The Governance of Land Use in France

CASE STUDIES OF CLERMONT-FERRAND AND NANTES SAINT-NAZAIRE

OECD

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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.

The important role of land-use policies has been underscored by a wide range of developments, including the recent formation and subsequent bursting of real-estate bubbles in a number of OECD countries, the growth of renewable energy production, changing demographics, the provision of public services including public transport, environmental concerns, spatial planning, changes in lifestyles, tourism and growing food-security concerns. These examples illustrate the strong relationship that exists between land-use policies, social development, and macroeconomic trends and fluctuations across both urban and rural territories.

The interactions between institutions and markets can heavily influence the supply, availability, function and location of land. A major function of the planning system is to balance property rights against the public interest by translating spatial development processes into physical form. Land-use regulations and tax regimes create various incentives and disincentives that are played out across landscapes. The interface between these issues is complex and often contested, in particular on the fringes of urban and rural areas, in brownfield redevelopment zones, and in areas of social deprivation. Any policy interventions therefore need to be carefully designed to be effective. A major role of planning is to proactively address and mediate these conflicts where they occur. This requires strong public engagement and communication, and thus a tradition of collaborative and communicative planning. Given the "nestedness" of spatial planning, it is no surprise that determining the appropriate level of planning, regulation oversight and implementation is difficult. Moreover, forms of land governance depend on the institutional history of a country and how its system of property rights and land-use planning has evolved.

In recognition of the importance of these issues, the OECD's Regional Development Policy Committee (RDPC) and its Working Parties on Urban Policy (WPURB) and Rural Policy (WPRUR) have undertaken a programme of research on the governance of land use. These case studies of spatial and land-use planning in Nantes Saint-Nazaire and Clermont-Ferrand are one of several land-use case studies that will be published together alongside an inventory and analysis of land-use planning systems across all OECD countries.

France's spatial and land-use planning embraces collaborative approaches. The regional level sets overarching sustainable development goals which are then binding on lower order plans. At the functional level—the areas across which people live, work and

commute—communes and *intercommunalités* are encouraged to develop comprehensive development plans that then operationalise these strategic objectives. But it is at the level of the commune that local land-use plans and decisions about development are made. Some communes co-operate by establishing joint land-use plans. Spatial and land-use planning in France is therefore embedded in multilevel and multi-scaled relations that require a large degree of co-ordination and co-operation among actors. It is also multi-sectoral: it encourages planners to think about the spatial dimensions of such issues as economic development, transportation, ecology and air quality in order to develop co-ordinated responses. These comprehensive and integrated features of France's planning system stand out as best practices among OECD countries.

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Acronyms and abbreviations

ACSÉ	National Agency for Social Cohesion (*Agence nationale pour la cohésion sociale et l'égalité des chances*)
ALUR	Law for housing access and renewed urban planning (*Loi pour l'accès au logement et un urbanisme renové*)
CA	Conurbation communities (*Communautés d'agglomération*)
CC	Communities of communes (*Communautés de communes*)
CESR	Regional economic and social councils (*Conseils économiques et sociaux régionaux*)
CGET	The general commission for territorial equality (*Commissariat général à l'égalité des territoires*)
CLERCO	The Clermont agglomeration community (*Communauté d'agglomération clermontoise*)
COM	Overseas collectivities (*Collectivité d'outre-mer*)
CTAP	Territorial Conferences for Public Action (*Conférences Territoriales de l'Action Publique*)
CU	Urban communities (*Communautés urbaines*)
DATAR	Interministerial Delegation of Land Planning and Regional Attractiveness (*Délégation interministérielle à l'aménagement du territoire et à l'attractivité régionale*)
DDT	One of the state services for the Puy-de-Dôme *département* (*Direction Départementale des Territoires du Puy-de-Dôme*)
DDTM	One of the state services for Loire-Atlantique (*Direction départementale des territoires et de la mer*)
DOO	Guidance and targeting document (*Document d'orientation et d'objectifs*)
DRAAF	The Regional Directorate of Food, Agriculture and Forestry of the Auvergne-Rhône-Alpes Region (*Direction Régionale de l'Alimentation, de l'Agriculture et de la Forêt de la région Auvergne-Rhône-Alpes*)
DREAL	The Regional Directorate for Environment, Planning and Housing (*Direction régionale de l'environnement, de l'aménagement et du logement*)

DTADD	Regional spatial and sustainable development directive (*Directive territoriale d'aménagement et de développement durables*)
EPCI	Public corporation for co-operation between communes (*Établissement public de coopération intercommunale*)
EPF-SMAF	Public land institution for Auvergne (*Établissement public foncier-syndicat mixte d'action foncière*)
EPFL	Local public land institutions (*Établissements publics fonciers locaux*)
Inter-SCoT	Plan for territorial coherence for multiple communes (*Schéma de cohérence territoriale*)
LAU	Spatial management and urbanism laws (*Lois d'aménagement et d'urbanisme*)
MAPTAM	Modernisation of territorial public action and affirmation of metropolises (*Modernisation de l'action publique territoriale et d'affirmation des métropoles*)
OIN	The development of public facilities and operations of national interest (*Établissements publics d'aménagement et les Opérations d'intérêt national*)
PADD	Planning and sustainable development project of the SCoT (*Projet d'Aménagement et de Développement Durable*)
PAEN	Protection of agricultural and natural peri-urban areas (*Protection des espaces agricoles et naturels péri urbains*)
PASER	Project for State Regional Strategy (*Projet d'action stratégique de l'État en région*)
PDU	Plan of urban mobility (*Plans de déplacements urbains*)
PLH	Local housing plan (*Programme local pour l'habitat*)
PLU	Local urban development plan (*Plan local d'urbanisme*)
PLUi	Intercommunal urban development plan (*Plan local d'urbanisme intercommunal*)
POS	Land use plan (*Plan d'occupation des sols*)
RNU	National urban planning regulations (*Dispositions impératives du règlement national d'urbanisme*)
SAN	New conurbation syndicates (*Syndicat d'agglomération nouvelle*)
SCoT	Territorial coherence plan (*Schéma de cohérence territoriale*)
SIVOM	Multi-purpose intercommunal syndicates (*Syndicat intercommunal à vocations multiples)*
SIVU	Single purpose intercommunal syndicates (*Syndicat intercommunal à vocation unique*)

SRADDET	The regional sustainable development and equal territories plan (*Schéma régional d'aménagement, de développement durable et d'égalité des territoires*)
SRADDT	The regional sustainable development plan (*Schéma régional d'aménagement et de développement durable du territoire*)
SRCAE	Regional climate, air and energy plan (*Schémas Régionaux Climat Air Energie*)
SRCE	Regional ecological coherence plans (*Schéma régional de cohérence écologique*)
SRDE	Regional economic development plan (*Schéma régional de développement économique*)
SRIT	Infrastructures, transportations and inter-modality regional plan (*Schéma régional des infrastructures, des transports et de l'intermodalité*)
SRU	Solidarity and urban renewal law (*Solidarité et Renouvellement Urbains*)
ZAC	Area of concerted planning at the commune level (*Zone d'amenagement concerté*)
ZRR	Rural revitalisation zones (*Zones de revitalisation rurale)*

Executive summary

The state's role in land-use planning in France has decreased in recent decades and competencies have been devolved to subnational governments. The national government sets the legal framework concerning land-use planning along with environmental and other related policies and plays a central role in planning and financing infrastructure projects, but it does not establish a national spatial plan. Regions prepare a general strategic plan that outlines their policy priorities and develop a spatial vision for the region. They also influence land-use decisions through the planning and financing of large-scale infrastructure projects. The *départements*, a level of government between regions and communes (i.e. municipalities), does not have any formal role in the field of land-use planning. Communes or *intercommunalités* (joint municipal associations) develop local land-use plans and approve building permits—they are thus critical actors when it comes to implementation.

France is carrying out significant territorial reforms that give regions a larger role in planning. Regions have become the lead actors for strategic spatial planning and sustainable development. Lower-order plans must now be consistent with the newly mandated regional plans that merge three previous sectoral plans (transport; ecology; and climate, air and energy) and include a waste management plan by 2017. The recent subnational reforms in France also clarify responsibilities among subnational tiers, reduce the number of metropolitan areas and merge some regions. The new planning regime sets ambitious goals for sustainable development that demand highly integrated planning across functional territories.

Joint strategic and land-use planning is increasing in importance and new institutions have been created to implement these plans. France's system of subnational government is renowned for its multiple layers—a so-called *millefeuilles territorial*. As a consequence, French communes have used intercommunal associations to address common issues and resolve conflicts. Communes are encouraged to adopt joint land-use plans (PLUi) as well as plans for territorial coherence (SCoT), which aim to ensure consistency across sectoral policies (e.g. housing, mobility, commercial development, environment and landscape) and, explicitly, reduce suburbanisation and peri-urbanisation. In each of the case study areas (greater Clermont-Ferrand and Nantes Saint-Nazaire) intercommunal co-operative associations have been created to develop joint spatial and economic visions for the territory. There are many benefits to integrated planning at this scale. However, there remains a risk that in communes with limited buy-in or capacity, the impacts of these strategic plans will be weak. Furthermore, the nature of consensus required for their development can result in some of the most important, yet fractious, issues being left off of the agenda.

France's planning system has embraced a comprehensive, integrated approach. There are many benefits to this approach: it is multi-sectoral and addresses complex and interlinked issues at a larger and more appropriate scale. But the success of this approach depends in large part on the governance institutions that develop plans, and on the

capacity of communes and *intercommunalités* to implement them. This capacity is one of the most critical issues facing the planning system today.

Key recommendations

Strengthen the political authority and visibility of strategic planning authorities. Developing territorial coherence plans (SCoT) can be a lengthy and complicated process. In both case study areas, public engagement in these plans was limited. Consequently, there is a risk of capture by organised interests. Major efforts should be made to inform residents about this process and how it affects their communities. To be successful in the longer term, these associations need to be visible and understandable to citizens across the areas that they govern.

Strengthen the planning capacities of smaller communes. The territorial coherence plan establishes ambitious sustainable development goals. However, interpretations of what is "sustainable" can vary substantially across communities and contexts. These are not politically neutral instruments, and asymmetry in human, financial, or political/institutional capital can create real differences in the ability of the various actors involved to monitor, assess and implement plans. If the ambitions of the new regional plan and the territorial coherence plans are to be realised, there will need to be strong community capacity building among local actors who face such limitations, particularly in the smaller communes. This will help overcome the risk that the shift to ever more multi-sectoral and integrated plans across a larger functional scale are inadequately implemented in practice.

Enhance monitoring and management of peri-urban zones. Peri-urban areas are under a great amount of development pressure in France and face the greatest number of land-based conflicts (i.e. appeals to plans and development decisions). Both the SCoT and PLUi can help overcome the many demands and conflicts affecting these areas. However, there is a risk that these plans, in brokering among multiple interests, will not tackle some of the most difficult and potentially fractious challenges they face. Furthermore, peri-urban interests may be particularly weak in such negotiations. It is important that these places be recognised in their own right, not just as spillover or transition zones. More should be done to monitor and asses land-use changes in these spaces and to share best practices among communes and the planning community.

Combine regulatory and economic incentives to meet spatial goals. The land-use objectives under the SCoTs for both Greater Clermont-Ferrand and Nantes Saint-Nazaire include density targets to induce a more compact and sustainable urban form. It will be very difficult for both locales to achieve these objectives through land-use planning tools alone. Instead, they should use a broader array of fiscal tools and incentives to promote higher-density housing that occupies a smaller square footage per person. In a similar vein, Clermont-Ferrand should use fiscal tools to promote brownfield redevelopments as opposed to greenfield developments. This is particularly important given the trend of increasing fiscal autonomy and demands on local taxation, which encourage urban sprawl.

Enhance vertical co-ordination. It is critical that mechanisms for exchange between levels of government are enhanced to facilitate policy learning. The newly created Territorial Conferences for Public Action are important in this regard. They assemble all regional and local authorities under the chairmanship of the regional council president to facilitate an integrated and cross-disciplinary planning process. Given the number of changes to the planning system in recent years, further mechanisms for vertical co-ordination are needed in order to ease community transitions to the new requirements.

Assessment and recommendations

Towards comprehensive integrated spatial and land use planning within a sustainable development framework

While land use planning is ultimately implemented at the local level, these plans are increasingly shaped by laws, regulations and financial incentives put in place by higher levels of government

France is a unitary state with a strong national government that continues to exercise direct oversight over the decisions of subnational governments, even as it devolves additional responsibilities to them. There are 35 855 basic units of government in France—the commune or municipality. The large number of, mostly small, communes provide a high degree of contact between citizens and their elected local government representatives. In addition, there are several layers of subnational government above communes, with either directly or indirectly elected leaders. However, France also maintains a system of *préfets*, who are the direct representatives of the state, at all levels of subnational government to monitor the decisions of elected officials.

In the case of land use, the ultimate responsibility for drafting the laws that govern the uses of specific land parcels are made by communes, the lowest level of subnational government. Individual communes are assigned the responsibility for land use laws because they are deemed best-placed to understand how a change in land use for one parcel of land can affect adjoining parcels, and balance conflicting local interests. Yet, while communes have technical responsibility for defining land uses, their actual decisions are increasingly shaped and constrained by: European Union directives, national laws and regulations, spatial plans of regional governments and the planning policies of intercommunal organisations. They can also cede their authority to the intercommunal level to make land use decisions.

The national government continues to play a role in local decision making, including land use decisions, in some cases. The system of *préfets* who share overlapping power with local elected councils can still have a great deal of influence, especially in small and rural communes that have limited professional staff and part time councils. In addition, the common practice in France of members of the National Assembly also holding a local elected office leads legislators to be highly involved in local decisions, more so than if they only held national office.

Spatial planning in France involves multiple levels of government and a plethora of intergovernmental organisations

Each layer of subnational governments has its own competences. There are three formal levels of government—regions, *départements* and communes—that have specific functions that are assigned by national law. In the past there was significant overlap in responsibilities and the hierarchy of authority among levels was not clear. That is, higher level governments could adopt policies, but they were not binding on lower level

governments. More recent legislation has both reallocated responsibilities and clarified the hierarchical relationship.

France continues to have a very large number of small communes. All governments at the same level in France have equal authority, irrespective of differences in size. In principle, the Paris commune has no more authority as a commune than does a small rural commune with 500 people. While France has acted to reduce the number of regions to capture size efficiencies, it has not done this with communes. Further, local governments at the same level cannot impose their wishes on other governments. Yet, in a modern economy the boundaries of communes no longer correspond to economic activity and they certainly do not correspond to environmental or ecological zones. Since there is no possibility of large scale amalgamations of communes in France, some other governance mechanism is required to facilitate co-ordinated action across a larger geographic space. Consequently, there are a growing number of administrative entities that do not have a formal existence as units of government, but are special purpose voluntary agreements among subnational governments.

The most common of these are intercommunal agreements, where a number of communes agree to establish an organisation to which they will delegate authority and resources to act on their collective behalf. Spatial planning is one of these functions. With recent reforms the French government is providing additional authority to strengthen co-operation among groups of communes by establishing more complex agreements that have broader powers to manage development opportunities and challenges. These include a variety of new organisations that establish plans and undertake actions for the collective benefit of the members. Crucially, these are voluntary processes that only function well if they are managed such that all participating communes perceive that they will individually benefit from the agreement.

France has broadened the objectives of land use planning from economic development to a more integrated approach that includes social and environmental objectives

Every country's spatial policies are driven by an underlying logic. France's planning system has long been characterised as following the "regional economic" form, wherein spatial planning pursues a wide range of social and economic planning objectives, with a particular emphasis on correcting regional disparities in wealth, employment and social conditions. But the system is shifting towards a "comprehensive integrated" form, which focusses more on spatial co-ordination through a hierarchy of plans, rather than mainly focusing on economic development *per se*.

The objectives of land use planning now include environmental protection and efforts to minimise sprawl in order to reduce climate change effects. In addition, there are also aspects of the planning process that aim to foster greater social cohesion. This has made the objectives for planning more complex because trade-offs among these objectives may be required, and because the different levels of subnational government can place different weights on the various objectives for land use plans.

Recent territorial and planning reforms place regions as the lead actors for strategic spatial planning and sustainable development

The role of regions has recently been strengthened relative to its authority a decade ago. In November 2014, the National Assembly adopted legislation to reduce the number of regions in France from 22 to 13 by 2016. The legislation also reduced areas of jurisdictional overlap, so that the powers of regions and *départements a*re specific and

exclusive. For planning purposes, regions will pursue integrated planning and broad economic development strategies; *départements* will focus on providing social development and related services; and communes will focus on land use plans and local public services.

Under this new framework, regional plans are now binding on lower order plans. While in the past, regional plans provided only non-binding guidelines and strategies for the *départements* and commune levels, the new regional spatial plans (SRADDET) require conformity by lower order plans. The new law replaces the essential elements of the three regional sectoral plans (on transport, ecology and climate air and energy) and adds a requirement for the region to develop a specific plan on the prevention and management of waste by 2017. The deadline for regions to adopt a SRADDET is 31 December 2018. Thus, local land use plans will need to adopt the logic of the regional plan once it comes into force.

As planning has become more complex, the commune is now too small a unit for effective planning, but amalgamation of communes is usually perceived as politically unacceptable

France has recently put in place a more co-ordinated and hierarchical planning structure. Recent planning reforms have: devolved additional powers to subnational government, clarified which level of government has responsibility for specific decisions, and now require lower level plans to incorporate the structure of higher subnational government plans. Prior to these changes there was only limited co-ordination among the various land use plans, and no requirement that plans be nested in a hierarchy. The resulting contradictory requirements led to decisions resulting in conflicting land uses, especially along commune borders.

Most communes have less than 5 000 people and cover a small geographic area. However, their land use plans can affect people far away, both in terms of environmental spill overs and as a direct consequence of incompatible land use changes. The use of voluntary intercommunal agreements allows individual communes agree to a land use plan that covers a larger territory and that reduces the chance of conflicts. Intercommunal agreements have increased in number and in the topics they cover over time. They can be special purpose or multi-purpose and there are now complex layers where intercommunal agreements, in turn, form additional agreements with each other in order to expand their scope. While these agreements offer a high degree of flexibility and provide a focused way to align common interests, the growing number and scope of agreements and the importance of all participants seeing some benefit to them in order to take part, makes them complex to negotiate.

The increasing complexity and multi-scalar nature of spatial and land use plans requires capacity building for smaller communes to meaningfully take part

The supervisory role of the state has evolved with delegation, but remains in place. Land use planning has become more complex and the objectives at all levels of government are less aligned. This makes it more important that land use plans be consistent over a larger territory than a single commune. While many other OECD countries have relied on forced amalgamation to accomplish this, France has chosen to maintain a strong local democratic process defined by geographically compact and independent communes. This means that co-ordination has to come through voluntary agreements that can be challenging to establish, because they have to be structured as a

positive sum game in order to attract participants. Where they have been successful they can allow a high degree of local "buy-in" to the plans.

Communes enter into a variety of binding agreements with other communes even though the agreements can limit the degree of flexibility they have in making independent choices. While they give up flexibility they must believe that the agreements offer greater rewards. In the case of joint land use planning, the benefits come from the delegation of additional responsibility from higher levels of government, or additional funds, to those participating in a particular type of intercommunal agreement.

Coordination benefits can come in the form of being better able to manage where new housing is built. This allows communes to ensure that infrastructure is built where it is needed and to better plan for the expansion of services. In addition, intercommunal plans can be vital for a commune to be able to comply with higher level environmental regulations on subjects, such as watershed management or solid waste disposal, that spread across multiple communes. Because economic activity also does not respect local administrative boundaries, intercommunal agreements can be a key element in efforts to improve employment and income across a larger territory by creating a spatial plan that improves the quality of life in a larger geographic area.

However, in places where civic engagement is weak, or there is a great imbalance between the interests and capacities of the communes involved, they are hard to establish and may not evolve beyond a narrow set of functions, thus limiting their effectiveness. In particular, communes and *intercommunalités* in rural and mountainous areas can be more likely to face constraints in various forms of capital—financial, human, social and institutional—that limit the inclusion of their interests in the elaboration of the SCoT and its eventual implementation. Thus, there is a significant capacity-building issue required in order to ensure that all local authorities have the ability, resources and buy-in to realise the planning objectives through the tools at hand.

Urban planning agencies have been critical actors in helping communities meet the challenges associated with increasingly complex strategic spatial and land use plans. They provide advice and expert assessment on urban planning and land management issues and develop urban planning documents. They are a centre of expertise on spatial planning and are linked to a national federation which shares best practices, tracks major trends and provides opinions on major national and European debates related to urban policy and spatial planning. The expertise that these agencies provide is critical. However, there is a risk that some elements of the planning process become a technocratic exercise that is not adequately embedded in community aims and visions, nor is it responsible and accountable to it through local democratic processes. These agencies, together with local governments, need to strike a careful balance so that the planning process—while increasingly sophisticated in the tools and analyses it draws on—is fundamentally rooted in local communities and understandable to them so that they can meaningfully engage in the processes.

French municipalities should draw on a wider array of fiscal instruments to meet their spatial, economic, environmental and social objectives

Over the past decade, local governments in France have seen increasing fiscal autonomy. State transfers have declined and are anticipated to fall further over the short term, and local governments are responsible for more own source revenues. But local governments face several constraints in how they adjust to this environment: the ratio of own source revenues to total revenues (excluding borrowing) cannot fall below thresholds

set in 2003 (the "fiscal autonomy rule") and; by law, they are not permitted to run budget deficits and can only borrow to finance future investments, which they do with increasing frequency.

Local governments are under pressure to reduce their operating expenses, cut back on investment, pool services and increase their revenue from local taxes. However local tax increases are limited by thresholds set by the State and can be very unpopular with local residents. Communes presently rely to large degree on property taxes on developed land, and in an effort to increase their take in the absence of tax increases, it is increasingly important to expand tax bases by encouraging new residential and business developments, including on suburban and peri-urban land. Such an approach is generally contrary to planning objectives. Further, there are a number of permanent or temporary exemptions that can be granted for all types of local taxation, some of which may undermine land use policies. Limited use is made of other fiscal instruments that could direct desired land uses and behaviours (e.g. increase density, develop on brownfield sites instead of greenfield ones). Local governments also make too little use of their power to modulate taxes on new low-density construction, while a number of measures to ease property access give undue encouragement to new construction at the expense of renovations. This also contributes to urban sprawl.

French municipalities should be given authority to draw on a wider array of fiscal instruments to meet their spatial, economic, environmental and social objectives. Presently, the property tax on developed land generates the largest share of revenue followed by the residence tax, the value-added tax on business income, the tax on business premises and finally, the tax on underdeveloped land. There are many other fiscal instruments that could be drawn on in order to complement spatial development objectives such as land value capture mechanisms.

Greater Clermont-Ferrand—planning amidst territorial rescaling

The current strategy is to find a way to expand the size of the local economy in order to make it more attractive for inward investors by linking adjacent communes into a larger métropole

Clermont-Ferrand is a medium size metropolitan area that is trying to restructure its economy. The metropolitan area is dominated by the city of Clermont-Ferrand, which had a strong manufacturing base largely driven by its role as the headquarters for the Michelin Tire Company. While the corporate headquarters remain, most of the tire manufacturing work has left the region. In 2016, due to a reorganisation of regional government in France, Clermont-Ferrand lost its role as the regional capital of the Auvergne region, which was merged with the Rhone-Alpes region. Lyon is the new capital of the merged region. This has not only reduced the number of direct jobs in public administration, but it may make the city less attractive in the future as a location for private firms. Moreover, the region is somewhat challenged in terms of connectivity with a small airport and limited rail connections. Like many other similarly-sized agglomerations in OECD countries that have experienced such changes, there is no obvious strategy to define a new economic role.

The city is working to establish as stronger system of intercommunal linkages to increase the size of Greater Clermont-Ferrand, so it is seen as a larger urban agglomeration at a European scale. The belief is that this will make the region more visible and attractive to potential investors and lead to a new economic role. The city has

some advantages in the form of good universities and strong local cultural resources. It also has a large amount of former industrial land that could be used for new purposes. Clermont-Ferrand's main weaknesses are a somewhat peripheral location in a semi-mountainous topography, and weak air and rail links.

Peri-urbanisation and farm abandonment threaten the terrain

Situated in the Massif Central area of France amidst mountainous topography, Clermont-Ferrand faces particular transport and land use challenges. The agriculture lands surrounding Clermont-Ferrand are relatively productive if located on flat and fertile land, or unproductive if located on less fertile hilly land. Two key land use challenges are, trying to limit the conversion of the limited quantity of higher productivity flat land, and trying to reduce the rate of abandonment of lower quality hill land. In the first case, pressure for new suburban housing is leading to conversion. While the number of jobs lost and implications for agricultural output are not huge, the visual amenity implications are considerable. The amenity loss is seen as having negative consequences for the growing tourism industry. In addition, there are concerns that continued construction of new housing outside the urban core has adverse consequences for the city. Similarly, the loss of farms in the hilly areas is leading to a shift in the local ecology as land that has been managed for centuries reverts back to a wild state. The new terrain is typically less attractive for tourism.

Given its situation, Clermont-Ferrand seems to have chosen the best option available to it, but it has not executed the plan particularly well

Successful intercommunal agreements have to be structured to provide benefits to all participants. The spatial strategy for the agglomeration is based upon a growing number of intercommunal agreements that are intended to have two effects. The first is to improve local co-ordination to better manage the development opportunities in the area. The second is to shift the focus of those outside the region from the city of Clermont-Ferrand to metropolitan Clermont-Ferrand. Evolution of the local economy away from traditional industries like Michelin as the main engine for economic prosperity has placed greater importance on local governments being proactive, rather than simply relying on the private sector to drive growth. This entails greater co-operation among communes because the local labour market extends well beyond the administrative boundaries of the city. While the city of Clermont-Ferrand is the dominant local economy, making its prosperity central for the prosperity of all other communes, the current strategy seems excessively structured to benefit the urban centre with no effort to show how other surrounding communes might benefit in turn.

Clermont-Ferrand has additional ambitions to form linkages with other more distant cities in order to create an even larger agglomeration. Because Clermont-Ferrand is no longer the capital of its own region, and is now the third city in a much larger region, it faces the challenge of being marginalised by Lyon and Grenoble which are both considerably larger in population. To gain more weight, both in the region and in the nation, the strategy is to emphasise the expanded metropolitan area as the unit for consideration by firms and higher level governments. The thought is that if Clermont-Ferrand is perceived as being a larger urban agglomeration, it will be more attractive as an investment location.

More tools and incentives are needed to meet the objectives of urban density and revitalisation and the development of rural amenities for tourism and residents

Urban sprawl into adjacent communes weakens the ability of the city to attract redevelopment investment. While there is ample vacant land in the city, recent housing and commercial development has been outside the urban core, often in adjacent communes. Because French communes have no right to regulate other communes, Clermont-Ferrand is relying on intercommunal agreements to conduct joint spatial planning to focus any new development in the city centre. While this idea of a compact city is clearly consistent with French urban planning philosophy, for adjacent communes, giving up new development only makes sense if the strategy to make Clermont-Ferrand a "bigger" agglomeration ultimately leads to trickle-down benefits from new investment.

Current spatial plans for the *métropole* have a strong concern with minimising adverse environmental impacts. Fostering compact development is part of this approach, as is maintaining agriculture on existing farmland and protecting natural areas in hilly terrain as tourist opportunities. The region has an attractive mountainous topography, but this land is marginal for farming and is experiencing land abandonment. With farm abandonment there are significant ecological changes that reduce the amenity value of the mountains. However, planning seems to offer no obvious solution to this problem. On the other hand, opportunities to expand farming on the arable valley and plain lands are limited due to their restricted area.

The planning objectives for urban and rural locales will be more effectively met if they combine various tools and incentives in order to promote density, develop brownfield sites, protect agricultural land, and development amenities for residents and tourists. This could include land use value capture mechanisms, density bonusing, brownfield redevelopment incentives and joint development where necessary.

Nantes Saint-Nazaire—Maintaining quality of life and the environment in a growth context

Nantes Saint-Nazaire is a successful and growing area; its future success relies on it maintaining the high quality of life that has spurred its residential economy

This is a successful, larger mid-size agglomeration that has two distinct urban cores that used to be in direct competition, but in recent decades have joined forces. The cities had a historical rivalry in ship-building and in port facilities along the estuary of the Loire River. Ship-building and most port facilities ultimately concentrated in Saint-Nazaire, but ship building proved to be a highly cyclical industry, and while shipping is still important, the focus is now on bulk commodities and an liquefied natural gas terminal. Nantes has successfully shifted from heavy industry to advanced producer services and research and development, while Saint-Nazaire has diversified its manufacturing capacity beyond the maritime industry to aerospace. Successful economic restructuring has led to rapid demographic growth driven by: expanded employment opportunities in high wage positions, the fact the area offers a high level of natural amenities, and due to its relative proximity to Paris. Consequently, the region is experiencing a new set of land use issues.

Rapid economic and demographic growth in an area with a fragile water based eco-system now requires a more co-ordinated spatial planning approach. A significant share of the new residents are young families with children who desire detached housing and another significant group are retired people looking for appropriate housing. Both of these

groups have often turned to suburban development, leading to growth in adjacent communes. New housing has placed pressure on fragile wetlands and complicated transport and infrastructure due to the difficulties of building in an estuary. Meanwhile, Nantes, in particular, was interested in redeveloping industrial brownfield sites in the urban core along the river. Resolving these issues has required a series of intercommunal arrangements that determine jointly acceptable spatial plans.

There is a general recognition in the entire region that preserving its unique water based set of amenities is a key factor for future growth. There is a strong consensus for additional economic and population growth, and a recognition that preserving the current amenities will be central to achieving this ambition. The area has locational advantages, but they are not that much better than those of many other areas of a similar size. What sets the Nantes Saint-Nazaire apart is the high amenity quality of the Loire estuary and adjoining Atlantic coast. But, overcrowding and inappropriate development could reduce this benefit. This makes it important that all communes in the area agree to a joint spatial development plan that balances environmental protection and access to natural amenities with growth.

The area's spatial strategy seeks to balance population growth with environmental protection

Because Nantes and Saint-Nazaire were able to reconcile their differences and co-operate on economic development, this provided a demonstration that intercommunal agreements could be structured to benefit all parties and offered a model for other agreements. Both Nantes and Saint-Nazaire are involved in intercommunal agreements with their closest neighbours and there are other agreements among more rural communes. These agreements then roll-up into larger agreements for broader spatial planning. The area was one of the first to adopt a comprehensive spatial planning approach using a territorial coherence plan (SCoT, Schema de Coherence Territorial), and is now on its second version.

A major focus for spatial planning is to manage and increase the ongoing growth process. The aspiration is to continue to increase the population while protecting the natural environment that is one of the key drivers of economic prosperity because it makes the area attractive to firms and new migrants. There is strong sense that having good natural amenities can tip relocation decisions in favour of Nantes Saint-Nazaire. With ongoing growth there is a need for new housing and new sites for firms. A focus of the spatial plan is to concentrate new housing and firm locations in the urban cores where there is a considerable amount of available brownfield land due to a reduction in industrial activity. In order to encourage such developments, local governments can permit temporary uses of sites to increase interest and highlight the potential of a location for development. They can also provide fiscal incentives (e.g., tax breaks) for brownfield development.

Although the main orientation of the spatial plan is to concentrate future growth in the core to slow the conversion of farmland and protect the natural environment there is also a recognition that growth in the rural communes will be required. This reflects several phenomena. The first is that a large share of new migrants are families with young children who are not looking for urban housing and prefer more space that can be found in existing villages in rural communes. The second is that some firms may require greenfield location and are not interested in the available brownfield sites for a variety of reasons. Finally, maintaining development options in the smaller rural communes provides them with an economic incentive to participate in intercommunal agreements.

Spatial planning in the area is complicated by balancing a variety of interests including competition between the two urban communes and structuring a variety of different levels of co-operation among the considerable number of rural communes. While the number and complexity of these relationships is challenging for an outside observer, the participants seem to have developed a way to understand and manage the process. Perhaps more important is the history of all participants benefitting from intercommunal agreements. In addition, the complexity of living in a region where water is a common and critical feature that cuts across all communes creates a strong incentive to co-operate, if only to deal with mandates from the national government.

Despite collaborative structures, conflict over land use in the agglomeration still exists, particularly over the proposed Notre-Dame-des-Landes airport (Aéroport du Grand Ouest project)

While a tradition of comprehensive intercommunal agreements has resolved many potential land use conflicts, others remain. Some revolve around managing larger bodies of water, where any decision has significant benefits or costs for important groups. The largest is the proposal for a new Notre-Dame-des-Landes airport that will be built on land that many perceive as being important environmentally. Proponents favour the construction because they see it as contributing to economic growth. Opponents believe it will have considerable negative impacts on the environment and that the expanded capacity of the proposed airport is not necessary for the region. The conflict is emblematic of the challenge of balancing development with environmental preservation, and it shows that large projects, even in a *milieu* where co-operative decision making is strong, can be controversial. In the long run, an important question is how this will impact the currently strong degree of co-operation—and if it will, in fact, weaken it.

This issue also raises questions about the scale at which decisions should be made. A referendum on the issue, conducted at the level of the *département,* resulted in 55.17% voting "yes" in support of the new airport project. However, one could argue that the impact of the project is in fact regional in nature, and as such, a referendum on the matter should have been at that scale instead. Land use decisions in France need to navigate complex multi-scalar politics which are ultimately bound to questions about political legitimacy, accountability and embeddedness in local democracy.

Chapter 1

Spatial and land use planning in France

The chapter provides a national context for the case studies of Clermont-Ferrand and Nantes Saint-Nazaire that follow in Chapters 2 and 3. It offers an overview of the institutional frameworks and relationships that govern the spatial planning system in France. These include the major pieces of legislation that define the planning system and their evolution over time, including changes in fiscal relations between governments.

France's territory encompasses a wide variety of land uses. About 5% of the national territory is used for housing, industrial sites, mines and transport infrastructure. Some form of agricultural use, cropland, pastures and permanent crops, covers roughly 60% of the land, while the remaining 35% of land is in forests, other natural environments and water. There is a distinct spatial order with dense metropolises, growing peri-urban zones, and clearly defined villages dotting the predominantly agricultural and natural landscape. While these spatial forms are shaped by their histories, they are also moulded by present practices—the national regulatory frameworks that guide and structure actions at the regional and local levels, and by economic forces. This introductory chapter describes the institutional frameworks and policies that that shape the spatial planning system and land use practices at the regional and local levels.

Land use planning in France is complicated. Complications arise from multiple sources, but one of the largest is the inherent tension within a system of government that involves both, a strong national government that is engaged in virtually all aspects of French society, and a strong tradition of small scale local democracy that has resulted in a plethora of elected local governments, or communes. This leads to situations where national policies impose a series of constraints that can clash with local priorities. And, conversely, local actions can impose costs on the territory outside of the specific commune if they are unchecked by a broader perspective. Consequently, in France, while land use planning is ultimately implemented at the local or commune level, these plans are increasingly shaped by laws, regulations and financial incentives that are put in place by higher levels of government, including the European Union.

Land use planning is further complicated by the presence of many plans, but also because there are many actors in the planning system that encompass various objectives and who operate at different *spatial scales*. This last point is key. Because France has a large number of communes, to address the inherent fragmentation, the intercommunal scale has arisen as a major actor in spatial and land use planning. It is a flexible geography which begs the questions: what is the right scale for planning, and is there a single "best" scale; how do interests align across these spaces, and how can common visions be adopted; and finally, how do citizens relate to these structures?

Box 1.1. **A note on terminology**

Planning terminology differs among nations—a fact which can make comparative studies of the subject difficult. A term that may have a single, specific meaning in one language, may have multiple meanings in another. For instance, in French, the same word is used for urban planning as urban design—*urbanisme*. As another example, the term "*elaboration conjointe*" –or joint plan making—conveys both an action and a normative stance as to who should be involved in making plans. It implies that both citizens and planning authorities should be involved in the elaboration of plans. French spatial planning is known as *aménagement du territoire;* but the same term has a different meaning in Belgium and France.

This report uses French planning terminology or English equivalents throughout. However, in the case of the administrative division of *département*, the French term is used throughout this report in lieu of the English equivalent, due to the word's special meaning in French. Further, while the English equivalent name of legislation is used throughout, French acronyms are used instead of English ones (as noted in the list of acronyms upfront). This is because they are far more prominent in the literature. Further, the word *commune* is used in lieu of municipality throughout this report, along with *intercommunalités* (instead of intermunicipalities).

Source: Own elaboration.

The chapter details this complexity and the recent national reforms that seek to reduce it. It offers background context for the case studies of Clermont-Ferrand and Nantes Saint-Nazaire that follow. The chapter begins with a section that describes subnational government roles and functions, and a description of fiscal relations at the local government level. This is followed by an overview of France's spatial and land use planning system and how it has changed over time. Finally, the purpose and scope of various spatial plans at the different levels of government are elaborated, including a discussion of how they are intended to integrate with each other.

France's many-layered subnational governance

France relies on the typical set of planning and enforcement tools for land use regulations that are common across the OECD countries. But each country implements these tools in its own way and uses its own framework of subnational government to assign different tools and functions to specific levels. This variety, when combined with clear differences in the goals of spatial planning among countries, leads to distinct planning regimes.

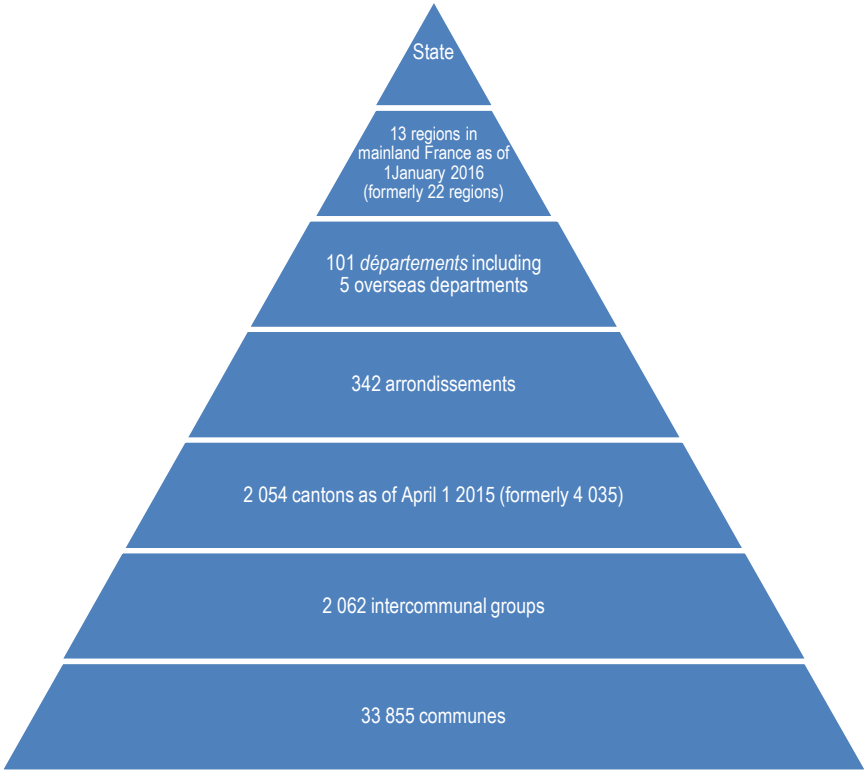
To appreciate the challenge in developing land use plans in France it is crucial to first understand how the various levels of government in the country are organised. Land use planning is one function among many for the different levels of government and while all engage in it, the different levels of government have quite specific concerns and roles, both in general terms and in terms of their spatial planning functions. These differences may lead to considerable challenges in constructing and implementing an integrated spatial planning scheme.

The need for intercommunal planning, and the growing importance of regions

France, a unitary State, is renowned for a high degree of subnational fragmentation – a feature which has lent it the moniker *millefeuille* – after the many-layered puff pastry dessert. There are three formal subnational levels of government: i) regions (of which there are now 13 and five overseas), ii) *départements* (of which there are 101) and iii) communes (of which there are 35855) (Figure 1.1). There are also various forms of intercommunal co-operation which further adds to the "institutional thickness" at the local level. By way of comparison, French communes represent 41% of all municipalities in the European Union, and 27% of those in the OECD (OECD, 2015b: 18).

Regions were first created in 1982 by the national government as a new intermediary level between the national government and the *départements*. Unlike the other main levels of government they have no direct legislative authority and their administrative capacities are assigned by the State. Since they contain *départements,* their boundaries are determined by those of the *départements* they contain. Regions are governed by a directly elected local council (elected every six years) that is chosen through a modified closed list process, with the candidates on lists being determined by political parties. This approach leads to regional councillors having little loyalty to specific communities within the regions, but considerable loyalty to the party that nominates them. Regions levy taxes and receive fiscal transfers from the national government to carry out their functions. They also have access to various EU funds that are made available outside the national budget process. The regional level in France plays a major role in planning large infrastructure investments and in constructing strategies for economic development, education and environmental protection.

Figure 1.1. **Levels of administration in France**



Regional planning in France is driven by an aim for "territorial balance"—both in terms of levels of urbanisation and in terms of economic development. The role of regions in spatial planning has recently changed. On 1 January 2016, the number of regions in France was reduced from 21 to 13 (including Corsica) and the regional level was assigned strengthened competencies, especially economic ones, along with new implementation tools—a point that will be returned to. Importantly, the recent reforms increased the burden on communes to comply with regulations put in place by their respective regions.

Départements are governed by a directly elected General Council (elected every six years) with the council president leading the executive.[1] The French *départements* (and communes) were created after the fall of the Ancien Regime through the Act of 14th December 1789.[2] While many have been added over time to the list of the first 83 *départements* (101 today) and several changes made, the general principle for defining boundaries was that an individual could reach the central administrative city (chef-lieu) by horseback and return within the same day from every corner of the territory.[3] A similar approach was subsequently employed in the Eastern states of the USA to establish boundaries for counties. *Départements* undertake planning schemes on such topics as transportation and mobility, housing, and waste management, which influence local land uses. Historically, *départements* were the main intermediate level of public administration, but now regions are taking over some of their previous capacities. Each *département* is administratively divided into one or more arrondissements, which, in rural areas consists of a relatively large number of communes, and are similar to townships in function. In cities, arrondissements have more capabilities and provide an additional layer of elected officials and administration of public services.

Regions and *départements* also have appointed representatives of the state—the *préfet* and, in the case of *départements*, *subpréfets*. The role of *préfet* was created by Napoleon in 1800 to represent the interests of the State across *départements* and to act as the chief executive of the local government prior to the creation of elected local governments in 1982. While their role has been reduced over time, they continue to exercise responsibility for enforcing national laws and regulations at the region or *département* level. A central responsibility of *préfet*s is to manage police, fire and other public safety organisations, and to head all local public services that are delivered directly by the national government. Regional *préfets* have authority over *départemental* ones and their activities are formally co-ordinated through the Regional Administrative Committee. Regional *préfets* define State strategies at the regional level—they submit a strategic proposal document that has been known since 2004 as the Project for State Regional Strategy (*Projet d'action strategique de l'Etat en region*, PASER). A National PASER Monitoring Committee, co-chaired by the minister responsible for State Reform (the Budget Ministry) and the Ministry of the Interior and Territorial Planning, serves as the framework in which the central ministers define State strategy in each region, in collaboration with the regional *préfet*. *Départemental préfets* have administrative authority to assess the legal compliance of local authorities in the adoption of spatial plans, among other functions.

Cantons provide yet another layer in the French governance system. They are mainly electoral districts for *départements*, with each having roughly the same size population. Thus, in a city there may be multiple cantons, while in rural areas there may be multiple communities. In rural areas the canton may be a local administrative unit for police or courts. Cantons were created at the same time as *départements* and communes in 1790, but have never played an important administrative role.

The basic unit of subnational government in France is the commune. In general, a commune corresponds to a municipality, a city, town or village; the term is used for all basic units of local government that have direct administrative capacity regardless of their size. Communes are governed by a directly elected city council that is chaired by a mayor. The mayor is both the chief executive of the commune and also an agent of the central government, with respect to certain powers (e.g. civil registry, elections organisation). An estimated 80% of communes have less than 1 000 residents. Consolidation of the large number of communes into fewer and larger basic units of local government has been politically rejected—amalgamations have been rare. In part this may reflect the dual role of national legislatures who, perhaps more than is the case in other countries, understand the importance local populations have for direct democracy at a scale that is meaningful. The OECD has recommended that France reduce the number of communes by merging the smallest ones in order to achieve economies of scale and to pool resources effectively (OECD, 2014; 2013; 2011). However, absent such aggregation, the only option in an environment where the basic unit of government is too small, is to find ways to encourage collaboration. Because of this, communes frequently enter into voluntary associations with each other in order to co-deliver services and share elements of administration—referred to as *intercommunalités*. These associations have no direct administrative capacity, but exist as voluntary organisations with legal standing with specific powers delegated to the organisation by the controlling communes. Mergers (or amalgamations) of communes are very rare in France, and this institutional mechanism in effect takes their place.

Communes hold a high degree of independence for planning decisions and they have the ultimate responsibility for promulgating and administering land use plans and for granting planning permissions. They construct their own planning documents (*plan local d'urbanisme*, PLU or *Zone d'Aménagement Concertée* "Concerted Planning Area"). The PLU are the main tools to decide on land use regulations and reflect the spatial element of regional objectives and follow strategic guidelines set by higher levels of authority. Communes also play a role in operating: social services, elementary schools, cultural and sports fields. Mayors of communes play an important administrative function in town planning processes and are responsible for delivering building permits. There is an exception this—in case of an operation of national interest (opération d'intérêt national, OIN), it is the state and not the municipality that issues land use permits and especially the building permit.[4]

The *communal* and *intercommunal levels* have similar functions in planning; Local Urban Plans can be created at the communal or intercommunal scale, depending on a commune's desire to associate with other municipalities—or not. In the case of both types (communal or intercommunal) building permits are delivered by the city council of each town. This commune's role is to develop a land use plan that reflects its priorities, but in a way that is consistent with national and regional planning guidelines in accordance with its devolved competencies over land-use. Since the adoption of the Law for Housing Access and Renewed Urban Planning (ALUR, 2014), there is some disconnect between plans at the intercommunal level (with the PLUi), and land-use and building permits which remain under municipal jurisdiction.

Intercommunal agreements are a long-standing tradition in France, given the large number of small communes. In 1966 the concept of an "urban community" was created to address co-ordination problems associated with large metropolitan areas. An urban community (*communauté urbain*) is a highly integrated form of co-operation for which a dozen different responsibilities are transferred from the individual constituent communes. Four urban communities were created by the national government without consultation for the large metropolitan areas of Bordeaux, Lille, Strasbourg and Marseille. More commonly however, intercommunality in France has been historically characterised by a voluntary linking of communes to accomplish a specific set of mutually agreed functions. In 1992, the first inter communal structure with its own taxing power (rather than delegated taxing power) appeared as "city communities" (*communautes de ville*). That same year "communities of communes" for rural territories were established. Today, there are numerous public bodies for intercommunal co-operation (*Un établissement public de coopération intercommunale*, EPCI) that hold taxing power including: communities of communes (*communautés de communes*, CC), urban communities (*communautés urbaines*, CU), communities of agglomeration (*les communautés d'agglomération*, CA), metropolises (*métropoles*). Forms of EPCI that do not have tax status include municipal boards or associations with a single purpose, such as water development, transit or waste disposal.

Another actor of note are the *Urban Planning Agencies,* which were created in 1967, as centres of expertise on spatial planning. There are currently 51 of these operating in France, with the largest one covering the Paris region (Ile-de-France).[5] In general these bodies are created through the agreement of subnational authorities (municipalities, inter-municipal communities, *départements*, regions) with the support and approval of State authorities. They may also involve collaborations with other organisations such as universities and chambers of commerce. Their role is to provide advice and expert assessment on urban planning and land management issues. They develop urban planning

documents, such as SCoTs and PLU/PLUI for the municipalities or intercommunal municipal associations that they represent (*Établissement public de coopération intercommunale*, EPCI). There is a national federation of urban planning agencies which shares best practices, tracks major trends and provides opinions on major national and European debates related to urban policy and spatial planning.

France also has public land agencies and conservancies that impact how land is used. The Coastal Conservancy (*le conservatoire du littoral*) is a public administrative institution of the State under the authority of the Minister of Nature Protection. It was fist established in 1975 with a mission to acquire parcels of coastline threatened by urbanisation or degradation. The institution is an important property owner along the coast and both protects and restores coastal areas. Both state and local public land agencies (*les établissements publics fonciers*, EPF) purchase, bank and development land for public use. They can expropriate land and also have the right of first refusal. State EPF were first introduced in the 1960s while their local counterparts are far more recent—their legal framework was established in 1991. Finally there are national parks, regional natural parks (PNR) and marine natural parks—institutions that manage protected areas. The reform of national parks in 2006 increased the influence of local authorities in their decision-making bodies by creating "buffer zones" around the "core areas" of the parks, which are governed by charters which the municipalities can adhere to if they wish (OECD, 2016). The 51 regional natural parks account for the bulk of French protected areas and reflect the country's decentralised, contractual and incentives-based approach (OECD, 2016).

Under the new configuration, regions will play a bigger role in planning and economic development

While the national government has created additional levels of government at the subnational level, and occasionally regrouped them, it has never *removed* them, until now. In November 2014, the National Assembly adopted legislation to reduce the number of regions in France from 22 to 13 by 2016. The legislation also reduced areas of jurisdictional overlap, so that the powers of regions and *départements* are *specific* and *exclusive*. For planning purposes, regions will pursue integrated planning and broad economic development strategies; *départements* will focus on providing social development and related services; and communes will focus on land use plans and local public services.

It is important to note that this rescaling was *imposed* by the national government onto the regions. The argument for consolidations follows both a cost-savings approach (eliminating about half the regional governments) and a scale approach (creating bigger regions that can be more efficient providers of services and investments). However, it is a contentious project and, as the map below indicates, some former regional capitals will lose their status along with the attendant public sector employment, services and other associated advantages (a point returned to in Chapter 2 in the case study of Clermont-Ferrand). This new structure responds to an ongoing debate about the proper size of French regions, which has in part been spurred by the growing profile of the so-called *Grandes Régions* such as Grand Paris and Grand Nord-Est, and that has been influenced by EU programme preferences for larger regions.

Figure 1.2. **Old regions of France, pre-2016**

Notes: This map is for illustrative purposes and is without prejudice to the status of or sovereignty over any territory covered by this map. The display of the map may differ according to the angle of projection.

Source: Own elaboration.

Figure 1.3. **New regions of France, 2016**

Notes: This map is for illustrative purposes and is without prejudice to the status of or sovereignty over any territory covered by this map. The display of the map may differ according to the angle of projection.

Source: Own elaboration.

The reforms definitively recognise (and enhances) the role of regions as a major structure of the State alongside *départements* and communes. Through the reforms, regions may come to play a greater role at the European Union level in territorial development and the role of metropolises may be strengthened (Torre and Bourdin, 2015: 13). These reforms are a "step in the right direction" towards simplifying the *millefeuille territorial* (OECD, 2015b).

Box 1.2. **Debates about the "general competence" clause**

The "general competence" clause is a legal concept that local authorities should be able to exercise competencies beyond those ascribed to them by law if it is a matter of their territorial interests. Both France, the United Kingdom and Germany have such competency clauses, which are related to the idea of subsidiarity (that decision making authority should be ascribed to those at the lowest level of government in order to be closer to communities and residents). There are a number of caveats to the clause. For example, in France, subnational governments can take on tasks that are not formally ascribed to them if these tasks are not part of the obligatory responsibilities of another level of government. The clause is also subject to some additional rules, such as the principle of neutrality for labour disputes.

In France, the "general competence" clause (*la clause générale de competence*) has been subject to a great deal of debate. The clause was first established for communes through the municipal law of 1884 and later extended to other subnational governments in 1982. It has been critiqued as leading to competition between subnational governments and to duplication across responsibilities in some cases (Balladur Committee, 2009). The counter argument to this point is generally that subnational governments have a Constitutional right to "free administration" and that any negation of the clause would undermine that right. However, one can also argue that to minimise conflicts only one level of subnational government should have this authority and that the principle of subsidiarity would suggest it should be the commune, as the lowest level.

These debates have led to subsequent reforms. In 2010 the general competence clause was removed from *départements* and regions, but due to a change in administration this was never implemented; the subsequent MAPTAM law (2014) restored the general competencies clause to all subnational levels. The NOTRe law (2015) undid this reversal and returned the general competence clause to the commune level only. There are a few exceptions in the legislation: for regions the removal of the general competence clause does not apply to tourism, culture, sport and international co-operation activity; and *départements* will continue to have a role in the regional development plan, sustainable development and territorial equality. The OECD has recommended that France remove the general competence clause for all local governments including communes and *intercommunalités* (OECD 2015: 27).

Source: OECD (2015a), *OECD Economic Surveys: France 2015*, OECD Publishing, Paris, http://dx.doi.org/10.1787/eco_surveys-fra-2015-en.

Devolution and spatial policy in France

While the governance structure in France has been long known for its high degree of centralisation, reforms over the past decades have led to a stronger subnational role in spatial and land use planning in France. The competence for spatial planning was largely transferred to the local and regional levels (in 1982 and 2003), and various incentives for intercommunal co-operation have been adopted, thus establishing a planning system which is thick with institutional actors, and plans. The national government continues to shape overall priorities—in particular the priority for sustainable development, but it is local and regional actors who now decide the details and implement them.[6]

Every country's spatial policies are driven by an underlying logic. France's planning system has long been characterised as following the "regional economic" form, wherein spatial planning pursues a wide range of social and economic planning objectives, with a particular emphasis on addressing regional disparities in wealth, employment and social conditions (EC, 1997). But the system is shifting towards a "comprehensive integrated" form, which focusses more on spatial co-ordination through a hierarchy of plans, rather than mainly focusing on economic development *per se* (EC, 1997). Until the 2000s the main aim of spatial planning in France was to organise urban development and the location of economic activities—today its main objectives are to reduce sprawl, protect natural and agricultural spaces and direct development in a way that is more energy efficient (leading to fewer greenhouse gas emissions (OECD, 2015b: 48). Currently, spatial planning in France is increasingly integrated across thematic areas (e.g. ecosystem protection, climate change mitigation and adaptation, management of land uses) and comprehensive, in the sense that inter-municipal planning is encouraged. But, this shift from one ideal to the next is neither whole nor uniform, and recent reforms have come with "hiccups, movements back and forth, and… successive adjustments" (Geppert, 2015: 109).

From centralisation to devolution during the Third Republic

Political, economic and administrative power in France has historically been concentrated in Paris and the Ile-de-France region (Crézé, 2011: 124). As far in the past as during the years of the French Revolution, a struggle took place between the Jacobins, who favoured strong central power as a way to pursue the goal of equality for all citizens, and the Girondins, who instead valued local independence. Debates in the Constituent Assembly at the time centred around whether national unity and equality before the law could be reconciled with local liberty (Schmidt, 2007: 17). On the side of local liberty, the Girondins' Constitution of 1793 demanded universal suffrage at the local level and total decentralisation—but it was never implemented. It was the Jacobins who eventually gained dominance and established a centralised republican State with a long reach.

While *départements* have existed since 1791, as an intermediate level of government between the nation State and the commune, their roles have changed considerably through time. With the decree of December 4, 1793 *départements* lost powers that had been briefly granted to them only a few years earlier (but were never implemented). Under Napoleon this centralisation continued; the *départemental* structure of 1790 was retained and the powerful position of *préfet* in *départements* ensured State control over local matters (Schmidt, 2007: 23). *Départements* implemented national policy at the regional level. The system was hierarchal and top-down. It was a policy that emphasised territorial equality in terms of centralised access to State administration and that led to a high level of control over the territories.

Elected councils at the commune and *département* level were introduced in 1830, but the main administrative functions of subnational government remained under the control of the Ministry of the Interior and its local agents the *préfets*. Many actions by *départements* and communes required authorisation by the Minister or even statutory approval by the national legislature. This situation persisted until the beginning years of the Third Republic (1870-1940), when decentralisation reforms gained traction and locally elected councillors were given increased authority. In 1882 mayors of communal councils were made elective officers and the councils received increased authority to administer the commune. At the same time *préfets* were given more discretion in acting

without prior approval from the Minister of the Interior and limited tax revenue was transferred to communes and *départements*.

By the beginning of the 20th century there were increased demands for reducing the role of *préfets* and transferring more authority to elected bodies as a way to increase political liberty (Garner, 1919: 36-46). In this transition the mayor, but not the council, assumed powers of the *préfet*, but the mayor acted as an agent of the national government. There was also a recognition that the *départements* were in most cases too small a unit of government to be an effective intermediary between the commune and the State. It was proposed that a smaller number of regional units that were aligned with natural geographic boundaries and economic specialisations and having roughly similar size populations would be more effective in bargaining with the national government. As Tarrow points out, the idea of strong regions is not necessarily seen as beneficial either to local elites in communes or national governments, both of which might prefer maintaining their power (Tarrow, 1974: 8-9). Thus, while the Third Republic led to a formal devolution of responsibilities to lower levels of government, the State retained effective control of most decisions, largely by controlling funding.

Post WWII spatial policy was driven by the goal of territorial equality

The French geographer Jean-François Gravier famously characterised the country's territory as "Paris and the French desert" (1949). His statement was not simply a description—it flowed from a view that France was territorially unbalanced and that the State should act to correct this through redistributive measures and public investments. In response, post-World War II, spatial policy in France emphasised a mix of fiscal redistribution and public investment for under-served regions in an effort to foster greater spatial equality. The concept of growth *pôle—pôles de croissance*—developed by Francois Perroux played a significant role in shaping this policy.

In the early 1960s, the role of the State in spatial planning was further strengthened with the creation of DATAR under the direct authority of the Prime Minister.[7] Under DATAR's leadership a number of national policies were launched including land use and urban planning and the development of transportation and other infrastructure investments. In 1967 a bi-level system of land use planning was adopted; municipalities (or collections of municipalities) created local plans which were required to be compatible with the upper level ones (*Schéma Directeur d'Aménagement et d'Urbanisme*, SDAU). But, it was not until the 1970s that the real movement on the "problem of territorial imbalance" was made. In 1971, DATAR released an influential study ("Scenario of the unacceptable: Image of France in 2000"), which argued that France was developing in a manner which was highly spatially unbalanced (DATAR, 2015). This document served as the basis of the subsequent general planning scheme for France (*Schéma général d'aménagement de la France*).[8] This era of DATAR exemplifies what was perceived as the ideal form of regional-economic planning, where the central government manages development challenges across the country through active public sector investment.[9]

In the mid-1970s economic crises spurred a growing critique of top down models of spatial development—particularly land use planning, which was regarded as disconnected from local realities. In France, as in other OECD countries, centralised planning models had largely failed to end regional economic inequality. In response, starting in the 1980s, France has moved through a series of stages in devolving greater responsibility for spatial planning to subnational governments in an effort to balance responsiveness to specific

local conditions and opportunities, with national priorities. In the process, while communes have maintained the ultimate responsibility for developing and managing land use plans, these plans have become more constrained by laws, regulations and other actions taken by higher levels of government. The specific process of devolution in France has been seen as analogous to a three act play.

Act I, The transfer from Préfets to Councils

The chorus of critique led to the adoption of a series of laws in 1980s which introduced greater decentralisation (known as the Gaston Deferre Laws).[10] The Decentalisation Act of 1982 transferred executive powers from the State designated administrators at the local level (*préfets*) to regional and county (*département*) council chairmen (elected by the council). The Chevènement law of 1999 established new structures through co-operative institutions (EPCI) and facilitated the pooling of services and projects among communes. These laws are often referred to as Act I of the decentralisation process. Financial compensation followed alongside these decentralisation reforms—there was a transfer of national taxes to local governments and a general decentralisation grant to facilitate the process.

Act II, The strengthening of regions

Subsequent reforms, Act II of decentralisation, included the Constitutional Amendment Act of 2003 which positioned regions as local autonomous bodies alongside councils and communes (see Box 1.3 for an elaboration of the major principles of the reforms). The following year, yet another law (the Law on local freedoms and responsibilities of 13 August 2004) introduced the concept of financial autonomy for all three levels of local government (commune, *département* and region) and transferred some new responsibilities to the regions (e.g. commuter rail, vocational training, social housing, education and culture). Taken together, these reforms decentralised fiscal and administrative roles, strengthened subnational spatial policy and encouraged intercommunal co-operation.

As with the previous decentralisation reforms (Act I), these proceeded in tandem with the transfer of fiscal resources (special taxes) over several years as local responsibilities increased. In 2003, the principle of compensation was included in France's constitution (Article 72-2). The principle guarantees that subnational governments should have revenue equivalent to their powers: "whenever powers are transferred between central government and the territorial communities, revenue equivalent to that given over to the exercise of those powers shall also be transferred. Whenever the effect of newly created or extended powers is to increase the expenditure to be borne by territorial communities, revenue as determined by statue, shall be allocated to said communities" (Constitution, Article 72-2). Despite this, the issue of financial compensation for extended competences remains controversial and related shifts in financial and human resources have stretched the capacities of subnational authorities (OECD, 2015b: 47). This issue was compounded in 2008 when the government announced a zero growth rate for State transfers in order to achieve budget stability.

It has been remarked that these decentralisation reforms have contradictory aims. On the one hand, they are based on the notion that decision making powers should be attributed to specific (and different) tiers of subnational government. On the other hand, they embrace the idea that subnational authorities should have the freedom to take initiatives on matters that are important to their constituencies. In an assessment of

France's decentralisation reforms, Wienen and Mosler-Törnström remark that principle of free administration cuts across the clarity of the principle of division of powers (2016: 41). They comment that the various subnational authorities have "overlapping jurisdictions and loosely defined spheres of competence" and that, even where there is a clear division of responsibilities, "they are not always respected" (Wienen and Mosler-Törnström, 2016: 41). This potential for overlapping responsibilities stems from the fact that there is no formal hierarchy among subnational authorities—"in theory, no single authority can impose its will on any other" (Wienen and Mosler-Törnström, 2016: 41).

Box 1.3. **Main principles of French decentralisation reforms**

France's decentralisation reforms began in the 1980s and continue today. Some of the main operating principles of the decentralisation process are:

- *The free administration of local governments:* Elected councils freely administer local governments with regulatory powers to perform their tasks.
- *No oversight of one local government over another:* Since local governments are free to administer their affairs, none may have the power to tell another what to do.
- *Principle of financial autonomy for local governments*: Local governments have resources that they are free to use. Tax revenues and the local governments' own resources from other sources must represent a decisive share of these resources. This means that local governments must not depend on the central government for the majority of their resources (see below).
- *Principle of central government supervision after the* fact: The central government supervises local governments' actions, but this supervision takes place after the fact. The Regional *Préfets* supervise the regional governments and their public corporations, while the regional courts of auditors conduct the financial audits and legal audits of local governments' budgets, financial statements and financial management as well as interregional public corporations that have their registered office in the Région. The *Départemental Préfets* supervise the *départemental* governments and the Communes, along with local and *interdépartemental* public corporations with their registered office in the *Département*.
- *Experimentation:* Legislation on decentralisation introduced the principle of experimentation, which allows local government to conduct temporary experiments involving the exercise of central government powers. If an experiment is a success, the power may be transferred to the local government permanently.
- *Administrative and territorial simplification*: Territorial reorganisation to reduce the number of regions and a streaming of the requirements for planning permissions.

Source: Government of France (2006), "Spatial planning and sustainable development policy in France", p. 24; République Française (2016), "Transferts financiers de l'état aux collectivités territoriales", Annexe au projet de loi de finances pour 2016, http://www.performance-publique.budget.gouv.fr/sites/performance_publique/files/farandole/ressources/2016/pap/pdf/jaunes/jaune2016_collectivites.pdf.

Act III – Rebalancing responsibilities among the levels of subnational government

These tensions were apparent in subsequent discussions on how to, yet again, improve the revised system. Various government reports over the intervening years recommended: greater control of local government finance (the Richard Report, 2006); suppressing the "general administration" clause (the Lambert Report, 2007); reducing the role of *départements* (the Attali Report, 2008); and cutting back the number of regions (the Balladur Report, 2009). The growing chorus for reform lead to Act III of decentralisation and yet another law—the Modernisation of Territorial Public Action and

Affirmation of Metropolises (MAPTAM, 27 January 2014). Popularly known as MAPTAM, the law has two main aims: i) to clarify responsibilities among local authorities and the State (especially with regards to the delegation of powers mechanism), and ii) to affirm the role of cities and establish in law the metropolis of Lyon. The process of clarifying responsibilities among levels of government continues to this day. In 2015, laws were passed to establish metropolitan areas (Act of 16 January 2015 relating to the delimitation of the regions) and to establish a new territorial organisation in the Republic (Act of 7 August 2015).[11]

Despite considerable devolution, the State continues to play a leading role in spatial planning

Despite ongoing decentralisation reforms, the State (through DATAR) has continued to play an important role in spatial planning, albeit of a more collaborative and strategic nature. In the 2010s, the agency worked with a wide range of actors through such initiatives as the European Regional Foresight College. One outcome of this work was a critique of previous spatial planning approaches for being disconnected to the practice of land management. In response, a project on "French territories to the year 2040" was launched (Government of France, 2012). A forecasting exercise of seven territories was produced as a monograph in 2011—the result of collaboration with: more than 250 scientific and regional stakeholders, representatives of central and decentralised administrations, local authorities, local chambers, businesses and civil society. Subsequently a "forward thinking" exercise was conducted in order to analyse the major issues and recommend more effective strategies for land use planning and sustainable development.

In March 2014, DATAR merged with the General Secretariat of Interministerial Committee for Cities and the National Agency for Social Cohesion (NASC, ACSÉ) to form the General Commission for Territorial Equality (*Le Commissariat général à l'égalité des territoires*, CGET). CGET designs, prepares and implements the national policy of territorial equality and monitors *interdépartemental* co-ordination. However, it is important to note that this national policy is in fact a series of sectoral policies. France does not have a national spatial policy/plan as such. Rather it sets the guiding framework for the goals and substance of regional and local plans and identifies specific types of policies for different local areas (urban policies, rural-urban/rurban policies, rural policies and specific policies for mountain and coastal zones). It also establishes sectoral policies which have spatial implications in the areas of economic attractiveness and competition, transportation, local digital development, public services and finally, higher education and research. The Ministry of Housing and Territorial Equality also has an important role to play in shaping spatial policy objectives at the local level.

The state is also engaged in land use decisions through the role of*préfets* who act as direct agents of the national state in every level of local government. This is a particularly French institution, although it also exists in Chile, where a national official exercises direct authority in parallel with local elected government on various matters, some of which have overlapping jurisdiction. In smaller communes where the local government has few resources and limited capabilities the *préfet* can have a direct role in land use decisions, because they have the resources of the national state to support their decision while local officials have limited analytical capacity. In rural areas this asymmetry in capacity can lead to asymmetries in power. An elected mayor may have the authority to challenge the decision of the *préfet* on a land use proposal but lack the will to do so

because their decision has less formal analysis to support it than does that of the local *préfet*.

In the past, the national legislature of France had to directly approve the vast majority of local government actions before they could be undertaken (Garner, 1919: 19). Today these decisions have been devolved to local councils at the commune level. Yet national legislators remain far more engaged in the mechanics of local government than is the case in most other OECD countries. While elected officials everywhere pay attention to the things that influence the preferences of their electorate, the French system of national legislators holding two elected offices, local and national, keeps them directly engaged with the local political processes. In principle, this can be seen as beneficial because it provides the national legislature with a direct window into the conditions facing local governments. In practice it can lead to a legislator promoting projects that mainly benefit his or her constituents—"political pork" or, conversely, to the legislator using the position of national power to promote a local action that is controversial with a large portion of the local populace. The new airport in Nantes Saint-Nazaire is an example. It is both a nationally funded project that can provide local benefits, and simultaneously a locally controversial issue. This dual role of national legislators provides a channel for better information, but it can muddy the process of making decisions at both levels of government. The integrated nature of local and national politics in France leads to a unique combination of "market power and intergovernmental linkages enabling the regime to pursue ambitious state-centred development agendas" (Kantor et al.1997: 355).

The national government remains committed to territorial equality, and this ensures it continues to play a strong role in spatial policies

Territorial equality is a major government priority—it is grounded in the idea of a republican pact where citizens have equal opportunities regardless of place of birth, residence or work. Because the national government has this interest in spatial equality it must remain engaged in spatial policy to assure that its priorities are considered. This means that devolution is always a partial process and any devolved powers can be taken back by the nation state. But the means by which spatial equality is to be achieved through government policy has changed over time. In the immediate post war years it entailed redistributive policies with compensatory measures for lagging regions and cities. While redistributive policies persist, their role has been reduced over time, with an increasing focus on enabling each region to have the capacity to more effectively manage its own resources to strengthen competitiveness.

The goal of territorial equality has been somewhat supplanted by two additional, but somewhat contradictory, concepts: territorial cohesion and competitiveness.[12] There has been a shift away from a focus on compensating territories for their inequalities and towards an approach that instead promotes better utilisation of the assets of each territory—rural, urban and the variations in-between. Such an approach requires devolution of both responsibility and resources to allow a bottom-up regional development process (OECD, 2006b). It can also lead to increased differences in outcomes when some regions have better initial endowments and better development strategies. If gaps in economic performance increase this can reduce social cohesion and raise new demands for the nation State to reduce regional inequalities. The difference this time is that instead of a single approach that was applied uniformly to all regions, now a targeted territorial approach to address social-spatial and economic inequalities is followed. For instance, there are now distinct policies that focus on: urban areas, where there are high levels of unemployment, low levels of education, discrimination and

insecurity; isolated rural areas affected by service shortages; deindustrialised areas suffering from unemployment, socioeconomic marginalisation and environmental degradation; and peri-urban areas where there are weak social bonds and individuals largely commute to cities for employment (Government of France, 2015a).

While interregional equality remains a goal of spatial policy, it exists alongside: the promotion of clusters for competitiveness, special roles for large metropolises, and a new institutional configuration— the *métropole* (Box 1.4). In essence, this is a return to the growth *pôle* approach endorsed by Perroux in the 1950s. Perroux conceived of a growth *pôle* as an economic dynamic brought about by successful firms stimulating growth in other firms that were linked to them in terms of market exchanges (Parr, 1999: 1198). However, because firms operate in geographic space the concept soon took on a direct spatial focus and became the foundation for two important policies. The first is the idea of supporting specific clusters of firms in some region that are linked through supply chain relationships or other connections. This idea forms the basis of modern cluster approaches to local economic development and to Porter's "diamond model of competitive advantage" (Porter, 1980; 1998) Second, it also led to the idea of direct government efforts to induce growth *pôles* in specific locations.

Parr identifies two key results from this latter policy choice. First, it led to the idea that resources should be concentrated in a small number of locations to achieve critical mass (Parr, 1999: 1198). This idea is extended to include the spatial concentration of specific industries in particular places that are the most suitable for their growth. The second result was the idea that national governments could induce new *pôles* in different parts of the country to achieve more balanced growth—*pôles d'equilibre* (Parr, 1999: 1203). Actions by the government could move both workers and firms to a new location that would become the motor for regional growth. In France these ideas continue to underpin the process of spatial planning and influence the allocation of responsibilities to different levels of subnational government. But, in their contemporary manifestation there is a much clearer metropolitan-driven notion of what constitutes a growth *pôle*. For these large agglomerations there is an emphasis on increasing the attractiveness and accessibility of cities and alongside this, pursing the goals of environmental sustainability.

Box 1.4. **France's new metropolises**

All communes in France, no matter their size, previously had the same powers. Several reforms have changed this and have empowered larger cities to govern across a wider space and have the increased powers to do so. Metropolises—or, *métropoles*—were created as a form of intercommunal community (EPCI) by a 2010 local government reform. The new MAPTAM law (2014) further strengthens these competencies—which only apply to select cities. *Métropoles* are the most integrated form of intercommunal body that can exist by law. They apply only large urban areas: territories with a minimum of 400 000 inhabitants located in an urban area of 650 000 or more. Every urban area that meets this threshold can request to become a metropolis and this is done on a voluntary basis.

The main provisions of the law concerning the affirmation of ordinary cities and cities with a special status for Paris, Lyon and Aix-Marseille-Provence. From 1 January 2015, the city of Lyon was created as that local authority with special status. On the same date, Bordeaux, Brest, Grenoble, Lille, Montpellier, Nantes, Rennes, Rouen, Strasbourg and Toulouse were able to access the ordinary metropolitan status on the basis of demographic and functional criteria. The metropolis of Nice Côte d'Azur had preceded in 2012. Equipped with specific statutes, cities of Greater Paris and Aix-Marseille Provence were created in January 2016. The decree creating the metropolis of Greater Nancy entered into force 1 July 2016.

Box 1.4. **France's new metropolises** (*cont.*)

Métropoles have the following competencies:

- *Economic, social and cultural development*: creation, development and management of industrial zones, commercial, tertiary, craft, tourism, port or airport; economic development actions; construction, development, maintenance and operation of cultural, socio-cultural, socio-educational and sports of metropolitan interest.
- *Planning across the metropolitan space:* territorial coherence plans (SCoT) and sectoral plans; organisation of public transport; creation, management and road maintenance; signage; parks and parking lots and urban mobility plan.
- *Local housing policy*: local housing program; housing policy; Financial aid for social housing; actions of social housing; actions in favour of housing for the disadvantaged; improvement of the housing stock built, rehabilitation and elimination of slums.
- *Urban policy*: development of diagnosis of the territory and definition of the city contract guidelines; animation and co-ordination of the contractual arrangements for urban development, local development and economic and social inclusion and local systems for crime prevention.
- *The management of collective services*: sanitation and water; fire and rescue services.
- *The protection and enhancement of the environment and living conditions:* the management of household and similar waste; efforts to combat air pollution, noise pollution; contribution to energy transition; support for measures to control energy demand; creation, development, maintenance and management of heating networks or urban cooling systems.

Moreover, the State, regions and *départements* can delegate, by convention, some of their powers to the cities. The border cities may join border co-operation structures. For instance, the Lille metropolis may well see its status as European metropolis strengthened beyond its national borders. Within its territory, each city can establish territory advice, with an operating budget and investment powered by an endowment of land management by signing an agreement with the State. The city can also undertake all housing competencies: supply subsidies, *préfetural* quota of reservation of social housing (all or in part), guarantee the right to decent and independent housing (DALO), implementation of requisitioning procedures and management of emergency accommodation. The State may also assign the ownership and management of major equipment and infrastructure.

As one example, the new Métropole du Grand Paris—a metropolitan governance body that came into being January 2016—will encompass Paris and 130 surrounding cities. The new entity will be in charge of economic development, town planning, environmental policies and, to a certain extent, housing. The creation of this métropole is part of a global policy set out in new legislation adopted in 2014, which has created 14 métropoles in France. This process of achieving metropolitan governance has been especially difficult in the case of Paris, because of its global size and such local specificities as high wealth differences among cities and a long tradition of political and institutional fragmentation. This is why federative projects, such as the 2024 Olympic games or 2025 universal exhibition candidacies, though not directly linked to the Grand Paris project, are also regarded as powerful drivers to move collectively along in that direction, and to boost public works.

1. As described in Chapter IV of Title II of Book IV of Part I of The law of 27 January 2014 modernizing the territorial public action and affirmation of metropolises.

Source: Commissariat Général à l'Egalité des Territoires (2016), "Métropole", www.gouvernement.fr/action/les-metropoles.

For rural areas, spatial policy seeks to address both their economic and social functions. For example, the 2004 law on rural areas paved the way for a revision of the rural revitalisation zones (*les zones de revitalisation rurale*, ZRR), allowing small urban centres to be included in this structure, thus recognizing their economic role as market

points for rural firms and households. Related to this, the government has supported rural-urban partnerships by borrowing from the idea of competitive urban clusters to create rural centres of excellence (Box 1.5).

The question of scale—what is gained and what is lost?

As a final remark on decentralisation and spatial policy, the French system is characterised by multi-level governance—there are a wide array of actors and institutional structures at multiple levels. While the central government still plays a major role in regional policy, it has increased the competencies of subnational governments over time. Hierarchical relationships have often been supplanted by a partnership-based approach across multiple scales. The resulting institutional and regulatory landscape for spatial and land use planning is complex and this can be particularly complicated for citizens to understand and engage with, which has implications for local democracy.

As will be discussed in the case studies of Clermont-Ferrand and Nantes Saint-Nazaire, the territories have embraced a larger spatial planning scale through the SCoT that covers a large number of communes and *intercommunalités*. There are many benefits to such an approach as it covers the functional area which is the best spatial unit to understand and address climate and water related issues, transportation and waste disposal. However, this increasing scale is also part of a political project to advance the interest of the region. In Clermont-Ferrand, there is interest in creating yet another partnership that encompasses a larger geographic area as it seeks to reorient its position within the newly merged region. This raises the question of what should be tackled at what scale? Does a spatial plan that directs future land use make sense across a very large area? What are the tradeoffs? Is the scale at which one defines urban planning objectives also the right scale for plan implementation? In the words of McCann, "scale is not a neutral background; rather, it is a discursive frame used by competing interests to define or redefine the appropriate location of political power and the territorial extent of specific policies and regulation" (McCann, 2003: 160).

High level strategic planning is important to address the major challenges facing sustainable metropolitan development in France, but these issues need to be tackled and implemented at the local level. In the words of Petitet, "the question is therefore how to turn the virtuous general objectives at the (inter) SCoT level into real and specific building regulations at a more local level and how to ensure that these higher level objectives are respected at the most local level" (2010: 48). Asymmetries or imbalances between the capabilities of those involved can frustrate the process: "not all areas have the same ability to impact spatial planning projects" (Bertrand, 2015).

A recent assessment of the implementation of the SCoT in Grenoble illustrates this point. It was found that the rural and mountainous areas faced constraints in various forms of capital—financial, human social and institutional—that both limited the inclusion of their interests in the elaboration of the SCoT and its eventual implementation (Bertrand, 2015). Thus, there is a significant capacity-building issue required in order to ensure that all local authorities have the ability, resources and buy-in to realise the planning objectives through the tools at hand. This raises the question of finances. As the role of *intercommunalités* grows in importance, their fiscal resources will need to keep pace with these functions. This in turn increases the importance of transparent and accountable political authority at this scale.

Box 1.5. **Rural centres of excellence, France**

France's rural centres of excellence programme were inspired by the idea of competitive urban clusters. Projects under this program are awarded State funding for economic development projects in rural areas that involve a partnership between local authorities and private firms. This program was created to support the 2005 law on the development of rural areas. The impact on the territory has been estimated at over a billion euros of work with the creation or retention of more than 40 000 jobs in rural areas. The overall State participation amounted to EUR 236m from 11 ministries (agriculture, tourism, equipment, culture, overseas, ecology, employment, small business, health, industry, regional development) and specific funds of State.

In 2005, the Ministry for Development and Territorial Competitiveness certified 300 rural centres of excellence and opened a call for projects around four themes: heritage and tourism development, sustainable development, the development of new services that may attract new residents to rural areas, and/or industrial and craft production, particularly with the use of innovative techniques. State and EU project funding covers between a third and half of the total project cost, depending on eligibly. The second round of projects have focused on increasing the economic capacity of rural territories and meeting the needs of the population through public services based on territorial changes.

Near Clermont-Ferrand there are two projects under the Centres of Rural Excellence programme. The first is located south west of Clermont-Ferrand in the Regional Natural Park of Auvergne Volcanoes. The project focusses on developing wood as a renewable energy source (creation of drying buildings, purchase of shredders, wood boilers and installation of a collective heating network), supporting the quality of the landscape and developing freight rail. The project received a grant of EUR 851 380. A second project in the village of Broc focuses on heritage and tourism rehabilitation. The village's historical site has been redeveloped to encourage mixed uses including a hotel and restaurant. This project received a EUR 600 000 grant.

Source: Pôle d'Excellence Rurales (2016), Ragréage de la filière pierre volcanique ou le retour à l'âge de pierre, Parc naturel régional des Volcans d'Auvergne. Carte des projets. http://poles-excellence-rurale.datar.gouv.fr/.

Box 1.6. **The planning profession in France**

Across OECD countries, the disciplinary background of planners differs considerably. For instance, the planning profession in Israel has long been dominated by engineers and architects and is only now beginning to recognise urban planners as a distinct profession (despite having had an urban planning association since 1965). In the United States, United Kingdom and Canada, there are professional bodies that oversee planning accreditation and certification and there are specific planning degrees (e.g., masters in urban planning). In contrast, France has long embraced an interdisciplinary approach to urban planning.

French language has the same word for urban planning and urban design, *urbanisme*. Most of the well-known French urbanists are in fact urban designers. This is an important distinction and an issue that the profession in France has been attempting to address. In particular, the national collective of young urban planners in France which released a white paper with nine propositions to organise the planning profession.

For urban planners, there are three main academic paths to practice planning in France. There are 24 institutes for urban and regional planning which are scientific research institutes that provide post-graduate training in the fields of urban planning and spatial planning. Second, there are 150 or more different types of diplomas on urban and regional planning offered by various higher education institutions. Finally, there are masters' lectures on spatial planning and urbanism offered by the national Council of Universities. These programs are largely rooted in the social sciences and have produced professionals for managing planning processes as opposed to highly technical skill sets. In contrast, there are only 17 degrees in urban design in France—but this is not representative of the scope of the professions since urban designers are also trained as architects and landscapers. Often the term architect planner or landscape planner is used to describe such profiles.

Box 1.6. **The planning profession in France** (*cont.*)

Despite having had a professional planning society since 1911 (la Société Française des Urbanistes, SFU), the preparation of local land use plans is carried out by a range of professions including civil engineers, urbanists, architects, land scape architects, geographers, economists and historians. These professions are employed by in-house *départements*, urban planning agencies or governments. In 1998, the national government established a regulatory body for the profession (l'Office Public de Qualification des Urbanistes, OPQU). As of 2011, 288 urban planners were accredited under this organisation (169 in private companies, 102 in public structures, 17 others). This is a very small proportion out of the total number of planners in France.

Source: GUET, J.-F. (2005), "French urban planning tools and methods renewal", ISoCaRP congress 2005, www.isocarp.net/data/case_studies/684.pdf; Kropf, K. (2011), Coding in the French planning system: From building line to morphological zoning, *Urban Coding and Planning*, Routledge, London, pp. 158-249.

Increasing fiscal autonomy for local governments

Local government finance, land use and development are interlinked. Governments at all levels rely on a variety of revenue streams, but local governments in OECD countries are almost always constrained by higher level governments in terms of their ability to raise revenue and what they can spend it on. Subnational governments are responsible for 62% of total public investment in OECD countries on average (Hulbert and Vammalle, 2014). The relationship between fiscal and planning systems in a country in turn creates incentives for how land is used (see Box 1.7 for an illustration).

Box 1.7. **Fiscal and planning systems: The United Kingdom versus Switzerland**

The government structures of the United Kingdom and Switzerland are at opposite poles of the decentralisation spectrum. Whereas the United Kingdom's (central) land use planning system is one of the most rigid in the world and its fiscal system is heavily centralised, Switzerland is an extremely decentralised country, with strong political and fiscal powers allocated at local level.

The United Kingdom—centralised land use planning and fiscal centralisation

The Anglo-Saxon (British) planning system—which has been adopted 'in spirit' by most of the Commonwealth countries, such as Australia or New Zealand—differs starkly from continental European planning systems. Two main features distinguish the British 'development control' system from the continental European 'rule-based zoning' system. First, development control is highly centralised and imposes stringent land use restrictions to contain urban growth throughout the country ('green belts' that are largely sacrosanct for development for example surround all major urban centres in England). Second, development control is discretionary rather than rule based. This means that every single planning application is subject to review and political opposition by local 'not in my backyard' (NIMBY) residents, making new development extremely difficult and—due to the planning process related costs—costly and creating a significant degree of uncertainty for would-be developers often making development projects inviable. In contrast, in a rule-based zoning system, as long as a plot of land is say within a residential zone and developers follow the rules, they have the automatic right to develop the land for residential purposes.

Moreover, the UK fiscal system provides very few fiscal incentives to local authorities to permit new development: Local authorities bear most of the cost of providing public services to new entrants but cannot reap the benefits in the form of local tax revenue, as most taxes are levied by the central government. Moreover, increases in the local (council) tax revenue are, in the medium-run, equalised away through a central government grant system. Thus, because there are so few fiscal incentives to permit local development, local planning authorities have strong incentives to cater to NIMBY residents, who in turn have strong incentives to oppose new development in order to protect their asset values. Put differently: the development control system facilitates NIMBY-behaviour. Successful opposition to new development via NIMBY-residents in this context is strongest near green belts as homeowners, in accordance with Fischel's homevoter hypothesis (Fischel, 2001a, b), have particularly strong incentives to protect their nice views and open space.

Box 1.7. **Fiscal and planning systems: The United Kingdom versus Switzerland** (*cont.*)

As a consequence, land use patterns in the United Kingdom are not sprawling. New development is compact, although at a lower density than in the absence of height restrictions. This, however, comes at a staggering cost. The combination of lack of fiscal incentives and development control has created a vicious circle leading to an unprecedented housing shortage and severe housing affordability crisis. To provide an order of magnitude of the effects of the development control system on housing markets, Hilber and Vermeulen (2016) estimate that housing prices would have increased 100% less between 1974 and 2008 in the absence of any regulatory constraints.

Switzerland—political and fiscal decentralisation

In contrast to the United Kingdom, Switzerland—a highly decentralised country with fiscal competition both at regional and local level—has a rule- or code-based planning system, where construction projects are automatically approved as long as they comply with the requirements of the respective code. These requirements usually consist in attributing land use type (residential, commercial, industrial, or mixed) to plots of land zoned for new construction and in defining the development intensity (in the form, for example, of floor to area ratios). This makes it extremely difficult for local NIMBY residents to successfully oppose new development. Moreover, the Swiss fiscal system provides strong incentives to local municipalities to allocate land for new residential development: local public good provision is financed by levying progressive income taxes and municipalities can choose tax rate levels. Local municipalities thus have strong fiscal incentives to allocate large plots of land at the outskirts of their localities in an attempt to attract high-income taxpayers.

The combination of a flexible planning system with local fiscal incentives makes the housing supply in Switzerland fairly elastic. As a consequence, housing affordability is considered less of an issue in Switzerland, except in major agglomerations—mainly Zurich and Geneva—where physical and geographical supply constraints (lakes, mountains) are quite binding. The main policy concern in Switzerland is thus urban sprawl and preservation of the touristic countryside: Swiss voters are increasingly concerned about urban sprawl as new development in suburban areas is typically quite scattered and low density. Moreover they are concerned about blighting the most beautiful and touristic Alpine areas. This has recently lead Swiss voters to approve an initiative that imposed a ban on the construction of new second homes in touristic areas, with adverse consequences for local residents.

Source: Hilber, C.A.L. (2015a), "UK Housing and Planning Policies: The Evidence from Economic Research", *Centre for Economic Performance 2015*, Election Analysis Series, #EA033; Hilber, C.A.L. (2015b), "Deep-rooted Vested Interests are to Blame for Our Housing Crisis", Disclaimer, 4 May; Hilber, C.A.L. (2016a), "The UK planning system—Proposals for reform", *Planning et Building Control Today*, October issue; Hilber, C.A.L. and O. Schöni (2016b), "Housing Policies in the United Kingdom, Switzerland, and the United States: Lessons Learned", *ADBI Working Paper 569*, Asian Development Bank Institute, Tokyo.

As in most other countries, increases in local government responsibility (i.e. devolution of functions from the French national government) are not fully accompanied by an equivalent stream of revenue. In France, as in other countries where own-source revenue (as opposed to grants and other transfers) are an important source of revenue, the property tax is the most common source of local government finance. Consequently, devolution can result in increased pressure on local governments to raise revenue from property taxes, which can in turn lead to efforts to stimulate land development.

Local governments may use fiscal incentives to maintain agricultural land, establish tax exemptions to stimulate investment in brownfield sites, or create various incentives to include social housing in any new developments. In this way, they shape land use practices. The broader fiscal environment—such as, fiscal transfers from other levels of government—affects how these tools are used and the demands upon them (Martin, 2015). Where governments rely to a large degree on own-source revenues, there can be

significant fiscal pressure to develop new land or convert currently developed land into uses with higher tax potential. How land is used and when it is developed has fiscal consequences for the commune, while, conversely, the broader fiscal environment (and specific fiscal tools) in turn shape land use and development practices.

Local government fiscal autonomy has increased alongside devolution reforms

Local authorities in France (regions, *départements*, communes, intercommunes) have two general sources of revenue: i) *specific resources* such as direct tax revenue and State transfers and; ii) *temporary resources,* which are project specific loans that must be reimbursed by the beneficiary community. Temporary resources can only be used to finance investment spending (as opposed to operational spending). The regulatory framework governing French local authorities is highly stringent. By law, local authorities must balance their budgets (i.e. they cannot run a budget deficit). The amount of operating incomes must be higher than the amount of operating expenditures and by law, local authorities must balance their budgets (i.e. they cannot run a budget deficit). Local authorities can only borrow funds in order to finance their investments—this is known as the "golden rule" (Box 1.8). In 2013, borrowing by local authorities in France amounted to 7.3% of total revenues (at EUR 229.6 bln) (Government of France, 2016).

Box 1.8. **French local government funding agency**

In 2014, a unique French funding agency—*Agence France Locale* (AFL)—began distributing loans to local authorities by pooling volumes and raising funds in capital markets. AFL is wholly owned by French local authorities and each member acts as guarantor up to the amount of its total outstanding borrowings with Agency. Only French local authorities with tax raising powers can join the Agency; this includes cities, inter-municipal entities with tax autonomy, *départements* and regions.

The Agency was established in the wake of the banking crisis to address tightening loan conditions and strained liquidity. The AFL is modelled on similar institutions that have long operated in Northern Europe without default (the oldest among these, *Kommune Kredit*, was first established in 1899). This model is gaining traction across OECD countries and has recently been adopted in both New Zealand and the United Kingdom.

French local authorities are the main public investor in France in terms of infrastructure and transportation networks. Approximately 70% of French local authorities' investment expenditure is self-financed and their debt amounts to 8% of GDP. Of all debt held by local authorities (EUR 141.5 billion, 2014) the majority is held by cities (44.8%), followed by *départements* (23.7%), inter-municipal entities (16.0%) and regions (15.5%).

2014 (in EUR billion)	Central government	Social security activities	Other central public entities	Local governments	Other local public entities	Total
Total expenditures	455.5	562.9	81.3	230.7	21.3	1 207.5
Investment expenditures	9.8	8.3	17.2	48.0	2.4	85.6
Debt as of 31/12/2014	1 610.2	216.8	22.6	141.5	46.7	2 037.8

1. Financial transfers between sectors are consolidated and, as a consequence, the sum of data from all sectors is higher than the consolidated data for "All public entities".

Sources: Observatoire des finances locales – DGCL (2015), "Les finances des collectivités locales en 2015", Septembre, www.collectivites-locales.gouv.fr/files/files/OFL2015_00.pdf; Agence France Locale (2016), http://www.agence-france-locale.fr/Documents/AFL_Pr%C3%A9sentation_investisseurs.pdf.

While local taxes and state transfers both provide revenue to communes, local taxes contribute the most. In 2013, local taxes contributed approximately 55% of local authorities' revenue (Government of France, 2016). Local direct taxes are the oldest taxes in the French tax system; "they succeeded the direct taxes that had been created in 1790 and 1791 as State taxes and were transferred to local authorities in the 1914-1917 tax reform" (Government of France, 2015: 69). Since 1970, the tax base is common to property tax on developed land, property tax on undeveloped land and the residence tax (cadastral income). During the past twenty past years, the economic contribution has been reformed to encourage investment. These taxes are collected by the State on behalf of local authorities and are composed of four main types:

- Property taxes on developed land
- Property taxes on undeveloped land
- A residence (building) tax and
- An economic contribution comprised of a local tax on business buildings and a business value-added tax.[13]

Of these, the property tax on developed land generates the largest share of revenue (at approximately 37%), then the residence tax (at 26%); followed by the value-added tax on business income (at 21%); and the tax on business premises (at 10%) and finally, the tax on underdeveloped land (at just over 1%) (Government of France, 2015a: 71).[14] The importance of various forms of property tax to communes provides a clear incentive for local governments to undertake actions that can raise property values, including allowing the conversion of low value land to a higher value uses. It also creates an incentive to attract new residents and businesses in order to expand the tax base.

In France, local property taxes are mainly assessed on a property's notional rental value, with the exception of those related to business.[15] The notional rental value of a property's theoretical yield is determined by the authorities (Box 1.9). Local tax rates are set by local government assemblies (*département* and commune councils, etc.) when voting on their annual budget. However, the rates may not exceed certain limits determined by central government, which are applied to bases that are also centrally determined. Within this framework, there are many permanent or temporary exemptions—e.g. for low income individuals. Designed well, property taxes can be used as an effective tool for sustainable land use (Box 1.10).

Box 1.9. **France's property tax system**

Property tax on developed land

Property tax on developed land is levied annually on developed land situated in France except where there is entitlement to permanent exemption (public property, farm buildings, etc.) or temporary exemption (new or innovative enterprises, incentives for development as part of urban or spatial planning policy). The tax base is the cadastral income, equal to 50% of the notional rental value regularly updated by the authorities. The amount of tax is calculated by multiplying the tax base by the rates voted by each beneficiary local authority for the year in question. Exemption or automatic relief is granted to elderly or disabled people of modest means, under certain conditions of resources and cohabitation.

Box 1.9. **France's property tax system** (*cont.*)

Property tax on undeveloped land

Property tax on undeveloped land is levied annually on owners of any undeveloped land of any nature situated in France except where there is entitlement to permanent exemption (public property) or temporary exemption (incentives for organic farming, reforestation and the conservation of environmental interest zones). The tax accrues to communes and their public establishments for intercommunal co-operation. The basis for assessing the property tax on undeveloped land is 80% of the notional rental value of the property resulting from valuations regularly updated by the authorities. To encourage owners to put their land up for sale in order to increase the volume of buildable lots, an increase in the notional rental value of buildable lots is applied in zones where real estate pressures are the strongest. Agricultural lands, including those left fallow, are exempt from any increase. The amount of tax is calculated by multiplying the cadastral income of each property by the rates voted by each beneficiary local authority for the year in question.

The residence tax

Furnished residential premises are also taxed based on an assessment of the notional rental value based on valuations of developed land updated by the authorities. For residential premises used as the taxpayer's main home, compulsory relief for dependents or optional relief (general relief on the base, special relief on the base, relief for disabled people) is deducted from the notional rental value. The amount of tax is calculated by multiplying the income from the tax base by the rates voted by each beneficiary commune or public establishment for intercommunal co-operation for the year in question.

Certain premises are exempt from residence tax. For instance, low income individuals may qualify for an exemption or for automatic relief on the amount of residence tax on their main home. For taxpayers who do not qualify for exemption or automatic relief, the amount of residence tax on their main home is capped according to income under certain conditions.

Starting on 1 January 2015, in zones where the annual tax on vacant residential premises is applicable, communes may increase by 20% the portion of the residence tax accruing to them from furnished accommodations not used as a primary residence. The annual tax on vacant residential premises is applicable in zones in which real estate pressures are the highest. The rates are set at 12.5% for the first year of taxation and 25% starting from the second year of taxation.

Source: Government of France (2015a), "Overview of the French tax system – legislation in force as of 31 July 2015", Public Finances Directorate, General Tax Policy Directorate, Bureau A/Section 4, p. 70.

Box 1.10. **Designing property taxes for sustainable land use**

The impact of property taxes on land use is ambiguous

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 land owners to increase the density of buildings. Per m² 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 1.10. **Designing property taxes for sustainable land use** (*cont.*)

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 abovementioned 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. 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 less 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 societal point of view. They create a mechanism through which land owners 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 land owners to pursue specific forms of development, such development will occur less frequently. Expressed differently, green property taxes force land owners 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 onto 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 1.10. **Designing property taxes for sustainable land use** (*cont.*)

- 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 re-zoning for purely fiscal reasons. They might even be tempted to increase revenues from environmental land taxes such as a soil-sealing or greenfield taxes, 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; and upper-level government 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, U.S. 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 U.S. states tax single-family homes at lower effective tax rates. If effective tax rates were adjusted to be identical for both types dwellings, important incentives for more compact development would be provided.

Adapted from: OECD (2017), The Governance of Land Use in OECD Countries: Policy Analysis and Recommendations, OECD publishing, Paris.

Sources: Brueckner, J. K. and H. Kim (2003), "Urban Sprawl and the Property Tax. International Tax and Public Finance". Vol. 10/1, pp. 5-23; Ihlanfeldt, K.R. (1984), "Property taxation and the demand for housing: An econometric analysis", *Journal of Urban Economics*, Vol. 16/2, pp. 208-224; Song, Y. and Y. Zenou (2006), "Property tax and urban sprawl: Theory and implications for US cities", *Journal of Urban Economics*, Vol. 60/3, pp. 519-534; Banzhaf, S.H, and N. Lavery (2010), "Can the land tax help curb urban sprawl? Evidence from growth patterns in Pennsylvania", *Journal of Urban Economics*, Vol. 67/2, pp. 169-179; Blöchliger, H. and M. Nettley (2015), "Sub-central Tax Autonomy: 2011 Update", *OECD Working Papers on Fiscal Federalism*, No. 20, OECD Publishing, Paris, http://dx.doi.org/10.1787/5js4t79sbshd-en.

There are some other local taxes for such things as household waste collection, but their contributions to total revenue are relatively small. Local authorities may also tax: estate revenues (e.g. rent on private assets, remuneration of an occupation agreement in the public domain), income from local public services and relevant authorities, and

European structural funds. The contributions of these sources to the total revenue of local authorities are also relatively minor.

The Ile-de-France region has some additional revenue tools. In 2015, a special supplementary annual tax was introduced for Ile-de-France region to help finance investments in public transport. It is paid by all taxpayers liable for the property tax on developed land or for the business premises contribution in the communes in the Ile-de-France region.[16] There are also special infrastructure taxes payable by all taxpayers (individuals or legal entities) who are liable for local taxes. In 2011, this type of tax was introduced to support transport projects in metropolitan Paris (*Société du Grand Paris* project).

The second major funding area is transfers from the State to local authorities. These transfers are composed of three main sources: i) depreciation and operating grants, ii) capital allowances and iii) compensation grants. Among depreciation and operating grants, the most important is the total operating grant, which was first established in 1979. Capital allowances include an equipment block grant which is given to *préfets départements* in some municipalities and associations of municipalities to help fund their equipment and infrastructure. There is also a capital endowment grant for rural areas. The tax compensation fund value added is also a form of capital endowment which offsets the VAT paid by communities on their capital expenditure realised two years before. Finally, there are compensation grants. These can be used to offset State transfers to communities for skills development. Compensation grants include the general grant of decentralisation and can also be used to offset exemptions and discounts granted by the State on local taxation.

Local revenues in France have more than doubled since the early 1990s; the total revenue of local authorities increased from 87.5 billion (EUR bn) in 1990 to 215 billion in 2010 and EUR 229.6 billion in 2013 (République Française, 2016). The financial autonomy of communities is viewed within state policy as an important link between taxpayers and their communities and as a way to empower local actors. This policy has been entrenched by the "fiscal autonomy rule"—i.e. the ratio of own resources to total resources (excluding borrowing) cannot go below the level recorded in 2003. At an aggregate level, the fiscal autonomy of communes, intercommunes, *départements* and regions, has increased over time in line with their growing responsibilities. Between 2003 and 2013, regions saw the greatest such increase at 11.9%, followed by *départements* at 9.2% and finally, communes and intercommunes at 5.2% (République Française, 2016: 99).[17] In 2013, *départements* had the highest ratio of fiscal autonomy followed by communes, and regions (Table 1.1).

Table 1.1. **Ratio of local government fiscal autonomy, 2013**

	Communes and EPCI	Départements	Regions
Ratio of own source resources against total resources	66.00%	67.80%	53.60%

Source: République française (2016), "Transferts financiers de l'état aux collectivités territoriales", Annexe au projet de loi de finances pour 2016, http://www.performance-publique.budget.gouv.fr/sites/performance_publique/files/farandole/ressources/2016/pap/pdf/jaunes/jaune2016_collectivites.pdf

Correspondingly, local government *spending* has increased significantly over the past 20 years: from 8% of GDP in 1980 to around 11% in 2013 (République Française, 2016). The increase in subnational spending has been stronger in the regions than in the

départements and communes. However, in recent years this trend towards increased spending has declined somewhat as local authorities have reduced capital expenditures. Much of this restraint was related to the 2008 economic crisis that led to a decline in the level of some State transfers to local governments and to weaker economies in many regions.

It bears noting that a recent fiscal forecasting exercise of subnational governments in France projects that *départements* and regions will exhibit imbalanced budgets before 2020, with financial ratios greater than 100%, the critical threshold (Binet et al, 2016).[18] In contrast, communes over this period were projected to be able to maintain their investments levels to the year 2020.

More could be done with fiscal instruments

Given the fiscal environment, local governments are under increasing pressure to reduce their operating expenses, cut back on investment and to pool services and/or, increase their revenue from local taxes. The last option (of increasing revenue) is limited by thresholds set by the State and can be very unpopular for local residents. As a case in point, the local tax rates in both Nantes and Saint-Nazaire have only very marginally increased over the past several years.

An effective strategy to address these changes is for central government grants to local authorities to be linked to their success in controlling their operating expenses (OECD, 2015b: 39). The budget framework law for 2014 to 2019 will introduce a target figure for local public spending, similar to that used in healthcare, which is one step towards controlling this spending.[19] This target will inform the annual discussions between central and local government concerning local government's contribution to planned budget reduction.

Communes rely to large degree on property taxes on developed land. In an environment of increasing fiscal constraints, this creates a pressure to increase residential and business development, including on suburban and peri-urban land. Further, there are a number of permanent or temporary exemptions that can be granted for all types of local taxation, some of which may undermine land use policies. Municipalities often grant exemptions from the ''territorial economic contribution'', a local property and value-added tax paid by businesses, in order to attract jobs (OECD, 2015b: 39). In doing so, they often encourage investment in suburban or peri-urban locales, which is contrary to spatial development objectives. Finally, local governments also make too little use of their power to modulate taxes on new low-density construction, while a number of measures to ease property access give undue encouragement to new construction at the expense of renovations (OECD, 2015: 39). This also contributes to urban sprawl.

French municipalities should draw on a wider array of fiscal instruments to meet their spatial, economic, environmental and social objectives. Presently, the property tax on developed land generates the largest share of revenue followed by the residence tax, the value-added tax on business income, the tax on business premises and finally, the tax on underdeveloped land. There are many other fiscal instruments that could be drawn on in order to complement spatial development objectives (Table 1.2). For example, presently Nantes and Saint-Nazaire do not use land value capture mechanisms—tools to recover the increases in land value attributed to public interventions such as investments in infrastructure or allocation of development rights—unless they are directly associated with public real estate transactions.

Table 1.2. **Development management fiscal instruments**

Targeted fiscal instruments	Overarching fiscal instruments
Brown-field redevelopment incentives	Dedications (e.g. infrastructure levies)
Capital gains tax	Development impact fees
Conservation easements	Land value tax
Historic rehabilitation tax credits	Linkage fees
Joint development	Property tax
Location efficient mortgages	Real estate transfer tax
Special economic zones	Special assessment tax
Split-property tax	Sub-division exactions
Tax increment financing	Tap fees
Transfer of development rights	
Use-value tax assessment	

Source: Modified from Silva, E. A. and R. A. Acheampong (2015), "Developing an Inventory and Typology of Land-Use Planning Systems and Policy Instruments in OECD Countries", *OECD Environment Working Papers*, No. 94, OECD Publishing, Paris, http://dx.doi.org/10.1787/5jrp6wgxp09s-en.

Box 1.11. **Land use instruments to manage growth and development**

A range of policy instruments is applied to control, regulate and stimulate desired development outcomes in OECD countries. Regulatory instruments such as greenbelts, zoning policies, rate-of-growth-controls, and urban service boundaries are applied to control sprawl, protect the environment and co-ordinate infrastructure investment by shaping the timing, location and extent of physical development. Fiscal instruments operate in practice as taxes and exactions levied on developers to raise revenues and mitigate the negative impacts of development such as sprawl. Incentive-based instruments take 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.

In most countries (including the United States, United Kingdom, Canada and Australia), developers benefit from Brownfield Redevelopment Incentives to encourage them to build in inner-city areas. Contrary to development on greenfield sites, brownfield (re)development poses a number of challenges to developers (McCarthy, 2002). These include expensive land prices at inner city locations, demolition cost of existing structures, clean-up/decontamination cost in previous industrial sites, and limitations imposed by existing zoning regulations. Brownfield redevelopment however, contributes towards regenerating areas experiencing decline and provide many benefits including averting unsustainable urban expansion, increased asset value of the site and the surrounding site, increased tax base, increased employment, environmental protection and effective use of existing infrastructure. Thus, the provision of incentives in these areas is considered essential in reducing development costs whilst helping to achieve sustainable development outcomes. In the United Kingdom, for example, a 60% brownfield housing development target was set by the government in 1998 (raised to 80% in 2008) as a way of regenerating towns and cities and delivering new housing supply on previously developed land (Wong and Bäing, 2010). To achieve this, tax incentives and other assistance such as dereliction aid and gap funding schemes are provided to eliminate barriers for brownfield development. In the US, the Brownfield Act of 2002 sets out the arrangement for providing economic incentives and liability exemptions to developers in Brownfield sites. Prior to the enactment of the Brownfield Act, the federal government, through the 1980 Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), mobilised tax revenues from chemical and petroleum industries, which went to a trust fund (commonly known as Superfund) for cleaning up abandoned or uncontrolled hazardous waste sites.

Box 1.11. **Land use instruments to manage growth and development** (*cont.*)

Historic Rehabilitation Tax Credits exist in most countries to provide incentives for the public to preserve and rehabilitate historic places and cultural heritage. In the US, current tax incentives for preservation, established by the Tax Reform Act of 1986 (PL 99-514; Internal Revenue Code Section 47) include a 20% tax credit for the rehabilitation of certified historic structures and a 10% tax credit for the rehabilitation of non-historic, non-residential buildings built before 1936. In the Brussels Capital Region of Belgium, under the Ordinance on the Conservation of the Built Heritage adopted in 1993, heritage property owners are offered basic incentives: income from unlet listed property is exempt from property tax, listed property located in and willed to the Region is exempt from inheritance tax while owners of listed buildings who open their properties to the public can deduct certain maintenance costs from their income taxes. A portion of building repair costs can be deducted from income earned on heritage buildings in Denmark. Owners of listed buildings are also entitled to grants compensating them for maintenance and repair expenses exceeding the "normal" costs associated with non-listed buildings; a building's rate of "decay per year" is used to calculate the value of its grant, ranging from 20-50% of the repair costs (McCleary, 2005).

In France, registered or listed historic monuments that are open to the public can deduct 100% of their expenses, while such properties not open to the public can deduct 50%. In Germany, owners of nonincome producing protected buildings may deduct all their eligible maintenance and rehabilitation expenses from their taxable income over a period of ten years, at a maximum rate of 10% per year. In Japan, tax concessions to finance private historic preservation are enmeshed in a highly complex set of rules, conditions, qualifications, and exceptions; most of the benefits relate to the transfer of money and property earmarked for preservation, or the regular duties associated with property ownership rather than deductions or credits based on rehabilitation projects (McCleary, 2005). Property given or bequeathed to an eligible nature-conservation organisation has been exempt from capital gains tax in Australia since 2000. Heritage properties are completely exempted from property taxes in Turkey.

Transfer of Development Rights (TDR): TDR is a market-based incentive programme intended to reduce or eliminate development potential in places that should be preserved by increasing development potential in places where growth is wanted (Pruetz and Standridge, 2005). TDR programmes are grounded in the assumption that the development rights of a parcel, as part of the right to convert, can be sold and used in another parcel. The typical TDR programme involves the landowner of a preservation or sending zone (or parcel) selling the development rights to a developer who will use these rights in an area designated as development or receiving zone (or parcel). In general, the receiving area allows for higher density of construction than the base density established by law through density bonuses provided by local governments, thereby creating incentives for developers to buy the development rights (Tavares, 2003). Successful TDR programmes require strict sending-area regulations, market incentives and or ways for development to gain bonus density without using TDR (Pruetz and Standridge, 2005).

TDR programmes are used to achieve a wide variety of objectives including protecting agricultural lands, preserving wildlife habitats and controlling development densities in areas with limited infrastructure or public services (Johnston and Madison, 1997). This instrument is widely used in the USA where it was first introduced in New York City in 1916. A zoning ordinance permitting lot owners to sell their unused air rights to adjacent lots, allowed the "receiving" lot to exceed the height and setback requirements (Johnston and Madison, 1997). TDR programmes exist in other OECD countries such as New Zealand, France, Italy, and Turkey. Despite its popularity in the USA, numerous legal issues and administrative complexity represent some of the key challenges confronting its application in other countries.

Other incentive-based instruments used across OECD countries are use-value tax assessment, Splitrate property tax and tax increment financing. Use-value tax assessment provides landowners with an incentive to maintain agricultural uses in urban and peri-urban areas by taxing agricultural land use at a lower rate than other uses (Anderson and Griffing, 2000). In Japan, some metropolitan areas including Tokyo levy lower property taxes on land designated for agricultural uses (OECD/China Development Research Foundation, 2010). Split-rate property tax is used to encourage redevelopment of obsolete buildings and facilitate revitalisation in older central cities by placing proportionally higher taxes on land than on built structures. This makes it more costly to hold on to vacant or under utilised centrally-located sites. Split-rate property tax is used in many OECD

Box 1.11. **Land use instruments to manage growth and development** (*cont.*)

countries including France, Australia, US, Denmark and Finland (OECD/China Development Research Foundation, 2010). Split-property tax can provoke premature land conversion in outlying areas and therefore requires effective regulatory mechanisms to avoid such displacement effects. Tax increment financing is used as public financing method to provide subsidies for redevelopment, infrastructure provision and other community-improvement projects in many OECD countries.

Source: Silva, E.A. and R.A. Acheampong (2015), "Developing an Inventory and Typology of Land-Use Planning Systems and Policy Instruments in OECD Countries", *OECD Environment Working Papers*, No. 94, OECD Publishing, Paris, http://dx.doi.org/10.1787/5jrp6wgxp09s-en.

Cited works: McCarthy, L. (2002), "The brownfield dual land-use policy challenge: reducing barriers to private redevelopment while connecting reuse to broader community goals", Land Use Policy, Vol. 19/4, pp. 287-296; McCleary, R.L. (2005), "Financial incentives for historic preservation: An international view", (Masters of Science dissertation, University of Pennsylvania); Johnston, R.A. and M.E. Madison (1997), From land marks to landscapes: a review of current practices in the transfer of development rights, Journal of the American Planning Association, Vol. 63/3, pp. 365-378; Pruetz, R. and N. Standridge (2008), "What makes transfer of development rights work?: Success factors from research and practice", *Journal of the American Planning Association*, Vol. 75/1, pp.78-87.

Recent reforms—clarifying responsibilities and empowering regions

The French spatial planning system includes strong protection for specific assets—e.g. historical/cultural, natural, that are incorporated into an integrated system of planning wherein land use issues are considered alongside: multi-modal transportation planning, housing, ecosystem and climate adaptation and mitigation considerations. The planning system is evolving to encourage more comprehensive and integrated planning approaches: comprehensive in the sense that a larger, functional area is considered under the same plan, and integrated in the sense of considering multiple sectoral issues simultaneously. Recent reforms also increase the role of regions in spatial planning and attempt to "detangle" any overlapping responsibilities of different subnational governments.

The national and regional levels

The national level sets broad "rules of the game" along with specific regional directives

There is presently no national spatial development perspective and attempts to establish such policies have been stymied by contention in recent years (Geppert, 2015: 111). Instead there are a number of sectoral guidelines and a body of national rules governing new developments and changes to existing buildings called National Urbanism Regulations (*Les dispositions impératives du règlement national d'urbanisme*, RNU). A small number of RNU have national authority and apply in all circumstances; otherwise, where there is a local plan, the *local rules* take precedence. As a general rule, in the absence of local plan, the RNU forbids new buildings outside of built-up areas with the sole exception of those relating to changes to existing buildings or that are of agricultural nature. This clearly creates an incentive for a commune to be part of a local plan. Beyond this, there are also particular national rules called "spatial planning and urbanism laws" (*Les Lois d'Aménagement et d'Urbanisme*, LAU) which apply to coastal areas and mountainous regions; they cannot be overruled in any circumstances, including by local plans. Since 1980, the coastal and mountain laws have influenced land use planning, and slowed down urban spatial extension in fragile areas.

The national level also issues regional directives (*Directive Territoriale d'Aménagement et de Développement Durables*, DTADD) which can have a long time scale. Finally, there are a set of national regulations that establish guidelines for landscape enhancement and protection—these are commonly known as "landscape directives" (*Les directives paysages* or *Directives de protection et de mise en valeur des paysages*).[20] The regulations mainly concern planning requirements (e.g. the volume and height of buildings and external aspects of the development) in order to, for instance, preserve views of a historical monument. They can be influential in the determination of planning applications.

Box 1.12. **Is there a "Europeanisation" of planning?**

Is the gradual expansion of the European Union (EU) agenda creating a "Europeanisation" of planning? Are distinct planning traditions across European states becoming more similar as a consequence? Are planning tools and methods converging? The concept of "Europeanisation" is a process and not an act and can be measured in a variety of ways such as "changes in rules, procedures, policy paradigms, styles, ''ways of doing things,'' shared beliefs, or norms" (Stead, 2013: 4). It involves both top-down processes emanating from EU instructions but also a bottom up and horizontal policy transfer and policy learning processes.

The processes of Europeanisation have been a long project. The Council of Europe 1964 report on *Regional Planning a European Problem* put spatial development in member countries on the political agenda (Kunzmann: 45). Subsequently, a number of conferences and reports furthered this agenda, with a focus on transnational issues. In 1983, a *European Charter of Regional/Spatial Planning* was adopted that set fundamental objectives for Europe's territorial development which at the time were "balanced socio-economic development of the regions, improvement of the quality of life, responsible management of natural resources and protection of the environment, and rational use of land (cited in Kunzmann, 2006: 46). Subsequently, in the early 1990s, the EU became instrumental in establishing transboundary and interregional co-operation networks to address the need to plan across functional territories. The INTERREG programme supports cohesion policy by forwarding cross-border, transnational and interregional co-operation. Numerous studies of INTERREG's effects has pointed to the diffusion of spatial planning practices and ideas across European countries as a result of this program and its approach (e.g.Dabinet, 2006; Tewdwr-Jones and Williams 2001).

By the late 1990s the EU had adopted the European Spatial Development Perspective (ESDP) with the three main priorities of i) development of a balanced and polycentric urban system and a new urban-rural relationship; ii) securing parity of access to infrastructure and knowledge; and iii) sustainable development, prudent management and protection of nature and cultural heritage (European Commission, 1999: 11). It has been described as a "manifesto which stressed the importance of space in sectoral policies" and as "a powerful pan European source of information on principles of spatial development" (Kunzmann, 2006: 51). The ESDP led to the creation of the European Spatial Planning Observatory which provides reliable comparative spatial data for all of Europe.

While the EU does not have a competence in spatial planning, it has certainly been instrumental in some areas—particularly transboundary co-ordination and comparative analysis. However, planning cultures and practices across Europe continue to be diverse—informed by different disciplinary traditions and cultures and debates (Santamaria & Elissalde, 2015).

Source: Dabinett, G. (2006), ''Transnational Spatial Planning—Insights from Practices in the European Union'', *Urban Policy and Research*, 24:283–90; European Commission (1999), European Spatial Development Perspective (ESDP) (Potsdam, May 1999), http://ec.europa.eu/regional_policy/sources/docoffic/official/reports/som_en.htm (accessed 17 July, 2016); Tewdwr-Jones, M., and R. H. Williams, (2001), *The European Dimension of British Planning*. London, UK; Kunzmann, K. (2006), "The Europeanisation of spatial planning" in *Regional development and spatial planning in an enlarged European Union*, pp.43-64; Stead, D. (2013), "Convergence, divergence, or constancy of spatial planning? Connecting theoretical concepts with empirical evidence from Europe", *Journal of Planning Literature,* 28(1), pp.19-31; Santamaria, F. and B. Elissalde, (2015), "Do you speak the European? French practitioners of spatial planning and territorial development questioned on some key-concepts of the European Union regional policy", *Information géographique*, Vol. 79/1, pp. 55-71.

Above the national level there are also European Union directives and other requirements that lead to new national laws and regulations, that in turn have implications for subnational governments (Box 1.12). In addition, the EU provides funding for subnational programs and projects, including regional development, that can alter the behaviour of regions. While these funds are relatively modest when compared to the GDP of the entire EU, they have been highly attractive to regional governments, because they are a new source of funds that can be large in terms of the budget of a region. They are often the only significant source of unencumbered money available to a region and are provided over an extended period of time.

The role of regions has recently been strengthened relative to its authority a decade ago

The new reforms are best understood against the structure of the previous system. In the past, regional plans provided only non-binding guidelines and strategies for the *départements* and commune levels. While strategic plans were developed for larger territories there was no requirement that local land use plans adopt the logic of the regional plan. There were four such regional plans altogether, one of which related to spatial development with the others being sectoral in nature.

The spatial plan—the Regional Spatial and Sustainable Development Plan (*Schéma Régional d'Aménagement et de Développement Durable du Territoire*, SRADDT)—was the main tool for regions to express planning policies.[21] It provided guidelines for *départements* or communes and served as a signal of the regional government's spatial ambitions and plans for major public investments across: housing commerce, industry, agriculture, environment/recreation, and transport.[22] It also included population density targets. The SRADDT was a guiding document for financial incentives and contractual regional policies, but it had little direct influence on local land use decisions. Every region could adopt this type of plan (if they wanted to), except for Ile de France, Corsica and the overseas *départements* and territories (*Départements et territoires d'outre-mer*, Dom-Tom) for whom there were special plans.[23]

There were also three sector plans at the regional level. The first, dealt with transportation, (the Infrastructure, Transportation and Inter-modality Regional Plan, *Schéma Régional des Infrastructures, des Transports et de l'Intermodalité*, SRIT). It was a tool to co-ordinate individual mobility and goods transportation at a regional scale and to promote inter-modality for highway, public transportation, shipping and rail. The plan creates complementarity between transportation systems and between public and private actors and sets performance goals for transportation services.

The second type of sector plan identified the ecological network (the Ecological Consistency Regional Plan, *Schéma Régional de Cohérence Ecologique,* SRCE). This included the identification of biodiversity reservoirs and ecological passageways (*TrameVerte et Bleue*), and measures to guarantee their preservation. These plans were co-developed by the State and the Region and covered the entire regional territory. They were created after the "*Grenelle de l'Environnement*" (an open multi-party debate) and the national environmental law. In effect, the SRCE integrated natural resources protection into regional planning.

The final sectoral plan was for climate, air and energy (*Schéma Régional du Climat, de l'Air et de l'Energie,* SRCAE). It covered the whole country and was again co-developed by the State and the Region in question.[24] It presented an analysis of climate, air and energy trends, the policy environment and guidelines for climate change

adaptation to the years 2020 and 2050 respectively. It constituted the regional application of French and European commitments to climate policies. The plan set qualitative and quantitative objectives in a form that was consistent with the objectives defined in European legislation on energy and climate. In each region, the SRCAE was elaborated with associated special purpose bodies involved in the energy and climate fields.

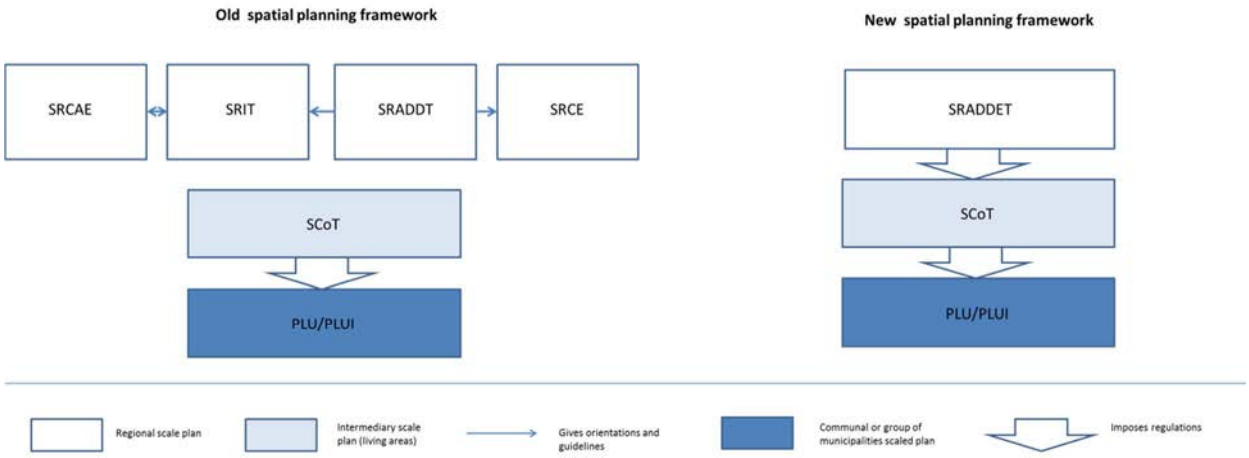
With the new NOTRe Act (2015), spatial planning by regions takes on a much stronger role

Regional planning is in the midst of change—the old SRADDT is being replaced by a new type of regional spatial plan that requires conformity by lower order plans (Government of France, 2015c). As such, the new Planning, Sustainable Development and Territorial Equality Regional Plan (*Schéma Régional d'Aménagement*, *de Développement Durable et d'Egalité du Territoire*, SRADDET) has a much greater influence on planning policies than did its predecessor—it places regions as lead actors in the field of planning and sustainable development. Unlike the previous planning process which was not compulsory, the new law requires regions to develop an integrated spatial plan. The new law replaces the essential elements of the three sectoral plans (the SRIT, SRCAE, SCRE) and adds a requirement for the region to develop a specific plan on the prevention and management of waste by 2017. The deadline for regions to adopt a SRADDET is 31 December 2018 (Figure 1.4 provides an overview of the changes).

The SRADDET addresses the long-held critique that the French planning system duplicates functions between levels of government by removing the general competence of regions and *départements*, such that they can no longer intervene in areas that are beyond their scope of jurisdiction.[25]It further clarifies the areas of responsibility among the various levels of government by explicitly transferring responsibilities.[26] For instance, regions under the new legislation gain responsibility over interurban transport.[27] The SRADDET also establishes requirements for a regional strategy for economic development, innovation and internationalisation which sets regional guidelines for a period of 5 years (to be adopted prior to January 4, 2017). Once the new plans are in place, actions of EPCI and the communes in economic development must be compatible with its guidelines. The new law also includes a stipulation that the plan can set directions in any field that falls under its exclusive jurisdiction. But regions remain restricted by the loss of the "general competence clause" and the principle that no government can exert oversight over other governments where it lacks clear jurisdiction.

Beyond the reorientation of plans, there is another new mechanism to help co-ordinate land-use policies. MAPTAM establishes that in each region regular conferences are to be hosted by regional council presidents to promote the concerted use of planning competences by every level of local authority in order to support an integrated and cross-disciplinary planning process, instead of a sector-specific one.

Figure 1.4. **Old versus new planning framework**



Box 1.13. **Mechanisms for vertical co-ordination on spatial planning**

Currently, many countries lack the structures to achieve the required co-ordination between levels of government on spatial planning issues. Both France and Austria have established regular conferences that provide such structure, but at different scales and for different topics. France's Territorial Conferences for Public Action focus on dialogue between regions and local authorities and are open to a range of thematic areas whereas the Austrian Conference on Spatial Planning assembles representatives from all levels of government and is specifically targeted to address spatial planning issues.

France's Territorial Conferences for Public Action (*Les Conférences Territoriales de l'Action Publique*, CTAP)

CTAP are a relatively new institutional mechanism. They were established (mandated) as part of the MAPTAM law (2014) and are intended to strengthen dialogue between local authorities (including EPCI) and the region and to co-ordinate responsibilities. CTAP in each region are chaired by the President of the Regional Council. Its membership includes: presidents of the council *départements* and EPCI over 30 000 inhabitants; a representative of EPCI under 30 000 population for each *département;* an elected representative for communes greater than 30 000 for each *département*; an elected representative of the communes of 3500 inhabitants 30 000 inhabitants for each department; an elected representative of municipalities with fewer than 3 500 inhabitants for each department and; a representative of the local authorities in mountain areas.

Each CTAP organises its work around thematic topics. The state representative in the region (prefect) is informed of meetings of the CTAP and it participates, at its request, or when a community asks a state delegation of authority. The CTAP determine arrangements for co-operation actions through the adoption of draft conventions of agreements between parties and are reported yearly. The objective is to support an integrated and cross-disciplinary planning process, instead of a sector-specific one.

The Austrian Conference on Spatial Planning (*Österreichische Raumordungskonferenz,* ÖROK)

Austrian Conference on Spatial Planning was founded in 1971; it 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. The organisation 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 includes 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 approximately 25-30.

Box 1.13. **Mechanisms for vertical co-ordination on spatial planning** (*cont.*)

One of the central tasks of the ÖROK is the preparation of the Austrian Spatial Development Concept, which covers a planning period of approximately 10 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, the ÖREK 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.

The ÖROK is also 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 2014-2020. The ÖROK also serves as National Contact Point within the framework of European Territorial Cooperation.

Source: Österreichische Raumordnungskonferenz ÖROK, **,** http://www.oerok.gv.at/ (accessed 1 June 2016); Vie Publique (2016), "Que sont les conférences territoriales de l'action publique ?", www.vie-publique.fr/decouverte-institutions/institutions/collectivites-territoriales/intercommunalite-cooperation-locale/que-sont-conferences-territoriales-action-publique.html.

France's territorial coherence plans still play a key role in planning across administrative boundaries

Over the past two decades there has been a significant rise in the number of strategic spatial plans across urban agglomerations in the OECD (Betrand et al., 2015). 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" (*basin de vie ou aire urbaine*) for parts of the country. This type of plan was established by the Solidarity and Urban Renewal law (*loi Solidarité et Renouvellement Urbain 2000*, SRU).[28]The plan establishes a reference framework for territorial planning over a time frame of 20 years. As such, it does not give granular detail on land use development—that task falls to planning decisions at the scale of the commune (PLU for instance), but these must align with the principles or fundamental guidelines presented in the SCoT. Land use plans in the SCoT are often at a scale of 1: 100 000 in contrast to local urban development plans that range from 1: 5 000 to 1: 2 000.

Table 1.3. **Advancement of SCoT coverage**

	SCoT (count)	Communes (count)	Population (in millions of habitants)	Surface (km 2)
Perimeter of ScoT approved	51	3 248	4.5	49 093
SCoT elaboration initiated	98	5 955	7.5	98 769
SCoT elaboration ended	28	1 347	2.7	17 439
Approved SCoT	271	14 587	37	200 708
Total	**448**	**25 137**	**51.7**	**366 009**

Source: Fédération Nationale de SCoT (2015), "Panorama des SCoT au 1er janvier 2015", www.coeur-herault.fr/sites/default/files//field/pdf/panorama_des_scot.pdf.

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% out of total), 50.5 million inhabitants (77% of the French population) and almost 60% of national territory (Government of France, 2015b).

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, the State set up annual calls for proposals starting in 2010 to increase participation in rural territories with limited human and financial resources to draw up SCoTs.

A SCoT contains 3 documents: a presentation report, a sustainable planning and development project (*Projet d'aménagement et de développement durables*, PADD) and a guidance and targeting document (*Document d'orientation et d'objectifs*, DOO). The PADD is the policy document which establishes the main thrusts of territorial development for the next 15 to 20 years; the DOO is the technical document which is enforceable against local documents such as the local housing programmes (*Programmes locaux de l'habitat*), urban mobility plans (*Plans de déplacements urbains*), local urban planning plans (*Plans locaux d'urbanisme*) and municipal maps (*Cartes communales*).

Since the French law of 13 December 2000 on solidarity and urban renewal, 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 *départemental* 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).

Commune and intercommunal levels

The commune and intercommunal levels elaborate specific land use laws and provide planning permissions

Ultimately it is at the local, or commune, level where detailed land use development plans and intercommunal local land use development plans (*Plan Local d'Urbanisme*, PLU[29] and *Plan Local d'Urbanisme Intercommunal*, PLUI) establish a specific planning regime, and set general land-use laws for a given territory. These plans take into account the guidance and directives from upper level planning policies (national, region), but also consider local conditions for development. They set a framework for sustainable local development and identify appropriate uses for specific parcels of land. Once the law is in

effect, every actor involved must follow the law and if businesses or individuals build a structure without planning permission, they face court fines and the construction may be demolished. One of the main orientations is to use less space when urbanizing. In France, zoning rules are included in local urban development plans that are passed as local laws and have juridical standing. This is in contrast to plans in the United Kingdom for instance, where "plans are not part of the law, but are made under the law" (Cullingworth and Nadin, 2003).

Such plans can cover a single commune (PLU) or a group of communes (PLUI) with some exceptions for rural areas.[30] The 2014 Law for Housing Access and Renewed Urban Planning (*Loi pour l'Accès au Logement et un Urbanisme Renové*, ALUR), encourages municipalities to participate in a PLUI by forming a multi-commune agreement, especially for those in more urbanised areas. It established that the competencies for land use planning will be transferred to the intercommunal level automatically by 27 March 2017, unless locally-elected officials decide otherwise. There are four different parts to such plans: a presentation report, a sustainable development planning project, the ruling (or zoning) and map annexes.[31]

The PLU and PLUI must take the SCoT's planning framework into account, when one exists. The SCoT thus constrains the set of planning choices in local plans. The PLUI provides strategic planning and zoning functions, including regulations on residential, commercial, industrial, agricultural, transport-related, and environmental/parks/recreation land uses. They also include density targets. The PLU and PLUI take priority over other local government policies and actions, and are legally binding, with no exemptions. They are voted on by municipal council and are never replaced but are updated. Because these plans are statutory they have a high level of enforcement.

Lower order plans, including local land use plans, must conform to higher order ones

Requirements of a lower order plan or document (established by a lower level of government) cannot contradict a higher order plan. This is the relationship between the SCoT and the PLU/ PLUI (intercommunal and communal), and between the previous SDRIF/SAR/PADDUC/SRADDET and the SCoT (regional and intercommunal). Further, the SCoT must be compatible with landscape protection and improvement directives set out in the national Mountain and Coastal laws. Compatibility requirements are less demanding than are conformity requirements in the sense that conforming requires complete consistency, while compatibility allows significant differences, as long as the general intent of the superior plan is preserved.

Another type of relationship is awareness, or "taking into consideration". Some planning documents must take into consideration other plans and laws in the same field. This restriction only implies that plans should not ignore the general objectives of other related documents, but can deviate from them if there are sound arguments for doing so. This is the relationship between the SRCAE/SRCE and SCOT. It is less demanding than the compatibility requirement.

Recent reforms solidify the importance of intercommunal plans

In 1967, the Land Planning Law put in place the current system of land use governance, with the creation of the SDAU Planning and Urban Master Plan (*Schéma Directeur d'Aménagement et d'Urbanisme*) and POS Land Use Plan (*Plan d'Occupation des Sols*). This corresponds to the implementation of a strict land regulation. Through the

Solidarity and Urban Renewal law (SRU) in 2000 the SDAU and POS evolved into the SCoT and PLU, which were documents integrating a sustainable development plan. They were the tools brought about by decentralisation, and an increased municipal influence on planning.

Protecting the natural environment and preserving the built environment are now required elements of land use plans

Since 1976, all land use planning documents must include an environmental impact analysis of the plan. The Solidarity and Urban Renewal Act of 13 December 2000 imposed an even greater consideration of the environment and, more broadly, of sustainable development in the PLU. Similarly, the recent Grenelle laws have further strengthened these requirements. As a result, land use planning should now fully reflect the importance of preserving natural spaces and heritage, and maintaining urban quality by integrating these ideas into sustainable development objectives. In addition, since 2004, the legislation on environmental and urban planning for a PLU also requires a strengthened environmental assessment procedure known as a "strategic assessment of environmental impact" (SEA), to reflect the requirements of European Directive 2001/42/EC.

Recent changes have created a clear hierarchy of plans that limit options for decisions at lower levels, but result in greater consistency across space

The current wave of legislative changes implements a strong hierarchical relation among the levels of government. This means that there will be a hierarchical relationship between the SRADDET, which is a region plan and the SCoT, which is an intercommunal plan that will give regions more influence in planning decisions. This in turn cascades down to local policies, since the PLU/ PLUI have to be compatible with the SCoT. The other change is that inter-municipal plans are gaining in importance (with the PLUI). Consequently, actual land use plans will be more constrained by regional, metropolitan and common issues and be less about very local issues of any given commune that retains the ultimate responsibility for generating a plan that will become the actual law establishing allowable land uses.

Since 2014, three laws have had a large effect on the current system of land governance: the law for Housing Access and Renewed Urban Planning (ALUR), the law Territorial Public Action Modernisation and Metropolis Affirmation (MAPTAM) and the law NOTRe.[32] They provide the most recent revisions to the French planning structure and reinforce the hierarchical relationship among levels of government that have ultimately lessened the influence of the municipal level in planning policies. With these current legislative changes the government is establishing a system that privileges regional and inter-municipal levels of governance (over individual communes) and prioritises the planning tools at those levels.

Planning permissions and enforcement

Ultimately, spatial plans that are constructed at a higher level are translated into specific laws for how particular parcels of land within a commune can be used. It is at this level that the private interests of the land owner are confronted with the public interest embodied in zoning restrictions and specific development ordinances. When no change from current use on a parcel of land is contemplated, the existence of land use

regulations has little impact. But, when a change in land use is desired then these regulations come into effect and the proposed new use may, or may not, be compatible with the regulations. In France, in every instance the landowner has to apply to the commune for permission to alter the use. Because land use plans in France are statutory they are subject to all the usual due process requirements applicable to any law.

Planning permissions

In terms of planning permissions, there are two forms—an informal planning advice certificate and secondly, formal planning permission. The planning advice certificate (*certificat d'urbanisme*) is issued by the *mairie* or by the *préfet* and provides general planning information on a particular site. It may be best described as an "in principle" planning consent; it does not give planning permission for a particular project, for which specific approval must be sought but it does suggest that the proposed use is allowable within the current law. Planning certificates are useful documents in that they offer a strong assurance for routine developments, but they do not provide the same level of guarantee as planning permissions and they contain far less detail.

Yet another important difference is that planning certificates are not subject to the right of opposition by third parties in the same way as are planning permissions. In cases where there is a first division of land for one or more new dwellings, a special kind of consent called a *déclaration préalable* or a *permis d'aménager* (where more than one dwelling) is required. Approval for this procedure needs to be attained by the seller prior to placing the land for sale on the market.

Development is allowed on property where new construction activity is authorised in the land use plan

As a general rule, formal authorisation is required for all new construction work, and also for existing buildings where the works either increase the footprint of the building, or create new surface levels. Consent is also required for certain alterations and for a change of use. Authorisations in these cases may require submission of either a planning application or a works declaration (*Demande de permis de construire* or *Demande de déclaration préalable*). There is greater discretion to build an extension to an existing property than is the case for a separate new building, but only provided the property is located in an area which has a local plan and where the land is zoned for construction. In most rural areas any extension greater than 20m² requires a planning permission, unless there is a formal local plan (either *Plan d'Occupation des Sols*, POS or *Plan Local d'Urbanisme*, PLU) in place. There are particular rules and processes governing building works in a conservation area, and for changes to a listed building or for construction within 500 metres of a listed building. These all require prior approval by the local *mairie* or *préfet* as few, if any, dispensations are available. It is a criminal offence to undertake works requiring a planning permission without getting prior consent. The penalty is a fine of up to a maximum of EUR 300 000 and two years in prison.

In small communes that may not have a land use plan, responsibility for approval of land use changes comes through the Office of the Préfet

If the *commune* does not have a local plan in place, or it is a small commune (under 10 000 inhabitants), then planning permissions are normally managed by the *préfeture* — through the Regional Directorate of Environment, Planning and Housing (*Direction Régionale de l'Environnement, de l'Aménagement et du Logement*, DREAL). DREAL is

a joint branch of the Ministry of Ecology, Sustainable Development and Energy, and the Ministry of Housing, Equality Territories and Rural Policy.[33] It is a regional planning and highways *département* with a network of local offices throughout each *département*. Ultimately the mayor of the commune involved formally signs the planning consent (or refusal) on behalf of the public authorities, but the mayor may not actually have made the final decision.

It is not unusual for the *préfeture* to make a decision with which the mayor is at odds. If the mayor/local council disagrees with the opinion of the *préfeture*, and the council is not the planning authority, then they can make an appeal to the *préfet* within two months of the decision. Conversely, if the local council is the planning authority, then the mayor can make a decision that conflicts with the advice given by the DREAL. The mayor is not obliged to accept the advice of the DREAL (except in very particular circumstances). Appeals can subsequently be made to the *préfeture* by involved parties. In some cases small local councils have come together in an inter-commununal body (*Etablissement Public de Coopération Intercommunale,* EPCI), to which they have transferred responsibility for planning and certain other matters. In these cases, it is the Chairman of the intercommunal body who will have primary responsibility for planning decisions (French Property, 2016).

Expropriation

Expropriation of private property for public uses requires a lengthy process

In France, land can be expropriated by all levels of government as well as by public utilities. Expropriations for private uses of land are not possible. Reasons for expropriations include the construction of infrastructure, public buildings, and housing developments as well as the establishment of nature reserves. In urban areas, land can furthermore be expropriated in designated urban renewal zones in order to facilitate urban renewal projects.

There are two steps in the mechanism for the expropriation of private land: an administrative stage where there is a public inquiry, in order to have the population's opinion about the public and common interest of the operation; and second a land inquiry where there is a precise list of lots to be expropriated and the landowners. The regional delegate of State is the one who decides whether it is or not a case of public benefit, and if so decides on the amount of compensation, which is derived from the market value of the property in question. The process is long because landowners have the possibility of challenging the process in court. The actors that have the ability to expropriate are: the national government, communes, the regional authorities, and Public Land Institution (*Etablissement publics foncier*, EPF). Expropriation of private land for private use by another party is impossible in France; it can only be done for public use (see Box 1.14 for comparative examples).

Box 1.14. **Expropriation powers across OECD member countries**

In the **Czech Republic**, expropriation is possible for developments in the public interest if all other attempts to acquire the required land have failed. Reasons for expropriation are infrastructure construction, public utility developments, urban renewal projects, flood protection, national defence and nature reserves. For private purposes, land may only be expropriated in order to provide access to a plot. In practice, land is rarely expropriated, because the threat of expropriation suffices to make land owners sell their land voluntarily. Compensation for expropriation is paid either i) at the amount of the usual price of the land or the building including its accessories if the property rights of the original owner were ended, or ii) at the amount of the price of the rights based on the factual proof if property rights have been restricted.

Box 1.14. **Expropriation powers across OECD member countries** (*cont.*)

In **Finland**, land can be expropriated for a variety of reasons, such as the provision of public infrastructure and housing, the establishment of nature protection areas and for mining activities. When local plans zone areas in a way that make it impossible for a private land owner to generate a reasonable return from it, the state can be obliged to expropriate the area and pay compensation for it. However, the requirement to compensate land owners does not cover areas used for the construction of roads. Expropriation of private land for other uses is not possible, but the state can expropriate land and sell it to another private developer. While legally possible, such a procedure would face increased political challenges and legal scrutiny.

In **Germany**, municipalities have the possibility to expropriate land if it is in the public interest. It is a measure of last resort and is only allowed if all possibilities for an amicable arrangement have been exhausted. The main reasons for expropriation are making land available for use according to the regulations of the binding land use plan, developing empty or lightly developed plots in urban areas and urban renewal projects. As long as a project is in the public interest, no distinction between private and public use is made by the law. All expropriation measures must explicitly grant compensation, which is calculated by independent experts. Compensation may take the form of money, alternative real estate, or the transfer of other rights.

In general cases, land in the **Netherlands** can be expropriated if a proposed development is in the public interest, but the existing land owner is not able or not willing to carry it out. In addition, the proposed development must be urgent and the public body must have first tried to acquire the land amicably. This is irrespective of whether the proposed development will be carried out by a public or private investor. Furthermore, specific cases for expropriation exist, such as water safety, national defence and the readjustment of fragmented plots of land. Once the legal criteria are met, expropriation procedures are straightforward and experts determine the compensation that has to be paid.

Land ownership and development rights are considered separate issues in the **United Kingdom**. In general, ownership does not give the automatic right to develop land and all developments require planning permission. Expropriation is possible for both public and private developments, including infrastructure projects, public facilities, and also commercial projects such as retail and residential developments. Property owners are compensated for the loss of their land or premises at current market rates. Expropriations were frequent in the in the decades after 1945, but are used sparingly since the 1980s even though they pose few legal difficulties.

Source: OECD (2017), *The Governance of Land Use in OECD Countries: Policy Analysis and Recommendations*, OECD publishing, Paris.; Czech Republic (2006), Zákon č. 184/2006 Sb Zákon o odnětí nebo omezení vlastnického práva k pozemku nebo ke stavbě (zákon o vyvlastnění) [Coll., on the Withdrawal or Restriction of Ownership Rights to the Land or Buildings (Expropriation Act)], www.zakonyprolidi.cz/cs/2006-184, Finland (1999), Maankäyttö- ja rakennuslaki [Land Use and Building Act 132/1999], www.finlex.fi/en/laki/kaannokset/1999/en19990132.pdf ; France (2016), Code de l'expropriation pour cause d'utilité, publique, www.legifrance.gouv.fr/affichcode.do?cidtexte=legitext000006074224&datetexte=20160807, Germany (1960), Baugesetzbuch (BauGB) [Federal Building Code] www.gesetze-im-internet.de/bundesrecht/bbaug/gesamt.pdf; Netherlands (2015), "Onteigeningswet" (Expropriation Act), http://wetten.overheid.nl/BWBR0001842/2015-07-01, United Kingdom (2004), "Planning and Compulsory Purchase Act 2004", www.legislation.gov.uk/ukpga/2004/5/contents.

Appeals

Procedures for appealing decisions on changes in land use

Appeals arise typically if a landowner's request for a change in use is refused and they choose to ask for a new hearing. For this to happen there has to be a flaw in the previous process because the law establishes allowable land uses and cannot be challenged directly. Alternatively, the land use change may be approved, but other parties can try to block the change in use. There are many possibilities for legal recourse, which can encourage NIMBYism (Not In My Backyard) phenomenon—or as is said in France, *pas dans mon jardin*. This can involve efforts to: block building permits, dispute the planning process or dispute the underlying objective the plan itself. Any individual or

association can go to the administrative courthouse to issue a complaint about a land use decision relating to the PLU/PLUI and SCoTs, or regarding an individual permit for a new or changed development or land use.

A 2009 study on land use litigation in France found that only approximately 10% of all disputes heard by administrative courts are for the annulment of specific planning documents (Melot, 2009: 6). Therefore, litigation over individual decisions on specific parcels is far more common. Of the litigation relating to land use plans, the majority of such disputes were found to be unsuccessful (63%). It was further found that disputes filed by associations have a higher rate of success in courts than do those filed by individuals (Melot, 2009: 7). This suggests that courts typically uphold the validity of local planning laws.

A separate study which analysed litigation related to land use at the national level found that disputes tend to be concentrated in areas where land faces the greatest redevelopment pressures, such as on the fringe of large cities (i.e. peri-urban areas), or in coastal and mountainous areas (where national rules are especially strict) (Aubusson Cavarlay et al., 2005). This is to be expected, as these are areas that are likely under the greatest stress for competing and changing land uses. For further discussion of land use conflicts in peri-urban areas, see Box 1.15.

Box 1.15. **Peri-urban land use conflict**

Peri-urban space—that is, the landscape that transitions from an urban fringe into a rural zone—is a frequent source of land use conflict. Sprawling cities shift fringe areas towards new land uses (including residential, industrial and business areas) and away from their traditional social and economic functions (Seret et al, 2014). Land use planners need to balance diverse interests in such areas, such as the need to protect open green space and natural amenities, to protect agricultural lands, to provide critical infrastructure and transportation for growing urban areas and to meet housing demand. The push and pull between these various uses is inherently tied to questions of how this space should be governed and how to define the public interest in questions about how land should be used and developed (or not, as the case may be).

The table below illustrates the pace of peri-urbanisation in France. An analysis of urbanisation of land (*l'artificialisation des sols*) based on CORINE Land Cover data shows that suburban and central cities contain approximately 57% of developed land, while remote and rural communes near cities have 11% and 32% respectively (see Table below). In terms of the share of land which changed from undeveloped to developed land uses between 2006 to 2012, there is little change, in either urban areas where most land is already developed, or in remote rural communes where there is little demand for land for new construction. Conversely, rural communes near urban areas experienced the largest share of land conversion at 38.7% of all conversions, followed by suburban locales at 29.0%.

Changes in developed land by type of commune, as a proportion of total land cover in France, 2012

Type of commune	Developed land in 2012	Share of land changing from undeveloped to developed land between 2006 and 2012
Suburban municipality (banlieue)	33.7%	29.0%
Central municipality	23.1%	18.0%
Remote commune	10.7%	14.3%
Rural commune	32.5%	38.7%
Total land in communes	**100%**	**100%**

Source: Commissariat Général au Développement Durable (2015), "L'occupation des sols en France: progression plus modérée de l'artificialisation entre 2006 et 2012", *Observations et statistiques*, Vol. 219, p. 3.

Box 1.15. **Peri-urban land use conflict** (*cont.*)

Administrative data provides a source of information on the nature of land use conflicts in peri-urban areas. Modifications to land uses are subject to administrative procedures and can be contested as long as the claimant has a right of action before the administrative tribunal. Actions can be brought forward by private individuals, environmental associations, the *Préfet*, property developers, companies etc.

A 2010 study by Kirat and Pham of administrative proceedings in the Île-de-France area from 1 January 1981 to 31 December 2005 explores the nature of peri-urban conflicts. The data consist of 448 decisions concerning 340 municipalities across three main categories of claims: i) related to industrial and agricultural spaces; ii) related to public services and infrastructure and; iii) urban planning regulations and documents. Of the three types, urban planning documents—that is, urban plans and zoning regulations and permits to build—were the most frequent to appear before the administrative tribunal (178 decisions). These are followed by conflicts related to industry and agricultural spaces (103 decisions), and finally, those linked to public service facilities and infrastructures (78 decisions).

A spatial-temporal analysis of the administrative decisions indicates that ongoing processes of urbanisation lead to land use conflicts occurring at a further distance from Paris. Paris' urban territory continues to expand and agricultural land is reduced in the process. The authors find that a municipality's urbanisation rate (measured as the average annual number of planning permissions granted) is significantly correlated to conflicts involving infrastructure and urban planning (Kirat and Pham, 2010:10). This is consistent with findings from other studies of peri-urbanisation and land use conflict around Paris: "most conflicts are linked to a place-based collective effort to prevent or manage the negative impacts of urbanisation on the agrarian landscapes and products" (Darly and Torré, 2013).

There is also an important socioeconomic dimension to land use conflicts. The study found that: "urban planning and public facility conflicts are linked to the presence of a population whose socio-professional categories are rather affluent, while conflicts involving industrial installations increase in those areas of the inner Paris suburbs which are more socially disadvantaged, although they are more often than not lead by the government" (Kirat and Pham, 2010:12).

Source: Kirat, T. and H.-V., Pham (2010), "Conflicts in suburban land use and administrative litigation: The case of the Île-De-France Region", *IEIF - Réflexions Immobilières*, No. 54; Darly S. and A. Torré (2013). "Conflicts over farmland uses and the dynamics of "agri-urban" localities in the greater Paris region", *Land Use Policy*, Vol. 33, pp. 90–99, doi: 10.1016/j.landusepol.2012.12.014; Serret, H. et al. (2014), Potential contributions of green spaces at business sites to the ecological network in an urban agglomeration: The case of the Ile-de-France region, France. *Landscape and Urban Planning*, 131, pp.27-35.

Main spatial policy aims

Spatial planning as a tool for economic development

Spatial planning is a part of a broader concern by both the nation state and the various levels of subnational government with improving levels of income and employment. For example, in Nantes Saint-Nazaire the key underlying objective for the various local plans is to maintain economic growth. Preserving the environment and ensuring a better distribution of the benefits of growth are key constraints, but increasing the level of economic activity to attract more people and raise local incomes is the objective. Similarly, in Clermont-Ferrand the main objective for the different levels of spatial planning is to form a stronger agglomeration that can restart economic growth in the face of a slowdown in key industries and the potential negative effects of losing the status of being an independent region.

The logic of the growth *pôle* is that governments can influence the level of economic activity at particular locations through the policies they select. Land use policy can

prevent uses on parcels of land by specifying a public interest in another type of activity in the spatial plan and by denying a change in use if an applicant seeks one. However, in a market economy, it is more difficult to ensure that land uses specified in the spatial plan actually occur. For example, while spatial plans may seek to keep specific parcels of land in farming, if returns from farming are too low, the land will simply be abandoned. This asymmetry points to a crucial challenge for spatial planning: blocking specific undesirable land uses is far easier than achieving desired land uses.

The asymmetry is especially important for both household and business decisions where people and firms have alternative location options, including some outside the jurisdiction of the planner. Even at the level of the national government it may be difficult to get firms to move to relatively underdeveloped regions to meet national balanced growth objectives. These locations are typically less developed because they have higher production costs or some other undesirable aspect. To overcome the reluctance of firms, governments typically have to provide a financial inducement in the form of: reduced taxes, subsidies for infrastructure, worker training, or some other compensation. Providing subsidies can satisfy the spatial distribution objectives of a government, but it comes at the cost of committing scarce public revenues to get a firm to locate in what might be an inherently less profitable place. In turn, this leads to dead-weight efficiency losses for the local and national economy.

Protecting the natural environment is an increasingly important planning objective

Many aspects of the environment are public goods that markets will under supply. As a result, governments may be better placed than markets to determine to best quantity to be provided. Spatial plans are a useful mechanism for managing environmental quality because they inherently capture where actions that affect the environment occur, and the parcels of land that experience the consequences of these actions. Where the spill over effects are externalities there can be additional reasons for relying on government to manage the level of environmental effects that have no market price. Spatial plans can block behaviour that has adverse environmental consequences, or ensure that it can only take place at locations that have minimal impacts on others.

In France there is a growing recognition of the importance of maintaining and improving the level of environmental protection. Part of this reflects the growing global concern with climate change, and includes various European Union directives and other international obligations that France must respect. Another part reflects the growing recognition at the local government level that citizens are increasingly concerned with their quality of life, and the condition of the natural environment is critical aspect of the local quality of life.

Choosing the right level of government to manage environmental policy is important because the administrative boundaries of governments rarely correspond to the spatial extent of environmental effects. The level of government that manages environmental effects varies, with the importance of the issue in France. The national government has priority in coastal and mountainous areas where the consequences of mismanagement can have far reaching effects. More localised environmental impacts are managed by subnational governments.[34] Very local externalities are managed at the commune level.

These forces influence spatial plans at the commune level in different ways. The creation of a spatial plan is an exercise in constrained optimisation where the planner has desired objectives or outcomes but faces constraints or limitations on how he or she can

act. One of the factors that limit the choices of the local planner is respecting national and regional spatial plans that impose constraints on local land use plans to accomplish these higher order environmental objectives. Conversely, when local voters demand a higher quality environment, this becomes an element of the objectives of the local government, rather than a constraint.

Common objectives to increase the density of housing and concentrate new housing in urban cores

In France, as in most OECD countries, the increasing concern with climate change is spurring efforts to find ways to reduce emissions. One popular national strategy is to try to encourage more people to live in a greater proximity in existing urban cores in smaller homes and where public transit can replace cars. A secondary benefit for the cities is an increased tax base, which is especially attractive to those cities that have experienced economic decline and outmigration to new suburban settlements. Spatial plans in France have typically adopted this approach, especially intercommunal plans where a city commune plays a lead role. The main strategy is to reduce the amount of suburban land that will be eligible for conversion to housing and to rezone former industrial brownfields in the urban core for housing.

Maintaining land in farming is a high priority in France and is a key planning objective

Farming remains a central part of French identity, even as its share of the national economy declines and the share of the French population that are farmers falls at an even faster rate. In France, the volume and value of farm output continues to grow, but farming is being concentrated on larger farms in areas with better agronomic capability. In areas where land is less productive and there are difficulties in assembling large farms that have contiguous fields, the returns from farming are low and discourage new farm entrants. In an increasing number of circumstances, this is leading to the highest operating cost farms being abandoned. This process of "desertification" has little impact on the food supply, but can seriously alter local ecosystems where they are based on active management of the terrain by farmers.

Spatial planning policy is able to control urban sprawl by denying permission to convert farmland to an alternative use, but it has little ability to reduce farm abandonment. Only higher profits from farming will have this effect. Required reductions in price and income support for farmers in those countries that are part of global trade agreements limit the potential to support agriculture. France does have policies to support new farmers that reduce the cost of entry and also supports farm consolidation. However, these incentives do not significantly impact the rate of return from farming activities. Similarly, the European Union has specific support for farms in hilly and other disadvantaged areas, but it too offers only limited assistance.

Natural lands and water systems have a high degree of protection from development

Current policies of both France and the European Union require local land use plans to protect the natural environment for the benefit of all citizens. At the regional, *département* and local levels an additional benefit from protecting natural environments is their potential to provide a base for outdoor tourism that can play a role in economic development, particularly in rural communes that lack many other opportunities. In

addition, the local natural environment can be a local public good that contributes to the quality of life of residents, even though it has limited benefit for people elsewhere. Establishing strong controls on preserving the local natural environment is also a useful mechanism for keeping land in its current use that can contribute to the planning objective of concentrating future new housing construction in existing urban areas.

Key challenges facing land use in France

A major challenge related to land use in France involves governance mechanisms. While most OECD countries place land use planning at a local government level, the particular challenge in France is that the capacity of communes to carry out and implement effective planning is highly variable. The very large number of small communes, both in terms of geographic size and population, results in local governments that lack planning capability and that autonomously make plans for such a small amount of land that there are inevitable incompatibility conflicts with adjacent communes. This is problematic because communes hold the actual planning responsibility and the majority of the 36 000 communes have populations of less than 1 000 inhabitants. While responsibility for specific land use plans continues to remain at the level of the commune because it is at this level of government that the granularity of actual decisions about particular parcels of land can best be managed, the ability of small communes to develop plans that are in compliance with the plethora of laws, regulations and agreements, that have to be respected is in doubt. Places that lack the resources to have in-house professional services have to contract this function out to consultants. A consequence is that a plan may meet the requirements or constraints that are imposed on the commune, but it may not adequately address local interests in land use, because the outside consultant has no real knowledge of local concerns, and elected officials with this knowledge cannot adequately participate in defining objectives for the planning process.

The resulting a planning framework is also often incapable of addressing common spatial issues. Planning could be much more integrated and cross-disciplinary if more planning and land use decisions were made at a higher level of government. This is the whole challenge of encouraging the greater use of SCoTs and PLUIs as mechanisms to connect the specific plans of individual communes where they have important spillover effects on neighbouring jurisdictions. Presently, there is a combination of “carrot” and “stick” processes to achieve such collaboration. In some cases, the national government compels joint action by communes because it requires action and cannot trust that the competing interests of individual places will be co-operatively resolved. This is most common in instances where protection of the natural environment cuts across multiple communes. In other instances, modest incentives to co-operate can provide the impetus for communes to see that they all can benefit from joint action and once this process is started it can continue. In an assessment of the French system of spatial planning, Geppert remarks that: “although there is co-ordination between different levels of government, it results in joint investments rather than in shared spatial visions and/or common objectives” (2015: 109). This is a long held critique of the planning system. Writing in 1982, Laurini offered a similar assessment, commenting that “the French planning process is more of a conflict resolving procedure than a problem solving one” (Laurini, 1982: 203).

Another major challenge is that the full implications of the various rounds of changes in the number, size and responsibilities of the various levels of subnational government are as yet unknown. France has made major changes in how spatial planning is to be

carried out over a relatively short period of time and these changes have important implications both for local governments who have to adapt to how they set plans, and for land owners who have to assess how the changes have altered their development opportunities. It is presently unclear how land use planning is going to evolve with all the changes implied by the wave of recent legislative changes (e.g. ALUR, MAPTAM and NOTRe). Intercommunal power is increasingly emphasised and the new regions (13 instead of 22) should have more influence on planning. But, with the tradition of the commune's monopoly in term of land use, regions are uncertain about their areas of competence. While the intent has been to make the process of planning more co-ordinated and to establish clearer responsibilities at each level, in some cases the effect has been to destabilise existing relationships that were formed under the old rules and now have to be readjusted to reflect the new rules. This can occur in the middle of multi-year agreements and can affect outcomes. In an assessment of the French system, Reimer et al. remark that France's system of spatial planning is "still at a crossroads" after the reforms of a decade ago, "having failed to find an equilibrium," (2014: 124). While in the long run the new process is probably better, there are clear short term costs that are largely born at the local level.

National policies and directives from the European Union add yet another interface. France is still a centralised State, and while it has greatly reduced the direct role of the national government in land use plans it remains very engaged relative to many other OECD countries. Because France has a unitary government all devolved powers can be altered, and the frequent changes in the last few decades suggest the possibility of further change in the future. Second, while France has largely strengthened local government, the direct role of the State in day-to-day administration through the *préfet* and the responsibility of mayors to the nation State remains. Finally, directives from Brussels, while not directly aimed at land use, can have major implications for land use decisions and plans.

Finally, there is a tension between land protection policies and social welfare policies. SRCAE and SRCE regional plans are concerned with environmental land protection, while the SRU is focussed on establishing higher housing density in towns. Those measures may be necessary, but their logical consequence is higher costs for housing that burden lower income individuals. Higher prices can be explained by a lack of building spaces, increased costs for converting brownfield sites to new uses, and the possibility of land speculation that keeps property off the market until prices rise higher. In addition, there may well be preferences by individual citizens for new construction in a suburban environment that is not adequately recognised by plans. At this point, developing social welfare policies, in terms of housing choices, is intricate. Its existence is perhaps the strongest argument for leaving the ultimate responsibility for land regulations at the commune level. Here the longstanding social tensions in France between a strong State that wishes to set uniform rules and policies for all, and an equally powerful belief in the importance of local democracy where citizens shape their environment can best be resolved by local politicians who are most exposed to the wishes of the electorate.

Notes

1. Prior to the 1982 devolution reforms, this executive position was held by the prefect who was an appointed representative of the national government.
2. The names of the départements were derived from rivers and mountains situated on the territory, in a radical departure from the names of the provinces of the *Ancien Régime*.
3. The cantons were also created during this period as an electoral subdivision of the département. A canton is a territory of around 16 to 20 square kilometres whose boundaries were determined along the same lines as those of the département (i.e. within a single day's journey from the central city, but on foot).
4. OIN have been used for such development as: new cities, major national infrastructure projects such as airports, ports and industrial areas, and for urban renewal.
5. Urban planning agencies hold the legal status of non-profit body, with the exception of the Ile de France Urban Planning and Development Agency which is a public interest foundation.
6. Sustainable development is an overarching objective of French spatial planning. The Spatial Planning and Sustainable Development Act of 25 June 1999 calls for "balanced development of the entire national territory, combining social progress, economic efficiency and environmental protection."
7. The Agency was first established in February 14, 1963 as the Delegation for Spatial Planning and Regional Action (DATAR). In 2006 it was renamed the Interministerial Delegation for the development and competitiveness (DIACT) and in 2009 it was again renamed the Interministerial Delegation for Regional Planning and Regional Attractiveness (DATAR).
8. In the late 1980s and throughout the 1990s DATAR continued to produce spatial forecasting work to guide spatial development across the country. This work presented different visions of how the country could develop according to various economic and population scenarios in order to engage public debate and discussion.
9. For an elaboration of ideal types in spatial planning see CEC, 1997 The EU Compendium of Spatial Planning Systems and Policies Commission of the European Communities (Office for the Official Publications of the European Communities, Luxembourg).
10. Gaston Defferre headed the Ministry of Interior and Decentralisation under the Government of Francois Mitterrand.
11. MAPTAM established 9 metropolitan areas under ordinary law as of January 2015 and 3 special metropolitan areas (Lyon, Aix-Marseille-Provence and Grand Paris) as of January 2016.

12. Spatial planning in France has been marked by ongoing debates regarding the extent to which the goals of territorial equality should be pursued versus those that focus on economic growth and competitiveness. The discourse regarding territorial equality has roots in the post war period when the Paris and a number of other large cities experienced record growth at the same time as many other regions of the country faced economic decline and structural change (e.g. decline in the manufacturing industries).

13. The local business tax (or professional tax) was abolished on 1 January 2010 and was replaced by a local economic contribution (*Contribution économique territoriale*, CET) comprised of a business premises contribution based on the rental value of property and a contribution on business value added calculated on the basis of the value added generated by a business (Government of France, 2015a: 73). The business tax was changed because it was based in part on the value of equipment and could thus be viewed as a deterrent to investment in equipment—particularly for the industrial sector.

14. Please note, these do not add to 100 due to rounding error.

15. The notional rental value refers to the balance of revenue and expenses connected with the use of the dwelling.

16. The yield of this additional tax is established each year by the Regional Council of the Ile-de-France region, up to a cap of EUR80 million for 2015.

17. In 2003, the ratio for fiscal autonomy for communes, *départements* and regions was 60.8%, 58.6% and 41.7% respectively.

18. The study projections are based on annual data from 1982 to 2010 (CAIRN, 2016).

19. The performance objective of local expenditure (ODEDEL) is a code management tool in local spending. It was created by section 11 of the Public Finance Planning Act (PSSA) for the period 2014-2019. It established a performance objective for local public expenditure as a percentage of annual change. The trajectory of evolution in local spending over a four-year deadline was is as follows: 2014: 1.2%; 2015: 0.5%; 2016: 1.9%; 2017: 2%. For operating expenditures, the evolution is as follows: 2014: 2.8%; 2015: 2%; 2016: 2.2%; 2017: 1.9%. Vie Publique (2016). ODELEL. URL: www.vie-publique.fr/decouverte-institutions/finances-publiques/collectivites-territoriales/depenses/qu-est-ce-que-odedel.html (accessed 18 July, 2016).

20. Created by the law on the protection and enhancement of the landscape No. 93-24 of 8 January 1993, now codified in Articles L.350- 1 and following the environment code.

21. The plan includes scale drawings, it is never replaced, and it is updated every 60 months.

22. The SRADDT targets both subordinate plan and other plans at the same hierarchal level and governmental organisations.

23. These exceptions are covered by a Regional Planning Scheme (*Schéma d'Aménagement Régional*, SAR) for French overseas territories; Île-de-France Region Master Plan (*Schéma Directeur de la Région Île-de-France*, SDRIF), the Corsica Planning and Sustainable Development Plan (*Plan d'Aménagement et de Développement Durable de la Corse*, PADDUC).

24. There are also regional economic development schemes (*Schéma Régional de Développement Economique*, SRDE) which include *contrats d'agglomération*, which

focus predominantly on city centres and larger towns, and *contrat de pays*, which are widespread across the country.

25. Authorities however can retain joint competencies in the areas of sport, tourism, culture, youth, and international affairs.

26. E.g. it confirms the transfer of municipal competencies regarding water and sanitation to the intercommunal level 1st January 2020.

27. The transfer of the skills' Departments to the Regions regarding local public transports is planned as from January 1st, 2017. As regards the school transport, the skill of departments transferred from September 1st, 2017. Delegations of skill are nevertheless possible. The road public stations of the department (except Ile-de-France and metropolis of Lyon) will be transferred to the region on 1st of January 2017.

28. Its objective is to update the urban policy by bringing together urban planning, housing and transport issues, inside an urban conurbation. The "Urban planning and housing" part of the law aims at setting up a consistent urban development, and promoting social diversity in terms of housing. In concrete terms, the law stipulates that there must be at least 20% of social housing for cities and urban conurbations or more than 50 000 inhabitants. The law also created SCoTs and PLU, to replace the former SDAU Planning and Urban Master Plan (*Schéma Directeur d'Aménagement et d'Urbanisme*) and Land Use Plan (*Plan d'Occupation des Sols*, POS). Those new land use planning tools answer to a sustainable development requirement.

29. Until 2000 the local plans were called *Plan d'Occupation des Sols* (POS), but since this time they have been replaced by the *Plan Local d'Urbanisme* (PLU). The main aim of the change was to simplify the whole process and to reduce the complexity of the local plan. Nevertheless, the preparation of a PLU remains a significant task, and in smaller rural communes you may well find that no such plan exists. Accordingly, the government has agreed that smaller rural communes can prepare a *Carte Communale*. Increasingly, the smaller local councils have got together to produce a local plan (PLU) on an intercommunal basis.

30. Some municipalities are not covered by a PLU. These are mainly rural areas. For planning, they instead refer to the National Planning Regulation (*Règlement National d'Urbanisme*). For example, in Grand Clermont, only 5 municipalities do not have any planning document and are subject to the National Planning Regulation (RNU) which limits urban development. With the exception of public buildings, buildings required for agricultural exploitations, etc., sectors outside of already urbanized areas of a municipality covered by the RNU cannot be built.

31. Map annexes are at a scale of between 1:2 000 cm and 1:5 000 cm.

32. The 2014 Law for Housing Access and Renewed Urban Planning (Loi pour l'Accès au Logement et un Urbanisme Renové, ALUR) aims to reduce housing costs for renters and promotes the development or rental housing. It also establishes rent capping. Construction norms are going to change and urban planning basics too, in particular the Coefficient on Land Use (*Coefficient d'Occupation du Sol*), which will be suppressed. This suppression is in favour of social diversity: it means that more little constructions can be build and rent. The law also creates PLUI and incites *intercommunalités* to conceive a Local Urban Plan instead of municipalities.

33. DREAL is the regional level of the Ministry of Ecology, Sustainable Development and Energy and the Ministry of Housing, Equality Territories and Rural Policy.

DREAL replaced the Regional Environment Directorates (DIREN), the Regional Directorate of Equipment (DRE) and the Regional Directorates of Industry, Research and Environment (DRIRE).

34. These roles and responsibilities are outlined in the laws on the protection of fragile environments, including mountain and coastal laws (les lois de protection des territoires fragiles et à enjeu telles loi montagne et loi littoral). Since 1980, these laws influenced land use planning, and slowed down urban spatial extension in fragile areas.

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Chapter 2

Land use planning in greater Clermont-Ferrand

This chapter provides a case study of the governance of land use in greater Clermont-Ferrand. It describes the major socio-economic features of the city and surrounding communes, along with a description of the natural and built environment and major development pressures. This is followed by a discussion of governance arrangements and planning tools that can be used to shape land uses. Incentives and disincentives associated with specific tools and the role of other regulatory measures are also discussed. Finally, the major land use issues and challenges facing the city are reviewed.

Clermont-Ferrand is facing structural change—a situation not uncommon to mid-range agglomerations. In Clermont-Ferrand's case, the drivers involve a realignment of the traditional economic base in manufacturing that has been dominated by employment in a single large multinational firm. While the Michelin tire company continues to have its corporate headquarters in Clermont-Ferrand and has strengthened its research activities there, its production facilities are located elsewhere. Further, with the Auvergne and Rhône-Alpes regions recently being merged to form one new region, Clermont-Ferrand loses its status as a regional capital and along with this, public sector employment and institutions. Although the region has several strengths, a key challenge is devising a development strategy that will allow a transition to a new role. Accompanying the changes in economic and political functions will be changes in the way land is used. Clermont-Ferrand, together with its surrounding locales, will need to respond to France's new spatial planning framework at time when it also potentially faces local changes in terms of how land is valued.

The commune of Clermont-Ferrand and the rest of the Puy-de-Dôme *département* has a varied character. The region has a strong manufacturing heritage that was once dominated by Michelin, but is now more diversified with chemical, food processing, engineering and software replacing lost employment in tire manufacturing. There are several universities and specialised higher education institutions in Clermont-Ferrand. They, along with the corporate headquarters of Michelin, provide a strong base for cultural activity. Clermont-Ferrand offers an above-average range of public services compared to cities of equal size.[1] But outside the city itself, the region's topography and low population density result in a large gap in accessibility of everyday services—one of the largest such accessibility gaps in France (INSEE, 2016b).

The region is part of the Central Massif in France, which has historically been one of the least accessible areas in the country. Agriculture in the region is mainly associated with cattle farming, but there are significant pockets of arable land where crops can be grown. In the past, wine and tree fruit production was important, but they have both declined in importance in recent years. Tourism to the area is increasing, both within the city of Clermont–Ferrand and in the more rural communes that take advantage of the mountainous topography. Second homes are also becoming increasingly common in rural communes, which has both positive and negative implications for housing. The area's mountainous topography constrains urban development by hemming in the city to the west. Land use planning needs to navigate across these issues—peri-urban growth, the development of different industries and sectors, each with their own land use demands, and the need to reduce disparities, including those related to access to services.

Greater Clermont-Ferrand is in the midst of a difficult change. How it reorients itself within the new regional configuration will be a major determinant of its long term success. The large number of communes within the metropolitan area makes having strong intercommunal organisations to tackle both broader development and spatial planning across the functional areas where people live and work, critical. Clermont-Ferrand is a member of three such intercommunal associations, each covering a different geographical scale, and with some institutions being more formal than others. These organisations can provide a structure for resolving the diverse interests of the city and its rural commune counterparts, which may not always align.

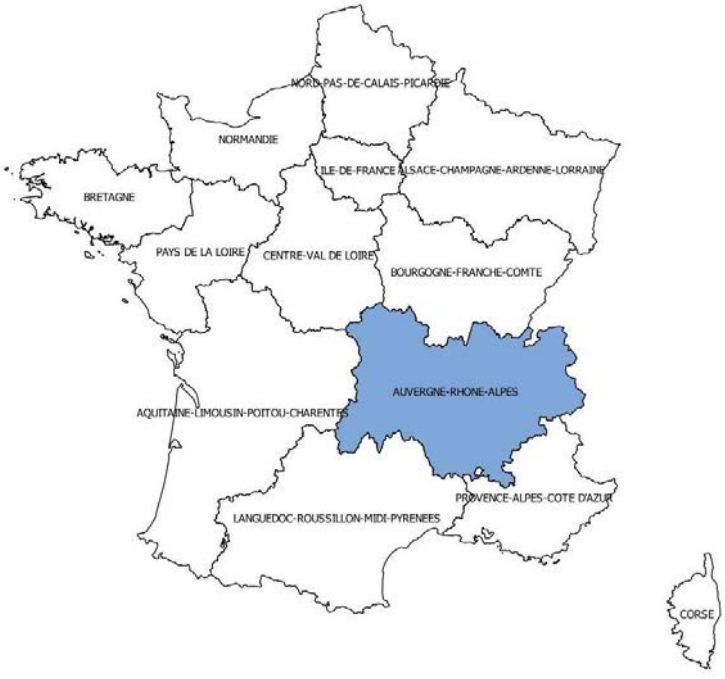
This chapter presents a case study of the governance of land use in greater Clermont-Ferrand. It proceeds in four parts. Section one describes the characteristics of the area, including major features of the local economy, its population and its land uses. This is

followed by a discussion of the major actors involved in the governance of land use at the commune and intercommunal (metropolitan), *département* and regional scales. Next, the scope and objectives of land use plans are discussed. Finally, the major opportunities and challenges related to land use in the area are elaborated.

Placing Clermont-Ferrand in context

Clermont-Ferrand is located in south-central France in the Puy-de-Dôme *département* of the Auvergne-Rhône-Alpes region (Figures 2.1 and 2.2 for maps of commune, *départements* and region).[2] Clermont-Ferrand's origins as a hyphenated city date to municipal merger in 1630.[3] For centuries the city's development was slow. At the beginning of the 20th century Clermont-Ferrand was a small and remote city nestled between the famous Puy-de-Dôme dormant volcanoes and the fertile Limagne plain. Today it is a mid-range urban agglomeration: the 19th largest metropolitan region in France in 2012, with a population of around 470 000; the city proper had a population of 141 569.

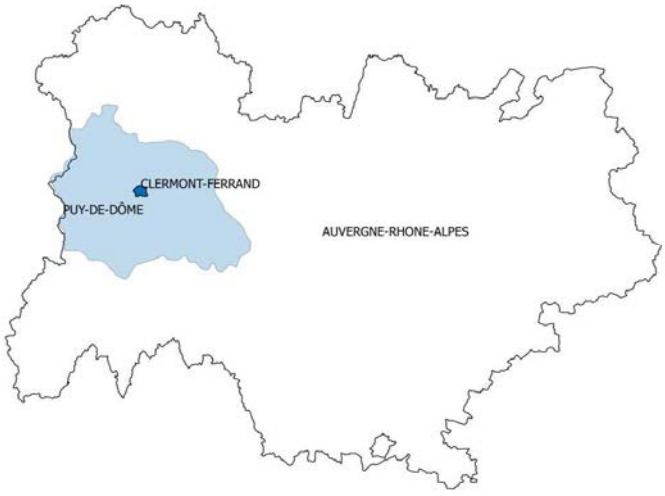
Figure 2.1. **Auvergne-Rhone-Alpes region, France**



Note: Auvergne-Rhone-Alpes is a newly consolidated region as of February 2016. The region will choose its final name by July 2016. Up until February 2016, Clermont-Ferrand was located in the Auvergne region. This map is for illustrative purposes and is without prejudice to the status of or sovereignty over any territory covered by this map. The display of the map may differ according to the angle of projection.

Source: Own elaboration.

Figure 2.2. **Puy-de-Dôme *département*, Auvergne-Rhone-Alpes region**

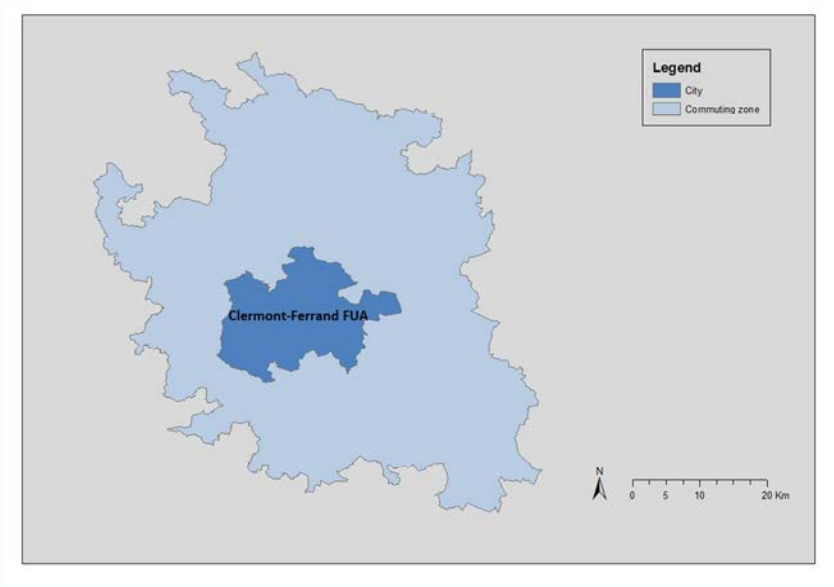


Notes: This map is for illustrative purposes and is without prejudice to the status of or sovereignty over any territory covered by this map. The display of the map may differ according to the angle of projection.

Source: Own elaboration.

Box 2.1. **The Clermont-Ferrand Functional Urban Area**

The OECD has developed functional urban areas (FUAs) as a means of comparing metropolitan areas across countries. FUAs are characterised by a densely inhabited "city", and "commuting zone" whose labour market is highly integrated with the cores. FUAs represent the area across which people live, work and commute and giver a better picture of the how the city relates to its broader environs and the labour market connections between core and peripheries. Clermont-Ferrand's FUA encompasses 200 municipalities in total, from those that are large to those that are very small across the city and its surrounding commuting zone.



Notes: This map is for illustrative purposes and is without prejudice to the status of or sovereignty over any territory covered by this map. The display of the map may differ according to the angle of projection.

Source: Own elaboration.

Economy, industries and employment

Clermont-Fernand's growth in the 20th century was fuelled by two large firms

Clermont-Fernand grew rapidly under the influence of two firms with very different focusses: the industrial Michelin and the agricultural Limagrain. Michelin—one of the largest tire manufacturers in the world—was founded by two brothers in Clermont-Ferrand in 1889. The firm has been formative in the city's development. It is the sole large industrial firm in the region and the local industrial system is organised around its operations. Beyond the local economy, the firm has also shaped the city's civic institutions, and day-to-day life—a role that has led to critiques of its paternalism and control (Zanetti, 2014, 2015). In the 1920s and 1930s, Michelin built housing ("Michelin neighbourhoods," some of which remain to this day), schools and nurseries for its employees—the company's legacies are written across the city's built form.

While Michelin dominated the city in last century, its influence has since lessened. Today the company's production facilities are dispersed but its research and development facilities remain concentrated in Clermont-Ferrand. This shift took place over a number of years, thus lessening the blow of employment loss and aiding in the transition to new industries. The region as a whole lost 20 000 industrial jobs over the duration of the past ten years; a trend that was mimicked across France, with similar overall declines in industrial employment (Wazsak, n.d.).

The industrial sector nevertheless remains important. The Auvergne region accounted for 2.5% out of all French industrial employment and ranked 8th among all metropolitan industrial areas in France in 2010 (Wazsak, n.d.). Today Clermont-Ferrand employs the majority of the industrial workforce in the region (around 35%), most notably in the rubber industries, food processing and metallurgy. The main industrial areas are located in the north of the city and include a number of brownfield sites.

The second major business in the area, Limagrain, is one of the largest agricultural co-operatives in France. It is primarily a producer of cereal and vegetable seeds, with a major share of its seed production taking place in other countries around the world. Local farmers who own the co-operative produce wheat and vegetables, and the firm has a large industrial bakery division. The firm is the fourth largest seed exporter in the world and its crop production has a large impact on land use in the hinterland, especially in the Limagne plain where agriculture is dominated by field crops and wheat in particular. The area is also known for the cultivation of sugar beets and has historically had a significant confectionary manufacturing industry that relies on local sugar. On some of the hillier land there has been a revitalisation of the wine industry, but the amount of land in vines remains well below historic high levels. Beef and dairy cattle production are important contributors to the local economy with meat processing and cheese production providing important sources of income and employment in some rural communes.

Farming remains the single largest use of land in the region. Currently there is a growing bifurcation within agriculture. On more productive land in plains and in valleys, farms are getting larger and becoming more specialised. On hillier land, smaller farms are increasingly only marginally profitable and many seem destined to cease operations when the current generation of operators retires. Consequently, the amount of agricultural land in the region is more likely to decline as a result of farm abandonment than from urban expansion.

The activities of these two business leaders—Michelin and Limagrain—are an indication of the mixed character of the local area which form at the junction of urban and rural (mostly farm-based) activities. This mixed character affects land uses and development. For instance, while agricultural activities are land intensive, the industry employs relatively few people when compared to the trade, transport and services sector or public administration, education, health and social services (Table 2.1, employment by industry).

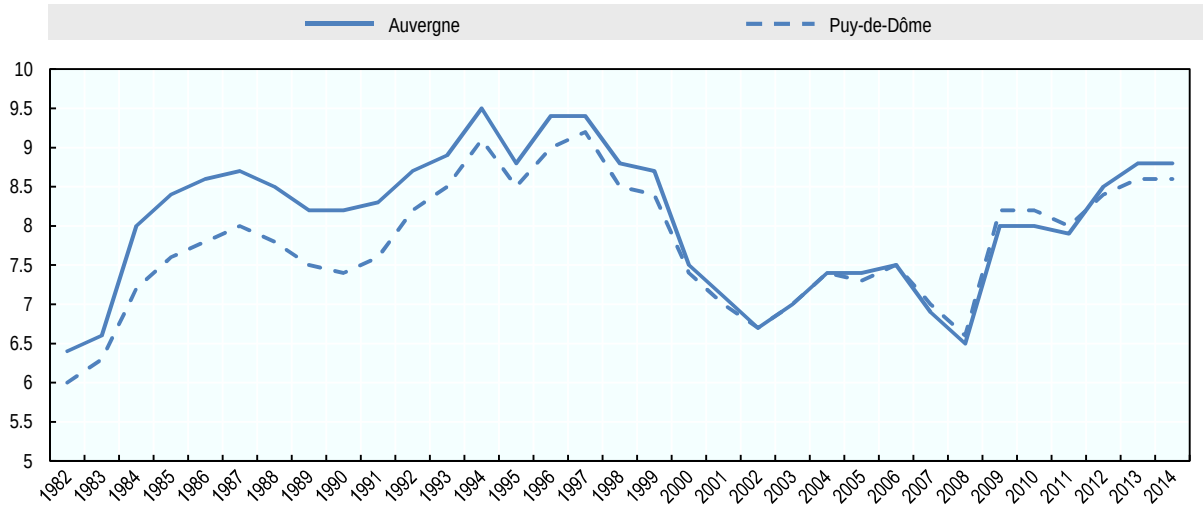
Table 2.1. **Employment by industry, percentage out of total, Puy-de-Dôme and Clermont-Ferrand, 2012**

Industry	Puy-de-Dôme	Clermont-Ferrand
Agriculture	3%	1%
Industry	16%	13%
Construction	7%	6%
Trade, transport, services	41%	47%
Public administration, education, health, social services	32%	34%

Source: INSEE (2012), "Le Puy-de-Dôme à grands traits", www.insee.fr/fr/themes/document.asp?reg_id=10&ref_id=20863.

The unemployment rate in the Auvergne region and Puy-de-Dôme *département* increased steeply in the 1980s and mid-1990s—hitting a high of 9.5% for the region in 1994 (Figure 2.3). It fell sharply in the early 2000s but has been growing again after a low during the 2008 recession.

Figure 2.3. **Historical unemployment rate, Auvergne and Puy-de-Dôme, 1982-2014**



Source: INSEE (2016a), "Taux de chômage localisé en moyenne annuelle, par *département* de France métropolitaine", Série historique 1982-2014, www.insee.fr/fr/themes/detail.asp?reg_id=99&ref_id=ir-irsoceds2013&page=irweb/irsoceds2013/dd/irsoceds2013_chomage.htm.

Historically dominated by agriculture and manufacturing, the services sector is growing and tourism is increasing

Other major industries in the region include tourism (included under services) and mining (included under industry). The *Auvergne* region is a long established tourist destination and is particularly well-known for its thermal cures (e.g. *Vichy*). However,

this reputation is slowly diminishing and some of the area's large traditional hotels are now being transformed into more flexible tourist resorts or houses with flats within the urban agglomeration. There are several ongoing projects to transform the traditional thermal baths into more attractive places for tourism.

In contrast, the *Chaine des Puys* have a very strong and growing reputation for activity based tourism. Local authorities have taken on a range of projects to further its potential since the 1990s, including the *Opération Grand Site de la Chaine des Puys*, which has led to several innovations in terms of land use and development planning. The number of hiking and bicycle trails has been expanded, and a rack railroad was developed, giving the opportunity for visitors to easily access the Puy-de-Dôme and its panoramic views of the region (*Panoramique des Dômes*). This project has also helped to protect landscapes and environmental resources. The Puy-de-Dôme is the most visited site in the Auvergne region with approximately half a million visitors yearly.

The regional landscape's recent candidacy in the UNESCO World heritage ranking should increase tourism to the area. An increase in the number of visitors to the area will increase demand for overnight accommodation and related services. This presents its own challenges. In terms of land use, new forms of access to sites may be required (roads, trails, parking). In the coming years, the region will need to balance multiple demands on its landscape and manage access to fragile highland environments. Developing sustainable forms of transportation to access these areas will also be important and will help reduce reliance on car access and its attendant infrastructure.

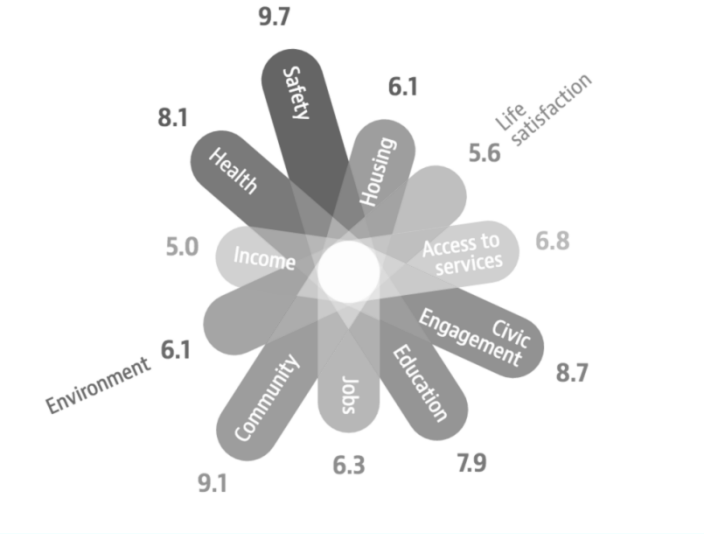
Agriculture in the region also plays a significant role in terms of providing visual amenities for tourism. However, many of the local farms are small and are operated by older farmers, with few prospects for new operators. This is especially true in the hilly parts of the region, which have the highest tourism potential. Many of these farms are likely to cease production in a few years and the land will return to its natural state. If this happens it will have local ecological impacts and change the visual landscape for tourists by increasing the amount of wooded land.

The mining industry in the region is declining

Mining has been an important activity in the region in the past, reflecting the volcanic activity that produced a variety of accessible minerals. While some mining continues, its scope has been greatly reduced. Mines and quarries continue to have an impact on land use in the immediate vicinity of their location—they are both locally land intensive and potentially polluting. More stringent regulations on mining practices and land use plans to limit conflicting uses in proximity to mines can alleviate most of these issues. But, in the recent past there have been an increasing number of conflicts between mining operations and nearby land uses, such as housing, that have been difficult to resolve. In addition, in some parts of the region, mining will no longer be allowed due to national environmental policy. This is the case along the Allier River, which is now considered a protected natural resource (especially in terms of green and blue corridors) and is an important element for future tourist and leisure activities.

Box 2.2. **How's life in Auvergne?**

The OECD's Regional Well Being indicators offer a comparative assessment across 11 dimensions of well-being for 30 countries. Across the 11 indicators, Auvergne is comparable to such regions as: Lazio, Italy; North Middle Sweden; Bergenland, Austria; and Madrid, Spain.



Auvergne ranks among the top 13% among all OECD regions in the indicator for civic engagement which is measured as voter turnout (83.6%). It also ranks high among all OECD regions for community (in the top 19%)—that is, the perceived social support network which, for Auvergne, is 94.5%. For safety, which is measured by the homicide rate, Auvergne is among the top 21% of OECD regions, with a homicide rate of 0.7 per 100 000 persons.

In some areas though, Auvergne is less competitive. It is among the bottom 36% when it comes to jobs, which are measured by the employment and unemployment rates, at 63.3% and 7.3% respectively. It was further ranked in the bottom 41% among all OECD regions in terms of access to services measured by household broadband access (which was 72.0% in Auvergne). For the indicator on education, Auvergne ranks among the bottom 49%. This is measured as the share of the labour force with at least secondary education, which for Auvergne was 81.2%.

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 (2016). "Regional wellbeing indictors, Auvergne", www.oecdregionalwellbeing.org/FR72.html (accessed 23 June 2016).

Housing and demography

In common with trends across France, Clermont-Ferrand's peri-urban zone is seeing the strongest growth

While the aforementioned industries create distinct pressures on land use in the region, it is the peri-urban area that has seen the greatest change. Since the 1990s, population growth in the Puy-de-Dôme *département* has been concentrated in the north-south corridor of the territory surrounding Clermont-Ferrand, following the major road. The peri-urban areas around Clermont-Ferrand have seen particularly strong growth. This land is seeing an increase in both the elderly population and that of children—peri-urban spaces are an attractive place for both those retiring and those who are raising young families. It is estimated that, by 2031, if the peri-urbanisation movement continues at the same rate as over the 1999-2006 period, which was one of sustained population growth, the population will increase by approximately 2.7%, whereas the population for the entire *département* will increase by about 10%. Population density estimates for the *département* project the greatest density increases in the southern agglomeration followed by Clermont-Ferrand agglomeration to the year 2031 (Table 2.2).

Table 2.2. **Projected population change**

Agglomeration	Change 2006-2031, estimated		Annual growth rate of the population			Density (hab / km 2)	
	Absolute	Relative	Projected 2006-2031	Observed 1999-2006	Observed 1982-1999	2031, estimated	2006, estimated
Puy-de-Dôme	57 600	9.20%	0.40%	0.40%	0.10%	85	78
Clermont agglomeration	7 600	2.70%	0.10%	0.30%	0.10%	896	872
West combrailles Sancy	2 200	3.80%	0.20%	0.00%	-0.90%	22	21
Riom-North agglomeration	14 500	18.50%	0.70%	0.90%	0.70%	126	107
Sancy-Val d'Allier	11 600	20.40%	0.80%	0.90%	-0.10%	49	41
South agglomeration	16 900	27.90%	1.10%	1.50%	1.40%	121	95
Thiers-Ambert	4 800	5.40%	0.20%	0.00%	-0.30%	43	41

Source: INSEE (2010), "Prospectives démographiques des territoires du Puy-de-Dôme", *La Lettre n° 61*, www.insee.fr/fr/insee_regions/auvergne/themes/lettre/lettre61/lettre61.pdf (accessed 2 May 2016).

Clermont-Ferrand is not alone in these trends of peri-urbanisation—it is one of the most critical issues facing land use planning in France. Approximately a third of the population of France lives in peri-urban areas and they have been the fastest growing demographic over the past 30 years (Bonnet, 2016).

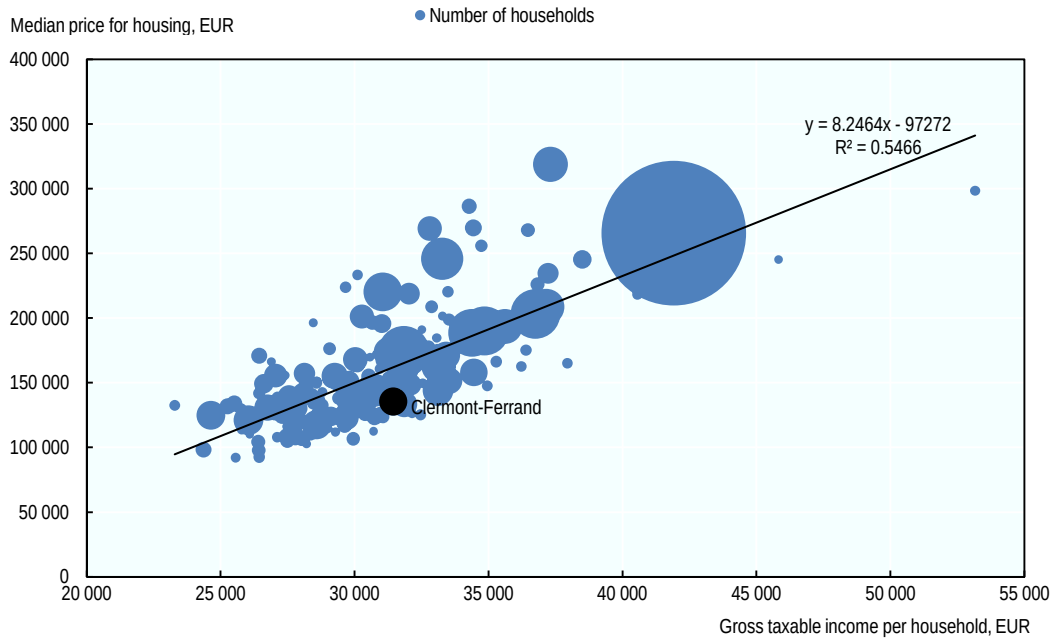
During the last 20 years, 1 800 hectares of land has been developed in the Clermont area, including 1 100 hectares for residential purposes. Home sales increased quickly in 1990s, and then levelled out throughout the 2000s, with the exception of the 2008 economic crisis when sales stagnated. Most of these developments have occurred near the city on land with rich and productive agricultural soil. House prices steeply increased in the 2000s but fell mid 2008 only to recover thereafter.

Housing in Clermont-Ferrand is relatively affordable compared to other agglomerations across France

Figures from 2006 indicate that the median house price in Clermont-Ferrand was 135 490 euros and that gross taxable income per household was 31 446 (Figure 2.4). When one compares median house prices to that of taxable income as a measure of housing affordability, Clermont-Ferrand fares well; it stands in the top quartile for housing affordability by this measure among French agglomerations. Agglomerations with a high number of secondary residences tend to have the lowest affordability by the measure (e.g. Antibes, Menton and Bayone for which secondary residences comprise approximately 20% more of the housing stock). In contrast, secondary residences in the Clermont-Ferrand agglomeration are 9% of housing stock, but are increasing in share as access to the region improves and prices in other locations continue to increase.

Suburban areas have been the most affected by new housing developments. Suburban areas now have a less mixed land use pattern than in the past, and include an increasing volume of developed parcels of land. Using a common typology, Clermont's suburbs have shifted from peri-urban zones under rural influence to peri-urban zones under *urban* influence. This is most visible in Cournon d'Auvergne, which has grown from an agricultural village to become the second largest city in the *département*. The "city in the countryside" feature has had a major influence on the Eastern side of the Limagne plain, but also on the hills after the collapse of wine-production.

Figure 2.4. **House prices and household income by agglomeration, France, 2006**



Source: CGEDD (2016), "House Prices in France: Property Price Index, French Real Estate Market Trends in the Long Run", 12 February 2016, updated 22 February 2016, www.cgedd.developpement-durable.gouv.fr/house-prices-in-france-property-price-index-french-a1117.html (accessed 2 May 2016).

Patterns of urbanisation across the agglomeration have proceeded alongside main roads and the railways, following a "gloved-fingers" path. This has led to a need for new infrastructure alongside these main channels in order to service new developments. In turn, this opens up the area for development and leads to further urbanisation, including in areas that are costly for the municipality to provide services to and that impose environmental costs (e.g. the cost of expanding infrastructure and the costs of commuting). While residential developments along establish roads ways are to be encouraged since they take advantage of existing infrastructure, they are problematic when the costs of servicing these areas are born by the municipality and the externalities associated with such a location are not reflected in the costs paid by home owners. Certain policy measures contribute to these types of distortions, such as government subsidies for fossil fuels which are prevalent across the OECD (OECD, 2015).

House prices in the area have increased faster than income, a phenomenon common across France. This is to be expected to some degree as lower interest rates increase an individual's ability to purchase a property. Supply constraints also increase demand—for instance, high demand to live in a particular area because of its amenities or cultural heritage. Figures from 1998-2010 in the Puy-de-Dôme *département* show house prices increasing by 129% over the period while household income increased only 33% (Table 2.3). In comparison to other *départements* in the region, these are low figures; Puy-de-Dôme had the lowest percentage change in terms of housing prices over the period and the second lowest in terms of household income. But, if one takes a ratio of the two indicators, a different pattern emerges; Puy-de-Dôme ranks in the middle of the pack among *départements* by this measure. In contrast, the ratio of the percentage change

in household income to that of house prices was the lowest in Haute Savoie and the highest in Rhône for the 1998-2010 period (Table 2.3).

Table 2.3. **Key housing indicators, Puy-de-Dôme and other *départements* in region, 1998-2010**

	Percentage change in house prices, 1998-2010	Percentage change in household income, 1998-2010	Percentage change in population, 1998-2010	Percentage change in new housing construction, 1998-2010
Puy-de-Dôme	129%	33%	8%	13%
Ain	144%	40%	18%	23%
Allier	142%	34%	0%	9%
Ardéche	150%	35%	15%	17%
Cantal	148%	38%	1%	10%
Drome	149%	37%	14%	19%
Haute Loire	154%	36%	10%	13%
Haute Savoie	139%	42%	22%	22%
Isere	141%	37%	15%	17%
Loire	138%	32%	2%	11%
Rhône	163%	34%	14%	16%
Savoie	143%	40%	16%	19%

Source: CGEDD (2011), "Différenciation de la variation du prix des logements selon le *département* de 1994 à 2010", www.cgedd.developpement-durable.gouv.fr/IMG/pdf/difference-variation-prix-immobilier-par-*département*_cle76a2da.pdf (accessed 4 May 2016).

Low local housing prices and the growth of tourism are contributing to an increasing number of home purchases by non-residents who intend to use the housing for holiday accommodation. While these purchases help to hold up housing prices in smaller remote communes, they also increase competition for housing in communes that are more suburban in nature. On the positive side, owners pay local taxes but place few demands on local services. However, they also tend not to spend a lot of money locally, since they are present for only short periods of time.

In terms of land occupation, there is an intermediary fringe between the city and the mountains, particularly in the Limagne area, where most of the land use challenges are concentrated. Presently, agricultural land use is relatively undiversified in suburban areas. For example, the construction of greenhouses in several suburban areas is not permitted and it is therefore difficult to promote this form of peri-urban agriculture in these spaces. The greenhouse and market garden belt in Clermont-Ferrand is much smaller than that of other comparable cities in France.

Unlike the experience of most cities, urban sprawl has not reduced the inner city population in Clermont-Ferrand. However, there are two phenomena to note. The first is that urban sprawl is occurring in stages. The first suburban ring is ageing and becoming less attractive, while the second suburban ring (to the East) is growing. The purchasing power gradient is moving further away from the centre. Second, there are neglected neighbourhoods (and a concentration of low income residents) in both the city centre and in neighbourhoods to the north and south of the city centre (e.g. Saint-Jacques, la Gautière, les Vergnes). There are twelve voluntary citizen councils in Clermont-Ferrand that partner with the city and other agencies in designated "priority neighbourhoods" (i.e. deprived urban areas) to try and address these issues.

In contrast to the growth of peri-urban areas, in the Limagne plain, land occupation is relatively stable, with large parcels devoted to crop production. However, on the hillsides near Clermont, there are informal agricultural or pastoral spaces such as sheep rearing, which is a traditional activity on the hillsides. These land uses are declining and consequently, low bushes and trees are quickly spreading across these areas in the absence of grazing animals which would normally help contain such growth. This affects the accessibility of the land for tourism. Thus, the landscapes are changing and the Puys mountains may become somewhat less accessible for tourists as a result.

Major land use pressures

The various land use pressures in the Clermont-Ferrand agglomeration are in large measure shaped by the area's peculiar geographical conditions (Limagne plain and the Puys Mountains) which create natural barriers to development in certain directions. There is a clear demand for new houses and new office space, and new infrastructure is being developed (roads, railways, waste sites, energy plants, etc.) for the region. In addition, as the relative mix of economic activities changes over time, there are associated changes in land use directly involved with these different types of firms. There has been a shift in the number and size of firms that support the main economic sectors in the region, which also impacts land use. In many instances, local residents, firms and public bodies, do not share a common vision of local development and have divergent opinions regarding current and future land uses in the area. At present, different land uses—industrial activities, farming, natural areas, touristic zones, infrastructure, and residential zones—are sometimes located in close proximity to one another, which can lead to conflict.

Like many other places in France, Clermont-Ferrand faces environmental challenges. The increasing emphasis on natural resource based tourism is exacerbating some associated land use conflicts. Increased tourism numbers leads to congestion at a minimum and may reduce the inherent quality of the natural resources that are a primary reason for visiting the region, especially in the mountains and the hillsides near the city of Clermont-Ferrand. However, there is clear pressure to increase tourism numbers to provide additional income and employment opportunities. Expanding the mix of tourist attractions to include active tourism, such as mountain-biking or other sports related activities, can also lead to conflicts with more passive tourism activities, such as birding or walking.

The area also faces increasing challenges maintaining water quantity and quality. With climate change leading to possible water shortages, these issues need to be anticipated by policymakers. Today, two-thirds of the local population drinks water from the Allier River's aquifer. There are new concerns about the impact of run-off from farming on water quality (e.g. manure and pesticide and fertiliser impacts). Similarly, the threat of contamination from spills by mining operations remains a concern.

Given these conditions, several land use issues have the potential to lead to future conflict between uses and users. For example, there is competition over agricultural lands between different categories of users. There is an interest by many groups to maintain farming near the city and agro-pastoral activities are important to the maintenance of biodiversity in the region. However, ongoing processes of urbanisation (particularly in peri-urban areas) create demand for new transport infrastructure (roads and railways) and housing developments. Growth in the tourism industry and new infrastructure to support it can create demands in areas with fragile environments. Landscape maintenance,

particularly on mountainous and hillside zones is an increasing issue. Finally, water quality and quantity issues generate competition between different land uses.

Box 2.3. **Natural Regional Parks and environmental zoning**

France has environmental zoning instruments—Natural Regional Parks (NRP)—that serve to conserve natural areas and cultural heritage, and protect ecosystems. First created in the late 1960s, the parks have since expanded to cover 15% of French territory. NPRs are established through 12 year contracts between local authorities and the national government; each park determines its own objectives. Hence, they all differ to some extent. The *Volcans d'Auvergne* is the largest NPR in France, covering 189 00 hectares of land.

While the literature has highlighted the potential side-effects of land-use regulations on housing markets, little attention has been paid to the specific case of environmental zoning instruments. A recent OECD working paper by Coison and Salinié (2016) fills this literature gap by evaluating the effects of NRPs on urban development at the municipality level using a quasi-experimental empirical approach (difference-in-differences).

The results of the analysis reveal that NRPs have *limited impacts* on long-term urban development as measured by growth in housing units or population. Similarly, their short-term effects on building permits are *not significant* and no empirical evidence is found that NRPs would direct growth towards denser housing structure within the regulated areas. Finally, *no substantial effect* is found on plot development which suggests that NRPs have generally been unsuccessful in preventing the conversion of undeveloped land to urban area. This is in line with other literature on the subject, beyond that of the French case, that environmental zoning has ambiguous effects.

This work raises several questions regarding the design of environmental zoning policies and the characteristics that may influence the extent of effects on urban development:

1. First, the specificities of natural parks' conventions may vary depending on local issues, partly explaining the heterogeneity of results. The authors note that the frequent co-existence of environmental protection goals and the ambition of cultural and/or touristic dynamics may send out confusing political signals. Policymakers should therefore ensure that these goals are clarified.
2. Second, the results of the study suggest that the more complex the territory is, the more uncertain the effects are. For instance, significant estimates of the effects of an NRP on total number of housing units seem more likely to be negative for smaller NRPs, and when only one region is involved. Furthermore, NRPs with significant effects on total housing units are also those for which at least 80% of municipalities are fully comprised in the regulated area, as opposed to partial zoning of the municipality's surface. Therefore, an efficient governance and communication between the various local stakeholders may therefore be key to higher resilience within these territories and the accomplishment of defined goals.
3. Third, NPRs are designed to pursue both ecological and human objectives. For NRPs, in general, the set of objectives is rather broadly defined and the actions to be taken are not very precise. Although NRPs may lack enforcement power, defining such goals and tools should certainly bring in more coherence and help NRPs achieve their complex goals.
4. A wide stream of this literature emphasises the key role of institutions in the efficiency of collective action. Ostrom (2002) synthesizes the institutional key factors leading to the success of self-governing associations, such as NPRs to seven points: i) well-defined boundaries, ii) congruence (i.e. costs borne by individuals are related to their benefits), iii) collective-choice arrangement (i.e. stakeholders can influence the rules), iv) liability of those who monitor and enforce rules, v) a system of graduated sanctions, vi) a conflict-resolution mechanism and vii) autonomy (i.e. the ability of stakeholders to design their own institutions). Ostrom (2005) underlines that the effects of the size of the protected area and the heterogeneity of appropriators on the outcomes of the protected area are unclear. There is a need to evaluate NRPs on these important elements to know how they could be improved.

Box 2.3. **Natural Regional Parks and environmental zoning** (*cont.*)

5. Finally, the obvious spatial dimension of environmental zoning exposes it to possible conflicts with other local policies. The stated goals of a natural park may be conflictual to specific stakeholders' interests, but they may also be contradictory or at least mitigated by other policies such as local urban planning instruments or other environmental measures. In this case, NRPs for which more than half of the surface is also subject to Natura 2000 regulation, do not exhibit significant results. The multiplication and superposition of environmental and land regulation measures, in addition to the natural park itself, may actually hide its benefits. In 1993, the Law on Landscape Protection established the enforceability of NRP conventions with priority over local regulatory zoning. However, as noted by Jegouzo (2014) there were a number of legal holes that perhaps made this law less effective than desired. For example, an NRP convention was not given priority over local collectively decided regulatory zoning. The legislator was well aware of those issues and tried to improve the position of NRPs as urban containment devices. In 2014, the Law for Access to Housing and a Renewed Urbanism (ALUR Law) marked a profound change. It made collective regulatory zoning mandatory and established a coherence principle which stated that they should comply with existing pertinent zoning such as NRPs. It will be interesting to measure, in the future, the impact of this change.

Source: Adapted from Salanié, J. and T. Coisnon (2016), "Environmental Zoning and Urban Development: Natural Regional Parks in France", *OECD Environment Working Papers*, No. 110, OECD Publishing, Paris, http://dx.doi.org/10.1787/5jlsk97vpwtd-en.

Multi-layered governance and spatial planning

While natural conditions and resources, historical legacies, socioeconomic dynamics and industrial change all impact how land is used in Clermont-Ferrand, so too do governance structures and the policies and plans created under their auspices. The political and institutional factors at different levels of government—from policies determined in Brussels to the actions of local decision making bodies—affect how land is used and the pressure for development. The regional level determines major land use strategies and guidelines, while communes actually implement specific land use laws. At the same time, various local governance structures, together with other public actors, elaborate local planning documents based on national or European rules and laws, in such a way that the final land use planning decision is a truly complex and intricate process. This section proceeds by outlining the major governmental actors that influence land use in Clermont-Fernand and is followed by a discussion of the specific strategies and plans that implement the vision.

Main governmental actors

With the latest reforms, regional spatial planning takes on a bigger role

As has been mentioned, this case study of Clermont-Ferrand arrives on the cusp of significant change in territorial administration: France's 2014 reforms merged the regions of Auvergne and Rhone-Alpes. The new regional configuration came into effect January 1st, 2016. With this change, Clermont-Ferrand loses its status as the regional capital of Auvergne; the new regional capital of the amalgamated region is Lyon. The change is expected to have important implications for future development of Clermont-Ferrand as it seeks to establish its position within the new regional configuration. This is a point that will be returned to.

The regional level of government in France does not have separate legislative authority and cannot create statutory laws. But, it is an influential body with an elected regional council (204 regional representatives), responsibility for administering key functions, and the ability to levy its own taxes. As mentioned in Chapter 1, the NoTRE law of 2015 strengthened the powers of regions. In terms of planning, the region's the most important responsibility will be to develop a regional spatial plan by 2019—the SRADDET. The plan will identify the location of infrastructure of regional importance (including roads and fiber optics), indicate which rural areas are preferred for future changes in land use, ensure habitat protection, and promote the efficient management of space. A wide range of actors will be consulted in the development of the regional plan including *département* and commune councils, public institutions related to the SCoT (territorial coherence plan) and PLU (local urban development plans). It will then be subject to public inquiry and be approved by the State. The SRADDET of the new Auvergne-Rhône-Alpes Region will integrate existing plans including Auvergne's SRADTT (updated in 2014) and Auvergne and Rhône-Alpes' SRCAE and SRCE.

At the regional level there is also a regional administration committee headed by the *préfet* (the appointed representative of the State in the region). This committee includes the regional representatives of national ministries: the Regional Directorate of Environment, Planning and Housing (*Direction régionale de l'environnement, de l'aménagement et du logement,* DREAL); the Regional Directorate of Food, Agriculture and Forestry of the Auvergne-Rhône-Alpes Region (*Direction Régionale de l'Alimentation, de l'Agriculture et de la Forêt de la région Auvergne-Rhône-Alpes*, DRAAF). These bodies implement the policies of their national ministries under the authority of the regional *préfet* and *subpréfets* at the *départemental* level. The later include the State services for the *département* (*Direction Départementale des Territoires du Puy-de-Dôme,* DDT) for legislative control and specific regulation (i.e. agriculture, risk, nature). Given DREAL's focus on urbanism, housing and sustainable development, it is an important actor in spatial planning. *Préfets* supervise the acts of subnational government *ex facto*—that is, the *préfet* examines the legality of actions that have been undertaken by regional governments and their public corporations in order to ensure that they are compatible with national laws and regulations, while *subpréfets* do the same with *département* governments and communes.

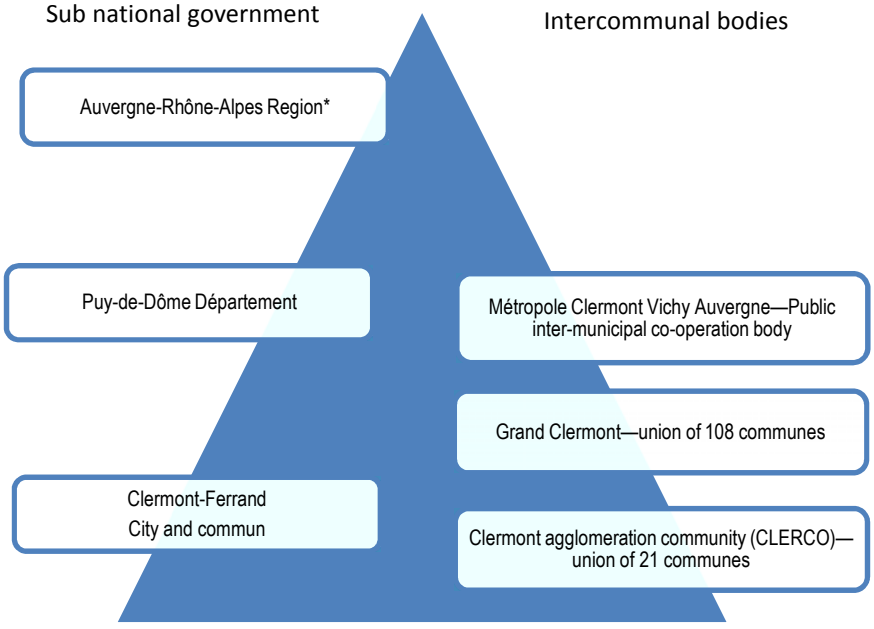
Below the regional level is the *département*—Puy-de-Dôme (with an elected *départemental* council). It has an important role in spatial management through its involvement in road and infrastructure development and it provides funding to municipalities for equipment. In particular, the *département* has powers over rural land development including the regulation of deforestation, agricultural and forest land development, the exchange and transfer of rural properties and the development of wastelands. There are public hearings and broad consultation processes for change of land use requests on these matters, which are typically raised through one or more municipalities or intercommunal bodies.

Continuing through this *mille-feuille* leads to the commune/municipality of Clermont-Ferrand, which drafts urban planning documents, issues building permits, organises urban transport and maintains communal roads—thus making the commune level a critical actor in land use planning.

Clermont-Ferrand's Town Planning *Département* is responsible for all studies, procedures and urban development in the city, including requests for construction permits. The city's role in land use planning will be further discussed in the section on

plans. Building permits are delivered by the city.[4] These functions are replicated in every other commune in the *département* and each commune has identical authority. Only if an intercommunal agreement has been established do communes have to consider each other's actions, and then only for those aspects set out in the agreement.

Figure 2.5. **Main subnational and intercommunal actors**



* The Auvergne-Rhône-Alpes region is the product of a merger of three regions which took place February 2016.

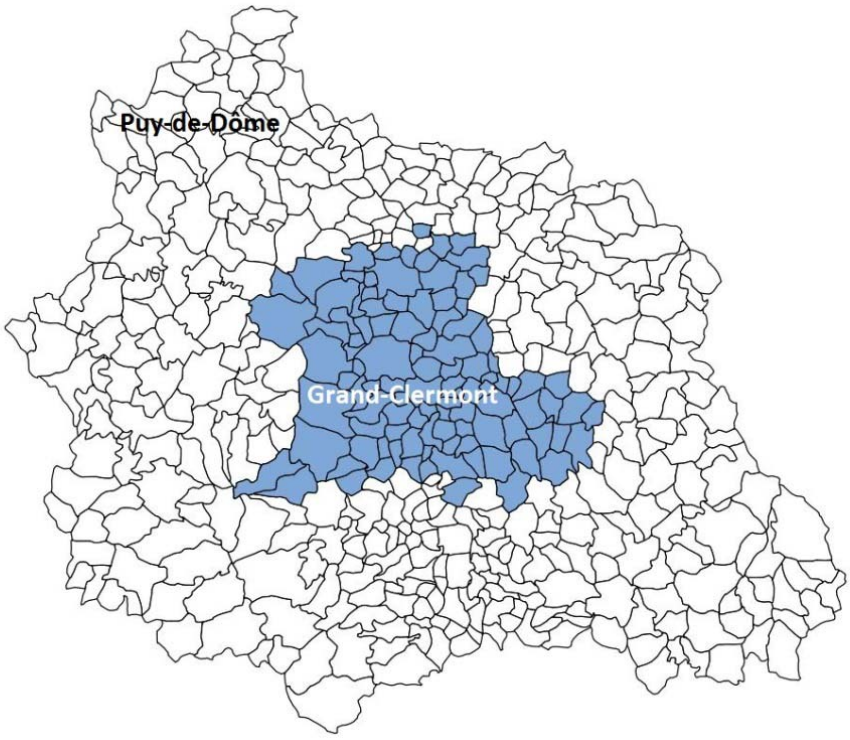
Source: Own elaboration.

Multiple intercommunal governance structures have been created to address shared issues and adopt a common spatial planning vision

In terms of the *volume* of local government units, France is quite unique. While across OECD countries, small local government units have been successively amalgamated to form larger entities, France has rarely done so. The 467 communes dotted across the map of Puy-de-Dôme below (Figure 2.6) point to an obvious need for collaboration across functional territories. To this end, there are several intercommunal layers which further lend to the complexity of land use governance in the territory. The largest such association of municipalities is the *Pôle métropolitain* Métropole of Clermont-Vichy-Auverge—a mixed syndicate which has no self-competence but can make strategies and propose actions. The *Pôle métropolitain* was established in 2013 and consists of the urban areas of the former region of Auvergne: Clermont, Riom, Issoire, Thiers and Vichy (covering approximately 484 000 inhabitants). It was created to strengthen the role of the Auvergne metropolitan area as a counterpart to the neighbouring *métropoles* of Lyon and Grenoble.

In contrast to the Métropole of Clermont-Vichy-Auverge, Grand Clermont is a formal body and plays a major role in planning. It is responsible for developing and implementing the Territorial Coherence Plan (SCoT). It is a mixed syndicate, composed of 108 communes, including Clermont-Ferrand and 8 communities of communes.[5] The area encompassing Grand Clermont is depicted the map below (Figure 2.6).

Figure 2.6. **Grand Clermont, Puy-de-Dôme *département***

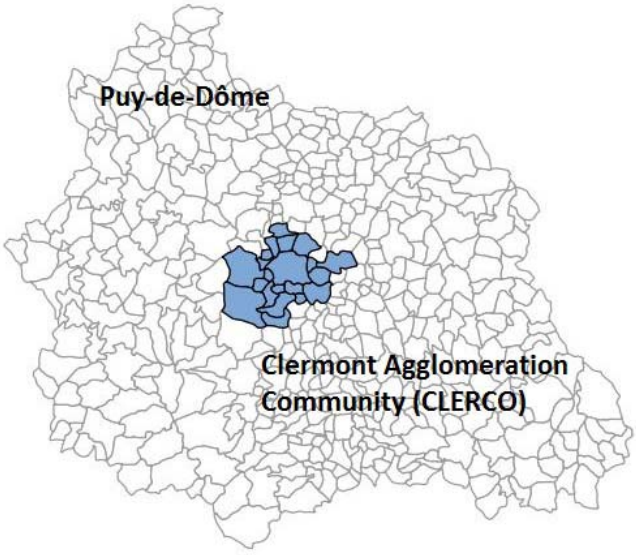


Notes: This map is for illustrative purposes and is without prejudice to the status of or sovereignty over any territory covered by this map. The display of the map may differ according to the angle of projection.

Source: Own elaboration.

There is yet another intercommunal structure at a lower level of geography below Grand Clermont. The Clermont Agglomeration Community (CLERCO) is an intercommunal group whose headquarters are in Clermont-Ferrand (est. 1999). The Clermont Agglomeration Community is the largest urban community in the Auvergne-Rhône-Alpes region in terms of spatial extent, but is smaller than Grand Clermont. With the new MAPAM law, CLERCO intends to adopt the status of an urban community—a change which is possible due to a lowering of the population threshold to achieve that distinction. Unlike agglomeration communities and communities of communes, communes that join a MAPAM cannot freely leave an urban community. CLERCO is governed by a community board composed of member communes and is involved in the development of the master plan for the area and in various sector schemes. Its territory within the *département* is depicted in the map below (Figure 2.7). CLERCO has decision-making capacity akin to a commune. Clermont Communauté is like a "glocal government" or "administration". This makes it therefore different from Grand Clermont and the Metropole Clermont-Vichy-Auvergne, which are territories of projects ("other public groups/co-operation").

Figure 2.7. **Clermont Agglomeration Community (CLERCO)**



Notes: This map is for illustrative purposes and is without prejudice to the status of or sovereignty over any territory covered by this map. The display of the map may differ according to the angle of projection.

Source: Own elaboration.

The various intercommunal associations are linked to broader political projects. Today Clermont is a *communauté d'agglomeration* (CLERCO) although it will soon become an urban community and encompass a larger population and have additional competencies. Grand Clermont has the ambition to ultimately become a *metropôle*, encompassing a considerably larger territory with even more population and a broader array of competencies. Within this expanded framework, it is the *intercomunaliés* which have the competencies that operationalise the projects. While *pôles métropolitain* co-operate between different *intercomunalités* over a large territory (even across several *départements*) there is no delegation of competencies. It is more a place for dialogue and an arena to launch joint projects. In Clermont-Ferrand's case, these projects include economic, planning, culture, sport, mobility issues and the management of the river. In contrast, the *metropôle* has a stronger institutional aspect with the delegation of some competencies.

All of these intercommunal structures help to navigate urban-rural linkages and interests

The French system of subnational government creates a system whereby voluntary collaboration is critical in order to achieve the goals of most communes. Each commune has identical authority, such that no commune can impose its will on another. But the administrative boundaries of communes are too small to effectively plan crucial functions such as land use and address overarching issues, such as, economic development strategies. Because of the way powers are assigned, communes, and not regions or *départements*, are the ultimate actors in most of these functions. This makes collaboration crucial.

Inter-municipal co-operation creates the opportunity to gather local actors around a common objective and pursue common land use strategies across urban and rural territories. While the two worlds (agriculture and the city) can seem detached from one another, there are various public bodies and associations that establish connections among them. The variable geography in the array of intercommunal agreements associated with Clermont-Ferrand (shown in the preceding maps) reflects the fact that different sets of participants are needed for different functions and at different scales.

These new institutional structures are shaped by, and react to, the issues facing the urban-rural fringe. For example, *Terres de liens*, a national association whose activity is directed towards the protection and the renewal of land devoted to farming in per-urban districts. These initiatives are connected to others in the area, such as the recently launched policy by the *Conseil Départemental* to promote local food in school canteens and thus support local growers. There are many potential benefits from improved urban-rural co-operation. These are interlinked areas yet, there are power dynamics that can undermine co-operation efforts. For instance, peripheral communes tend to want to retain influence and related to this, tactics may waver from subordination to co-operation with the main city depending on the issues at hand (Box 2.4).

Box 2.4. **Rural-rural partnerships**

While there are many benefits to partnership between rural communities and cities, such co-operation can face challenges due to the inherent power asymmetries between large and small places (OECD, 2013). Smaller communities may feel like they will be subsumed by urban priorities for growth, and thus seek to maintain independence.

In the North West corner of the Pays du Grand Clermont, a partnership of rural communities has been established to forward its own vision of development which emphasises *autonomy* from the central city: Clermont-Ferrand (Loudiyi, Lardon & Lelli, 2009: 77). The intercommunal structure *Volvic Source et Volcans* (VSV) was established in 2002. It encompasses the regional national park of Volcans d'Áuvergne along with several peripheral communes. It is one of the most populated municipal structures and has a growing population, with a large number of individuals commuting outside of the area for employment.

Member communes in VSV have drawn up a joint development plan. Their strategy focuses on establishing the area as a greenbelt and, in support of this goal, controlling urbanisation in the area and supporting the tourism and other local industries. This vision of development is grounded in nature preservation as opposed to agricultural uses of the land—despite agriculture being an important industry in the area. VSV has taxing authority and levies a housing tax, tax on undeveloped land, and a business tax. Its fiscal capacity is slightly higher than that of other such intercommunal authorities in the *département* (270 euros per capita versus 200 for the intercommunal average in 2015).[6]

Thus, even within Grand Clermont, which is covered by the SCoT, there are differing visions of development and different partnerships for the implementation of common strategies which many not entirely complement that of surrounding locales.

Sources: Loudiyi, S., S. Lardon and L. Lelli (2009, June) "Can Agriculture be a Territorial Resource in Periurban territories? The case of an inter-municipal structure, Volvic Sources et Volcans", In *International Workshop on Agricultural management in peri-urban areas*; OECD (2013), *Rural-Urban Partnerships: An Integrated Approach to Economic Development*, OECD Publishing, Paris, http://dx.doi.org/10.1787/9789264204812-en.

Other actors involved in land use planning

Beyond formal and informal governance structures, a number of other public and non-profit bodies are also involved in elements of land use planning

Beyond these intercommunal bodies, there is also the Clermont Metropolitan Planning Agency which supports the development of a metropolitan strategy in the area. It offers thematic expertise in the elaboration of spatial plans such as the SCoT of Grand Clermont and works through a network of local partners and stakeholders to develop a strategic vision for the territory. Its membership includes the Clermont community, the Riom community, Grand Clermont, the Puy-de-Dôme *département*, the Auvergne region, the city of Clermont-Ferrand and others. It is one of the 52 urban planning agencies that operate across France (mentioned in Chapter 1).

Another actor that impacts land use in the area is the Society for Land Development and Rural Settlement (*Société d'aménagement foncier et d'établissement rural*, SAFER). Agricultural land management is regulated by the State through regional *départements* of agriculture together with the SAFER. SAFER is a non-profit agency established in 1960 with a mandate to assist in farm reorganisation; make farmland more productive and; encourage young people into the profession. Today the mandate is a bit broader, with a focus on protecting farmland and the natural environment and supporting the development of the local economy. The organisation purchases agricultural land for resale to farmers or public authorities in order to maintain a specific pattern of land use in an area. It can also rent land for agricultural purposes, take on projects to maintain local landscapes, and conduct studies on agricultural land prices. By law, SAFER is offered the right of first refusal to purchase agricultural land in order to maintain farms of specific desired size (articles L 143-1 and L 143-2 of the Rural Code).[7] SAFER has regional offices throughout France—its Auvergne office is located in Clermont-Ferrand. The organisation has been instrumental in bringing about farm enlargement across the Massif Central (Rapey, 2015).

A second organisation which has the right of first refusal for land acquisition is the EPF-SMAF—Auvergne's public land institution (*Établissement public foncier-syndicat mixte d'action foncière*). The organisation can also acquire land by expropriation. Such bodies exist at the national and local levels in France—Auvergne's was first established in 1976. They have an agreement to co-ordinate with SAFER for the purchase of agricultural lands and their membership includes roughly 40% of all communes in the Puy-de- Dôme *département*. The organisation acquires land or property on behalf of its members (or other public bodies) in order to support local housing policy, economic development, leisure and tourism, establish utilities, reduce/eliminate health hazards, enable urban renewal, and save or enhance heritage site and natural areas. EPF-SMAF was funded by State and local government contributions and grants from the EU. Apart from this long list of actors involved in spatial policy and land use governance there are also commissions to regulate commercial development projects and agricultural land use change, a regional public finance agency to collect taxes, the areas under industrial (SEVESO EU directive) or environmental risks (flooding) are managed by the State and the airport is managed an independent authority.

The many public authorities and bodies involved in land use in greater Clermont-Ferrand points to the considerable role of collaborative governance across various scales and interests that not only requires a great deal of co-ordination and engagement among entities, but also with citizens. To this end there are two different ways to involve

stakeholders in land-use decisions: i) formal rules of participation and involvement and, ii) more flexible forms of engagement. Formal rules require consultation with "associated persons"—this is a list established by law which includes other local authorities, and various Consular Chambers that represent specific groups (e.g. agriculture, commerce and industry, trade). Further, some documents cannot be approved without a public inquiry. This is case for the SCoT, PLU/PLUI and SRADDET. Alternatively, a land use authority can also decide to organise more open and participatory forms of engagement to obtain some of the inhabitants and users' opinions through such practices as citizen conferences, focus groups, opinion polls, public meetings and information leaflets. This latter path has the potential to achieve a consensus among a full set of stakeholders, but it is much harder to organise, and there is always the possibility that no mutually agreeable resolution will emerge. As will be discussed in the following section on plans, it can be difficult to meaningfully engage citizens.

Box 2.5. **The digitisation of planning documents**

It is often remarked that citizen engagement remains low for land use planning issues due to a lack of information (Purian, Ahituv & Ashkenazy, 2012). Many governments are trying to remedy this issue by providing planning information in much more accessible and understandable formats. This includes: putting planning documents into plain language so that they are easier to read and understand for the lay person; using social media and other online tools to engage with citizens and get their feedback on issues that affect them; holding public meetings and town halls for major projects and changes; and sharing planning documents in a more accessible way—at the click of a button—by digitising land use plans/maps.

To this end France has embarked on a process of digitisation for planning documents in order to reduce costs and improve communication between those involved in the process. In this way, planning documents are easily shared, updated and made accessible for elected officials, professionals and stakeholders. The new process is expected to be cheaper, editable, exchangeable and multipliable. Presently, urban planning documents can be scanned at an estimated cost of 500 Euros while an individual hard copy can cost 100 Euros. Significant costs savings are expected particularly when one factors in that it is much easier to make revisions to scanned versions.

- Communities must have made their planning documents accessible online by 1 January 2016;
- Between 1st January 2016 and 1st January 2020, when communities develop or revise a planning document, they need to scan the national format (*Le Conseil national de l'information géographique*);
- From 1st January 2020, the authorities must publish their planning documents in the Geoportal of urban planning to make them enforceable. The site, currently being established, will be the national portal to all to all of the urban information in France.

The digitisation of planning documents meets the European Directive INSPIRE to provide citizens with geotagged information on sustainable development issues (Ordinance No. 2013-1184 of 19 December 2013).

This process of digitisation makes information incredibly fast and easy to access. For example, from Clermont-Ferrand's land use plan it is possible to research information relevant to any parcel of land either by using its cadastral reference, civic address, or simply by zoning in on the map. The relevant plans and regulations pertaining to the parcel of land selected are automatically pulled up. Further, map layers can be added to see the location of major risks (e.g., transportation of dangerous materials), mobile towers, hydroelectric studies, sports centres and health services and multi modal transportation.

Source: Government of France (2015), Ministry of Housing, Territorial Equality and Rural Policy,www.territoires.gouv.fr/la-numerisation-des-documents-d-urbanisme; Purian, R., N. Ahituvand A. Ashkenazy (2012), "The richness of barriers to public participation: Multi-layered system of real estate data from multiple sources", MCIS 2012 Proceedings.

Critical junctures: The elaboration of spatial and land use plans

The specific number and powers of subnational governments shape how an area is *governed* and affects the scale at which land use issues are thought about and tackled. Legislative and regulatory frameworks, as well as the structure of public funds, can create incentives for communes to come together and develop common spatial projects. However, the particular set of economic opportunities that exist within the geographic area that is being governed will also determine whether these projects have social value. At the local level, there exist four main types of planning documents (*documents d'urbanisme*) that govern land use occupation and changes: i) the SCoT (Schéma de Cohérence Territorial); ii) local plans, PLU and PLUI, iii) the *carte communale* (which provides a map of buildable and non-buildable areas); iv) and national urban law which is enforceable even in the absence of a SCOT or PLU.

In France, the possibility for metropolitan planning clearly exists through the Territorial Coherence Plan (SCoT). It is also encouraged through the possibility to undertake *intercommunal* local urban development plans (PLUI), something that Greater Clermont-Ferrand has not yet engaged in. The current land use plan for Clermont-Ferrand relates only to the commune (PLU). This section describes both of these plans, including the debates that arose during their development, which highlight the inherent tensions that arise when planning across diverse territories. The plans, particularly the SCoT, are critical junctures—they open up a period of analysis and debate about land use in the area. They set directions for future uses and are thus a critical instrument governing land use.

Planning at the intercommunal scale: The SCoT of Grand Clermont

The Territorial Coherence Plan (SCoT) of Grand Clermont is the major spatial plan guiding future development in the metropolitan area. As mentioned in Chapter 1, the SCoT is a general document that is then transferred down into the local urban development plans (PLU) for each individual commune involved in the SCoT—PLUs must be compatible with the SCoT by integrating and respecting its content and objectives.

The plan's elaboration was a major undertaking. The process first started during the mid-2000s, with the plan being officially adopted in 2011. Involving 414 000 inhabitants, it is organised and promoted by Grand Clermont—thus extending across communes that cover urban areas, peri-urban zones and rural territories. The SCoT also covers places where activities are devoted to economic production or the day-to-day life of the metropolis, such as two natural parks, farming areas, or areas devoted to natural and water resources. The area encompasses diverse topography and landscapes, from the Limagne agricultural plain (300 meters above sea level) to the Puys Chain (more than 1 400 meters above sea level) spanning roughly 135 000 hectares. These plains, plateaus, volcanic landforms and valleys constitute rich and diversified natural landscapes and some of the most fertile lands in Europe: the Limagne Plain and the Limagne des Buttes.

With a 20 year outlook, the SCoT sets a general direction for land uses, rather than specific and detailed plans

With a forward-looking approach (a span of 20 years), the SCoT aims to address the needs of the population both now and into the future, while reaching a balance between urban or to-be-urbanised areas, and agricultural and natural areas. It sets broad directions

for development, in the form of housing, public transportation, and infrastructure; as well as the protection of natural and agricultural areas, landscapes, etc. It contributes to the linkage and harmonisation of public policies. The plan also acts as framework for sectoral policies, particularly those related to urban planning, housing development and local transport.

Given the breadth and long time frame of the SCoT, it does not provide high level of specific detail on land uses. With the exception of some particular cases (e.g. protection to concentrations of vineyards, market gardening and summer grazing areas), there is no strict and systematic application of the regulations of the SCoT of Grand Clermont. It is not "enforceable against third parties", except for certain types of development projects (e.g. housing development projects, concentrated development areas, land reserves over 5 hectares, reparcelling and changes in use, commercial establishment authorisations, building permits for structures over 5 000 square meters). Provisions of the SCoT are required to be incorporated into the PLU and other communal development plans and must be applied when issuing building permits.

By law, the SCoT must respect the principles of sustainable urban development

The SCoT is grounded in sustainable development principles as articulated by the national government and more recently by the region. It tackles environmental objectives, such as, promoting urban renewal in distressed areas, ensuring urban development is controlled, protecting rural areas, and preserving natural spaces and landscapes. These are to be aligned with social and economic considerations, such as encouraging social diversity and achieving a viable mix of economic functions within the territory covered by the SCoT.

Given the centrality of environmental objectives, the initial impetus for the SCoT in greater Clermont-Ferrand was an effort involving several local actors, particularly local politicians, to create a green plan to increase the preservation of natural areas. This goal arose as a chief concern for the parties involved and was considered the fundamental basis for a renewed structuring of the territory.

The plan's spatial structure rests upon three distinct sub territories

The SCoT describes particular land use arrangements and targets for the Clermont area—e.g. urban uses, natural areas, protected zones, farming. These uses are organised around an urban core, which is quite dense, that is surrounded by agricultural and natural lands in a ring-like form. The spatial structure of the SCoT is based upon the co-existence of three distinct sub-territories: the metropolitan core (mainly the city of Clermont-Ferrand); smaller urban *pôles* (referred to as the *pôles de vie*); and finally, peri-urban areas and natural protected areas organised around the regional parks (*Parcs Naturels Régionaux*)and the Allier river.

In planning terms, the choice of zoning is quite classical for a SCoT; it is built on the differentiation between various types of activities. Most services are to be provided in urbanised areas, industrial zones are preserved, and large areas are reserved for peri-urban agriculture, even though they result in development activity in the green belt. This last aspect is rationalised as a way to create short value chains and promote local food. The majority of the rest of the land is to be maintained either in commercial agriculture, forest cover or some other natural state that is suitable for low-intensity tourism.

The plan promotes an archipelago spatial structure…

The main goal of the SCoT of Grand Clermont is to improve upon and to rationalise local land use. This includes a desire to reduce the population movement from the urban core to other areas and to ensure "efficient" land uses by creating a dense urban core, with increasingly lower levels of density in the suburban and peri-urban areas. This so-called "archipelago" spatial organisation means that different "pôles" co-exist across the territory with devoted and specific functions, which can become more urbanised over time. The plan reflects the reality that the SCoT is made up of a number of communes who must each perceive that the plan provides benefits for their particular settlement or commune, while leading to a more rational spatial structure. These *pôles* are meant to function as a network in order to strengthen transport connections and limit new developments in the peri-urban areas. As part of this effort, the SCoT includes the goal of wanting to reduce the size of new houses (number of square meters per house) in order to promote greater density in existing locales and limit future urban expansion. Accomplishing this last objective may prove difficult, as it ultimately requires behavioural change in social norms and expectations for housing.

In terms of details, the SCoT describes an objective of increasing the number of inhabitants in the area by 50 000 by 2030 and the number of houses by 45 000.[8]Further, it aims to changes dynamics of urbanisation that had prevailed in past years. While between 1995 and 2005, 60% of new housing took place in the metropolitan heart, 10% in *pôles de vie* and 30% sub- and peri-urban areas, the SCoT aims to strengthen the metropolitan heart and the *pôles de vie* by having a distribution of 70% in the metropolitan heart; 15% in the *pôles de vie* and 15% in sub- and peri-urban areas (Greater Clermont, n.d.). Greater Clermont-Ferrand has used 1 800 hectares for its growth over the past 10 years, 1 100 of which have concerned the housing environment, two-thirds of which has in taken place in peri-urban locales. The SCoT recommends at least a 20% improvement in land-use efficiency, aiming at an average density of 130 square meters per housing unit in the metropolitan core, 500 square meters per unit in the *poles de vie* and 700 square meters in the suburban areas. While these densities are an articulated objective, their implementation falls to the individual communes that actually grant planning permissions on a project by project basis.

And the protection and promotion of natural spaces across the territory

Another crucial idea that arose during the elaboration, and eventual adoption, of the SCoT was to distinguish and to promote natural spaces across the territory—notably the intermediary spaces between the urban agglomeration and the *Puys* Mountains (this has been done by the *Conservatoire des espaces naturels d'Auvergne*). There was a particular interest in making use of small plots of land which may have value for natural uses—e.g. as a hiking path—but which were not used for farming and not linked to other natural spaces. There is a considerable amount of this land in the peri-urban area due to the decline of agricultural activities in hilly areas. The interest and the recognition of the valuable character of these spaces began when Clermont's urbanisation began to climb the hillsides of its surrounds at the end of the 1990s. Such development is seen as presenting a threat to the quality of the local landscapes, the importance of which has increased since the recognition of the territory by National authorities and UNESCO. Although most people have the impression that these spaces are natural areas, in reality they are actually the result of an extended period of intensive management that gives them an ecological function that is distinct from natural landscapes.

Public engagement during the elaboration of the SCoT was weak, but key stakeholders had a vocal presence

Those responsible for developing the SCoT attempted to engage the local communities in the plan to gain multiple perspectives and build community support, but were largely unsuccessful. Though the legally-required public meetings were broadly advertised, participation was low, with around 1 000 persons in total. The large geographical scale of a SCoT and its relatively abstract discussion of large scale land uses makes it of limited interest to most local people who focus more narrowly on specific land uses in their immediate vicinity. It is far easier to involve professionals, such as architects, politicians, and developers, than to attract the participation of local individuals in the local actions and the definition of land use perimeters. However, in the absence of strong public participation it is difficult to claim that the plan has local endorsement or acceptance. Efforts to capture local concerns through the use of mathematical models that assess the impact of changes in transport networks at the local level on agriculture, landscape and housing provide a weak substitute for direct contact with the local population.

Significantly, there has been opposition to the SCoT project, especially during the preliminary stages. Most opposition was directed towards the proposal to increase housing density in the urban core and to limit the peri-urbanisation process. Local residents and associations opposed the idea of apartment towers and increased density and argued for gardens and individual houses in the suburbs instead. Along the same line of thinking, the Chamber of Agriculture delivered a negative opinion about the first version of the project which was based on the premise that too much agricultural land is being urbanised. The Chamber of Agriculture argued that farmland was not in short supply and that greater conversion was not a public concern. Finally, some people argued against the construction of a new by-pass road that was mainly intended for trucks.

It should also be noted that, during the preliminary stages and the launching of the project, some local politicians expressed frustration that the land use planning process was not ambitious enough in terms of its expectations about the rate of urban growth. In agreement with this perspective, several farmers expressed discontent at the limited opportunities to rezone agricultural land for commercial or residential development. But in the end, actual population growth in the area fell short of predictions. The rate of urbanisation in the SCoT area was not as fast as was expected, leading to less demand for new housing, and since 2008, the amount of land used for production has in fact declined. Public engagement in the planning process is very important; plans should be based on community values, needs and expectations and should have community buy-in. However, there is always a risk that such engagement efforts result in NIMBYism (not in my back yard) or BIMBYism (build in my back yard) which can be contrary to overarching spatial development objectives.

A revised version of the SCoT must be prepared by 2017 at the latest. This will provide another opportunity for residents to exchange views about the plan. For example, the farming lobby, trucking lobby, politicians, environmental associations and so on will all be engaged in the process. This deliberative process creates an opportunity to convene various interests and to, ideally, reach agreement on key issues that should be based on good planning principles. Before the final decision of land use planning, there is a phase of elaboration, with a search for consensus, in political and technical terms. But much depends on the political climate. If the local population does not believe they can have an

impact on the next plan, there will be little likelihood of high rates of participation in its elaboration.

While the SCoT offers a comprehensive approach to spatial planning it cannot solve all of the area's issues and it has limited scope. It is constrained by the types of issues that it a can address both by national policies and by the authority granted to regions and to communes. For example, it is bound by national rules or regulations, like the *procédure d'installation classée* (a set of national regulations regarding the setting of industrial, transport, energy or waste sites), or the questions of ecological continuities. On the other hand, there are governance structures and plans (like the PLU) which act at the smaller geographical scale of the commune.

Clermont-Ferrand's future land use development plan

For communes, the main planning document is the local urban development plan (*Plan Local d'Urbanisme,* PLU), which organises and defines land occupation for a period of 10 to 15 years. This plan implements the guidance and objectives set by the SCoT and all other spatial plans and regulations. Prior to the establishment of PLUs, local planning was administrated by the POS (*Plans d'Occupation des Sols*), which included less recommendations, constraints and controls than the PLUs.

The project of creating a PLU for the commune of Clermont-Ferrand was launched a few years ago by the local authorities and is about to be finalised—it will replace the old POS. The year 2016 will be devoted to a compulsory public enquiry and public consultation, with the new land use plan expected to come into force in 2017. Other communes in the greater Clermont-Ferrand territory have the responsibility to create their own PLUs.

The main idea set out in the plan is to design a smart city in order to rebuild the town upon its old settlement ("build the city upon the city"). The plan seeks densification in order to prevent expansion into agricultural or natural land. The intent of PLU of Clermont can be summarised by a single statement: there is enough available land within the city to provide the opportunity to build new houses and infrastructure. But most of these spaces originate from the old industrial system and were used for industrial production. These "brown-field" sites have to be transformed or rehabilitated before they are useful for other purposes. Financing for this remediation is not readily available from government and private local property developers are reluctant to undertake this function. At the moment, there is no systematic planning, nor serious anticipation regarding the potential for brownfield redevelopments, even though a number of initiatives to encourage new housing construction have been launched. One strategy to begin the transformation of brown-field sties is to encourage temporary uses in order to increase interest in the area and demonstrate its potential vitality (Box 2.6).

There are therefore several major obstacles to the successful realisation of the planned approach. The first is the cost of reconversion. The cost of remediation of a parcel in order to make it ready for new construction is quite high and potential real estate developers are hesitant to develop on such sites due to a number of uncertainties, such as the threat of archaeological constraints or inadequate future demand (lower real estate prices). In addition, the complexity of the approval process, with multiple bureaucratic steps that are needed to achieve a construction project – from the building permit (*permis de construire*) at the commune or intercommunal level, to the authorisations and coherence with the PLU, the PLH, the SCO and different types of rules (like *l'avis des domains*) – reduces the incentive to invest. Finally and crucially, while Clermont-Ferrand

may believe that all future developments should take place within its administrative boundaries, this is not the belief of neighbouring communes.

Presently, the PLUs are slowly being replaced by PLUIs (*PLU Intercommunaux*), with the same goal but for a community of communes (*Communauté de Communes*). Several local actors are presently interested in pursuing a PLUI, which would encompass several communes around Clermont-Ferrand. This planning tool could bring more coherence in the distribution of local land uses and real estate policies, induce new modes of collaboration, especially between public and private bodies. It could also facilitate more integrated actions at the level of land use occupation and regulation across the local territory. Such a perspective matches with the ongoing process of reducing the number of EPCI, and more precisely, with the creation of intercommunal organisations in charge of various duties including land management. However, in order to induce such co-operation and align their own policies with those of Clermont-Ferrand, the other communes will need to share in the benefits of any future developments.

Box 2.6. **Embracing experimentation through temporary land uses**

It can be difficult to encourage investment in brownfield sites. But, it is critical to do so. Overgrown and unsightly vacant properties detract from a city's livability and negatively affect real estate prices. This can create dead zones in a community and reinforce the feeling of neighbourhood neglect and decline. In response to this problem, urban activists have been transforming such spaces for decades, often without the permission of local authorities. These types of unsanctioned activities are sometimes referred to as "guerilla urbanism"—for example, the Green Guerilla movement in New York City which pioneered the practice of reclaiming vacant urban land for neighborhood gardening in the 1970s (Schmelzkopf, 1995).

In many cases, these activist-driven movements have led to institutionalised practices. Community garden programs supported by local government are now commonplace on vacant lots. Or, take for example, Park(ing) Day in San Francisco—an initiative started by a local activist group in 2005 which temporarily reclaimed parking spaces for pedestrian activities. Embracing the concept, the city has created a "Pavement to Parks" program led by private initiative which has created dozens such temporary public spaces. "Do-It-Yourself" skateboard parks offer another example. The former director of design for the city of London describes the growth of temporary land use initiatives as a "confluence of tough economic times, the emergence of a new kind of creative culture, and a preponderance of stalled development and vacant properties" (Greco, 2012).

Local governments are increasingly embracing the temporary land uses movement and working with communities and businesses to make better use of vacant spaces—whether this be for a pop-up event or festival or longer term uses that entail the refurbishment of built structures on vacant land. The approach has been referred to as the "temporary city", "tactical urbanism" or even the "pop up city"—it is grounded in the idea that planning of public spaces doesn't need to always involve capital intensive projects. The term "temporary" can entail anything from a couple of days to several years. Such uses create a sense of dynamism about a place and can be an important first step to encourage more permanent forms of investment.

A city's regulatory environment plays a major role in shaping the prospects for temporary land uses. For instance, Portland's open rules towards food vending have allowed local food truck entrepreneurs to occupy vacant spaces and create vibrant uses out of them—it has been a boon for local businesses and has encouraged tourism to the area (Southworth, 2014). Temporary land uses encourage experimentation. Across the United States, local skateboarders have taken over vacant lands—often unused public land underneath bridges—to build illegal skateparks (e.g., Burnside Park, Portland; Washington Street Park, San Diego). In many cases, these illegal structures have since gained community buy-in and have been turned into official skateparks sanctioned by municipalities, thus changing their temporary land uses into permanent features of the urban landscape. Though initially an unsanctioned experiment, their uses were proven to be beneficial and were eventually accepted.

In Cleveland—a shrinking city where approximately 1 000 homes are demolished in a typical year—the need to address vacant land uses is paramount. The city together with the Kent State University Urban Design

Box 2.6. **Embracing experimentation through temporary land uses** (*cont.*)

Collaborative created a "Vacant land re-use pattern book" (2009) as a guide and resource for individuals and communities wishing to undertake projects on vacant land. It provides costs estimates for different kinds of projects and access to data and maps of vacant land so that potential areas can be identified and linked up to other vacant sites. In an assessment of such practices, Németh and Langhorst (2013) offer some conditions for appropriate temporary uses (see Table below).

General category	More appropriate for temporary uses	Less appropriate for temporary uses
Ownership of the land	Lack of (or poor efficacy of) public investment or incentives	Private ownership (unless vacant too long)
Role/influence of the city	Slow-growth/declining cities Trial and error, flexible approach embraced Socially progressive goals (inclusion, diversity, access)	Traditional planning tools successfully encouraging private investment Growing/vibrant cities Top-down, master-planning Pragmatic, financial/economic goals only
General economic climate	Low private development interest Times of "disruptive, stressful, social and urban change" Exploit uncertain transitional period	High private development interest More stable, predictable times Immanent redevelopment likely
Development potential of the space	Long-vacant land or structures Vacant land/abandoned structures Areas with high risk of decline and "contagion effect" Non-corporate, low-capital businesses or investors likely Smaller scale Leftover/remnant parcels, small, fragmented spaces Higher use value Areas seeking redevelopment, attraction of new residents and businesses Active community/residents/non-profits/small investors	Recent vacancy; likely to redevelop quickly "Underutilised land" (awaiting planned development) Areas of stability Corporate developers, big business, municipal "growth regimes" Larger scale Larger, continuous spaces Higher exchange value High-profile, central tourist areas Top-down corporate interests
Potential uses of the space	Events/programmatic uses "Soft content" Desire/need to break from mono-functional environments Desire to encourage/create new meanings, functions, identities, and relationships for/of a space Test unfamiliar or potentially controversial ideas Educational tool to prove investment potential of certain uses/spaces "Tactical" unsanctioned and transgressive uses, frequently by marginalised demographics, subcultures (e.g. squatting, skateboarding, emergent artists...) (De Certeau, 1984)	Fixed infrastructure, buildings Inflexible built form Already diverse, multi-use environments More stable, secure areas "Proven" solutions, uses "Strategic" sanctioned uses catering to preferred/ privileged/mainstream demographics (De Certeau, 1984)

Source: Németh, J. and J. Langhorst (2014), "Rethinking urban transformation: Temporary uses for vacant land", *Cities*, Vol. 40, pp.143-150.

As Németh and Langhorst (2013) note, there are liability issues to consider and not all temporary land uses will be desirable or feasible. Much depends on the compatibility of the uses with that of the surrounding neighbourhood, the type of ownership of the land, the built structures on it, and liabilities associated with the activities that are planned. Nevertheless, by encouraging temporary land uses on vacant land—and creating guidelines and criteria for such uses—cities can work with communities and individuals to gauge what works, how land uses may evolve and create dynamic spaces that may either go on to last in the longer term, or shift to new uses over time.

Sources: Greco, J. (2012), "From Pop-Up to Permanent", Planning, Vol. 78/9, pp.15-18; Németh, J. and J. Langhorst (2014), "Rethinking urban transformation: Temporary uses for vacant land", *Cities*, Vol. 40, pp.143-150; Schmelzkopf, K. (1995), "Urban community gardens as contested space", *Geographical Review*, Vol. 1 pp. 364-381; Southworth, M. (2014), "Public Life, Public Space, and the Changing Art of City Design", *Journal of Urban Design*, Vol. 19/1, pp. 37.

Establishing a regional presence through the pôle métropolitain

In 1988, the region started to develop the concept of a metropolitan area, mainly based on the Clermont-Ferrand agglomeration. This initiative garnered strongly negative reactions from all territories within the agglomeration area, but particularly from the main cities. As a result, the region stopped the initiative and the idea lay dormant until 2004 when, following a national initiative from DATAR, the *Commissaire de massif* requested the region to respond to the new national call to create metropolitan agreements. Clermont-Ferrand responded to the call jointly with *Le Puy*, *Aurillac* and *Vichy*, and tried to establish a general policy for the broader area.

The idea to develop a larger structure than the traditional urban or rural local areas, involving collaboration between different *pôles*, continued to germinate and the project of the *Pôle métropolitain Métropole Clermont Vichy Auvergne* was eventually launched in 2011 and formally created in 2013. As previously mentioned, the new entity is much larger than the SCoT of Grand Clermont—the body includes the SCoT of *Vichy* and the *intercommunalité* of Thiersas well as various rural areas (in geographical terms, from Vichy to Brioude). It is also expected to be enlarged to the city of Thiers in the future. The goal is to cope with the increasing metropolitan character of the area and to improve its public image both within the newly reconfigured region and beyond it.

The opportunity to create *pôles métropolitains* was first established in France in 2010 by a national law that facilitates collaboration among larger urban agglomerations located in close proximity to one another. *Pôles métropolitains* are based upon voluntary agreements among different communes or *intercommunalités* and provide an opportunity for collaborative actions through a new shared public body that is jointly launched by the various local governments. These organisations are special purpose entities with narrow mandates and limited financial or human resources that are meant to facilitate joint strategies and co-ordinate action by the parent communes.

The 2014 MAPTAM law has led to the creation of several new French *métropoles* such as the Lyon and Grenoble *métropoles*, in the new Rhône-Alpes-Auvergne Region (est. January 4th, 2016). For Clermont-Ferrand, this is perceived as having created the threat of metropolitan competition within the new regional area, which will harm the former Auvergne communes unless they can find some way to act in a collaborative manner to increase their economic and demographic mass.

The structure of the *Pôle métropolitain* Métropole Clermont Vichy Auvergne currently pursues five main objectives:

- To maintain and try to increase the economic strength of its territory, including industry, agriculture and services activities, but also to ameliorate the performances of the University and the educative system
- To increase and to maintain mobility and connectivity between the different pôles
- To develop the activities related to sport and to increase their external visibility
- To develop and to rationalise cultural activities (for example, a co-ordinated policy for the local Operas)
- To develop a joint governance of the *Allier* river and to settle new green corridors on its banks.

Challenges 1, 2 and 5 are clearly linked with the setting of a local land use policy, co-ordinated between various local authorities and stakeholders. Challenge 1 implies the need to keep land for agricultural and industrial activities and to try to avert the threat of a fully residential or touristic economic development option. Challenge 2 addresses the development of roads and railways, but also of land uses and residential expansion within the metropolitan area. The construction of many individual houses would lead to an increase in urbanised land. Current urbanisation along the main transport arteries has the potential increase traffic congestion. Challenge 5 clearly refers to the project to development the banks of the Allier River, and the protection of natural resources and green areas. It is also linked to the development of amenities for tourism and leisure and recreational amenities for urban residents.

This initiative established a laboratory for collaboration between different *intercommunalités* and public bodies around a joint project. The set of objectives may seem both narrow and mundane, but this in part reflects both the limited scope for actions allowed to a *pôle métropolitain* by national law.

One of the major challenges for this new structure is to open more constructive relations between the Clermont urban area and the other communes and to collaborate with them, particularly on land use issues. Beyond this, the collaboration with Vichy is at stake, as is the possibility of reaching a general agreement among cities, small urban *pôles,* peri-urban areas and the rural zones for the joint management of local public goods, like water and landscape. The role of the City of Clermont-Ferrand is difficult in this respect. While Clermont-Ferrand is the core of the urban system, it has also to take into account the interests of the other parties and to avoid the criticism that it is trying to concentrate all finances and opportunities internally. For example, it is of the utmost importance to create jobs in the other areas of the *pôles métropolitain* and to devote funds to organise careful and fair land use plans, and to connect on that topic with different representatives of Clermont's hinterland. This problem is accentuated by ongoing friction among various communes.

The metropolitan co-operation objective is crucial given the new situation created by the merging of the two regions and the increased competition stemming from the two regional métropoles (Lyon and Grenoble). This is the second major issue for the area. With the increasing development of the two cities of Lyon and Grenoble, the larger Clermont area has to define a co-ordinated policy and set precise targets for the future if it is not to be overshadowed by the two larger agglomerations in the new region. The question of future specialisation is crucial: which main types of activity should be pursued? This decision not only has to reflect the resources and skills of Greater Clermont and the new pôle métropolitain, but it must also recognise those in the balance of the new region, especially Lyon and Grenoble. These choices will considerably impact upon land use occupation choices in the future. Further, the question of the opening of Clermont to the region and abroad appears to be crucial.

On the other hand, the creation of a new bigger Region could become a major opportunity for the *pôle métropolitain*. The larger Region with its main offices in Lyon may choose to delegate more responsibility to metropolitan areas including the Métropole Clermont Vichy Auvergne. This could allow the *pôle* to take on more significant responsibilities than it has responsibility for at present. However, this remains a hypothetical possibility since the structure of the new regional government remains unclear, as does the degree of local support for a larger role for the *pôle*.

The *Pôle métropolitain Métropole Clermont Vichy Auvergne* will only play a minor role in planning and regional governance because of its limited institutional competencies, and the fact that its scope is limited by pre-existing institutional governance tools, such as the SCOT, PLUs, and national or EU based rules and laws, as already discussed earlier in the text. At a very local scale, it has also to cope with the restrictions imposed by the SRADDT (*Schéma régional d'aménagement et de développement durable du territoire*)—the document that fixes the main lines of local land use planning (e.g. transport, urbanism, natural areas) and sustainable development at the regional level. The regional SRADDT, which was launched in 2011, assumes for the first time the idea that, even though the Auvergne region is mainly rural territory, it is at the same time dealing the with negatives consequences of increasing urbanisation, largely in Clermont-Ferrand, that has important implications, not just for the city but for other communes in the region as well.

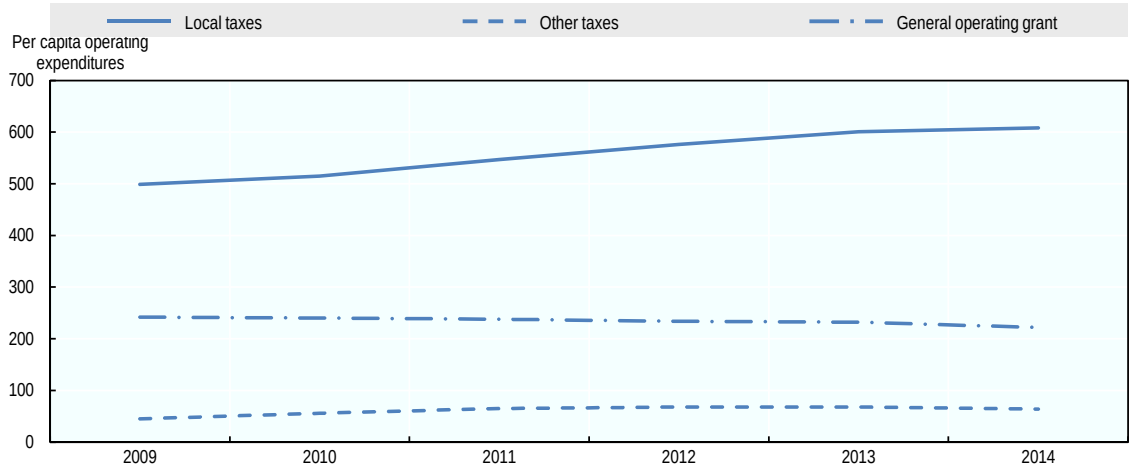
Finally, major changes in the framework for spatial planning will occur in the near future, reflecting both the new larger region and the introduction of the new regional SRADDET (*Schéma régional d'aménagement, de développement durable et d'égalité des territoires*), that adds new responsibilities for the region, such as the management of waste sites. The administration of the new region will also have to develop a relationship with two national land management agencies that have a regional presence. One is the local EPFL (*Établissements Publics Fonciers Locaux*) that is in charge of building land banks for future land uses by the means of pre-emption of real estate transactions (with a current local budget of about EUR 140 mln). The second is the relationship with SAFER (*Sociétés d'aménagement foncier et d'établissement rural*), that also uses pre-emptions of real estate transactions to acquire agricultural land or land located in rural areas.

The local fiscal environment

Land use plans are an obvious tool with which to shape land use practices, but fiscal tools and incentives or disincentives can equally affect how land is used. Specific fiscal tools can direct or maintain certain land uses, such as special agricultural levies to maintain their function, density bonuses for new developments that meet a certain density threshold or tax incentives and grants that target the redevelopment of brownfield sites. Beyond targeted fiscal instruments, the broader fiscal environment can also affect land use decisions in a municipality. Local governments that rely to a large degree on own source revenues to fund programmes, services and infrastructure may face a pressure to expand their residential population or attract new businesses in order to increase revenues where other sources of revenue decline. Alternatively, they can reduce spending in times of fiscal constraint or increase local taxes or other fees to compensate for budget shortfalls.

Clermont-Ferrand, like municipalities across France, increasingly faces such pressures. The contribution of local taxes to total operating expenditures between 2009 and 2014 increased by 24% while the category of other taxes increased by 46%. Local taxes comprised 44.6% of the total operating budget in Clermont-Fernand in 2014—an increase from 40% in 2009. In contrast, the general operating grant decreased over this time by 7%.

Figure 2.8. **Per capita contribution of local taxes to total operating expenditures, Clermont-Ferrand (commune), 2009-14**



Note: Figures inflation-adjusted (CPI), base year 2007.

Source: Ministère des finances et des comptes publics (2016), "Le portail de l'économie et des finances", www.economie.gouv.fr/cedef/chiffres-cles-budgets-collectivites-locales (accessed 18 July, 2016).

As the table below shows, the tax rates across all of the three main types of local taxes increased between 2009 and 2014 (Table 2.4). Of these, the tax on undeveloped land has increased the most, by almost 5% over the period.[9] This tax applies to such land as quarries, mines and bogs, marshes and salt flats, soil built properties, rural buildings, courtyards and outbuildings, land occupied by the railway, golf courses, without buildings and so on. There is a long list of temporary and permanent exceptions to the tax (Service Public, 2016). The total contributions of the tax on undeveloped property are very low, comprising just a fraction of a percent of local tax revenue because of the low assessed value of undeveloped land. Designed effectively, property taxes and such charges as area or betterment charges or fees can be used to meet spatial aims such as more compact development (see Box 2.7 for examples).

Table 2.4. **Local tax rate, Clermont Ferrand, 2009-14**

Type of tax	2009	2010	2011	2012	2013	2014
Council tax (including THLV)	17.5%	17.9%	18.3%	18.7%	19.1%	19.1%
Developed property	21.7%	22.1%	22.7%	23.2%	23.6%	23.6%
Undeveloped property	53.2%	54.2%	55.6%	56.8%	57.8%	57.8%

Note: THLV refers to the habitation tax.

Source: Ministère des finances et des comptes publics (2016), "Le portail de l'économie et des finances", www.economie.gouv.fr/cedef/chiffres-cles-budgets-collectivites-locales (accessed 18 July, 2016).

Box 2.7. **Designing property taxes and charges to tackle urban sprawl**

Greater differentiation of property taxes to encourage desirable developments can make them an effective instrument for steering land use. By altering the relative price of property, property taxes can influence a number of decisions about property improvement, size and location – and ultimately increase or decrease urban sprawl (Deskins and Fox, 2010). While differentiated property taxes can influence land use, their use for this purpose is not without caveats. They should be clearly-structured so that they cannot be used to treat politically well-connected developers and land owners preferentially. Further, they need to be carefully designed so that individuals cannot "game the system" by, for example, misrepresenting the true use of a property. Decreasing sprawl through property taxes requires the following priority actions:

Box 2.7. **Designing property taxes and charges to tackle urban sprawl** (*cont.*)

- Eliminate policies that favour single-family homes over apartments because the former encourage less dense development. Perverse incentives are created when single-family residential properties are offered lower taxes than higher-density properties of the same value (Haveman and Sexton, 2008).
- Tax the land value, not the property. When property taxes are based on land value, rather than buildings or other improvements to the property, owners have an incentive to develop the land to its most profitable use. Replacing a traditional property tax with a land-value tax, or a split-value tax that includes higher rates for land value and lower rates for structures or other improvements (as implemented by some municipalities in the US state of Pennsylvania), could encourage development in the urban core.

Development charges or fees can also discourage sprawl and fund infrastructure. A development charge is a one-off levy on developers to finance the growth-related capital costs associated with new development or, in some cases, redevelopment. These charges are levied on works constructed by the municipality, and the funds collected must finance the infrastructure needed for the development. Development charges that reflect the true cost of providing services can buttress planning tools by guiding development away from high-cost areas to more efficient locations (Tomalty and Skaburskis, 2003). Pricing policies can be an effective planning tool because "they directly engage developers, they make them accept the full project costs, they recognise and publicise the need to correct for the external costs of development by increasing the cost of land, and they raise funds for infrastructure development and compensation programmes" (Skaburskis, 2003). For example, the extension of the metro-line in Copenhagen was financed through fees from the development of the Ørestad area of Copenhagen (OECD, 2009).

When urban form and density are not fully factored into the development charge, a market distortion occurs which can result in inefficient allocation of resources (GTA Task Force, 1996). In order to have the required effect, the charges have to be differentiated by location to reflect the different infrastructure costs. The costs of services may vary by location for at least three reasons (Tomalty and Skaburskis, 1997). First, the distance of each development from major facilities makes a difference. A development far away from an existing water treatment plant, for example, may require an additional pumping station. To be efficient, development charges would be higher in these locations. Second, there will be infrastructure cost savings for nodal or infill development because the infrastructure is already there. Third, service standards may vary in different developments (e.g. household water use versus waste generation). Whatever the reason for the differential costs, efficient land use requires that developments imposing higher infrastructure costs on the city pay higher development charges than developments imposing lower costs. Blais (2010) notes that, in addition to varying by location, charges should also differ according to the density and type of development to avoid low cost areas subsidising high-cost areas, small lots subsidising large lots, and smaller residential units subsidising larger units.

Area-specific charges allow municipalities to vary the charge according to the different infrastructure costs imposed by each area on the city. A uniform charge subsidises inefficient uses of land; developments that impose higher costs are subsidised by developments that incur lower costs. In practice, however, many cities are missing opportunities to use development charges to foster green development.

Other problems can arise from the way in which the charge is determined. In Ontario, for example, municipalities are only permitted to charge the infrastructure costs for services that are already delivered in the municipality and only for standards of service that do not exceed the average level of service over the previous ten years. If a municipality chooses to encourage compact development by increasing transit service, for example, the development charge cannot be used to cover costs that exceed the existing standard. Although these provisions were instituted to ensure that developers are not liable to pay for gold-plated services (services that exceed what existing residents currently enjoy), they make it difficult for municipalities to recover transit costs (OECD, 2010).

Source: OECD (2013a), *Green Growth in Cities*, OECD Publishing, Paris, http://dx.doi.org/10.1787/9789264195325-en.

Box 2.7. **Designing property taxes and charges to tackle urban sprawl** (*cont.*)

Cited sources: Deskins, J. and W. Fox (2010), "Measuring the Behavioral Responses of the Property Tax", in R. Bahl, J. Martinez-Vazquez and J. Youngman, Challenging theConventional Wisdom of the Property Tax, Lincoln Institute of Land Policy, Cambridge, Massachusetts; Haveman, M. and T.A. Sexton (2008), Property Tax Assessment Limits: Lessons from Thirty Years of Experience, Lincoln Institute of Land Policy, Cambridge, Massachusetts; Tomalty, R. and A. Skaburskis (1997), "Negotiating Development Charges in Ontario: Average Cost versus Marginal Cost Pricing of Services", Urban Studies, Vol. 34, No. 12; Skaburskis, A. (2003), "Planning City Form: Development Cost Charges and Simulated Markets", Planning Practice and Research, Vol. 18, No. 2; OECD (2009), *OECD Territorial Reviews: Copenhagen, Denmark 2009*, OECD Publishing, Paris, http://dx.doi.org/10.1787/9789264060036-en; Blais, P. (2010), Perverse Cities: Hidden Subsidies, Wonky Policy, and Urban Sprawl, UBC Press, Vancouver, British Columbia; OECD (2010), *OECD Territorial Reviews: Toronto, Canada 2009*, OECD Publishing, Paris, http://dx.doi.org/10.1787/9789264079410-en.

Main challenges and opportunities

Spatial and land use planning in greater Clermont is chiefly characterised by a desire for more efficient and effective land uses that balance the demands of urbanisation and particularly, peri-urbanisation, with that of natural and agricultural activities. In tandem, local governments have articulated a desire through both the SCoT and *métropole* plans to increase the population in the area. If successful, this will require more houses to be built in order to maintain the area's vibrancy and act as a counterweight to the pull of larger metropolises, in particular Lyon. Thus, the governance and regulation of land use are as much a political project as they are a reaction to social, economic conditions and urban-rural morphologies. The preceding discussions of the area's spatial planning's objectives illuminate several major challenges and opportunities. This section discusses each in turn.

Land use challenges

In many respects, Clermont-Ferrand faces land use planning issues that are common across OECD countries

In spite of several peculiarities, the Clermont-Ferrand metropolitan area reveals notable similarities with hundreds of comparable cities, in France and in other OECD countries. It is a medium size agglomeration, with a dense core, close suburban belts, and uneasy relations with local governments in a mostly natural or agricultural hinterland, leading to strong competition and tensions with regards to land use and development. Because in France there is little likelihood of amalgamation and all communes have equal rights and authorities, local policies try to tackle these challenges by forming co-operative communal associations and with the SCoT a common spatial plan.

Like many cities, Clermont-Ferrand is trying to tackle growing urban sprawl, much of which occurs outside its jurisdiction. The pace of urbanisation is quite regular, but is proceeding even slower than was expected by the current SCoT. Despite aspirations to increase density within the city, suburbanisation and peri-urbanisation continue apace and appear difficult to stop (Box 2.8). At the same time, even if the core of the city provides building opportunities on the old industrial land, the process of reconversion is difficult to handle because of the cost of remediating soil pollution and the possibility of archaeological constraints.

The process of peri-urbanisation is one of the most common features of modern agglomerations, be they large or small. In Clermont-Ferrand, it induces the usual

consequences encompassing: the conversion of good agricultural soils, increased competition between different land uses (e.g. houses, infrastructures for the city, roads and railways, manufacturing plants, natural areas, recreational zones, farms), the risks associate with reduced storm water infiltration and water pollution, the concentration of urbanisation along main roads, the increasing difficulty of organizing public transport in low density housing settlements, and the feeling of a separation between suburban populations and more urbanised ones. But, in Clermont-Ferrand, as in other urban places, there seems to be a clear preference by many households for this type for dispersed development, and not the more compact approach favoured by planners and city officials. As has been discussed, this imposes a number of costs and externalities including the environmental costs of commuting and fiscal costs borne by the municipality when expanding and servicing infrastructure to peri-urban areas.

Another result of the peri-urbanisation process is the development of different conflict behaviours on the fringe of the city and in the suburbs (Mann & Jeanneux, 2009). Some of them are led by the externality effects accompanying profit seeking by individual land owners, such is the case in BIMBY (Build In My BackYard) situations, when people want to subdivide their garden and transform it into a building site face the opposition of close neighbours. But in most cases, conflicts occur at a larger geographic scale when bigger parcels of land are being considered for a change in zoning designation, and the consequences spill over a much larger territory involving far more people.

Competition among various potential new land uses, or the mixing of various land uses in adjacent areas can result in conflicts between current or potential users over house building, maintenance of agriculture, waste sites or classed installations, protecting water supplies, risks of reduced water infiltration, etc. Conflicts can also exist in rural areas between those who wish to maintain traditional industries on the land and those who wish to develop new uses, such as tourism. For example, "in the Auvergne, there are those who wish to preserve the region's traditional economy based on cheese production, and who see the development of tourism as a threat to this traditional way of life" (Oliver and Jenkins, 2003: 304).

Box 2.8. **Counteracting urban sprawl: France's "15 km rule"**

In 2000, France created a "15 km" rule to counteract urban sprawl. It mandated that any municipality located within 15 km from the outer limit of an urban agglomeration would lose its right to elaborate a land use plan and give building permits if it were *not* covered by a Territorial Coherence Plan (*Schéma de Cohérence Territoriale,* SCoT*)* —a form of inter-municipal plan whereby municipalities commit themselves to integrated and joint development. This rule created a very strong incentive for municipalities to join the SCoT, but it was not enough to limit urban sprawl from persisting. Writing in 2014, a government note on the matter comments that only 20% of the territory is currently covered by an enforceable SCoT, and that their coverage is not well-connected to areas of population growth. Moreover, industrial and commercial developments have continued to contribute to sprawl. And so, while the government established a new form of comprehensive integrated plan that would link housing, urban planning and transportation more effectively, plan coverage was proceeding slowly and leapfrog developments continued apace.

In 2010 the "15 km" rule was extended to cover more municipalities. In 2013, it was expanded again to apply to municipalities around cities of 15 000 and by 2017, all municipalities will be required to be covered by a SCoT, and if they are not, no new developments will be permitted in that locale. Thus, by 2017, all of France will be covered by the limited urbanisation principle. This is a very promising development.

Source: Ministère du logement et de l'égalité des territoires (2014), "Renforcement du principe d'urbanisation limitée en l'absence de SCoT, Loi Alur", May 2014.

New needs for new usages: agriculture near the city, touristic areas, environmental requirements

The current revolution around the notion of livable cities and their multiple functions is above all the consequence of a progressive shift in urban dwellers' behaviours. It appears that the 21st century is characterised by the increasing concern of local populations for various dimensions of their quality of life that can only partially be fulfilled in the city itself. These include access to natural areas and recreation areas, farming near the city for local consumption, and a diverse mix of housing choices that includes both dense urban and dispersed suburban homes. In this respect, there is a growing perceived need for the reservation of lands devoted to these uses in the hinterland, and for land use planning policies directed towards the organisation of available lands that include broadly defined urban population needs.

However, urban interests are not the only consideration in land use planning. The principle of local democracy in France has resulted in the independence of each commune in establishing a land use plan that best suits its particular needs, so long as it conforms to existing regulations set by higher levels of government. The interests of residents in more rural communes may not include simply acting as a recreation area for a nearby city. Where multiple communes exist in close proximity but have different objectives, there is a need for a mechanism to resolve these overlapping, but incompatible objectives in land use and other topics.

Structures of multilevel governance are at the core of decisions about land use, including their changes and their reorganisation. As copiously illustrated by the example of the Grand Clermont metropolis, different laws and rules promulgated by national and local authorities as well as rules and land use zonings issued from EU decisions (like ZNIEFF or green and blue corridors) structure these relationships and ensure a coherence between all these institutional constraints and the various levels of decision making. But at the same time, one has to cope with the issue of the multiple planning documents and the governance structures that support them. This increasing complexity is at the origin of real problems in managing land use within and outside a single commune of any size. However, it is particularly challenging for smaller communes which have limited capacity including part-time councils and a small professional staff.

But at the same time, Clermont-Ferrand's geographical features and loss of regional influence present particular challenges to overcome

Some of the common issues, found in most medium-size cities, are increased in the case of Clermont-Ferrand by local peculiarities, such as natural or geographical conditions and specific governance and political conditions. The latter also provide for some interesting opportunities for the whole area.

Urban sprawl and peri-urbanisation processes are limited by the amount of physical space in an area bounded by mountains and hillsides. The ongoing peri-urbanisation processes of the Clermont metropolis is partly constrained by the lack of space, due to the presence of the Chaîne des Puys Mountains and the subsequent hillsides, near the city. This peculiar geographical situation has two main consequences. First, it involves a restriction of the possible land uses and occupation and it gives birth to a relative scarcity of available land. Second, it implies a potential need for more intensive management of the nearby hillsides, and more precisely, the identification of specific areas that can be devoted to the needs of the local population.

Conflicts about land use occur irrespective of the differences in the relative scarcity of land. They reflect conflicts about specific parcels of land because some uses may be perceived as harming the interests of nearby land owners. A media analysis of land use conflicts in Puy-de-Dôme illustrates this point well. It was found that the majority of conflicts are brought forward by rural residents who would like to maintain the natural environment against the land uses of businesses and industry (Mann and Jeanneaux, 2009: 129). Of the 35 conflicts identified in the area in the study, three quarters were resolved in the residents' interest—a fact the author of the study notes demonstrates that *ex-post* decision protest behaviour can result in political decisions that maintain or improve the quality of residential life. This does however suggest that for land owners, land use plans may provide far less assurance than is commonly presumed. Assuming that all of these challenges occurred after planning permission was granted (otherwise the development would not have been challenged) the local plan must have allowed the uses that were subsequently over-turned. This suggests either that the plan itself was flawed, or that the local political processes do not respect the plan, neither of which are desirable.

Local multilevel governance issues have been aggravated by French territorial reforms and the creation of the Lyon *métropole*. This evolution could lead to dramatic changes for the Clermont *métropole.* It has lost its status of regional capital and its activities will be challenged by the two other cities—Lyon and Grenoble. Moreover, Lyon and Grenoble officially benefit from the enhanced status of *métropoles* (along with 11 other cities in France), which means that they have a comparative advantages in terms of funding and that they can control and make contracts with their hinterland in an easier way than can Clermont-Ferrand.

This evolution appears to have created a major challenge for Clermont-Ferrand and other nearby communes and gives rise to several issues. The agglomeration will lose a part of the public services now locally available due to the loss of regional capital status. Most regional central services will be located in Lyon in the near future, and it will be the centre for regional political authority and decision making. Clermont-Ferrand faces the possibility of losing its leading role in its immediate area, in terms of cultural, commercial and intellectual services, to the Lyon *métropole*, the 2nd largest city in France. The city's position is challenged by the rise of the new *métropole*, improved east-west transport connections and the loss of a part of its administrative power. It is fair to say that regarding the national criteria related to being designated a *métropole* (greater than 500 000 inhabitants and other conditions in terms of attractiveness and economic strength). Confronted with this situation, the strategy of building a collaborative strategy across urban, peri-urban and rural territories through the *Pôle métropolitain Métropole Clermont Vichy Auvergne* appears to be the most rational approach. But even so, it is far from clear that it will be very effective.

Future areas of opportunity

To finish with the questions of how land should be used, what criteria should be used to allow changes in use, and what form the subsequent land use plans and permissions should take, the broad response is that these questions seem to be strongly influenced by local conditions, be they in geographical, economic, social or institutional. These local conditions give birth to peculiar issues but also to some local opportunities as well. Consequently, the approach used in France and in other OECD countries, of making actual plans and planning decisions the responsibility of the lowest level of subnational government, the commune, is generally appropriate. The issue of size does however matter. Very small communes may be limited in their capacity to elaborate and realise

complex plans. It is further important that some elements of local control should be constrained by higher level priorities because local preferences for specific land uses may not be compatible with broader social welfare objectives. In Greater Clermont-Ferrand, specific local conditions provide important limitations and opportunities for development and hence for specific uses of land.

While the Clermont agglomeration is bound by the Chaîne des Puys Mountains and by the Limagne plain and thus is constrained by development in that direction, this fact also presents opportunities. The limitations imposed by this geographical feature has at the same time created the necessity to develop local and co-ordinated land use policies in order to avoid local competition and land use conflict. It has also galvanised the need to reach agreements with other territories in order to establish a functional organisation of the main land usages, for various activities like industry, urbanisation, industry, infrastructure and so on. Importantly, the mountains offer renewed opportunities for the tourism industry and the creation of devoted recreation areas and other rural amenities that benefit local urbanites and visitors alike. These uses require that the mountain landscapes be maintained and that efforts are made to increase their accessibility, either through viewing sites, or paths that travel through them.

A medium size agglomeration and a slow rate of demography: a threat for the future?

The regular but modest rate of growth of the local population and of the agglomeration area is also an obstacle to major development in the current situation of the creation of the new merged region. This was not an issue when Clermont-Ferrand was the capital of the Auvergne Region because of the polarisation around the agglomeration in terms of various public services. With the emergence of Lyon as the new regional capital, an important part of local economic activity may turn away from the Clermont *pôle*. Overtime, this could reduce Clermont-Ferrand attractiveness for residents and business, which could reduce the rate of demographic and economic growth.

Constraints due to weak accessibility and a lack of public transport

One of the major weaknesses of the area in terms of economic development is the relative isolation of the Clermont area. Nestled in the Massif Central Mountains, the area's transport connections are relatively poor. There is no high speed train (TGV) connection, and there are no plans for one to be developed at present. It presently takes more than three hours to reach Paris by train. Moreover, the local train network is not well developed within the new region; for example, the train connection with Lyon has only recently expanded to provide frequent trips. Flight connections at the airport are limited; while it was once a minor hub now there are far fewer direct flights to other cities and it is quite difficult to reach the main French regional capitals, not to mention other countries. This situation limits the region's economic development and poses a constraint for local firms.

Rural-urban linkages

Compared to many other cities, Clermont-Ferrand occupies a unique position with regards to the relationship between urban and rural areas. It is a city in the country (*une "ville à la campagne"*), with mobility between the two worlds. Natural or agricultural areas are easily reachable for urban dwellers and the reverse can be said for rural inhabitants willing to spend some time in the central agglomeration. This situation can

generate great benefits for touristic development. It is also offers a chance to strengthen local agricultural connections in the form of higher value local foods and additional value-added processing. Taking advantage of these opportunities requires increased collaboration between different types of economic and institutional structures under the umbrella of the Grand Clermont, as well as the setting of co-ordinated land use planning policies (see Box 2.9 for a discussion of common governance frameworks for rural-urban partnerships).

At present, the spatial policy is largely an effort to concentrate future development within the urban core. Absent an articulation of how this creates better opportunities for surrounding communes, it is difficult to see how they can justify ongoing participation in the arrangement. While the urban core is the leading force in the local economy, greater thought about how strengthening Clermont-Ferrand itself will lead to spill over benefits for those communes that participate in the process can strengthen the relationship and ensure that it continues in the future. This is an issue often noted in the French planning literature. For example, Pierre Lefèvre has remarked that "French local leaders—as well as architects and town planners working in the urban development sector—appear to have favoured, for a long time, the city as a whole, its image and public spaces, often with the declared purpose of improving the territory they consider to be in competition with other urban areas" (Lefèvre, 2008). More attention should be paid to peri-urban territories and relationship. A recent report by Dourcelle et al. (2016) for the General Council of the Environment and Sustainable Development echoes this sentiment. They call for a change in the perception of peri-urban areas and to strengthen the quality of rural and urban policies and relations instead of simply reproducing patterns of development for the city.

Box 2.9. **Governance frameworks for rural-urban partnerships**

A recent study on rural-urban partnerships conducted by the OECD revealed some common elements. In case studies of 11 rural-urban partnerships in a range of OECD countries, four different ways to approach rural-urban collaborations emerge. Each reflects the specific institutional and cultural context of the country. This framework divides the partnerships observed into an admittedly simplified schema, to tease out key aspects that can guide policy development and support (see tables below for a summary).

Explicit rural-urban partnership	Implicit urban-rural partnership
• Rennes (France) • Geelong (Australia) • Nuremberg (Germany) • Central Zone of West Pomeranian Voivodeship (Poland) • BrabantStad (Netherlands)	• Forlì-Cesena (Italy) • Extremadura (Spain) • Castelo Branco (Portugal) • Central Finland (Jyväskylä and Saarijärvi-Viitasaari) (Finland) • Lexington (United States) • Prague/Central Bohemia (Czech Republic)

Model 1	Model 2	Model 3	Model 4
Delegated functions	**No delegated functions**	**Delegated functions**	**No delegated functions**
• Rennes (France)	• Geelong (Australia) • Nuremberg (Germany) • Central Zone of West Pomeranian Voivodeship (Poland) • BrabantStad (Netherlands)	• Extremadura (Spain) • Forlì-Cesena (Italy)	• Lexington (United States) • Prague (Czech Republic) • Central Finland (Jyväskylä and Saarijärvi-Viitasaari) (Finland) • Castelo Branco (Portugal)

Box 2.9. **Governance frameworks for rural-urban partnerships** (*cont.*)

The categories explicit and implicit are used to highlight an important distinction between the 11 rural-urban partnerships analysed. The "explicit" rural-urban partnerships (five in total), deliberately set out to cultivate a rural-urban partnership or manage rural-urban relationships. This "intent" is reflected in the objectives of the partnership agreement. This rural-urban dimension is a core aspect for the partnership that is deliberately pursued, either through the issues identified, initiatives realised and/or stakeholder involvement.

In contrast, the "implicit" group (six cases) shows no such overt objective. In these cases, the collaboration that emerged was driven by other local development objectives mandating the involvement of urban and rural areas. The second layer sub-divides the two groups further, based on the partnerships' delegated authority. Delegation of authority means division of authority and powers downwards. This means the partnerships have some semblance of recognition, such that they have been entrusted with the responsibility to act. This provides clues to the level or recognition (by other levels of government), its ability to realise objectives (implementation tools) and financial acumen.

Each type presents various advantages and disadvantaged. On the topic of spatial planning, the case of Rennes, France offers a unique approach—it is an inter-municipal structure called the *Rennes Métropole* with a dedicated revenue source that elaborates a common spatial plan for the territory that's is then binding for local land use plans. The Territorial Coherence Plan (*Schéma de cohérence territoriale*, or SCoT) allows the *Rennes Métropole* to directly manage rural and urban issues and present a unified voice on behalf of the region. It is able to effectively incorporate and then work with smaller peri-rural municipalities towards the realisation of an overall vision for Rennes. The partnership is also able to take advantage of its large organisational structure and stakeholders. Nonetheless, there can be some drawbacks, such as less local autonomy—municipalities agree upon joining to cede certain powers, which they are no longer authorised to exercise.

Source: OECD (2013), *Rural-Urban Partnerships: An Integrated Approach to Economic Development*, OECD Publishing, Paris, http://dx.doi.org/10.1787/9789264204812-en.

Natural areas and landscape heritage: an opportunity for the Greater Clermont

The strength of the landscape quality and natural heritage are major assets for the Clermont area. Recent recognition as a part of the human patrimony, as well as the historical reputation of the Chaîne des Puys Mountains area provide a base for future touristic developments. Local policy makers and promotors should however be aware of the potential for overuse. Overcrowding could lead to a partial destruction of the resource as well as a banalisation of the landscapes. Further, tourism is often a weak lever for economic development. It offers mostly low-paying and seasonal jobs and the number of communities betting on tourism based growth increases annually. The tourism opportunities in the region should be carefully developed and organised by means of local land use policies and integrated into a broader economic development strategy.

While the number and scope of the intercommunal agreements is increasing, and there are aspirations for even greater integration, what remains less clear is both how effective these agreements will be in revitalizing growth and the extent to which the benefits from the arrangements are equitably distributed. Clermont-Ferrand has been dealt a weak hand and is playing it in the best possible way. Many urban agglomerations of a similar size also struggle with replacing a core manufacturing sector with something equally able to provide income and employment. However, the current strategy is also similar to the one employed by many of these similar cities—emphasise the local quality of life and try to expand into advanced services. One important legacy of the Michelin era is the presence of a good system of higher education that can provide both new ideas and attract new young people. Less compelling is the emphasis on tourism-based

development, which typically offers mainly seasonal and low wage employment. It is also not clear that the efforts to market Greater Clermont-Ferrand will be sufficient to make the agglomeration competitive within the new region and in France more generally.

Key recommendations for greater Clermont-Ferrand

Establish a larger metropolitan vision

In order to establish efficient land use planning policy together with a strategy for economic development, Clermont-Ferrand together with its surrounding locales should promote the vision of a larger metropolitan area and strengthen its relationship with members of metropolitan area –Vichy/Issoire/Thiers/Riom/Brioude, (and maybe Moulins) and the other *pôle métropolitains*. This strategy is presently being promoted by Grand Clermont and Clermont Métropole and will be crucial for the area's future development because it enlarges the scope of the Clermont community, which might otherwise appear too small to resist to the competition of the larger regional capitals. It also positions the territory as a counterpart of Grenoble in the Western part of the Region. Such an approach addresses the need to better organise land-use and local planning regarding in the face of future challenges by strengthening the local network and the relations between the various territories and by defining a joint and co-ordinated land use policy. Further, this strategy is consistent with present aims to increase density in central Clermont-Ferrand and to improve the efficiency of land use in the suburbs. Finally, the strategy could be used to enhance the relationship between Clermont and its hinterland and rebalance the perception that the hinterland is solely at the service of the city.

The Chaîne des Puys Mountains and the Limagne plain are important assets for the tourist and agricultural industries. In order to avoid the risk of an increased polarisation of the rural activities towards the Lyon *métropole*, it is important to build strong linkages with these territories to counteract such an effect.

Increase the level of participation in local democracy

There is the strong and fundamental need to increase the level of involvement of the local population in local democracy. The volume of opposition between various land users remains quite high. Consequently, land based conflicts have arisen, resulting from both the lack of space and the intense competition between different development projects, supported by individuals or groups of people.

A land use plan which addresses the distribution of uses between various local *pôles* must be based on a general agreement among local stakeholders, including local and decentralised public bodies, developers, entrepreneurs, farmers, local environmental associations and local neighbourhood associations. This crucial requirement maybe fulfilled by an increased involvement of the local population at the earlier stages of the decision making process and by creating bilateral exchanges between the local planners and developers on the one hand, and the local population on the other. This is all the more necessary due to the risk of increasing social segregation resulting from peri-urbanisation processes and the up-scaling of strategic planning processes to the métropole scale. However, participatory planning needs to balance local needs and expectations against general planning goals and objectives such a densification which may be contrary to local interest.

Develop land and amenities for tourism and recreation

The exceptional landscapes of the Chaîne des Puys and the hillsides offers great opportunities for touristic development, recreation amenities, and residential development. The two regional parks offer some possibilities as well. Combined with the comparative advantage of the whole area in terms of natural and rural zones, it offers the opportunity to develop new activities and business. It is critical that land is reserved for these activities, including the infrastructure that is needed to access and support them.

Draw on a broader array of fiscal tools and incentives

Clermont-Ferrand is trying to tackle urban sprawl, and like many cities across France, it is failing at this endeavour. Suburbanisation and peri-urbanisation continue apace. If Clermont-Ferrand is going to reorient development and investment towards the city, it will need to embrace a full set of policy incentives, particularly fiscal ones, to help induce these outcomes, spur urban density and see investments in brownfield sites that presently detract from the city's attractiveness. Planning alone will be unlikely to meet these desired objectives, as is evident from present trends.

Notes

1. The measure is computed based on access to a basket of services and facilities "everyday life". In the Auvergne, 10% of the most distant inhabitants are able to access a basket of services and facilities that are important to everyday life in 7.7 minutes. This journey time is 3.5 times higher than that of the nearest 10% which makes it the largest such gap after Corsica and Burgundy - Franche-Comté (Guevera and Valles, 2016).
2. This is a newly consolidated region as of February 2016. The region will choose its final name by July 2016. Up until February 2016, Clermont-Ferrand was located in the Auvergne region.
3. In 1630 King Louis XIII's "edict of union" merged the towns of Clermont and Montferrand, thereby establishing the name used today. From the medieval period to the end of the 18th century the area was characterised by the "bipolar" urban centres of Clermont and Montferrand and a number of village centres which were later absorbed through urbanisation: Beaumont, Chamalières, Aubière and Gerzat (former medieval villagers' fortified castle). The clergy owned large properties between Clermont and Montferrand and preindustrial development occurred along the branches of the Tiretaine River.
4. In areas where an intercommunal authority holds the competence for planning, this function would fall to the intercommunal authority
5. The group includes a Development Council, which is an advisory body composed of members from the economic, cultural and voluntary sectors. The Development Councils were created by the orientation law for the Planning and Sustainable Territorial Development of 25 June 1999, called Voynet law, to organize the principle of partnership between elected representatives and socio-professional associations. A development Council is a consultative body, a place for discussion and proposals on the future of a territory and its population. This is a space to build a common ambition to residents and organized actors of "Country". Thus, it provides assistance in the preparation of public decisions of elected officials, its implementation, its monitoring and Evaluation. It may give themselves records or any matter it deems necessary. It occupies a prominent place for the dissemination of information within the professional circles and associations, or even to the entire population and receives experts as needs.
6. Volvic Source et Volcans (2016), www.vsv.fr/ (accessed 2 May, 2016).
7. For example, in 2012 SAFER exercised its right to pre-emption in 1 360 cases, for an area of 6 900 ha and a value of EUR 53 mln (SAFER, www.safer.fr/droit-de-preemption.asp).
8. Grand Clermont (n.d.), "SCOT, Partie 1: Introduction", http://www.legrandclermont.com/sites/default/files/files/SCOT%20%203%20DOG%20modif2.pdf

9. The TFPNB is calculated by multiplying the tax base, which is on the tax notice by the annual rates set by the local authority. The tax base of the TFPNB is equal to the cadastral rental value (also called cadastral income), with a deduction of 20% of the amount to account for the costs of agricultural properties. With regard to farmland, restraint rental value is determined based on tariffs set by nature culture and property, with 13 major categories or groups. The rental value of agricultural land resulting, in each commune of scales set for each category. The land whose assignment is changed are reclassified according to their new assignment, and their rental value is updated. Agricultural lands are exempt from additional tax to the property tax on undeveloped land. Service Publique (2016), "Property tax on undeveloped land", www.service-public.fr/particuliers/vosdroits/F31638.

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Chapter 3

Land use planning in greater Nantes Saint-Nazaire

This case study examines land use practices within the Nantes Saint-Nazaire area. It begins by describing the area's unique history and identifies the conditions that have shaped how land uses are governed, including the major pressures and conflicts related to land use. Following this, the main planning tools in the area are described, and finally, the land use challenges and opportunities for the area are discussed.

The metropolitan area associated with the linked cities of Nantes and Saint-Nazaire is experiencing a period of sustained growth in population and economic activity that has led to growing anxiety about the implications for sustainable development, including an increased concern about rapid land conversion. This period of economic prosperity is relatively recent as the local economies experienced economic stress in the 1980s and early 1990s due to a decline in the traditional economic base of ship-building. Today, while ship building and port activities remain an important element of the local economy they no long are as dominant. Like many larger urban agglomerations, various forms of services are the main source of jobs in the urban core. From an urban land use perspective, because both cities had a strong manufacturing base in the past that has now weakened, there is a significant amount of brownfield land available for reuse. To date, efforts to find new uses have been mixed, with some notable successes in Nantes. The largest share of new development has tended to occur outside the administrative boundaries of the communes of Nantes and Saint-Nazaire, both in terms of new employment opportunities and new housing.

While this type of suburban, or peri-urban, development is common in France and in many other OECD countries, it is more challenging in this case because the region is located along a river estuary that opens into the Atlantic Ocean. Much of the nearby land has important ecological functions. Moreover, the unspoiled coastal vistas are an important part of what makes the area attractive to new residents and new firms and is the base of a significant tourism industry. The fact that water and wetlands cover a large part of the area also limits the amount of potentially developable land, which further exacerbates tensions among competing land uses. Crucially, there is a strong desire to see economic growth continue, but also a recognition that better land management is necessary to maintain a high quality of life that will contribute to future growth.

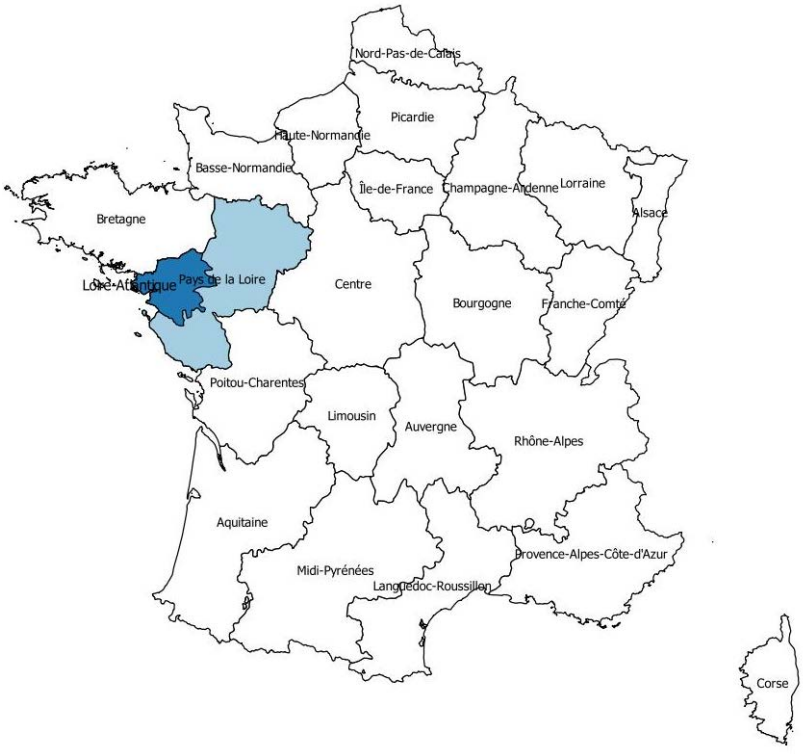
Land use management in the region is particularly complex. Because it is a coastal zone, national "spatial planning and urbanism laws" that are applicable in coastal and mountainous areas apply. Beyond this, there is the full set of subnational spatial planning regulations at the regional, *département* and commune level. In addition, communes in the *département* of Loire-Atlantique, which includes Nantes and Saint-Nazaire as its two largest urban places, have been very active in creating an array of intercommunal agreements that further complicate the planning process, even as they provide a forum for collaborative actions. The two cities, which are approximately 50 kilometres apart from one another, are linked by the *Pôle métropolitain* Nantes Saint-Nazaire association, which has developed a common spatial planning vision through the SCoT. In addition, Nantes is part of a *Métropole*, while Saint-Nazaire is part of a *commununautés d'agglomeration*. Other intercommunal agreements cover all communes in the *département*. Land use issues in this area illustrate the opportunities and trade-offs inherent to governing across a diverse geographical scale which encompasses both urban, peri-urban and rural interests, a mix of industries, and a large area of natural preservation.

The chapter presents a case study of the governance of land use in the *Pôle métropolitain* Nantes Saint-Nazaire. It proceeds in four parts. Section one describes the characteristics of the area, including major features of the local economy, its population and its land uses. This is followed by a discussion of the major actors involved in the governance of land use at the commune and intercommunal (metropolitan), *département* and regional scales. The third section discusses the major land use plans and how they have evolved over time. Finally, the major opportunities and challenges related to land use in the area are elaborated.

The mixed character and land use pressures in Nantes Saint-Nazaire region

The study area is located in North-western France on the Atlantic coast in the Loire Atlantique *département* which is one of five *départements* in the Pay de la Loire region (Figure 3.1). It is the 6th largest urban conurbation in France in terms of population (about 800 000), and the third largest region in terms of manufacturing. The Loire-Atlantique *département* has a population of roughly 1 260 000. The commune of Nantes is the 6th largest city in France, with a population of about 900 000, while the commune of Saint-Nazaire has a population of about 70 000.

Figure 3.1. **Pays de la Loire**

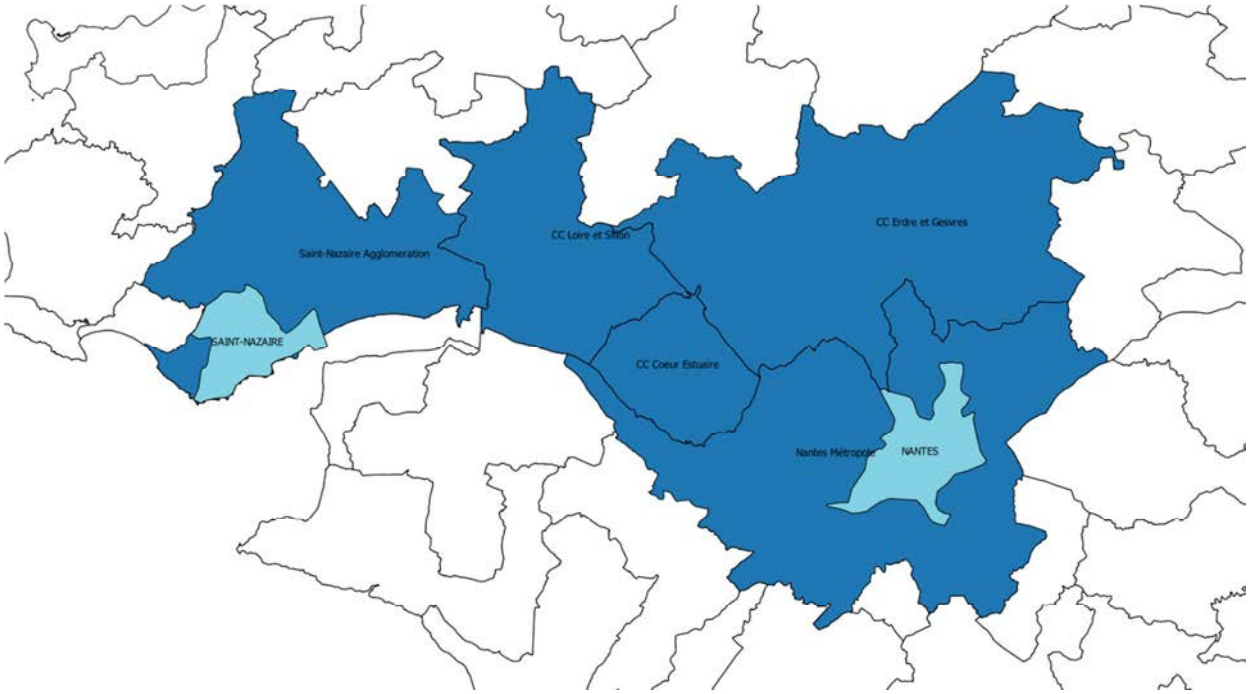


Source: Own elaboration.

Once rivals, Nantes and Saint-Nazaire have formed a partnership to raise their regional presence

Nantes and Saint-Nazaire share a common history related to the port and to port activities along the Loire estuary, but the two cities developed independently, competing for port operations and shipyards with each other and with other regions in France. A period of intense economic decline in the 1980s sparked a common need for the two cities to collaborate more effectively.[1] During this time local authorities worked to develop a common agenda for the Nantes Saint-Nazaire area in order to better compete for investment and residents against other French territories. To foster this culture of partnership, the *Pôle métropolitain* was established, which, together with large scale private investment, has played a major role in reversing the area's fortunes to make it an attractive place for residents and businesses (Figure 3.2).

Figure 3.2. **Nantes Saint-Nazaire pôle métropole**



Source: Own elaboration.

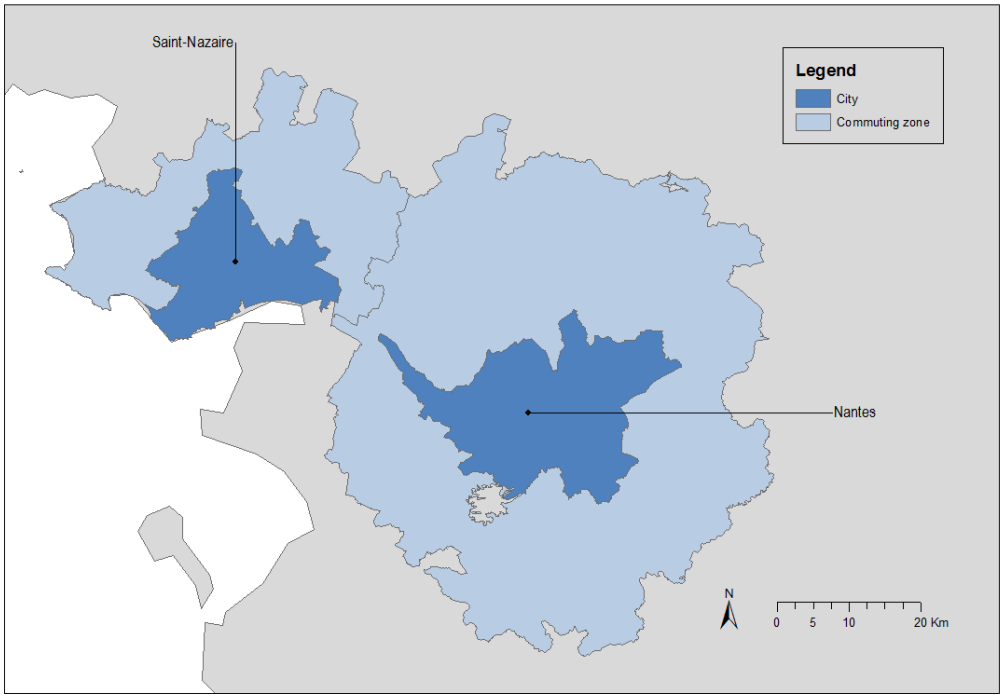
Box 3.1. **The Nantes and Saint-Nazaire Functional Urban Area**

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

According to the OECD's typology, Nantes and Saint-Nazaire are separate, but abutting, FUAs. The Nantes FUA encompasses 108 communes while Saint-Nazaire's is much smaller, with only 35 communes. The OECD's Metropolitan Database contains data for 281 metro areas with a population of 500 000 or more over 30 OECD countries. The Nantes FUA, with a population of 910 493 (2014), ranks among the third quartile (bottom 75%) of all OECD regions in terms of size. It is similar in size to the FUAs of Concepción, Culiacán, Omaha and The Hague. It also ranks in the third quartile for population density, which stood at 298.64 persons per square km in 2014. By this measure Nantes FUA has population densities similar to that of San Diego, Houston, Stockholm and Bratislava.

Nantes ranks high on the OECD's index of territorial fragmentation (2014) which is defined as the number of local governments in a metropolitan area per 100 000 inhabitants. By this measure Nantes FUA is in the top quarter of all OECD FUAs alongside Ostrava, Omaha, Porto and Paris. Nantes FUA also ranks high in terms of green areas per capita (2014). By this indicator it is in the top quarter of all OECD FUAs alongside Toledo, Hanover, Centro and Detroit.

Box 3.1. **The Nantes and Saint-Nazaire Functional Urban Area** (*cont.*)



Notes: This map is for illustrative purposes and is without prejudice to the status of or sovereignty over any territory covered by this map. The display of the map may differ according to the angle of projection.

Source: Own elaboration.

Economy, industries and employment

The trades, transport and services sector dominate employment in Nantes Saint-Nazaire

A location at the mouth of the Loire river gave the area a strong initial base in shipping, both the export of agricultural products from further up the Loire valley and imports of various goods from abroad for distribution to interior France. Shipbuilding and fishing augmented this water-based economy and the two cities were once major players in European ship construction. Today the largest ship yard in Europe is in Saint-Nazaire—the *Chantiers navals de Saint-Nazaire*, or the *Chantiers de l'Atlantique* (the name of the local society in charge of the management and the organisation of shipyards until 2008). It is now owned by the Korean firm STX and employs around 2 000 workers. With an operations area of more than 150 hectares, it is one of the biggest shipyards in the world. However, its activity is subject to huge variations related to international booms and busts in ship construction and to changes in the relative costs of production among competing yards in other countries. The new specialisation is in large cruise ships, which is a growing market. After a difficult period at the beginning of this decade, the shipyard constructed the largest cruise ship in the world in 2016 (*Oceana*), and they have just signed with MSC *Croisières* for the construction of four additional cruise ships, which should ensure the prosperity of the shipyard for the next 5 to 6 years. Port facilities

in both Nantes and Saint-Nazaire remain important as part of a multi-modal logistics process that links ocean, rail and road transport systems.

More recently, the economy has shifted to include major operations for the company Airbus Group SE in the form of first stage assembling of Airbus fuselage components at Saint-Nazaire, that are then moved to other locations for subsequent work. Nantes has a second Airbus factory engaged in fuselage construction and composite manufacturing. Total employment by Airbus in both plants is now over 4 000. In addition, there are other specialised manufacturing firms that produce diesel engines and parts for marine applications, a large number of food processing firms and some clothing manufacturing. The services sector is the largest employer. This includes significant public sector employment in administration, since Nantes is the capital of the Pay de la Loire region and the capital of the Loire Atlantique *département*, and significant employment in advanced health care, higher education, corporate and public research facilities, and in financial services.

Agriculture in the immediate vicinity of Nantes and Saint-Nazaire tends to be small in scale and not highly productive, with approximately 32 000 hectares of cultivated lands. It is strongly urban or peri-urban in orientation and is mainly dedicated to niche production for local markets and sometimes for national markets (e.g. for mâche salad and lily of the valley). However, in the larger region of Pay de la Loire, agriculture is very significant and highly competitive in global markets. Much of the production that takes place further up the Loire River finds its way to Nantes and Saint-Nazaire for processing and export. Farming in some parts of the area is pressured by new housing development that places a higher value on the land. However, farming is also seen as providing a land use that is central part of the visual amenities that make the territory attractive for residents and tourists.

Recently, there has been considerable expansion of large scale greenhouse production devoted to the production of fresh vegetables for the *Nantes Saint-Nazaire* metropolis. These facilities are controversial because they occupy large areas in rural or peri-urban zones and do not fit well with popular perceptions of traditional farming activity. They are also perceived to be large consumers of water and potential sources of pollution. Consequently, the greenhouses have not been easily accepted by new residents in the small cities and the rural places within the perimeter of the metropolis, even though there is strong support in principle to increase the availability of locally-produced food.

Tourism is growing in the region—driven in large measure by access to water. The area boasts ocean beaches, river banks, and marshes and wetlands all of which have great amenity potential. Moreover, as older industrial sites along the Loire river are redeveloped, high value land becomes available for reuse. But, the supply of waterfront land is highly limited and how it will be used is a major challenge for spatial planning. Urban based tourism is also increasing as city centres are rehabilitated and investments are made in cultural and historic opportunities. As an entry point to the Loire Valley, with its vineyards and distinct heritage, the area has tourism opportunities beyond its own resources. Improvements in transport are facilitating increased tourism, particularly TGV rail connections to central France and potentially a new airport and possibilities for cruise ship landings.

The inclusion of the Loire Valley in the UNESCO World heritage ranking should increase tourism to the area. An increase of the number of visitors will increase the demand for overnight accommodation and for related services. This presents its own challenges. In terms of land use, new forms of access to sites may be required (roads,

trails, parking). In the coming years, the region will need to balance multiple demands on its landscape and manage access to fragile environments. Developing sustainable forms of transportation to access these areas will also be important and will help reduce reliance on car access and its attendant infrastructure.

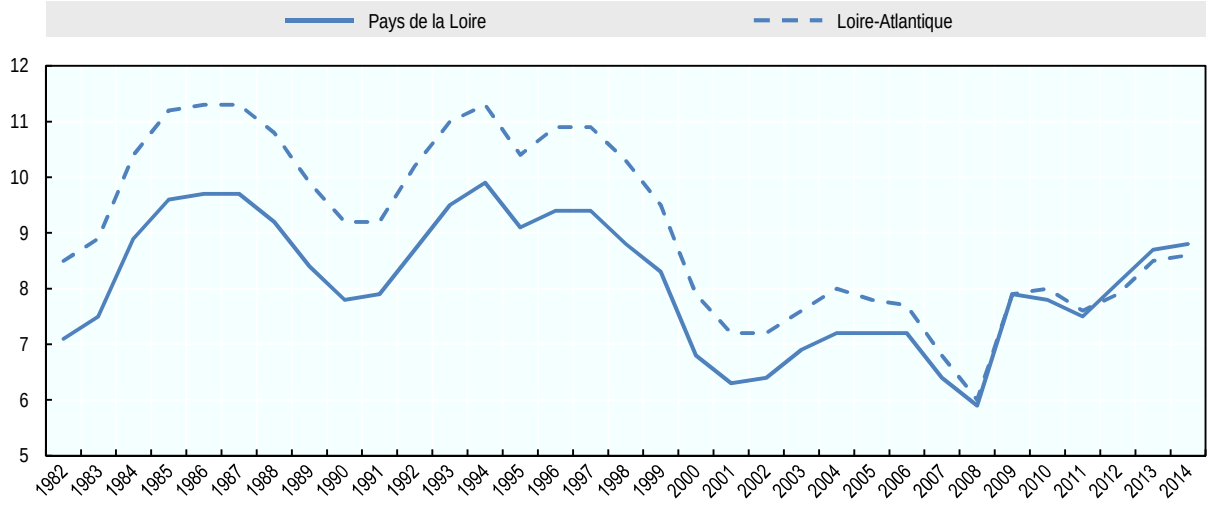
The trades, transport and services sectors are the major sectors for employment in both Nantes and Saint-Nazaire communes and their urban communities as a whole at approximately 70% or higher (Table 3.1). This stands in contrast to the *départemental* average of around 40%. It is important to note that Nantes Saint-Nazaire is a gateway for residential migration—many people work there but live elsewhere.

Table 3.1. **Percentage of employment by industry, Nantes and Saint-Nazaire commune and *intercommunalité*, 2012**

Industry	Nantes (communes)	Nantes (urban community)	Saint-Nazaire (commune)	Saint-Nazaire (urban community)	Loire Atlantique
Agriculture	0.1%	0.7%	0.6%	1.4%	1.6%
Industry	3.6%	4.4%	5.0%	5.5%	18.3%
Construction	5.6%	7.9%	8.8%	9.0%	6.9%
Trade, transport, services	74.2%	71.6%	68.5%	71.0%	42.7%
Public administration, education, health, social services	16.4%	15.4%	17.2%	13.2%	30.3%

Source: INSEE (2016a), "Régions, *départements* et villes de France", www.insee.fr/fr/themes/theme.asp?theme=1&sous_theme=2.

Figure 3.3. **Historical unemployment rates, Pays de la Loire, Loire-Atlantique, 1982-2014**



Source: INSEE (2016), "Taux de chômage localisé en moyenne annuelle par département de France métropolitaine", Série historique 1982-2014, www.insee.fr/fr/themes/detail.asp?reg_id=99&ref_id=ir-irsoceds2013&page=irweb/irsoceds2013/dd/irsoceds2013_chomage.htm.

While the unemployment rate in the *département* of Loire Atlantique has historically been higher or equal to the regional average, in recent years it has fallen below the regional average (Figure 3.3). This reflects stronger employment opportunities in the

département—another factor contributing to its attractiveness of the area for new residents, which then in turn creates more demand for housing and services. From late 1989 to 2012, the entire Loire Valley saw strong employment growth that was double the national growth rate each year. The overall trend in employment in the Loire Valley during this period can be explained not only by a catch-up phenomenon in the market services sector (2.4% annually), but also by better performance of other sectors, including construction, and only a slight decline in industrial employment (-0.4% against -1.5% for France) (INSEE, 2013b). Nantes has had particularly strong employment growth. Between 2000-10, the city experienced the strongest employment growth in the region of Pays de la Loire at 1.5% per year against 0.7% for the region as a whole (INSEE, 2013b).

Housing and demography

The area has experienced strong population growth over the past two decades

Today, the Nantes Saint-Nazaire area has a population of approximately 830 000 inhabitants (www.nantessaintnazaire.fr/). It has welcomed an estimated 100 000 new inhabitants over the past 20 years. Its port is the fifth busiest in France. Nantes is regularly ranked as one of the most attractive cities in France to live in thanks to its relative affordability and high quality of life—it has even been described by some authors as "the new Eden of the West" (Garat et al., 2015). But one has to keep in mind that more than 70% of the demographic growth is linked to natural population increases (excess of births over deaths).[2]

Peri-urban areas are projected to experience the greatest population growth

The Loire-Atlantique *département* experienced strong population growth over the past 20 years, with around 11 400 new residents annually.[3] But this has largely been driven by peri-urban and suburban growth, rather than growth in the urban core of Nantes and Saint-Nazaire. In both Nantes and Saint-Nazaire, population growth was higher for the urban community (which includes suburban areas), than in the respective cities. Further, labour market participation rates were higher, and unemployment rates were lower, in the urban community than in the city proper for both cases, suggesting that members of households with the best employment prospects do not particularly desire to live in city centres.

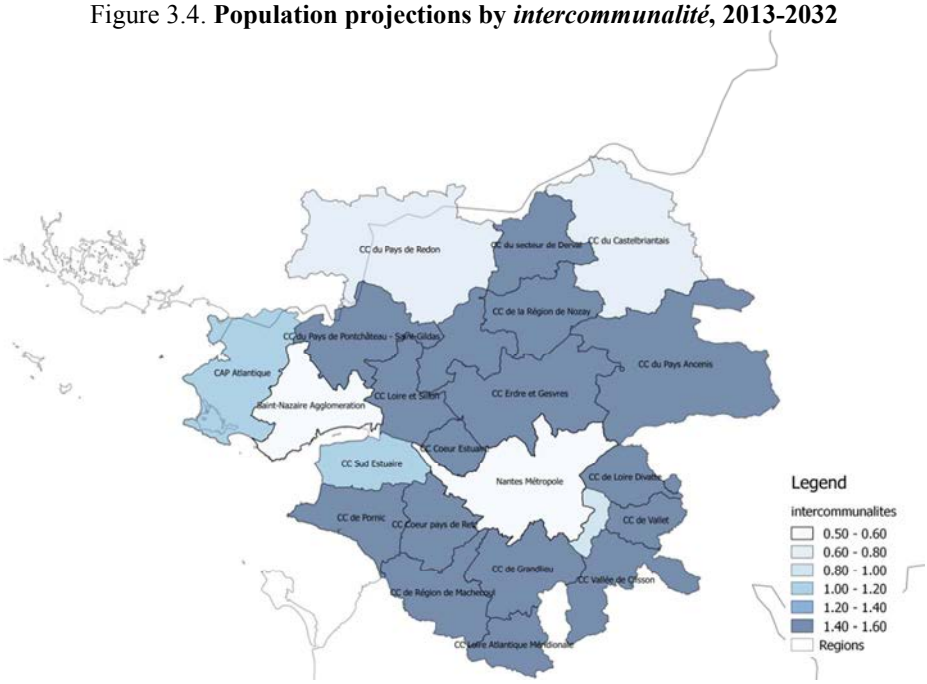
Table 3.2. **Key figures, Nantes and Saint-Nazaire commune and *intercommunalité*, 2012**

	Nantes (commune)	Nantes (urban community)	Saint-Nazaire (commune)	Saint-Nazaire (urban community)
Population, 2012	291 604	606 640	67 940	148 141
Population change, 2012-2007	+0.6%	+0.8%	-0.2	-0.1
Population density (no. inhabitants per sq. km), 2012	4 473.1	1 128.3	1 452.0	484.7
Labour market participation rate (ages 15-64), 2012	71.0%	72.3%	69.5%	70.4%
Unemployment rate (ages 15-64), 2012	15.8%	12.4%	16.6%	14.0%

Source: INSEE (2016a), "Régions, *départements* et villes de France", www.insee.fr/fr/themes/theme.asp?theme=1&sous_theme=2.

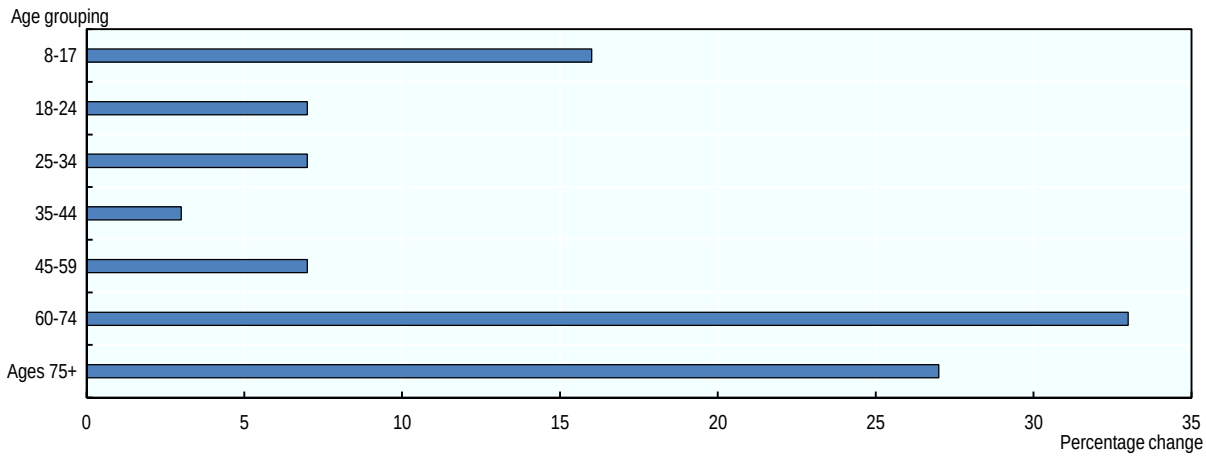
Were current population trends to continue, the population of the *département* as a whole would increase by over 200 000 residents by the year 2030.[4] Such projected increases would affect some areas more than others, with the lowest growth rates anticipated in the Nantes Métropole and Saint-Nazaire agglomeration (at 0.5% and 0.6% respectively), and higher growth rates in the surrounding peri-urban communes, as depicted the map below (Figure 3.4). This pattern of population growth has clear implications for land use and spatial planning.

Figure 3.4. **Population projections by *intercommunalité*, 2013-2032**



Source: Data source for population projections: Insee (2013a), "Les territoires de la Loire-Atlantique en 2030 : davantage de séniors et de jeunes", Pays de la Loire : Étude n° 117.

Figure 3.5. **Population projections 2009-2030 by age grouping, Loire Atlantique**



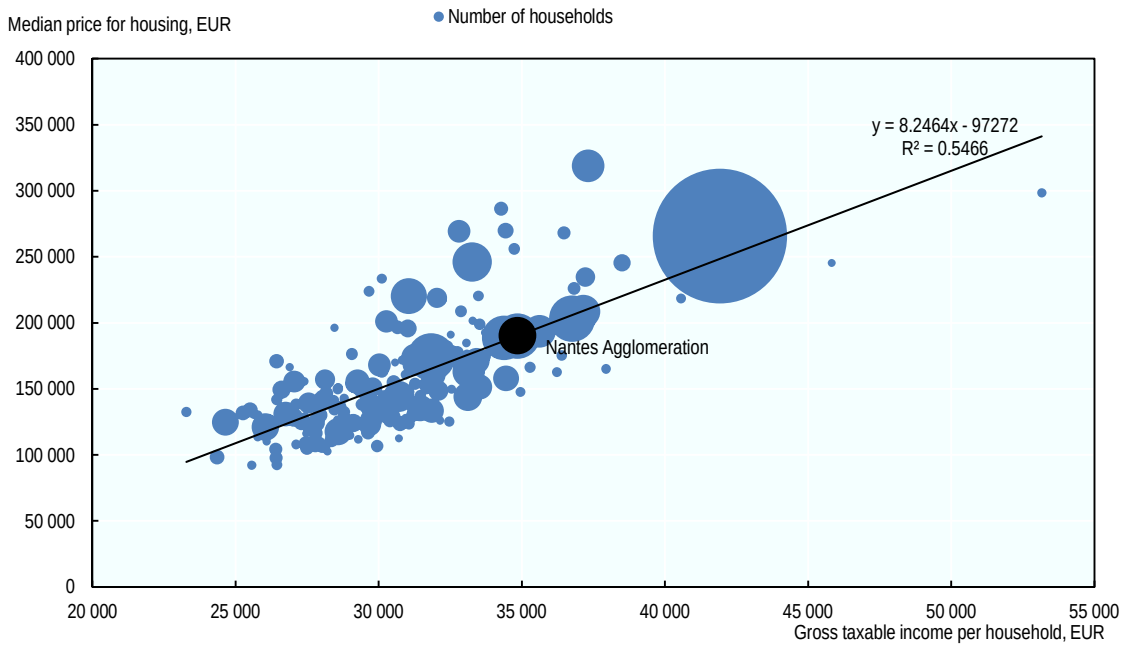
Source: INSEE (2013a), "Les territoires de la Loire-Atlantique en 2030 : davantage de séniors et de jeunes", Pays de la Loire : Étude n° 117.

Population projections for the region estimate growing elder and youth cohorts (Figure 3.5). This breaks down to an estimated increase of 7 000 seniors ages 60 and over per year and an addition 2 000 youth per year between 2009 and 2013 (INSEE, 2013a). These population dynamics together with the geographical dimension will likely make the accessibility of services and amenities for peri-urban residents increasingly important. It will also be very important for Nantes Saint-Nazaire to maintain the attractiveness of residential areas, along with protecting amenities and access to natural spaces, particularly coastal zones.

Relatively affordable housing has been a pull-factor for the Nantes agglomeration

Housing in the Nantes agglomeration has been relatively affordable in comparison with other agglomerations across France. Figures from 2006 place the Nantes agglomeration in a middle ranking in terms of affordability (Figure 3.6). The median price for housing in 2006 was 190 314 Euros, while the gross taxable income per household was 34 850 Euros; the average figures for all agglomerations in France stood at 155 108 Euros for the median price of housing and gross income per household of EUR 30 605.

Figure 3.6. **House prices and affordability, France, 2006**



Source: CGEDD (2016), "House Prices in France: Property Price Index, French Real Estate Market Trends in the Long Run", 12 February 2016 (updated 22 February 2016), www.cgedd.developpement-durable.gouv.fr/house-prices-in-france-property-price-index-french-a1117.html (accessed 2, May, 2016).

Maintaining housing affordability will be important for continued demographic growth

With the high-speed train from Nantes to Paris taking a little over two hours, housing in Nantes has become increasingly attractive for those seeking better value for money. But, this attractiveness has been accompanied by rising house prices. The Loire-

Atlantique has experienced the greatest increases in house prices in the region; between 1998-2010 house prices in the *département* increased by 144%, which was significantly higher than that of other *départements* in the region with the exception of Vendée, which also has a strong economy, particularly in tourism (Table 3.3). Meanwhile, household income over the same period increased by only 38% in the Loire Atlantique—an increase that was only slightly higher than that of other *départements* in the region. In recent years, average incomes have not been keeping pace with rising house prices in Loire-Atlantique.

Table 3.3. **Key housing indicators, Loire-Atlantique and other *départements* in region, 1998-2010**

	Percentage change in house prices, 1998-2010	Percentage change in household income, 1998-2010	Percentage change in population, 1998-2010	Percentage change in new housing construction, 1998-2010
Loire-Atlantique	144%	38%	17%	22%
Maine-et-Loire	108%	35%	11%	17%
Mayenne	155%	37%	9%	16%
Sarthe	109%	29%	8%	14%
Vendée	132%	36%	20%	25%

Source: CGEDD (2011), "Différenciation de la variation du prix des logements selon le *département* de 1994 à 2010", www.cgedd.developpement-durable.gouv.fr/IMG/pdf/difference-variation-prix-immobilier-par-*département*_cle76a2da.pdf (accessed 4 May, 2016).

Lower income households are concentrated in the city centre and in some peri-urban areas

The poverty rate in Nantes Saint-Nazaire is close to that of the national average. Low income neighbourhoods are concentrated in urban areas, but poverty is also found in some peri-urban locales. If gentrification of neighbourhoods where poverty is common takes place, in response to increased demand for housing and slower growth in land conversion, there will be a secondary planning problem of finding new affordable accommodations for the low income households that are displaced.

Urban sprawl and urbanisation processes

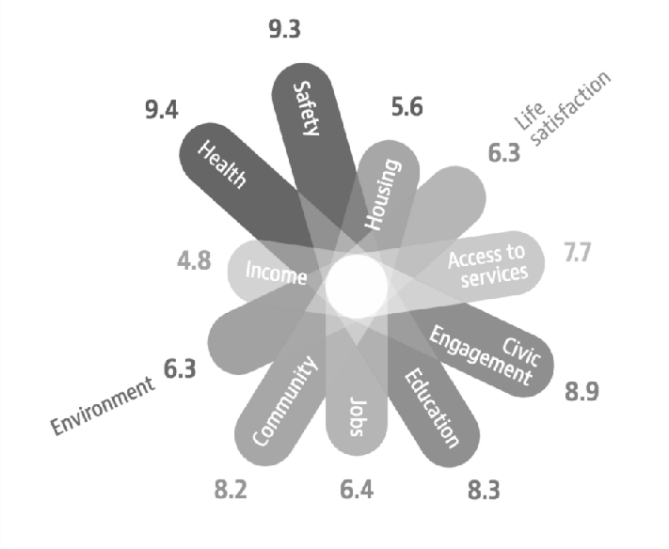
Nantes is one of the more attractive cities in France and, consequently, a large number of young educated people and families with young children have moved to the area in order to take advantage of local amenities and the good quality of life (see Box 3.2 for regional well-being indicators). This movement has been reinforced by strong growth in employment opportunities in recent years, especially in higher paying professional services. This trend has been recognised by many studies, including statistical results published by INSEE. The area's attractiveness is mainly based on two engines: the first has been the transformation of the local economy away from a reliance on shipbuilding and port activities into aerospace and other advanced forms of manufacturing and the growth of professional services in finance and insurance, and research and development. Modernisation of the economy has attracted higher skilled people with higher incomes. The second is growth in the number of people who can choose where they want to live. This includes retired people, but also people whose jobs can be conducted from any location, as well as people who have the ability to undertake long distance commuting to work—e.g., to Paris by the TGV. These individuals tend to have high wealth and incomes, and so create additional demand for locally provided goods and services even if they do not work in the community.

As a result, there has been considerable growth across the urban agglomerations, mainly in the Nantes Métropole, but also in peri-urban areas. Some 100 000 new inhabitants are expected to move to the métropole during the next 20 years—among the highest rates in France. Most new residents will live in urban areas, but also in smaller communes given the fact that housing prices are rising in the city of Nantes.

The urban fabric has tripled in the last 50 years, while the population has increased by half that amount (AURAN). The general trend now is for there to be one new home for each additional person. At the same time, land availability has been steadily reduced on the estuary, and a considerable amount of the remaining land is under restrictions that block construction or urbanisation because of its natural or environmental characteristics. This means that there is growing pressure to control the spatial growth of the main city areas, to densify the city cores, and to manage the development of housing across the entire agglomeration in order to avoid spatial fragmentation and uncontrolled urban sprawl. On the other hand, there is no desire to slow the projected population growth or to increase the cost of housing. Since many new residents tend to have young children and place a high value on single family housing, there will have to be some accommodation of new housing development. The answer may be to improve housing and services in smaller towns, in order to reduce long distance commuting and to ensure the wellbeing of the entire local population.

Box 3.2. **How's life in Pays de la Loire?**

The OECD's Regional Well Being indicators offer a comparative assessment across 11 dimensions of well-being for 30 countries. Across the 11 indicators, Pays de la Loire is comparable to such regions as: Province of Trento, Italy; South Sweden; Luxembourg; and Madrid, Spain.



Pays de la Loire ranks among the top 9% of OECD regions in the indicator for health, which is measured by the mortality and life expectancy rates. The mortality rate in Pays de la Loire stands at 6.6 deaths per 1 000 people and the average life expectancy is 82.9 years. It region ranks among the top 12% among all OECD regions in the indicator for civic engagement which is measured by voter turnout (84.2%). It also ranks high among all OECD regions for community (in the top 19%)—that is, the perceived social support network which for Pays de la Loire is 92.3%. For safety, which is measured by the homicide rate, Pays de la Loire is among the top 31% of regions, with a homicide rate of 0.9 per 100 000 persons.

In some areas though, Pas de la Loire is less competitive. It is among the bottom 39% when it comes to jobs, which are measured by the employment and unemployment rates, which in Pays de la Loire were 66.3% and 8.5% respectively. It was further ranked in the bottom 47% among all OECD regions in terms of life satisfaction; Pays de la Loire's life satisfaction stands at 6.8 out of a 10 point index.

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 (2016), "Regional wellbeing indictors: Auvergne", www.oecdregionalwellbeing.org/FR72.html (accessed 23 June 2016).

Key elements of local geography

Water and Environment

The whole territory is faced with both constraints and positive amenities due to water conditions. Eighty per cent of the territory is composed of natural and agricultural areas, 23% of the territory of the Nantes Saint-Nazaire *métropole* is covered by wetlands and approximately 2 800 km of rivers. The presence of water has an impact on virtually every type of activity and project. The influence of water diffusion over the whole territory comes in several forms:

The sea: its presence on the waterfront, its role in the estuary, and its importance for the Ports of Saint-Nazaire and Nantes;

The rivers: they flow across the territory, and impact the main circulation and mobility routes;

The wetlands: in the past they used to play a direct role in the economy of area, while now they are valued for their environmental role. They are quite numerous and include lakes as well as swamps, with some being large, especially the *Marais de Brière* and *Lac de Grand-Lieu.*

Several positive amenities are associated with this permanent presence in the everyday life of local populations and businesses. Traditional ones are related to fishing practices, river transport and to the economic activity related to trade and shipyards, especially for the port of *Saint-Nazaire*. The value of water and adjacent land, in environmental terms is recognised, for example in the *Parc Naturel Régional* de *Brières*, which is dedicated to the promotion of natural species and landscapes. Water is a key part of the local quality of life that makes the region attractive to migrants whether they come to work or to retire. More recently, water availability has been associated with tourism activity as well, and Nantes Saint-Nazaire has become an attractive place for short and medium stays and leisure.

On the other hand, the area's rich water resources create problems and impose constraints of different types. First, the rivers are constant obstacles to the circulation of goods and the mobility of people. Bridges are required that increase infrastructure costs and create bottlenecks and congestion. Places without bridges become isolated and have difficult access to goods and services. Secondly, even though there is only a moderate risk of flooding in the coastal zone, the question of water collection and the contamination of groundwater is considered to be an important issue in the area, especially for peri-urban zones. Third, many of the numerous wetlands can be considered obstacles to the development of the area. Some of them are registered as areas of exceptional interest in terms of biodiversity and their management is linked to environmental protection laws for water (like *directive cadre sur l'eau* and *directive habitat-faune-flore*). Consequently, their utilisation for economic activity or housing is subject to severe restrictions.

Lake Grand-Lieu

Lake *Grand-Lieu,* located in the South-West of *Nantes métropole*, covers a very large area. It is the largest natural lake in France in winter, with a fluctuating surface and a very shallow depth (1 meter deep in the summer and three meters deep in the winter). It is considered to be a very exceptional area in terms of biodiversity with more than 300 protected animal species and approximately 400 indigenous plant species. The northern

portion of the lake has the status of national natural reserve (*réserve naturelle nationale*); the southern area has the status of a regional natural reserve (*réserve naturelle régionale*). Given its large size, it is also subject to the rules attached to the *loi littoral*. All these classifications and regulations have led to strong restrictions in terms of construction in its vicinity, including farms and farm buildings.

Given its peculiarities (low depth, risks of flooding, fluctuating surface, protected areas, biodiversity), lake *Grand-Lieu* is protected from public use and is not open to tourism and visitation. Because the lake is very isolated from the population, it contributes no direct economic benefit to the area in terms of tourism or other activity. However, in the past, when it was open to activity it gave birth to conflicts, around the question of water levels. Pumping has the capacity to alter lake levels and different lake users (hunters, farmers, tourists, bird watchers) declared preferences for different levels, corresponding to their main uses and activities, most of which were conflicting.

Several conflicts have emerged during the last 20 years between farmers, environmentalists, hunters, and public State representatives, about the level of water and possible local uses (Leost, 1998). The lake activity is managed by the *Conservatoire du littora*l, which tries to facilitate negotiations to reach a general agreement about the level of water. A new *réglement d'eau* (water regulation and rules), which establishes the level of water and the periods of flooding or restrictions was set one year ago. It is strongly contested by the farmers for the moment, because of the severe restriction that it causes to their activity. This example is typical of many situations involving wetland agriculture in the area.

Major infrastructure—the port and airport

The Port of Nantes Saint-Nazaire and the shipyards

The image of the region is associated with the two ports, but now mostly with *Saint-Nazaire*. Since 1966 the operation of the two ports has been merged into one public body, the *Grand port maritime de Nantes-Saint-Nazaire*, and managed by the State (more precisely the *Direction Générale des infrastructures, des transports et de la mer* in the Ministry of ecology, energy and sea), under the supervision of local authorities (Chamber of Commerce, Region, plus various *intercommunalités*). It encompasses both the Ports of *Saint-Nazaire* and *Nantes* with the latter having only 10% of the total traffic.

The geography and the structure of the port in Saint-Nazaire was transformed by the large infrastructure investment from the Port 2000 project, which enlarged its surface area and created new opportunities for cargo handling and storage. Currently, the main function of the port complex is oil and natural gas transport and storage (in the *Donge* area) but animal feeds and other bulk commodities remain important, as does its logistics role in the local assembly of Airbus components. There is also an intention to try to attract cruise ships to augment the existing tourism base, and future plans are based on expectations of growth in tourism activity. A crucial question about the future development of the port reflects increasing the degree of local integration into the regional economy and how it fits into the larger system of ports in Europe. At a global scale, it cannot compete with the largest European ports like Rotterdam or Barcelona.

The port is a major factor in the development of the estuary if only because it uses a large amount of land. However, there are ongoing efforts to better link its activity to other parts of the local economy, such as the Airbus assembly facilities. One proposed example is to connect the construction of offshore wind turbine platforms at the shipyard to an

expansion off-shore wind production in the region. Further physical expansion of the main facility in Saint-Nazaire is unlikely because the land available for future growth is limited, as was made clear earlier by the conflict related to the expansion in the early 2000s for the Port 2000 project.

The grand west airport project—Notre-Dame-des-Landes

The airport *Notre-Dame-des-Landes* project began 30 years ago—it is intended to replace the current airport with a new location and expanded capacity. The future airport is to be located approximately 20 kilometres northwest of Nantes. It would be "Class A" airport and thus able to accommodate even the largest of planes and up to 9 million passengers a year, which is five million more than the current airport can handle (Carrard, 2011). The idea is that the airport could also act as an overflow from Parisian airports and increase tourism and other connections in the North West of France. For decades there has been a major conflict between those who supported the project, mainly, the national government, local politicians, including the former Prime Minister and mayor of Nantes and the *Nantes Métropole*. Opposition to the project comes from diverse groups, including local residents' associations, farmers' associations, and local and national environmental and political groups (Lecourt, 2004: 183).

Over time the project's scope has evolved, but opposition has remained constant. The airport is intended to provide new opportunities for air transport in the *département* and for the Region as a whole. Supporters claim that it could play a major role in the future development of the region, increase passenger traffic and tourism and allow local people to reach foreign destinations without commuting to Charles de Gaulle airport in Paris. A new airport might also induce an expansion of Airbus activity, because runways at the current airport are too small to accommodate the large planes used for shipping components. They also claim that construction of the new airport is inevitable, because the current one is too small and cannot be easily expanded. For them, it is ultimately a question of recognizing the public interest of the project including job creation (they expect the creation of 6 000 new jobs).

Opponents stress the fact that the project is to be located on a significant ecological site that they claim has important value in terms of biodiversity. The airport is to be established in a mixed area of pasture used for agriculture and managed wetlands. Opponents argue that improvements at the old airport are possible, including construction of another runway at far less cost. The start of construction has been announced many times by the government and the local authorities, without any action, due to the strong opposition (Carrard, 2011). There have been many legal appeals, as well as more frequent and larger public protests. The topic has gained widespread interest and has now become a national cause for ecologists and alternative political parties. Some opponents have established a ZAD (*Zone a Défendre*) on the area and have occupied the territory. They have opposed the police on several occasions and the situation has been extremely fractious and tense.

To help resolve the impasse, the *Président de la République* announced a referendum on the question of building the *Notre-Dame-des-Landes* airport. The referendum took place on the 26th of June 2016 with the majority of the voters in the *Département* of *Loire Atlantique* choosing to endorse construction. However opponents are challenging the legality of the results, arguing that appropriate procedures for the vote were not followed so the results should be ignored. The *Notre-Dame-des-Landes* airport has become emblematic of conflicts surrounding large new infrastructure projects and is the subject of several academic studies (Backer, 2005; Carrard, 2009, 2010, 2011; Guibert, 2013; Pélissié et al. 2013 Lecourt and Faburel 2005).

Box 3.3. **France's National Commission for Public Debate**

Large scale infrastructure projects—such as the *Notre-Dames-Des-Landes* airport—are a common source of land use conflict. They are costly, complex, typically land intensive and for all of these reasons, involve risk. Given this, meaningful public engagement in decision making is an important part of the policy process. This entails raising public awareness of about the scope, cost, location and timeframes for a project early on in the process so as to gather information and opinions on various elements. At its most involved level, such engagement practices include citizens in some element of decision making.

There are several purposes to such public engagement efforts. For example, including the opinions and ideas of citizens (or stakeholders) in a project can lead to more and better information with which to design or deliver a project. It may unveil important information about local conditions and uses. A diversity of perspectives can uncover gaps in a project that have not been addressed. Further, public engagement efforts are often forwarded as a way to resolve conflict prior to undertaking a project. They lay bare the various dissenting opinions which can then be addressed upfront, before greater conflict emerges. Finally, by opening up projects to deliberation and debate, governments can build legitimacy around the final outcome, even if consensus is not achieved.

Conducting large scale public engagement can require a great deal of expertise. It requires communications, managing relationships and a great deal of information across multiple platforms (online, event driven etc.). In order to support this, it can be very useful to have a central organisation which has expertise in such processes, can co-ordinate between different *départements*/ministries and levels of government, and create standards and regularity around the engagement process.

The French government has established such a central body of expertise through the National Commission for Public Debate (La Commission nationale du débat public, CNDP). The Commission was created in 1995 by the Barnier law on strengthening the protection of the environment. With the law on grassroots democracy in 2002, the CNDP became an independent administrative authority. The law entrusts the Commission with the mission to ensure the participation of the public in the development of major projects of national interest that have strong socio-economic impacts and/or significant impact on the environment or land. More precisely, the Commission ensures:

- Compliance with good public information throughout the phases of the project (implementation to completion)
- Advises authorities on public consultation throughout the duration of a project
- Ensures the collection of all opinions and recommendations are subject to a common methodology

The CNDP is composed of a president, two vice presidents and 22 members from different backgrounds (parliamentarians, local elected officials, members of the State Council, the Supreme Court, the Court of Auditors, associations, employers, trade unions...) which ensure its independence, in particular with respect to governments and building owners.

The Commission undertook a public inquiry for the Notre-Dame-Des-Landes Airport project between December 2002 and May 2003. During this time 16 public meetings were held with 7 420 participants; 405 contributions to the discussion were made by e-mail and; 1 860 written interventions were made (questions, comments, positions). All of this information is compiled and documented on the Commission's website.

The Commission has been further involved in the project through ongoing consultations and hearings on the project in an attempt to mediate the ongoing conflicts. As has been mentioned, a local referendum was held in the Loire-Atlantique *Département* on the 26th of June inviting electors to vote on the question "Do you support the Nantes-Atlantique airport transfer project in the municipality of Notre Dame-des-Landes?" 55.17% voted "yes", in support of the new airport project. However it is important to note that the referendum is a form of consultation—its outcome is non-binding. Major environmental groups that are opposed to the project vow to continue their opposition to it, including those who are occupying the planned site. The referendum also raised questions regarding the scale at which such decisions should be made.

Box 3.3. **France's National Commission for Public Debate** (*Cont.*)

While held at the level of the *département*, the project is large enough to have impact across the region. Nevertheless, while there has been a great deal of conflict around the Airport project, the Commission has been an important independent body that can mediate between interests.

Source: Commission nationale du débat public (2016), "Projet d'aéroport de Notre-Dame-des-Landes", www.debatpublic.fr/projet-daeroport-notre-dame-landes (accessed 1 June, 2016).

Waste management

As in many places, waste management is an increasing challenge in the Nantes Saint-Nazaire area. The volume of waste has increased in a dramatic manner, due to the increase in population in the area, especially in the urban agglomerations and to changes in how goods are packaged and sold. In addition, appropriate land for disposing of waste is increasingly scarce and has competing uses. In the past, the main strategy was to construct local landfills with a limited life expectancy of about 20 years, as well as to build waste incineration plants. For various reasons this approach is no longer acceptable, especially for rural communes

It appears now that current approaches to waste management are not sustainable for the future, given the increase of population and crowding in the area. There is also less acceptance by neighbours of using land for a new waste disposal site and court challenges are common. Even though the issue has been identified and discussed in the SCoT, a consensus has not been reached and several conflicts have appeared (le Saout, 2005). Some attempts, like the proposal for a landfill near the location of the future airport, were rejected by the *aviation civile* authority, because the site could increase the presence of birds, and cause danger to planes. At the moment, several local opposition committees are active in places proposed for new landfills, while the question of exporting waste is still being considered.

Multi-layered governance and spatial planning

The recent realignment of regional boundaries in France did not affect the Pays de la Loire region, but the changes in authority for regional councils has expanded the role of this level of government in spatial planning and it will in the future take on additional responsibilities. Importantly, its decisions will have an impact on lower level spatial plans, largely because they must be respected. A striking feature of the Loire Atlantique *département* is the number and variety of intercommunal co-operative agreements. These cover virtually all communes in the region and point to a strong sense that spatial spill-overs across communes are so important that local governments must find ways to co-operate to achieve their development and management objectives. In addition, the large number of agreements also suggests that the results from co-operation are generally positive, in the sense that all participating communes perceive that they have benefitted from past agreements and so are prepared to enter into new ones.

The recent shift in the distribution of planning authority to increase the power of regions and various intercommunal organisations to develop higher order spatial plans that connect transport, public service provision and economic development with traditional land use plans establishes an integrated planning structure. This was always

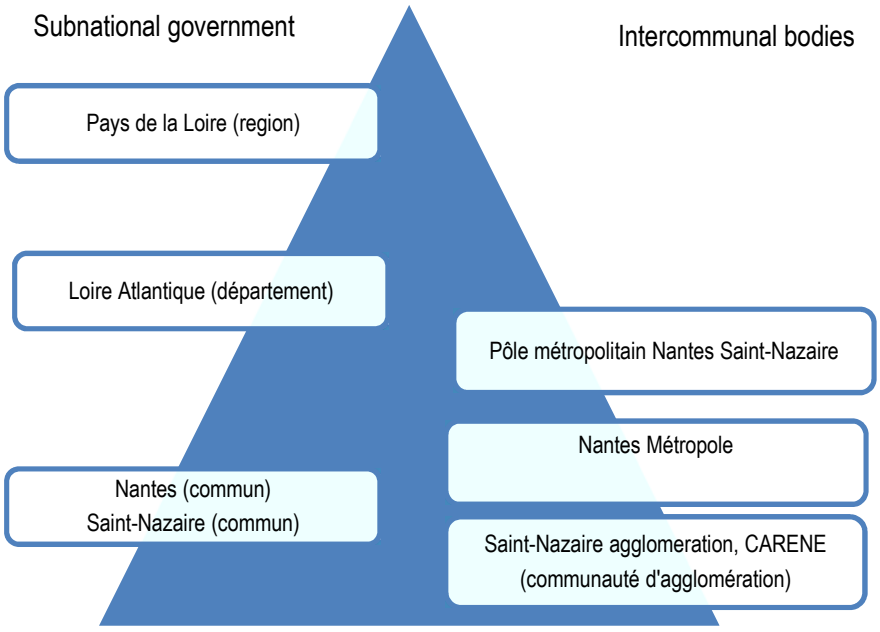
possible, but the incentive for communes to invest in this sort of long term process was limited as long as it was only advisory. Now that the specific land use laws of communes have to conform to higher order plans, there is an incentive to do a better job in the integrated planning stage. In *départements* like Loire Atlantique, where traditions of intercommunal collaboration were already firmly established, this change should be easy to bring about because the idea of co-ordinated planning by communes is already firmly established.

Main governmental actors

The Nantes Saint-Nazaire area has a number of intercommunalités, which are encompassed by the pôle métropolitain

In France there is a division of responsibility for spatial planning among levels of subnational government. Regions are recently in charge with a global "blueprint" (e.g. economic, digital networks, air and energy, environment) which act as a guidance for land occupation plans as opposed to a compulsory planning scheme (SRADDET). *Intercommunalités* establish co-operative plans as the result of a common project about their major policies that impact land (SCoT). However, it is the individual communes or *intercommunalités* that the specific laws that specify allowable uses for parcels of land and provide the planning permissions associated with changes in land use as established (PLU or PLUi). *Départements*, like other actors, are involved in those plans so far as they have projects or interests to assert with consequences on land occupation. Several multi-level governance structures already exist with various functions and competencies, especially in terms of land use planning (decision making and management). At the same time, the various subnational institutions build their land governance structures on documents provided by national or European rules and laws, in such a way that the final land use planning decision becomes a truly complex and intricate process.

Figure 3.7. **Main subnational and intercommunal actors**



Source: Own elaboration.

The establishment of the Pôle métropolitain Nantes Saint-Nazaire

During the 1980s the idea that local governments in the Loire estuary should work together became popular. Politicians started to think that the agglomerations *of Nantes and Saint-Nazaire should* have a common vision for local planning and that they are stronger together. In 2001, a *communauté de communes* was organised around the city of Nantes and a political campaign was launched by the president of the Nantes *métropole* to promote the idea of joint governance for a larger area that would involve all the communes around the boundaries of the Nantes *métropole*.

Over time, local leaders and communities learned to work together in a co-operative manner. Eventually this culture of working together led to the decision to develop the first SCoT (*Schéma de Cohérence Territoriale*) as a mechanism to allow more co-ordinated spatial development planning and plan implementation. Satisfaction with the outcomes of this very intense period of collaboration and joint reflection led to the next decision to increase the degree of integration by creating the *Nantes Saint-Nazaire* métropole, which was launched in 2012. In the meantime, the SCoT1, involving 61 communes, which started in 2007 and lasted 4 years, continued to provide a structure to maintain co-operative relations among the various participating communes and other entities.

The French *pôle métropolitain* is a voluntary organisation made up of existing local *intercommunalités*, which are in turn made up of groups of communes that have delegated responsibilities to these new entities. The authority to form a *pôle métropolitain* and its capabilities was created by the law of December 2010 concerning the reform of territorial collectivities. It is intended to favour the co-operation between larger cities that are geographically proximate and that are situated within complex urban regions or within development "corridors". The *Pôle métropolitain Nantes Saint-Nazaire* is composed of a number of pre-existing groups of communes that have different structures including the *Métropole* (*Nantes* Métropole), a *Communauté d'agglomération* (communauté d'agglomération de la région nazairienne et de l'estuaire), and four *Communautés de communes* (Erdre et Gesvres, Cœur d'Estuaire, région de Blain et Loire et Sillon).[5]

The main goal of the project *of Nantes Saint-Nazaire métropole* is to organise the set of communes around a project of joint development and land use organisation. The *Pôle métropolitain* provides local organisers and politicians with useful tools to build the future organisation and define joint projects. Even though it does not allow any transfer of competencies, it provides the possibility to work together. The main value is that it provides a forum to agree to do things that cannot easily be done by the other structures, such as individual *Départements* and communes. However, the actual governance structure is quite small, at the moment, only 4 persons are employed by the *pôle métropolitain*.

In recent years, a common vision for the area has evolved and there is a better understanding of future directions of work. A stronger joint common culture played a major role in building the links, together with the permanent efforts towards negotiation and reaching a consensus. Today, the *métropole* occupies a crucial place in territorial planning and development and plays a major role at the regional level. Its economic and geographic influence spreads from South Brittany to North *Vendée*. Its growth rate is superior to the national rate and it has become an important contributor to spatial planning.

Even though the *Pôle métropolitain* Nantes Saint-Nazaire is now well recognised as a useful geography for spatial planning, there are still some important challenges that will have to be resolved in the future:

- The first relates to how the future will be managed. Who will be involved? What will be the direction for action for the pôle métropolitain? How can participation by citizens in the pôle's work be encouraged so that it is better connected to what people want? Currently, in any discussions of spatial planning in the region there is very weak citizen engagement—e.g. very few people have attended public meetings regarding the elaboration of the new SCoT. How can the aspirations and concerns of future residents be brought into the planning process at this scale? And how can diverse voices be included without detracting from overarching spatial development objectives such as increasing density which can be against residential interests?
- A second challenge is related to finding better ways to connect future economic development that is largely driven by the short term decisions of individual households and firms as they respond to evolving market forces, to a long term spatial planning process that strives to identify appropriate uses for large blocks of land a decade in the future. While spatial plans can condition the choices that firms and households make by determining where roads will be constructed and by indicating what land is open for development and what land is not, these are coarse tools for shaping economic growth. Overly rigid spatial plans can limit prosperity, while overly flexible plans lose the ability to manage the built environment and achieve environmental protection goals.
- The last challenge addresses the place of the metropolis within the Region. The logic of constructing a Pôle métropolitain is that the correct spatial unit for planning is an urban core or cores that lead economic growth in a surrounding more rural hinterland. Optimizing the propulsive force of this growth pôle (as defined by Perroux, 1949) means giving the core a dominant role in spatial planning and in managing other associated affairs of the pôle métropolitain. This is certainly the direction that recent reforms in France have pursued. However, there are other theories about the best approach for fostering local economic and social development that are common in France. One of these employs the idea of a "bassin de vie" to argue that the appropriate geographic unit for optimizing quality of life has a small geography, especially in rural territories. "Basssins de vie" in France are defined as an area where people both live and work, and where they can obtain the vast majority of the services that they need locally. The logic in this theory is that a high degree of physical and social connectedness leads to a better quality of life and to better local decision making. In France in 2009 there were 1 745 rural "bassins de vie" with populations ranging from 270 to 9 500 inhabitants (Gallois and Schmitt, 2005: 8). In many ways the logic of the "basin de vie" approach parallels the traditional logic of the commune in France as the fundamental unit for direct democracy, in the sense they both emphasise the idea of attachment to a community, irrespective of its size, because this level of geography provides: employment, goods and services, a sense of belonging, and an impression of the ability to influence decisions.

Each of these questions is strongly related to how land use planning in the area should be managed and what it should encompass. Recent changes in the distribution of spatial planning powers among the different levels of subnational government have not explicitly

addressed any of these questions, but the changes have altered the balance of responsibilities among the levels, and have altered how citizens will ultimately judge the legitimacy of the planning process.

Territorial coherence across a diverse territory

The most common mechanism to allow spatial planning across a larger geographic area that contains a variety of communes is the *Schéma de Cohérence Territoriale* (SCoT). The first one for Nantes Saint-Nazaire (SCoT1) was launched in March 2007. It encompassed 800 000 inhabitants, and involved six *Etablissements Publics de Coopération Intercommunale* (EPCI): the *Communauté urbaine de Nantes* (Nantes Métropole),[6] the *Communauté d'Agglomération* of the Région Nazairienne and the Estuaire (CARENE) that includes Saint-Nazaire, the *Communautés de communes* of Loire and Sillon (CCLS), of Erdre and Gesvres (CCEG), of Cœur d'Estuaire (CCCE) and later the Blain area (Pays de Blain) that joined the SCoT in 2010, for a total of 61 communes. It was mainly organised around two main cores: the Nantes and Saint-Nazaire urban zones.

The elaboration and implementation of the two Plans for Territorial Coherence (SCoT)

SCoT1—Strengthening Nantes Saint-Nazaire as a European metropolis

The ambition of SCoT1 was to strengthen the role of the Nantes Saint-Nazaire area as a European metropolis and to enhance local social and economic dynamics while improving the management of urban development of the whole territory. Fundamentally, the project was based on the idea of trying to take advantage of the original form of the metropolis, divided into two main urban *pôles*, while incorporating the dynamism of the dense network of surrounding communes. Defining the relationships between built areas and the roles played by nature in the area was also crucial, and has been a major part of the project.

The SCoT1 aimed to reach six main goals:

- To better regulate the urbanisation process and reduce urban sprawl, and to maintain the main balances among the various territories and the local populations
- To allow each inhabitant or newcomer to find appropriate accommodation
- To facilitate the mobility of inhabitants
- To ensure economic development across the whole territory
- To protect and to valorise the agricultural space over the long term
- To protect and better manage all the resources of the territory.

More precisely, the promoters wanted to increase the density of the population inside the whole territory, and to preserve vital natural areas (for example the *Marais de Brière*, Lake Grand-lieu, green and blue corridors), characterised by biodiversity, as well as to maintain farming in productive agricultural spaces. The overall objective was to "optimise the territory", given the increasing level of urbanisation and the demographic impact from the arrival of new populations. On the other hand, there was also the idea to

increase, or at least to maintain, the economic attractiveness of the two main economic *pôles*: Nantes and Saint-Nazaire.

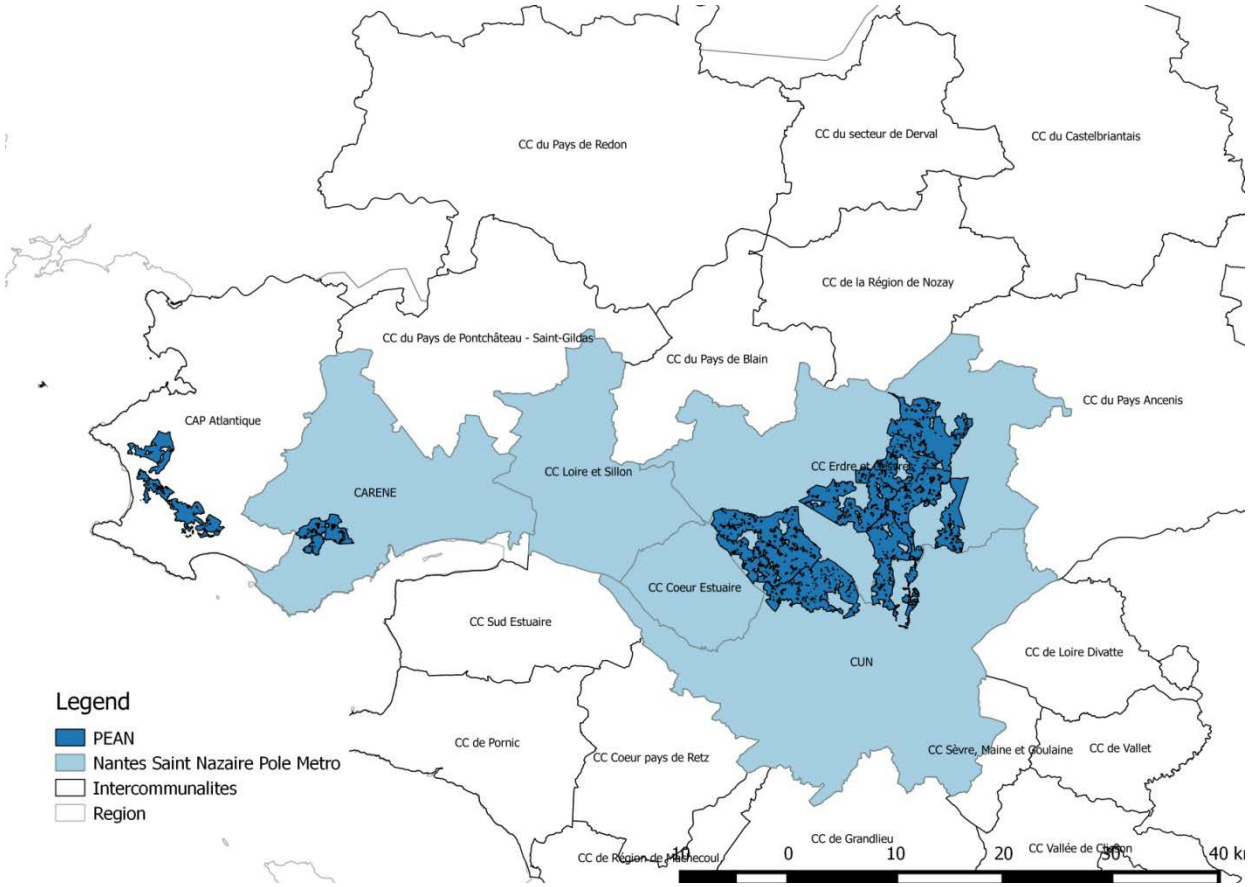
A central goal was to try to preserve the local network of communes, mainly more urbanised ones, and ensure their quasi independence, as well as to support transport and mobility within the area by various means of transportation, including public transport, cars, walking and bicycle mobility. The idea of a local network was crucial, and was one of the key points in the development process of SCoT1. A major concern was trying to avoid the threat of massive urban sprawl related to the natural increase of the population as well as to inward migration, by finding ways to concentrate new housing in the two main cities, and also by adding more housing in the most populated and urbanised areas of outlying communes.

In terms of land use occupation, SCoT1 tried to manage the distribution of lands in a way that would protect most of the natural areas, but also to allow new opportunities for mobility by expanding transport links in the face of major constraints associated with river crossings. There was a concern with the increasing price of land and with land speculation, especially for housing and agricultural land. Here the tension between, the benefits from reducing the price of farmland, by making conversion more difficult; in turn leading to increased prices for the remaining land that has potential planning permissions for development is apparent. Similarly, reducing the amount of land for new housing tends to increase prices for the existing housing stock; while adding new land for housing keeps prices low, but encourages sprawl.

Maintaining production on designated farmland is a challenge across much of the area. Agriculture in the *département* typically offers relatively low returns to farm operators, in part because farms are small and the physical environment is challenging. This leads to local farmers being willing to sell their land for development, especially if they do not have an heir who wants to farm. The government of France has established a national program SAFER to purchase farmland when it comes up for sale to help existing farmers increase the size of their farm to boost efficiency and to facilitate new entrants into farming. As in other regions, SAFER operates in the Pays de la Loire region as an important mechanism to maintain land in farming.

The local authorities have also implemented local tools, like the PEAN (*Périmètres de protection des Espaces Agricoles et Naturels*), as a way to protect and recapture agricultural land. It imposes very strong protection and regulation of these areas through a plan of action in order to stabilise and secure farmland. One example is the *PEAN des trois vallées* (the most important in *France*) involving 17 000 hectares of agricultural land in three communes. These areas are located in intermediary places between the city and natural areas where farming is now dominant but under development pressure. These areas are depicted in the map below (Figure 3.8).

Figure 3.8. **Protection of agricultural and natural peri-urban areas**



Note: PEAN stands for Protection des espaces agricoles et naturels péri urbains/ Protection of agricultural and natural peri-urban areas.

Source: Own elaboration.

After evaluation, the first SCoT was seen as a success

The SCoT1 was evaluated by a private consulting firm in 2012-13, under the responsibility of the *Pôle métropolitain Nantes Saint-Nazaire*, in part to support the development of a new SCoT to be introduced in 2016 that will extend until 2017 (it began in March 2016). Even though the full implications of land use plans extend for decades, some short term results were reported in the evaluation. The balance between agricultural and natural areas (80% of the total surface) on the one hand, and urbanised/constructible areas (20%) on the other hand, were maintained between 2005 and 2012. The share of zones dedicated to housing or mixed uses was stabilised (14%), as well as those dedicated to services activities (6%). The proportion of agricultural areas decreased and that of the natural ones increased because of the reclassification of agricultural zones and land reserves into natural zones. Nevertheless, the usable agricultural surface stabilised.

If the results were positive in terms of land consumption, they appear to be less convincing in terms of economic development. The rate of economic growth was not as high as anticipated, even if it was higher than in comparable French areas; for example, more jobs were created than in the Lyon agglomeration over the period of the first SCoT.

In particular, employment opportunities in the two large urban cores have not kept up with job growth in more peripheral areas. For Saint-Nazaire, one can expect slight changes in this respect, given the new contracts signed by the shipyard for the construction of several big cruise ships, but these largely protect current jobs and do not offer large net increases in direct employment. Further, it is important to consider that the 2008 economic crisis would have negatively impacted economic development in the intervening years.

In terms of building working relationships, the first SCoT was deemed a success. There is now a strong focus on improving interaction and dialogue both between the two urban areas in the estuary, and also among the two urban areas and the more rural communes. This focus on strengthening collaboration is quite new for the area and its adoption has fostered a better working environment for the SCoT, as well as being a potentially powerful engine for the future growth of the area by facilitating agreements on common development and planning policies.

However, the resolution of issues of mobility remains in the area. This question is related to the natural conditions, due to the influence of rivers, wetlands and other topographic features, but also to the effects of recent economic and social development. Urban expansion is still taking place, and average travel distances to work are increasing as a consequence. Some people are now leaving the two central cities because of high housing prices, while others move for lifestyle reasons; both add to the number of daily commuters. While some smaller cities have opened the possibility of building new housing in order to attract new inhabitants, not all have considered the implications of more people for schooling, health care and other local services. As a result, the volume of short trips has increased. Parking problems are growing both as a result of, increased car commuting (about 80 000 cars per day within the SCoT territory), but, also as tourism increases in volume and adds additional demands for parking spaces. The SCoT provides general indications related to the question of transport and mobility but, it does not give operational solutions, especially in terms of collective transport. In the end, the *Pôle métropolitain* does not have a clear common transport policy because this is an issue that is best managed at a larger geographic scale such as the region or nation.

With hindsight it now appears that the initial delimitation of the SCoT did not allow the area to fully take into account all the questions linked to land use occupation and management. While the SCoT was initially conceived as a tool to help larger communes manage land that was outside their direct control, this was too narrow a perspective. Because a SCoT requires agreement among the members, it must consider a broader set of interests, including those of the smaller communes that also play a key role in the organisation because of the increasing expansion of the whole urban and peri-urban area. Questions about: local economic development, mobility, and the role of local food and farmland preservation, need to be approached at a larger scale.

In addition, the geographic boundaries of a SCoT can lead to it fail to account for spill over effects, both in and outside of its specific territory. This is especially important for management of the environment, for transportation issues, and for labour market developments that affect commuting patterns. Competition among areas for economic development opportunities is also an emerging challenge. Stronger relations are considered necessary with the nearby territories of the South Loire, like Cap Atlantique, Pont-Château, and other EPCI surrounding the Nantes Métropole, in order to better manage relationships among territories.

SCoT2 has just been adopted

Now that the SCoT2 has been launched it will take on the role of being the main planning agent for the *Pôle métropolitain* Nantes Saint-Nazaire. The *Pôle métropolitain* remains the dominant governance structure as the forum for large and small communes and the complex array of current intercommunal agreements, but it has neither the resources nor the authority to directly engage in spatial planning. SCoT2 will be the main planning document, assessing land use occupation patterns and influencing big decisions about the future development projects and directions.

A main challenge for the project is to combine the preservation of the area and its rich bio-diversity with the arrival of new populations and to increase income and employment opportunities. Both are important in order to maintain territorial attractiveness, to attract new, younger people and to avoid an acceleration of population ageing. Achieving a better spatial balance in economic activity is also crucial. The Nantes and Saint-Nazaire urban *pôles* are the main economic engines for the region, but jobs and income have to be distributed across all communes both for economic efficiency reasons and to maintain support for regional collaboration.

In land use terms, the main task is to densify some areas, and overall to reduce the consumption of space. Plans are to reduce the conversion rate of agricultural lands for the next period and to increase pressure to push the construction of commercial buildings into the inner cities. For the first time the SCoT document has a target figure of 25 housing units/hectare in the SCoT perimeter, which is a significant increase over the current ratio of about 20 units/hectare, in order to limit urban sprawl and to preserve natural and farming areas. As always, the major challenge is to combine individual goals (people want to live in single family homes, and businesses prefer to choose where they will operate) with the broader public interest of managing development so that society collectively is better off.

While increasing density is a simple objective, it is much harder to identify how this can actually be accomplished. Infill mechanisms, such as BIMBY (build in my backyard) appear attractive, but are not common in the area, and are not so easy to manage. Such building projects easily lead to neighbourhood conflicts and legal challenges. Available infill sites may not suit the needs of builders, and costs of construction are typically higher for infill sites than on greenfield ones. Additional expenses for brownfield remediation can add cost and time delays that make them unattractive without subsidies. Currently 75% of land consumption is outside the urban core areas. Increasing housing in small towns is a question of small but complicated operations. In a few small towns, the centre stands partly unoccupied, mainly because people do not want to reside there, because it is neither rural nor does it have the benefits of larger urban places, and the quality of existing housing is poor.

Beyond these issues, several other factors will have an impact on spatial planning. They include: i) the densification of the main cities, and the improvement of public transport within the city lead to the question of car parking; ii) the urban centres continue to have a considerable amount of heavy industry along the river and the risk of industrial accidents, *Seveso* type risks, in the estuary impose strong rules and limits opportunities for urbanisation in close proximity to these sites; iii) there also exist several constraints due to the management of water in the SCoT perimeter, mainly regarding wetlands.

The identification and protection of wetlands is now considered crucial, and identifying potential development sites is subject to the SDAGE (*Schéma Directeur d'Aménagement et de Gestion des Eaux.* This required planning document fixes regulations for managing and protecting the water resources in large regions for a period of six years, thereby influencing planning documents at various levels. Similarly, making the area more attractive for tourism is influenced by water management regulations, and are in turn clearly linked with larger decisions, taken at a broader scale (the Region, or elsewhere).

Implementation of the SCoT: The role of PLUs and PLUIs in the Nantes Métropole

The SCoT is a tool that provides a broad long term orientation for land use management, which people, organisations and public bodies must comply with. But communes remain responsible for creating the laws and site specific planning documents that manage land use changes. For communes, the main planning document is the PLU (*Plan Local d'Urbanisme*), which organises and defines land occupation over a period of 10 to 15 years. These individual PLUs are slowly being replaced by PLUIs (*PLU Intercommunaux*), with the same goals, but for a Community of Communes (*Communauté de Communes*). Prior to the introduction of PLUs local planning was administrated by the POS (*Plans d'Occupation des Sols*), which involved fewer recommendations and constraints, and less control than do the PLUs.

Existing and future PLUs and PLUIs in the area both inform and constrain the development of higher level plans, like a SCoT, and vice versa. The new SCOT Nantes Saint-Nazaire cannot be separated from the presence of already existing and future PLUs in the area, which determine land use occupation at a smaller scale. For example, the PLU for the commune of Saint-Nazaire attaches a great importance to the protection of natural areas, the location of production zones, and risks in the estuary. As the attractiveness of the sea shore is quite important, the PLU imposes restrictive rules related on construction in the coastal zone and tries to relocate new development two or three kilometres inland.

However, the major planning document for the commune, as well as being the main land use management tool, will become the PLUI of *Nantes Métropole*, which is now being developed, and will be launched in 2018, (it is also known as the PLUm, *Plan Local d'Urbanisme métropolitain*)). Involving 24 communes around the City of Nantes it will establish the main directions for the broader project of territorial development to the year 2030.

The PLUm of *Nantes Métropole* pursues four main goals. It intends to build:

- A metropolis that is suitable for all people, including families and households with low incomes. There is also a clear intent to continue to attract new people to the urban core
- A metropolis that improves mobility while ensuring environmental protection. The project will try to increase the degree of proximity between employment, housing and access to services, by expanding public transport (tramway, busway, regional express train) and providing better incentives to use sustainable transport (e.g. bicycles)

- A more compact and more attractive metropolis, based on densification, that will reduce the interest in urban sprawl, and thereby improve biodiversity, and retain natural land and agricultural spaces
- A metropolis that is well integrated into the broader economic, social and ecological environment, in the *Pôle métropolitain* Nantes Saint-Nazaire.

In more specific land use terms, the PLUm intends to accomplish these goals by using an urban renewal strategy that envisions trying to rebuild "the city in the city" with actions like increasing the number of floors in existing buildings. They are also trying to encourage increased participation in the process by public-private development companies (*Sociétés publiques d'aménagement*) and private investors to manage land use and local land acquisition operations, beyond the limited number of public programs.

These broad and quite general goals are consistent with those of the SCoT2, and the same can be said about most of the local PLUs. Nevertheless, they raise questions in terms of action co-ordination and coherence. The previous SCoT1 was built on the basis of local PLUs and POSs. But now there is a need for greater congruence between the orientation of the new SCoT and the next generation of PLUs, especially the PLUm of the Nantes *métropole*. More precisely, the question at stake is how to integrate the project of the various *intercommunalités*, with their own level of constraints and local solutions, into a larger scale than single municipalities.

The preferred solution has been to involve groups of elected representatives (like mayors) in the definition of the future objectives of the SCoT2 (3 to 4 representatives for each intercommunity). By doing so, these individuals are able to bring local ideas and projects to a supra level, and have the potential to overcome difficulties based on the differences between territories. For example, the north littoral is filled with elderly people, whereas in the south there are mostly younger couples with children. But most of all, the main question is often about the opposition between Nantes and Saint-Nazaire on the one hand, and on the other hand, the other communes. For example, on the surface the PLUm seems to offer great benefits to Nantes, and not much in the way of economic renewal or prosperity to the surrounding communes. While the PLUm couches its language in terms of the broad, high level goals of sustainability and environmental protection, it does not address how small communes will improve services or increase employment, or whether they will be able to change land uses.

These issues of multi-level governance require a major commitment of time and effort. This is the case for discussions about the types of activity that will be allowed in the estuary. And it is also true for decisions about the amount of land that will be made available for conversion, and just as importantly, where this land will be located. In this respect, even if the question of densification reaches a common agreement between local politicians and organisations, the gradient is different with regard to the different types of areas. The local contexts are crucial, and, finally, because the actual *permis de construire* that conveys the right to build remain in the hands of local mayors, their support for these higher order plans remains necessary.

The structure of local government finance

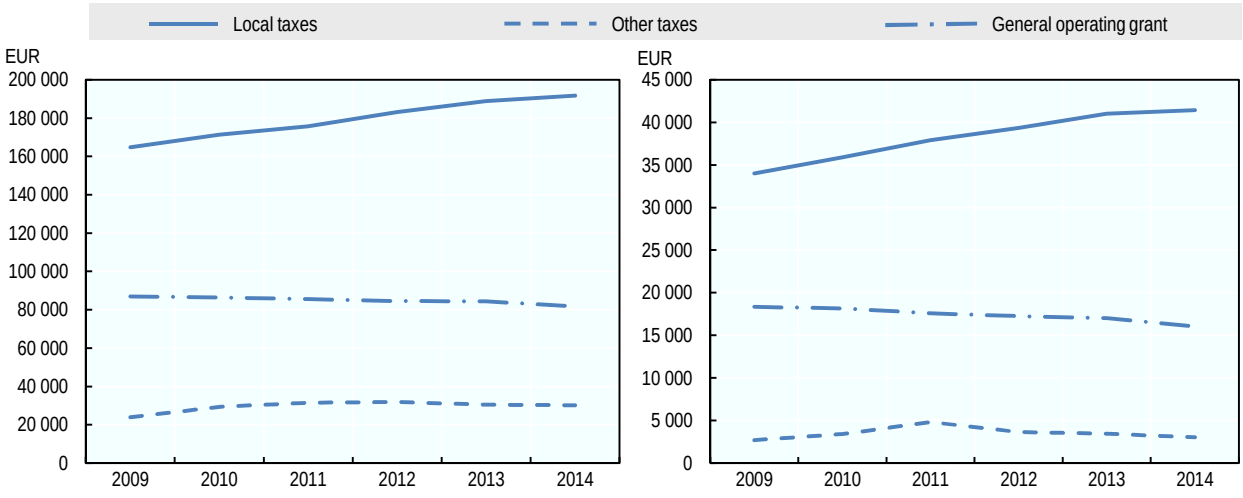
Local government fiscal tools also have the potential to shape land use practices by creating various incentives or disincentives for how land is used. For example, governments may provide a special levy to maintain agricultural land, establish tax exemptions to stimulate investment in brownfields, or create various fiscal incentives to

include social housing in any new developments. Further, the broader fiscal environment—such as fiscal transfers from other levels of government—affects how these tools are used and the demands upon them (Martin, 2015). Where local government are responsible for a greater share of own source revenues, they face a distinct pressures to increase their local tax bases. Depending on the nature of local taxation, this can lead to a push for residential expansion in order to increase the amount of property taxes available to a municipality, or attracting businesses to the area in order to increase business tax contributions.

In France these pressures to increase own source revenues are apparent. Both Nantes and Saint-Nazaire are increasingly relying on own source revenues to fund operating expenditures. In Nantes, the contribution of local taxes to total operating expenditures between 2009 and 2014 increased by 16% while in Saint-Nazaire it increased by 22% (Figure 3.9). Local taxes comprised 46% of the total operating budget in Nantes in 2014 and 57% in Saint-Nazaire. In contrast, the general operating grant decreased over this time in both municipalities, by 6% in the case of Nantes and 13% in the case of Saint-Nazaire.

Figure 3.9. **Increasing fiscal autonomy in Nantes and Saint-Nazaire**

Contribution of local taxes to total operating expenditures, Nantes and Saint-Nazaire (commune), 2009-2014



Note: Figures inflation-adjusted (CPI), base year 2007.

Source: Ministère des finances et des comptes publics (2016), "Le portail de l'économie et des finances", www.economie.gouv.fr/cedef/chiffres-cles-budgets-collectivites-locales (accessed 18 July 2016).

Despite these fiscal constraints, both cities have tried to keep their local tax rates stable over time. There have been only marginal increases in each commune between 2009 and 2014. The rates do however differ considerably between the two communes with Saint-Nazaire having substantially lower council taxes and taxes on developed property than Nantes (Table 3.4).

Table 3.4. **Local tax rates, Nantes and Saint-Nazaire, 2009-14**

		2009	2010	2011	2012	2013	2014
Nantes	Council tax (including THLV)	23.8%	24.0%	24.0%	24.0%	24.0%	24.0%
	Developed property	27.2%	27.5%	27.5%	27.5%	27.5%	27.5%
	Undeveloped property	61.9%	62.5%	62.5%	62.5%	62.5%	62.5%
Saint-Nazaire	Council tax (including THLV)	17.6%	17.8%	18.0%	18.0%	18.0%	18.0%
	Developed property	21.1%	21.4%	21.6%	21.6%	21.6%	21.6%
	Undeveloped property	65.1%	66.0%	66.8%	66.8%	66.8%	66.8%

Note: THLV refers to the habitation tax.

Source: Ministère des finances et des comptes publics (2016), "Le portail de l'économie et des finances", www.economie.gouv.fr/cedef/chiffres-cles-budgets-collectivites-locales (accessed 18 July, 2016).

The intercommunal bodies also levy local taxes and receive government grants. For example, the 2016 budget for Nantes Métropole still projects a program of investment over the next five years, despite a tightening fiscal environment mainly due to lower government grants.[7] In the face of declining revenue Nantes Métropole has reduced its operating expenses and has increased local tax rates by 5.9% on average (Nantes Métropole, 2016).[8] CARENE is also operating in an environment of declining State grants and anticipates declining allocations to fulfil its program of work—about EUR 1.5 million less in 2016(CARENE, 2016). However, CARENE expects the strong economic performance of the area to offset the decline in state grants without increasing local tax rates (CARENE, 2016). The *Pôle Métropolitain* Nantes Saint-Nazaire also has its own budget which consists of contributions from *intercommunalités* which is calculated by taking into account the weight of population in the cluster and its tax wealth.

Table 3.5. **Budget contributions to Le *Pôle métropolitain* Nantes Saint-Nazaire**

Intercommunalités	Budget contribution
Nantes Métropole	75.35%
Saint-Nazaire Agglomération	15.90%
Erdre et Gesvres	3.98%
Loire et Sillon	1.88%
Cœur d'Estuaire	1.79%
Pays de Blain	1.10%

Source: Pôle métropolitain Nantes Saint-Nazaire (2016), "Gouvernance", www.nantessaintnazaire.fr/comment-ca-fonctionne/.

Main challenges and opportunities

The metropolis of *Nantes Saint-Nazaire* is characterised by a very high level of growth and economic development that is greater than in most French cities. However, its situation is not due to exceptional circumstances. What separates the *métropole* from similar areas is its level of development, and not the particular character of the local *mileu*. It is a medium size agglomeration, with two relatively dense cores, close suburban belts and peri-urban areas, faced with significant geographical and environmental constraints. The region must choose a path that is, to a considerable extent, limited by how the national government has distributed powers and funding among different levels

of subnational government. Comparable regions face the same set of issues regarding maintaining natural or preserved hinterlands, resolving competition and tensions among land uses, engaging citizens in complex matters that do not have simple solutions, and in constructing appropriate local policies. Even though there are always issues that are specific to any area, three main topics that are also at stake in many places can be identified. While the two first items deal with conflicts, the last one provides for some interesting opportunities for the whole area. The chapter concludes with a brief discussion of some important future challenges for spatial planning in Nantes Saint-Nazaire.

Spatial planning in the near future

Nantes Saint-Nazaire has been able to grow by transforming the local economy and capitalizing on its environment amenities.

Spatial and land use planning in the Nantes Saint-Nazaire region is chiefly characterised by an effort to protect local land and water resources that differentiate the area from other medium size agglomerations in France while maintaining the strong growth in population and economic output that has characterised the last decade. Integrated land use planning has a strong foundation in the area that rests upon a series of joint agreements among local communes led by the two urban cores of Nantes and Saint-Nazaire. Even before the most recent round of planning reforms put in place by the French government that now require better co-ordination of planning, local governments in this region took advantage of earlier legislation that allowed the formation of intercommunal organisations to facilitate co-operative activities including land use planning.

An important factor that encourages joint action is the dominant role of water in the area. Managing the Loire estuary and local streams and wetlands cannot be done on a commune by commune basis, and this common issue provided an early impetus for collaboration. Similarly, historical competition between Nantes and Saint-Nazaire over shipyards and port facilities evolved into co-operation when both places were forced to come together in order to build a more efficient port complex that could compete with other port cities in Europe. Thus, the governance and regulation of land use are as much a political project as they are a reaction to social, economic conditions and urban-rural morphologies. The preceding discussions of the area's spatial planning objectives illuminate several major challenges and opportunities. These are discussed in turn.

Peri-urbanisation processes

The process of peri-urbanisation is one of the most common features of modern agglomerations, be they large or small. These processes are also at work in the Nantes Saint-Nazaire area, and induce in this place the same common consequences. Competition among different land uses (houses, roads and rail lines, business buildings, natural areas, recreational zones, agriculture) in a restricted area, with geographical constraints, leads to an increased difficulty in managing mobility within a space constrained area. Critically, the extension of infrastructure and services to such areas can impose significant costs to municipalities over time. The aggregate result from a series of uncoordinated land use changes can be a pattern of development that imposes high travel costs on the majority of the population because linked land uses are not spatially adjacent – people live far from where they work and shop, or where spill over effects from farming make living in the country unpleasant. In turn these costs lead to conflict, reduced social cohesion and in extreme cases out migration as people flee a dysfunctional situation. On

the other hand, peri-urbanisation is not inherently bad, as considerable evidence shows that a large share of the population when presented with an opportunity to live in a semi-rural environment will choose to do so. The obvious challenge is how to best manage the process. A critical issue that is that residents who choose to live in these locales bear the full costs associated with these locational choices. Very often this is not the case.

Conflicts between different land usages

In any community, changes in land uses through time are required to respond to changes in the economy, the population, or in other conditions. Conflicts arise when parcels changing use impose uncompensated costs on adjacent parcels or on the larger community. It need not matter if the change is initiated by an individual or the local government. Nearby residents are likely to be just as unhappy if a firm opens a factory next to them as they would be if the local government constructs a bus maintenance operation. The conflicts come from incompatible uses and when spatial plans change uses, they too can cause conflicts. But in some cases, different uses in close proximity offer benefits to one or more landowners. Being able to walk to a restaurant or a grocery store is a key benefit from living in a mixed use urban neighbourhood, as is having a home in a rural commune next to a forest preserve. This suggests that a key challenge for land use plans is not simply to apply exclusionary zoning that separates different uses, but to identify which uses are compatible with each other and support those, while discouraging those that conflict from being in close proximity.

New needs for new usages: landscape and environmental requirements, agriculture near the city, touristic areas

People living in urban agglomerations typically like the variety of experiences offered by a city, but typically also want something else. They are fond of different dimensions that can only partly be fulfilled in the city: natural areas, recreation areas, nearby farms and locally produced food that is authentic to the region In Nantes Saint-Nazaire, this desire for both nature and preserved, but transformed, landscapes, is particularly strong. Both new and long-time residents express the importance of easy access to natural areas, to wetlands and to protected environmental zones. These zones play an especially strong role in the decision of young individuals and couples who chose to move to the area. The exceptional geographical situation of the estuary and the huge opportunities offered by natural and preserved areas provide a response to these demands.

What this shows is that quality of life plays a key role in the location choices of people and that simple economic motives—employment options and income levels—are only part of what makes a place attractive. In addition, even people who prefer to live in a dense urban environment also commonly value a nearby high quality natural environment that provides a counter-point to their day-to-day experience. For Nantes Saint-Nazaire, the decision in the spatial planning process to emphasise urban-rural connections and to strengthen both the quality of the urban areas and the quality of the rural areas has been a key factor in sustaining economic growth.

Identifying the next growth points

The ambition of the area is to continue to increase in population and economic activity which means there will be an ongoing need for new housing and for new industrial sites. In the last decade this growth process has led to a rapid expansion of both new housing and new businesses in peri-urban communes. An objective of the current

spatial plan for the Nantes Saint-Nazaire *métropole* is to end this trend and to concentrate new housing in urban cores in order to "build the city in the city" and increase density. The benefits of this are: reduced infrastructure costs, the potential for less car use for commuting if people live near where they work and preserving land for agriculture and nature.

However, this plan concentrates the benefits of future growth and wealth in the urban cores, leaving the peripheral communes with few benefits, especially since farming in the region is not particularly productive, nor is tourism likely to create many full time, high wage jobs. To maintain support for the plan's objectives, the two core communes may have to compensate these losing communes, which of course reduces the benefits of the strategy. Moreover, the spatial strategy seems to assume that new employers will be willing to settle for a higher cost and more complex to develop brownfield sites in Nantes or Saint-Nazaire over greenfield sites in a rural commune. If they do not, and a significant share of employment remains outside the core, the benefits of moving households into the core are clearly reduced. Further, many new migrants have young children and strong preferences for detached housing.

There is some recognition that new housing might also be needed in the urbanised parts of rural communes, but this seems more of an afterthought than a core element of the strategy. However, for a number of political, household life-style choice, and business attraction reasons, it may be useful to identify multiple types of locations that preserve options for housing, even while trying to increase density.

Strengthening infrastructure

The infrastructure needs of the region are complicated by the presence of water. In terms of road transport, the more complex process for siting roads and the need for bridges increases the cost of construction and makes routes longer than is the case in more inland areas. Rail connections to Paris are already good and the short travel time is an attractive aspect of the region. Solid waste management is an increasingly complex problem. As the population grows, restrictions on land-fills become more rigorous and the number of potential new sites declines. With projections of considerable future population growth, the siting of new waste disposal or treatment facilities will become a key task for land use planners.

The Loire itself is an important transport route for bulk commodities and navigation systems have to be maintained. Similarly, the ports themselves remain an important feature of the area and occupy a large stretches of the riverfront in Nantes, Saint-Nazaire and other smaller places. From a spatial planning perspective, the ports place constraints on other activities that can be located in close proximity and make demands in terms for other forms of infrastructure, like road and rail access, to improve their operational efficiency.

Finally, while the recent referendum on the Notre-Dame-des-Landes Airport showed a majority of those voting supported its development, the opposition has not given up. There appears to be significant exaggeration of the benefits and the costs by both supporters and opponents that have become set in stone. At this point, the duration and intensity of the conflict risks spilling over into other areas both for spatial planning and for broader economic development and political co-operation domains.

Economic diversification

Nantes in particular, but also Saint-Nazaire and other communes in the area, have gone through a major economic transformation. While shipping and shipyards are still a significant element in the local economy, they are only part of a more diversified economic structure where services play the leading role. The number of activities at the port complex has increased over time, especially with introduction of the LNG facility, but employment has not increased proportionately. Manufacturing employment has also diversified beyond the traditional marine industries with two Airbus assembly plants and their related support firms. However, growth in advanced producer services, like finance, health care and research have created many of the new jobs.

Employment growth in these advanced service industries is the main attractor of new high skill migrants to the region. For most of these firms the *métropole* provides no clear locational advantage over other medium size agglomerations in France in terms of the direct cost of doing business. What it does provide is a much better location in terms of quality of life for employees that can make attracting and retaining workers easier for these firms. The focus of the spatial plan on preserving local natural amenities and maintaining the quality of the local environment are a key aspect of keeping the Nantes Saint-Nazaire area a place where people want to live.

Tourism and retirement services are two expanding sectors that also require the preservation the natural environment and creating attractive urban neighbourhoods. Considerable numbers of retired people are moving to the area because of a favourable real estate market (INSEE, 2016b), and because the climate is good and a variety of life style opportunities exist. Similarly, tourism is growing because of the water based amenities and increasingly attractive urban spaces. Spatial planning will play a key role in maintaining and improving both the natural and built environment that supports further growth of these two drivers of local economic activity, which can be challenging to achieve (Stenger and Dupraz, 2014).

Strong local support for multilevel governance has facilitated past strong economic performance

The issue of strengthening multilevel governance is a concern everywhere in France, and lays at the heart of the last reforms of the national laws on spatial planning among levels of subnational government (the laws MAPTAM and NOTRe). These reforms have tried to bring solutions and simplifications to the so-called *millefeuilles territorial*. In the Nantes Saint-Nazaire area, local governments had already made strong commitments to the horizontal aspect of multi-level governance by taking advantage of a variety of co-operative special purpose intercommunal agreements. This degree of collaboration is impressive, and has been useful, but it has also resulted in a multiplicity of institutional layers that are further complicated by spatial constraints caused by the complex geography of the territory. Those responsible for spatial planning in Nantes Saint-Nazaire appear to have found ways to maintain co-ordination among the increasingly complex set of organisations, but doing so is a resource consuming process.

Presently the spatial planning decision process depends on various levels of government and a complex set of entities, a far from exhaustive list includes the following:

- Local authorities (Regions, *Départements*, *Intercommunalités*, communes)

- National government ministries and agencies and their regional bodies
- European Union Directives and other regulations that have a direct impact on land use
- Planning documents (e.g. SRADDET, SCOT, PLU, PLUI)
- Specific local documents (negotiated and agreed to by local actors)
- In principle, planning decisions for a particular parcel of land could involve a significant number of these bodies, and historically, the individual guidance from each of the various bodies on acceptable land uses may not have been consistent.

The connections and exchanges of information among these different levels are extremely complex, and their multiplication in number over time has not contributed to economic growth. And it also may not have contributed to better planning policies and decisions. Because many of the actors have a single issue that they are concerned with (e.g. maintaining the number of farmers in a region or protecting bird populations) they do not easily recognise trade-offs among conflicting goals. Because the individual commune, or group of communes, is ultimately charged with developing the actual land use legislation that governs changes in land uses, it has to find a way to balance conflicting signals from higher levels of government with the pressures from the local populace to maintain or change the use of particular parcels of land. Typically, rural communes do not have staff with strong competences in land use planning, which makes this an even greater challenge. While consultants can be hired to provide planning support this can also be problematic, because while the consultant may understand the approach of the higher level in spatial planning, they may lack a strong understanding of the local *milieu* and offer advice that is controversial locally.

The most recent set of reforms have the positive feature of establishing a hierarchy of plans where those promulgated by higher level entities must be respected in the subsequent planning actions of lower level entities of subnational government. In addition, there has been a clarification of which level of government is responsible for which function in the planning process. The effect has been to clarify the vertical linkages in the multilevel governance process. While the individual commune remains responsible for determining specific planning law within its boundary, the French government is creating incentives for communes to work together on land use and other plans across functional areas, where groups of communes share common problems or objectives. This allows different groups to form for different purposes. This type of flexible geography increases the degree of complexity in managing horizontal co-ordination but may also result in the best approach when the need for better co-ordination has to be balanced against the desirability of having plans that are capable of including the granularity of local conditions and local interests. The success of the Nantes Saint-Nazaire region in carrying out complex co-ordination of spatial management in a way that maintains local political support is evidence that such an approach is workable.

Key recommendations for Nantes Saint-Nazaire

Continue tradition of co-operation and exchange between communes and intercommunalties

The case study of Nantes Saint-Nazaire has demonstrated good governance practices and a high level of communication and exchange between various local stakeholders on land use issues. Strong institutional relationships and a meaningful joint planning strategy

have been a critical part of the area's success. The tradition of exchange and communication between local stakeholders, even those with opposing points of view, is an extremely valuable territorial asset, which has led to the successful and smooth development of the Nantes Saint-Nazaire metropolis. It appears now of the utmost importance to maintain this type of management and more precisely to promote good governance practices and skills between local actors. Doing so will ease the communication between the various levels of multi-governance, as well as between the various types of governance structures and representatives of different organisations or institutions in charge of local management and land use planning. It will facilitate the necessary exchanges and compromises when the time comes to make funding choices on joint projects. Also it helps local actors temporarily solve or overcome land use conflict related to local needs and expectations.

Continue to grow the residential economy by maintaining a high quality of life in order to attract (and maintain) populations

Over the last 20 years there has been the huge increase in the residential economy, due to the arrival of elder residents and young couples with children in search of a better quality of life. The arrival of these newcomers has led to large changes in the metropolis, in terms of life style and new needs, and has induced a constant increase of growth as well as the development of new services. In order to maintain and further expand the residential economy, is it important to increase local attractiveness in terms of protected areas and natural landscapes, and maintain residential landscapes. The area will need to balance growth and development (increasing density) with the maintenance of the areas and landscapes that have attracted individuals to the area in the first instance.

Protect the coastal zone, the environmental areas and the natural landscapes

The protection of the coastal zone, the environmental areas and the natural landscapes is clearly at stake in the Nantes Saint-Nazaire area. It is not only a major cause of conflict, due to conflicting uses, or intentions of use, of various local stakeholders (developers, public bodies, local institutions, ecologists, neighbours, farmers…), but also the major source of attractiveness of the local metropolis, in terms of wellbeing. It provides the territory its unique character that is widely recognised and appreciated. For these obvious reasons, these areas must be protected as much as possible, in order to ensure the future prosperity of the area.

Promote urban densification

Given the previous statements and recommendations, local land use planning policies should promote densification of the urbanised areas in order to contain urban sprawl and to preserve un-built areas. This process must follow three main paths:

- Densification of the core of the main cities ("to build the city on the city")
- Management of urban sprawl, mainly in peri-urban areas, and preservation of natural agricultural zones and landscapes from urbanisation processes.
- Promotion of urbanisation of smaller cities ("bourgs") in the area, along with associated services (e.g. schools, nurseries, small shop), in order to reduce the costs associated with long distance commutes and provide additional options in housing types.

Notes

1. It should be noted that the concept of a Nantes metropolis existed as early as the 1950s. For a historical overview of the agglomeration's development see Renard, J. (2004), pp.135-142.
2. http://france3-regions.francetvinfo.fr/pays-de-la-loire/2014/09/02/nantes-lune-des-trois-villes-les-plus-attractives-selon_les-cadres-franciliens-542436.html; www.mavilledemain.fr/axes/5-ville-active-et-ou-ville-a-vivre.html.
3. Between 1990 and 2009, the Loire-Atlantique gained approximately 11 400 new residents annually (INSEE, 2013a).
4. This reflects a projected increase from 1 329 000 in 2013 to 1 550 000 inhabitants in 2030, based on INSEE projections (INSEE, 2013a).
5. Intercommunal associations in Nantes stretch back to the early 1960s when the Community Association of the Nantes Region (l'Association Communautaire de la Région Nantaise, CDNA) was created, encompassing 37 communes. During this time there were also a number of fledgling intercommunal associations that arose in order to implement specific policies (i.e. transport, roads, drainage etc.). These early associations took on shared projects, but lacked the analytical capacity and political inertia to think of the regions development as a whole. The creation of the Urban Studies Agency for the Nantes Agglomeration (l'Agence d'études urbaines de l'Agglomération Nantaise, Auran) in 1978 was critical in this regard. It was the first organisation to forward a cohesive approach to development. The organisation had several successors over the intervening years with the latest iteration being the Nantes Métropole, created in 2004.
   Source: Nantes Métropole (n.d.) Les fiches territoire Nantes Métropole (Loire-Atlantique), http://www.nantesmetropole.fr/institution-metropolitaine/institution/; Pôle métropolitain Nantes Saint-Nazaire (2016). www.nantessaintnazaire.fr/home-english/ ; Busnelk, M.F. (2003). La création de la communauté urbaine de Nantes: Pays de la Loire. PCM le pont, Vol. 101/3, pp.49-53.
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7. From 2016, the budget represents more than 1 billion euros, of which EUR 327 million is spent on investments (Nantes Metropole, 2016).
8. The effective tax rates for 2016 are: housing tax: 10.14%; built property tax: 6.41%; tax on garbage collection: 7.50% (Nantes Metropole, 2016).

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