services and to invest in public infrastructure. One obvious way for the city of Amsterdam to finance the costs of maintaining high-quality public services is to raise revenue from the rising value of land and property. Good public services and investments in public infrastructure are capitalised into high property values. Rather than allowing private individuals and businesses to retain the entire market value benefit from increased property values attributable to public spending and investment, the city should take steps to "capture" a portion of the increases in value. One option is for the city to increase its reliance on land-based sources of local revenue – e.g. raising revenues from the value-based property tax, and/or by various "value-capture" mechanisms linked to specific public infrastructure projects.

With a shift to a perpetual ground lease system, it is noted that the city relinquishes a useful land-value capture tool. In this new system, the city calculates the amount that leaseholders have to pay for the use of the (built-up) land it owns only once and for all time. The ground rent is then only indexed annually to inflation. While the new perpetual system will enable the city to capture value from change of use, at the point when that change is occurring, it will not capture changes in value over time that occur for other reasons.

Presently, the city does not fully capture the real estate value or the added value from municipal investments. This is a missed opportunity. In many cases, the national fiscal framework limits own-source municipal revenue and so the adoption of any new or expanded fiscal instruments requires national government support as well.

Preparing for the implementation of the new Environment and Planning Act

Municipalities need to be properly resourced in order to implement the new act

Municipalities are now preparing for the implementation of the new Environment and Planning Act in 2019. The act integrates laws across multiple policy fields, including environment, nature, sustainability and health. It will require new ways of working, new technologies and different skills for public servants than in the past. For example, it places an increasing emphasis on monitoring and assessment. These changes need to be properly resourced in order to be effective – costs for the implementation of the legislation should not be borne by municipalities alone.

It is anticipated that the national government will provide funds for training to assist municipalities and water boards to implement the new act and adjust to new ways of working. However, these are not as yet determined. The new Environment and Planning Act does not directly include provisions for new resources for municipalities in anticipation

of their changing functions. While long-term cost savings are estimated at between EUR 35 million and EUR 51 million a year for municipalities as a result of the act, there will be significant short-term costs which are difficult to estimate. Implementation will require ongoing monitoring and adjustment to new processes. The impact on day-to-day work practices of the new law should be monitored and if necessary, municipalities should be compensated for this regulatory change (this compensation could take a number of forms). However, it is important to gauge these costs as the process unfolds. The impact on day to day work practices of the new law should be monitored and if necessary, municipalities should be compensated for this regulatory change (this compensation could take a number of forms). However it is important to gauge these costs as the process unfolds. This could for instance entail national funds for data architecture and need not be linked to broader questions of fiscal reform.

Strengthen public engagement and ensure transparent processes

Amsterdam already has a strong commitment to deliberative planning, but the new act will increase the importance of this function even more. It is anticipated that there will be an even more active role for citizens in planning processes and a closer relationship between initiators/developers, authorities and citizens. It will be critical that there is consistency around how "publics" are involved in decision making in the city in the future. Protracted engagement efforts would detract from the desired outcome of more timely developments. At the same time, the planning process could easily become increasingly beholden to more powerful groups that are better placed in terms of time, energy and resources to achieve their agendas.

There is inherent risk within a more flexible approach. Decisions about land use need to navigate power relations and asymmetries and need to balance the demands of inclusiveness, timeliness and flexibility. The city will need the play the role of fair broker and be extremely transparent about how regulatory requirements are being met and how and when stakeholders are included in decision making.

Ensure that social and cultural aspects of planning remain priorities

The new act places an emphasis on physical and environmental elements of planning and associated indicators. Given this, there is some risk that in adapting to the new system, the social and cultural elements of the planning process gain less attention and visibility. It will be important to establish a balance between economic, environmental, social and cultural elements within new and emerging planning processes, especially with the current developments in the Amsterdam region, where social inclusiveness and spatial segregation are growing issues.

Enhancing metropolitan governance for spatial planning

Effective metropolitan-wide collaboration is essential for the municipalities in greater Amsterdam to realise their spatial development objectives. Meeting growing housing demand, developing new spaces for business and industry, and increased transportation connectivity demands co-ordinated responses. Municipalities in the Amsterdam Metropolitan Area have a long history of working with one another through informal partnerships. This has generally worked well in the past. However, this informality comes with limited resources and a small administration, which limits the metropolitan governance function.

In this period of population and economic growth it is critical that the MRA's municipalities work together with the provinces and the regional transport authority in order to implement collective strategies to realise their many ambitions. Increasing the

capacity at the metropolitan scale is vital to realising these shared goals. The MRA must substantially step up its own self-organisation in order to deliver adaptive, fair and sustainable land-use planning. Recent reforms to the MRA to establish a common bureau and increase the entity's funding through per capita transfers help to strengthen its capacity to undertake communications activities, establish collaborative mechanisms for decision making, and conduct ongoing analysis of key trends and challenges. However, the issues facing the region may demand more formalised approaches in the future and a larger funding envelope to achieve strategic objectives.

Increase organisational capacity (budget and staff) and strengthen political accountability

After long discussions about how the MRA might evolve, municipalities and provinces have established a common bureau (MRA Bureau) along with a Co-ordination Committee (*Regiegroep*) which makes the position of elected leadership stronger. Under the new framework, the tripartite focus on the economy, transportation and spatial planning remains. However, there are more direct links between the regional transportation authority and the transportation platform of the MRA. Further, in order to increase the administrative capacity of the MRA, the new common bureau is financed by all provinces and municipal councils in the metropolitan region. This raises the basic per capita contribution of municipalities from EUR 0.50 to EUR 1.50.

The recent reforms to the MRA are a prudent next step for metropolitan co-operation. Dedicated funding for administration, and economic and spatial development, will help implement some key elements of the metropolitan agenda. This is not a radical change to the organisation's form and function. However, it does go some way to addressing critiques that the MRA is too informal and needs to build its capacity.

Prioritise key actions and build awareness among the MRA's residents

In the short and medium terms it will be important to demonstrate successes in implementing core actions. The MRA's development agenda has a long action list of issues it would like to tackle. It should prioritise the most important elements, which for the spatial agenda clearly include the issue of accommodating population growth and building new housing.

It will be important for the organisation to champion successes and build awareness of its activities both among its constituent residents and the business community and in the context of broader European and international competiveness. In the case of residents, it will be particularly important for the metropolitan body to strengthen its accountability and transparency. For many years the MRA was focused on building consensus among its member municipalities and more recently, it has adopted an outward-oriented framework to raise the profile of the region on the international stage. But it also needs to have meaning and buy-in from citizens and be visible to them. This is crucial in order to build ongoing consensus around the MRA's agenda and its spatial development aims.

Monitor and evaluate spatial trends and challenges across the metropolitan area

The spatial development strategy for the metropolitan area could be better operationalised through ongoing monitoring and assessment. Recent steps by the MRA to establish a more permanent common bureau and to increase member contributions are positive in this regard. They will help enhance these types of functions. The MRA should use this increased capacity to enhance its monitoring and evaluation of spatial conditions and

developments, particularly socio-spatial inequalities which, under the new act, are at risk of losing their prominence given its focus on physical and environmental aspects of planning.

Share expertise on the implementation of the Environment and Planning Act

The new act demands new ways of working from municipal public servants. It requires more negotiation and engagement on new development projects up front and ongoing monitoring and evaluation. In realising this shift, the issue of capacity is critical. Larger municipalities with larger spatial planning departments are better placed to adapt to these changes – they simply have a larger pool of resources to draw on. Therefore, the MRA could take on an important role in facilitating exchange among planning professionals and building capacity, particularly for smaller municipalities, to effectively adapt to the incoming changes and meet metropolitan development goals.

Some mutually agreed upon targets for key areas of action across the metropolitan area are warranted

Mutually agreed upon targets to achieve such important objectives as the need for an estimated 250 000 new residences by 2040 across the MRA are warranted. This will help ensure that there is a detailed dialogue up front on the key issues that need to be tackled in terms of where and when developments should occur. They could provide a strong reference point to signal intensions to both MRA members and to residents and investors/developers by establishing political commitments. Such targets could also help prioritise the many action items contained in the MRA's short- to medium- and long-term agendas.

These targets should be regularly monitored and reported on to track progress on priority areas. Other OECD metropolitan bodies offer a template for such an approach – for example, the targets included in Metro Vancouver's Regional Growth Strategy.

Aligning regional transportation with functional need

It is critical that economic, spatial and transport planning are well aligned across the metropolitan area. Transport Authority Amsterdam seeks to strengthen co-operation with municipal and provincial partners on transport and accessibility and has entered into a co-operation agreement with the provinces of North Holland and Flevoland, and the municipalities of Almere and Lelystad. Such partnerships are critical – particularly in light of the strong population growth projected for Almere, to Amsterdam's east. Whether co-operation agreements are enough to establish a strong regional transportation network in these growing areas outside of the transport authority's formal governance arrangement remains to be seen. This is a matter that should be studied and assessed. Whether its membership is expanded is untimely the purview of the national government since its membership has been determined by national legislative mandate.

Chapter 1.

Land-use trends, challenges and opportunities in Amsterdam

This chapter provides a diagnosis of the main trends affecting how land is used now and into the future in Amsterdam. It focuses on both the municipality of Amsterdam and the broader area across which people live, work and commute (in other words, the functional urban area). This chapter contains four sections. The first section describes Amsterdam's geography and its relationship to the surrounding region, remarking in particular on the region's polycentricity. This is followed by an assessment of metropolitan Amsterdam's economy, socio-spatial and demographic trends, housing pressures, and large-scale transportation investments – all of which affect land use. The final section discusses the main pressures on land use in the city, and major challenges and opportunities for how land is used both now and into the future.

Amsterdam is a thriving city. It, together with its surrounding municipalities, is an economic driver in the region and country. Its dynamic, services-dominated economy includes both major international firms and small start-ups. The city and region are well connected to the rest of Europe by road, rail, air and sea. Its international airport and port are European hubs. It has strong population growth – it is a place where people want to invest, work and live and especially visit, with tourism numbers growing annually.

But along with this success come pressures, particularly in terms of how land is used. Already a dense city, Amsterdam has few areas into which it can expand. These space constraints limit the availability of land for new developments. The resulting rising house prices threaten the city's affordability, particularly for middle-income households which do not qualify for social sector housing. Meanwhile, the large social housing sector struggles to keep up with demand for affordable housing. The popularity of Amsterdam as a touristic destination places a great amount of pressure on the city's historic centre and threatens the capacity of the city's core to maintain a diversity of residential, economic and social functions.

Further, there is evidence to suggest that Amsterdam is not making the most of its agglomeration benefits. The city's functional urban area (FUA) ranks near the top among all FUAs across the OECD in terms of gross domestic product (GDP) per capita, and GDP as a share of national average. However, it is among the bottom when it comes to GDP and labour productivity growth. OECD studies (2007; 2014a; 2015) have found that the largest Dutch cities have not fully exploited the benefits of agglomeration. The spaces across which people live, work and commute are an important determinant of agglomeration effects for any city but particularly for metropolitan areas that are highly polycentric, such as Amsterdam. Amsterdam ranks among global cities, but the city proper has a relatively small population. Because of this, Amsterdam is intimately connected to its surrounding municipalities and its success is linked to those places. This raises the issue of at what scale spatial and land-use planning should take place. Increasing transportation connectivity, meeting housing demand, and ensuring efficient and effective land uses across the functional urban area will be critical for the city to meet its goals of being an "economically strong and sustainable city" (Structural Vision, 2040).

This introductory chapter explores Amsterdam's socio-spatial and economic conditions, including how the city relates to the broader metropolitan area. It identifies the major land-use trends, opportunities and challenges facing Amsterdam and its surroundings and in doing so, sets the scene for Chapter 2, which examines how the planning system both reacts to and shapes these conditions. Chapter 2 further describes how land use is governed and regulated across different scales – European Union, national, regional, local – and how local spatial policies together with land-use plans interact with such elements as the fiscal system to shape land-use outcomes. The final chapter explores the shifting nature of regional co-operation in the Amsterdam Metropolitan Area (Metropoolregio Amsterdam, MRA) and the importance of this scale to effective land-use planning. It argues that more institutionalised forms of regional governance are needed to meet the challenges facing the region.

Amsterdam and Dutch polycentricity

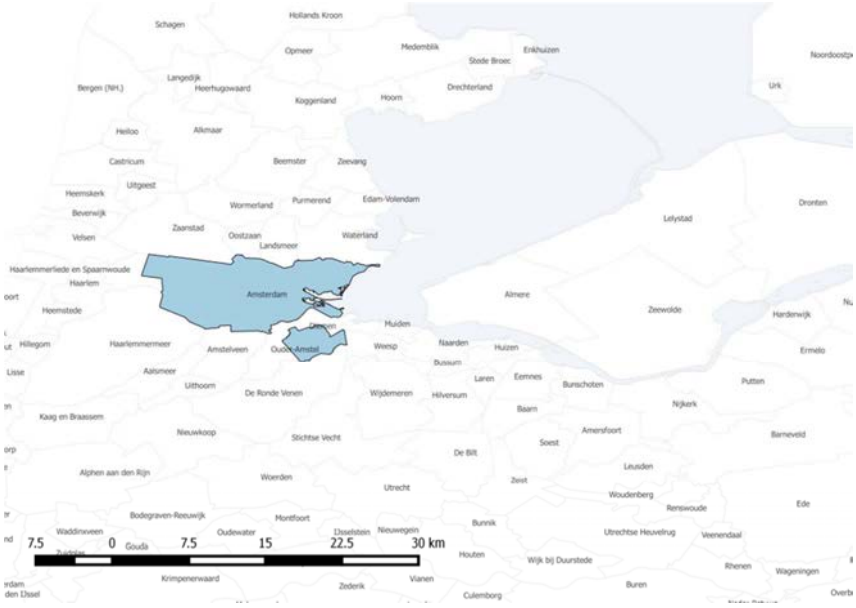
Amsterdam is flanked by the IJmeer basin to its east and the "Green Heart" of the Randstad to its south-west

Amsterdam is located in the western part of the Netherlands in the province of North Holland. It takes its name from the river Amstel which runs through the northern part of the city and terminates at the city centre into the IJmeer basin which connects the

city to the North Sea canal and the sea beyond. The city is famed for its 17th century canals which fan out from the city's heart. The city lays on average 1 metre above sea level on old peat/clay ground that is artificially covered with sand.[1] Part of the city rests on a flat alluvial plain (polder) that has long been protected by a system of dykes, drainage and river flood controls. A 20-40 metre high sand dune system that continues for about 100 kilometres along the coast in the west protects Amsterdam from sea floods and engineered flood protection constructions (*Afsluitdijk, ribbedijk, zeesluis*). A century-long history of careful water management has bred a culture of mutual co-operation and consensus decision making – aptly referred to as the "Polder model".

Amsterdam is the largest city in the Netherlands and the urban core of the city-region; its population stood at 834 713 in 2016 (Gemeente Amsterdam, 2015b). To the city's west is the municipality of Haarlem, the provincial capital, with a population of 156 645 in 2015 (Figure 1.1). To its north lay the municipalities of Zaandam and Pumerend (with populations of 151 000 and 79 532 respectively, 2015). To Amsterdam's south-east is the municipality of Hilversum (population 87 161 in 2015) and to its east, Almere, in Flevoland province (population 196 932, 2015) (Statistics Netherlands, 2015b).

Figure 1.1. **The city of Amsterdam and its surrounding municipalities**



Note: On 1 January 2016 Zeevang and Edam-Volendam merged to make Edam-Volendam: there is now one less municipality in the region.

Source: Own elaboration.

Amsterdam is more than the sum of its parts. Together with its surrounding urban counterparts, the city has a polycentric structure and its functional connections to surrounding communities are very close as a result. The city even finds itself in the peculiar position of having part of its territory to the south-east separated by two surrounding municipalities – Diemen and Ouder-Amstel – as depicted in Figure 1.1. The city and surrounding locales can be thought about at different scales – and its governance structures reflect this (Table 1.1). The remainder of this section describes each of these geographies in turn in order of size – from smallest to largest – as depicted in Table 1.1.

Table 1.1. **Amsterdam's geography and different scales**

Name	Membership	Governing body	Population
City of Amsterdam	Amsterdam	Directly elected city council	834 713 (2016)
Transport Authority Amsterdam (*Vervoerregio Amsterdam*)	15 municipalities	Regional transportation authority; regional council formed by delegated members from municipalities	1 498 791 (2016)
Amsterdam Metropolitan Area (*Metropoolregio Amsterdam*)	33 municipalities, and representatives from the provinces of North Holland and Flevoland, and the Amsterdam City Region	Informal partnership based around three committees: Planning, Accessibility and Economic Structure	2 388 318 (2015)
Functional urban area – OECD definition	57 municipalities	Not applicable	2 452 659 (2014)
Randstad	Collection of small and large cities in North Holland and South Holland, Utrecht and Flevoland	No formal or informal governance body and no official boundary	7.1 million (2016, estimated)

Note: Greater Amsterdam is also a COROP region (*Coördinatiecommissie Regionaal Onderzoeksprogramma*) used for statistical purposes by Statistics Netherlands.

Sources: Statistics Netherlands (2017b), "Population and population dynamics; month, quarter and year", http://statline.cbs.nl/Statweb/publication/?DM=SLEN&PA=37943eng&D1=0-9&D2=1,86,171,256,341,358,l&LA=EN&VW=T; OECD (2016f), *OECD Territorial Reviews: The Metropolitan Region of Rotterdam-The Hague, Netherlands*, http://dx.doi.org/10.1787/9789264249387-en.

The city of Amsterdam is a member of an informal metropolitan governance body and a regional transportation authority

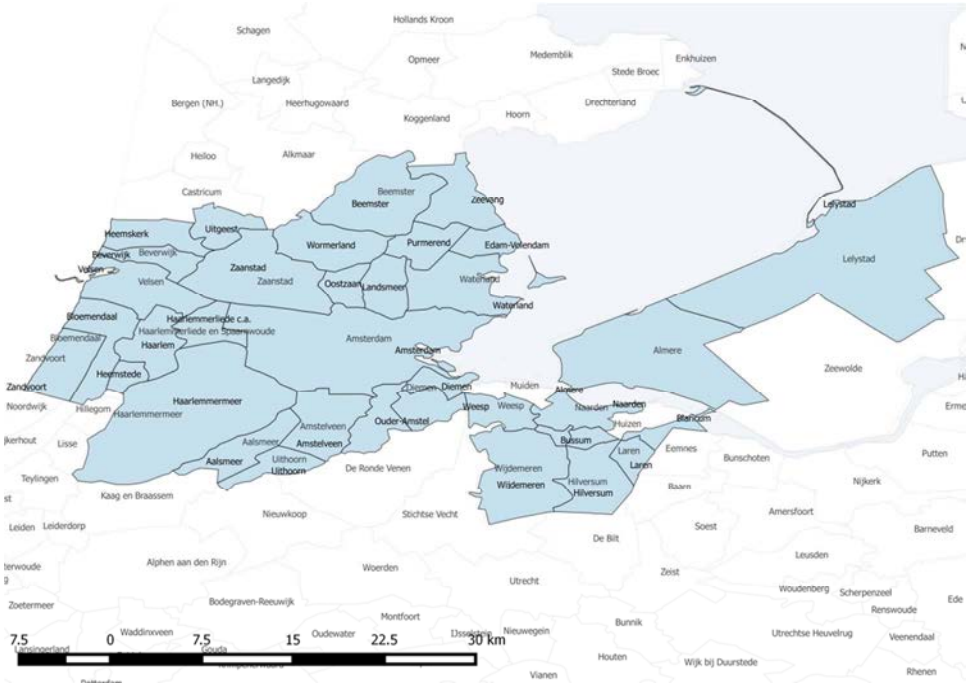
The city of Amsterdam is a member of the Amsterdam Metropolitan Area – an informal regional co-operation body (Figure 1.2). The city is also a member of Transport Authority Amsterdam (Vervoerregio Amsterdam) – a regional transportation network which until very recently had much broader functions as a city-region (Figure 1.3).[2] As evident in the maps below, the Amsterdam Metropolitan Area covers a much larger geographic area than that of the transport authority.

Amsterdam's functional urban area encompasses 57 municipalities, with 8 municipalities at its core

The OECD has developed functional urban areas (FUAs) as a means of comparing metropolitan areas across countries.[3] FUAs are characterised by a densely inhabited city, and a commuting zone whose labour market is highly integrated with the cores. FUAs represent the area across which people live, work and commute and as such give a better picture of the how the city relates to its broader environs and the labour market connections between core and peripheries than administrative boundaries do.

Amsterdam is among the most polycentric urban regions in the OECD and is notably more polycentric than other Dutch FUAs, with eight urban cores within its metropolitan boundaries as opposed to one in the case of the other FUAs. Amsterdam's FUA encompasses 57 municipalities in total, from large to very small – as depicted in Figure 1.4. The city's FUA population was 2 452 659 in 2014, which is approximately thrice that of the city of Amsterdam alone.[4] Amsterdam is both the largest FUA in the Netherlands and the largest city. The second largest FUA in the Netherlands is Rotterdam at 1 509 373, followed by The Hague at 906 897 and Utrecht at 754 615 (2014).

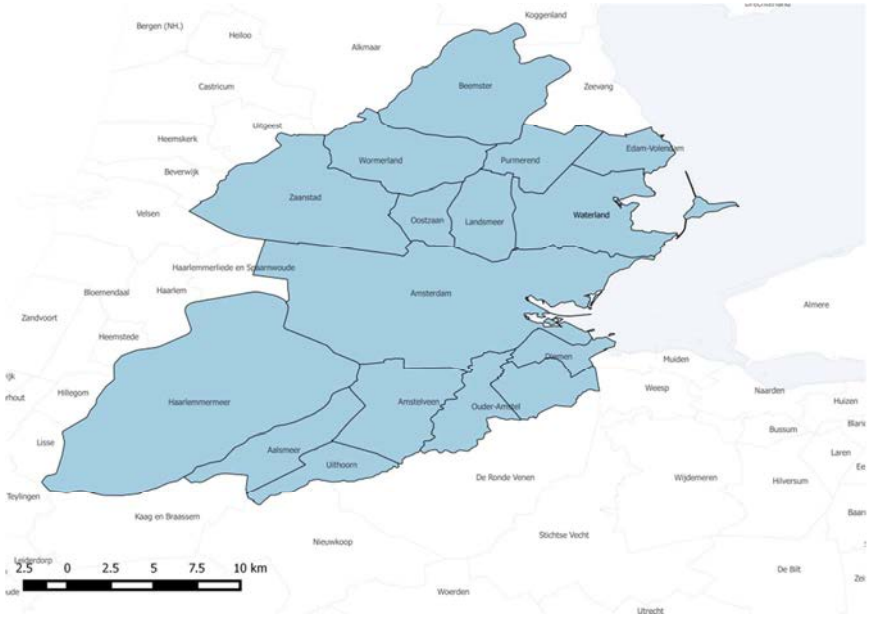
Figure 1.2. **Amsterdam Metropolitan Area**



Note: On 1 January 2016, Zeevang and Edam-Volendam merged to make Edam-Volendam.

Source: Own elaboration.

Figure 1.3. **Transport Authority Amsterdam**

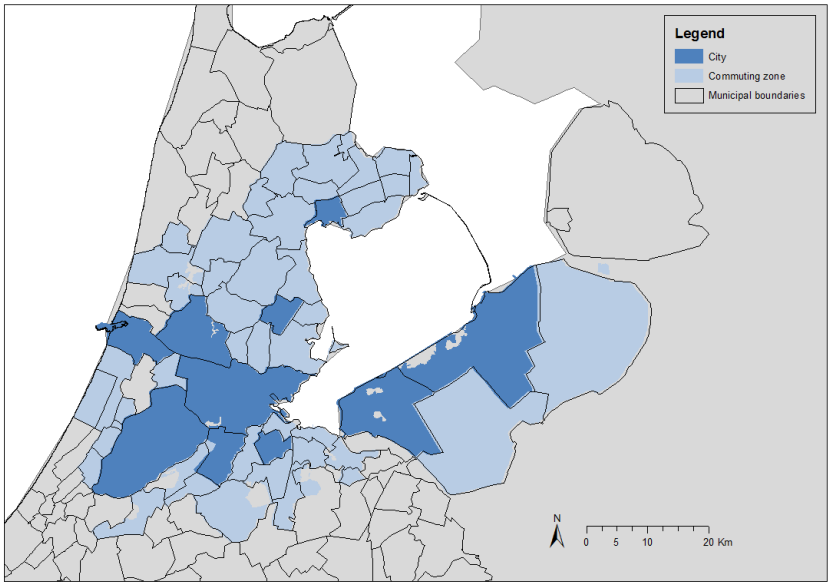


Note: On 1 January 2016, Zeevang and Edam-Volendam merged to make Edam-Volendam.

Source: Own elaboration.

Roughly 70% of the population is concentrated in Amsterdam FUA's urban core (eight municipalities), placing it in the third quartile among OECD countries. In contrast, The Hague has a much higher population concentration in the core, at approximately 79% (placing it in the second quartile among OECD FUAs). Both Utrecht and Rotterdam are among the bottom quartile for OECD FUAs by this measure (at 45% and 58% respectively).

Figure 1.4. **Amsterdam functional urban area**



Source: Own elaboration.

Amsterdam forms part of the northern ring of the Randstad

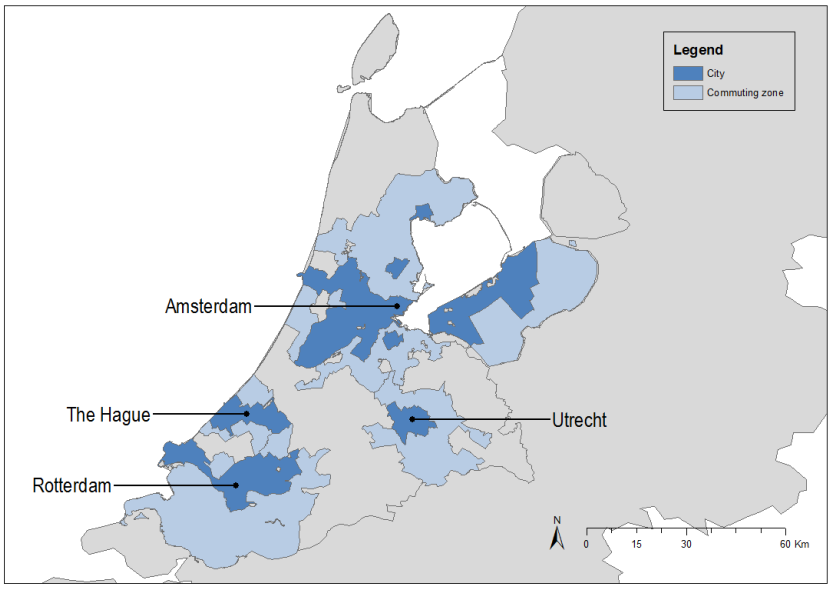
The Randstad – "Ring City" – is a loose geographic area that encompasses the four largest Dutch cities of Amsterdam, Rotterdam, The Hague and Utrecht and their surrounding locales. In more recent nomenclature it is often referred to as the Holland Metropole. The Randstad remains an elusive concept given that it has no official boundaries and does not correspond to any administrative boundaries or an FUA. Figure 1.5 depicts four of the largest FUAs in the Netherlands – the Randstad roughly encompasses this area and the territories in between that link it. It is a system of large, medium and small cities, in addition to the presence of a wide number of rural areas.

The Randstad covers roughly 26% of the territory of the country and is home to 46% of the population of the Netherlands. It is a polycentric geography stretching across parts of the provinces of North Holland and South Holland, Utrecht and Flevoland. The northern region (Randstad North/Northwing) is larger, with roughly 4 million inhabitants (Amsterdam and Utrecht) against the southern region (Randstad South/Southwing) with approximately 3 million inhabitants (The Hague and Rotterdam).

The Randstad's intra-urban polycentricity is in part the consequence of national policy decisions dating back to the late 1950s when the western parts of the Netherlands saw large population growth amidst post-war reconstruction. Polycentricity is thus both a descriptive term of a distinct spatial-economic form, but also part of a normative agenda to promote and equalise economic growth across the territory (Hague and Kirk, 2003;

Meijers, 2008).[5] A Dutch national commission on the spatial development of the western territory culminated in 1958 with recommendations to preserve the open green spaces between major cities and to protect an open area in the middle of a ring of the largest cities.[6] Thus, the famous concept of the "Green Heart" took shape. It has served as a sort of growth boundary, preventing the large surrounding cities from developing towards each other in this central space which connects them.

Figure 1.5. **Functional urban areas in the Randstad**



Notes: The display of the map may differ according to the angle of projection. "City" is composed of the urban core and can include multiple cities.

Source: Own elaboration.

An important function of the name "Randstad" is to promote the attractiveness of this larger area internationally by branding it with a recognisable name. The Randstad encompasses "a political capital, a financial capital, a cultural capital, a world port, a world airport, headquarters of important transnational companies (including banks and producer services), and a highly skilled, cosmopolitan labour force" (Lambregts, Kloosterman and Van der Werff, 2005: 19). The term Delta Metropolis (*Deltametropool*) or Holland Metropole is used to propel the ambition for all municipalities in the Randstad to function together as a single metropolitan region. However, it is important to note that this area does not form a functional urban area – in this respect, the MRA is of far greater importance.

Amsterdam's economic and settlement structures are best explained by its networks

Given the region's spatial form, any analysis of Amsterdam's economic, social and political functions and changes over time requires a consideration of issues across different scales. Amsterdam's economic and settlement structures are best explained by its networks, including trade and commuter flows, transport and ICT connectivity, and tourism (Sassen, 1991; Taylor, 2004). Therefore, this chapter examines Amsterdam's

economy, demography, socio-economic characteristics, housing and infrastructure investments from different scales – from the broader region down to the city level.

Dutch cities are part of an increasing trend towards polycentric urban regions across Europe, despite their compact city traditions. In such regions, agglomeration advantages shift from local urban systems towards a broader metropolitan scale, leading to more dispersed employment functions, amenities and services. In greater Amsterdam, polycentricity has been driven in large part by growth in automobile commuting and an expansion of the road network (Musterd et. al., 2006: 365). Large-scale building programmes in new towns encouraged dispersed settlement and made suburban living available to lower income households. A sharp increase in foreign migration from the 1960s onwards helped spur population growth, including in suburban areas. By the late 1990s, employment growth intensified outside of the core – further cementing the city-region's contemporary spatial form (Bontje, 2004).

The Netherlands' polycentric structure is in many ways an economic strength; it is associated with more balanced, sustainable and competitive territorial development (OECD, 2015). Reinforcing this point, OECD research has found that, at country level, polycentricity is associated with higher GDP per capita than monocentricity (Brezzi and Veneri, 2015). However, at the regional scale, relatively more monocentric regions have higher GDP per capita than their more polycentric counterparts. In general, the research on polycentric urban regions' relationship to economic competitiveness is decidedly mixed, with empirical issues of how to measure the phenomenon unsettled (Meijers, 2008: 1 322). What is clear, however, is that the networked nature of the territory requires collaborative partnerships and policies between municipalities of different sizes – a topic that will be explored at length in Chapter 3.

Greater Amsterdam's economic competitiveness

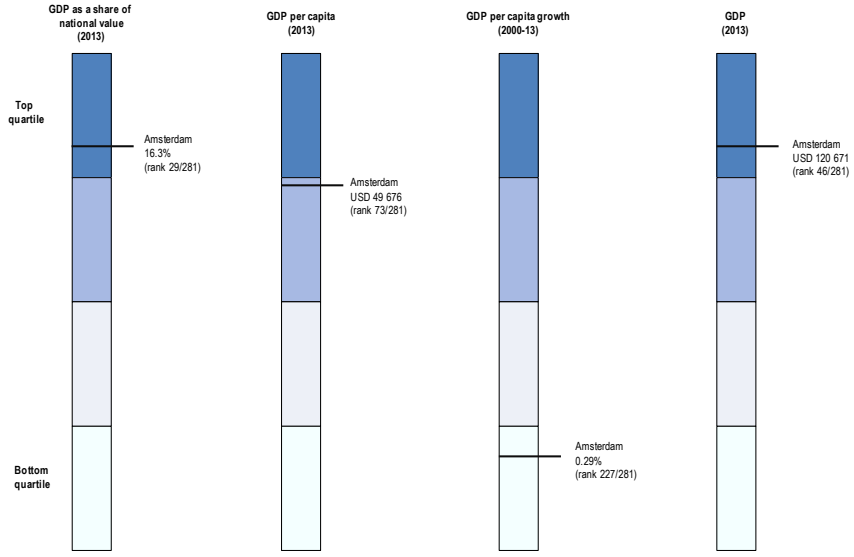
The Dutch economy is strong and Amsterdam is central to its growth

Economic conditions have a major impact on how land is used, particularly the pace of new developments. In the wake of the global economic downturn in 2008, the Dutch economy, like those across the OECD, stagnated and the pace of new and planned developments lagged. But growth has picked up since 2014 and GDP recently overtook its pre-crisis peak for the country as a whole (OECD, 2016b: 14). Among OECD countries, the Netherlands fairs well in many indicators; its well-being outcomes are above or equal to the OECD average; it has among the lowest poverty rates in the OECD and below average income inequality (as measured by the Gini coefficient); and the unemployment rate has fallen to 6.5%, which is around the OECD average, though this remains much higher than the pre-crises low of 3.5% in late 2008 (OECD, 2016b: 14-16). Overall, the country's economic outlook is positive, with growth reaching nearly 2% in 2015 and expected to strengthen to 2.1% in 2017 (OECD, 2016b: 16).

The four largest FUAs in the Netherlands together account for over a third of the country's national GDP (36% in 2013). Among this grouping of FUAs, Amsterdam is a leader, its GDP as a share of national value for the FUA was 16% in 2013, thus dwarfing Rotterdam's at 9%, The Hague's at 5%, and Utrecht's at 5% (OECD, 2017) (Figure 1.6). By this measure Amsterdam's economy is comparable to that of the FUAs of Vienna, Stockholm, Athens or Monterrey, ranking among the top quartile of all OECD FUAs. However, in terms of per capita GDP, the Amsterdam FUA is less competitive than its immediate peers. The FUA of Utrecht leads among the Randstad pack (at USD 50 766

in 2013), followed by Amsterdam (USD 49 676 in 2013), Rotterdam and The Hague (USD 43 970 for both in 2013). Across all OECD FUAs, Amsterdam's per capita GDP puts it near the top of the second quartile, alongside places like Albany, Fort Worth, Providence and Louiseville in the United States. Per capita growth has been relatively slow in Amsterdam compared to other OECD FUAs over the 2000-13 period, standing in the bottom quartile (Figure 1.6).

Figure 1.6. **Amsterdam and OECD functional urban areas, economic indicators**



Source: OECD (2017), *Metropolitan eXplorer* (database), http://measuringurban.oecd.org/# (accessed 30 June 2016).

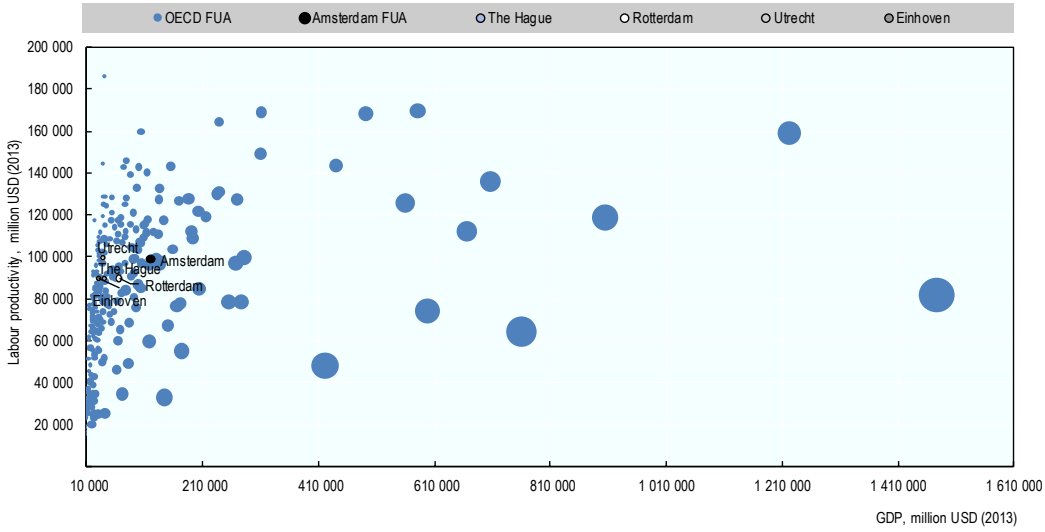
Amsterdam is competitive among its international peers in terms of labour productivity, indicating a positive environment for economic growth and good living standards (Figure 1.7).[7] In 2013, Amsterdam's labour productivity stood among the second quartile of all OECD FUAs.[8] This measure places Amsterdam alongside such FUAs as Copenhagen, Vienna, Las Vegas and Karlsruhe. All FUAs across the Randstad exhibited similar rates of labour productivity in 2013, with Utrecht leading slightly (at USD 99 762), followed by Amsterdam (USD 99 000), Rotterdam and The Hague (USD 89 779 for both together). The FUAs of the Randstad have complimentary economic profiles: "Amsterdam forms the financial and cultural capital; The Hague, the political and administrative centre; Rotterdam, the main logistics centre; and Utrecht stands out as the seat of many a consultancy firm" (Lambregts, Kloosterman and Van der Werff, 2005: 23). Despite these economic profiles, research by Kloosterman and Lambregts (2000) indicates that, as opposed to developing complementary economic niches, the main cities in the Randstad are in fact becoming more alike in their economic profiles, indicating that they may increasingly compete with each other for businesses and people.

Recovery from the global financial crisis has been slow

The recent growth performance of the Dutch economy has been below the OECD average (OECD, 2015: 31). The growth of Dutch GDP has been negative almost uninterruptedly since mid-2011 and the Dutch productivity premium has declined in recent years against OECD standards (OECD, 2015: 31, 39). In a similar vein, Amsterdam's GDP and labour productivity are strong in absolute terms, but rank near the bottom of the third quartile of

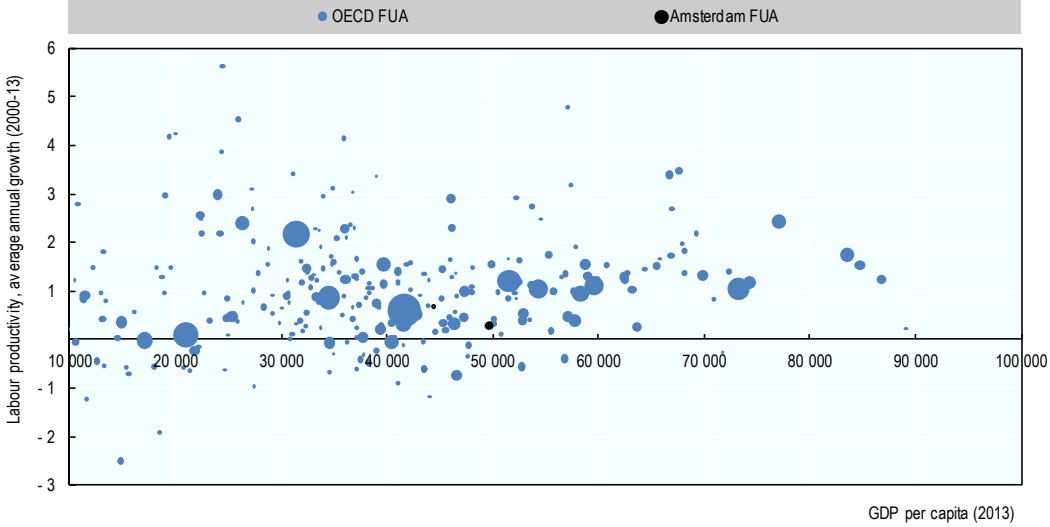
all FUAs in the OECD in terms of growth indicators for GDP, GDP per capita and labour productivity between 2000 and 2013. GDP growth between 2000 and 2013 stood at 1.2%. GDP per capita growth in the Amsterdam FUA stood at 0.3%, in comparison to Utrecht at 0.01%, Rotterdam and The Hague, both at -0.85%. Labour productivity growth stood at 0.3%, in comparison to Utrecht at 0.1%, Rotterdam and The Hague, both at -0.6% over the same period (Figure 1.8).

Figure 1.7. **Labour productivity and GDP, functional urban areas, 2013**



Source: OECD (2016e), "Metropolitan areas (Edition 2016)", *OECD Regional Statistics* (database), http://dx.doi.org/10.1787/95f368bf-en.

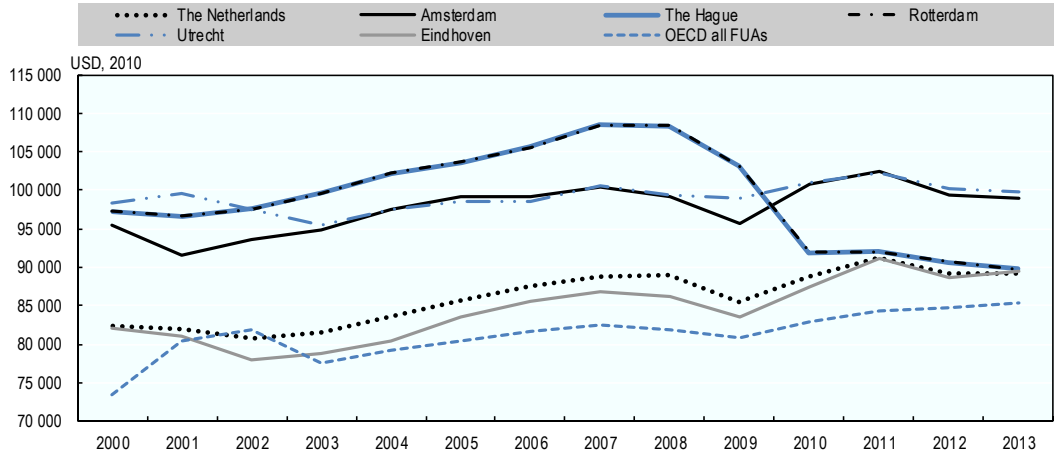
Figure 1.8. **Average annual labour productivity growth and GDP, functional urban areas, 2000-13**



Source: OECD (2016e), "Metropolitan areas (Edition 2016)", *OECD Regional Statistics* (database), http://dx.doi.org/10.1787/95f368bf-en.

While all Dutch FUAs experienced declines in labour productivity from 2011 in contrast to the OECD average, Dutch FUAs had higher labour productivity from the onset, coming in much above the OECD FUA average in 2000 (Figure 1.9). Among Dutch FUAs, Amsterdam's labour productivity falls close behind that of Utrecht in 2013, which leads the pack. Rotterdam's labour productivity was the most variable over the 2000-13 period, with a steep fall post 2008-crisis and slighter declines from 2010 onwards.[9]

Figure 1.9. **Labour productivity, Dutch functional urban areas and all OECD, 2000-13**



Source: OECD (2016e), "Metropolitan areas (Edition 2016)", *OECD Regional Statistics* (database), http://dx.doi.org/10.1787/95f368bf-en.

Previous OECD research (2015; 2007) has remarked on the fact that major Dutch urban areas, Amsterdam included, have registered lower levels of labour productivity than is expected when compared to similarly sized cities in other OECD countries with comparable GDP. Across the OECD, labour productivity and wages tend to increase with city size. It is estimated that productivity increases by 2-5% for every doubling of the population (Ahrend et al., 2014). A feature of Dutch urban regions is that they are less dense in terms of both residents and jobs than many of their European counterparts. While, smaller neighbouring cities are borrowing the agglomeration benefits from their bigger neighbours, like Amsterdam, large Dutch cities should still meet the levels of its European competitors (OECD, 2015).

In this discussion, the importance of transport connectivity in polycentric regions bears highlighting. In Amsterdam, and across the Netherlands in general, commuting times are long. In fact, the Dutch labour force has longer commuting times than those in other European countries and road and rail infrastructure in the Netherlands, particularly in the Randstad, are among the most heavily used in the OECD (OECD, 2010: 4). It has been estimated that slow multifactor productivity growth in the Netherlands is in part explained by the fact that positive agglomeration advantages are overruled by negative congestion effects caused by traffic jams (Broesma and van Dijk, 2007). Due to the strong intercity connections, there is major pressure on the main connecting highways, which leads to the usual negative externalities, such as carbon emissions and lost time. Given this, a major strategy for Amsterdam is to enhance connections, reduce commuting times/lengths and increase market access in order to make the most of agglomeration benefits.

Previous OECD research has also drawn attention to the importance of residential mobility (OECD, 2016a). The Dutch renter-occupied social housing sector is among the largest in the OECD. This sector is divided into regions and subregions, with their own registration and regulations. Amsterdam's social housing region corresponds to the former city-region (Stadsregio Amsterdam) which includes 15 municipalities. In contrast, the Amsterdam Metropolitan Area is composed of 33 municipalities. It can be difficult to move from one housing region to the other within the social housing system, thus limiting residential and labour mobility. Further, registration times to access housing can be long; they average 8.7 years in Amsterdam (Kromhout et al., 2016). Commuting patterns indicate that the area covered by Amsterdam's social housing region is but a portion of its metropolitan area. Rising house prices are also an important consideration for the residential mobility of the middle-income residents; as middle-income residents move further afield to access affordable housing, longer commuting times may impact labour mobility.

Post-recession, employment is starting to recover

In Amsterdam and Greater Amsterdam, the employment rate dropped in 2008, and began to climb again in 2010, only to fall again thereafter. But, in the past two years the employment rate has been steady and climbing. Both Amsterdam and Greater Amsterdam had an employment rate of 65.8% in 2015, surpassing the national average (Statistics Netherlands, 2016e). Along with the three other major Dutch cities, the unemployment rate in Amsterdam has declined in recent years; it fell from 8.9% in 2013 to 8.5% in 2014 and even further to 7.7% in 2015 (Statistics Netherlands, 2016e).[10]

The Netherlands has long been known for having a large amount of part-time employment compared to other European countries, which in turn has implications for total household income and housing affordability (Visser, 2002). In the wake of the 2008 financial crisis, there was a rise in part-time employment as firms and governments cut back on employee hours in order to save costs and reduce the need for redundancies. Part-time employment particularly increased among women during this time. It bears noting that part-time employment among Dutch women is often preferred to full-time work, leading to higher life and job satisfaction (Booth and van Ours, 2013).

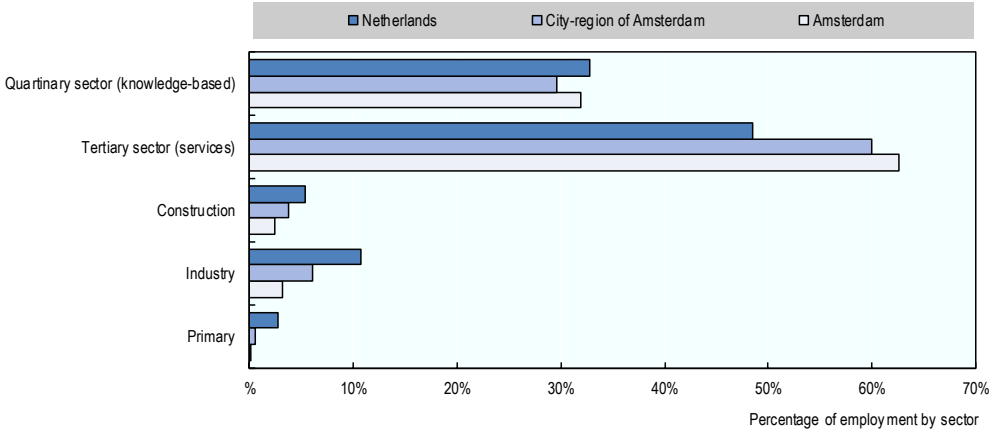
Amsterdam's economy is dominated by the services and knowledge-based sectors

Amsterdam's economy is dominated by the services sector. The sector makes up 62.5% of total employment in the city of Amsterdam, which is proportionally higher than that of the city-region and the country as a whole (at 60% and 49% respectively) (Figure 1.10). Amsterdam's services economy shows strong growth in three areas in particular: commercial and financial services (such as wholesale, business services, financial services and real estate), hospitality and retail, and specialised services in such areas as business and education.[11] The knowledge-based sector (e.g. IT, R&D, consulting services) has the second largest share of total employment, at 31.9% for Amsterdam, which is surprisingly below the national average of 32.8%. As indicative of the strength of this sector, the Netherlands is home to 50 out of the top 500 fastest growing technology companies in Europe, the Middle East and Africa, many of which are located in Amsterdam.[12] Predictably, the share of employment in Amsterdam's construction, industry and primary sectors is much smaller than national or city-region averages, at 2.4%, 3.2% and 0.06% respectively (Figure 1.10). The industry and primary sectors tend to be land intensive, and thus located outside of urban areas.

All of the top growing industries in Amsterdam over this period were services related. Between 2008 and 2013, Amsterdam saw the strongest increases in the amount of employment in comparison to Greater Amsterdam and the country as a whole.[13] The largest employment gains were in the rental and other business services sector (at 35%), followed by health and social work (13%), the food services industry (23%), and the food transport and catering industry (12%) (Figure 1.11). In contrast, the greatest declines in Amsterdam over this period were in the primary and industry sectors.

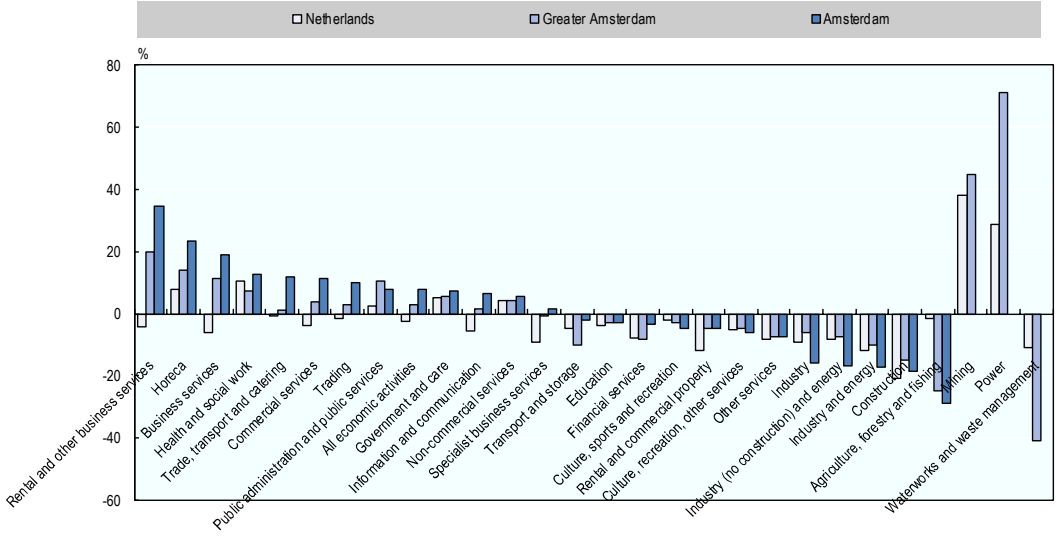
Figure 1.10. **Percentage of employment by sector, out of total, 2015**

Amsterdam, Greater Amsterdam and Netherlands



Source: City of Amsterdam (2015), Economic statistics, Research information and statistics, Diverse datasets, http://data.amsterdam.nl/topic/economie-haven (accessed 23 June 2016).

Figure 1.11. **Percentage change in employment by economic activity, 2008-13**



Note: Horeca (or HORECA) is an abbreviation used in Europe for the sector of the food industry that consists of establishments which prepare and serve food and beverages (food service). Please note: there are missing values for mining and power for Amsterdam.

Source: Statistics Netherlands (2016f), "Banen van werknemers in december; economische activiteit (SBI2008)", region, http://statline.cbs.nl/Statweb/publication/?DM=SLNL&PA=81402NED&D1=a&D2=a&D3=0-5,41,100&D4=0,9&HDR=T,G3&STB=G2,G1&VW=T (accessed 23 June 2016).

The nature of these employment shifts has important implications for land usage in Amsterdam and its environs. For example:

- Declines in industrial employment have led to vacant brownfield sites. These can be redeveloped into new uses, such as mixed commercial and residential developments. There are several areas in Amsterdam where such a transformation is taking place.
- The growing tourism sector in the city has led to a high concentration of hotels in the historic centre. This, combined with the many services and amenities for tourists, threaten to reduce residential and other non-touristic uses in the urban core. It bears noting that Amsterdam is central for leisure and shopping for both domestic and international visitors.
- The growing services industry in such areas as catering and food increases demand for employment in positions that are often lower skilled and lower waged. Increasing housing costs in both Amsterdam and surrounding areas could threaten the availability of a labour pool for this type of work.

Amsterdam's quality of life, connectivity and skilled workforce attracts businesses

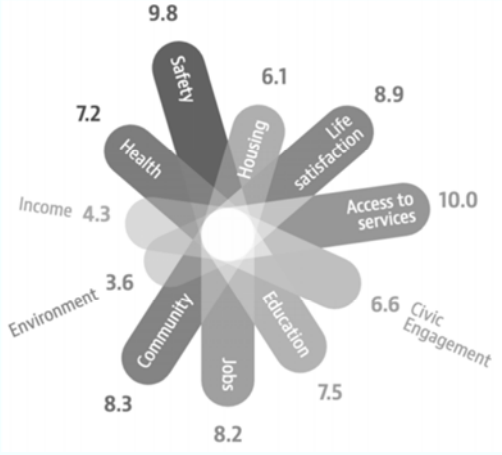
Amsterdam is home to a mix of large and small businesses. It is the headquarters of major multinational and international businesses (e.g. Heineken international, Philips and ING group) and also small start-ups.[14] Its attractiveness for diverse businesses is in large part related to the city's transport connectivity, skilled labour force and quality of life factors, such as access to green space and high-quality public amenities. Illustrating this point, a recent survey of international businesses in Amsterdam ranks the international business culture (61%), transport and logistics infrastructure (30%), quality of life (23%), and the skilled workforce (19%) as key determinants of the city's attractiveness for businesses (Gemeente Amsterdam, 2015c: 7).[15] The Netherlands regularly ranks among the most talent competitive countries; it ranked 5th place in 2015 by one international index and has highly ranked universities.[16] The region has recently been ranked the fifth most significant start-up hub in Europe, and the fourth fastest-growing among the top 20 global rankings (Compass, 2015).[17]

These factors, along with an open and liberal social climate, have been attributed to the strength and growth of key sectors – such as the creative industries.[18] For example, the growth in this industry has been attributed to the city's "urban residential milieu and social climate" – the creative sector relies on personal contact between suppliers and producers and involves activities that tend to cluster, and for which knowledge-based interactions are important, including high-quality public spaces, cultural venues and libraries (Musterd and Deurloo, 2006: 80). There has been a "concerted cultural-economic turn" in Dutch urban policy and Amsterdam supports these activities by, for example, creating dedicated cultural spaces (Peck, 2012: 462).[19] Employment in the creative industries sector stood at approximately 10% of total employment for the city in 2013 (iMMovator, 2014: 57). The creative sector in turn helps to make the city a dynamic environment that others are drawn to. In terms of land use, the sector requires flexible spaces for firms and activities, including spaces for micro-enterprises.

Box 1.1. **How's life in North Holland?**

The OECD's Regional Well-Being indicators offer a comparative assessment across 11 dimensions of well-being for 30 countries. North Holland's regional well-being indicators exhibit strengths in access to services, safety and life satisfaction. Across the 11 indicators North Holland is comparable to the regions of: Utrecht, Oslo, Akershus, South Sweden and the South West of the United Kingdom.

Figure 1.12. **Well-being in North Holland, Netherlands**



In terms of "access to services", North Holland ranks among the top 10% of all OECD regions, alongside Utrecht. Households' access to broadband in North Holland is high at 94%. For "safety", the region is among the top 14% of OECD regions, with a homicide rate of 0.6% per 100 000 population. "Life satisfaction" (measured as an index) also ranks high, in the top 16%, as do "jobs", in the top 22% (measured as the employment and unemployment rates for the region).

However, the region is less competitive in some other areas. It is in the bottom 22% when it comes to "environment", which is measured as the average level of $PM_{2.5}$ in the region experienced by the population (13.9 µg/m³ for North Holland). The region also ranks among the bottom 44% when it comes to "education" which is measured as the share of the labour force with at least a secondary education: 79%. Lower income groups who tend to have poorer educational outcomes are concentrated in the largest Dutch cities, which in part explains these poorer outcomes.

The OECD's work on regional well-being uses specific indicators that are proxies for the broader concepts of environment, education and so on. It is recognised that there are many ways to depict well-being. The OECD's work in this area is specifically structured to facilitate comparative analysis between regions.

Source: OECD (2016g), "Regional well-being indicators, North Holland", https://www.oecdregionalwellbeing.org/NL32.html (accessed 23 June 2016).

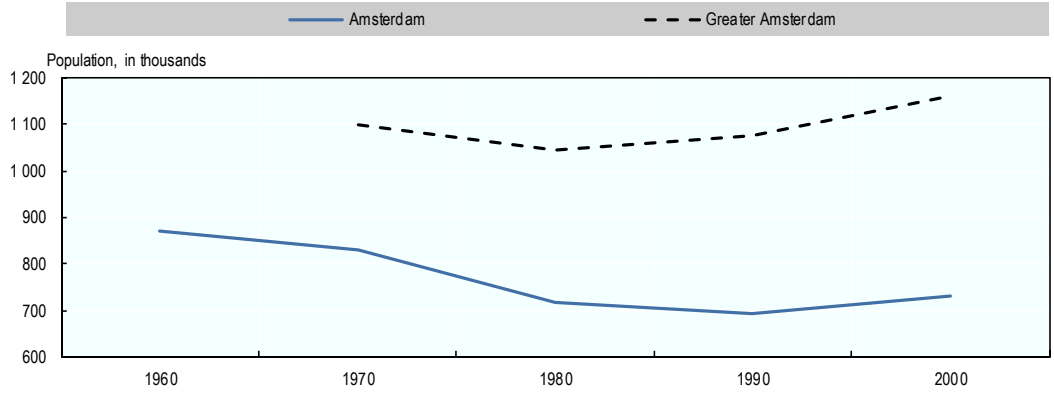
Socio-economic and demographic change

Both the city and region are growing after trying times in the 1970s and 1980s

Amsterdam has seen waves of population growth and decline that have impacted the housing stock and how land is used in both the city and in surrounding communities. Amsterdam saw strong population growth in the 1990s, and, for Greater Amsterdam, such growth was evident as far back as 1980 (Figure 1.13). But this population growth came

on the heels of persistent population decline from the 1960s onwards, when a large number of residents left the city (Jansen and Slot, 2016: 5). While Amsterdam had strong post-war population growth, by the end of the 1950s the cramped conditions in the city's ageing housing stock began to take its toll and families relocated to surrounding suburban communities and further afield. Amsterdam's population loss to suburban locales peaked in the early 1970s with approximately 20 000 residents leaving every year. New residents soon came to replace them. By the mid-1970s, successive waves of immigration from such countries as Turkey, Morocco and Suriname bolstered the urban population. Much of these changes were related to economic shifts; in 1988, the city's unemployment rate hit a post-war high of 28% when established industries experienced structural decline (Kloosterman, 2013:109). Come the 1990s, things started to turn around. With a stronger economy, Amsterdam's housing stock saw increased investment, more private sector homes were built and young professionals increasingly settled in the city centre (Jansen and Slot, 2011: 4).

Figure 1.13. **Population, Amsterdam and Greater Amsterdam, 1960-2000**



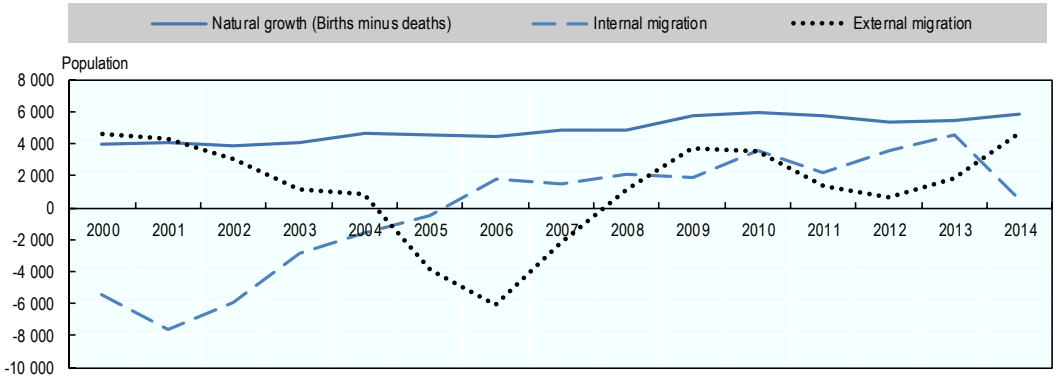
Note: Greater Amsterdam is a COROP region (*Coördinatiecommissie Regionaal Onderzoeksprogramma*) used for statistical purposes by Statistics Netherlands. Missing data for 1960 for Greater Amsterdam.

Source: Statistics Netherlands (2015b), "Population development: Live births, deaths and migration by region", http://statline.cbs.nl/Statweb/publication/?DM=SLNL&PA=37259ned&D1=0-1,3,8-9,14,16,21-22,24&D2=0&D3=39,66,88,139&D4=0,10,20,30,40,(l-1)-l&VW=T (accessed 16 January 2017).

Between 2000 and 2014, the city's population increased by around 14%, corresponding to around 1% annually on average; this is roughly twice that of the national average over this period. Natural growth has provided the largest contribution over this period, though it has been variable, with net declines in some years (Figure 1.14).[20] On average, about 30 000 persons moved out of Amsterdam between 2000 and 2013. In 2013, internal out-migration rose strongly; the number of persons moving out of Amsterdam for another municipality in the Netherlands increased by 5 000. It is likely that the increase in out-migration was caused by rising house prices.

Households with younger children (ages 0-3) have been more likely to leave the city since 2013. In 2015, the trends towards population loss through internal migration increased further (City of Amsterdam, 2016b). Of those departing, the majority (9%) left for the municipality of Amstelveen, bordering Amsterdam to its south – a prosperous, green city which is home to several international firms and has a fairly large expat community. Both Haarlem and Zaanstad (at 5.4% each), and Almere (at 5.2%) have benefited from the internal migration of Amsterdammers.

Figure 1.14. **Components of population change for the city of Amsterdam**

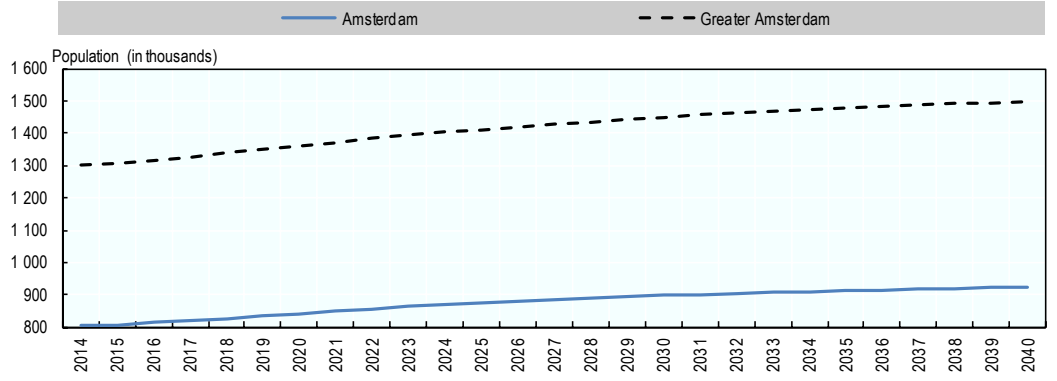


Source: Statistics Netherlands (2015b), "Population development: Live births, deaths and migration by region", http://statline.cbs.nl/Statweb/publication/?DM=SLNL&PA=37259ned&D1=0-1,3,8-9,14,16,21-22,24&D2=0&D3=39,66,88,139&D4=0,10,20,30,40,(l-1)-l&VW=T (accessed 16 January 2017).

Strong future population growth is projected

Present population trends show strong population growth in both Amsterdam and the broader metropolitan area over the next two and a half decades. The expectation is that Amsterdam's population will increase by 23% between 2017 and 2040, while in Greater Amsterdam it is anticipated to increase by 20% and in the Netherlands overall by only 6% (Figure 1.15). Amsterdam is a centre of growth. The city of Almere, to Amsterdam's east, is expected to grow at an even higher rate – with a forecast population increase of just over 24% between 2017 and 2040 (Figure 1.16). Besides Almere, the fastest growing municipalities around Amsterdam lay to the city's west; Zaanstad, Amstelveen, Haarlem and Haarlemmermeer are projected to grow between 14% and 20% over this period.

Figure 1.15. **Forecast population growth, Amsterdam and Greater Amsterdam**

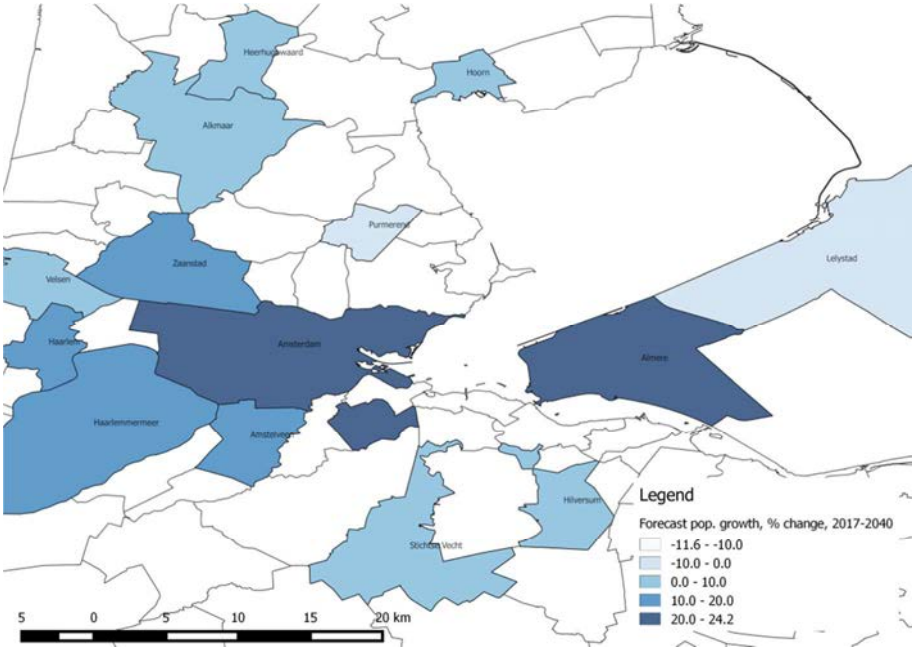


Source: Statistics Netherlands (2017a), "Regional forecast 2014-2040: Key figures, regional divisions in 2015", http://statline.cbs.nl/Statweb/publication/?DM=SLNL&PA=83489NED&D1=0&D2=0&D3=0&D4=0-12,35,59&D5=a&HDR=T,G1,G3&STB=G2,G4&VW=T (accessed 16 January 2017).

The rapid population growth in Amsterdam in recent years was faster than anticipated due in large part to higher than expected foreign migration, leading to a growth in residential developments.[21] While population ageing dynamics in the rest of the country

will lead to a potential contraction in the size of the labour force over the coming 15 years, these trends are not expected to impact municipalities in the Randstad, where internal and international migration compensate for these trends (de Jong and van Duin, 2012).

Figure 1.16. **Forecast population growth, percentage population change 2017-40, select municipalities**

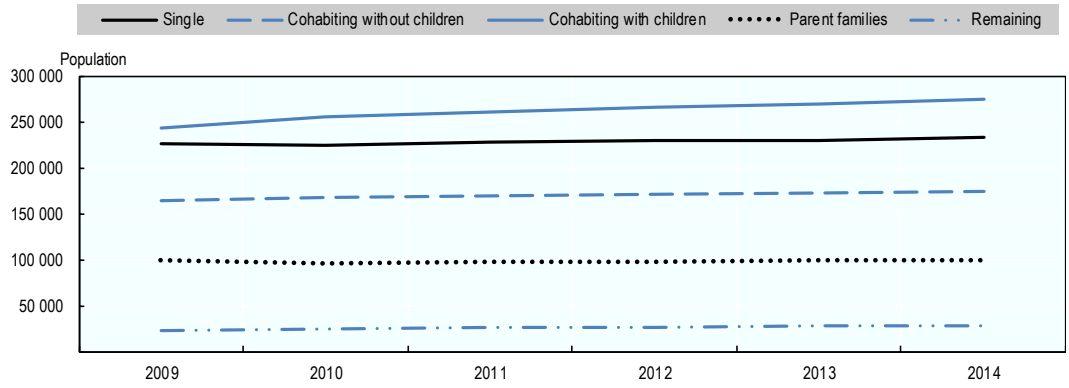


Source: Statistics Netherlands (2017a), "Regional forecast 2014-2040: Key figures, regional divisions in 2015", http://statline.cbs.nl/Statweb/publication/?DM=SLNL&PA=83489NED&D1=0&D2=0&D3=0&D4=0-12,35,59&D5=a&HDR=T,G1,G3&STB=G2,G4&VW=T (accessed 16 January 2017).

Age is an important factor to consider in land-use planning and urban design. For example, population demographics such as the ageing of the post-war baby boomers can lead to large increases in demand for housing, infrastructure and amenities that are appropriate for an older population (OECD, 2015). This may include more walkable and assessable neighbourhoods with mixed commercial/residential spaces and smaller housing. Similarly, a spike in younger cohorts increases demand for recreation spaces and amenities, education facilities and larger housing. Over the past 15 years, the age cohorts that saw the greatest growth in Amsterdam are those aged 60-75 along with individuals in their 20s and the very young (0-10 years). In contrast, there has been a decline in the cohorts of 30-45 year olds and 75-90 year olds (Gemeente Amsterdam, 2015a). This could reflect the preference of such households to move outside of the city to take advantage of comparatively more affordable housing options.

Amsterdam is unique in the large share of single-person households – just over half of households are either composed of single individuals or persons co-habiting without children (Figure 1.176). Between 2009 and 2014, the number of single households and those co-habiting without children increased by 10%. The trend towards small-sized households increases pressure on the housing market. Meanwhile, households with children (co-habiting or parent families) increased by almost 12%.

Figure 1.17. **Population by household type, Amsterdam**



Source: Gemeente Amsterdam (2015a), "Amsterdamse Thermometer van de Bereikbaarheid", https://www.amsterdam.nl/parkeren-verkeer/bereikbaar/thermometer (accessed 16 January 2017).

While poverty rates are high, social-spatial segregation is moderate

Amsterdam has among the highest proportion of the population at risk of poverty in the Netherlands.[22] In 2013, the poverty rate stood at 18.2%: this was surpassed only by Rotterdam, at 18.7% (Statistics Netherlands, 2015a: 12).[23] In general, the largest municipalities have the highest rates of poverty. Amsterdam also has the highest share among Dutch municipalities of households with persistent low income (at 6.8% in 2013) (Statistics Netherlands, 2015a).[24] Poverty in Amsterdam is concentrated among the young and the elderly. Approximately 23% of people below the age of 18, and 23% of people above 65 years of age live in a "social minimum" household (Gemeente Amsterdam, 2012).[25] On average, 19% of households had a social minimum income in 2012, 20% of which consisted of single-parent families.

However, among the cities with the highest proportion of low-income residents in the Netherlands, Amsterdam has the lowest degree of spatial segregation – low-income residents are relatively evenly dispersed among the city's neighbourhoods (Figure 1.18).[26] This is due to moderate socio-economic inequality in general and the ubiquity of social housing, which in 2015 stood at over 50% of total housing stock. In addition, from the mid-1990s onwards, policies sought to actively produce mixed and heterogeneous neighbourhoods in terms of both socio-economic status and ethnicity (which are in practice strongly correlated) through urban renewal. Consequently, social housing is distributed relatively equally across the city.

Despite these positive developments, there are some spatial trends to note. Single-parent families are more concentrated in the south-eastern district (partly due to the large presence of Surinamese and Antilleans in this area, who are more likely to form single-parent families). Further, "social minimum" households are over-represented in the north and south-eastern districts, and under-represented in the south and central districts of the city. However, there are also large differences within city districts and neighbourhoods. For instance, the northern city district includes a neighbourhood with one of the highest percentages of "social minimum" households, along with a neighbourhood that has the lowest percentage.[27]

Statistics Netherlands has developed an index of social segregation ranging from 0 (no segregation) to 100 (complete segregation); this represents the percentage of low-income households that should move to achieve a completely equal distribution (Statistics

Netherlands, 2015a). Amsterdam's value on the index is significantly lower than both the other major cities in the Randstad and the average for all municipalities (Figure 1.18). However, like all municipalities in the Randstad, the degree of social segregation increased over the 2010-13 period, while the average for all municipalities in the Netherlands decreased over this time.

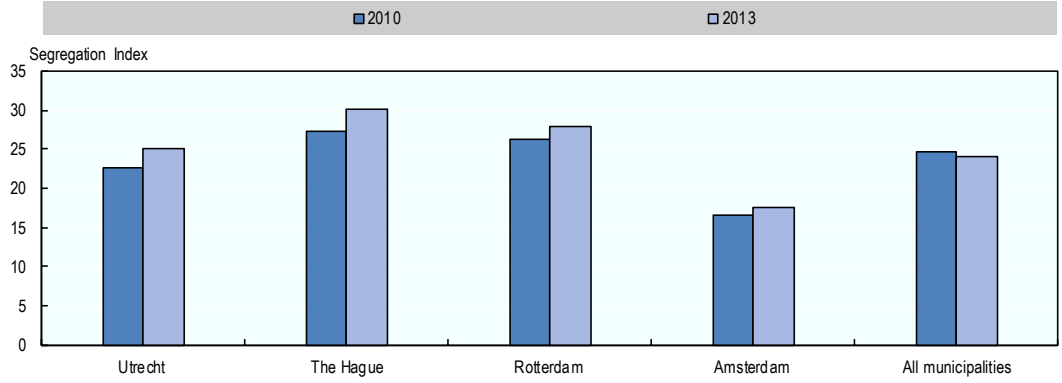
Table 1.2. **Low-income households by municipality, Netherlands, 2015**

Municipality	Share of low-income households	Municipality	Share of persistent low-income households
Rotterdam	18.7%	Amsterdam	6.8%
Amsterdam	18.2%	Rotterdam	6.7%
Groningen	17.9%	Groningen	6.4%
The Hague	17.6%	Heerlen	5.6%
Vaals	16.2%	The Hague	5.6%
Arnhem	16.1%	Vaals	5.2%
Enschede	16.1%	Arnhem	5.2%
Heerlen	16.0%	Enschde	5.0%
Leeuwarden	15.6%	Kerkrade	4.8%
Nijmegen	14.9%	Leeuwarden	4.7%

Note: Persistent low-income households are defined as those that have been low income for four consecutive years or longer.

Source: Statistics Netherlands (2015a), "Armode en sociale uitsluiting 2015", https://www.cbs.nl/nl-nl/publicatie/2015/51/armoede-en-sociale-uitsluiting-2015 (accessed 27 June 2016), p. 128.

Figure 1.18. **Low-income segregation index, select municipalities, Netherlands**



Source: Statistics Netherlands (2015a), "Armode en sociale uitsluiting 2015", https://www.cbs.nl/nl-nl/publicatie/2015/51/armoede-en-sociale-uitsluiting-2015 (accessed 27 June 2016), p. 136.

Among other major European cities, Amsterdam's moderate levels of social segregation stand out. In a comparison of 11 other major European cities between 2001 and 2011, Musterd et al. find Amsterdam to be the only city where the gap between the spatial segregation of the highest and lowest income groups has decreased (2015: 8).[28] However, some segregation is evident when one examines specific characteristics. There is, for instance, evidence of social-spatial segregation between Dutch and migrant cohorts and segregation between lower and higher income migrants (Musterd and van Gent, 2016). The Netherlands has a strong tradition of income redistribution and a large social housing sector in comparison to many other European countries, which has encouraged a social-

spatial mix in its cities. An important question is whether the trends of the past will continue in the future. More recent analysis indicates that there is, for instance, a growing suburbanisation of poverty around Amsterdam, that the inner city is less accessible and affordable, and that the share of social housing is diminishing (Hochstenbach and Musterd, 2016).

There is also a growing potential for spatial segregation from the housing of refugees. Asylum requests to the Netherlands surged in 2015, almost doubling relative to 2014, mainly owing to a large inflow of Syrian refugees. Inflows have been falling more recently, although they could rise again in the event of greater geopolitical instability, in particular in the Middle East. Amsterdam is working with housing associations to deliver additional homes to meet this demand, often in temporary locations together with young people and students. This is a deliberate policy to promote community building and integration. The longer-term dynamics of how housing for this cohort will be met is of course not known.

Housing and real estate trends

Amsterdam faces significant land-based constraints – it is hemmed in by the bay, by the jurisdiction of surrounding municipalities, and by protected greenspaces and the airport, which limits its growth options. While it is often remarked that land is a fixed asset, this is not wholly true in Amsterdam, since manmade islands can, and have been, built; major projects are presently being undertaken to create residential islands (i.e. IJburg). Thus, the bay is not entirely a land-based constraint.

Population growth combined with increasing tourism, commuting from neighbouring municipalities and a growing economy is placing pressure on the city to make the most of its space, to develop on new sites and redevelop old ones, and at the same time to maintain a diversity of economic functions and a mix between residents of different incomes. Already, the city has a much higher population density than its neighbouring municipalities in the Amsterdam Metropolitan Area at 4 954 inhabitants per km^2 of land in 2015; the next highest population density is in Haarlem at 1 757 inhabitants per km^2 of land (Gemeente Amsterdam, 2015b). Amsterdam also has low average home occupancy – at 1.97 persons per residence in 2015, which is lower than any of its MRA counterparts (Gemeente Amsterdam, 2015b). Suffice it to say, there are major pressures on the housing and real estate markets, which is evident from the most recent figures.

Any discussion of housing and real estate development in Amsterdam must be prefaced with the caveat that the city has an active land policy. Dutch municipalities, and Amsterdam in particular, are leaders among cities in the OECD in terms of their involvement in releasing land for development and developing it themselves. There is also a relatively large social housing sector. Beyond this, national and local policies have further shaped the built environment. Housing and real estate policies are rarely policy neutral, but in the Dutch case, they most certainly are not.

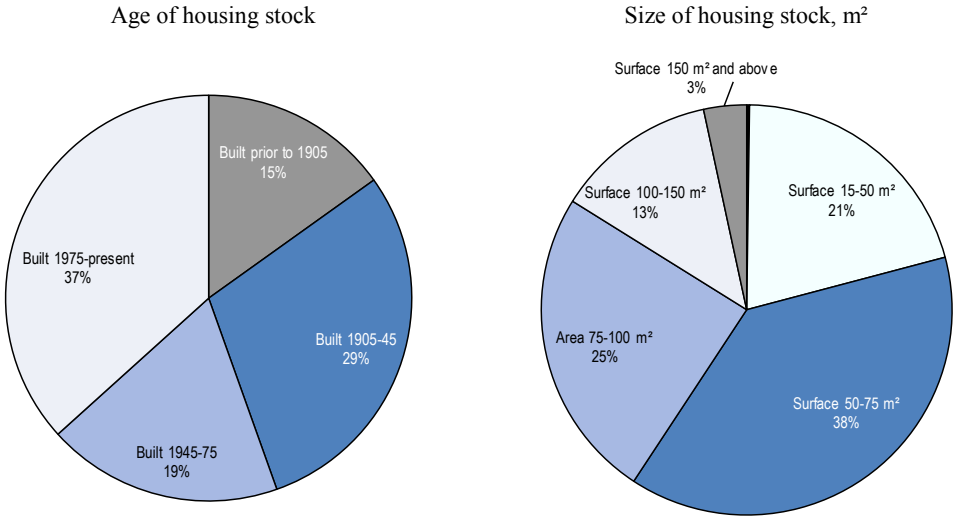
Amsterdam has high-quality housing stock across a mix of eras

Amsterdam's housing stock contains 417 096 dwellings (Gemeente Amsterdam, 2016a). Almost half (45%) of the housing stock was built prior to World War I. Of this, the oldest housing (pre-1905) is located in the historic city centre along the canals and in older working class neighbourhoods like the Jordaan and the Pijp. Housing from the 1920-45 era was built at a time when the city was growing quickly and needed to accommodate an influx of labourers. The buildings of this period are characterised by architecture of the

"Amsterdam School" – closed building blocks from brick with a monumental character – along with some garden villages that were built in the north of the city. Post World War II, there was a shortage of housing and the city expanded to the west, north and south-east. Almost one-fifth (19%) of the housing stock was built between 1945 and 1975, with the remainder (37%) from 1975 to today. On the western side of the city, a garden city approach was chosen, while in the south-east the Bijlmermeer was built, based on the principles of Le Corbusier.

During the 1970s and 1980s many people left the city and the population declined and housing production was low. In the 1980s, the trend changed, and plans were made to build new houses again. After the 1990s some new residential areas were added on the west side (Aker, Nieuw-Sloten); the old harbour district was transformed to a residential area. In the east, new land was made: the IJburg. In the last 20 years many areas built in the 1950s and 1960s have been renovated. Often this meant demolishing the old housing stock and building new houses. Due to this renewal, the quality of the housing stock in Amsterdam is quite high.

Figure 1.19. **Age and size of housing stock in Amsterdam, 2016**



Source: Statistics Netherlands (2016a), "Housing stock: Dwelling type, age, area, region", http://statline.cbs.nl/StatWeb/publication/?VW=T&DM=SLNL&PA=82550NED&LA=NL (accessed 27 June 2016).

The social housing sector dominates but is in the midst of transition

Public policies have encouraged owner-occupied housing and social rental housing over that of private rental housing through such measures as the tax deductibility of mortgage interests, state guarantees for buyers, high loans-to-value mortgages, strict rent regulation, restrictions on spatial planning, state aid and solidarity instruments in social housing (OECD, 2010). The relative share of each type of housing reflects these policy preferences.[29] Amsterdam has a larger share of housing associations than that of the MRA as a whole; a lower share of owner-occupied housing; and a higher share of private rentals (Table 1.3).

Table 1.3. **Share of dwellings out of total by type, Amsterdam and Amsterdam Metropolitan Area, 2015**

Dwelling type	Amsterdam	Amsterdam Metropolitan Area
Housing associations	43%	35%
Owner occupied	29%	47%
Private rental	26%	17%
Other	1%	1%

Source: Gemeente Amsterdam (2016a), "Wonen in Amsterdam 2015, Eerste resultaten woningmarkt", https://www.amsterdam.nl/bestuur-organisatie/organisatie/ruimte-economie/wonen/onderz-woningmarkt/wia (accessed 18 March 2017).

Housing policies have gone through distinct phases. In the 1960s and 1970s, housing subsidies were used to increase supply and establish new suburban towns while in the 1980s and 1990s, national housing policies focused on new developments on city fringes (Zonneveld and Evers, 2014: 68).[30] In the 1970s and 1980s, housing associations were instrumental in building and renovating new neighbourhoods and the share of social rental stock reached as high as 80%. From the 1990s, active policies to enlarge the owner-occupied sector have resulted in large increases – before that time only 10% of the housing stock was owner-occupied in Amsterdam.

Recent legislative changes have impacted the provision of social rental housing. For example, income-based rent increases have been introduced for middle-income individuals, the purpose of which is to incentivise those with higher incomes to move, thus freeing up space for lower income residents.[31] Since 2011, only households with an income below a middle-income threshold can access the social housing sector, whereas in the past this threshold was set higher.[32] Further, a new social housing levy for landlords with more than ten units has been introduced, the share of commercial property holdings by housing associations has been reduced and the sale of properties to the private market has been liberalised (Box 1.2).[33]

Box 1.2. **The Dutch social housing sector**

What is social housing?

The Dutch social housing sector offers subsidised rent based on a number of criteria. Individuals qualify for social housing if they make less than EUR 36 165 (2017) per year. The maximum social rent that can be charged is EUR 710.68 per month. Rental amounts are based on a points system that takes housing quality and location into account.

Social housing (subsidised rent) is offered by both housing associations (private legal entities) and private sector low-income rentals. Privately owned social housing rentals require a municipal permit and must abide by the city's rules. Approximately 95% of the stock owned by housing associations is in the social rental sector. In Amsterdam, approximately one-third of the private rental sector is comprised of social rent housing.

There is a registration system for social housing based on social housing regions. Amsterdam's social housing region covers the 15 municipalities of the former city-region (*Stadsregio*). The amount of time it takes to access housing depends on the type of accommodations one seeks and the length of time that an individual has been registered in the system for. The average registration time in Amsterdam is 8.7 years. It can be difficult to move from one social housing system (registration system) to another; one first must establish residency in the region. This system can therefore limit an individual's mobility and their access to the labour market. As previous OECD reports have pointed out, this constrains labour mobility and limits spatial integration across the metropolitan area (OECD, 2016f).

Box 1.2. **The Dutch social housing sector** (*continued*)

A (very brief) history of social housing and recent reforms

There is a long history of social housing provision in the Netherlands. The first housing associations were private social initiatives. In 1901, state involvement in the sector was solidified with the adoption of the first Housing Act. Post World War II, the scope and role of social housing ballooned and housing associations became semi-public institutions with strong financial ties to the state. In the 1980s and 1990s, social housing was one of the first policy fields to be decentralised and in 1993 the government cancelled all outstanding loans from housing associations in exchange for subsidies to the sector. At the end of the 1990s, the tasks of the social housing association were expanded to include such matters as neighbourhood improvement and associations entered into performance agreements with municipalities to meet these objectives.

In recent years, new European and national guidelines and legislation have impacted the social housing sector: housing associations can no longer engage in commercial activities (social housing and commercial activities need to be managed by administratively/legally separate entities); a new landlord levy has been introduced and housing associations now need to pay a tax based on the number of houses that they own (for those with more than ten units); housing associations are assigned a core region in which they must operate; and a rent cap of inflation +1% was established on their housing portfolios. The national government's reforms to the Housing Act in 2015 were introduced in order to pull back housing associations to what the government perceives as their core mandate of providing quality and affordable social housing for people on a limited rental budget.

The future of the social housing sector?

Recent legislative changes create new incentives for the social housing sector and this in turn calls into question how the sector will develop in the future. For instance, the limits placed on the commercial activities of housing associations and the new landlord levy in turn reduces their income. It bears noting that the landlord levy does not apply to private market housing. At the same time, the new regulation has made it easier for housing associations to sell portions of their housing stock to third (private) parties and such sales have increased sharply in recent years, particularly in areas that are gentrifying (Capital Value, 2016: 44; Hochstenbach and Musterd, 2016). Further, there are indications that housing associations in the Netherlands are not investing in new construction and are instead focused on refurbishing exiting housing stock, which is rapidly ageing. It may be increasingly difficult to maintain the quality and quantity of social housing stock in the future.

In Amsterdam, the agreement between the municipality and the social housing associations expresses the idea of a "sustainable equilibrium" in order to balance demand. At present this sustainable equilibrium amount is capped at 162 000 dwellings (social housing units owned by housing associations).

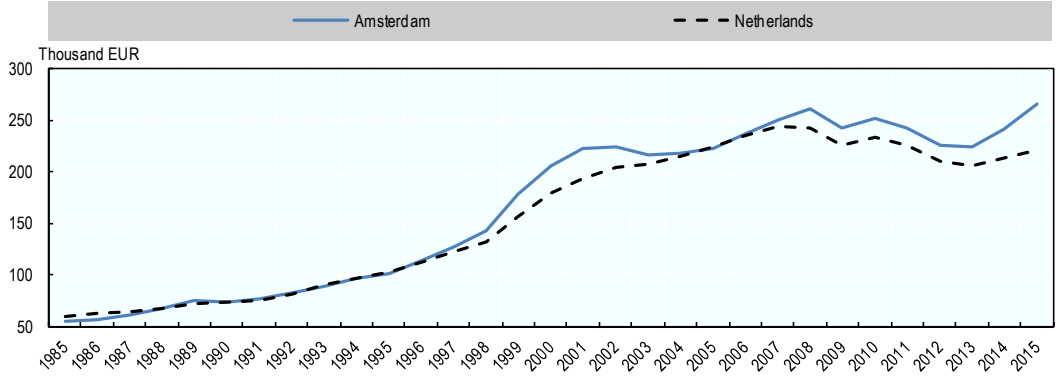
Sources: Capital Value (2016), "An analysis of the Dutch residential (investment) market, 2016", http://ingrealestate.com/media/1610990/report-analysis-dutch-residential-market-2016.pdf (accessed 18 January 2017); Zijlstra, S. (2013), "The position of social tenants in the Netherlands", http://repository.tudelft.nl/islandora/object/uuid:098a3824-c999-42ec-b648-b2f07bedbca1/datastream/OBJ/download (accessed 18 January 2017); Hochstenbach, C. and S. Musterd (2016), "Changing urban geographies through boom and bust periods: Gentrification and the suburbanization of poverty"; Gemeente Amsterdam (2016a), "Wonen in Amsterdam 2015, Eerste resultaten woningmarkt", https://www.amsterdam.nl/bestuur-organisatie/organisatie/ruimte-economie/wonen/onderz-woningmarkt/wia (accessed 18 March 2017); OECD (2016f), "Metropolitan governance in the Metropolitan Region of Rotterdam-The Hague and in the OECD", http://dx.doi.org/10.1787/9789264249387-7-en (accessed 18 March 2017).

Between 2013 and 2015, the share of private rental housing increased while the share of owner-occupied dwellings remained unchanged and the share of dwellings in housing associations decreased (Gemeente Amsterdam, 2015c). The decrease in the size of the stock of housing associations in recent years was supported by the municipality, housing associations and tenants in an effort to encourage a greater mix of some housing types in some neighbourhoods. This is driven by the idea that there should be a "sustainable equilibrium" in the social housing sector such that sales and demolition of social housing stock are balanced by new construction and that supply and demand are met. This idea forms the basis of the Amsterdam Cooperation Agreement 2015-2019 between the city, housing associations and tenants (see van der Veer, 2016 for a discussion).

The real estate market has bounced back

The demand for housing is high, especially in the older central parts of the city (NVM, 2016). After a drop in prices due to the 2008 economic recession, housing prices are beginning to rise again in Amsterdam, and since 2013 show a sharp spike above the national average (Figure 1.20). The selling price of homes in Amsterdam is higher than in the Hague, Rotterdam or Utrecht (Statistics Netherlands, 2017). [34]

Figure 1.20. **Housing transaction prices, Amsterdam and Netherlands**



Source: NVM (2016), "Overzicht transactieprijzen woningen bestaande bouw in duizenden euro's", https://www.nvm.nl/marktinformatie/marktinformatie (accessed 18 January 2017).

Housing costs are higher for home owners than for renters/tenants in Amsterdam. Homeowners pay, on average, approximately EUR 979.3 a month in housing costs for dwellings with 75 m^2 of usable space or less (Statistics Netherlands, 2016a). This amount is significantly higher than the national average of approximately EUR 793.1 a month for homeowners with the same amount of space. Similarly, tenants pay an average of EUR 592.8 for a dwelling of this size in Amsterdam, which is above the national average of EUR 565.7 per month (Statistics Netherlands, 2016b).

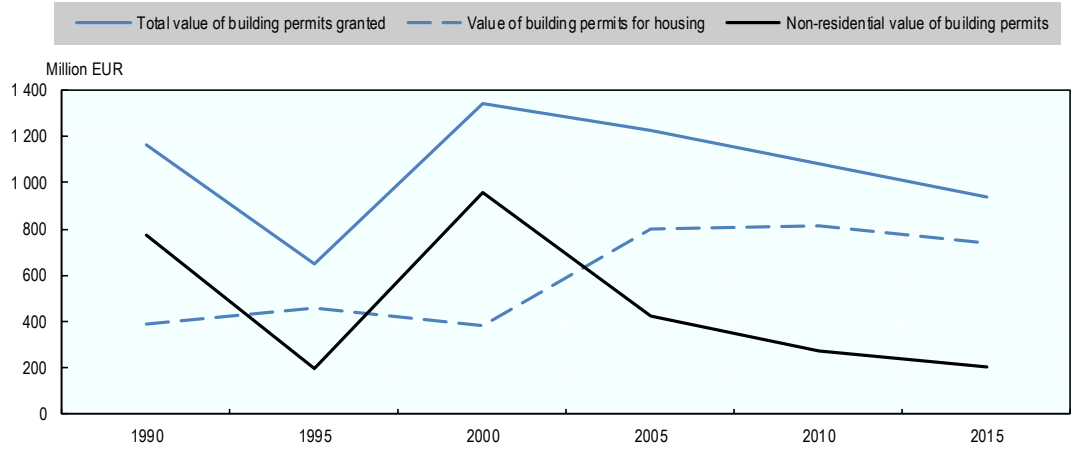
Monthly expenditure for a dwelling with less than 75 square metres of usable space was EUR 979 in Amsterdam in 2015 versus EUR 793 for the country as a whole (Statistics Netherlands, 2016b). In part this is to be expected – Amsterdam boasts high-quality amenities and a strong labour market, making it a very attractive location to live, as reflected in higher home prices (Garretsen and Marlet, 2016). Demand also remains high for social housing stock. In 2015, the average social rent was EUR 496 per month while the average market rent was EUR 745 (Gemeente Amsterdam, 2016a). In 2015, both households receiving rent allowances and those that did not (market rent) paid on

average 28% of their income on rent. If the housing allowance did not exist, this figure would rise to 45% for households receiving rent allowances (Gemeente Amsterdam, 2016a). There are some concerns that middle-income individuals are being squeezed out of the housing market in Amsterdam. Social rental housing is no longer provided for middle-income individuals, home prices have risen greatly as have private market rents.

Fewer large-scale projects are being undertaken in the wake of the 2008 financial crisis

Building permits are an important indicator of investment and renewal in an urban area. Across Greater Amsterdam, the total number of building permits reveals a declining trend to 2010, with growth thereafter (Figure 1.21). Recent increases since 2010 are attributable to growth in residential developments as opposed to non-residential ones, whose total volume reveals a declining trend from 2005.

Figure 1.21. **Number of building permits, Greater Amsterdam**



Source: Statistics Netherlands (2016d), "Building permits: Value and number per type of building COROParea", http://statline.cbs.nl/Statweb/publication/?DM=SLNL&PA=70940ned&D1=a&D2=1&D3=0-2&D4=34-40&D5=0,5,10,15,20,l&HDR=G1,G2,G3,G4&STB=T&VW=T (accessed 29 June 2016).

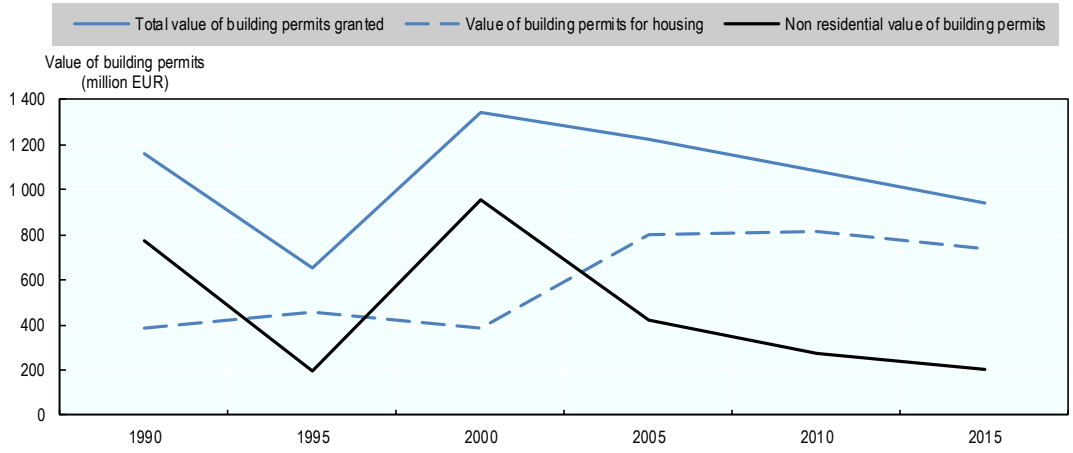
The number of building permits only tells part of the story; the value of the types of projects that are taken on are also a critical piece for understanding urban change and renewal. The total value of building permits that have been granted show a consistent declining trend from 2000 onwards coming on the heels of a period of heightened investment from the mid-1990s to 2000. In particular, the value of non-residential building permits has been declining steeply since the 2000s while the value of building permits for housing increased steeply in the early 2000s only to level off thereafter. These trends support the argument that fewer large-scale projects are being undertaken in the city, particularly in the case of non-residential investments.

Increasing hotel accommodations to meet growing tourist demand

The Amsterdam Metropolitan Area has a strong and growing tourism industry. Hotel room occupancy is increasing and is growing faster than the national average. In 2014, the Amsterdam Metropolitan Area took in 42% of the hotel bookings in the country (Gemeente Amsterdam, 2016b). It should be noted that these figures do not include

accommodations in the unregulated tourism sector, which increase this share even further (Box 1.3). Demand for hotel rooms has increased for six consecutive years in Amsterdam, with a particularly intense period of growth between 2010 and 2014 (Gemeente Amsterdam, 2016b). Amsterdam is now comparable to Paris and London in terms of number of visits and hotel room demand (Gemeente Amsterdam, 2016b). This growing demand has, in turn, increased hotel room rates in the city; in 2015 the forecast average daily room rate for hotels in Amsterdam was EUR 121.2, placing the city in 9th place among major European destinations.[35]

Figure 1.22. **Value of building permits, Greater Amsterdam**



Source: Statistics Netherlands (2016d), "Building permits: Value and number per type of building COROP area", http://statline.cbs.nl/Statweb/publication/?DM=SLNL&PA=70940ned&D1=a&D2=1&D3=0-2&D4=34-40&D5=0,5,10,15,20,l&HDR=G1,G2,G3,G4&STB=T&VW=T (accessed 29 June 2016).

In response to this increased demand, there has been significant growth in the number of hotel accommodations and number of sleeps in the Amsterdam hotel market. The most significant growth has been in the mid-range and higher ends of the hotel market (Table 1.4). The lower end of the hotel market tends to compete more directly with rooms in the unregulated tourism sector – which may be one reason for the recent declines in 1- and 2-star hotels.

Table 1.4. **Growth in hotel accommodations, Amsterdam**

Change in number of hotel accommodations and number of sleeps, 2012-15

	Percentage change in number of accommodation establishments, 2012-15	Percentage change in number of sleeps, 2012-15
No star	19.0%	54.6%
1 star	-6.3%	-1.3%
2 star	-11.3%	-15.4%
3 star	7.6%	22.6%
4 star	14.3%	22.2%
5 star	7.7%	1.2%
Total, all hotel types	7.0%	21.0%

Source: Statistics Netherlands (2016c), "Hotels: Capacity, accommodation, rooms, beds, star class", http://statline.cbs.nl/Statweb/publication/?DM=SLNL&PA=82063ned&D1=a&D2=7-13&D3=0- (accessed 29 June 2016).

The scale of Amsterdam's tourism has a large impact on the city and its neighbourhoods, particularly the central area where the vast majority of hotels and tourists concentrate. Excessive numbers of tourists can detract from the liveability of an area by increasing congestion, limiting access to major tourism sites and placing stress on local infrastructure, including water systems and waste management (Riganti and Nijkamp, 2008). It can also limit the diversity of businesses in the city, particularly in highly congested areas in the centre of the city, creating a place that then loses meaning and connection to the daily life and needs of its residents.

Box 1.3. **The growth of hotels in the unregulated tourism sector**

The rise of the unregulated tourism sector – where people are connected through variety of web platforms to share and sell goods and services – has had wide-ranging effects on local economies, firms and communities. The sector (with companies such as Airbnb, HomeAway or VRBO) has brought in extra income for individuals willing to rent their rooms or homes, and has led to boon in relatively affordable room rentals for short- or long-term stays. By lowering transaction costs, these companies can present a real threat to established industries. For example, a recent study by Zervas, Proserpio and Byers (2016) estimates that hotel revenues have declined by 8-10% in Austin, Texas as a result Airbnb's operations. Facing tighter market competition, incumbent firms are forced to respond, often by lowering their prices and improving the quality of their services in order to remain competitive – two very favourable conditions for consumers (OECD, 2016c: 13).

These types of decentralised peer-to-peer markets do not face the same kinds of regulatory burdens that established businesses face. A recent study by the Financial Times (2017) has found that about a third of the savings from booking an AirBnB room in London is due to the tax advantages of their business model. These types of services also tend to circumnavigate health and safety regulations, labour laws, and zoning rules. In the case of the latter, this can lead to a concentration of economic activities in certain neighbourhoods and communities which are not zoned for such activities, leading to conflict between neighbours. In cities with particularly high demand for such services, such as Amsterdam, this can result in apartments being permanently dedicated to these temporary uses (often purchased by investors for these purposes), resulting in permanent housing being taken off the market. In areas with very strong demand these dynamics can increase rental and housing prices. A recent study of these effects in New York City found that for each of the top 20 neighbourhoods for Airbnb listings in Manhattan and Brooklyn, average rent increases were nearly double the citywide average from 2011 to 2015 (BJH Advisors LLC, 2016). In 2015, the report estimates the city also lost more than 8 000 housing units to Airbnb, reducing access to affordable housing in the city by 10%. The impact of this phenomenon is thus not inconsequential.

Presently there are an estimated 14 000 Airbnb flat rentals on the market in Amsterdam. The business association representing the European hospitality industry estimates that the accommodation sharing economy is more than double the size of the traditional tourism accommodation sector in Europe, based on listings on the main platforms (HOTREC, 2014).

The sheer scale with which the sharing economy has flourished has left policy makers scrambling to understand and address its consequences and craft regulatory responses that can be meaningfully applied – a challenging undertaking given the peer-to-peer nature of the service. Policy makers face serious data limitations in trying to quantify the scale and impact of these services given that the companies involved do not share their data. Available data are largely composed of estimates based on listings and information from the main sharing economy platforms. Amsterdam has compiled and mapped information from public listings to help understand the scope of Airbnb listings in the city and their prevalence in specific neighbourhoods (http://insideairbnb.com).

Airbnb regulations: Comparative examples

In 2014, **Amsterdam** created a new category of housing of private vacation rental that allows short-term rentals under certain conditions: properties must be rented by the main (registered) occupant of the property; the person renting the property must also be owner of the property (as opposed to the tenant); a property can be rented

Box 1.3. **The growth of hotels in the unregulated tourism sector** (*continued*)

for no more than two months a year; no more than four people can rent a property at a time. In terms of efforts to regulate activity and collect the appropriate taxes, Airbnb is but one company among many that provide this service. City officials estimate that approximately 15% of overnight stays in the city are through sharing economy platforms and at present the city only has an agreement with Airbnb to collect the local tax on accommodation, which is set at 5% (est. January 2015).

Many other cities have adopted thresholds – allowing individuals to rent their homes or apartments, but only for a certain number of weeks a year. **London** has established a 90-day annual limit on Airbnb hosts; planning permission is required for those wishing to rent for longer. **Paris** has recently adopted rules that anyone who wishes to rent their home out for longer than four weeks, or who rents a property that they do not themselves live in, must apply for a change of use permit and register it as a commercial property. Non-compliance can result in a fine of up to EUR 25 000 per unit and a penalty of EUR 1 000 per day. The city of Paris has strengthened enforcement actions and leads daily checks by sworn officers to identify and punish abuses. **San Francisco** has a similar system; rentals are effectively capped at 90 days a year and short-term rental operators must obtain a valid business registration certificate and hosts must register with the city (paying a fee of USD 50) and abide by a number of requirements (e.g. hold liability insurance). As another example, **Japan** – which has the fastest growing Airbnb market in the world – recently introduced national guidelines to limit the market to week-long rentals only. It is left to each municipality to ratify the rules, bringing them into legal force. The rules are now in force in **Osaka** for instance. In **New York**, it has been illegal since 2010 to rent out a whole apartment for fewer than 30 days. In **Berlin**, rentals are only allowed if they constitute less than 50% of their apartment on a short-term basis; those who contravene this policy risk a fine of EUR 100 000. The purpose of this regulation was to preserve affordable housing in the city.

Priority actions for policy makers

There are two critical issues for policy makers to address when it comes to these types of private rentals. First, municipalities need to monitor and assess the impacts of such services on residential buildings and neighbourhoods. It is important to understand the consequences of these new activities in order to determine the kinds of regulations that will be needed to address any negative consequences. At present there is very limited research on these issues. Municipalities can, for instance, set up a hotline for complaints, as has been done in Amsterdam.

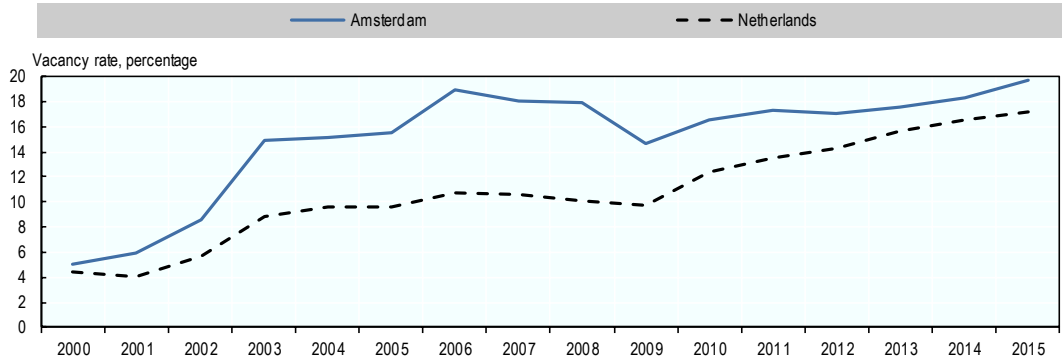
Second, rentals through Airbnb and other similar platforms need to respect laws and regulations. They need to declare income and other services such as cleaners and pay hotel taxes and all other relevant taxes. They also need to also comply with obligations on the registration of visitor identity (i.e. Schengen convention requirements). Compliance with fiscal obligations requires that short-term rental companies agree to levy charges at source – as Airbnb currently does for Amsterdam and a large number of other cities. Further, companies like Airbnb should be pressed to provide data in order to ensure compliance with local regulations. The integration of short-term private accommodation rentals in legislation is a mandate for national and/or regional governments. Presently, municipalities have developed their own regulations and have negotiated on a one-on-one basis with these firms. The growth of hotels in the unregulated tourism sector presents an opportunity to review the overall regulatory framework for tourism, to ensure it is fit for purpose.

Sources: BJH Advisors LLC (2016), "Short changing New York City: The impact of Airbnb on New York City's housing market", www.sharebetter.org/wp-content/uploads/2016/06/NYCHousingReport_Final.pdf (accessed 20 July 2016); Zervas, G., D. Proserpio and J. Byers (2016), "The rise of the sharing economy: Estimating the impact of Airbnb on the hotel industry", http://people.bu.edu/zg/publications/airbnb.pdf; HOTREC (2015), "Levelling the playing field: Policy paper on the sharing economy", www.hotrec.eu/cust/documentrequest.aspx?UID=f61dafd3-2b31-4183-a0c4-86ddf174344b; HOTREC (2014), "HOTREC position vis-à-vis the emerging shadow hospitality economy in Europe", www.hotrec.eu/document/hotrec-position-vis-a-vis-the-emerging-shadow-hospitality-economy-in-europe.aspx; OECD (2016d), *OECD Tourism Trends and Policies 2016*, http://dx.doi.org/10.1787/tour-2016-en; City of Amsterdam (2016), "Inside Airbnb: Adding data to the debate", http://insideairbnb.com; Financial Times (2017), "Airbnb's edge on room prices depends on tax advantages", https://www.ft.com/content/73102c20-c60e-11e6-9043-7e34c07b46ef (accessed 2 February 2017).

There is an oversupply of office space

Amsterdam has a high vacancy rate for office space. After a dip between 2005-08, the vacancy rate has risen steadily, reaching almost 20% in 2015, which is significantly above the Dutch average of approximately 17% for the same year. These high vacancy rates are the product of an oversupply of office space combined with the upgrading of business tenants to newer office spaces. There are recent indications that the vacancy rate for office spaces is now declining in Amsterdam.

Figure 1.23. **Office vacancy rates, Amsterdam and the Netherlands**



Source: Planbureau Voor de Leefomgeving (2016), "Leegstand van kantoren 2000-2015", www.pbl.nl/infographic/leegstand-van-kantoren-2000-2015#gemnr=0&year=2015&type=kantoren (accessed 27 June 2016).

Demand for office space has shifted in recent years towards more small-scale and sustainable developments (Janssen-Janssen, 2016). Office tenants have moved from lower priced office spaces in older buildings to higher priced ones in upgraded new buildings (Brouwer, 2014). Reflecting this, costs per square metre per year of office space have increased significantly over the past few years – from USD 383 per square metre in 2001 up to USD 529 per square metre in 2013, despite high office vacancy rates (Statistics Netherlands, 2014). Given these trends, a major issue for the city is how to transform vacant office space into viable residential or commercial developments. Many of these offices are in older buildings in peripheral locations that will be expensive to redevelop and may not transition well to new functions (Janssen-Janssen, 2016). It is estimated that the conversion of empty offices could potentially provide 25 000 additional housing units, which is about 5% of the demand until 2025 (Deloitte, 2015).

Connecting the city

As a polycentric city-region, transport and infrastructure connections are critical

Transport has structured Amsterdam's networked geography, establishing connections between municipalities and transport hubs, leading in turn to new investments and employment growth. Large-scale investments have been made throughout the years in communication-, logistic- and traffic infrastructure to enhance the external and internal connectivity of the Randstad cities with each other and with other parts of the country and north-west Europe at large. While over the past 100 years the central transport planning

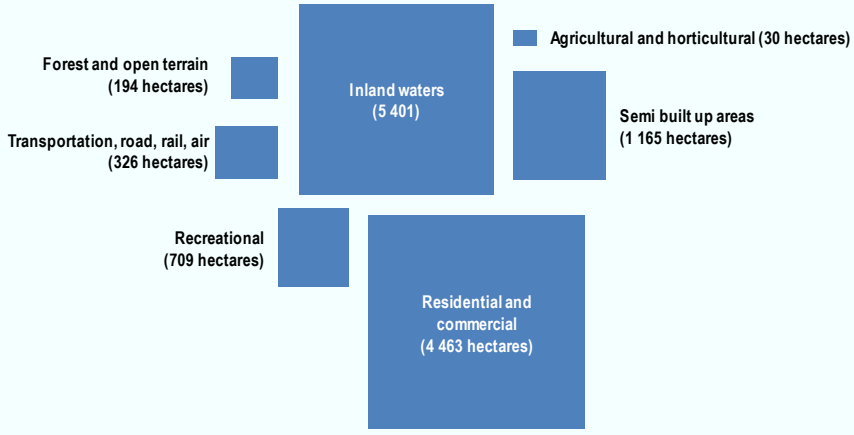
challenges of the region have been "to develop adequate heavy rail linkages between secondary centres and the 'mother' city of Amsterdam and, later, to connect the region into the national motorway grid", this is now changing with an increasing emphasis on connections between intermediate zones, including the regional transit system and the hierarchy of highways (Bertolini and le Clercq, 2003: 580). In the mid-1970s a new ring road was developed along with rail connections to the city's west (Schiphol) and east (Almere). This, in turn, increased development and investment in these areas, establishing the south axis as an important employment node, particularly the area around Schiphol Airport, which rivals central Amsterdam's centre as hub (Bertolini and le Clercq, 2003: 581).

Box 1.4. **Land use in Amsterdam**

Excluding its inland waters, Amsterdam's land use is dominated by residential and commercial functions; these functions form approximately 65% out of total land (2012) (Figure 1.24). The share of residential and commercial land for Greater Amsterdam is less, at 60% (2012).

Amsterdam has more semi-built up areas (17% versus 13%) and more land devoted to transportation (5% versus 3%) than Greater Amsterdam as a whole (2012, totals exclude inland water). Both Amsterdam and Greater Amsterdam have the same amount of recreational land (10%), but Amsterdam has less agricultural and horticultural land (0.4% versus 5%) and less forest and open terrain (3% versus 8%) than Greater Amsterdam overall.

Figure 1.24. **Amsterdam, land use by type, in hectares, 2012**



Source: Statistics Netherlands (2016g),"StatLine: Bodemgebruik; naar gebruiksvorm en gemeente", Statistics Netherlands, The Hague, http://statline.cbs.nl/StatWeb/publication/?VW=T&DM=SLNL&PA=70262ned&LA=NL (accessed 27 June 2016).

The Randstad has one of the strongest transport sectors in Europe due to the harbours of Amsterdam and Rotterdam and the Schiphol Airport. The port of Rotterdam is Europe's most important point of entry and departure for goods transported over sea. Schiphol Airport, located just south of Amsterdam, is Europe's fifth largest airport in terms of passenger movements (in 2015). Both the airport and port are seeing increasing growth; airport passenger numbers hit a record high in 2015 and throughput in the port increased 1% in 2014. In order to meet growing airport capacity, the small secondary airport in the Amsterdam region at Lelystad will be increasing its flights; in 2018 holiday

flights are planned to depart/arrive from Lelystad Airport. This will, in turn, impact commuting to the area and increase noise pollution, among other outcomes.

Already well connected, a number of major infrastructure investments are further enhancing the region's transportation networks. Some of the largest projects presently being undertaken are: a new national road connected to the A10 motorway; a multifunctional transport station in the south of Amsterdam which will connect the area to the northern section of the Netherlands' western Randstad conurbation, both by road and public transport, and road upgrades along Schiphol-Amsterdam-Almere.[36,37,38] Further, there are major planned updates to railway and public transport for the Schiphol-Amsterdam-Almere-Lelystad corridor and investments in the metropolitan railway network in the northern Randstad (Regionet).[39,40]

The area around the airport has been developed over the past two decades by the Schiphol Real Estate Group. These developments include business office complexes, hotels, meeting and entertainment facilities, logistics parks, shopping and other commercial activities branded under the AirportCity name. The area now employs 65 000 and has become much beyond an airport hub – it includes regional corporate headquarters, retail shopping, logistics and an exhibition space. There are ongoing debates about the extent to which this area can accommodate residential developments.

The port of Amsterdam is the second largest in the Netherlands and the fourth largest in Europe in terms of capacity; it generates most of its revenue from fossil fuels. It is located on the banks of the North Sea canal and the IJ across several harbour areas. Recent investments in a new sea lock will increase the port's capacity. These two major industries – port and airport – have a significant impact on the landscape, land use and noise in the region and require careful management. These are long-standing issues in the area. Some creative solutions have been adopted, such as the creation of a 32 hectare park bordering Schiphol Airport to the south-west with deep landscaped ridges and trenches that were designed to reduce noise pollution (Buitenschot Land Art Park).

Impressive uptake of sustainable transportation

Amsterdam has an extensive public transportation network served by train, tram, metro, bus and ferry. A new north-south metro line will open in Amsterdam in 2018, adding to the existing four metro lines in the city. A public transport chip card (OV-chipkaart) ensures passenger mobility throughout the city, region and country. The regional public transportation provider (Vervoerregio Amsterdam) provides bus, tram and subway services and also manages regional infrastructure for cars, public transport and cycling.

Amsterdam's prolific bike culture is unparalleled and much studied as other places seek to emulate the city's growth in sustainable transportation. Investments in dedicated bike paths throughout the city, bike parking at major transport hubs such as the train station, and the development of mixed-use neighbourhoods and the regulation of car parking have all contributed to bike usage. Sixty-three percent of Amsterdammers use their bike on a daily basis and they often own more than one bicycle; there are an estimated 800 000 bikes in the city for a population of 821 752 (2014). Just over a third of traffic movement in the city is by bike compared to 22% by car and 16% by public transport; in the city centre, 48% of traffic movement is by bike (2014).[41] Biking is often combined with other forms of transport, such as rail (Keijer and Reitveld, 2000). The success of cycling has led to a need for more bicycle parking options as the overabundance of bicycles is detracting from the accessibility of sidewalks for pedestrians and clogs transport hubs like rail stations.

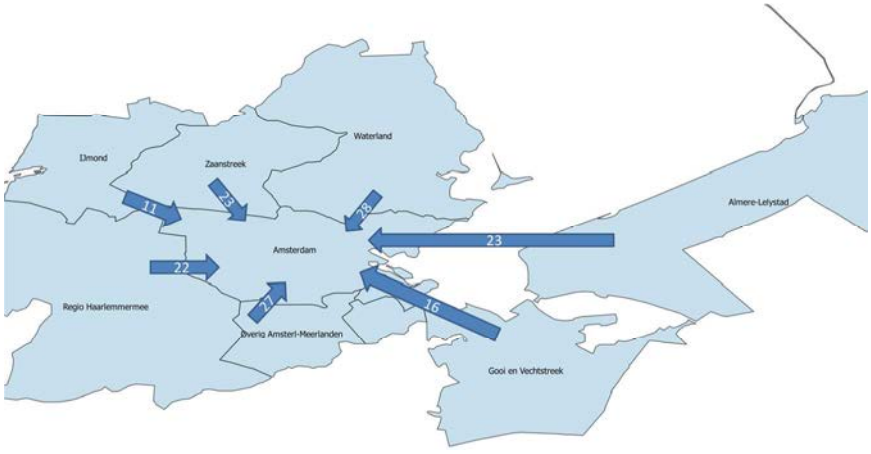
There is growth in the city across all forms of mobility due to population and employment growth and increasing numbers of tourists (Gemeente Amsterdam, 2015a). There is a rapid rise in moped ownership (an increase of 91% between 2008 and 2014), particularly for individuals who are commuting longer distances, and e-bikes are growing in usage; however, in terms of total numbers this modal share remains relatively small. Decreasing car usage (-16% between 2008 and 2014) has led to a reduction in air pollution and fewer traffic jams. Bicycle usage continues to increase (by 11% between 2008 and 2014); meanwhile, local residents are using public transport less, but public transit usage has increased overall due to tourism usage (an increase of 8% for passenger trains and 31% for buses). Finally, walking has increased in recent years among Amsterdammers (by 11% between 2008 and 2014) and ferry usage has increased (by 29% over the same period).

A major task for local transportation is to balance the interests and needs of different users – e.g. bicycles competing with e-bikes or mopeds and pedestrians competing with bicycles for street space. Further, there is a need to balance sustainably with accessibility; that is, as automobile dependence lessens, to match or exceed the accessibility of the car through sustainable transport options. How land is used – density, dedicated infrastructure, mixed-use neighbourhoods – is a critical factor in achieving this balance (Bertolini and le Clercq, 2003).

Commuter flows in Amsterdam region

Dutch workers on average travel 14 kilometres to get to work, which is high compared to other European nations (ING, 2012). However, the regional differences vary. Urban work regions such as Greater Amsterdam, Utrecht region and South East Brabant have a surplus of jobs while residential areas such as Flevoland, Zaanstad, South East Friesland and East Groningen, have a shortage (ING, 2012). In Amsterdam, this job surplus is estimated at 160 000 workers (Amsterdam Economic Board, 2015: 164). Therefore, Amsterdam is a huge employment draw in the region and almost all surrounding municipalities/regions have a net inflow of commuters to Amsterdam, with the exception of Haarlemmermeer region (Figure 1.25; Table 1.5).

Figure 1.25. **Commuting to Amsterdam, headcount in thousands, 2014**



Source: Statistics Netherlands (bewerking TNO/NEO Observatory) in Gemeente Amsterdam (2015c), "Economische Verkenningen Metropoolregio Amsterdam 2015", www.utrecht-monitor.nl/sites/www.utrecht-monitor.nl/files/documenten/economische_verkenningen_metropoolregio_amsterdam_2015_mra.pdf, p. 164.

While some commutes are relatively short – such as the 15-minute train ride between Haarlem and Amsterdam – others are considerably longer (e.g. Lelystad which is a 40-minute train or car ride from Amsterdam), which imposes environmental and financial costs. It is also notable that Almere and Lelystad are not formal members of the regional transportation authority; they have, however, signed a co-operation agreement with the regional transportation authority along with the provinces of Flevoland and North Holland.

Table 1.5. **Commuting, headcount in thousands, 2014**

From / To	Amsterdam	Regio Haarlemmermeer	Gooi en Vechtstreek	Almere-Lelystad	Regio Haarlem	IJmond	Overig Amstel-Meerlanden	Zaanstreek	Waterland	Other Netherlands	Total work
Amsterdam	307	19	16	23	20	11	27	23	28	99	574
Regio Haarlemmermeer	22	58	3	5	18	6	7	3	2	5	173
Gooi en Vechtstreek	8	1	63	10	1	0	1	1	1	35	122
Almere-Lelystad	6	0	4	68	1	0	1	1	1	33	116
Regio Haarlem	5	6	0	0	52	13	1	1	1	21	100
IJmond	2	1	0	0	5	52	0	3	1	19	83
Overig Amstel-Meerlanden	13	6	3	3	2	1	18	1	2	19	69
Zaanstreek	4	1	0	1	1	4	0	37	5	14	67
Waterland	3	0	0	1	0	1	0	4	37	15	61
Other Netherlands	48	12	26	20	11	9	5	5	5		
Total work	417	104	117	131	111	97	60	81	83		

Source: Statistics Netherlands (bewerking TNO/NEO Observatory) in Gemeente Amsterdam (2015c), "Economische Verkenningen Metropoolregio Amsterdam 2015", www.utrecht-monitor.nl/sites/www.utrecht-monitor.nl/files/documenten/economische_verkenningen_metropoolregio_amsterdam_2015_mra.pdf, p. 164.

The greatest pressures for land development and protection

The preceding discussion of trends impacting land use in Amsterdam and its environs all point to the fact that Amsterdam is a thriving city. This is not without its challenges. How can the city maintain affordable housing, avoid social spatial segregation and accommodate its large student population; how can it accommodate growing tourism while at the same time ensure a vibrant, multifunctional historic centre; how can it create spaces for new businesses to grow and thrive without facilitating sprawl and generating incompatible land uses; and, critically, how can it accommodate projected population growth while maintaining the quality of life that makes the city such a great place to live? The greatest pressures for land development and protection, discussed here, indicate some of the main areas that are critical for such adjustment.

Accommodating population growth and maintaining affordability – the need for housing

With a strong and growing economy and steady population growth, Amsterdam is seeing a raft of new investments – residential, commercial, transport. With reasonably high population density, the city has always had to balance pressure on land and its multiple functions. One prime example is the conflict between the airport and space for residential developments: the city would like to expand residential developments in this

area; however, the airport's noise zoning restricts this along with high-rise developments which could obstruct flight paths.

Present dynamics increase these types of pressures even more. In many cities, these growth dynamics would inevitably lead to expansion in suburban and peri-urban areas. Amsterdam has many green areas that would accommodate such growth, such as the green zone along the Amstel River. However, the national government has kept the landscapes around Amsterdam free of development through strict policies and standards. Since 2009, the buffer zone policy has been taken over by the province of North Holland (by provincial decree). If the province changes the buffer policy, municipalities can easily change their zoning plans, in turn lessening landscape protection. At present, the continuing buffer zone policy means that pressures to develop are channelled towards densification within the existing city and secondary growth poles. In the absence of such restrictive policies, such projects would not have likely been taken on or at minimum, have been pursued at much later dates. In cases such as the creation of new land in the bay (i.e. the new IJburg archipelago), the presence of a nearby Natura 2000 area complicated and delayed the development due to the need for additional research on the site. The proximity of protected sites to areas of expansion requires careful treatment.

An estimated 250 000 houses will need to be built in the MRA before 2040. It is critical that housing issues be addressed at the metropolitan level due to housing market inelasticity and high urban densities (Altes, 2006). City planners estimate that there is currently enough space to meet this growing demand, particularly in the centre of Amsterdam and in Almere. For developers, concentration areas are more difficult to develop than expansion districts because there are often many more parties and stakeholders involved than is the case with an expansion district; to a certain extent, higher market prices compensate for that disadvantage. However, questions remain as to whether this housing demand can feasibly be met and whether the region can avoid developing large housing districts in areas that are now green (for example in Waterland and Bovenkerkerpolder). The huge volume of urbanisation over the past 60 years has shown that pressures for expansion are strong. Despite long-standing consensus about buffer zones and noise contours, certain areas are under increasing pressure to develop.

Housing demand also raises questions about the height and density of new developments. In order to accommodate a growing population, taller apartment buildings may be warranted than have previously been permitted, encouraged or deemed socially desirable. There is a large literature and many examples of how to design taller and higher density developments for successful living environments; there are also many examples of where such approaches have failed (van Soomeren et al., 2016; Kearns et al., 2012; Je et al, 2007; Ng, 2009; Wong, 2004). The research on this subject suggests that the negative effects experienced by individuals living in high-rise developments can be tempered by a number of moderating factors such as neighbourhood quality, indoor density and the stage of life of occupants (Gifford, 2007). This points to the importance of considering social elements of land-use planning and urban design alongside other elements, such as transport connectivity.

It is apparent that the market for housing is shifting. While long dominated by the social housing sector and to a much lesser extent, home ownership, there is now a growing private rental market (Gemeente Amsterdam, 2015c). In both the rental and owner-occupied sectors, residential locational choices are increasingly driven from a desire to be near amenities (as opposed to proximity to work) and higher land prices near urban amenities reflect these preferences (Groot et al., 2010; 80). Houses on desirable

sites, for example within the A10 ring motorway, rise in value owing to increased demand. The same applies for newly built homes. This means that the size of homes within the ring motorway that average-income households can afford is decreasing. Because these households are no longer eligible for social housing, the number of houses that are available to them has decreased.

There are many one- and two-person households with an average income who want to live within the ring motorway and all available small homes in existing and new developments are rapidly sold. Households in need of more space, such as families, search for bigger homes. Rising house prices mean that they are no longer affordable for people with an average income, so they relocate to the edge of the city or to a satellite city. Given these trends, there is a risk that Amsterdam will become an increasingly polarised city that can accommodate low-wage earners through social housing and high-wage earners who can pay high private market rent of high housing prices, leaving out middle-income earners. Further, the accessibility of the city to lower wage earners remains a concern given the long registration times for many types of housing within the social housing sector.

The need to accommodate new residents and maintain affordable housing options is one of the greatest challenges that Amsterdam presently faces. Other cities offer a cautionary tale of what to avoid. In cities like Vancouver, San Francisco and London housing costs have ballooned, home ownership is out of reach for many residents, and rental prices have increased greatly in light of low vacancy rates. This has changed the demographic profiles of the cities with a diminishing middle class and has exacerbated social-spatial segregation (Bachrach and Christensen, 2014; Ley and Lynch, 2012).

Protecting green space and a diversity of functions

The road and rail network in the MRA is developing rapidly through the construction of new connections and the upgrading of existing ones. Landscape and environmental integration requires a great deal of attention, especially in vulnerable areas. New barriers that further fragment the landscape and recreational routes must be avoided so as not to damage values such as open countryside, landscape structures, and peace and quiet more generally. The interventions along the Schiphol-Almere axis and the construction of the Westrandweg are examples of new national roads. Planned large-scale provincial interventions include the A8-A9 connection and the Nieuwe Bennebroekerweg. At present a large number of transportation studies (A7/A8, A1-corridor, A9) in the region focus on accessibility issues for the medium and long term. In most cases these are approached in a multi-sectional manner in order to ensure the coherence of the spatial system and optimal local integration. However, new connections often interfere with important heritage structures such as the Defence Line of Amsterdam (*Stelling van Amsterdam*), water defence dikes and UNESCO heritage sites.

There are inherent tensions between major hubs such as the Schiphol Airport and port and their surroundings – "tensions between economic development, job creation and international connectivity on the one hand, and environmental protection, congestion and liveability" on the other (van Wijk, Brattinga and Bontje, 2011: 262). While these tensions have long been apparent, increasing activities of these industries together with population growth further challenge the ability to reach balance between different users and usages.

There are also growing tensions between uses of agriculture, green space and natural amenities on the outskirts of the city. Owing to demographic and socio-cultural developments, recreation outside the city is expected to rise by 30% by 2040. The number

of tourists coming to the region is growing by 8% a year, and they increasingly visit the region outside Amsterdam city centre. Some landscapes (such as recreational sites like Spaarnwoude) are suitable for intensive use, while other areas (such as the dunes, Twiske, the IJmeer, Waterland, Amstelscheg) are very vulnerable in terms of landscape and ecology.

In vulnerable areas, there is an increasing tension between the growing leisure economy and a social desire for an environment that offers scope for exercise, relaxation and events. There are also growing conflicts with the agricultural uses of land surrounding the city. Farmers who focus on scaling-up to serve the global market in the peatland meadow areas (which are often of great cultural and historical significance) do not combine well with the spatial and environmental goals of maintaining an open countryside, ensuring sustainable water management, preserving biodiversity and reducing CO_2 emissions.[42] Only 2% of the agricultural areas in the Netherlands have a high nature value; this does not compare favourably with the rest of the EU15 where the average is 15-25% (OECD, 2008). While the scaling-up of agriculture is proceeding rapidly, there are many schemes to pursue more sustainable forms of agriculture in the peatland meadow areas. In addition, various parties are working outside the standard chains of production and logistics to achieve shorter supply chains between producers and consumers, in order to reduce energy, raise food awareness, and create solidarity between town and countryside. A special form of environmental nuisance is that of artificial light that the horticulture sector uses to increase production: 64% of the light produced in the Netherlands comes from greenhouses, which in many areas makes it impossible to see the stars (OECD, 2008). In sum, profitable agriculture in peri-urban areas does not provide the typical idyllic rural landscapes. There are ongoing discussions about how to better align agricultural practices with sustainable landscapes, including by the European Commission (European Commission, 2012).

Projected climate change impacts – more frequent and severe storms and flooding together with rising ocean levels – challenge established and new land uses. It is estimated that the value of assets exposed to flood risk in Amsterdam will increase by over six-fold to the year 2070 (Nichols et al., 2007). One issue that poses real concern is the rotting of housing foundations in the city due to lower groundwater levels in dry periods. The Netherlands has a long history of flood management and invests in strengthening primary water defence lines along the sea coast, and elsewhere (e.g. Markermeerdijk and Houtribdijk). Amsterdam relies on the surrounding countryside to keep the city from flooding, and as such, more space will ultimately be needed for water storage. Water boards are investing in making water management more sustainable in order to face the challenges of rising sea levels and salinization. At the same time, water holds important cultural-historical value, contributes significantly to residential quality, and is of great importance for recreation, tourism and Dutch identity.

The waterway network suffers from fragmented management and the fragmentation of transport networks, which will present a challenge for the future; it is also critical that the intensification of land usages are well aligned with water management and climate change adaptation concerns (OECD, 2014b). In terms of climate change mitigation, there are ambitious plans for sustainable energy development in the region which require land. For example, the space requirements for more wind turbines in Flevoland and increasing land requirements to accommodate "solar fields". These uses in turn need to be compatible with water management.

Box 1.5. Chapter summary

Metropolitan Amsterdam faces growing demands in terms of how its land is used

Amsterdam is a thriving city that is seeing strong population and employment growth. It is also a relatively small city (in terms of size) and one that is hemmed in by the bay, the airport and its neighbours, such that areas for expansion remain limited. Ingeniously, the city has come up with some unique solutions, such as the creation of residential islands in its bay which are critical in meeting the housing needs for a growing population. However, in the coming years, much more housing is needed in both the city and surrounding areas. There is also a need to have space for public amenities, businesses, cultural spaces and so on.

There are long-standing debates about where expansion could occur, particularly in the area bordering the airport. Further, population growth is placing increasing pressures on the transport network, which is so critical to the polycentric region's success. The demands on the city's land are many, and growing. The solutions to these issues will require a collaborative approach across levels of government, and from the public and private sectors.

Accommodating a growing services and knowledge-based economy

Like much of the OECD, the 2008 economic crisis had a major impact on all facets of the Dutch economy and society, resulting in growing unemployment rates, increasing levels of part-time employment and a stalled construction/building sector, among other outcomes. But in recent years, Amsterdam has shown strong economic growth, particularly in the services and knowledge-based sectors. These growing sectors place certain demands on how land is used. For example, the growing tourism sector places a great deal of pressure on the historical centre and there is a threat that this area will increasingly lose its connection as a place that also serves the needs of the local community. One strategy to address this is to encourage tourism to other parts of the city and region in order to disperse its effects. There is also a large number of commuters from surrounding municipalities who visit the city each day, further adding pressure, particularly at commuting nodes and core amenities.

Amsterdam is home to both large and small businesses, including a growing creative industries sector. In order to accommodate a range of businesses, a variety of office/workspaces and residential spaces are required, for both those of low and high incomes. It bears noting that small-scale start-ups in the city of Amsterdam have a tendency to move to surrounding cities once they have greater space requirements, but this is part of a natural cycle of business activity.

Maintaining affordable housing amidst high demand

Amsterdam, like all large Dutch municipalities, has relatively higher rates of poverty than that of the national average. However, the city also has enviably low rates of social segregation thanks to its large social housing sector. The amount of social housing is declining, which could threaten the accessibility of the city for lower income residents. Waiting lists for the social housing sector are already long. Further, the city has long welcomed a large student population and it is important that the housing for this group remain accessible and affordable as growing housing demand raises housing costs in the private rental market.

As will be discussed in the following chapter, both Amsterdam together with other governments in the Netherlands (local, provincial and national) have embraced ambitious spatial visions based on the objectives of increasing competitiveness and productivity, while ensuring environmental sustainability and improving the quality of life. A climate of economic growth and a growing population in Amsterdam creates many opportunities for the city to make more effective use of its underused spaces and to upgrade buildings and infrastructure. However, it also creates challenges in terms of how to balance many of these demands that can often compete. This is a period of intensive investment that will shape the urban morphology of the city and its functions and relations with other municipalities for years to come.

Notes

1. Parts of the city of Amsterdam lay as much as 4-5 metres below sea level (e.g. Waterfsmeer). Areas outside of the city also lay below sea level, such as the airport and Harlmermeer.

2. Until recently Amsterdam was also a member of what was called a "plus region" (or *stadsregio*). This was a regional public body first established in 1950 composed of several municipalities under which statutory tasks were assigned in 1985 (under Chapter XI of Common Law). These tasks included: the regular preparation of a regional economic development strategy; policies for industrial, office and retail facilities of regional importance (including seaport and airports); and a regional land policy. There were seven such regions in total across the Netherlands. In the case of Amsterdam, the "plus region" included the cities of Amsterdam, Zaanstad, Haarlemmermeer, Amstelveen, Purmerend, Aalsmeer, Edam-Volendam, Uithoorn, Diemen, Waterland, Wormerland, Ouder-Amstel, Landsmeer, Oostzaan and Beemster (covering a total population of 1 484 893). In effect, the plus region was a form of compulsory co-operation between municipalities with assigned tasks and partial state funding to carry out its activities. The rationale of abolishing the plus regions is to afford municipalities more leeway in choosing the forms of co-operation that work best for them.

3. The database contains data for 281 metro areas with a population of 500 000 or more for over 30 OECD countries. Amsterdam's FUA ranks among the top quarter of all OECD FUAs in terms of population. Its population is similar in size of that of the FUAs of Frankfurt (2 533 311), Vancouver (2 479 623), Orlando (2 374 186) and Portland (2 538 928) (figures for 2014).

4. The population of the city of Amsterdam stood at 810 937 in 2014.

5. Examples of this include France, which has long sought to counter the political and economic dominance of Paris, and Ireland, which has developed "gateway cities" in lagging regions in order to overcome its overdependence on Dublin (Meijers, 2008). Further, the European Spatial Development Perspective "presents as a major objective the development of a balanced and polycentric urban system, as the economic fabric of Europe is dominated by one large metropolitan system mainly located in the north-west corner of the continent: the pentagon"(Meijers, 2008: 1 314).

6. The commission to examine the Randstad's spatial development was established 1951 by the Minister of Reconstruction and Housing. The commission's work culminated in its final 1958 report entitled "The development of the Western Netherlands" (Werkcommissie Westen des Lands, 1958).

7. GDP per full-time employee measured at place of work, expressed in USD, constant prices and constant PPPs, OECD base year (2010).

8. The OECD *Metropolitan Database* defines labour productivity as: GDP per employee expressed in USD, constant prices and constant PPPs, OECD base year (2010).

9. Rotterdam is home to oil refineries and as such its economic output is impacted by fluctuations in oil prices, which partially explains this variability.

10. In 2015, Utrecht had the lowest unemployment rate out of the four cities (at 7.3%) and Rotterdam the highest (at 12%) followed by The Hague (at 10%) (Statistics Netherlands, 2016e). The differences between the unemployment rates across the four

cities reflect the heterogeneity in the skill composition of the population, the nature of local industries and related employment opportunities. On average, unemployment rates for low-skilled individuals are higher and therefore cities with larger populations of these groups have higher unemployment rates. This is the case, for instance, in Rotterdam, where low-skilled individuals comprise 32% of its population (Statistics Netherlands, 2016e).

11. The financial and business services sector is supported by impressive digital infrastructure, including the largest data transport hub in the world. The Amsterdam Internet Exchange was first established the 1990s. The fibre optic network has since grown exponentially; in 2013, the total Internet traffic volume of AMS-IX grew by 35% to 5.6 exabytes (5 600 000 terabytes) (City of Amsterdam 2016b). The city is home to two universities and is a major tourist hub with among the highest room rates in Europe. Amsterdam's hotels have high occupancy rates (approximately 75% in 2013) and revenue per average room has steadily increased in recent years (City of Amsterdam, 2014c).

12. Fifty companies in the Netherlands rank among the top 500 fastest growing technology companies in Europe, the Middle East and Africa. Five Dutch companies rank within the top 50 on this list, 2 of which are located in Amsterdam (Improve digital and Wepaypeople) (Deloitte, 2014).

13. The number of jobs in Amsterdam increased by almost 8% between 2008 and 2013. In contrast, greater Amsterdam saw a slight increase in the number of jobs by approximately 3% and the country as a whole saw a decline of approximately 2.5% over this period.

14. For example, one of the largest and most successful start-up companies that has made Amsterdam its European headquarters is Uber.

15. Based on a survey of 200 international companies in the area.

16. According to the 2015 World Talent Report of the IMD World Competitiveness Centre.

17. For the purposes of the Global Startup Ecosystem Ranking (2015), Amsterdam is geographically defined by the Amsterdam-The Hague-Eindhoven triangle.

18. The creative industries can be defined as "those industries that combine the creation, production and commercialization of 'content', which is intangible and cultural in nature" (Wetzels, 2008: 60).

19. For example, the NDSM development (Nederlandsche Dok en Scheepsbouw Maatschappij), a former shipyard that became a haven for temporary uses in the 1990s (e.g. skateboard park) and is today being redeveloped as a cultural hub, among other uses. Bureau Broedplaatsen is the major municipal office that supports such policies.

20. The balance of internal migration (the difference between inmigration and outmigration) between 2000-14 has been slightly negative overall (at -2 250 between 2000 and 2014). The internal migration balance saw the greatest declines in the early part of the 2000s; but since 2006, the internal migration balance has been positive, reaching its height in 2013, with a net contribution of 4 550. The balance of external migration (the difference between inmigration and outmigration) was positive between 2000 and 2013, contributing about 18 850 individuals over this period. The balance of external migration has been highly variable year by year, reaching a net

low of -4 700 in 2005, and a net high of 3 800 in 2007. Since 2014, the external migration surplus has increased and the internal migration surplus has decreased.

21. Previous forecasts had estimated population growth to reach 896 000 inhabitants in 2025, whereas present forecasts estimate a figure that is higher by 29 000 individuals (City of Amsterdam, 2016f).

22. The poverty rate definition is established by a "social minimum" which is determined by government policy.

23. The average for the country as a whole was 10.3% in 2013 (Statistics Netherlands, 2015a: 127). Please see appendix of Statistics Netherlands (2015b) for poverty definition and methods.

24. Persistent poverty is defined as households that have already lived at least four consecutive years in low income. The municipality with the second highest share of households with persistent low income is Rotterdam at 6.7% in 2013, followed by Groningen at 6.4%. The national average stood at 3% of households in 2013 (Statistics Netherlands, 2015a: 12).

25. The social minimum income is the amount of money deemed necessary to make ends meet. The precise amount depends on the household form. In 2011, 110% of the social minimum income amounted to a net annual income of EUR 12 168 for a single person, EUR 15 645 for a single parent, and EUR 17 383 for a family with or without children (Gemeente Amsterdam, 2012).

26. Of the four major cities, Amsterdam has the lowest share of income segregation by household; only about 18% of residents would need to move in order for each neighbourhood to have an equal share of low income residents. In The Hague, this segregation is 30% higher (Statistics Netherlands, 2015a: 12).

27. Volewijck is the neighbourhood with the highest percentage of "social minimum" households (at 31%) and Nieuwendammerdijk/Buiksloterdijk one of the lowest (at 1%) (Gemeente Amsterdam, 2012).

28. See also Tammaru, Musterd and Ham (2015).

29. For a history of the social housing sector in Amsterdam see: AFWC (2007).

30. These are referred to as Vinex ("*Vierde Nota Ruimtelijke Ordening Extra*", translates as Fourth Memorandum Spatial Planning Extra) of the Dutch Ministry of Housing, Spatial Planning and the Environment released in 1988.

31. These changes were introduced in response to the European Commission's argument that the hybrid status of housing associations was distorting market competition through preferential treatment in land transactions and low interest rates (Zonneveld and Evers, 2014: 69).

32. Social dwellings offered by housing corporations are rented out to households with a gross income below EUR 34 229 per annum for social dwellings that rent for up to EUR 710.68 per month. Up to 10% of yearly rentals are allowed for people with urgent needs or earners beyond the set income threshold (Housing Europe, 2015: 72).

33. These changes were related to the European Commission's decision on state aid to social housing (Commission Decision of 15 December 2009 and related court cases C-133/12 and C-132/12), and country-specific recommendations targeted at reforming the Dutch social rent sector. The social housing levy was introduced in 2013 and is based on assessed value (Housing Europe, 2015: 72).

34. The selling price index for homes in Amsterdam (2010=11) stood at 110.2 in 2016, which is above that of The Hague, Rotterdam and Utrecht (94.7, 97.3, and 102.1 respectively) (Statistics Netherlands, 2017c).

35. Geneva had the highest average daily room rates among top European destinations (at EUR 227.60 in 2015). Please note, these figures include Moscow (PWC, 2016).

36. New national road: De Nieuwe Meer and Amstel intersections on A10 motorway (2028: planned opening, 2016: planning procedures order, 2017: start of construction, task-based funding: EUR 297 million) (source: project questionnaire).

37. Zuidas ("dock") complex combination of spatial project and main infrastructure project (2028 opening). Spatial developments along the Haarlemmermeer-Almere corridor and in the Zuidas district will greatly increase passenger numbers and traffic. This means more passengers at Amsterdam Zuid, necessitating an expansion of the public transport terminal. In addition, a widening of the A10 motorway is needed. Investment in spatial quality is needed to enable the Zuidas to become a prime international location. Accordingly, the A10 will be rerouted below ground at the Zuidas (2016: planning procedures order; 2017: start of construction [main building contract]; 2028: opening [various parts of the projects will be completed sooner]). Funding: task-based budget: EUR 1 569 million. The municipality of Amsterdam is contributing EUR 211 million, and for the public transport terminal the province of North Holland is contributing EUR 79 million and the Amsterdam Metropolitan Region EUR 147 million. The task-based budget also includes an EU subsidy of EUR 3 million and a contribution from the Dutch railway company (NS) of EUR 59 million for the Britten passage and Minerva passage. Article IF 17.08. In March 2015 the draft planning procedures order was determined (source: project questionnaire).

38. The final section of the A1/A6/A9 Schiphol-Amsterdam-Almere is anticipated to open in 2026. The accessibility of the road along this corridor and the integration of roads into the urban environment are not optimal at present. Future developments such as the expansion of Almere will put further pressure on accessibility. In the draft planning procedures order, the chosen solution is to link to a number of integration measures (tunnel, lowering below ground, wildlife crossing). An additional administrative agreement has been signed concerning bus services between Almere and the Watergraafsmeer intersection.

39. Schiphol-Amsterdam-Almere-Lelystad (SAAL) Completion: 2022: medium-term measures. In March 2008 it was agreed that there are bottlenecks along this corridor, and more will appear. The short-term measures are under construction (railway expansion along the southern route in Amsterdam). In addition, noise-protection measures are being taken in Weesp, Muiderberg and Almere. A decision regarding a preferred alternative for the medium term was taken in August 2013. The elaboration phase of the plan then started. 2019: start of medium- to long-term measures. Funding: for SAAL public transport, a total of EUR 1 182 million is available. Of the available funds, some EUR 55 million for management and maintenance is taken into account (source: project questionnaire).

40. Regionet (under construction 2016). The Regionet is a metropolitan rail network in the northern Randstad to prevent congestion. Regional parties are free to determine which parts of Regionet have priority. For this, a coherent package of infrastructure measures have been put together. The package also has a positive effect on the functioning of the national railway network. It concerns the following measures: higher frequency of trains on the Zaan Line, increasing capacity in Hilversum, increasing capacity of Schiphol tunnel, measures in Westpoort and Beverwijk, a stop

in the Hemboog at Sloterdijk station, relocation of Station Krommenie-Assendelft, new stations at Halfweg/Zwanenburg, Holendrecht and Almere Poort, improvement of capacity at Wormerveer and Watergraafsmeer station. Funding: EUR 189 million (source: project questionnaire).

41. Gemeente Amsterdam, cycling facts and figures, www.iamsterdam.com/en/media-centre/city-hall/dossier-cycling/cycling-facts-and-figures.

42. For example, Laag-Holland, Amstelscheg, the Green Heart, and also Spaarnwoude, Diemerscheg and the Vechstreek area.

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Chapter 2.

Aligning policy tools and incentives for more effective spatial development in Amsterdam

This chapter describes Amsterdam's spatial and land-use planning policies and instruments and its fiscal environment. It proceeds by describing governance structures in the Netherlands and the roles and responsibilities of the municipality. Following this, the system of spatial and land-use planning in the Netherlands – and Amsterdam in particular – is described. This includes both the strategic spatial plans that set out long-term intentions and the tools and instruments within the planning system to realise these goals. It then discusses the fiscal pressures, tools and incentives that shape spatial planning. The chapter concludes with a description of the new Environment and Planning Act and how it will likely impact the governance of land use in the city.

Amsterdam is a dynamic city. There is strong consensus to balance the goals of environmental sustainability and social equity with economic growth and competiveness – goals which are seen by planning authorities as mutually compatible and self-reinforcing. This, together with high levels of social trust and a culture of collaborative planning, have led many to remark on the strength of the city's planning doctrine – that much more has been achieved than one would suppose given the instruments of local governments and developers.

These features of the planning system will likely be even more critical in the future as new national planning legislation empowers local planning actors with greater flexibility to act in a way that demands a more negotiated and deliberative approach to new developments among municipalities, planners, developers and community members. Many countries across the OECD, including France, have recently grappled with similar reforms – with the need to reduce complexity and yet forward integrated spatial planning that can address multiple sectoral issues and policies across a functional territory and act in a timely and responsive manner. The new approach in the Netherlands is unique in terms of how it reorients relationships. A critical element of Dutch spatial and land-use planning is that while institutional frameworks (laws, policies, regulations) structure action, they are not the only feature that does so. Forms of collaborative governance, including active land-use planning, are equally important in understanding spatial development in the Dutch case. The system relies in large measure on trust.

This chapter explores these issues in three parts. It first describes the system of spatial planning, including the relationships between different levels of government and the recent reforms at the national level which will impact local practice. Following this, the fiscal environment in Amsterdam is discussed, with an emphasis on how fiscal frameworks, tools and incentives structure land uses in the city and influence actors' behaviour. The final section describes the new Environment and Planning Act and its implications for how land use is governed in Amsterdam. Throughout, elements of collaborative practice along with the spatial development goals that have been elaborated at multiple scales are discussed. A critical issue tackled in final chapter of this report (Chapter 3) is how the city works together with other municipalities to govern land use and spatial development, including the capacity of the present informal partnership approach to meet the region's future spatial challenges.

The governance of land use

Dutch multi-level governance – more steering and less rowing

The Dutch institutional system is complex. On the one hand, it is a decentralised system that includes a myriad of formal and network-based collaborative arrangements; on the other, the central government retains a strong presence at the local level, limiting the autonomy of subnational governments, especially with regards to their competences and finances (OECD, 2014a). These somewhat paradoxical elements of Dutch multi-level governance draw strength from the predominant political culture that emphasises collaboration and consensus from well-developed vertical and horizontal linkages. The centrepiece of the co-operation between the subnational and central level is an agreement ("*Bestuursakkoord*") between the central government and the Association of Netherlands Municipalities (Vereniging van Nederlandse Gemeenten, VNG), the Association of Provincial Authorities (Inter-Provinciaal Overleg, IPO) and the Association of Regional Water Authorities (Unie van Waterschappen, UvW). Co-ordination between subnational governments and the central government is guided by the Provinces Act (*Provinciewet*)

and the Municipalities Act (*Gemeentewet*). In more densely populated areas like Amsterdam, associations of municipalities can prepare joint strategic plans for their territories. This rich network represents an asset for the implementation of the subnational government reform, even if it requires efforts to align and co-ordinate the complex interactions.

The Dutch government structure is a three-tiered (national, provincial, local) unitary state driven by the underlying principle of co-government among the three levels (Pojani and Stead, 2014). There are 12 provinces, 390 municipalities and 23 regional water authorities. Each province and municipality has its own deliberative council elected by popular vote.[1] The national government creates the legal framework for spatial planning that determines the responsibilities of individual actors. It takes decisions based on a principle of subsidiarity – i.e. it gives powers to the lowest level of government if possible and to a higher level if necessary. Under this system, the national government remains directly responsible for issues of national importance as defined in the National Structure Plan. These are mostly related to water safety, transport, economic development, and the preservation of internationally protected areas of natural and cultural heritage (UNESCO and Natura 2000). Further, the national government is responsible for infrastructure of national importance and regions and municipalities need to take these spatial impacts into account when taking decisions. The national government also influences decisions of lower levels of government by offering financial incentives – although the importance of this steering mechanism has declined in recent years – and by structuring the scope of local government finance. It plays a major role in the funding of large infrastructure projects which have a major impact on land use.

The provincial level bears responsibility for spatial planning of issues of provincial importance and is mostly free from national guidance in determining what these issues are. In general, provinces prepare rural development plans for rural areas in their territory, maintain the provincial road network and co-ordinate the activities of the water boards, which are important given that large parts of the Netherlands are vulnerable to flooding. Provinces may also supervise the spatial policies of municipalities and can intervene if the decisions of one municipality have negative consequences on another municipality (e.g. regarding nature and landscape protection). Importantly, provinces can draw up binding regulations (ordinances) for local plans.

Municipalities are the most important actors determining land-use policies. Although the national and provincial governments have powers to override municipal planning decisions, they make seldom use of these powers. Municipalities exercise their powers partly by preparing local land-use plans, but also by practising active land-use planning. Amsterdam is active in land and property markets to ensure desired developments take place. Municipalities also have powerful vetoes. Developments rarely occur against the city's wishes. At the local level, it is important to mention the role of the districts – municipal subdivisions that were first created in the 1980s. Amsterdam has seven such districts. Each is overseen by a directly elected committee (*bestuurscommissie*). Up until 2014, Amsterdam's districts had a special status as a sub-municipality with a directly elected council (as opposed to a committee).[2] But recent reforms have reduced this independence and presently, districts carry out the tasks delegated to them by the municipal council.[3]

Beyond national, provincial and municipal governments, there are other governmental/governance bodies that also shape land-use practices in Amsterdam and the Netherlands more generally. The most well established among these are water boards (*waterschappen* or *hoogheemraadschappen*), which are a form of regional government

first created in the 13th century to manage water barriers, waterways and water levels in their respective regions. Water boards must be consulted by plan-making government bodies and housing associations and in the construction of residential buildings. Amsterdam's water board (*Hoogheemraadschap Amstel, Gooi en Vecht*) covers 23 municipalities and has been merged with the public water utility (Waternet). Waternet provides drinking water and manages groundwater and sewage while the water board purifies wastewater, maintains and manages surface water. The water board levies taxes and is governed by a directly elected board and an appointed chair.

There are also joint municipal-provincial collaborative structures. Amsterdam co-ordinates with municipalities and provinces across its functional urban areas through the Amsterdam Metropolitan Area (Metropoolregio Amsterdam, MRA). Established in December 2007, this informal partnership makes agreements in the fields of traffic and transport, economy, urbanisation, landscape and sustainability; it has a revolving presidency among its member municipalities and provinces. Three committees drive its work: 1) planning; 2) accessibility/transportation; and 3) the economy. The MRA elaborates a spatial vision – Development Scenario in 2040 (Development Scenario Noordvleugel 2040) – that identifies 11 main tasks for the region to tackle. There is also a regional transportation body, Vervoerregio Amsterdam, which is a partnership of 15 municipalities responsible for regional traffic and transport (excluding trains).[4] The majority of the entity's funds are from decentralised government subsidies while the remainder is contributions from the member municipalities.[5] The evolution of metropolitan governance and issues related to land use in the region are the focus of Chapter 3.

Beyond these major governmental actors, there are several collaborative partnerships and bodies involved with land-use issues in the Amsterdam region. For instance, there is a collaborative body for the management of the North Sea Canal Area that is focused on maintaining the area's international competitiveness and a related environmental services board that issues environmental permits. There is also the Amsterdam Economic Board, whose representatives from business, research and government work on such issues as urban mobility, digital connectivity and the circular economy. The actors engaged in spatial development across the MRA (summarised in Table 2.1) focus on formal government and networks of partnership within the territory.

There are also a wide range of other actors who are involved in land-use issues in Amsterdam and its surroundings including universities and research institutes, housing associations, interest groups, developers and so on. Amsterdam has some particularly unique organisations in this regard, such as groups that work with and between investors and residents on new urban developments (e.g. ZO!City, a community-based urban transformation group that has designed an online collaborative interface to engage with citizens) and there is a strong culture of deliberative planning which seeks to include as many voices as possible in the elaboration of plans and developments – a point that will be returned to.[6]

The spatial planning system

The structure of spatial planning in the Netherlands, like in all OECD countries, is set by legal frameworks such as property rights and the legislative frameworks that determine the authority of planning actors, the tools and instruments at their disposal, and rules and regulations that they must conform to. Beyond such formal institutions, the spatial planning system is also shaped by less tangible aspects, such as norms and expectations about the role of government and the nature of policy interventions, ways of

working between actors, levels of trust and so on – in other words, informal institutions. These types of relations are historically embedded and are in many ways equally important to understanding how the planning system works and responds to change.

Table 2.1. **Major spatial development actors in the Amsterdam region**

Government/entity	Governance	Core responsibilities for spatial development/planning	Spatial planning instruments/plans
Province of North Holland (provincie Noord-Holland)	Directly elected provincial parliament	Sustainable spatial development (including water); environment, energy and climate; countryside, nature management and nature areas; regional accessibility and regional public transport; regional economy; cultural infrastructure and preservation of historical monuments; quality of public administration	Ordinances (*verordening*), imposed local plans (*inpassingsplan*), creates regulation, gives instruction, amends plans, takes decisions regarding projects, employs subsidies, establishes covenants Plans: structural vision
City of Amsterdam (Gemeente Amsterdam)	Directly elected council, Mayor appointed by "the Crown" (the King, under ministerial responsibility)	Elaborates land-use plans; planning permits; monitors housing construction; constructs infrastructure; implements the Environmental Management Act; issues building permits; develops land in some cases	Creates regulation, gives instruction, amends plans, takes decisions regarding projects, employs subsidies, covenants Plans: structural visions and land-use plans
Water board (Waternet)	Regional government body; elected general administrative body; appointed chair	Manages water barriers, waterways, water levels, water quality and sewage treatment	Levies taxes, develops water infrastructure
Amsterdam Metropolitan Area (Metropoolregio Amsterdam)	Appointed representatives from membership; municipalities and two provinces	Agenda to reach consensus on traffic and transport, economy, urbanisation, landscape, and sustainability	Based on administrative agreements between members (e.g. joint studies, area developments and investments)
Transport Authority Amsterdam (Vervoerregio Amsterdam) Formerly the Amsterdam City Region (Stadsregio Amsterdam)	Appointment from partner membership; revolving presidency/chairs; three committees	Regional transport and traffic	National allocation of the Broad Goal Oriented Grant (government subsidy to spend on regional traffic and transport)
North Sea Canal Area (NZKG)	Municipal representation, government, port authorities, infrastructure managers supervised by the province of North Holland	The international competitiveness of the canal and Amsterdam Metropolitan Area	Administrative agreement and North Sea Canal Area Vision (Visie NZKG)
Environmental service NZKG (Omgevingsdienst Noordzeekanaalgebied NZKG)	Governing board with representatives from eight municipalities and three provinces composed of mayors, aldermen and other representatives	Issues environmental permits and ensures businesses comply with current laws and regulations on environmental safety, building safety, infrastructure and soil	Enforces compliance to laws, advises
Amsterdam Economic Board	Business, research and government representatives from across Amsterdam Metropolitan Area	Partnership in five core issues: circular economy, "digital connectivity, health, mobility and employment	Voluntary collaboration

Box 2.1. **Assessments of Dutch spatial planning and reform**

The Netherlands has a "soft spot for planning" (Faludi, 2005: 285). It is world-renowned for its system of planning and land management. The creation of walkable and mixed-use neighbourhoods, the uptake of sustainable transportation and related infrastructure, the protection of green spaces and the preservation of farmland are but a few practices of note. International academics have variously extolled the country as having "one of the world's most successful systems" (Alterman, 1997), as being a "world-wide lead" in the co-ordination of spatial and transportation systems (Hall, 2007), as "the most planned country among the European nations" (Dutt and Costa, 1985) and as no less than a "planners paradise" (Burke, 1966). Fainstein has dubbed Amsterdam a "grounded utopian actual city that, while not, of course, really utopia, offers a picture of possibility, at least in relation to the Anglo-American city" (2005: 127). In sum, there is strong consensus among many experts that there is much to learn from the Netherlands' oft-studied spatial planning system.

Despite these positive assessments, many Dutch academics have been far more critical, particularly in recent years. What some view as success – such as "the containment of open space in the Green Heart and buffer zones between agglomerations" – others view as problematic (Roodbol-Mekkes, van der Valk and Altes, 2012: 378). Part of the recent critique of Dutch planning has stemmed from the perceived loss of influence of national planning and policy and the lack of responsiveness of the system to the need for new developments (Hajer and Zonneveld, 2000; Buitelaar et al, 2007). A recent analysis by Buitelaarab and Bregman argues that the three core pillars of the Dutch planning system – integration (of land uses, actors and financial sources), comprehensiveness and the support of these by an active municipal land policy – are, in fact, crumbling (2016: 1281). These authors are reacting to a number of recent reforms and policy changes, including 2008 reforms that clarified responsibilities between levels of government, reduced the direct national role in land-use planning and the 2010 Crisis and Recovery Act that sped up approval processes for developments. In essence, the system is evolving to be less hierarchal and more flexible in terms of the rules that are imposed, while at the same time reorienting the role of governments in spatial development towards the local level and placing a larger onus on private actors to take the lead in new developments.

Remarking on these changes, Zonneveld and Evers argue that national spatial policy in the Netherlands is shifting away from a "comprehensive integrated" approach where there is a systematic and formal hierarchy of plans focused on spatial co-ordination among sectors, towards an "economic development" approach wherein economic objectives dominate (2014: 75). They further argue that the diminishing role of the national government in such areas as landscape quality *de facto* elevates the importance of EU environmental directives as a determinant of national spatial structure (Zonneveld and Evers, 2014: 69). Thus, there is much consternation surrounding present reforms which stem in large measure from changes both in terms of how land use is governed and in the role and scope of governmental actors which have accelerated in the wake of the 2008 economic crisis (Heurkins and Hobema, 2014; Kickert, 2015; Waterhout, Othengrafen and Sykes, 2013).

Under the present configuration, the spatial planning system as a whole operates to a high degree on the basis of trust that actors across various scales will implement the desired spatial objectives, such as the protection of green space, and work closely with each other to meet emerging challenges, one of the greatest of which is to build more housing to meet the needs of a growing population. As will be discussed later, while previous reforms to the planning system have instituted incremental changes, the 2016 Environment and Planning Act could present a significant reorientation of the competencies between actors in the planning system and how they work with and relate to one another – challenging what is already a devolved and flexible approach to work in new ways.

Sources: Faludi, A. (2005), *The Netherlands: A Culture with a Soft Spot for Planning*; Alterman, R. (1997), "The challenge of farmland preservation: Lessons from a six-nation comparison", http://dx.doi.org/10.1080/01944369708975916; Burke, G.L. (1966), *Greenheart Metropolis: Planning the Western Netherlands*; Hall, P. (2007), "The future of the metropolis and its form", http://dx.doi.org/10.1080/00343409750134647; Zonneveld, W. (2007), "A sea of houses: Preserving open space in an urbanised country", http://dx.doi.org/10.1080/09640560701475303; Waterhout, B., F. Othengrafen and O. Sykes (2013), "Neo-liberalization processes and spatial planning in France, Germany, and the Netherlands: An exploration", http://dx.doi.org/10.1080/02697459.2012.699261; Heurkens, E. and F. Hobma (2014), "Private sector-led urban development projects: Comparative insights from planning practices in the Netherlands and the UK", http://dx.doi.org/10.1080/02697459.2014.932196; Buitelaar, E., Lagendijk, A. and W. Jacobs (2007), "A theory of institutional change: illustrated by Dutch city-provinces and Dutch land policy", *Environment and Planning A,* Vol. 39/4, pp.891-908.

This section explores these elements in turn. It proceeds by outlining the framework legislation that establishes the legal basis for planning and describes the major plans at each level of government, namely the structural vision and, for Amsterdam, land-use plans. Following this, the city's use of active land-use planning is described and the compatibility and co-ordination between scales within the planning system is assessed, including the elements of trust in the system and the ways in which the various actors work with one another beyond statutory obligations.

Framework legislation – the Spatial Planning Act

Structure plans are non-hierarchal and non-binding on other levels of government

The Spatial Planning Act (2008, WRO) is the main framework legislation for spatial planning in the Netherlands. It, together with its accompanying regulations, provides the legal basis for structure plans, land-use plans and project plans. The 2008 WRO replaced its predecessor (the Spatial Planning Act of 1965) and introduced a number of important changes into the planning system under the central idea of "decentralise where possible, and centralise where necessary". A major outcome of the change was a shift from a hierarchy of nested plans, with lower order plans requiring conformity to upper order ones, to a system where each level of government identifies its own planning interests and applies planning instruments to realise them through structure plans. Structure plans do not apply legally, or in terms of policy, to other government authorities. A government's structural vision is binding only for the government itself. Under the WRO, all three governmental tiers have access to the same legal instruments, including the binding local land-use plan.

The 2008 Spatial Planning Act streamlined regulations that had become fragmented over time and reduced national and provincial oversight over municipal decisions. At the same time, a new law to simplify planning applications was introduced. It reduced the number of required permits from 35 down to 1. Some of the reforms of the Spatial Planning Act were reversed in 2010 under the auspices of fostering economic growth, which had declined since 2008.[7] However, none of the recent reforms fundamentally impacted the system of land-use governance, which has remained stable over the past decades.

Other key planning legislation is the Law Regulating the Development Permit, which stipulates the criteria that have to be met beyond complying with land-use plans in order receive the permission to develop, and the Crisis and Recovery Act, which was adopted in the wake of the 2008 economic recession in order to speed up planning permission. Other important and strictly enforced laws related to land use are the Nature Protection Act, the Environmental Act, the Water Act and the Expropriation Act (see Box 2.2 for a summary of key planning legislation). Property rights in general are defined in Book 3 of the Dutch Civil Code. The right to develop is not a specific right defined in the Dutch Civil Code; parties are free to define the content of such a right in an agreement.[8] There are also important policies such as the national urban policy, which structures relations between the national government, cities and stakeholders (Government of the Netherlands, 2017).

There is also a wide range of EU policy and legislation that impacts (directly and indirectly) how land is used. This includes: legislative requirements such as area-based designations (e.g. Natura 2000) and renewable energy targets; funding for energy and transportation networks; direct payments to farmers under the Common Agricultural Policy; and strategic documents and policy guidelines such as the Biodiversity Strategy to 2020 (for an overview of the main EU instruments that influence land use in the Netherlands see Evers and Tenekkes [2014]).

Box 2.2. Key planning legislation in the Netherlands

Spatial Planning Act (Wet ruimtelijke ordening)

This provides the legal basis for the structure plan and the land-use plan and prescribes the procedures for making and enforcing those plans.

Law Regulating the Development Permit (Wet algemene bepalingen omgevingsrecht, Wabo)

This is the basic law of any land-use governance: without the possibility of requiring permission to develop, most plans are ineffective. Very many activities that would change land use are forbidden unless a development permit has been obtained in advance. These activities include building, changing the use of a building or of land, changing a protected monument. The application is checked for compliance with various sorts of criteria which are specified nationally, such as the building regulations, the land-use plan, urban design standards, and noise nuisance standards. Additional criteria can be stipulated by both municipalities and provinces, such as demolition, felling trees. The application is tested against the criteria, and if it fails to meet one or more of them, it must be rejected. Exceptions are, however, possible. Note that this law was introduced in 2010 in order to integrate into one development permit 25 separate permits and rules, such as for building, for protecting monuments, noise nuisance. The purpose was to simplify and speed up procedures.

The municipality is responsible, unless the province has declared the project to be of provincial importance, in which case the province handles the application; or unless the minister has declared the project to be of national importance, in which case the minister handles the application.

Crisis and Recovery Act (Crisis- en herstelwet)

This provides the legal basis for the project plan and prescribes procedures for the land-use plan when these are made under certain circumstances. These procedures supersede those laid down in the Spatial Planning Act. National, provincial and municipal governments are responsible.

Environmental Protection Act (Wet milieubeheer)

If an activity has limited consequences for the environment, the application to start or change this activity is handled under the procedures for the development permit. If the environmental consequences are considerable, an environmental impact assessment (EIA) also has to be made. For the EIA, the national minister, or another body chosen by the national minister, is responsible.

Nature Protection Act (Natuurbeschermingswet)

If an activity is proposed for an area declared as a protected natural area (*beschermd natuurmonument*), a permit has first to be applied for. The application is tested for its damaging effects on the landscape, the natural history, animals and plants, etc. This is the Dutch implementation of the Birds and Habitat Directives. The executive committee of the province is responsible.

Water Act (Waterwet)

For certain activities which might endanger the water system, such as pumping up ground water or discharging wastewater, permission is required.

Expropriation Act (Onteigeningswet)

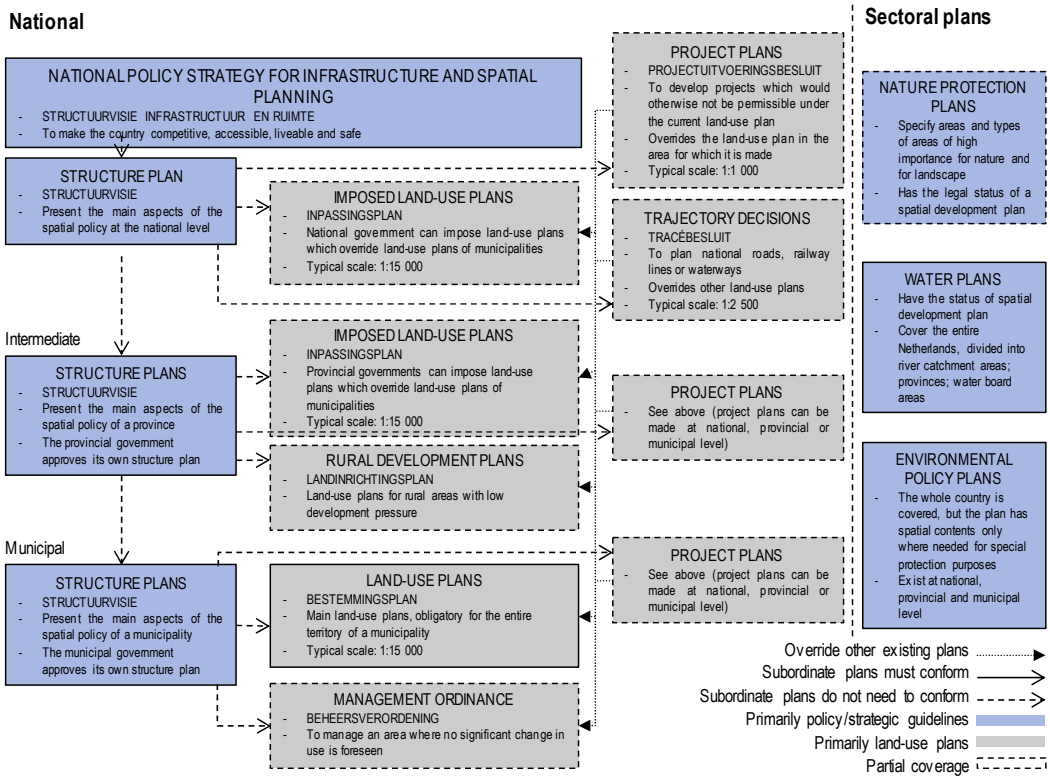
This provides the legal basis for expropriation. It has an additional significance, in that the compensation to be paid by compulsory purchase is often used as the basis for setting the price when a government body acquires land amicably. Responsible authorities include all levels of government, including the independent judiciary.

Source: Background questionnaire.

Structural visions – setting medium- and long-range goals

The two major types of spatial plans in the Netherlands are structure plans and land-use plans (Figure 2.1). By law, all three levels of government must prepare structure plans that outline their main spatial policy objectives and the policies to pursue them. In addition to the general structure plan that is legally required by all levels of government, governments can also prepare additional structure plans that deal with particular sectors or challenges. For example, the long-term infrastructure investment programme of the national government (MIRT) is spatially linked to the National Structure Plan. All spatial and land-use plans in the Netherlands are publicly accessible via a national web portal.[9]

Figure 2.1. **The Dutch spatial planning system**



The framework documents are flexible so that they can serve the needs and interests of each level of government and community as it sees fit. While the Spatial Planning Act mandates that each level of government elaborate a structure plan, each jurisdiction is free to decide its contents. The act does, however, specify how the vision is to be implemented – e.g. the tools and instruments to be used, which are the same for all levels of government. Apart from this, governments are free to choose a form that best suits the spatial subjects, the method of work, and their own political and administrative culture.

Given the plans' self-binding nature, the government incorporates subjects of national importance into a General Administrative Order in order to have a legislative effect on other public authorities. Vertical co-ordination between provinces and municipalities occurs in provincial planning committees that serve as platforms for discussions between all three levels of government. If no consensus can be reached in this way, the provincial or national government can issue ordinances that request a change in lower level plans to

conform to higher level plans. If the lower level does not comply, it can be forced through directives ordering it to do so. Furthermore, national and provincial governments can directly impose land-use plans on municipalities. Horizontal co-ordination at all three levels of government occurs through the legal requirement to co-ordinate spatially relevant decisions between the responsible public authorities at the respective level of government.

While there are mechanisms in the planning system to overcome major conflict, the system as a whole operates on a high degree of trust between the relevant parties to work together towards common objectives. There is also inherent flexibility in how the plans are elaborated by each level of government. The procedure for drawing up and determining a structural vision is decided by the government itself – the Spatial Planning Act and the Environmental Planning Act do not specify how citizens and social organisations are involved in the plan's elaboration, with the exception of instances where other legislation or administrative agreements dictate such procedure.[10] The legislation does, however, require that the process by which the public (broadly defined) is involved, be explained. Further, it is important to note that the structural visions, at all levels of government, signify intent and are not a legally binding document or policy by which an individual could lodge an appeal or an objection. Each government can diverge from its own structural vision as well. However, as a key document for spatial development with a lengthy process of elaboration that includes multiple stakeholders and the public, such a divergence would not likely be politically desirable.

Beyond the plans listed above, there are sectoral plans for water management, environmental policy/zoning and nature protection areas. There are a lot of general rules that apply to specific land uses, irrespective of a spatial plan – e.g. traffic rules, building regulations, animal welfare for agricultural areas, outdoor advertisements, water, noise, environmental pollution. These apply across the whole country, unless explicitly exempted, and can have a strong impact on the way that land is used despite their spatially uniform application. Many of these are the result of EU legislation.

While this sets the overarching framework for spatial planning and how the different levels relate to one another, "the devil is in the details" – particularly given that so much flexibility is permitted within the system. The following section describes each major plan in turn including its major objectives and tools to realise them and monitor progress over time. This includes the national, provincial and municipal structural visions along with other collaborative spatial plans such as the joint regional plans of North Holland, Utrecht, Flevoland (*Gebiedsagenda*) and the economic agenda for the Amsterdam Metropolitan Area. Following this, Amsterdam's land-use plans are discussed, which give the greatest level of detail for specific kinds of land uses.

The National Structure Plan: "A competitive, accessible, liveable and safe Netherlands"

The National Structure Plan is a strategic spatial vision for development that focuses on issues that are important for the entire country as a whole (Box 2.3). It describes eight major goals for the government to the year 2040 and sets three national objectives to the year 2028. Formally entitled the National Policy Strategy for Infrastructure and Spatial Planning (SVIR), the plan replaces five previous schemes and supersedes a number of other national documents in such areas as planning for military sites.[11] The Minister for Infrastructure and the Environment is responsible for the plan's elaboration and co-operation with other ministries where relevant. The SVIR aims to reduce duplication between levels of government, make the regulatory system less complex and critically,

devolve as many responsibilities for spatial planning down to the relevant subnational governments. In turn, the national government has identified 13 areas of national interest.

Box 2.3. The National Policy Strategy for Infrastructure and Spatial Planning

In 2008, reforms to the statutory spatial planning system led to further decentralisation, split responsibilities between national and regional partners, and created a strategic agenda for infrastructure investment to facilitate economic growth. The subsequent 2012 National Policy Strategy for Infrastructure and Spatial Planning (SVIR) built on these ideas by defining the areas of national interest for infrastructure policy with the intention of reducing the duplication (or sometimes conflict) between levels of government.

The implementation of the central government policy focuses on 8 long-term objectives to the year 2040; 3 medium-term objectives to the year 2028; and defines 13 areas of national interest, for which the central government will take responsibility and ensure the achievement of the planned results (summarised in Table 2.2).

Table 2.2. **National Policy Strategy for Infrastructure and Spatial Planning, medium- and long-term goals**

Medium-term objectives to 2028	Long-term goals to 2040	Areas of national interest
– Enhance the country's competitiveness – Improve accessibility and make room for expansion of roads, railways and waterways – Provide a liveable environment with room for nature and culture and safety and emergency preparedness (e.g. flood protection)	– Top ten most competitive economies in the world – Attractive business climate in urban areas that are optimally accessible – Co-ordinated multi-modal transport system consistent with spatial development – Spaces for employment and housing to match demand – Healthy urban and rural environments and flood protection – Preserve culture and natural landscapes and ecosystems – Continue transition to quieter, cleaner, more efficient and safer vehicles – Robust international energy network and advanced transition to renewable energy sources	– Excellent and accessible international business climate in the urban regions with a concentration of key sectors – Space for the main network for (sustainable) energy and energy – Space for the main network for the transport of (hazardous) substances through pipelines – Efficient use of the subsoil – Robust main network of road, rail and waterways around and between the major urban regions, including hinterland connections – Better utilisation of the capacity of the existing transport system of road, rail and waterways – Maintain the principle transport networks – Improve environment (air, soil, water) and protection against external noise and safety risks –Space for water, a sustainable fresh water supply and climate-resilient urban (re)development –Space for preservation and strengthening of (inter)national unique cultural, historical and natural qualities – Space for a national network of nature – Space for military sites and activities –Carefully considered and transparent decision making at all spatial plans

There are four main instruments that the national government can draw on to realise its objectives: frameworks, performance agreements at the administrative level, financial instruments (such as the infrastructure fund) and knowledge sharing. Because the SVIR is quite generic, more specific structural visions are made for some areas with complex spatial problems – e.g. the Schiphol area and the Amsterdam area – in co-operation with regional and local authorities.

Box 2.3. **The National Policy Strategy for Infrastructure and Spatial Planning** (*continued*)

Reducing overlap between levels of government

Outside these 13 areas of national interest, local and regional authorities are able to conduct their own policy, although they are expected to contribute to simplifying and integrating spatial planning regulations. This is intended to remove excessive layers of government and create scope for customised regional solutions. Responsibility for balancing urban and green areas at the regional level is left to the provincial authorities. To this end, the central government has abolished the national landscape policy and reduced the number of nature management regimes. The government also strengthened the cohesion between the various modes of transport and between spatial development and mobility. The introduction of a new accessibility indicator allows more regionally tailored solutions. The municipal and inter-municipal co-ordination and implementation of urbanisation plans is left to local authorities working independently or in collaboration within provincial authorities. The national government no longer dictates the course of urban planning, with the exception of urban regions around major transport hubs and ports where there is joint planning.

Ensuring the efficient use of space – the sustainable urbanisation procedure

To promote the careful use of space, the central government has included a "ladder" to guide sustainable urbanisation in the Spatial Planning Decree. The available space should be used efficiently and excessive programming avoided. To achieve these aims, the Spatial Planning Decree introduces a three-step procedure:

1. The authorities concerned assess whether the intended development meets a regional, inter-local demand for industrial sites, offices, residential buildings, retail developments or other urban amenities that has not been met elsewhere. Besides a quantitative assessment (number of hectares or number of homes), there must also be qualitative demand (e.g. an industrial site where a heavier environmental burden is permitted or a specific type of living environment) at a regional scale. The appropriate regional scale is determined mainly by commuter traffic.
2. If the intended development meets regional or local needs, the authorities concerned will assess whether it can be met in an urban area by restructuring or transforming existing locations.
3. If restructuring or transformation in an existing urban area offers insufficient potential for the regional, inter-local need to be met, the authorities concerned will assess whether it can be achieved in such a way that it can be accessed appropriately by multiple modes of transport (National Policy Structure for Infrastructure and Spatial Planning, 2012).

Further, there are areas where building activity is prohibited by national regulations (for instance nature reserves, coastal areas and river banks) or by provincial regulations (for instance provincial nature reserves). The Spatial Planning (General Rules) Decree (Barro) establishes the legal frameworks for safeguarding spatial planning policy – it ensures that land is reserved for such uses as flood defences, the electricity grid and the ecological network.

Accompanying these changes is a Multi-annual Programme for Infrastructure, Spatial Planning and Transport (MIRT) set up by the national government. It specifies the main steps for projects and programmes wishing to qualify for government funding. National and local officials meet annually to discuss a "regional agenda", a shared vision by national and regional authorities, and the MIRT contributes to the regional agenda, providing a long-term investment framework for the Netherlands and the regions.

Source: Adapted from OECD (2014a), *OECD Territorial Reviews: Netherlands 2014*, http://dx.doi.org/10.1787/9789264209527-en, pp. 129-130.

This represents a major policy shift for spatial planning at the national level. While in the past the national government played a major role in urban planning by, for instance, prescribing percentages of built land in inner city areas, defining the location and amount of new housing/land development in areas, and by defining national buffer zones and objectives for restructuring, it will only intervene now in the urban regions around major transport hubs and ports (Noordvleugel and Zuidvleugel) and will only act in co-ordination with local and regional authorities. Accompanying this change, the broad purpose grant for transport policy was transferred to general funds, and in Amsterdam falls under the purview of the regional transportation authority.

While there are no prescribed mechanisms for enforcement between the structure plans of each level of government, the national government has set up a monitoring system through the Netherlands Environmental Assessment Agency that is used to determine if national interests are, in fact, being safeguarded. Further, the government – through the national Spatial Planning (General Rules) Decree (Barro) – stipulates land that should be set aside for reasons of national importance such as the energy grid or flood defences. It is up to local land-use zoning plans to implement these provisions – any local plan that violates it can be taken to court and the plan can be annulled. The national government conducts retrospective studies to establish whether zoning plans and provincial regulations in fact comply with national legislation.

North Holland's Structural Vision: "Quality through versatility"

At the provincial level, North Holland's Structural Vision (North Holland Structural Vision 2040) responds to anticipated spatial conditions over the longer term. The plan covers all subjects with spatial implications: the economy, environment, landscape, nature, spatial quality, agriculture, water, traffic and transport, and cultural history. The level of detail on each subject differs, with far more attention given to the province's three main areas of interest: 1) climate change adaptation and mitigation; 2) sustainable development; and 3) spatial quality, which includes the preservation of cultural and natural landscapes and green reserves around the city.

Table 2.3. **North Holland Structural Vision 2040 instruments**

Spatial planning instruments	Legal	– Regulation and various implementing regulations – Legal consultation response opinion – Pro/reactive designation – Provincial land-use plan – Environmental permit – Deviation destination plan
	Non-legal	– Administrative and official consultations – Covenant/administrative agreement – Provincial land policy – Consultancy and expertise
Other instruments	Legal	– Water regulation – Environmental regulation
	Non-legal	– Administrative consultation – Covenant/administrative agreement – Subsidies – Investments – Incentive programmes – Communication/facilitation

Source: Noord Holland (2015), "Geconsolideerde Structuurvisie Noord-Holland 2040 na wijziging (vastgesteld door PS 28 september 2015)", https://www.noord-holland.nl/Onderwerpen/Ruimtelijke_inrichting/Structuurvisie_en_PRV/Beleidsdocumenten/Structuurvisie_Noord_Holland_2040.org (accessed 10 April 2017).

While North Holland's Structural Vision is a self-binding plan, the regulation attached to the vision contains some rules that municipalities need to take into account, for instance on the protection of green buffer zones and the protection of rural spaces from urbanisation (unless shown to be absolutely necessary).[12] North Holland's Structural Vision is determined by the provincial executive and is subject to extensive public consultation and is updated annually. The city of Amsterdam, together with other municipal stakeholders, was heavily involved in its elaboration. The plan draws on a mix of legal and non-legal tools and instruments in order to realise its objectives (Table 2.3) and is monitored and evaluated.[13] Once the new Environmental Act comes into force in 2019, the provincial structural vision (together with other strategic visions) will be replaced by a regional environmental vision.

Amsterdam's Structural Vision: "Economically strong and sustainable"

Amsterdam's Structural Vision outlines its development ambitions for the 2010-40 period, which in turn forms the basis for the city's investment agenda. It is grounded in the central idea that economic development and sustainability are mutually reinforcing aims – that "clean air, properties full of character and an attractive green public space are all aspects with which the city can secure the loyalty of people and businesses" (Structural Vision). This approach is well-aligned with the OECD's green growth agenda, which advocates for progress at the interface of the economy and the environment by fostering innovation, investment and competition, thereby creating new sources of economic growth that are consistent with resilient and sustainable ecosystems (OECD, 2015a).

In order to realise these ambitions, the vision outlines six spatial tasks.

1. To increase density. Beyond the clear need to accommodate population growth through an estimated 70 000 dwellings between now and 2040, it is noted that densification makes it possible to manage energy and transportation more efficiently and removes the need to infringe upon the landscape. To achieve this, the vision recommends that light industry be concentrated around the ring road, that business parks and the port area intensify the usage of space, and that more high-rises be developed near transport hubs and along the ring road. The potential to make more use of space below ground is also noted.
2. To transform mono-functional areas, such as business parks, into mixed residential and business functions which have the potential to boost knowledge-intensive sectors (e.g. the Port-City project).
3. To enhance regional transportation and increase the number of links between nodes. The idea is to create a "network-wide leap" by 2040 through such projects as extending the metro's orbital line into Amsterdam-North.
4. To increase the quality of public space through high design standards and by allocating more space to walking and biking (and reducing motorised traffic as a result).
5. To invest in the recreational use of green space and water and make it more accessible.
6. To prepare for a post-fossil fuel era – e.g. to make the housing stock more energy efficient, construct a closed heat-transfer system in order to be able to transport residual heat, and to install wind turbines.

As the structural vision notes, these spatial ambitions are driven by trends that are already being experienced in the city and region, and as such are embedded in, and respond to, the changing character of different neighbourhoods.

Amsterdam's Structural Vision was elaborated through a highly involved process of public review and input from residents, companies, institutions and other levels of government – a process that took around three years. A progress report on the plan is submitted to council every four years and a new edition of the plan is released every decade. The structural vison is accompanied by an implementation plan and a list of instruments by which to realise its objectives. Unlike the longer timeframe of the structural vision, the implementation instruments are set for the period 2010-20, after which time they will be evaluated and revised. This process of evaluation and revision is extremely important and is a function that is often lacking in many planning systems (Oliveira and Pinho, 2010).

Table 2.4. **Amsterdam Structural Vision instruments**

Spatial planning instruments	Legal	– Zoning plan (*bestemmingsplan*) – Development contract – Environmental assessment/permit (*omgevingsvergunning*) – Water assessment/permit (*watervergunning*) – Management regulation/ordinances (*beheersverordening*)
	Non-legal	– Plan and spatial decision-making measures (*Plaberum*) – Urban development plan
Other instruments	Legal	Not applicable
	Non-legal	– Investments/subsidies – Incentive programmes – Administrative procedure – Communication/facilitation – Public-private coalitions

Source: Own elaboration.

While the structural vision is a policy document to guide investments and signify the municipality's intent, it is not in and of itself a legally binding document. It comes down to other instruments, namely, legal spatial planning, (i.e. zoning and project decisions) and urban plans (planning and investment decision-making spatial measures, *Plaberum*) to realise its ambitions. Therefore, it is important that the district plans conform to the structure plan and there is a central review procedure to ensure this consistency.

Box 2.4. **Towards a circular economy in Amsterdam**

The concept of circular economy has emerged to stimulate a departure from linear economic and industrial processes ("resources to waste") that deplete finite resources by making disposable products. The circular economy represents a life cycle approach to maximise value creation in each link of the system. The overarching goals are to enhance the restorative capacity of natural resources, improve the reuse and recycling of products and raw materials, phase out waste and hazardous substances, and transition towards renewable and sustainable energy supplies. In recent years, the Netherlands has begun laying the groundwork towards a circular economy. It has formulated its own national policy, while actively contributing to international efforts to promote resource efficiency.

Box 2.4. **Towards a circular economy in Amsterdam** (*continued*)

At the municipal level, Amsterdam's Sustainability Agenda outlines the city's ambitions to establish a circular economy in the long term. Amsterdam is the first city to study in depth the potential of such a transition, including its market potential. The city is presently involved in more than 20 projects in the built environment that demonstrate the profitability of a circular economy approach. The city has also established urban innovation centres that demonstrate the viability of this approach to investors, with the aim of accelerating the transition towards a circular economy.

Integrated planning is essential for the realisation of a circular economy. For example, the construction and demolition of buildings can be co-ordinated so that materials from demolished buildings can be used in new projects. Modular buildings can be encouraged that have the potential for a longer lifespan due to the flexibility of their space. Since much of the circular economy requires a circular chain, the proximity of different activities to one another are important – hence a role for planning. It can also require flexibility in building codes to allow, for instance, bio-based modular buildings.

Policy design and implementation challenges

The new focus on a circular economy has brought a number of policy design and implementation challenges compared to traditional waste management. First, in traditional waste management, the government has taken the lead in planning, target setting and implementation (at the appropriate level of government) of regulatory and economic policy instruments to meet objectives. While this approach has been very successful, a circular economy requires a different type of engagement with a broader range of actors influencing decisions about resource use. Specifically, it must engage a diverse set of companies, including those producing and selling products to end consumers; this is a much more diffuse group than those typically engaged in traditional waste management. Further, new business models may be required to put the circular economy into operation.

The role of government in a circular economy is also different than in traditional waste management. Since the early 2000s, the Netherlands has gradually shifted its approach to environmental policy formulation. Moving from "command-and-control" style planning, the government is now playing a more hands-off role using incentives and innovation to change business and consumer behaviour. Further, it recognises that the transition towards a circular economy is complicated and novel, requiring a certain amount of trial and error to reach a robust policy. Moreover, the identification of realistic objectives, development of indicators and measurement of progress for resource efficiency is complex. The choice of indicators to measure progress is still the subject of debate.

The discussion about appropriate targets raises a more fundamental question of what should be the ultimate aim of greater resource efficiency and the move towards a circular economy. While policy makers generally agree on the need to reuse resources and produce more with less, agreement on the extent of the desired change is more elusive. With already relatively high rates of material recovery (recycling and composting), the Netherlands has made significant progress towards becoming a leader in improving efficiency in a linear economy; it still has much further to go to transition towards a circular economy. Potential gains in the transition to a more circular economy are still substantial, with important opportunities for improvement. Further, existing legislation (in the areas of waste, chemicals) may create barriers in the move towards a circular economy. For example, strict rules exist on the definition of waste and when it can be considered a product. These rules serve to protect producers, consumers and the environment. However, they often cause secondary resources to be regarded as waste, which hampers the development of markets for these materials. The challenge is to facilitate these markets, while still meeting the objectives of the legislation. Finally, there is also an important political economy dimension to this transition. The move towards a circular economy will result in winners (e.g. service companies and downstream product manufacturers), as well as potential losers (e.g. metal processing companies and primary extraction companies). The challenge for the Netherlands, and Amsterdam, is how to navigate these political economy issues, including developing policies to minimise impacts on potential losers.

Sources: Adapted from OECD (2015c), *OECD Environmental Performance Reviews: The Netherlands 2015*, http://dx.doi.org/10.1787/9789264240056-en; City of Amsterdam (2016), "A vision and action agenda for the city and metropolitan area", https://www.amsterdam.nl/publish/pages/768044/circular-amsterdam-en-small-210316.pdf (accessed 13 January 2017).

Joint regional and municipal agendas for spatial development

Beyond the structure plans, there are joint agendas at different scales that are important in the region. The provinces of North Holland, Utrecht and Flevoland have established a joint spatial plan together with the national government that focuses on strengthening the economic positon of the region internationally, and particularly focuses on the urban areas of Amsterdam and Utrecht (Regional Spatial Agenda: North Holland, Utrecht, Flevoland-2030/2040). The joint regional agenda also addresses such issues as urbanisation, accessibility/mobility, liveability, water safety and renewable energy. Each authority approved the regional agenda independently and is responsible for implementing its own actions, whether alone or together with other parties. This can include studies, programmes and projects. The agenda is not legally binding, and there are no incentives associated with it; however, it does form a basis for investments within the national government's Multi-Year Plan for Infrastructure, Spatial Planning and Transport, which includes financial agreements. The regional agenda was first adopted in 2008 and was updated in 2013 to incorporate the decentralisation of spatial planning policy outlined in the National Spatial and Infrastructural Vision.

The Amsterdam Metropolitan Area has also developed a joint agenda entitled "Room for economic vitalisation 2016-2020", that sets its ambitions to be a leading metropolitan region in Europe. The general thrust of the agenda is to develop compact cities within a landscape that is attractive for those seeking recreation and supported by infrastructure networks that connect the urban cores and the countryside with the rest of the world. The agenda outlines seven major areas for action that link economic, social, environmental and spatial issues. For example, the agenda recognises that approximately 250 000 housing units will be need to be built in the MRA between 2016 and 2040 and discusses how these developments should be geographically dispersed. It recommends the geographic dispersal of tourism to lessen the impacts on Amsterdam's historical centre and also raises the issue of the potential for residential construction near the Schiphol Airport. The agenda calls for more flexible zoning plans in order for developers and investors to be able to transform underused business parks and office spaces to new uses. As a collaborative agenda, projects proceed on the basis of partnerships between the relevant actors and, for some issues, such as the potential for residential developments near the airport, joint action would extend beyond the MRA to include the airport authority, and national and provincial governments.

Land-use plans – the main legal zoning instrument

Amsterdam's Structural Vision sets an ambitious programme of spatial development for the territory which is at once based on existing spatial structures, changes that are presently taking place and anticipated future need – the most pressing of which relates to accommodating future population growth. The most important legal instrument to structure actions in this regard are the city's local plans (*bestemmingsplan*).[14] Local plans are elaborated on the basis of extensive study and public engagement and are updated every ten years. The local plan is a legally binding framework for any development project: it sets out what is possible for each plot of land and the procedures for any change of use and thus establishes certainty and fairness in the planning process.[15] Local plans at once capture existing spatial conditions at a high level of detail and structure future action by determining allowable future uses and forms. Almost all parts of the city are covered by such plans.[16]

Local plans form the basis upon which planning applications are decided. Commercial and residential developments are not treated differently in his regard – they are both assessed against the zoning plan, and if they meet the requirements, they will obtain a permit for constructing, of which there are several types (Box 2.5).[17] For larger projects there is a planning and decision-making spatial measure (*plaberum*) entailing a four-stage process: strategy, research, project design and implementation. Projects are assessed against whether they meet WRO, regional, structure and zoning requirements, they go through environmental impact assessment/strategic environmental assessments. They are further assessed against the administrative agreements relating to a planning area and are assessed for compatibility with municipal policies and plans.

This formalistic description does not adequately capture how closely city officials work with builders, developers and residents to realise high-quality spaces and designs. There are embedded values and best practices that are realised through this process. For example, the city wishes to encourage hotels that are sustainable, mixed use and multi-functional so that they serve not only their clients, but have purpose within the broader community as well by, for example, having a public café on the ground floor. The city is in the process of updating its hotel policy to encourage these more dynamic uses of space. As another example, the city has a policy of restricting large grocery stores and instead encourages smaller ones that act as a draw for neighbouring stores in order to create more dynamic streetscapes.

Box 2.5. **The Dutch all-in-one permit process**

Many OECD countries are grappling with how to make their planning approval process more user-friendly, reduce the length of time it takes to process a permit, and reduce the need to apply for permits across different levels of government. The Netherlands has adopted an all-in-one permit system that offers one such solution. The 2010 "Wabo" Act (*Wet algemene bepalingen omgevingsrecht*) laid down the rules for the public and companies to use one transparent procedure to apply to one competent authority for permits for activities that impact on the physical environment. The new act has replaced around 25 separate permits for such matters as construction, demolition, spatial planning, listed buildings and the environment by a single one-stop-shop permit covering all activities. This has reduced administrative costs for members of the public and for companies. There is now one permit, one procedure and one set of submittal requirements, followed by one "legal remedies procedure" and enforcement by one authority. Applications are submitted electronically and are processed electronically, as much as possible.

This modernisation of the permit system did not establish any new or amended criteria for examining applications. Nor did the act alter the level of protection afforded by current legislation. The same goes for the policy latitude of a competent authority to attach conditions to a permit. But the act does regulate avoidance of conflicting conditions. The permit in most cases is issued by a municipality, which has eight weeks to decide on the permit and another six weeks to finalise it. If the building does not fit into the zoning scheme, the procedure to obtain the permit will take 26 weeks to asses and arrive at a decision.

Source: Ministry of Infrastructure and the Environment (2016), Omgevingsloket online, www.omgevingsloket.nl (accessed 10 April 2017).

Active land policy

Land-use governance is not limited to the application of public law rules in order to influence how landowners exercise their rights – e.g. through the necessity to apply for a development permit, or by offering financial incentives, where the application of those

measures is regulated by spatial plans. In the Netherlands, land use is much more than "passive planning" (waiting for someone else to take the initiative, and then trying to influence that); it includes "active planning", taking the initiative to make the desired change come about. The city acquires land, prepares it for construction and use, and then sells the land to private developers. The role that the city takes on in this regard is not statutorily defined.

The price of the land is determined residually: it is the difference between the market value of the building and the total cost of constructing the building.[18] The increase in the value of planned property as a result of investments in infrastructure and public space is therefore felt (to some extent) in the revenue generated for the municipality: the price paid for the land. The sale takes the form of leasehold: Amsterdam owns the majority of land in the city, and retains ownership after (re)development. Moreover, the increased value of existing property caused by investment in green and infrastructure flows in part to the municipality in the form of property tax. The level of this tax depends on the valuation of the property. The costs of public investments that benefit such private developments are recuperated (in part) from the private developer through an "anterior development agreement" that determines which costs are to be borne by the private developer.

Table 2.5. **Amsterdam's land development, key figures, 2015**

	EUR
Reserve fund	460 million
Working capital	160 million
Future income estimated within active plan portfolio	2.7 billion
Future cost estimated within active plan portfolio	1.8 billion
Net present value after risk	482 million

Source: City of Amsterdam, Department of Land and Development.

The Department of Land and Development (Grond en Ontwikkeling) manages the revenues of land development activities. Over the years, the revenues from these activities have fluctuated greatly. Funds from net surplus years have been added over time to a reserve fund which makes it easier to manage the risk in the project such that it does not affect municipal finances. These funds were particularly useful to the city during the recent financial crisis. The reserve funds have been used, for instance, to purchase the water rights to develop islands for residential housing in the bay. The national government has recently introduced a tax on profit made by municipal commercial activities. Amsterdam is presently in discussions with the state to determine whether its land development activities qualify as commercial activities and will be taxed.

Active land policy has enabled the city to direct development. One of the largest examples of this is the creation of the IJburg district – new islands being created to the east of Amsterdam that will eventually provide 18 000 homes for 45 000 people. Such policies have also enabled the city to define projects in a much more stringent manner than the regular development process would allow. The city has, for instance, developed high-quality public spaces and amenities as it readies plots for development. Of course, many developments in the city remain private sector led; active land-use policies are only used in some cases.

The city's active land-use planning is shifting towards smaller-scale, multi-phase projects to reduce risk

Active land-use planning, which is so characteristic of Dutch spatial planning, is being practised much less of late (Savini, 2016). Recent debates on changes in Dutch land-use policy have led some academics to conclude that active land policy has reached its limits (Boelens, 2010; Buitelaar, 2010; Muñoz-Gielen, 2010; van der Krabben, 2011). One reason is financial: it requires long-term, front-end investment by government bodies (mainly municipalities) on the expectation that they will be able to recoup the costs by selling building plots. But the downturn of the property market since 2008 has resulted in building plots being sold much more slowly and for less than forecast. In some cases, this has resulted in municipalities suffering huge losses that will never be recovered. In other instances, developments have not matched market demand. For example, many municipalities have assumed that the market for shopping space would grow, and have invested large amounts in new shopping developments. But the rapid growth of online shopping has reduced the demand for shopping floor space. In the case of Amsterdam, the city seeks to decrease its loans portfolio in order to comply with national and European rules. Larger scale projects tend to have a large time lag of around ten years before they see revenue, which creates a need for larger loans. This, in turn, creates a disincentive to take on larger scale projects.

Because of such factors, the city's spatial development strategy is shifting from being supply driven to being demand driven (Gemeente Amsterdam, 2016). The city will reduce the risks it bears by taking on smaller scale projects and adopting a phased approach. Another reason for the shift is political. Is it necessary and desirable that public bodies undertake activities which could alternatively be carried out by developers? In answer to this question, most developers do not want municipalities to withdraw from land development because the developers benefit from close co-operation, rather than conflict. However, they want more influence on (and more profits from) land development. The challenge is to invent an alternative development process which continues to safeguard the public interest and to provide a high-quality physical environment. It bears noting that private sector-led developments many still require a strong role for the public sector in their realisation. For example, an analysis of recent private sector-led developments in the Netherlands and the United Kingdom concluded that planners in both places "have a significant role to play in increasingly market-oriented development practices" (Heurkins and Hobma, 2014: 366). Project management and management resources tend to be a private affair, while process management is a joint management activity and the use of management tools is the domain of public authorities (Heurkins and Hobma, 2014: 366).

This changing role for public sector-led development particularly has an impact on certain types of developments, such as industrial estates. Municipalities are the main providers of industrial land, but they rarely make a profit on such activities and in recent years they have taken large losses on some of these developments. Amsterdam has nevertheless initiated such projects in order to increase employment. Until the mid-1990s, it was common that all developments of more than half a hectare took place on land which was provided, and serviced, by the municipality. The municipality would acquire the land in advance at less than development value, prepare and service it, and divide it into serviced building plots. By selling land lease contracts on those plots, the municipality covered its costs and developers (including schools and housing associations) bore the infrastructure costs. However, since then, it has become increasingly common for municipalities and developers to jointly undertake the land servicing with the developers paying the infrastructure costs. Since 2008, it has been possible to attach financial

conditions to the granting of a development permit, and in that way, to recoup the infrastructure costs from the developers.

Whichever process is followed, if the infrastructure costs are very high (e.g. because of poor building conditions or expensive bridges), then it might not be possible to recoup all the costs because the costs are recouped when selling the land, and the sales price cannot be higher than the market value of the land. In such cases, the (extra) infrastructure costs need to be subsidised. The costs of providing serviced building plots on the brownfields are usually far higher than on greenfield locations. Much is done to keep the losses small by, for example, encouraging high-density development and multiple commercial uses. Nevertheless, some loss is usually unavoidable and negotiations between the municipality, province and national government determine how those losses will be shared. Amsterdam's spatial policy relies to a large degree on the transformation of brownfield/industrial sites to new uses, particularly residential uses. A risk with the new approach to active land use based on smaller multi-phase projects is that it will not meet growing housing demand.

Box 2.6. **Active land policy: Brownfield redevelopment in Buiksloterham**

Buiksloterham is a former Shell research and development plot and industrial area located to the north of central Amsterdam. It, together with a former NDSM shipyard, forms a brownfield area with an attractive location and a great deal of development potential. However, expensive site remediation together with soil contamination issues and wetlands has made it a challenging site to redevelop. The city has taken on an innovative approach to land development in this area which is characteristic of its changing approach to active land policy. Redevelopment has cautiously proceeded in a phased approach that has encouraged temporary and experimental uses in order to work within site limitations, and a build a sense of community in the old industrial location – in other words, "place-making". The area has been slowly transformed through creative industries and festivals; former squatters and artists have established cultural space and creative businesses like MTV's European headquarters have been drawn to the area (Jansen, 2015: 117). As one example, a site with soil contamination was made open to bidders by the city of Amsterdam for temporary use (ten years). The criteria for site development included a need to build structures without foundations (due to soil issues) and to implement site remediation. The innovative De Ceuvel project met these criteria by establishing a café, ateliers and small business offices out of past-use houseboats.

The city did not develop a detailed urban plan for the area, instead opting for a more organic transformation of the space. It established "rules of development" that included requirements regarding the mixed use, height, density and building lines but that also gave a great deal of latitude in terms of construction. Once dominated by industrial activities, Buiksloterham is now home to a variety of small businesses and creative industries. It is a mixed commercial residential area. The area welcomed its first residents in 2014 and approximately 3 000 homes will be developed over the coming decade. The city wishes to retain elements of the area's heritage as a light industrial zone, and will be encouraging these functions. The city has also actively encouraged self-built homes – and through developments like Buiksloterham – is finding "do it yourself" (DIY) to be an increasingly viable part of the city's housing market.

The area's development has, however, not been without its challenges. The desire for mixed-use functions can pose problems where uses are incompatible and can lead to conflict due to noise, pollution or high traffic demands. Further, the development plan for the area was established in 2011 in the wake of the economic crisis. Consequently, large developers withdrew their interest in the site and some new guidelines were established to react to the changing conditions – namely, office space was removed and DIY builders were encouraged.

Sources: Gemeente Amsterdam (2016), "About Buiksloterham", https://www.amsterdam.nl/projecten/buiksloterham/about-buiksloterham; Jansen, J. (2015), "Amsterdam waterfront development: A social-geographical overview"; Dembski, S. (2013), "Case study Amsterdam Buiksloterham, the Netherlands: The challenge of planning organic transformation", http://hdl.handle.net/11245/1.391932.

The alignment of planning objectives across scales

While each structural vision is self-binding, there is a consistency in the main aims and objectives across the three scales, including a desire for high-quality environments, the protection of green space, and the promotion of environmental sustainability and economic competitiveness. Writing on the Dutch spatial planning system in the late 1980s, Needham remarked "it is probably not so much the plan itself that brings about a co-ordinated Dutch physical planning strategy, but much more the exceptional talents of the Dutch to reach compromises" (1989). The idea of a planning doctrine has been forwarded to explain this consensus-oriented approach – the idea that Dutch spatial planning actors have embraced interrelated and durable notions about spatial arrangements, development and how they are to be handled (Faludi, 1989; Faludi and van der Valk, 2013: 18). Pojani and Stead (2014) outline several eras of Dutch planning doctrine – summarised in Table 2.6.

Table 2.6. **The evolution of planning doctrine**

Timeframe	Policy concept
1950s and earlier: Concentric growth policy	"Concentric growth" policy was adopted around existing cities to preserve open spaces and minimise the costs of servicing land. With increasing urbanisation and pressures on infrastructure this type of growth was later believed to be unsustainable.
1960s and 1970s: Concentrated deconcentration	This entails controlled dispersal, allowing for suburban development but only in designated growth centres and new towns. This policy, which reflected the middle-class desire to suburbanise, led to declines in urban population, public services, employment and income.
1980s: "Compact city" policy and the "green heart"	This entailed reconcentrating development in major urban centres. While this policy focused attention on larger cities, rural communities and small towns were left in limbo. Infill growth reduced open space and rising real estate prices in the central areas of expanding cities led to social segregation.
	The concept of the Randstad (with a "green heart" in the middle) complemented the compact city policy. In the 2000s the Randstad concept started to be replaced by the Deltametropolis concept, which encompasses all the urban agglomerations in the Randstad.
1990s: "ABC" policy	Locations were labelled A, B and C, according to their level of accessibility by public transport and automobile (i.e. city centres were A locations, first-ring suburbs were B locations and exurban sites were C locations). Lack of parking and limited car access at premier A and B locations led businesses to relocate towards cheaper, car-oriented locations in the urban outskirts. For reasons of impracticality, the ABC policy was quietly shelved at the end of the 1990s.

Source: Pojani, D. and D. Stead (2014), "Ideas, interests, and institutions: Explaining Dutch transit-oriented development challenges".

In support of the notion of planning doctrine, one can see that the structural visions of each level of government reinforce and support one another in broad terms. There is, in general, a commitment to fostering urban density combined with high-quality public amenities and an excellent public transportation network. There is also a strong commitment to managing water issues, including the impacts of climate change, and a generally recognised need to reduce reliance on fossil fuels and adopt more sustainable and efficient energy system. For example, the medium-term goals of the national spatial vision aim to improve transport accessibility while Amsterdam's strategic vision complements this with a focus on enhancing regional transportation. National medium-term goals further describe the need for a liveable environment which protects and preserves spaces for nature and cultural activities. This is echoed in North Holland's spatial objectives to preserve cultural and natural landscapes and green reserves and in a sense operationalised by Amsterdam's strategic goals to increase density and invest in green spaces. Further, Amsterdam's specific aims to prepare for a post fossil fuel era are matched by North Holland's sustainable

development goals and echoed in the national government's long-term ambitions to transition to renewable energy sources.

In Metropolitan Amsterdam, many elements have aligned to complement this general approach, including a revival of demand to live in the centre (after periods of suburban flight in the 1970s) and economic growth in service and knowledge-based sectors, which are often aligned to the priorities of sustainable development. While these values appear to be generally articulated across the structural vision, it is in the details where conflicts can emerge, particularly where sectoral and multi-level government interests impede one another. By way of example, the objective of landscape protection has run up against the desire for renewable energy in the placement of wind turbines. In one such instance, the city of Amsterdam requested to build wind turbines in its bay. The province of North Holland did not approve this project on the basis that it would go against the principles of landscape protection. The city subsequently launched an appeal to the province on this matter, but lost. As another example, the desire for more profitable forms of agriculture, including massive greenhouses and livestock sheds, can detract from the attractiveness of the rural landscape. This has led to debates about the role of agriculture and whether large-scale and more profitable farms should be encouraged or whether the landscapes should cater more to amenities for urban dwellers (Zonneveld and Evers, 2014: 70).

This multiplicity of visions about rural landscapes and functions has long been a source of conflict (Frouws, 1998) but has intensified with the decentralisation of land-use policies, a focus of regional policy on promoting economic development and a move away from restricting land use (OECD, 2015c: 87). Further, as a small and compact country, it can be difficult for the central government to find suitable locations and new routes for such investments as motorways, railways, wind turbines, high-voltage lines and nature compensation measures. In some instances, national laws many detract from local policies. A key housing policy for Amsterdam is to have differentiated housing stock in terms of quality and prices. The city would also like to protect the south of Amsterdam, which is a UNESCO heritage area. However, national laws stipulate that rents can be raised in designated monument areas, which then impedes upon the desire for mixed neighbourhoods.

There are growing questions around how the notion of planning doctrine might be changing in light of present circumstances. Some academics have declared the end of the planning doctrine alongside a diminished role for the Dutch social welfare state. In particular, it has been argued that the "green heart" as a national policy concept was a cornerstone of the planning doctrine, and that its demise thus marks the end of this approach (Faludi, 1991, 1999; Faludi and van der Valk, 1997; Roodbol-Mekkes, van der Valk, Altes, 2012). In support of this argument, between 1989 and 1993, the population growth rate in the "green heart" was 4.8% – which was higher than the national average over that time at 3.0% – indicating that the area does indeed face development pressure (Needham, 2014: 46). However, this rate of population growth has since slowed. Beyond this, it is also noted that since 2010, spatial planning has "lost its unitary institutional identity by having competencies for spatial planning, housing and nature management divided across three ministries" (Savini, 2013: 340).

It is evident that the national role in spatial policy is changing. Gone are the days of large-scale national investments in such areas as housing, which were highly formative in shaping urban environments in decades past – particularly during periods of post war reconstruction and population growth. With the diminished dominance of national planning doctrine, local and regional actors take on much greater importance in meeting spatial ambitions, along with the private sector. Thus, the shared values of practitioners

are shaped at different scales than in the past and with different power relations among them.[19] However, these relations are changeable and national priorities may very well rise again to take on a more interventionist role in the future around such issues as housing affordability.

Formal vertical and horizontal co-ordination and co-operation

While a collaborative approach to solving problems explains informal working relationships to some degree, there are also formalised co-ordination mechanisms at the different levels which shape spatial planning practices. There are rules governing the hierarchal power of higher order plans over lower order ones (e.g. national plans superseded regional ones where there were disputes). However, prior to the 2008 Spatial Planning Act, Needham comments that "those hierarchal powers were clumsy, worked slowly and could be frustrated by clever legal tactics" (2014: 111). By way of example, municipalities had sole purview to issue building permits and as such, could deny such permits to upper level governments if their developments did not confirm to municipal plans. The 2008 Spatial Planning Act established a clear hierarchy for co-ordination: both national and regional governments can make imposed plans or project plans that supersede municipal ones (including permits); and provinces can create binding ordinances and rules on municipal land-use plans (Needham, 2014).

Beyond the legal mechanisms to resolve planning issues between levels of government, there are different institutions which act as co-ordinating or advisory bodies. The Council for the Environment and Infrastructure (Raad voor de leefomgeving en infrastructuur) is the primary strategic advisory board for the Dutch government and parliament in matters relating to the physical environment and infrastructure. The council operates independently and provides solicited and unsolicited advice on policy affecting the sustainable development of the human environment. The policy domains in which it is active are therefore those of the Ministry of Infrastructure and the Environment (Ministerie van Infrastructuur en Milieu), the Ministry of Economic Affairs (Ministerie van Economische Zaken), and the Ministry of the Interior and Kingdom Relations (Ministerie van Binnenlandse Zaken en Koninkrijksrelaties). Further, the central government maintains contact, through a large number of administrative meetings, with the provinces, municipalities and water boards, sometimes directly and sometimes through their umbrella organisations. Administrative consultation takes place on policies related to the physical environment within the framework of the Multi-annual Programme for Infrastructure, Spatial Planning and Transport (Meerjarenprogramma Infrastructuur, Ruimte en Transport, MIRT). There are also sub-councils of the cabinet (e.g. the Council for Economic Affairs, Infrastructure and Environment [De Raad voor Economische Zaken, Infrastructuur en Milieu]) that address innovation, scientific and research policy and are composed of representatives from higher and academic education institutions and the ministers most closely involved with these areas.

For specific policy areas, the Council of Ministers has appointed a number of so-called sub-councils. By virtue of parliamentary procedure, the minister-president chairs these councils, whose members are ministers and state secretaries involved specifically in the policy areas of the councils. In addition, a number of councils include the holders of high posts and senior public officials. Ministers who are not members of a sub-council can attend their sessions. Each of the ministers can request a decision of a sub-council to be presented to the full cabinet. For each sub-council, one minister acts as co-ordinating minister; his/her task is to ensure that subjects discussed in a sub-council are prepared in a

sound and interdepartmental manner. This interdepartmental preparation occurs through official co-ordination committees, the so-called "official anterooms".

At the provincial and municipal levels there are strong working relationships and joint committees. The MRA forms an important platform in this regard with voluntary municipal commitments to a joint spatial vision. The regional transport authority offers another venue for inter-municipal co-operation. These metropolitan governance structures are discussed in Chapter 3.

Box 2.7. **The Austrian Conference on Spatial Planning**

Currently, many countries lack the structures to achieve the required co-ordination between levels of government. One of the few organisations in place today that can provide such co-ordination is the Austrian Conference on Spatial Planning (Österreichische Raumordungskonferenz, ÖROK) that assembles representatives from all levels of government to discuss spatial policies. Further, as it is located at the centre of government (within the Office of the Chancellor), it may also be able to carry out the necessary cross-sectoral policy co-ordination between different branches of the national government.

Established in 1971, ÖROK is dedicated to co-ordinating spatial planning policies between the three levels of government in Austria (the national level, the states and the municipalities). Its decision-making body is chaired by the Federal Chancellor and its members include all federal ministers, the heads of all federated states and representatives of associations of local governments. Furthermore, business and labour organisations are represented on the body as consulting members. The work of the decision-making body is supported by a permanent secretariat with a staff of 25-30.

One of the central tasks of ÖROK is the preparation of the Austrian Spatial Development Concept, which covers a planning period of approximately ten years and provides a vision and guidelines for spatial development that is shared by all levels of government. Beyond the preparation of the Spatial Development Concept, ÖROK also monitors spatial development across Austria. It has developed an online tool that provides a mapping function of a variety of important indicators at the municipal and regional level and releases a report on the state of spatial development every three years.

ÖROK is also the co-ordinating body for structural funds provided by the European Union. It manages the integration of structural funds into broader spatial strategies and was directly responsible for the programming work related to one of the 11 thematic objectives of the programming period 2014-20. ÖROK also serves as National Contact Point within the framework of European territorial co-operation.

Source: ÖROK (2015), "Austrian Conference on Spatial Planning ÖROK", www.oerok.gv.at/fileadmin/Bilder/1.Reiter-Uber_die_Oerok/OEROK-Geschaefststelle/OEROK_Folder.pdf (accessed on 1 June 2016).

Fiscal relations, tools and instruments

How land is used is the outcome of a complex array of interactions. While the planning profession has many tools with which to shape land use, there are other elements beyond the purview of the planning system that can equally have influence. One of the most important such elements is finance – from the incentives that local governments face based on national subventions to targeted fiscal instruments that they can use, such as density bonuses. Fiscal systems, instruments and tools affect how land is used in a wide range of ways. Fiscal incentives should at minimum be aligned with spatial development objectives, or better yet, structured to specifically encourage desired outcomes, such as transit-oriented development.

Compared to other OECD jurisdictions, Amsterdam has some unique instruments with which to shape land use – namely, the high levels of public land ownership and the ground lease system. The city (like all Dutch municipalities) is also unique among OECD municipalities in terms of its low fiscal autonomy; the city relies to a high degree on transfers from other levels of government compared to own-source revenues. Local tax revenue in the Netherlands is 3.6% of total revenue, while the average for the OECD was 10.6% in 2011 (Blöchliger and Nettley, 2015). The national government remains heavily involved in funding key projects, such as the ZuidAs development in Amsterdam near the airport. This section examines these issues in turn.

Amsterdam's ground lease system

The ground lease system has complemented active land-use policy

A ground lease or leasehold is a legal right, combining several aspects of ownership and rent. Since 1896, the city of Amsterdam has kept most of its land: it still owns approximately 80% of all the land within its boundaries. On a large percentage of this land a ground lease has been granted. This means the city remains the owner of the land while the ground lessee or leaseholder is entitled to the benefit of the use of the land for a long period, in return for a ground rent (canon) payable at regular intervals. Unlike tenancy or rent, a ground lease is a right *in rem*; the right is associated with the land, rather than the person occupying it. The ground lease can be transferred by the ground lessee and the change will be registered with the Land Registry (*Kadaster*). Further, a mortgage can be granted for the buildings on a ground lease if and only if households opt for lump-sum payments.

The basic principle of the ground lease system is as follows: land is owned by the city. The city determines a ground lease for 75 years (as it was in the 19th century), or 50 years (the system as it is now) or eternally (as of 2016). Upon land (re)development, the city sets an annual ground lease (set for given timeframe), or determines a lump-sum payment-at-once (as is the discounted sum of annual ground lease over the given timeframe, with a possible discount). After those 75 or 50 years, the city sets a new ground lease according to the then-applicable ground lease system rules. In doing so, it is able to capture the increase in land value and use it to further public investments that benefit residents. For a given year, the city generates ground lease income which consists of the aggregate of lump-sum payments (typically from new developments or new ground leases),[20] and annual payments[21] (typically relating to existing ground leases). In 2015, the net annual profit was EUR 105 million. This is a high value; the average net annual profit in recent years has been closer to EUR 80 million. The net annual profit from the ground lease is remitted to the central municipal budget (approximately 50%) and the reminder contributes to the balancing fund and social housing fund. There is a municipal policy that the ground lease is set at a lower value for social housing developments. As of 2015, there were 255 000 ground leases issued in the city. While the actual value of the total portfolio is not estimated, its total value at historical cost is priced at EUR 6.8 billion.

A ground lease allows the city to continue exercising proper care for municipal property and its use – e.g. to counter speculation and to regulate the use of property within the city limits. The main argument that advocates the introduction of ground leases generally put forward in 1896 has not lost its value: because of the ground lease system, the increase in value of the land ultimately benefits the community, including ground lessees.[22] The active land policy also allows the city to stay involved in spatial development,

which can be essential in preserving certain functions and areas. It is also useful for smaller, economically vulnerable projects like sporting grounds and school buildings. There are also benefits for the individual ground lessee, namely, there is no need for an individual to invest in the land. Individuals, or housing corporations, acquire the land ready for building and the city guarantees that ground lessees receive what they are entitled to. The city finances the land costs for the ground lessee. The ground rent paid by lessees of owner-occupied houses is partially tax deductible, as are interest charges for any premium where mortgages include a house plus the lump-sum value. Ground leases encourage the city to invest in the built environment, resulting in value retention of the property.

However, there are also drawbacks. Under the system of a perpetual ground lease with periodic revision, the amount of the ground rent was specified at the beginning of each new 50-year term. Consequently, a ground lease facing an upcoming revision is surrounded with uncertainty regarding the new, revised ground rent. This means such a right might be hard to transfer as banks are hesitant to provide mortgages when such unpredictability is involved. The increased cost of the leases can also create financial hardship on leaseholders with modest incomes, though there is a municipal policy to waive these costs (in whole or in part) for those with limited means.

In adopting a new perpetual ground lease system without periodic revision, the city has relinquished a useful land-value capture tool

In an effort to address these issues, the city is introduced a perpetual ground lease system without period revision. In this new system, the city calculates the amount that leaseholders have to pay for the use of the (built-up) land it owns only once and for all time. This provides leaseholders with more clarity about the cost of their ground lease. With a perpetual lease, the ground rent will be determined once, and for all time. The ground rent is then only indexed annually (to inflation). From this point on, the ground rent and other agreements will never again be revised, unless the leaseholder changes the way the land is used. Mortgage providers will also be assured of the value of the leasehold as collateral for their loans.

While the new perpetual system enables the city to capture value from change of use, at the point when that change is occurring, it will no longer capture change in value over time. The ground lease is now indexed to inflation; it will no longer be used to capture changes in land value that can be used for public benefit. As an alternative to the perpetual lease system, the city could have undertaken to reassess the value of land on an ongoing, regular basis. In addition to being a pre-condition for establishing an effective value-based property tax system, regular assessments would allow the city to inform all leaseholders of changes in the value of their ground leaseholding on an ongoing basis. If the renewal of a ground lease results in a large increase in costs, the city could allow ground leaseholders to phase in the higher annual lease payment. It could also be able to retain long leases, but specify that the land rents would be charged on a regular basis (even annually) to reflect changes in land values. Alternatively, a government-funded system of subsidies targeted to leaseholders with limited incomes or assets could be established, similar to that which currently exists. From the perspective of establishing a sustainable system of city finance, these measures would be preferable to the move to perpetual (indexed) ground leases.

Dutch municipalities and low fiscal autonomy

Compared to OECD and EU countries, subnational governments in the Netherlands have among the lowest rates of fiscal autonomy, particularly at the municipal level. For the country as a whole, more than 62% of Dutch subnational government revenue comes from transfers (grants and subsidies), 15% from tariffs and fees, 3% from assets (financial and non-financial), and only 9% from taxes (shared and own-source taxes) (OECD, 2016). This gives Dutch subnational governments the same financing profile as Greece, Ireland, Mexico, Turkey and the United Kingdom, where subnational governments remain dependent upon central government transfers.

Box 2.8. **The ground lease system debate: Rotterdam and The Hague**

There have been prolonged debates among Dutch municipalities about whether to keep, abolish or reform the ground lease system. It has been argued, for instance, that the ground lease system is no longer needed because of the effectiveness of land-use instruments and public law restrictions. However, in some cases such as industrial estates, the ground lease system can offer more detailed regulations than would otherwise be applied (Ploeger and de Wolff, 2014: 14). Another issue is that, while the intention of the ground lease system is to capture future increases in land value and use this to benefit the community as a whole, cities are not fully covered by a ground lease. Therefore, those under the ground lease system "give the plus value on the land away for the general benefit, and some are allowed to keep it" (Ploeger and de Wolff, 2014: 15). However, the plus value for non-ground leaseholders could be captured in other ways, through a value capture tax. Ideological arguments have also been made – that in essence, "free and unlimited ownership" is simply a better system; but as Ploeger and de Wolff point out, there are many public law restrictions on property in any case, making this point moot (2015: 15).

In Rotterdam, these debates culminated in a policy shift whereby leaseholders could convert to ownership. A perpetual ground lease remains only for select cases (such as housing associations). The Hague, which had a perpetual lease system, also created the possibility of lessees to purchase the land at a discount rate – 3% of the land value, and later a mere 1.5 %. The rationale for these changes has been largely ideologically driven (Ploeger and de Wolff, 2014: 15).

On balance, these cities in the Netherlands have given up a useful instrument. The ground lease is the only instrument municipalities have for land value capture as a result of change in use (Ploeger and de Wolff, 2014: 15). Beyond this, it is a useful instrument through which to pursue active land policy and one that can make projects easier to finance by separating building costs from ground ownership. This is particularly important when interest rates are high, and could enable socially desirable projects being undertaken which would otherwise not. Finally, it is a useful legal tool in the construction of multifunctional complexes and can be used to separate below ground developments from above ground ones (Mouthan, 2013).

Sources: Mouthan, B.C. (2013), "Opstal en erfpacht als juridische instrumenten voor meervoudig grondgebruik"; Ploeger, H.D. and H.W. de Wolff (2014), "The Dutch urban ground lease: In fatal crisis or a bright future?", http://repository.tudelft.nl/islandora/object/uuid:c43d1911-06c2-4c61-bbc3-50b7bf4f142a/datastream/OBJ/download.

The historical trajectory of present conditions is important to acknowledge. Dutch policy between 1929 and 1982 was defined by a centralised social welfare state; the central government assumed social security and health responsibilities and used fiscal tools and incentives to direct social and economic development. Rising public expenditures combined with economic stagnation led to a revision of this approach in the mid-1980s towards a smaller and more decentralised welfare state. A combination of privatisation, deregulation and decentralisation proceeded. Therefore, while Dutch municipalities have

a low degree of fiscal autonomy, they have had increasing revenues over time as their roles and responsibilities have expanded.

Municipal revenues come from five main sources: general grants, specific grants, user charges, taxes and other income (income from property and market activities). There are different types of general grants. Equalizing grants take into account spending needs and the tax capacity of municipalities. The transfer by the municipality fund is allocated to individual municipalities on the basis of a very complex distribution formula using a variety of objective indicators (Bos, 2010). This not only takes account of the number of inhabitants, but also corrects for differences in tax-earning capacity (real estate value of dwellings and business property) and external circumstances, like a regional function or the social and physical structure. This includes indicators for the number of households receiving social benefits, the number of people from ethnic minority groups, the number of young or elderly, the density of addresses and the surface area of the historical centre. However, differences in other revenues, like interest, dividend or from the sale of land, are not taken into account. Supplementary to the general distribution formulae, the Frisian Islands and the four major cities receive a fixed amount (Bos, 2010). Poverty rates are highest in the largest Dutch cities and therefore the general grant adjusts for the need for higher revenues to provide social services to this population.

Integration grants are a specific form of general grants, but in this case it means a reshuffle of several budgets that since 2015 are decentralised to municipalities. A 2015 legislative reform made local governments fully (financially) responsible for social sector activities – e.g. social assistance, youth law, welfare, and care and disability policies. To accommodate this change in competencies, the national government reshuffled all specific budgets for the separated tasks and bundled them into one targeted integration budget. For an average municipality, this integration budget comprises almost one-fifth of the total revenues, which underlines the importance of municipal responsibilities for social domains. The integration grant nevertheless differs from the general grants because of its different distribution formula. Specific grants are received from different central government departments and are earmarked to finance local government tasks imposed by the central government, whereas general grants are used to finance the autonomous tasks of local governments.

Beyond grants, local governments receive revenues from levies. Municipal levies consist of user charges and local taxes, whereby local tax revenue is dominated by the property tax. According to Allers (2011), the only other local tax of any importance is the parking tax, which cannot be raised easily for fear of discouraging potential visitors of local businesses. The current parking tax rates have been unchanged since 2009. Amsterdam has made good use of its parking tax by establishing variable tariffs in different parts of the city – it has been a critical instrument for managing accessibility (Bertolini and le Clercq, 2003). For instance, the hourly parking rate in the centre of the city is EUR 6, while resident permit holders in that part of the city pay just 10 cents an hour (Gemeente Amsterdam, 2015). Meanwhile, more suburban locales have much lower parking rates (e.g. Buikslotermeerplein at EUR 1.3 per hour). These tariffs encourage visitors to the centre to take transit or bike without penalising residents.

Since user charges are not allowed to exceed (budgeted) costs and municipal budgets must be balanced, higher service levels can only be funded by raising taxes – i.e. by setting higher property tax rates (Allers, 2011). Out of total revenues of EUR 5 billion, more than 50% is derived from the national transfers to the local government. The total own-source tax revenues (OZB-property tax, sewage and waste and other taxes) are less than 8%.

The main merit of having such a high proportion of income from state transfers in combination with local autonomy and responsibility for executing these tasks is that it causes equality in service levels and social rights throughout the country. At the same time, local governments are stimulated to provide services in a cost-efficient manner to make the most of allotted transfers. For land-use policy, Dutch municipalities have less pressure to increase own-source revenues, including the property tax. While it could be argued that reliance on state transfers promotes a lack of entrepreneurial spirit and the inflexibility to change service levels and rules and regulations to accommodate differences in regional circumstances, in the end, state transfers compensate for these differences (Broersma, Edzes and Van Dijk, 2013).

Table 2.7. **Municipal revenues, Amsterdam, all Dutch municipalities, 2015**

	Amsterdam			All municipalities, Netherlands		
	'000 EUR	EUR per capita	Shares (%)	'000 EUR	EUR per capita	Shares (%)
General grants	1 406 070	1 711	27.3	16 860 551	998	31.5
Integration grants	587 498	715	11.4	10 339 155	612	19.3
Specific grants	604 929	736	11.7	6 128 856	363	11.5
Property taxes	169 600	203	3.1	3 656 610	216	6.8
Rest taxes[1]	50 276	61	1.0	44 610	26	0.8
Sewage and waste	197 586	240	3.8	3 576 480	212	6.7
Rest incomes	2 151 659	2 618	41.7	12 492 056	739	23.3
Total	5 156 886		100	53 500 018		100

Note: Rest taxes include commuting, tourism, dogs, advertising, Baat & Precariobelasting; rest incomes are revenues from the ground lease.

Source: Statistics Netherlands (2016), "Gemeentebegrotingen; heffingen per gemeente", http://statline.cbs.nl/StatWeb/publication/?VW=T&DM=SLNL&PA=83642NED&LA=NL (accessed 13 January 2017).

When considering the opportunities local governments have to increase their tax base, for instance through property tax, two institutional characteristics are important. First, municipalities are free, in theory, to choose local service levels and tax rates. However deviation from service levels or tax rates in other municipalities is only tolerated to a limited degree. In a small and densely populated country as the Netherlands, equality in service levels or tax rates throughout the country is a dominant, although implicit, political norm. Deviation from the norm may easily result in public resistance and members of the (national) parliament are quick to ask the national government to intervene. The same counts for pressure groups that use municipalities which spend a relatively large amount on their hobby horses to set a norm against which other municipalities can be compared. It is no surprise, then, that municipalities have been shown to mimic expenditure and tax levels of neighbouring jurisdictions (Allers, 2011; Bos, 2010).

Second, spending levels may not reflect the degree of autonomy subnational governments have to take financial decisions if they do not capture their autonomy to manage those resources (OECD, 2014a: 215). This is particularly true for the Netherlands: despite relatively high levels of subnational expenditure, an important share of expenditure is steered or dictated by the central government. Although Dutch subnational governments may have limited autonomy regarding the choice of how expenses are allocated in some areas and have less degree of decision-making power than expected, it is a generally accepted financial system between the layers of government, based on an overall understanding for equity requirements and social challenges.

Amsterdam's property tax rates are lower than the national average

Like for all municipalities in the Netherlands, the relative share of Amsterdam's property tax is low compared to other sources of income. Increasing the property tax base is difficult given nationwide regulations. This implies by definition that the tax stimulus must also be low. However, in Amsterdam, the share of the property tax to total revenue is, in fact, substantially lower than the national average; the per capita property tax in 2015 was EUR 193, while the average for the Netherlands was EUR 216 per capita. Part of the explanation for this is that Amsterdam gains revenues from its ground lease system. In the financial statements from Amsterdam over 2015, the total net revenues from ground leases were EUR 236 million (Amsterdam, 2015). This is also explained by the city's relatively low property tax rates. Compared to the four other major cities in the Netherlands, Amsterdam's property tax rates are much lower across all rate types (Table 2.8).

Table 2.8. **Property tax rates, Netherlands, 2016**

Municipality	Residential owners	Non-residential owners	Non-residential tenants
The Hague	0.0677%	0.2445%	0.2063%
Amsterdam	0.0572%	0.1799%	0.1438%
Rotterdam	0.1286%	0.3197%	0.2643%
Utrecht	0.1096%	0.3241%	0.2618%

Source: Own elaboration.

The city does not fully capture the real estate value or the added value from municipal investments.[23] Due to political choices, the city fixed the tax revenues based on property at a predetermined base sum of EUR 158 per year. That means that when the real estate value is rising, for instance by investments by the municipality, the value increase is not explicitly captured in the property tax. The consequence is that Amsterdam seems to not fully use its property tax base. In fact, 2.3% of the possible maximum of property tax is unused, which is high in comparison to comparably sized cities (1.4%) or comparable cities in urban regions (1.4%) (Ploeger and de Wolff, 2014: 11).

While the impact of property taxes on land use is often ambiguous, designed well, they can be used as an effective tool by which to steer sustainable land uses (Box 2.9). In sum, there is room for Amsterdam to make better use of this fiscal instrument in a way that complements its spatial planning objectives. It bears noting that revenues from market value-based property taxes are considerably more stable over the business cycle than revenues from taxes on income or consumption (Afonso, 2013).

Box 2.9. **Designing property taxes for sustainable land use**

Property taxes based on the value of land and the buildings on it are one of the most obvious examples of land-related taxes. Their effects on land use are subject to controversy, but are likely to be small. Given the close association of property taxes with land, this result may be surprising. It can be explained by two countervailing effects of property taxes on land use. First, property taxes make it costlier for landowners to increase the density of buildings. Per metre square floor space, small single or double storey buildings are cheaper to construct than larger buildings that use land more efficiently. Thus, lower property taxes need to be paid on them, which encourages low density development and horizontal expansion of cities (Brueckner and Kim, 2003). At the same time, property taxes make housing floor space more expensive, which makes households use less housing. If the ratio of land relative to dwelling size remains constant, this reduces land consumption and contributes to more compact patterns of development (Song and Zenou, 2006). While both effects partly cancel each other out, it varies which effect dominates.

Box 2.9. **Designing property taxes for sustainable land use** (*continued*)

Different studies on the effect of property taxes on land use in different settings come to different conclusions. Haurin (1980) argues that the effect on density is ambiguous. Ihlanfeldt (1984) finds that higher property taxes increase dwelling size, which, if true, would contradict the theory above. In contrast, Song and Zenou (2006) and Banzhaf and Lavery (2010) support the above-mentioned theory, but come to different conclusions regarding their practical consequences. Song and Zenou (2006) find that higher property taxes are correlated to more compact development, whereas Banzhaf and Lavery (2010) come to the opposite conclusion. Studying land use in Pennsylvania, they find implicitly that property taxes lead, in fact, to more sprawl, which indicates that the first effect dominates the second.

Properly structured, the property tax can be an effective tool for sustainable land use

While the literature finds mixed outcomes of property taxes, they can clearly facilitate sustainable land-use policies if they are well structured (Blöchliger, 2015). For example, a pure land value tax that does not take the value of buildings into account can help contain urban sprawl and foster the densification of developed land instead of greenfield development. Land values are independent from what the land is used for. In other words, the value of land depends on what it can be used for versus what is it used for. For example, the land of an empty brownfield site in a city centre has approximately the same value as the land under an adjacent skyscraper because the value of the skyscraper is not considered in the land value calculation. Under a land value tax both plots would be subject to the same taxes. It would be very expensive for the owner of the brownfield site to pay taxes on it without earning revenues from it. Thus, a land value tax provides strong incentives to develop urban brownfield sites. In contrast, under a general property tax that considers the value of the building and the land together, the owner of the brownfield site would have to pay much lower taxes than the owner of the plot with the skyscraper and consequently, would have fewer incentives to develop the land.

Alternately, specifically designed "green" property taxes (soil-sealing taxes, development charges, etc.) can increase the costs of specific aspects of land use that are particularly undesirable from a societal point of view. They create a mechanism through which landowners compensate the public for the costs that they impose on the public by developing land in particular ways. Since such a tax also makes it more costly for landowners to pursue specific forms of development, such development will occur less frequently. Expressed differently, green property taxes force landowners to (partly) internalise the externalities of developments.

Blöchliger (2015) offers an assessment of key policy issues that should be addressed in order to ensure that the property tax is used as an effective tool for sustainable land-use management:

- Property taxes have to be viewed in the context of other policy instruments to influence land use. This can include, for example, land-use planning and transport policy that can also help internalise externalities related to urban sprawl. Other policy instruments will often have a much stronger impact on land use than the property tax, which is typically low. Moreover, while property taxes can have an overall impact on land-use patterns, they are too rough an instrument to ensure the protection of specific land plots or to foster specific land-use patterns, e.g. protecting certain natural amenities from development altogether. The property tax can, however, underpin land-use policies such as urban spatial planning or transport policy.
- The impact of property taxation on land use depends on design. A pure land tax increases the cost of hoarding land and provides incentives to put land to its most valuable use. Development becomes more attractive, particularly in areas where land values are high, such as around existing infrastructure. As such, a pure land tax fosters denser cities. As already mentioned, the effect of the traditional property tax (or two-tier tax) which covers both land and improvements is less clear-cut. On the one hand, if the tax is shifted on to consumers, house prices increase, increasing the demand for smaller housing units and thereby population density. On the other hand, the property tax can promote urban sprawl as it reduces the capital-land ratio and thereby the number of housing units per unit of land area and density.

Box 2.9. **Designing property taxes for sustainable land use** (*continued*)

- Where land values are low, a tax on land area sets a stronger incentive to make efficient use of land than a tax on land value. A proposal being discussed in Germany is a land-use tax, which would differentiate land tax rates depending on how land is used and the associated environmental costs. Taxes on new developments – such as development or soil-sealing taxes – to internalise negative environmental externalities – are also being discussed. A tax on the welfare loss associated with the loss of open space due to development has been discussed in the Netherlands and the United States, although estimating the social value of open space is difficult.
- Property transaction taxes are bad for sustainable land use. They increase incentives to buy cheap land, which is generally farther away from city centres and transport infrastructure, and they discourage transactions that might help put land to a more efficient use. They also encourage the purchase of undeveloped land for new development at the expense of upgrading developed areas.
- Property taxes can create perverse incentives for local governments. Local governments might eye land development or rezoning for purely fiscal reasons. They might even be tempted to increase revenues from environmental land taxes such as a soil-sealing or greenfield tax, thereby undermining the original purpose of such taxes. Governments should tackle such perverse incentives through adequate land-use planning instruments: local government should address local land-use externalities; upper-level governments should address externalities with a wider geographical reach.
- Property taxes can be redesigned to foster green investment. For example, local governments in the United States count numerous property tax incentives for raising energy efficiency and renewable energy use. The Czech Republic, Italy, Norway and Spain are further examples of countries that provide property tax relief for renewable energy installations. The efficiency and effectiveness of these property tax rebates would have to be weighed against their costs in terms of a narrower property tax base and less tax revenue. Studies assessing the efficiency of property tax relief to promote investments in energy efficiency and renewable energy are not available. It is difficult to assess whether property taxes in this context are more or less effective than other instruments to promote the same objectives.

Where differential property tax rates exist, they have an effect on land use. For example, US states that have a lower effective property tax rate on single-family homes compared to apartment buildings have experienced less pronounced declines in land consumption than states which tax single-family homes more strongly relative to apartment buildings. Most US states tax single-family homes at lower effective tax rates. Making effective tax rates identical for both types of dwellings would provide important incentives for more compact development.

Sources: Brueckner, J.K. and H. Kim (2003), "Urban sprawl and the property tax", http://dx.doi.org/10.1023/A:1022260512147; Ihlanfeldt, K.R. (1984), "Property taxation and the demand for housing: An econometric analysis", https://doi.org/10.1016/0094-1190(84)90042-1; Song, Y. and Y. Zenou (2006), "Property tax and urban sprawl: Theory and implications for US cities", https://doi.org/10.1016/j.jue.2006.05.001; Banzhaf, S.H. and N. Lavery (2010), "Can the land tax help curb urban sprawl? Evidence from growth patterns in Pennsylvania", http://dx.doi.org/10.1016/j.jue.2009.08.005; Blöchliger, H. and M. Nettley (2015), "Sub-central tax autonomy: 2011 update", http://dx.doi.org/10.1787/5js4t79sbshd-en; Blöchliger, H. (2015), "Reforming the tax on immovable property: Taking care of the unloved", http://dx.doi.org/10.1787/5js30tw0n7kg-en; OECD (2017), *The Governance of Land Use: Policy Analysis and Recommendations*, http://dx.doi.org/10.1787/9789264268609-en.

Aligning fiscal tools and instruments to spatial objectives

Amsterdam presently uses few fiscal instruments to shape spatial outcomes. The parking tax can be said to be aligned with spatial outcomes since high parking fees in the centre zones create a disincentive for visitors to drive. However, in other elements of spatial policy fiscal instruments are lacking. For instance, the city does not currently employ any fiscal instruments to encourage density despite this being a critical spatial objective in order to meet growing housing need. Another potential application is to use

the city's tourist tax (presently set at 5%) to encourage visitors to stay in areas outside of the city centre, thus lessening the environmental impact in high-use zones. A system of graduated pricing could be established, with higher hotel rates in the centre and lower ones further out. Amsterdam is presently looking to establish such a policy.

Currently, own-source revenue is dominated by the property tax and ground lease revenues – in which the latter until recently have acted as a form of land value capture tax. There are many other fiscal instruments that could be drawn on in order to complement spatial development objectives (Table 2.9; Box 2.10).

Table 2.9. **Fiscal instruments to manage development**

Type	Mechanism	Revenue raising	Spatial goals/outcomes
Brownfield redevelopment incentives	Subsidy or grant	No, acts as a grant or subsidy	Create incentive to develop brownfield sites – and in turn, preserve greenfield ones.
Historic rehabilitation tax credits	Tax credit	No, acts as a subsidy	Preservation of buildings/ neighbourhoods with historical and cultural value.
Transfer of development rights	Market-based incentive programme	No, but can be revenue neutral	Preserve open space and limit density in underserviced/peripheral areas; increase density in well-serviced ones (i.e. limit sprawl and preserve open space). Typically combined with density bonuses.
Use-value tax assessment	Lower tax assessment on desired uses; higher tax assessment on undesired uses	Depends	Generally used to preserve farmland. Can in principle be used to encourage any type of use.
Development impact fees	Fees paid by developers for new developments where infrastructure needs to be extended	Yes, to pay for costs of new developments	Make developers pay the costs that their developments create for the public. Evidence that this reduces the rate of new developments in a territory.
Betterment levies	Captures the increase in property values due to a public action through taxes or fees	Yes	Fiscal mechanism that can support the development of new public infrastructure and amenities.

Source: OECD (2017), *The Governance of Land Use: Policy Analysis and Recommendations*, http://dx.doi.org/10.1787/9789264268609-en.

The potential of congestion charges for managing spatial development

Transportation has a very direct impact on how land is used. In Amsterdam, the large number of commuters from surrounding areas to the city has led to traffic congestion and its attendant impacts such as air pollution. The city has used differentiated parking fees in part to address central city congestion. However, road congestion pricing offers another option. It has been introduced in various forms across the OECD (Box 2.11). London and Stockholm have attracted perhaps the most international attention for their congestion pricing schemes which started in 2003 and 2006 respectively. These types of charges can be structured in a number of different ways. Ideally congestion charges will be structured in such a way as to encourage drivers to consider the marginal social costs of their decisions to drive as opposed to marginal private costs.

Box 2.10. **Fiscal instruments to manage development**

A wide range of policy instruments can be applied to control, regulate and stimulate desired development outcomes in OECD countries. Many fiscal instruments operate as taxes and exactions levied on developers to raise revenues and mitigate the negative impacts of development. Others are structured as incentives in the form of subsidies, tax credits, development rights and direct state action to encourage economic agents to take actions aimed at improving the conditions of the built environment and protecting the natural environment (Silva and Acheampong, 2015). A key point here is that, in many cases, the statutory instruments of planning alone are unlikely to produce the desired outcomes. Fiscal instruments can provide a critical inducement to meet spatial planning objectives.

Brownfield redevelopment incentives

Brownfield redevelopment incentives create an important inducement for private developers to take on projects in areas that can be more expensive to develop because of the presence of existing structures, the need for soil remediation, higher land costs and complex ownership rights. A study by Alberini et al. (2005) explored the impact of economic incentives for brownfield redevelopments versus liability relief or regulatory relief (such as fast-track planning approval processes). Their study, which was based on a survey of real estate developers in Europe, found that economic incentives, such as subsidies or tax rebates, can provide an important inducement to develop brownfield sites, particularly for experienced developers in the case of contaminated sites. Echoing this, in a review of brownfield policies in select European countries, Thornton et al. (2007) find fiscal incentives, entailing either direct (e.g. tax incentives) or indirect (e.g. structural policy, public credit programmes or pilot projects) forms of funding, are important inducements for brownfield redevelopment – particularly in the cases of the most complex and contaminated types of sites.

Such financial incentives can be set at national, regional or local levels. For example, in the United States, a federal brownfield tax incentive was introduced in 1997 which entailed fully tax deductible environmental clean-up costs, including petroleum cleanup. This programme was sunsetted in 2011. Meanwhile, examples from cities abound – for instance, New York City offers grants to property owners and developers to clean up and redevelop brownfields. Critically, these incentives do not extract value from urban development, but rather provide a subsidy to developers undertaking desirable behaviours that will presumably benefit the community as a whole by revitalizing unused spaces. It bears noting that property and landowners in the immediate vicinity of such revitalized sites stand to financially benefit through higher property prices due to the presumed effects of neighbourhood revitalization, which can be significant (De Sousa, Wu and Westphal, 2009). If brownfield redevelopment has strong positive effects on property prices in the neighbourhood, it is possible to finance redevelopment incentives through value capture instruments, such as betterment levies.

Historical rehabilitation tax credits are widely used across the OECD to encourage the perseveration of historic structures. They affect land use by maintaining historically established uses and densities. Like brownfield redevelopment incentives, they do not generate income but rather provide a subsidy for private individuals to undertake desired rehabilitation projects. There is an ongoing debate in the literature regarding the equity of historic rehabilitation tax credits. While the residents or developers who privately benefit from these credits contribute to the maintenance of a community's cultural and architectural heritage, others maintain that such taxes lead to rent-seeking behaviour and the listing of unworthy projects as heritage sites (Swaim, 2003).

Transfer of development rights (TDR) emerged in the 1960s as a tool for historic preservation – but their use has since proliferated, particularly in the United States, to address a wide range of planning goals, including the promotion of affordable housing and the protection of environmental resources (Linkous, 2016). TDRs are a market-based incentive programme that are generally structured so that landowners forfeit development rights in areas targeted for preservation and then sell those development rights to buyers who want to increase the density of development in areas designated as growth areas by local authorities (Nelson, Pruetz and Woodruff, 2013). As such, they are a useful tool that can be used to steer development away from undesirable areas, such as areas that are poorly linked to infrastructure and transport and that lack services, and towards areas where these features exist. Similarly, they can be used to preserve natural open spaces, maintain historical and cultural assets, farmland and other local assets (Nelson, Pruetz and Woodruff, 2013).

Box 2.10. **Fiscal instruments to manage development** (*continued*)

Simply put, TDRs transfer development potential, such as the density, from an area that is to be preserved to an area where there will be clustered development. If this is done as a one to one transfer, the average density of an urban area will not change, but it will be redistributed such that some areas can be maintained as open natural space for example. In receiving areas – to which the density rights are being transferred – developers are generally permitted to exceed the baseline level of development determined by the zoning code, which would generally require community buy-in (Nelson, Pruetz and Woodruff, 2013). Therefore, TDR is often combined with density bonuses in order to create the incentives for developers to buy the development rights in the first place (Tavares, 2003). As far back as 1916, New York City's zoning code made provision of the transfer of development rights between properties. While increasingly prevalent in the United States, TDR programmes also exist in other OECD countries, such as France, Italy, New Zealand and Turkey (Silva and Acheampong, 2015). Silva and Acheampong (2015) note that legal issues and administrative complexity represent some of the key challenges confronting its application in other countries.

Use-value tax assessments are a specific type of targeted property taxes. They follow the same logic as TDRs – they provide an incentive to landowners to maintain and preserve land in its current state as opposed to selling it for new development. Typically use-value assessments are structured for farmland preservation or the preservation of forested lands. They can be a particularly important incentive in areas near urban locales that have strong pressures for expansionary growth leading to suburbanisation and peri-urbanisation. Use-value tax assessments tax agricultural or forested land use at a lower rate than other uses in order to reduce the incentives to develop (Anderson and Griffing, 2000). For example, in the Netherlands there is differentiated treatment for farmland with exemptions for property tax and the real estate transfer tax (OECD, 2015b: 85).

In Japan, some metropolitan areas, including Tokyo, levy lower property taxes on land designated for agricultural uses (OECD/China Development Research Foundation, 2010). In the United States, use-value assessments typically require that the owners of the land be actively engaged in farming and have rollback provisions to recover lost tax revenues if the land is developed (Heimlich, 2001). Germany also levies lower property taxes on agricultural land than on developed land, but the effects remain limited as all property taxes are generally very low.

Typically, **development impact fees** have to be paid by landowners for the construction of infrastructure, which directly services their plots. They are often charged when land is initially developed, but may also be due when infrastructure is upgraded or significantly rehabilitated. Impact fees cover additional costs arising from the arrival of new residents and are usually paid by real estate developers, who in exchange obtain the permission to develop. Development impact fees may focus narrowly on the costs of infrastructure provision in the immediate vicinity of developments, but may also include costs for infrastructure at greater distances of a development. They are relatively common instrument that exist in 17 OECD countries.

Development impact fees force developers to bear part of the cost of new construction. As development becomes more expensive, urban expansion slows down. Burge and Ihlanfeldt (2006) show that impact fees spur the development of smaller homes in inner suburban areas and of medium and large homes throughout all the suburban areas. The authors attribute the increased construction in inner suburban areas to new multifamily houses being built. This is supported by another study that finds evidence that impact fees reduce the spatial extent of US urbanised areas (Geshkov and De Salvo, 2012).

Betterment levies (sometimes called special assessments) are also charged to capture the increase in property values due to a public action, such as the rezoning of land or the provision of infrastructure. In contrast to impact fees, which are generally related to the provision of infrastructure that services a particular property, betterment levies are more broadly defined and can also capture the windfall gain that occurs from the rezoning of a plot or the provision of a public service to an area. Furthermore, they can be charged over larger areas to capture the increase in property values in an entire neighbourhood that benefits from a new public transport connection. Whereas impact fees are charged at the time development occurs, betterment levies can be charged at any point in time at which a public action causes an increase in property values.

Box 2.10. **Fiscal instruments to manage development** (*continued*)

Despite the conceptual differences between impact fees and betterment levies, in practice they may not be clearly distinguishable. In Germany, impact fees can, for example, be charged on entire neighbourhoods that benefited from rehabilitation measures that are not necessarily related to particular plots. As such, these fees have characteristics that are in many respects similar to betterment levies.

Sources: Silva, E.A. and R.A. Acheampong (2015), "Developing an inventory and typology of land-use planning systems and policy instruments in OECD countries", http://dx.doi.org/10.1787/5jrp6wgxp09s-en; Alberini, A. et al. (2005), "The role of liability, regulation and economic incentives in brownfield remediation and redevelopment: Evidence from surveys of developers", http://dx.doi.org/10.1016/j.regsciurbeco.2004.05.004; De Sousa, C.A., C. Wu and L.M. Westphal (2009), "Assessing the effect of publicly assisted brownfield redevelopment on surrounding property values", http://dx.doi.org/10.1177/0891242408328379; Swaim, R. (2003), "Politics and policymaking: Tax credits and historic preservation", http://dx.doi.org/10.1080/10632920309597339; Linkous, E.R. (2016), "Transfer of development rights in theory and practice: The restructuring of TDR to incentivize development", http://dx.doi.org/10.1016/j.landusepol.2015.10.031; Nelson, A.C., R. Pruetz and D. Woodruff (2013), *The TDR Handbook: Designing and Implementing Transfer of Development Rights Programs*; Thornton, G. et al. (2007), "The challenge of sustainability: Incentives for brownfield regeneration in Europe", http://dx.doi.org/10.1016/j.envsci.2006.08.008; Burge, G. and K. Ihlanfeldt (2006), "Impact fees and single-family home construction", https://doi.org/10.1016/j.jue.2006.03.002; Geshkov, M.V. and J.S. De Salvo (2012), "The effect of land use controls on the spatial size of U.S. urbanized areas", http://dx.doi.org/10.1111/j.1467-9787.2012.00763.x; Heimlich, R.E. (2001), "Farmland protection programs: How would we know they worked?".

Box 2.11. **Introducing congestion charging schemes: Lessons from Singapore and Stockholm**

Transport economists have long lamented the lack of policy interest for a tool that to them is as obviously welfare-improving as congestion charges. However, what is obvious in principle is less obvious in practice. Questions regarding the desirability and feasibility of congestion charges become apparent when policy constraints and costs are taken into account. How to convince voters and their representatives that it is a good idea to make travel more expensive when traffic is bad? How to set charges and deploy revenues so that the distribution of gains and losses constitutes a marketable political proposition? Lessons from Singapore and Stockholm illustrate the many factors to consider when designing and implementing such as system.

The **Singapore congestion charging scheme** is a demand-management system, not a revenue-generating device. It is one component of a broad transport policy that also relies on a vehicle licence quota, on infrastructure planning and on public transport provision to offer high-quality transport options to a growing number of users at a reasonable cost. The vehicle quota system is intended to keep the growth of the vehicle stock roughly in line with the planned expansion of available road space (with allowed growth of the stock recently reduced from 3% to 1.5% per annum). Surveys indicate that car users are mainly interested in high-quality road transport (more road investment, effective congestion management) than in cheaper public transport alternatives.

The approach to system design is pragmatic. The system has become gradually more refined over time, moving from manual to electronic fee collection and enforcement, and covering more of the city as roads become busier, with initially 33 and now 66 gantries for automated control. Charges differ between gantries and vary with the time of day. In 2009, active management of the morning peak through changes in charge levels was extended to cover the evening peak hours too. Rates are revised every three months in order to keep speeds between 45 km/hr and 65 km/hr on the freeway links in the charged area. Rate changes respond to perceptible changes in congestion levels. Revenue neutrality was ensured at the time of the introduction of congestion charges through reduced vehicle taxes (government actually lost revenue as congestion charge revenues were overestimated).

The Singapore case is atypical in a number of respects, some by virtue of the geographical situation of the city and some by design. First, the number of foreign vehicles (occasional users) is small and easily identifiable with foreign licence plates, allowing design choices geared towards more frequent local users that may be hard to duplicate elsewhere. Second, the ability to change prices every three months cannot be replicated everywhere – the example of Stockholm was given, where a rate change might easily take two years because of legal requirements. By contrast, tolls in some value-pricing systems in the United States (e.g. the I-15 in San Diego) are adapted every six minutes. This is accepted both in Singapore and California, as the goal is to maintain free-flow speeds.

Box 2.11. **Introducing congestion charging schemes: Lessons from Singapore and Stockholm** (*continued*)

Finally, the charging system in Singapore is just one component of a broader system that manages supply (road infrastructure) and demand (vehicle licences and charges) with a view to what performance levels need to be reached. Ownership policies are more restrictive than in many other countries. The Singapore approach can be read as one where congestion charges are used to fine-tune overall transport prices so as to obtain acceptable service levels throughout the system. Other proposed or existing congestion charging schemes are not limited to fine-tuning to the same extent. Given the weaker degree of integration of the various components of transport policy elsewhere, the mismatch between demand during peak hours and capacity may be larger than in Singapore in many cases.

The **Stockholm congestion charging system** is effective in reducing traffic volumes and increasing travel speeds. Traffic volumes have declined in all time periods, suggesting there is more trip elimination than rescheduling. Commuters tend to reschedule, but trip purposes are strongly diverse, with about 40% non-commuting trips and many occasional users. Cost-benefit analysis suggests that the system produces net benefits; 75% of gross benefits come from time savings, the remaining quarter mainly from better air quality. The Stockholm evidence also suggests only limited direct gains came from the expansion in public transport expenditure that was part of the overall transport policy reform.

Public acceptance at this time is sufficiently broad to expect indefinite continuation of the system's operation. Acceptance is related to congestion reduction, but also to the improvement of the urban quality of life (e.g. less traffic, less pollution) and with the perception that support for the scheme reflects – and signals – green preferences. In this sense, the Stockholm case illustrates that perceived benefits are not necessarily entirely the same as benefits included in traditional appraisal. With respect to the relationship between acceptance, political risk and system costs, the Stockholm case is a clear example of the cost-inflating effect of strong risk aversion. In addition, it illustrates how political risk is transformed into risk for the administration responsible for designing and implementing the scheme, and how this administration shifts risk to the companies selected for executing the plans. The administration passes on risk by adding features to the charging system and assigning legal liabilities to contractors, who respond by "over-specifying" system components and building redundancy into the system, all of which inflates costs. It deserves emphasis that concerns about acceptance create these risks. It follows that if acceptance of a project can be won early, risk is lower throughout the design and implementation stages, and this allows costs to be cut. If acceptance is won late, as in the Stockholm case, then higher costs are incurred in early stages as a form of insurance. Once it becomes clear that risks will not materialise, insurance expenses can decline, and project costs can gradually be trimmed down. However, higher costs were incurred in the past and irreversible design choices partly drive future costs, so that gradual cost cutting does not allow the recovery of all expenses associated with high initial risk.

Key lessons

Congestion charging systems are not without costs. To ensure a welfare-improving outcome, the efficiency gain from charging needs to be greater than the cost of the system. The size of the efficiency gain depends on getting the prices right. Determining the level and structure of charges requires an understanding of the physical and behavioural aspects of congestion. The mechanisms involved are far more complex than is suggested by the argument that travel times increase with traffic volumes, as used in the basic rationale for charges. Charges are always an approximation to the theoretical ideal, so that decisions must be made on what approximation is best. Experience demonstrates that analytical approaches using disaggregated network models are more likely to produce an efficient result than prices based only on common sense. Such models are better placed to capture complex network activity across modes and reveal impacts on traffic flow that cannot easily be anticipated. A period of model testing and iteration, before charges are set, is indicated.

Charges are introduced in a world that is rife with other market imperfections and where other policy objectives than efficiency matter. Again, the question is if and how this affects recommendations for setting congestion charges. This is a subject of some controversy, but the emerging view is that charges should remain closely tied to marginal external congestion costs rather than adjusted to compensate for one or a range of other imperfections.

Source: ITF (2010), *Implementing Congestion Charges*, http://dx.doi.org/10.1787/9789282102855-en.

The OECD has recommended that Dutch municipalities – Amsterdam included – adopt a road pricing scheme (OECD, 2010b). It is noted that in adopting such a scheme, the relative road prices should take into account existing charges through fuel taxation.

Aligning fiscal policies beyond the purview of the spatial planning system

While the above-mentioned fiscal instruments directly target desired land-use practices, it is important to note that there are a wide range of other fiscal policies that impact land uses but that are outside of the purview of the spatial planning system per se. One of the most obvious examples is how tax policies affect land use is the tax deductibility of commuting expenses. Commuting expenses are tax deductible in 12 of 26 analysed OECD countries (Harding, 2014). Given the marginal tax rates in OECD countries, this reduces the costs of commuting by up to 50%, which provides incentives to people to live further away from their place of work than they would otherwise. This policy encourages sprawling development in the outskirts of urban areas. The OECD recommends abolishing the tax deductibility of commuting entirely (OECD, 2013). If this is not possible, it should at least be ensured that deductions for car-based commuting (which particularly encourages sprawl) are not greater than deductions for commuting with public transport.

Commuting expenses in the Netherlands are tax deductible, but only for public transport usage.[24] Previous OECD reports (OECD, 2010b; 2016) have noted the tax-free commuting allowance creates incentives that can interfere with road pricing schemes and with work-place neutrality. The OECD has recommended that it be reconsidered to focus on low-wage workers for whom the higher commuting costs due to road pricing may increase the chances of dropping out of the labour market (OECD, 2010a; 2016). The OECD has also recommended that taxes on diesel should be raised to better reflect the relative environmental costs of fuels (OECD, 2010b; 2016).

Another important example of a fiscal policy affecting land use is agricultural subsidies. They are a special case of fiscal transfers that contribute to approximately 18% of gross revenues of farms in the OECD (OECD, 2015b). Without these subsidies, agricultural activity would likely become unprofitable in some parts of the OECD and agricultural land use would decline (depending on the size of the subsidies). Since agriculture uses between 15% and 50% of the total land area in most OECD regions, the potential impact of agricultural subsidies on land use is obvious.

These policies do not have land use as an objective and are generally not evaluated according to their effects on land use. Nevertheless, they have significant consequences on land use that may work in favour or against the objectives of planners. By using them actively to provide incentives that are aligned with land-use objectives, land-use planning can become more effective, while being less restrictive and more flexible at the same time.

High ambitions for spatial development – but variable resources

Amsterdam's Structural Vision sets out high ambitions for the city's future development. These ambitions will need to be properly financed in order to be realised. With a shift in scale and scope of projects pursed by active land-use planning, there is an increasing need for private sector developments and investors to be more involved in realising these ambitions. In the words of Needham, "rather than lower their ambitions, municipalities try to pay for them by increasingly ingenious financial constructions, and these can influence the content of land use planning" (2014: 26). This requires more negotiation and trade-offs between the aims of the city and that of developers, who might, for example,

negotiate to build more or differently in return for funding things that the municipality would otherwise be responsible for providing. Thus there is a running tension between "ambitions and resources – legal powers and money" (Needham, 2014: 26).

The economic recession posed a great challenge in this regard. Private investments declined but at the same time the city was locked in to some developments that it ended up losing a great deal of money on. The city adjusted with a more cautious and risk-adverse approach – but this approach relied on a greater role for the private sector and individuals in meeting spatial objectives, such as high-quality public space. Amsterdam was in a strong positon to make this work, unlike some regions in the country which are experiencing population decline and a less robust economy. While the economy is once again in a period of growth and public investments in infrastructure and land development are once again being pursued, the impacts of the 2008 recession are a close reminder that things could easily change in this regard. Such an outcome would stall building investments and reduce the city's ability to meet its housing target, creating yet more housing demand and leading to a decrease in housing affordability.

A consequence of Amsterdam's current economic strength is a steady increase in the value of land and property within the city and region. Most notably, this is reflected in a steep rise in housing prices. The long-run prosperity of Amsterdam requires that the city continue to provide high-quality public services and to invest in public infrastructure. One obvious way for the city of Amsterdam to finance the rising costs of maintaining high-quality public services is to raise revenue from the rising value of land and property. Good public services and investments in public infrastructure are capitalised into high property values. Rather than allowing private individuals and businesses to retain the entire market value benefit from increased property values attributable to public spending and investment, the city should take steps to "capture" a portion of the increases in value. It can do this by raising revenues from a value-based property tax, and/or by various "value-capture" mechanisms linked to specific public infrastructure projects (Table 2.10).

Land value capture instruments are used in a number of countries including Denmark, Estonia, parts of Australia, New Zealand and the United States and many more cities are presently exploring their potential, including London.[25] As has been discussed, Amsterdam's old ground lease system was also a type of land value capture instrument. Advocates argue that, designed well, land value taxes can create incentives to use land for more productive uses, including creating incentives for regeneration and redevelopment. In Amsterdam, own-source revenues are increasingly important. For example, national operational subsidies for public transport are declining, which is placing pressure on the city to both establish a more cost-effective transit system and cover operational costs in the interim. It bears noting that water boards are in a much better fiscal situation given that they can raise taxes to cover their programme needs.

Within this discussion it is important to note that there is no legal limit for municipalities to raise tax rates in the Netherlands. However, there is a national agreement – the so-called macro-norm (macro-standard) – which is a mutual agreement between the Dutch municipalities and the Ministry of Finance that determines the National Financial Municipal Fund. Each year, each municipality receives a financial contribution from the municipal fund. The macro-standard sets the limit of the total percentage increase of all the rates of the Dutch municipalities together; municipalities cannot transcend this standard, and if they do, their subventions are reduced. Therefore, if the city of Amsterdam were to increase its rates, this would have consequences for other cities, the macro-standard and for the contribution that they receive from the municipal fund.

Table 2.10. **Land value capture tools**

Category	Tool	Incidence	Description	Examples
Tax based	Land tax (pure land value or split-rate property tax)	Existing land use, multiple projects, compulsory	Tax on land value or a higher tax for land than for buildings. Considered less distortionary, more progressive and efficient than the composed property tax (land + building) and the tax on commercial activities or labour.	Pure land tax in Australia, Denmark, Estonia Split-rate in Belgium and France
	Betterment contribution (levy or charge)	Existing land use, multiple projects, compulsory	One-time tax, levy or charge imposed on landowners adjacent to public infrastructure investment that would have contributed to land valorization. "Beneficiaries pay" rationale. Yet clear link between investment and land valorization beneficiaries is difficult to assess in practice.	Betterment charge in Brazil and Colombia Special assessment districts in the United States
Development based	Developer contribution (impact fee or developer exaction)	New land use, single-project, negotiated or standardised	Developers must collaborate with supplying off-site infrastructure and service needs steered by their project. If in money, it is a standardised impact fee or development charge. If in-kind and negotiated, it is a developer exaction. For external infrastructure like schools, hospitals, highways.	Korean land development charge, US cities (transit-oriented development [TOD], fees in San Francisco), London and Paris, India (impact fee in Hyderabad Growth Corridor)
	Development rights sale (air rights, building rights)	New land use, multiple projects, compulsory	Additional building potential is sold to developer by municipal authority, at auctions or direct negotiation. Allows for higher density in special operations. Alternatively, it may be simply transferred to compensate for previous restriction of building capacity due to historical or environmental protection.	São Paulo (certificates of additional construction potential and grants of building law); transfer of building rights in New York City, for historical properties, but also sale of air rights (Atlantic and Hudson Yard projects)
	Joint development (public-private partnership, urban redevelopment scheme)	New land use, single-project, negotiated	Public and private sectors co-operate in a project, typically large infrastructures. It can be a joint venture or a concession. Reliance on collaboration of private sector, risk sharing. Must co-ordinate with land development and resale or lease.	TOD in Tokyo; London; Chinese Taipei; Hong Kong, China; Washington, DC Grand Paris Express Urban operations in Brazil
	Strategic land asset management	New land use, single-project, voluntary	Local authorities acquire land, develop it and then resell it, or sell land to raise funds for a specific project, or stay in control of land property and lease it. Whatever is more strategic but also coherent in the long run.	India, People's Republic of China, Netherlands, Battery Park in New York City, Tokyo Public land leasing in Ethiopia and Poland
	Land readjustment or land pooling schemes	New land use, multiple projects, negotiated	Landowners pool their land to be developed, financing such investments with future sale of portions of serviced land.	Korea, Botswana, France, Germany, Chinese Taipei, Tokyo

Source: Figueiredo, L. and A. Schumann (forthcoming), *Theory and Practice of Land Value Capture Tools in Funding Urban Development*.

There are ongoing debates in the Netherlands about the need to revise the municipal fiscal framework. For example, a recent report from the Dutch Financial Relations Council (2016) notes that many tasks have been devolved to municipalities in the Netherlands while their fiscal framework has remained unchanged. Thus, there is an appetite to consider how this framework could potentially be better aligned with present needs. The potential of fiscal instruments to support spatial development objectives should be a part of this discussion. Within this discussion it is also important to consider the interdependencies between the system of local taxation and finance as a whole.

The Environment and Planning Act

Spatial policies and economic development

There have been ongoing debates in the Netherlands about whether spatial policies and regulations hamper economic development. In the wake of the 2008 recession, the 2010 Crisis and Recovery Act was adopted in order to speed up the planning process by reducing or simplifying some of the permit requirements. At the same time, there were emerging discussions about how the spatial planning system could be further simplified and how it might better address some of the growing tensions between economic and environmental agendas that are embedded in sectoral policy responses. The national government forwarded a view that existing sectoral policies are increasingly ineffective in dealing with the interconnectedness of projects, activities and land uses. A policy brief at the time notes that "it is difficult to meet societal challenges relating to economic development, flood protection, supplies of raw materials, water and sustainable energy, housing, accessibility and agriculture while at the same time protecting environmental quality, nature and cultural heritage" (Government of the Netherlands, 2012: 3).

The impetus for reform also arose from the observation that existing environmental legislation tended to focus on protecting the local environment and residents from noise and pollution as opposed to enabling the transition to sustainable development. It was further anchored in the need for place-based policies given that the different regions of the Netherlands are experiencing quite divergent trends, such as population growth in central urban regions and decline in more peripheral rural ones. A major issue was the need to make the requirements for developments less complex and time consuming. As a case in point, the recent expansion of Rotterdam's Europort harbour (Maasvlakte 2 project) required a 6 000 page environmental impact assessment (Government of Netherlands, 2014). In an advisory report to the national government, the independent Council for the Environment and Infrastructure described Dutch environmental and planning policy as "opaque, unpredictable and sluggish" – adding yet another voice to the calls for reform (Council for Environment and Infrastructure, 2016).

In response, a new encompassing act was passed on 23 March 2016 that combines a raft of legislation into a new framework.[26] The new Environment and Planning Act (Omgevingswet) has two primary objectives: 1) to ensure a safe, healthy and high-quality physical environment; and 2) to ensure the effective management, use and development of the physical environment to fulfil social functions.

The Environment and Planning Act merges 26 separate acts into 1; merges 120 orders in Council into 4; and simplifies over 100 ministerial regulations in order to create greater coherency. This includes merging the Spatial Planning Act, the Trajectory Act, the Crisis and Recovery Act, and the Wabo. The new act will come into force in 2019. The aim is to further integrate the rules and regulations for the governance of land use across a number

of policy areas – e.g. nature, water, construction, living, sustainability – and to speed up decision making for spatial projects.

At the time of writing the four orders in Council are being drafted in anticipation of the act's entry into force in 2019. They are: the Decree on Quality Living Environments; the Environment Decree; the Business Environment and the Construction Environment Decrees (Table 2.11). Each contains important details on the mechanics of how the act will be implemented in practice. The discussion that follows is based on the Environment and Planning Act only, since the orders are not yet finalised.

Table 2.11. **The Orders in Council for the Environment and Planning Act**

Environment and Planning Decree	This sets general and procedural rules regarding instruments such as those governing permit requirements, competent authorities, submission requirements and decision making.
Environmental Quality Decree	This contains the substantive standards for administrative action and is therefore directed exclusively at the authorities that apply the instruments contained in the act.
Decrees on activities in the physical environment	This group of rules is directed at the actions of individuals, businesses and authorities and concerns general and directly applicable national rules governing activities within the physical environment. Due to the volume and diversity of topics and target groups, two decrees will be adopted to incorporate the current sectoral regulations on construction, water management and environmental protection. The current Activities Decree comprises the core of the Environmental Regulations Decree, whereas the current 2012 Building Decree forms the core of the Building Regulations Decree.

Source: Council for the Environment and Infrastructure (2015), "Reform of environmental law: Realise your ambitions", http://en.rli.nl/sites/default/files/rli_2015-07_eng_1.pdf (accessed 13 January 2017).

Allocation of responsibilities – decentralise wherever possible, centralise where needed

Akin to the Spatial Planning Act that has preceded it, the new Environment and Planning Act allocates responsibilities on the principle of subsidiarity. Provincial interests include nature conservation and the preservation of the status and functioning of provincial infrastructure and instances where one or more water board is directly involved as well as issues that transcend municipal boundaries (including office and residential developments).[27] Whereas the Spatial Planning Act defined the core tasks of the municipal authority as regulating the use of land and construction, the new Environmental Act expands municipal responsibility in some areas. Specifically, it establishes a duty of the municipality to care for rainwater and groundwater, to collect urban wastewater, and in certain cases manage waterways in ports. It also transfers authority for noise pollution from the national to the local level. Further, the intent of the act is for municipalities to leave more to citizens and investors to develop while managing such issues such a noise, pollution and cultural heritage. This signifies a shift away from active land policy – a trend that can already be identified in the Netherlands (Heurkins and Hobma, 2014).

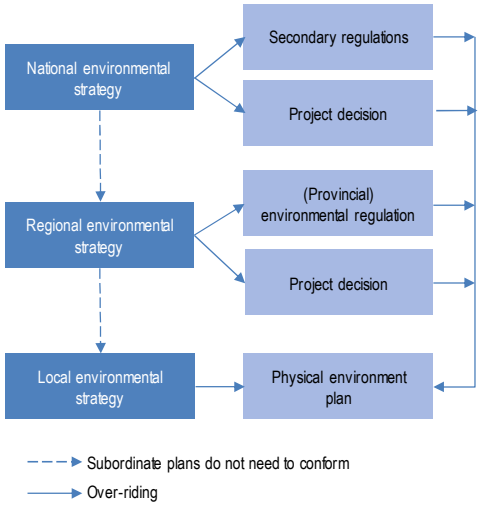
Under the new act, a key task for the province is to co-ordinate policies for the physical environment between the province, municipalities, water boards and the national government. This is consistent with its current legislative role. The province also has purview to protect nature reserves from noise pollution and to protect ground and surface water that is not managed by the state.[28] The role of the national government remains consistent with earlier legislation, with areas of national interest defined as management of state waters and preservation of key infrastructure (e.g. main airports, national defence). It is important to note, however, that while the intent of the law is to decentralise decisions under the new system, the Environment and Planning Act "can just as easily be used for

centralised policy without violating the law" (Council for the Environment and Infrastructure, 2015: 11).

Municipalities will create one area-wide environmental plan

By 2019, environmental plans will replace the structural visions at each level of government (Figure 2.2). A major change at the municipal (and provincial) level is the adoption of one plan for the entire territory that will incorporate all applicable zoning regulations and pertinent administrative laws. All existing zoning plans will be transferred to the environmental plan and local governments will have a period of ten years to transform them. It is anticipated that some areas will have a high degree of protection, such as heritage sites, while others will have far fewer rules and constraints and be more open to experimental uses and spaces. In essence, the municipality will be required to create a single environmental plan for its entire territory that will be based on a "dynamic system of continuous adjustment and renewal" (Council for the Environment and Infrastructure, 2015: 8).[29] The municipality's new environmental plan will have much broader functions than its predecessor. Complementing this, municipalities will be able to adopt an environmental vision which will act much like the present structural visions in setting a strategic approach.

Figure 2.2. **Environment and Planning Act planning framework**



Source: Own elaboration.

It should be noted that the rural development plan has not been incorporated into this figure as yet (Figure 2.2). Also, land ownership policy, of which this plan is a part, is still being revised. Because new policy decisions were needed, land ownership follows a specifically designed, separate legislative process. The renewed land ownership policy is expected to be incorporated into the Environment and Planning Act when the act comes into force.

The new Environment Planning Act is defined by six instruments to shape the physical environment: the environmental planning strategy, programmes, general rules, environmental by-laws, environmental permits and project decisions (Table 2.12). In order to streamline the amount of information required for a development, the research that underpins such decisions will: integrate the environmental impact assessment and project decision procedure;

prolong the period of applicability of research data and accord more certainty to their status; and increase the scope to reuse research data (Government of the Netherlands, 2012: 7). While the intent of the legislation is to increase flexibility by allowing more administrative discretion, it does not aim to relax standards or lower environmental protection. In essence, practitioners will have more latitude to make judgements about what type of information is required in order to proceed with a development.

Table 2.12. **Environment and Planning Act, key principles**

Environmental planning strategy	A coherent, strategic plan for the environment. This plan focuses on the physical environment as a whole. The environmental code requires that the state and the provinces adopt an area vision. Municipalities can decide whether to adopt such a vision or not.
Programme	A programme containing concrete measures for the protection, management, use and development of the environment. These measures outline the environmental values or goals to be achieved.
General rules	One of the basic principles of the law is that local governments should gather all rules and regulations related to the environment into one area-wide scheme. For municipalities, this is the regional plan, for the water boards, the Water Regulation, and for the provinces, an area regulation.
Environmental by-laws	For some areas, general national rules for the protection of the environment will apply. The disadvantage of such general rules is that they may not always fit specific situations. Therefore, the law contains a number of tools which increase the flexibility of general rules.
Environmental permit	Regulatory obligations under the environmental permit are simplified and are processed through a single application (and single point of entry to government).
Project decision	Provides a uniform procedure for decisions on complex projects arising from the responsibility the city or provinces. If a project is, for example, in breach of a regional plan, it allows the possibility of the regional plan to deviate. In some cases a project decision can replace an environmental permit.

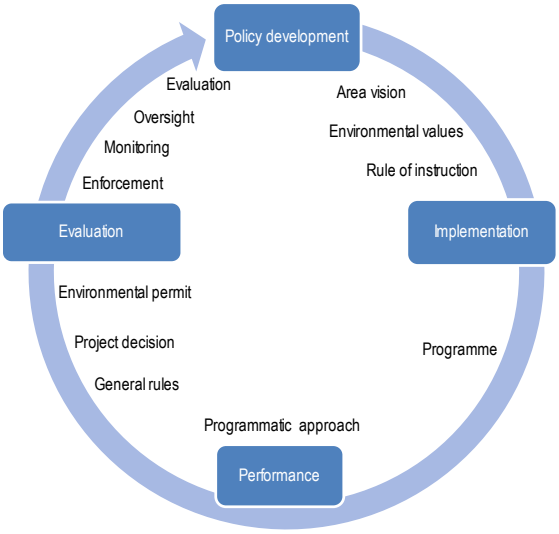
Source: Ministry of Infrastructure and the Environment (2014), "Omgevingswet 'Ruimte voor ontwikkeling, waarborgen voor kwaliteit", www.omgevingsweb.nl/publicaties/factsheet-omgevingswetruimte-voor-ontwikkeling-waarborgen-vo (accessed 13 January 2017).

The law specifies "environmental values" (*omgevingswaarden*) which describe the desired state or quality of the physical environment and acceptable levels of environmental degradation or nuisance.[30] These can be set as thresholds or goals to be achieved and apply across different geographies and locations. The municipality can set its own "environmental values" where it is relevant to control the outcome through municipal policy. The municipality's "environmental values" must, however, conform to upper level ones set by the national or provincial government, EU directives or other international obligations. This mechanism shifts the regulatory approach towards implementation of key objectives or goals, and monitoring and evaluation of their effectiveness. Each administrative body that establishes an "environmental value" must then develop a programme outlining how this will be met, including a package of policy tools and regulations. It requires that a monitoring system be established on the state or quality of the physical environment for each "value". This scheme of monitoring environmental values is derived from EU quality standards.[31] The "rules of instruction" refer to any rule relating to the execution of a duty or power by an administrative body.

This cyclical approach has been described by the national government as no less than a paradigm shift – from preservation and protection towards an active approach that continuously monitors and assesses the quality of the physical environment. The role of the government within this context is to link the initiatives of various actors who are developing projects that impact the physical environment, and to monitor their outcomes. Where there are undesirable outcomes, the relevant administrative bodies will need to establish a programme to remedy this. It is in this way that compliance with environmental

objectives is ensured. Where rules are violated, the government will take enforcement actions that depend on the severity of the violation.

Figure 2.3. **Environmental Act, policy cycle**



Source: Foort, S.V.T. and J. Kevelam (2015), "Het waarborgen van duurzaamheid in de Omgevingswet" ("Ensuring sustainability in the Dutch Environmental Planning Act").

New ways of working – more flexibility and co-ordination, monitoring and evaluation

With the new legislative framework, the Netherlands chooses flexibility. In Amsterdam, it is anticipated that the new legislative and regulatory framework will make it easier to develop and open the possibility to transform plots to new uses and foster innovation and experimentation. The city has already adapted to some of these changes through the recent Crisis and Recovery Act. But the new Environmental Act goes much further. Importantly, it will also open the possibility for local governments to disallow unwanted developments. In the past, such actions would have required that the city purchase development rights to compensate individuals for the loss of those rights. How such compensation will operate under the new system is presently being determined.

Much is unclear about how the mechanics of the new legislation will operate. In part, this is purposeful. The system aims to increase discretion at the local level while determining national and provincial standards and protecting the key interests at those scales where it is deemed necessary. Many functions will be devolved to the local level, but there will also be many areas where municipalities and water boards, together with provinces and the national government, will need to work together on joint projects – as they have always done – but with fewer regulations guiding practice and a greater latitude for decision making in some instances. This raises the question of whether governance structures within the city should change. Amsterdam recently centralised its governance by removing independent competencies from districts, which could have, in fact, been highly instrumental in implementing the new approach which is grounded in local specificities.

Amsterdam's new environmental plan becomes a critical instrument shaping land-use decisions. But it is as yet unclear how existing zoning regulations along with other sectoral regulations will be incorporated into one overarching plan. To combine all into

one and layer sectoral elements atop would defeat the purpose of the new law in establishing an integrated and more flexible system. The Council for the Environment and Infrastructure has prudently recommended that the physical environment plan form the basis upon which planning agreements can be made in order to "ensure that public interest are sustained and improvements in environmental quality are achieved" (2015: 10). It also notes that although the intention is for greater integration between sectoral elements, some issues should remain sectoral in nature and need not be integrated into a single policy document (2015: 11)

A major aim of the new act is to have a unified platform to share all information on the new spatial plans, rules and regulations. Presently, there is a national spatial portal where all relevant spatial plans for any given area are fully displayed and searchable. While land-use plans presently focus on physical planning, the new plans under the act encompass other topics as well (e.g. environmental protection and health and water). The development of a unified platform will require close co-operation between civil servants in different organisations and the integration of different (and potentially competing) policy goals.

Impact of the new Environmental Planning Law on the public interest

It is intended that the new act will rely far more on collaborative planning than in the past. This entails a more active role for citizens in planning processes and a closer relationship between initiators/developers, authorities and citizens (Council for the Environment and Infrastructure, 2015:11). The public engagement function will be critical in order to ensure the new system functions effectively. With less formalistic rules, there may be less recourse to legal procedure but a greater onus placed on building consensus and mediating conflict in advance. Neighbourhood groups and non-governmental organisations will likely be increasingly important actors under the emerging planning system. There are unique third-sector groups operating in the city that have acted as an intermediary between developers, residents and the city; these types of institutional roles will likely also grow in importance as well. Amsterdam already has a strong commitment to deliberative planning and has established inclusive processes to gain the input of its residents, including those who often have a marginal voice, such as the homeless. The city also has experience working in areas with more flexible planning rules that have required mediation and co-ordination among stakeholders and the public, especially where there are mixed-use functions that can impact noise and environmental quality in areas such as Buiksloterham.

The new Environment and Planning Act places a larger onus on proponents of a project to establish a public engagement process. Given the increasing latitude for projects and the interest in experimentation and innovation, this is an important function. It will be critical that there is consistency around how "publics" are involved in decision making in the city in the future. Protracted engagement efforts would detract from the desired outcome of more timely developments. At the same time, the planning process could easily become increasingly beholden to more powerful groups that are better placed in terms of time, energy and resources to achieve their agendas. This is inherent risk within a more flexible approach. Decisions about land use need to navigate power relations and power asymmetries. In more rigid, formal and legalistic systems, the interactions between the various actors are often highly constrained, which has the benefit of certainty. Under the new act, how these relationships play out will in large measure depend on the project at hand, but will need to balance inclusiveness, timelines and flexibility. Within this, the city will need to the play the role of fair broker and be extremely transparent about how

regulatory requirements are being met and how and when stakeholders are included in decision making.

The new act is expected to result in cost savings in the longer term

The new system is expected to result in cost reductions in several areas. The structural benefits of the act itself have been estimated at between EUR 35 million and EUR 51 million a year for municipalities, EUR 2 million for provinces. EUR 2 million for the water boards, EUR 11-15 million a year for companies, and EUR 0.5 million a year for private citizens (Government of Netherlands, personal correspondence). The financial effects of the secondary legislation are presently being estimated. It is anticipated that there will be: fewer obligations for policy planning, thus reducing administrative costs; reduced research costs for physical environmental plans because of wider planning possibilities; and reduced administrative costs for companies and government due to fewer permits and greater use of general rules. It is further expected that there will be an improved digital support system with up-to-date information about the state of the physical environment, which will provide basic data for permit requests and reduce research costs. And finally, shorter waiting periods for obtaining permits are anticipated.

While these types of cost savings are anticipated in the longer term, in the shorter to medium terms there will be new costs associated with the implementation of the Environment and Planning Act. These include the new technological infrastructure to support the system and training for staff in such areas as facilitation, monitoring and evaluation.

Is the new Environment and Planning Act a continuation, or a critical juncture?

The new Environment and Planning Act ushers in a departure from the philosophy of "static planning" which is exemplified by the local land-use plan, towards "a dynamic system of continuous adjustment and renewal" (Council for the Environment and Infrastructure, 2015: 5). But, is this a break from existing planning processes and institutions, or is it a continuation or evolution of its present form? This is, of course, a difficult question to answer at this early stage when so many details of how the instruments will in fact work remain to be determined. However, it is apparent that the orientation of the new act builds on key strengths within Dutch spatial planning – namely a high degree of trust between actors, a culture of co-operation both among municipalities and between levels of governments, and a commitment to core planning values. It particularly builds upon strengths that are evident in Amsterdam – a city with a long history of active land-use planning that has worked much beyond the purview of its statutory instruments. The city already has a great deal of capacity, with dedicated and talented planners that work closely with their stakeholders and publics.

This issue of capacity is paramount. The growing land-use pressures that Amsterdam faces are also faced by the metropolitan region as a whole and can only be met by co-ordinated responses. While cities like Amsterdam have a great deal of capacity, it is critical that smaller places also have the resources necessary to act as collaborative partners within the emerging system on projects of regional importance. Related to the issue of capacity, there is a threat that major investment decisions taken by the MIRT are dominated by provincial territorial interests and the major cities such as Amsterdam, as opposed to smaller locales (Zonneveld and Evers, 2014: 71).

This leads to a greater point. Decentralisation of competencies needs to be accompanied by the appropriate fiscal provisions. The act includes provisions for the cost recovery of fees related to environmental planning and stipulates that the municipality should be compensated for costs relating to the change of an environmental permit or regional plan that have been made at the

request of another public body. It is anticipated that the national government will provide funds for training to assist municipalities and water boards to implement the new act and adjust to new ways of working. The new Environment and Planning Act does not, however, directly include provisions for new resources for municipalities in anticipation of their changing functions. While cost savings are anticipated in the longer term, resource issues require close monitoring as it is not yet clear how the new act will reorient day-to-day functions and associated cost implications.

The new planning system will rely ever more so on trust and it will take time for new partnerships and ways of working to evolve within bureaucracies, across sectoral interests, and with public and private actors. These new functions should be properly resourced, particularly given the greater prominence of negotiation and facilitation, and evaluation and monitoring within the new approach. Further, under the new framework, fiscal incentives (or disincentives/penalties) could be made better use of to direct desired behaviour, such as increasing density, encouraging transit-oriented development, transforming brownfields and encouraging hotels to incorporate spaces that can serve the wider community in their design.

Finally, the new Environment and Planning Act raises the issue of how spatial and land-use planning will address sectoral concerns. There is a risk that the technical instruments will be focused on environmental concerns to the detriment of social or economic ones. Inter-sectoral alignment will depend in large measure on how the functions are bureaucratically determined within the city and how different departments work with one another. This is an issue to pay attention to as the new legislative framework is implemented.

Box 2.12. **Chapter summary**

A strong planning tradition grounded in collaborative governance

The Dutch have a strong planning culture that places a particular emphasis on trust and collaborative governance. The structure plans of each level of government generally support and reinforce each other's objectives and are self-binding. Amsterdam's spatial development objectives are focused on increasing housing density; transforming mono-functional areas into mixed-use (residential and commercial) developments; enhancing regional transport networks; increasing the quality of public space; investing in green space; and preparing for a post-fossil fuel era.

Recent reforms to develop a more integrated, responsive and flexible planning system

The system of spatial planning in the Netherlands is in the midst of change. In 2008, the planning system shifted from a hierarchy of plans towards self-binding structure plans at each level. Following this, the need for a more responsive and flexible planning system in the wake of the 2008 economic crisis led to the adoption of the Crisis and Recovery Act, which simplified the planning approval process.

The latest reforms through the Environment and Planning Act represent a much bigger shift. They encourage a multi-sectoral lens on projects, place a greater onus on project proponents to work with communities and gain consensus on a project in advance, and streamline the requirement for preparatory studies by increasing the discretion of public servants over that process.

The new act will entail new ways of working

The new act will entail new ways of working with stakeholders and a likely stronger role for monitoring and evaluation. It is not entirely clear how the new municipal environmental plan will incorporate its sectoral requirements and the existing detailed zoning that applies to the city. Given that a major aim of the legislation is to increase flexibility, highly detailed plans may detract from this function. And yet, such detail is needed in some areas, such as the historical centre. Likely, a mixed approach will evolve, with more detailed requirements and regulation in some parts of the city and less in newer, evolving districts. Thus, a balance will be struck between certainty where needed, and flexibility where prudent.

Box 2.12. **Chapter summary** (*continued*)

The city of Amsterdam is well placed to take advantage of this newer, flexible approach. Just as its tradition of active land-use planning is shifting, it has the potential of new tools at its disposal to open negotiation on projects and work with the private sector to deliver projects that meet both public and private interests. Importantly, it is doing so in an environment of economic growth. There are strong incentives for private developers to enter into the market and help meet the growing demand for housing.

The resource requirements associated with implementation should be closely monitored

The new planning system is expected to result in cost reductions in several areas in the longer term. But in the shorter to medium terms, there will be new costs associated with the implementation of the Environment and Planning Act, including new technological infrastructure to support the system and training for staff in such areas as facilitation, monitoring and evaluation. It is anticipated that the national government will provide funds for training to assist municipalities and water boards to help adjust to these changes, but there are no provisions for new resources for municipalities in anticipation of their changing functions. These costs are difficult to estimate at present. Implementation will require ongoing monitoring and adjustment to new processes and it is important that municipalities are adequately supported and resourced for these changing functions.

It will be important to monitor social spatial development alongside environmental indicators

The technical instruments on the new act are focused on environmental (physical) indicators. It will be important that planning considerations do not lose sight of socio-economic conditions under the new planning framework.

Aligning fiscal instruments with spatial planning objectives

Fiscal instruments can provide powerful incentives for how land is used. Brownfield redevelopment incentives can establish an inducement for private developers to take on such complex projects. Betterment levies can be charged to capture the increase in property values due to a public action such as the rezoning of land or the provision of infrastructure. A differentiated property tax can be used to steer desired developments – e.g. reduce greenfield development and increase urban density. Congestion pricing can discourage car usage while raising funds for sustainable transportation investments.

Amsterdam needs all the tools in its arsenal – fiscal included – to meet its spatial development goals. In many cases, the national fiscal framework limits own-source municipal revenue and so, the adoption of any new or expanded fiscal instruments requires national government support as well.

Notes

1. The provincial council (Provinciale Staten) and the municipal council (Gemeenteraad). Both councils elect the members of their executive council which are collegial boards (*collegiaal bestuur*): the Deputy States (*Gedeputeerde Staten*) for the provinces and the Burgomaster and the Court of Aldermen (*College van Burgemeester en Wethouders*) for the municipalities. The King's commissioners and the mayors are formally appointed by Royal Decree (*de Kroon*), but their appointment is based on a recommendation of the provincial and municipal deliberative councils. The King's Commissioner and the mayor also chair their deliberative councils. They both also have an autonomous role as a "national administrative entity".

2. The only other city in the country to have such a municipal configuration was Rotterdam.

3. For a summary of the recent reforms see: https://www.amsterdam.nl/bestuur-organisatie/bestuurscommissies/bestuurlijk-stelsel and https://www.amsterdam.nl/bestuur-organisatie/college/individuele-paginas/abdel-uheb-choho/persberichten/persberichten-2016/college-nieuw.

4. In the early 1990s, the national government amended the Joint Regulations Act in order to mandate co-operation between municipalities in seven metropolitan regions. Subsequently, national government priorities for more "compact and efficient government" abolished mandatory co-operation among the seven municipalities in 2014 and reassigned those competencies among provincial and municipal governments. The city-region of Amsterdam then changed from a form of mandatory co-operation into the voluntary partnership of 15 municipalities that it is today whose primary function is the provision of regional transportation, excluding rail (Tweede Kamer der Staten-Generaal, 2012).

5. The Amsterdam city-region is also committed to obtaining investment grants for the region, for example from national or European authorities.

6. ZO!City is a participatory urban planning/transformation project. The group has created a tool (TransformCity) that integrates storytelling, data-sharing, co-creation, participatory democracy, crowdsourcing and crowdfunding. The project aims to engage citizens, businesses, organisations and the government directly in order to exchange information and ideas and collectively plan and change their city or neighbourhood. The online map shows all relevant objects like buildings, roads, parks and stations as clickable objects that hold basic information and also in-depth thematic information via both open and user-generated datasets. The timeline features recent developments and future plans and scenarios as well. The full interactivity of the dashboard makes it easy to engage and respond directly to plans and projects. Everybody can share their own ideas and initiatives for the area, obtain feedback from other people and from the official institutions and, in doing so, test the local base of support. With the underlying crowdfunding infrastructure, project-based alliances can be formed and resources combined. The rewards for this active engagement may vary from an improvement in the daily environment to actual shares in local projects and developments.

7. The 2010 Crisis and Recovery Act (Crisis- en herstelwet) established shorter procedures for construction projects.

8. Property rights in general are defined in Book 3 of the Dutch Civil Code. Property consists of all things and all property rights. Real property rights are defined in Book 5 of the Dutch Civil Code, in which ownership and land lease are defined. Ownership is the most comprehensive right that a person, the owner, can have to a thing. The owner of land, such as the City Council of Amsterdam, also has the right to develop the land as well as the owner of a real limited property right, such as a land lease. The right to develop is not a specific right defined in the Dutch Civil Code, parties are free to define the content of such a right in an agreement. It depends on the content of the agreement whether and to what extent rights to develop (and obligations) can be used.

9. The National Spatial Portal for Planning was established in 2010 (www.ruimtelijkeplannen.nl); through it one can access all structural and land-use plans and general rules for every jurisdiction/locale.

10. For example, the statutory provisions for the strategic environmental assessment, the water assessment procedure according to the National Administrative Water Agreement, or the requirements for administrative prudence according to the General Administrative Law Act. The National Administrative Water Agreement (2008) specifies the water assessment process to be followed in each spatial plan that affects water management. This is underlined once again in the 2008 National Water Plan (*Rijkswaterplan*) and the 2009 administrative memorandum on water assessment. The province inspects the area plans of municipalities. The plans must not conflict with provincial interests.

11. The 2012 SVIR replaced the National Spatial Strategy (Nota Ruimte), the Randstad 2040 Structural Vision, the Policy Document on Mobility, the Mobility Strategy and the structure scheme for the motorway environment and supersedes the spatial objectives and conclusions in the following documents: Key Planning Decision on the Structure Scheme for Military Sites, the Landscape Agenda, the Living Countryside Agenda and "Peaks in the Delta" (Ministry of Infrastructure and the Environment, 2012).

12. These are referred to as provincial spatial regulations (*provinciale ruimtelijke verordening*).

13. The North Holland Structural Vision is monitored over a period of two years and evaluated at the end of that period; evaluation is based on 47 quantifiable policy objectives related to the 3 areas of provincial interest.

14. They have varying scales, with 1:15 000 being a typical scale.

15. There are some exceptions to the legal precedence of the zoning plans. Project plans take precedence over zoning plans and are used to facilitate the approval of developments that contradict existing land-use plans. Project plans can be made and implemented by all three levels of government. Sometimes they are used by higher level governments to enable projects to take place which would otherwise be blocked by lower levels of government. A special type of project plan is the "trajectory decision for national infrastructure projects", to which local governments cannot object. Also, while land-use plans are generally prepared by municipalities, the national government and the provinces can prepare so-called imposed plans (*inpassingsplan*) if local plans do not correspond to national and provincial planning policies. While they are legally binding to landowners, exemptions can easily be made if they are in the interest of the plan-making body.

16. There are some parts of Amsterdam for which there is no local land-use plan. Examples are the marine area near Oosterdok and the prison Bijlmer near Amstel train station. Both locations will be developed in time. The owner of these properties is not the city of Amsterdam but the national government. Another example where there is no local land-use plan is a part of the IJ. There is no pressing reason to make a local land use here. Legally, management ordinances can be established for areas where no major change in use is foreseen and development possibilities are restricted. Such ordinances are valid for a ten-year period. Compared to land-use plans, management ordinances have the advantage that they can be prepared more quickly and cheaply, but they do not create a legal basis for development.

17. For example building and demolition permits, logging concessions, environmental permits, historic building permits, planning permission, permission to deviate from the zoning plan and finally, operating licence or occupancy notification (fire protection).

18. Amsterdam's land price policy is updated by the annual land prices *Letter of Land and Development City of Amsterdam* and the *Land Pricing Guide*. The letter outlines macroeconomic trends and their policy implications. The *Land Pricing Guide* is applied citywide for new land allocations and the revision of existing leasehold rights.

19. For an evaluation of planning doctrine in Amsterdam see Cortie (1997).

20. For example, a newly developed townhouse at the J.F. Berghoefplantsoen 29, 1064 DE Amsterdam in 1997 was sold for EUR 140 000 including a lump-sum ground lease of EUR 31 500 for a parcel of 100 m².

21. For example, a single-family home for sale (on MLS Funda, 1 June 2016) at the Prinses Margrietstraat 1, 1077 KZ Amsterdam at a list price of EUR 2 950 000 with an annual ground lease for a parcel of 728 m² at EUR 12 120 over the period 1987-2037 (indexed annually by the consumer price index).

22. At the time, this was particularly important because there was no public law which determined such a role for the city in spatial development.

23. See www.waarstaatjegemeente.nl (accessed 4 July 2016).

24. The tax deductibility of commuting expenses in the Netherlands is based on two benefits: *Reiskostenvergoeding*, reimbursement from the employer of an employee's commuting costs, normally paid only to those who travel more than 10 kilometres one way and *Reiskostenforfait*, the allowance for travel costs paid by the employer to the employee which he/she can then offset against tax (Potter et al., 2006).

25. See London Assembly (2016).

26. See: Staatsblad van het Koninkrijk der Nederlanden (2016).

27. As outlined in Article 2.3 (General criteria distribution of tasks and responsibilities).

28. As outlined in Article 2.18 (Provincial responsibilities for the physical environment).

29. As outlined in Article 2.4 Regional Plan.

30. Environmental values by law entail three components: 1) a legal classification of the value and the obligation that this entails (such as a threshold); 2) the timeframes for the obligation to take affect or deadline by which it is to be met; 3) the geographic location(s) where it is applicable.

31. As outlined in Article 2.9 Environmental Values.

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Chapter 3.

Regional co-operation on land-use issues in the Amsterdam Metropolitan Area

This chapter examines regional co-operation on land-use issues across greater Amsterdam. It proceeds in three parts. The first section describes how regional governance institutions have evolved over the past several decades in metropolitan Amsterdam, including present configurations. Following this, the challenges inherent to metropolitan spatial planning are explored, including the trade-offs between formal and informal forms of governance, the challenge of adopting integrated multi-sectoral approaches, and the issue of which scale across which spatial planning should occur. Finally, key future governance issues and challenges for the Amsterdam Metropolitan Area are explored.

Land-use decisions of one community – rural or urban, large or small – affect its neighbours. From the location of transport infrastructure to the preservation of natural amenities to the costs of housing – there are a myriad of interactions that connect the functional territories across which people live, work and travel. Especially in densely populated urban areas, the management of land demands a co-ordinated approach to contentious issues such as regional transportation investments, the location of industrial areas and the amount of housing that is developed. As the purview of spatial planning has expanded, a broader metropolitan scale has been adopted in many countries. It is driven by the need for spatial and land-use planning to keep pace with changing functional territorial boundaries. This is particularly important in places like Amsterdam, which is one of the most polycentric functional urban areas in the OECD. Amsterdam's success in dealing with some of the greatest issues it faces such as the provision of affordable housing for a growing population, the preservation of green spaces and the development of high-quality urban amenities, rests in large measure on metropolitan-wide actions.

Metropolitan-wide planning can be achieved by either formal and informal institutions or a mix thereof depending on how sectoral competencies are divided. The effectiveness of either institutional approach depends to a large extent on the types of issues that a territory faces, the relationships among the actors, the resources at their disposal and, in general, the capacity to implement a common agenda. The policies of upper level governments, regional or national, have a major impact on the adoption of inter-municipal or metropolitan planning frameworks. In countries with consensus-oriented politics and high capacity at the local level like the Netherlands, soft co-ordination mechanisms are likely to work well. In other cases, more stringent co-ordination mechanisms at the metropolitan scale may be more effective. Metropolitan-wide planning approaches raise questions about the appropriate scale to tackle land-use issues; the democratic legitimacy of decisions that take place outside of formal governmental institutions; and the ability to secure stable forms of funding and achieve long-term goals.

In Greater Amsterdam, a variety of governance mechanisms have evolved over the past decades, with present configurations settling on a more informal approach, with the exception of the regional transportation body. A major question for the future is if this is the right configuration to meet present and evolving challenges, and whether the new Environment and Planning Act will fundamentally change how the various actors work with one another and thus demand new institutional relationships in the process. This chapter explores these issues in three parts. It first outlines how governance in greater Amsterdam has evolved in the past few decades, including an overview of present institutions. Second it examines how Amsterdam's regional governance compares against experiences in other OECD countries. Finally, key governance issues and challenges for the Amsterdam Metropolitan Area in future are explored.

Evolving metropolitan governance in Amsterdam

Ensuring that the needs of a growing population can be met, that businesses can flourish, and that development proceeds in a sustainable manner, all require co-ordinated and collective responses. There have been continuous debates across the Amsterdam Metropolitan Area about the appropriate scale, composition and functions of metropolitan governance and yet, few large-scale reforms in the political system. This section describes the evolution of metropolitan governance in Amsterdam, which is important in order to explain present institutional configurations and prospects for reform.

Early efforts focused on building dialogue and consensus

By the late 19th century Amsterdam outgrew its municipal borders and began to annex land in surrounding municipalities – a process that continued over the decades until the last large annexation of land in 1966 which led to the construction of Bijlmermeer (El Makhloufi, 2012: 298). Unsurprisingly, this led to conflicts with neighbouring municipalities. In recognition of a need for new forms of joint municipal co-operation in both greater Amsterdam and other metropolitan areas, the national government passed the Joint Regulations Act in 1950, which has since been amended several times (*Wet gemeenschappelijke regelingen*, WGR).[1] The act established public law guidelines for municipalities, provinces, regional water authorities, and other public bodies and legal entities to co-operate. It enabled these actors to work together in privatised entities such as associations or foundations. While the number of inter-municipal arrangements concluded under the WGR Act dropped from 1 500 in 1985 to around 700 in 2010, it remained sizeable (OECD, 2014). Traffic and transport represented the second largest expenditure item for such WGR arrangements (21%), just after social services (46%) (OECD, 2014). Clearly there was an interest among municipalities to address issues collaboratively. However, these types of associations also led to a critique about a lack of political legitimacy whereby important decisions were taken under institutional structures that were less visible and directly accountable to citizens.

In the 1970 and 1980s, forms of voluntary and bottom-up co-operation were established in Greater Amsterdam through the Informal Consultation Amsterdam Agglomeration (Informal Agglomeratie Overleg Amsterdam, IAO) and later, the Regional Consultation Amsterdam (Regionaal Overleg Amsterdam) (see Table 3.1 for a timeline). Under the IAO, municipal alderman consulted each other about diverse subjects. When the WGR was updated in 1984, the IAO became more important and city councils began to meet yearly. However, these nascent entities struggled to adopt a common vision for the metropolitan area and to implement projects on the ground – their resources and capacity were limited.

In the 1990s, the shortcomings of voluntary co-operation among municipalities in large urban areas – due in large part to the reluctance of the municipalities to give up their autonomy and divergent interests – led the Dutch government to pursue more effective co-operative structures (Hulst, 2005). In 1994, a temporary law called the Framework Law on Changing Governance (Kaderwet Bestuur in Verandering) made it compulsory for municipalities in seven "city-regions" to co-operate on spatial planning, mobility and economic development issues. This law was supposed to offer a transitional framework towards creating directly elected "city-provinces" (*stadsprovincies*), but the idea was massively rejected by citizens when put to referendum both in Amsterdam and in Rotterdam in 1995. The government therefore dropped that idea and instead extended the temporary framework by adopting the Joint Provision Act Plus (Wet gemeenschappelijke regeling plus, WGR+ Act) in 2005. The WGR+ Act gave a permanent legal status to the seven (subsequently eight) "city-regions" (*stadsregio* or WGR-*plusregio*), Amsterdam among them.

City-regions were thus a top-down (nationally mandated) approach to inter-municipal co-ordination for the largest city-regions that form a common urban system. Each city-region was governed by a council composed of municipal representatives, accountable to their respective municipal councils.[2] The voting system was designed in such a way to avoid the excessive predominance of the largest city. The law prescribed co-operation among municipalities for the provision of specific public services, particularly transport, but also housing, infrastructure and economic affairs. Some city-regions also co-operated in other

policy areas, such as spatial planning, child welfare, health, safety and the environment. The city-regions could make binding policy decisions where there was a majority of votes.

In 2014, the Netherlands decided to abolish the eight city-regions – which had acted as compulsory metropolitan-level co-ordination mechanisms. A major reason for giving the responsibilities back to provinces and municipalities was the perceived lack of democratic legitimacy of the city-regions. They also faced several obstacles to their effectiveness. For example, the effectiveness of regional plans were hampered by the preference for proportional disbursement of resources among the municipalities involved such that, in the case of Amsterdam, the regional plans were little more than a cumulative list of investment wishes by the municipalities that ignored the actual regional challenges and investment needs (Hulst, 2005). After the abolition of the city-regions, all provinces, except those of South Holland and North Holland, were given back the responsibility for transport, which they had officially lost since the 2005 WGR+ Act. Regional Consultation Amsterdam kept its *Kaderwet* status for two years and then another two years pending the discussion about the organisation of the regional government.

Table 3.1. **Key dates in the evolution of Amsterdam's metropolitan governance**

Key dates	Institution	Form of collaboration
Early 1970s	Informal Consultation Amsterdam Agglomeration (Informal Agglomeratie Overleg Amsterdam, IAO): regular consultation among Amsterdam and neighboring municipalities	Voluntary and informal bottom-up co-ordination with Amsterdam and 25 surrounding municipalities
1986	Regional Consultation Amsterdam (Regionaal Overleg Amsterdam, ROA)	Voluntary and informal bottom-up co-ordination of 23 municipalities
1992	Regional Organisation Amsterdam (Regionaal Orgaan Amsterdam, ROA)	Voluntary and informal co-operation; evolution of the Regional Consultation Amsterdam with new name
	Regional Cooperation Amsterdam (Regionale Samenwerking Amsterdam, RSA)	Regional informal body and evolution of the ROA
Late 1990s	Noordvleugeloverleg	A co-operative network of municipalities and provinces
1995 (new mandate in 2015)	City-region of Amsterdam (Stadsregio Amsterdam)	A formal consortium of 15 municipalities comprised of a Regional Council and Executive Board, responsible for deliberation and commissions. Policy and grant-funding powers.
2000	North wing talks (Noordvleugeloverleg), precursor to the Amsterdam Metropolitan Area	A co-operative network in the fields of spatial planning, economic development and infrastructure among municipalities and provinces in the northern part of the Randstad
2007	Amsterdam Metropolitan Area (Metropoolregio Amsterdam)	An informal partnership of 33 municipalities, the provinces of North Holland and Flevoland, and the city-region of Amsterdam
2015 (new mandate)	The city-region of Amsterdam became a "transport area", retaining statutory powers and resources for this competency. The new name of the entity is Transport Authority Amsterdam (Vervoerregio Amsterdam) effective January 2017.	A formal consortium of 15 municipalities comprised of a Regional Council and Executive Board, responsible for deliberation and commissions. Policy and grant-funding powers.
2017	The Amsterdam Metropolitan Area is formalised	The 33 municipalities, 2 provinces and the transport authority sign a covenant and a common bureau (the MRA Bureau) is established

Source: Own elaboration.

Stadsregio Amsterdam has evolved into a regional transport authority…

In light of these changes, from 2015, Stadsregio Amsterdam became a regional transport body, retaining statutory powers and competencies for this policy area, while its remaining former competencies were shifted back to the provinces or, in the case of youth issues, decentralised to the municipalities. The body is now called Transport Authority Amsterdam (Vervoerregio Amsterdam). With this new legal status, Transport Authority Amsterdam seeks to strengthen co-operation with municipal and provincial partners on transport and accessibility and there are active discussions through a project committee entitled "the Administrative future of the regional council" that explore the entity's role and political legitimacy going forward.

Transport Authority Amsterdam has entered into a co-operation agreement with the provinces of North Holland and Flevoland, and the municipalities of Almere and Lelystad, which is seen as essential to manage complex traffic flows. In 2016, for example, the respective parties agreed to a Strategic Mobility Plan (Strategische Visie Mobiliteit) and the partners also intend to intensify knowledge sharing in transport planning, concessions and procurement. Representatives from the provinces and leading municipalities have pledged to organise and consult more regularly and effectively. Presently Transport Authority Amsterdam is funded in part by national subventions (Broad Goal Oriented Grant) and also through municipal member contributions of EUR 2.23 per capita (Stadsregio Amsterdam, 2016).

Transport Authority Amsterdam is governed by a Regional Council composed of 60 members (by population) that are delegated by the 15 municipalities. The Regional Council is formed after municipal elections (which take place every four years) by councillors, aldermen and/or mayors. While the Regional Council is based on proportional representation, the city of Amsterdam has given up some of its seats in order to reduce its dominance on the council. The city has 37% of the voting seats in the Regional Council, despite accounting for 56% of the regional population.

As a transport authority, Transport Authority Amsterdam plays an important role in land-use decisions by developing policies for the use of the existing road network and public transport and cycling networks, and improving and expanding the quality of these systems.[3] Given the critical role of regional transportation within the Amsterdam agglomeration, the organisation also liaises closely with other regional entities, such as the Amsterdam Metropolitan Area and the Amsterdam Economic Board, on such issues as platform business parks and office locations, tourism policy, education and employment, and knowledge and innovation. They have, for example, established a joint policy for the location of large retail in the metropolitan area and a joint agenda for tourism.[4]

… with this change, the Amsterdam Metropolitan Area's role in spatial development becomes more important

With Transport Authority Amsterdam focused on regional transportation investments, the Amsterdam Metropolitan Area (Metropoolregio Amsterdam, MRA) – which is an informal partnership of 33 municipalities, the provinces of North Holland and Flevoland, and Transport Authority Amsterdam – takes on a key role in fostering co-operation across the broader agglomeration, including spatial development. The MRA has grown organically over time. Initial partnerships coalesced around a series of yearly conferences to discuss spatial development and forward strategic plans. The first such conference was held in 2000 through the North Wing Consultation (Noordvleugeloverleg) and under the

mantra of "content before structure". In other words, to have discussions and build consensus around the core issues before thinking about how to organise collective responses.

The MRA has developed both short – to medium – and long-term agendas to guide collaborative action. It is critical to note that these agendas are not part of an agreed upon planning routine with regular review. The short- to medium-term Agenda 2016-2020 focuses on seven strategic objectives in such areas as providing space for living and working, improving quality of life and transitioning to a "clean economy" (Metropoolregio Amsterdam, 2016). For example, in the case of "space for living and working" the MRA Agenda outlines the need for 250 000 homes to be built between 2016 and 2040. In order to achieve these (and other) goals, MRA members have agreed to the action items summarised in Table 3.2.

Table 3.2. **The MRA Agenda 2016-2020**

Development directions	Action list
Space for living and working	– Jointly agree and co-ordinate on housing issues – Jointly determine which urban locations are available for development over the next four to ten years – Implement the Amsterdam Metropolitan Area's (MRA) Real Estate Marketing Strategy in order to attract international investors – Examine the potential to "age in place" in existing 1970s and 1980s neighbourhoods – Transform offices into temporary spaces for living and working through such measures as flexible zoning – Transform and/or restructure the obsolete greenhouse area at Greenport Aalsmeer into new spaces for living and/or working – Work together with the aviation industry to establish new spaces for development – Establish development hubs along with priority rail corridors (e.g. Zaan and Schiphol-Amsterdam-Almere-Lelystad) – Implement the Regional Hotel Strategy 2016-2022 and establish in the medium term a Regional Accommodation Strategy – Endorse the MRA Strategic Agenda for Tourism 2025 and its corresponding Action Programme for Tourism
Smarter and more innovative work	– Support campus development for start-ups, including finding locations – Establish regional-level agreements on student housing and housing for new graduates – Explore the possibility of establishing a regional fund for innovative small and medium-sized enterprises together with the Utrecht region – Establish new data centres in the MRA – Work with other partners on an Education Action Plan for Lifelong Learning – Develop a Technology Pact in collaboration with industry and educational institutions that is focused on hands-on technical education – Invest in primary and secondary education by, for example, establishing programmes of excellence and offer coding and programming – Lobby the government for resources to support employment schemes – Promote connections between business clusters in the region
Improving quality of life	– Establish an action plan for the metropolitan landscape – Investigate a landscape plan and landscape compensation for the MRA – Develop a regional plan to co-ordinate events in the region – Perform a survey of the metropolitan potential of Markermeer-IJmeer – Appoint a trustee for scenery (model project in Waterland) – Conduct a scan of current landscaping projects (e.g. the Markermeer Dykes) – Translate "City in Balance Amsterdam" into a regional initiative: Region in Balance – Explore co-operation in the social domain (focusing on health inequalities and individuals with poor labour market outcomes) – Share knowledge about the prevention of social problems in older neighbourhoods – Implement Culture Pulse MRA, which focuses on aligning and strengthening cultural activities and tourism

Table 3.2. **The Amsterdam Metropolitan Area Agenda 2016-2020** (*continued*)

Development directions	Action list
Transitioning to a clean economy	– Identify business frontrunners who are currently establishing circular commodity chains in the region – Prepare a roadmap to accelerate and simplify licensing and adapt legislation – Designate pilot areas for a circular economy at the west axis (e.g. Zaanstad, Gooi and Vecht, Schiphol Trade Park and Floriade Almere) – Prepare raw materials analysis for the MRA – Designate sites for the temporary storage of high-quality materials that are released during demolition and establish a digital marketplace to sell this demolition on regional scale – Establish an inventory of undeveloped land that could be used in the next five to ten years for the generation of solar energy or for the cultivation of crops such as flax, hemp, elephant grass and hops for bio-based products – Conduct a survey of regional waste management and processing and suggestions for improvement – Design and implement a regional programme for energy in order to help MRA partners fulfil the National Energy Agreement and contribute to the National Energy Atlas – Conduct pilots of smart and flexible energy systems such as smart grids, where demand and energy play a role – Expand and crosslink heating/cooling networks in the MRA for greater energy efficiency and connect 300 000 additional dwelling equivalents – Design and implement a regional programme to accelerate energy conservation
Better connections	– Expand and improve the Schiphol Plaza node – Develop a single integrated public transport map of the MRA with a recognisable lines on MRA scale – Establish a single metropolitan bicycle network to establish, construct missing links and improve existing routes – Prepare a regional accessibility agenda for all types of goods by all modes of transport – Investigate which new infrastructure investments have priority after 2025 (e.g. metro extensions, the IJmeer, A1, A23 and completion of the second ring around Amsterdam) – Raise the financing of the A1 and A9 roads to the government's attention – Investigate the future funding of public transport and the efficient design of the urban distribution network
Climate proofing	– Develop a regional plan for water management measures for emergency services, water storage, multi-layer water safety, water quality, salinization of agricultural land subsidence and reduction of water use – Determine water storage locations to absorb heavy rain (provinces and municipalities) – Ensure that decisions about major infrastructure interventions and large water users are taken into account in setting visions – Work together with knowledge institutes and exploit events such as the Floriade 2022, in order to stimulate innovations for water resistance and food security in the region and to attract start-ups on this subject
Making the MRA more agile	– Improve the MRA's governance and its administrative co-operation – Monitor relevant trends and developments at the (inter) national and MRA scales (MRA Dashboard) while also engaging with citizens – Ensure the involvement of councillors, representatives from business, knowledge institutions and subregions in the tasks of the MRA by organising an annual meeting

Sources: Adapted from Metropoolregio Amsterdam (2016), "MRA Agenda", www.mraagenda.nl/mra-agenda-english.

The above action list identifies many areas for collaboration. However, the mechanisms to achieve these goals are not always clear. In some instances joint strategies have been established (e.g. Real Estate Marketing Strategy) and the actions presumably fall to implementation including monitoring, evaluating and reporting. However, roughly a third of the measures noted above entail the development of joint strategies or plans for which the mechanisms to achieve these actions are not clear. Further, the action list highlights the importance of data analytics to the organisation's goals. Roughly a third of the items on the agenda require regional data in order to establish priority areas and monitor trends.

Almost all actions require reports and evaluations on progress, which also necessitates regional data. This is clearly a critical function of the organisation and one which requires enhanced capacity. This is in part recognised by the idea of an "MRA dashboard" that could be used to monitor relevant trends and developments at the international, national and MRA scales and at the same time engage with citizens. But beyond monitoring external trends, such a "dashboard" could also be used to signify progress by MRA members on their joint activities – it could stand as a way to hold members to account and demonstrate outcomes.

The MRA also has a long-term agenda – "Development Scenario for the Amsterdam Metropolitan Area in 2040" (Ontwikkelingsbeeld 2040) – which informs the structural visions drawn up by municipalities and provinces as well as regional policy. It was elaborated through a highly involved process of metropolitan consultations in 2007. The development scenario provides a diagnosis of trends in the region and describes key spatial tasks for the future around the themes of: climate change; environment, energy and sustainability; the economy and globalisation; accessibility, mobility and infrastructure; demography, socio-economic development and leisure; and the metropolitan landscape. It tackles, for instance, such issues as how the port and Shipol airport can be incorporated into their surrounding urban landscapes; how to balance the ongoing urbanisation of Almere (a rapidly growing municipality across the IJmeer bay from Amsterdam) against the desire to protect landscapes; and how to ensure that there is a "social mix" in cities and neighbourhoods across the MRA.

The MRA has been governed by a Co-ordination Committee that meets three times a year and organises yearly conferences and leads the drive for inter-municipal agreement. Civil servants prepare the meetings for each of the platforms; these civil servants come largely from the city of Amsterdam, Transport Authority Amsterdam and the province of North Holland. The province of Flevoland and the city of Haarlem also have civil servants who work almost full-time on MRA projects. The MRA produces analyses of regional issues and trends through regular monitoring reports and an economic outlook for the area.

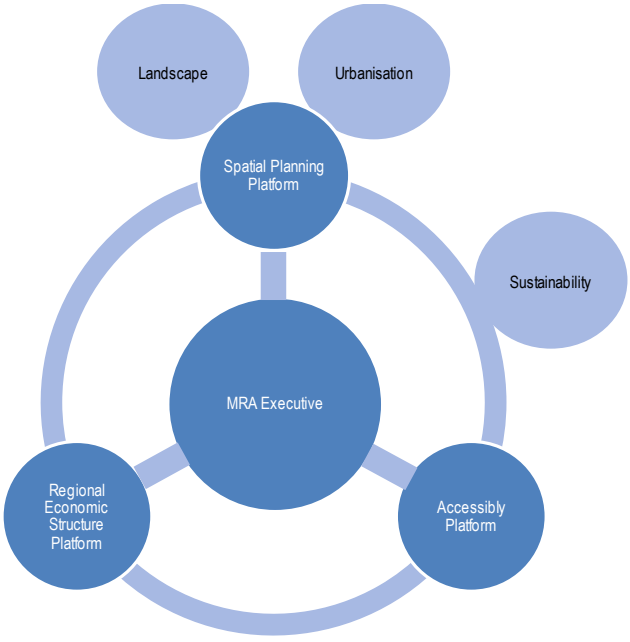
The MRA's work across its three priority areas of strategic planning, traffic and economic development are achieved through three "platforms", as depicted in Figure 3.1. Each platform is responsible for regional co-ordination in its policy domain and is composed of a chair, vice chair, secretary and participants who meet quarterly. The Planning Platform (Platform Ruimtelijke Ordening) sets strategic spatial plan objectives and actions while the Accessibility Platform (Platform Bereikbaarheid Metropoolregio Amsterdam) develops strategies for traffic and transport and major infrastructure requirements. Thus, the Accessibility Platform has an important link to the regional transportation authority given its focus on transport. However, there are no formalised connections between the two entities within the administrative structure. Further, the MRA has a broader membership (and covers a broader geographic area) than the transport authority. The Regional Economic Structure Platform (Platform Regionale Economische Structuur) addresses such issues as tourism policy, education and employment, and knowledge and innovation – issues and activities which have spatial consequences.

Can "content before structure" still work?

While the MRA partnership grew out of a mantra of "content before structure," how feasible does this remain given present challenges? Is it time to revisit the governance of the metropolitan area, and if so, what types of structures would lead to more effective

metropolitan governance? These are large and ultimately political questions which have been the subject of long-standing debates in the Netherlands (Bos, 2010; Janssen-Jansen, 2011). Over the past several decades a variety of institutional configurations have been tried – both informal and, in the case of Stadsregio, formal and top-down. Recently other ideas for reforming both regional and local government institutions continue to be proposed and, ultimately, rejected. For instance, the idea of creating a Randstad province (Randstadprovincie) was rejected in 2012; the merger of the provinces of North Holland, Utrecht and Flevoland was considered and rejected in 2015; and a recent proposal to merge small municipalities to meet a population threshold of 100 000 has met a great deal of resistance and was summarily abandoned. Nevertheless, there is growing sentiment among MRA partners that there is a need to improve the governance and administration of the MRA; this forms an action item for its "making the MRA more agile" development direction, described in Table 3.2.

Figure 3.1. **Amsterdam Metropolitan Area platforms**



Source: Adapted from Plan Amsterdam (2016), "Hoe werkt regionaal samenwerken in de MRA?", p. 3.

The following section examines key issues and debates that commonly arise in the organisation of metropolitan spatial planning from a comparative lens. It discusses the range of approaches that have been taken across the OECD and in doing so serves to demonstrate the merits and drawbacks of different options.

The challenge of metropolitan spatial planning

Over the past few decades there has been a, increase in metropolitan forms of governance across the OECD. This has been driven by recognition that, while urban agglomerations have many benefits, they also bring along with them distinct challenges that require metropolitan-wide solutions, particularly in the areas of transportation, economic development and spatial planning. Metro regions across the OECD tend to have higher gross domestic product (GDP) per capita than their respective national averages, higher

labour productivity and faster growth rates. Such agglomeration economies – in Amsterdam included – offer both highly specialised and diverse value-added activities, tend to have strong human and physical capital endowments, and are attractive to international businesses and investors.

Despite these strengths, urban agglomerations are also the site of large and persistent pockets of unemployment and have some of the highest rates of social-spatial exclusion and poverty. Further, such factors as the congestion costs faced by larger agglomerations (e.g. traffic, air and water pollution, noise levels and degradation of green areas) ultimately detract from quality of life and well-being. These trends are apparent across OECD city regions, Amsterdam included.

More than two-thirds of metropolitan areas have some form of metropolitan governance (OECD, 2015b). However, their policy focus, scope and composition can differ greatly. The following section examines the challenge of metropolitan planning through some of the key issues and debates, highlighting practices from other OECD countries in the process. While metropolitan areas face many common challenges, such as how to promote collaboration amidst diverse and sometimes conflicting interests, ultimately, metropolitan institutional solutions will be unique – reflecting local cultures, ways of working and historically embedded relationships.

Informal versus formal metropolitan governance

The majority of metropolitan governance bodies in the OECD tend to involve forms of informal or soft co-ordination; less than a quarter of OECD metropolitan areas have governance bodies that impose regulations. Therefore, the MRA's informal partnership is a common approach. Table 3.3 outlines the four broad categories of metropolitan governance bodies across the OECD. There are benefits and drawbacks to each approach and the OECD does not recommend any specific form.

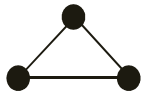
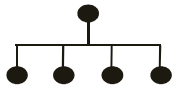
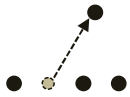
Metropolitan governance and political authority

Formal metropolitan governance bodies with directly elected regional representatives have greater political authority than informal ones where the governing actors are appointed. For example, the directly elected London Assembly forms the politically accountable strategic government for Greater London. Its members were elected on the basis of city regional considerations – transportation foremost among them (see Box 3.1 for a discussion and examples of directly elected metropolitan authorities). In contrast, the political authority of informal metropolitan governance is weaker. For example, the MRA's membership is formed by the appointment of directly elected (city-wide) municipal councillors (mayors are appointed upon nomination by city council) along with regional and Transport Authority Amsterdam representatives.

Links to political authority are directly tied to an entity's capacity to raise funds independently and to establish binding regulations. Informal forms of metropolitan governance can struggle to implement a common agenda where major trade-offs are required and have weaker connections to the citizens they govern in terms of democratic legitimacy and accountability. Despite these drawbacks, there are many reasons why metropolitan areas across the OECD have chosen to adopt more informal approaches to metropolitan collaboration, including the critical role they play in establishing a common metropolitan agenda.

Table 3.3. **Four broad categories of metropolitan governance bodies in OECD metropolitan areas**

From the lightest to the most stringent in institutional terms

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. Frequency: 52% of metropolitan areas in the OECD	
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. Frequency: 24% of metropolitan areas in the OECD	
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. Frequency: 16% of metropolitan areas in the OECD	
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. Frequency: 8% of metropolitan areas in the OECD	

Source: Adapted from OECD (2015a), *Governing the City*, http://dx.doi.org/10.1787/9789264226500-en, p. 21.

Box 3.1. **Directly elected metropolitan governance authorities**

Directly elected metropolitan bodies have clear links to democratic legitimacy and authority. If, for example, there are major challenges with transportation in Greater London, the people responsible to resolve these issues are foremost the Mayor of London and the London Assembly. Examples of directly elected metropolitan governance authorities in the OECD include the Greater London Authority, Portland Metro, Verband Region Stuttgart and Métropole Aix-Marseille-Provence. In contrast, in metropolitan authorities that are not directly elected (i.e. members are appointed from constituent municipalities), political authority is dispersed. It has also been argued that in such cases, the membership of these types of governance bodies is less focused on the overall metropolitan agenda and instead can be divided according to their own more narrow municipal interests.

The Stuttgart Region

Founded in 1994, the Stuttgart Regional Association represents 179 municipalities or 5 counties covering the metropolitan area of Stuttgart in the German *Land* of Baden-Württemburg, with around 2.7 million people and a surface area of approximately 3 600 km². The legal framework of the association was established through a provincial law passed in 1993. The association's General Assembly is directly elected through a general ballot every five years and has 80 members in total. The authority is responsible for regional planning (it develops a binding framework for the development planning of the municipalities); the landscape planning framework; regional transport planning (including regionally important public transport); regional economic development; and regional tourism marketing. It can also voluntarily take over other regionally important tasks. The Stuttgart Region has two main sources of income: levies and other grants (e.g. grants for the regionalisation of the S-Bahn). The authority has the right to raise revenues from: the general federal allocation (in the 179 cities and towns); traffic allocations (in participating urban and rural districts); and the waste levy (in the urban and rural districts).

Box 3.1. **Directly elected metropolitan governance authorities** (*continued*)

The Greater London Authority

Some years after the Greater London Council was abolished in 1986, a new Greater London Authority (GLA) was established in 2000. Unlike any previous local or regional government in the United Kingdom, it is made up of a directly elected mayor – the Mayor of London, who is elected by a single constituency of 7.3 million people – and a separately elected 25 member assembly, the London Assembly. When fully staffed, there are about 500 staff to help the mayor and assembly in their duties. There is a clear separation of powers within the GLA between the Mayor, whose executive role requires taking decisions on behalf of the GLA, and the assembly, which has an oversight role and is responsible for appointing GLA staff. The Mayor is London's spokesperson and leads the preparation of statutory strategies on transport, spatial development, economic development and the environment. S/he also sets budgets for the GLA, Transport for London, the London Development Agency, the Metropolitan Police and London's fire services. The assembly scrutinises the Mayor's activities, questioning the Mayor about her/his decisions. The assembly is also able to investigate other issues of importance to Londoners, publish its findings and recommendations, and make proposals to the Mayor. The GLA's competences include a number of existing government programmes, such as police, fire, transport and economic development. These four key functional responsibilities are in the hands of boards: Metropolitan Police Authority, London Fire and Emergency Planning Authority, Transport for London and London Development Agency. Other functions include environment, culture, media and sports, public health, and inward investment. The GLA has no taxing power. Its budget amounted to approximately GBP 3.6 billion in 2012-13, and most of the cost of the GLA itself is met by a central government grant, with a small contribution from London council taxpayers.

Metro Portland

Metro Portland (formerly the Metropolitan Service District) is a government for the Portland metropolitan area in Oregon, and the only directly elected regional government in the United States. Metro Portland serves more than 1.3 million residents in Clackamas, Multnomah and Washington counties, and the 25 cities in the Portland, Oregon, metropolitan area. Metro Portland was created by voters to join the Columbia Region Association of Governments and the Metropolitan Planning Commission in a May 1970 election. Metro Portland in its current form went into operation on 1 January 1979. It is governed by a council president elected region-wide and six commissioners who are elected by district, and has an elected region-wide auditor. Each elected official serves a four-year term. The council appoints a chief operating officer and an attorney. Metro Portland receives 14% of its USD 200 million budget by levying a property tax, but more than 50% of its budget comes from fees and charges levied on metropolitan-wide operated firms (e.g. solid waste disposal plan, the zoo, the Convention Centre, the Expos Centre and the Portland Center for Art Performances). Metro Portland performs the following functions: 1) provides land-use planning and is responsible for maintaining the Portland area urban growth boundary, a legal boundary that separates urban from rural land, designed to reduce urban sprawl; it co-ordinates with the cities and counties in the area to ensure a 20-year supply of developable land; 2) serves as the metropolitan planning organisation for the area, responsible for the planning of the region's transportation system; 3) manages several park facilities, handles waste disposal and maintains landfills and recycling transfer stations.

Source: OECD (2015a), *Governing the City*, http://dx.doi.org/10.1787/9789264226500-en; Stuttgart Region (2016), https://www.region-stuttgart.org.

Navigating power asymmetries between large and small actors

Metropolitan governance inherently needs to navigate power asymmetries between small and large actors such that smaller municipalities do not feel subsumed by the priorities of their larger collaborators. This is particularly the case where there is large central city dominance within the region. In the Amsterdam Metropolitan Area, these

dynamics are certainly evident.[5] Within the MRA, the provinces of North Holland and Flevoland and the city of Amsterdam are much larger than the other partners. The incremental process of building partnerships over time, starting with the regional consultations in the 1980s and 1990s, has been a key strategy to build trust among partners first and foremost. Further, in the case of Stadsregio Amsterdam, the city of Amsterdam gave up some of the proportional seats so that it does not dominate the governing council. This is a good strategy given the power asymmetries that exist.

Despite the many benefits of informal forms of metropolitan governance, there are several drawbacks. There is the risk that collaboration will only occur on issues that are mutually beneficial to the actors involved, leaving some of the most important challenges that need to be tackled unresolved. This is particularly important when it comes to spatial planning and land-use decisions, which can require real and visible trade-offs. In metropolitan Amsterdam, processes of urbanisation run up against landscape protection objectives which are a policy priority for provincial governments. Further, there are major debates about the role of subcenters in the region – how they can and should develop as places (and employment centres) in their own right, as opposed to serving as bedroom (commuting) communities for larger employment centres in the region. Some smaller communities with more affordable housing worry that they are becoming socially polarised places, with concentrations of lower income residents. Given these long-standing tensions, how can informal partnerships in the region tackle these issues and how will trade-offs among parties be negotiated?

More formal forms of metropolitan governance can be more effective at tackling such issues by setting clear targets and parameters for all municipal actors – for example, Metro Vancouver (Canada), a metropolitan political body that establishes plans for urban growth, among other functions (Box 3.2).[6] It is important to note that Metro Vancouver does not have a directly elected governing broad – rather, appointed representatives from its constituent municipalities form its governing board. It is, however, more formal than the MRA in terms of its revenue, administrative capacity and the binding nature of its regional growth strategy on municipal land-use plans.

Establishing long-term and reliable sources of financing

A further challenge with informal forms of metropolitan governance is the issue of establishing long-term, appropriate and reliable sources of financing to carry out tasks and responsibilities. Presently, the MRA has a limited budget from membership contributions, which it primarily uses for research, the development of a metropolitan vision and strategy, networking events, and communications activities. The budget is raised by the partners of the metropolitan region. Costs for projects and programmes are funded separately; usually directly by the partners involved. The MRA further draws on seconded public servants from its respective membership. However, these secondees tend to be from the largest cities and the regions, which leads to an imbalance of representation in terms of who carries out the day-to-day functions of the body. Smaller municipalities simply cannot commit personnel resources in the same ways.

The MRA's limited financial resources in turn hamper its scope for action as a collective body. Table 3.4 outlines the main revenue sources of metropolitan areas in the OECD along with some of the benefits and drawbacks of each type. The issue of finances is tied to the status of the MRA as a political body; were the MRA to begin to leverage more own-source revenues either through taxes or user fees, this would need to come in tandem with a more formalised governance body with political authority, accountability and transparency. The same can be said of greater recourse to capital finance mechanisms.

Box 3.2. Metro Vancouver's Regional Growth Strategy

The Vancouver region is located in south-western British Columbia, Canada, and covers an area of 2 832 km². The area is bounded by mountains, rivers, the Pacific Ocean and the US border. It is Canada's only non-amalgamated major metropolitan area. The population is around 2.4 million, approximately 50% of the population of British Columbia and about 13% of that of Canada. The region has experienced substantial growth over the past three decades, adding more than 1 million people in a generation and it has the highest housing prices in Canada.

The region is administered by Metro Vancouver, a supra-municipal authority that was first created in 1967; it brings together 24 local authorities (22 municipalities, 1 "electoral area" and 1 aboriginal community called "Treaty First Nation"). Metro Vancouver is mainly in charge of utilities such as regional water and waste management, air quality management, regional parks, growth management, and affordable housing. It has a staff of approximately 1 500 and a budget of CAN 699.1 million in 2017. Metro Vancouver's annual budgets are driven primarily by the costs of delivering fundamentally utility services in partnership with member municipalities (i.e. drinking water supply, sewerage and management of solid waste).

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 Regional Growth Strategy 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 along with input to the Mayors' Council on proposed borrowing limit increases in ten-year transport investment plans. Translink has approximately 6 700 employees and receives its revenue mainly through taxation (mostly fuel and property taxes), user fees and government transfers. Total consolidated revenues for 2016 were expected to be CAN 1.4 billion on a funded basis.

Metro Vancouver's regional growth strategy – interconnected management plans to guide sustainable regional growth

Metro Vancouver's regional growth strategy is an agreement between a regional district and its member municipalities on social, economic and environmental goals and priority actions. The regional growth strategy's objectives are to co-ordinate action on housing, transport, infrastructure and economic development in recognition that collaboration at regional level will make individual municipal action more effective. All regional district bylaws and all official community plans of member municipalities must be consistent with the regional growth strategy.

Metro Vancouver's current regional growth strategy – "Metro Vancouver 2040: Shaping our Future" – was adopted in 2011. It contains strategies to advance five goals related to urban development, the regional economy, the environment and climate change, housing and community amenities, and integrating land use and transportation. The regional growth strategy is reviewed every five years and progress on its core goals is reported annually. This includes an extensive set of performance measures for each of its five goals and component strategies (Metro Vancouver, 2014a). Assessments are also made against the baseline performance report (Metro Vancouver, 2014b).

Sources: OECD (2015a), *Governing the City*, http://dx.doi.org/10.1787/9789264226500-en; drawing on various sources including Metro Vancouver (2014a), www.metrovancouver.org (accessed 27 May 2015); TransLink (2014), "Regional transportation authority of Metro Vancouver", www.translink.ca (accessed May 2015); Metro Vancouver (2014b), "Progress towards the baseline annual report", http://www.metrovancouver.org/services/regional-planning/PlanningPublications/Progress-toward-Shaping-our-Future-Baseline-Annual-Report-min.pdf; Metro Vancouver (2014c), "Progress towards shaping our future, report highlights", www.metrovancouver.org/services/regional-planning/PlanningPublications/MV_2040_2014_Highlights.pdf; "Progress towards the baseline annual report"; OECD (2012a), *Compact City Policies: A Comparative Assessment*, http://dx.doi.org/10.1787/9789264167865-en.

Table 3.4. **Main revenue sources of OECD metropolitan areas**

	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	Often not only a 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 to 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 subnational 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 may have 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 Private participation in infrastructure	Concessions Private finance initiatives	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. In certain cases, can offer an attractive way to relieve municipalities from up front capital costs and avoid highly visible debt while tapping into the expertise of the private sector, but require strong local capacity for concluding adequate contractual agreements.
	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 by national legislation, due to moral hazard and macroeconomic stabilisation problems.

Source: OECD (2015a), *Governing the City*, http://dx.doi.org/10.1787/9789264226500-en.

Intergovernmental transfers are highly instrumental across OECD countries in establishing metropolitan forms of governance. 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 accept to have a single business tax with neighbouring municipalities. As a result, an overwhelming majority of the more than 35 000 municipalities in France are currently part of an inter-municipal collaboration structure.

The Netherlands does not presently employ such mechanisms. The national government in the Netherlands funds projects of metropolitan importance, but not the MRA itself.[7] For example, the national government's Randstad Urgent programme provided an impetus for new housing developments in Almere (the Schaalsprong project); without this funding, this project of metropolitan importance would likely not have been pursued (Janssen-Jansen, 2013). Beyond project-based funding, it bears noting that government transfers are the main source of funding for Amsterdam's regional transport authority, which established strong fiscal incentives for inter-municipal co-ordination in this policy area.

Independent sources of funding facilitate co-operation and would help the projects undertaken in the MRA to have a truly metropolitan scope as opposed to the project-based approach which is currently employed. Further, independent sources of funding would allow the MRA to have dedicated staff and rely less on seconded employees from the largest partners. This would help to address criticisms that the organisation is dominated by its larger members in day-to-day operations. However, it can be extremely challenging to adopt more stable and independent forms of funding as this is linked to the broader issue of an entity's political authority and the political prerogatives of upper level governments. A recent report from the Dutch Financial Relations Council (2016) notes the need for more fiscal options to pursue regional co-operation and deplaning.

Getting the scale right

What is the appropriate scale for metropolitan planning and does this scale differ by policy area? Should the governance frameworks for spatial planning issues be the same or differ from that of transportation planning and economic development objectives? A key aim of metropolitan governance is to address the issues across a functional urban area – the areas across which people live, work and commute. The MRA presently covers 33 municipalities (and the provinces of North Holland and Flevoland, and the city-region of Amsterdam). Meanwhile, the regional transportation body is at a smaller scale, with a membership of 15 municipalities. It is important that the design of metropolitan institutions be driven by an evaluation of a territory's ongoing functional (social-spatial economic) relations, instead of, for instance, historically embedded relationships.

These issues of scale are linked to the question of formal or informal forms of metropolitan governance. Informal metropolitan governance has the benefit of adaptability to geographic scale wherein partnerships can form around specific projects. More formal metropolitan governance structures may be less adaptable in that regard, particularly where projects that benefit one area are funded by the organisation as a whole and require consensus on implementation. Thus, the flexibility of metropolitan governance has been very useful in Amsterdam, and not only in the context of the MRA. Partnerships between municipal, provincial and private sector actors have been established to address land-use issues in key areas such as the Schiphol Airport, the port and the North Sea canal.

Scale also matters in terms of how the metropolitan area is thought about – both from the perspective of constituent municipalities and their residents and in a broader European and international context. The MRA wishes to rank among the five leading metropolitan regions in Europe. As a political project, the MRA has over time built consensus about the idea of metropolitan competitiveness as opposed to municipal competition. However, this metropolitan frame raises a challenge in that it is further away from elected democratic structures – it is more distant from citizens. There is a risk that citizens and other stakeholders who might feel remote from decision-making centres will reject metropolitan authority (goals, objectives and plans). Metropolitan governance bodies thus face a more general challenge in terms of building trust and accountability with citizens and other stakeholders. They need to balance their outward-focused interests against their inward-focused ones.

Integrated planning – tackling spatial and sectoral concerns in tandem

Spatial and land-use planning today is intimately connected to much broader agendas, such as the transition to a low-carbon economy, reducing social-spatial inequality, and creating opportunities for economic growth and prosperity. Spatial planning is therefore linked to policy ambitions at multiple scales, extending across sectoral issues and involving an ever wider array of actors in structures of governance. This has fundamentally challenged planning systems to adapt, both in terms of the formal institutional rules as well as informal roles and ways of working. There is a search for an "integrated" approach that can better link diverse policy objectives across the social, environmental and economic realms. The objective here is to connect different governance initiatives focused in the arena of the planning system, through the system's concern with the use and development of land, with spatial organisation, and the qualities of places.

In order to devise integrated spatial planning approaches, a number of key issues need to be addressed. The most prominent is how to deal with more strategic issues in increasingly devolved governmental structures where decisions are delegated to local governments, neighbourhoods and citizens. The MRA's three platforms of economic development, spatial planning and transportation (accessibility) present an integrated (multi-sectoral, triple helix) perspective. However, the implementation tools at the metropolitan level are voluntary and thus weak. The MRA sets important spatial objectives but has few concrete mechanisms to co-ordinate on land-use plans. In France, national legislation has established intercommunal and inter-sectoral plans (territorial coherence plans) that are binding on lower order ones (Box 3.3). Metro Vancouver's regional Growth Strategy presents a similar option (see Box 3.2). Given recent reforms to the planning system in the Netherlands, a change in formal legal planning instruments is not likely. At minimum, the MRA could develop stronger short- to medium-term targets for spatial development that are agreed among actors – with clear indicators to monitor change. If they are not legally binding, they could at minimum provide a strong reference point to signal intentions and establish political commitments. This would help address the issue that, in the past, the planning decisions of municipalities have been sometimes misaligned, resulting for example in the overproduction of office space in the region (Janssen-Jansen, 2013).

Another issue is the importance of aligning spatial planning with transportation planning. The more functionally integrated cities within an urban agglomeration are, the better the economic performance of the whole. Co-ordination challenges are minimised when land use and transport functions are within a single metropolitan authority. However, across the OECD, such configurations are relatively rare. Stadsregio Amsterdam has evolved into a regional transportation body that covers 15 municipalities and co-operates closely with the MRA, albeit usually on a project-by-project basis. The

regional transportation authority also has a co-operation agreement with Almere, Lelystad and the two provinces. Almere and Lelystad lay to Amsterdam's east and are experiencing population growth. Forecast population growth in Almere is expected to outstrip even Amsterdam to the year 2040 (Statistics Netherlands, 2016). Is a co-operation agreement between these cities and Transport Authority Amsterdam enough? This is an issue that requires monitoring. The links between metropolitan and municipal ambitions for transportation and land-use planning need to be well aligned and the regional transport authority's membership should be based on functional need.

Box 3.3. **Strategic spatial planning: France's territorial coherence plans**

Over the past two decades there has been a significant rise in the number of strategic spatial plans across urban agglomerations in the OECD. In France, as in many other countries, it is the notion of cohesion that underpins this joint spatial development project. The Territorial Coherence Plan (Schéma de Cohérence Territoriale, SCoT), created in 2000, is a key mechanism for intercommunal planning using a sustainable development framework. It covers the "local labour market" or "urban area" for parts of the country. This type of plan was established by the Solidarity and Urban Renewal Law.

A SCoT links housing, urban planning and transportation plans more effectively than they otherwise would be and supports cohesive development strategies for the entire area. There is no compulsory requirement for communes or groups of communes to participate in a SCoT, but there are incentives to do so. For example, according to national law, natural areas can be developed only if the area is covered by a SCoT. Such incentives have been further strengthened by the requirement that developed areas that are not covered by a SCoT cannot be expanded starting from 1 January 2017 onwards. To encourage the adoption of SCoTs, from 2010 the state has set up annual calls for proposals to increase participation in rural territories with limited human and financial resources to draw up SCoTs.

The plan establishes a reference framework for territorial planning over a timeframe of 20 years. As such, it does not give granular detail on land-use development – that task falls to plans and planning decisions at the scale of the commune (*plan local d'urbanisme* for instance), but these must align with the principles or fundamental guidelines. Every municipality covered by the same SCoT commits itself to integrated and joint development, which can help mediate and settle territorial issues for the whole area. In total, 448 SCoTs have been approved or are presently in the process of being developed. This covers 25 137 communes (nearly 70% of the total), 50.5 million inhabitants (77% of the French population) and almost 60% of the national territory (Government of France, 2015).

SCoTs have become the reference strategic planning documents for urban planning and development in large residential zones or urban areas. They constitute plans that go beyond commune, intercommune or across *département* administrative boundaries. The SCoT must, for example, set statistical objectives regarding the consumption of agricultural, natural and woodland spaces. It must also create a link between development and other policies; for example, the SCoT specifies conditions that favour the development of urbanisation as a priority in areas already served by public transport, but it can also promote creating new public transport services in locations that require them to improve access. However, it should be noted that this policy is not always successfully implemented. Many city-regions in France have not succeeded in setting up a SCoT even though attempts have been made (Hoggart, 2016: 74).

Sources: OECD (2016), *The Governance of Land use in France: Case Studies of Clermont-Ferrand and Nantes Saint-Nazaire*, http://dx.doi.org/10.1787/9789264268791-en; Government of France (2015), "Overview of SCoT", http://www.logement.gouv.fr/schema-de-coherence-territoriale-scot (accessed 2 May 2016); Hoggart, K. (ed.) (2016), *The City's Hinterland: Dynamism and Divergence in Europe's Peri-urban Territories*.

Steps for more effective metropolitan spatial planning

Amsterdam's metropolitan governance has evolved through an incremental approach which has in general worked well for the region. However, it has sometimes been a struggle for the actors across the metropolitan area to tackle issues jointly. External conditions have been highly instrumental in shaping these interactions. Joint partnership has been easier in times of economic growth and has stalled in periods of constraint. Similarly, funding from upper level governments, particularly the national government, has been highly instrumental in forwarding projects of regional importance, particularly housing and infrastructure projects. While the MRA has achieved a great deal, particularly in terms of articulating a metropolitan agenda, its capacity to implement the actions associated with these goals has varied.

Increasing the MRA's capacity for collaborative action

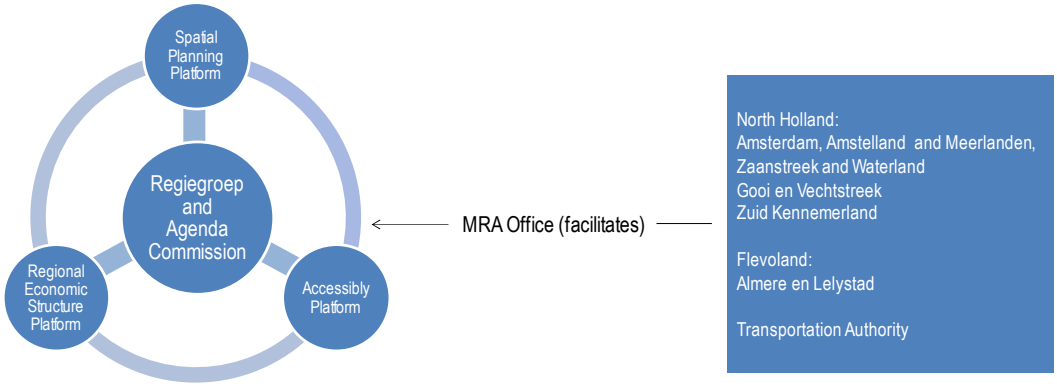
There is strong recognition across the MRA that land-use issues in the region need to be addressed through a metropolitan-wide strategy. The MRA has been very successful in building a metropolitan framework to address common issues; the "Development Scenario to 2040" is a particular achievement in this regard. Learning from the past, it is evident that uncoordinated actions have led to prolonged disputes and unwanted outcomes, such as the overproduction of office space in the region. Has the time come to adopt more formal governance structures in order to achieve core metropolitan goals?

After long discussions about how the MRA might evolve, municipalities and provinces have established a "covenant" and a common bureau which would make the position of elected councillors stronger. Under the new framework (Figure 3.2), the tripartite focus on the economy, transportation and spatial planning remains. However, there are now stronger direct links between the regional transportation authority (Transport Authority Amsterdam) and the transportation platform of the MRA. Further, partnerships are arranged along the six subregions of the MRA (of which the city of Amsterdam forms one subregion). Subregions are informal partnerships of municipalities that work closely on issues of mutual importance. For example, the Amstelland-Meerlanden offers a platform (informal, no statutory tasks) for six municipalities to discuss such issues as health and welfare and economic affairs.[8]

In order to increase the administrative capacity of the MRA, a common bureau (MRA Bureau) has been established. It is composed of six civil servants to coordinate regional issues with another 60 civil servant secondees from provincial, municipal and Transport Authority Amsterdam bureaucracies. On the political side, the MRA continues to be governed by the Regiegroep which is composed of mayors, commissionaires of the king and alderman and deputies from the subregions who meet twice a year. The presidency is held by Amsterdam, and there are two vice-presidents: Noord–Holland and Almere. An Agenda Commission (agendacommissie) has also been established which is composed of four alderman and two deputies. The Agenda Commission is the interface between the proposals that are discussed in the three "platforms" (spatial planning, accessibility and regional economic structure) and MRA Bureau which works on advancing these ideas. Under the new governance framework, the basic per capita contribution of municipalities has increased from EUR 0.50 to EUR 1.50, with the provinces paying an amount proportional to the largest city in their respective regions. This results in a budget of approximately EUR 7.5 million, with EUR 5 million allocated to achieving the action items of the economic platform; EUR 1 million allocated to the spatial development platform; and the remaining EUR 1.5 million allocated to administrative functions. The Transportation

Platform continues to be funded through government grant funding (Broad Goal Oriented Grant) by provinces and Transport Authority Amsterdam.

Figure 3.2. **New proposed structure, Amsterdam Metropolitan Area, 2017**



Source: Adapted from Plan Amsterdam (2016), "Hoe werkt regionaal samenwerken in de MRA?", p. 3

These reforms to the MRA are a prudent next step for metropolitan co-operation. Dedicated funding for administration and economic and spatial development will help implement some key elements of the metropolitan agenda. This is not a radical change to the organisation's form and function; however, it does go some way to addressing critiques that the MRA is too informal and needs to build its capacity.

In the short and medium terms it will be important for the MRA to demonstrate successes in implementing core actions. The MRA's development agenda has a long action list of issues it would like to tackle. It should prioritise the most important elements, which for the spatial agenda clearly include the issue of accommodating population growth and building new housing.

It will be important for the organisation to champion successes and build awareness of its activities both among its constituent residents and the business community and in the context of broader European and international competiveness. In the case of residents, it will be particularly important for the metropolitan body to strengthen is accountability and transparency. For many years the MRA was focused on building consensus among its member municipalities, and more recently it has adopted an outward-oriented framework to raise the profile of the region on the international stage. But it also needs to have meaning and buy-in from citizens and be visible to them. This is crucial in order to build ongoing consensus around the MRA agenda.

Metropolitan planning and the new Environment and Planning Act

The new national Environment and Planning Act will reshape informal regional co-operation in the Amsterdam Metropolitan Area, especially the relationship with the province of North Holland during the elaboration of the future Provincial Environmental Vision. For the city of Amsterdam, a point of departure for future regional co-operation is the Structural Vision 2040 and the Spatial-Economic Agenda 2016-2020.

It is anticipated that the new Environment and Planning Act will increase the flexibility of the planning system, allow some developments to proceed in a more timely manner, and in some places, encourage experimentation and flexibility. Municipalities in

metropolitan Amsterdam, along with the region and water board, have a long tradition of working with one another on development issues and tend to closely co-ordinate where new developments in one area will impact surrounding locales (though they are not always in agreement). Therefore, they are generally well placed to make the most of these changes. In terms of metropolitan-wide spatial planning, the MRA offers a critical platform through which to analyse spatial developments and recommend adjustments along the way. To improve this function, the MRA should increase its capacity for monitoring and evaluation of spatial conditions and developments, particularly socio-spatial inequalities which, under the new act, may lose their prominence given its focus on physical and environmental aspects of planning.

The new act further demands new ways of working from municipal public servants. It requires more negotiation and engagement on new development projects up front and ongoing monitoring and evaluation. In realising this shift, the issue of capacity is critical. Larger municipalities with larger spatial planning departments are better placed to adapt to these changes – they simply have a larger pool of resources to draw on. Therefore, the MRA could take on an important role in facilitating exchange among planning professionals and building capacity, particularly for smaller municipalities, to effectively adapt to the incoming changes.

Finally, as has been discussed in Chapter 2, the impetus for spatial planning is changing – it is anticipated that much more will be left to (and expected from) the private sector and housing associations. In effect, the MRA will not be able to realise its spatial ambitions without these actors. It will be increasingly important that the metropolitan agenda engages with both housing associations and private sector developers to monitor and assess land-use changes and outcomes. The Amsterdam Economic Board, which includes representatives from businesses, knowledge institutes and government authorities in the Amsterdam Metropolitan Area, will also be an important partner.

The importance of collaborative multi-level governance

The city of Amsterdam and its neighbouring municipalities across the metropolitan area exhibit strong interdependences. These interdependencies extend to the national and regional scales as well. There is a strong dependency on national law and resources to achieve spatial planning objectives. There is a strong dependency on regional agreements to co-ordinate legally binding planning instruments within the MRA, such as the new environmental visions. Finally, there is a strong dependency on national housing market regulations and regional agreements to maintain affordable housing and low rates of spatial segregation within the MRA. Thus, effective multi-level governance across national, regional and municipal partners is also critical and the MRA is an important platform through which to achieve this.

Box 3.4. Chapter summary

A need to increase metropolitan governance capacity

Effective metropolitan-wide collaboration is essential for the municipalities in greater Amsterdam to realise their spatial development objectives. Meeting growing housing demand, developing new spaces for business and industry, and increased transportation connectivity demands co-ordinated responses. Municipalities in the Amsterdam Metropolitan Area (MRA) have a long history of working with one another through informal partnerships. This has generally worked well in the past. However, this informality comes with limited resources and a small administration, which limits the metropolitan governance function.

In this period of population and economic growth it is critical that MRA municipalities work together with the provinces and the regional transport authority in order to implement collective strategies to realise their many ambitions. Increasing the capacity at the metropolitan scale is vital to realising these shared goals. The MRA must substantially step up its own self-organisation in order to deliver adaptive, fair and sustainable land-use planning. Recent reforms to the MRA to establish a common bureau and increase the entity's funding through per capita transfers help to strengthen its capacity to undertake communications activities, establish collaborative mechanisms for decisions making, and conduct ongoing analysis of key trends and challenges. However, the issues facing the region may demand more formalised approaches in the future – namely a larger funding envelope to achieve strategic objectives and formalised agreements on where and how growth should occur, along with indicators to track progress and monitor change.

Aligning regional transportation with functional need

Transport Authority Amsterdam seeks to strengthen co-operation with municipal and provincial partners on transport and accessibility and has entered into a co-operation agreement with the provinces of North Holland and Flevoland, and the municipalities of Almere and Lelystad. Such partnerships are critical, particularly in light of the strong population growth projected for Almere, to Amsterdam's east. Whether co-operation agreements are enough to establish a strong regional transportation network in these growing areas outside of the authority's formal governance arrangement remains to be seen. This is a matter that should be studied and assessed. Expanded membership is the purview of the national government ultimately to revise and reform, as the transport authority's membership stems from national legislative mandate.

Priority areas for action

1. Increasing fiscal capacity. Both the MRA and its constituent members have limited revenue both in terms of fiscal "income" and the usage of fiscal instruments to guide land use. It is advisable to commission an exploration into options to increase its revenue. This would help the MRA fulfill the mandate it has set out in its medium- and long-term agendas, including enhancing its monitoring and evaluation function.

2. Sharing expertise. The new Environmental Planning Act will pose greater demands and requires proper staffing and increased capacity. These changes will pose a particular challenge for smaller municipalities. The MRA should explore options to effectively address these changes, including how members can pool capacity and resources.

3. Strengthening visibility and public engagement. As the MRA adjusts incrementally to its revised governance structure it should seek to strengthen its visibility with the citizens it governs with an eye to more formalised agreements in the future. This is particularly important for spatial and land-use planning. The MRA should also strengthen relationships with private sector actors and housing associations – these actors are critical partners in realising the MRA agenda.

4. Monitoring and evaluation and mutually agreed upon targets. The MRA should strengthen its capacity for monitoring and evaluation of spatial conditions and developments, particularly socio-spatial inequalities in the region. Further, mutually agreed upon targets to achieve such important objectives as the need for an estimated 250 000 new residences by 2040 across the MRA are warranted. This will help to ensure that there is a detailed dialogue up front on the key issues that need to be tackled in terms of where and when developments should occur, along with clear political commitments and accountability. Metro Vancouver's Regional Growth Strategy offers one example of how such targets and ongoing monitoring and evaluation might be structured.

Notes

1. The Joint Regulations Act was most recently amended in 2015 (see *Wet gemeenschappelijke regelingen*, 2015, http://wetten.overheid.nl/BWBR0003740/2015-01-01).

2. This framework did not involve the creation of an additional tier of government or an elected council, and municipal representatives of the Regional Council were made accountable to their local council. In the case of Stadsregio Amsterdam, the Regional Council has 56 members, appointed by the 16 municipalities themselves, divided according to political affiliation. The city of Amsterdam itself was allocated 21 of the council seats, although it had a majority share of metropolitan population, in order to assuage concerns among the outer municipalities that the central city would wield too much power in the region. The council also has an Executive Board, whose President is the Mayor of Amsterdam. Every four years the Regional Council agrees a regional agenda to optimise the region, which consists of priority tasks and projects. The agenda provides the direction for annual implementation programmes and work plans.

3. Stadsregio Amsterdam became a dedicated region for infrastructure and transport in January 2017.

4. For more information, see Stadsregio Amsterdam retail policy (https://www.stadsregioamsterdam.nl/pagina/20151216-detailhandel) and the joint agenda for tourism (https://www.stadsregioamsterdam.nl/pagina/20160129-toerisme).

5. For example, an "Amsterdam Almere twin-city vision" was briefly put forward in 2003 in response to the strategic needs of greater Amsterdam's development in terms of housing policy, but the sheer size difference between the two cities made it clear that Amsterdam is the leader of the region.

6. Under British Columbia provincial legislation, Metro Vancouver is classed as a regional district.

7. There are some specific and temporary programmes which the national government considers to be of national interest and finances. For example, the Randstad Urgent programme, consisting of 33 projects in the region in such areas as nature development and transportation infrastructure; these can have inter-municipal collaboration as a funding requirement. In the past, much urban renewal carried out by municipalities was heavily subsidised by the national government.

8. The constituent municipalities are: Aalsmeer, Amstelveen, De Ronde Venen, Diemen, Haarlemmermeer, Parent Amstel and Uithoorn (https://www.am-overleg.nl).

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