Metropolitan Strategic Planning

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Case Studies Report for Greater Newcastle, NSW.
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1.0 Introduction and Overview

Greater Newcastle, NSW, is embarking upon a metropolitan strategic planning process as part of a new phase of collaboration between the five Greater Newcastle councils (Cessnock, Lake Macquarie, Maitland, Newcastle and Port Stephens) and the NSW State Government Department of Planning and Environment.

This report considers international case studies of metropolitan strategic planning from a range of metro areas that have some similar features to Greater Newcastle in terms of size and orientation. It seeks to garner insights for Greater Newcastle and to capture observations that could aid and inform the Greater Newcastle Metropolitan Strategic Planning process.

The key questions addressed in this report are:

- How does metropolitan strategic planning help such metros and what would be the costs of not undertaking metropolitan planning?
- Which international metropolitan areas have useful lessons for Greater Newcastle?
- What have been the core elements of successful metropolitan strategic plans?
- How have they addressed competitiveness, growth, and liveability?
- What role has transport infrastructure played in their development?
- What part has renewal of the urban core played in their metropolitan growth?
- What have been the effective forms of collaboration between local councils?
- What are the cycles and lengths of time over which successful metropolitan development has occurred in other regions?

Greater Newcastle has good fundamentals for growth in terms of populations and demographics, economic diversification and specialisation, and a wonderful natural environment. It also has improving infrastructure, capable local governments that are willing to work together across the metropolitan area, and a committed State Government willing to convene and resource metropolitan planning.

Greater Newcastle shows consistent signs of interdependence between its five local governments. This is illustrated by continued commuting between the five councils that form a single labour market and travel to study area, the shared role of key infrastructures such as the port, airport, the common natural assets such as the Hunter River and Valley, the coast line, and natural resources such as the coal deposits. The metro area also shares some key institutions and facilities such as the University and Sport amenities, as well as the improving provision of amenities within the revitalising urban core.

Effective Metro/Regional Planning comes about when the capacity exists to deliver and implement change, and recognition of current strengths and assets are combined with an appetite to address future opportunities and challenges.
Taken together these features suggest an imperative for joint long-term planning between the five councils and the State Government, in order to make the most of the opportunities for well planned growth and to anticipate and avoid badly planned growth or excessive growth problems. At the same time, Greater Newcastle has the opportunity to address some important transformations that will enable it to prosper into the future. These include, but are not limited to:

- Revitalisation and liveability in the urban core and defining the means to manage the metropolitan expansion of the city;
- Extending transportation systems to better integrate the metropolitan area;
- Relocating key metropolitan assets (such as the University) into optimal locations;
- Effective development of the port and airport activities and associated economies;
- Building an agreed infrastructure priorities programme;
- Generating durable metropolitan governance through which a common agenda for how well-managed and successful growth can be implemented; and
- Recruiting citizen support for managed growth and transformation, and building citizen confidence around the metropolitan plan.

Such transformations need to be guided by a shared metropolitan vision and sequenced through an integrated metropolitan strategic plan. Failure to undertake these improvements within the context of a shared metropolitan plan would result in missed opportunities, sub-optimal development paths, and loss of confidence going forwards.

### 1.1 Case study selection

This report is not an analysis of Greater Newcastle. It has not involved a major study of the Greater Newcastle Metropolitan area. To address these issues for Greater Newcastle we have reviewed the experience of 7 international city-regions:

1. Bilbao, Basque Country, Spain
2. Cardiff, Wales, UK
3. Gothenburg, Sweden
4. Halifax, Nova Scotia, Canada
5. Malmö, Sweden
6. Portland, Oregon, USA
7. Waterloo, Ontario, Canada.

In particular, the case studies chosen highlight some important aspects of the work in train in Greater Newcastle. These are:

- Inter-council co-operation at metro level, especially for vision led, longer term strategic planning;
- Economic diversification and specialisation.
- Population recovery and growth;
- City centre renewal and re-urbanisation;
- Increase public transport system investment (eg light rail) and implications;
- Growth of visitor economy and air connectivity (eg cruise terminal and airport growth);
- Role of universities as anchors of city centre renewal and economic diversification (building a Higher education Economy, Innovation system, etc);
- Increased confidence, ambition, and effective ‘deal making’ with higher tiers of government;
- Clarity about the impact and opportunities of trends, e.g. demographics, technology, geo-politics, appetite of global capital; and
- Scope for greater regional connectivity, eg Newcastle – Sydney – Wollongong–Canberra.
<table>
<thead>
<tr>
<th>Metropolitan Area</th>
<th>Pop./million</th>
<th>No. of local governments</th>
<th>Key Infrastructure Projects</th>
<th>Metropolitan Governance</th>
<th>Key metropolitan policies</th>
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<tr>
<td>Bilbao</td>
<td>0.95</td>
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<td>Metro Sanitation</td>
<td>Bizkaia Province</td>
<td>Culture and Identity Polycentric development Entrepreneurship and re-skilling</td>
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<td>Bilbao Metropoli 30</td>
<td>Smart city</td>
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<td>Cardiff Capital Region</td>
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<td>Metro 2017</td>
<td>City Region Cabinet</td>
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<td>(non-profit association)</td>
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<td>Long-distance connectivity</td>
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Figure 2: Table summary of the metropolitan areas studied are summarised with data for Greater Newcastle included.
The seven international examples highlight different ways through which metropolitan planning has been fostered through multiple cycles. In each case, regional collaboration has coincided with a rise in population, better planning and management of land, increased investment in infrastructure and urban renewal, land use and density changes, reduction in long-term structural unemployment, increased job growth in internationally traded sectors, increased the rate of entrepreneurship, and improved economic performance relative to the rest of the nation.

**Insight 1: for Greater Newcastle**

**Why do other metro areas begin metropolitan planning collaboration?**

There are multiple and distinct drivers that include:

1. Need for more integrated planning in the context of drivers of change and multiplicity of governance;
2. A change of circumstances that breeds collective recognition of shared regional problems (whether economic, budgetary, infrastructural, social, environmental);
3. Charismatic leadership from one or more regional politicians to highlight the inefficiencies of fragmentation and competition;
4. Enhanced collaboration between local governments and improved public and private co-operation;
5. An institutional reform or a policy shift from a higher tier of government that demands regional joint working and increases receptivity to new ideas;
6. Sustained advocacy from business and civic groups on one or more key issues that create a supportive environment for combined local and state government leadership; and
7. Overall, an integrated and well-articulated story has to evolved, that is more than patch work quilt, and provide an organising framework for how to take the metro region forwards.

**What are the costs of not doing metropolitan strategic planning?**

1. Inadequate Metropolitan Planning framework which lacks capacity to address the variety of planning challenges presented by the fact that people live, work and connect across the multiple planning frameworks of many local governments;
2. Population and economic growth will be less effectively planned with the likelihood of greater externalities (pollution, sprawl, congestion, housing market inflation, etc);
3. Competition between neighbouring municipalities that leads to difficulties in making a combined case for investment to higher tiers of government;
4. Incoherent and disjointed infrastructure investment with loss of system integration and improvement;
5. Misalignment of land use and infrastructure planning and delivery timelines, leading to failure to prioritise and the rise of stranded or under-utilised assets;
6. Disparate brands and narratives about the future of the region that do not add up to coherent story and prospectus to the outside world leading to failure to optimise external investment and jobs;
7. Failure to agree cross-party approach to development policy leading to flip-flops and changes to policy from one electoral cycle to another, deterring private investment; and
8. Disengagement of citizens, a lack of democratic conversation about a city/region’s future, and increased cynicism and mistrust between citizens, governments, business and media.
1.2 Core elements of successful metropolitan plans

The seven cases point to 10 factors that shape the success of metropolitan strategic plans:

1. Shared commitment to population growth and an enhanced infrastructure and housing supply to manage this growth;

2. Agreed transport corridors and growth nodes that connect to the core city and each other;

3. Expansion and densification of the urban core, including significant new housing provision to meet the needs of different age groups, reduced car use and pollution, and increased vibrancy and quality of life;

4. Regional strategies provide a rationale and a prospectus for targeted intensification and improved urban design;

5. A clear assessment and understanding of firm networks and cluster activities;

6. Robust scenario planning;

7. Clear accounting and visualisation of the benefits for the most remote or rural municipalities, and the overall impacts of core services;

8. The mobilisation of citizen engagement, enthusiasm and consciousness of the regional dimension;

9. Local governments have a strong incentive or obligation to comply with wider metropolitan plans and targets; and

10. A pipeline or sequence of projects that provide confidence both to investors and to local governments that may benefit less from the first cycle of projects.

1.3 Land use planning and metropolitan strategic planning

Land-use planning has been at the heart of the metropolitan reform and development process in most of the international case studies, and in many other cities where effective metropolitan growth management has been achieved.

In particular many metropolitan areas have adopted urban growth boundaries at the start of their metropolitan growth phase as a way to control growth, and designate urban and rural ‘reserve’ land outside the boundary for future capacity needs. Some of these controls are mandated from above, others voluntarily adopted from the bottom up.

Growth is often controlled outside an urban growth boundary through a mix of tax incentives and zoning at large minimum lot sizes. Growth is also managed inside the boundary using zoning to help maintain a strong affordable housing supply. In many cases, such as Portland and Waterloo, the boundary was drawn large enough to allow some development at low densities for the first 20 years before densification was more aggressively pursued. The idea was not to permanently contain growth but to manage the transition to more systematic urban land-use. In both cases, the boundary was popular with urban residents at the ballot box because they saw the benefits of enforced rural open space and were made aware of the costs of leapfrog development. Over time, reforms have been made to simplify the complexity of regulation that tends to spring up around the boundary.

For most metropolitan areas, an Urban Growth Boundary has not been enough to ensure growth management. Other mechanisms have been required to prevent sprawl effects within the boundary, and encourage intensification in the right areas.
Growth boundaries have been shown to be successful at:

1. Encouraging a metro to make conscious choices about urban structure, the growth model, and urban/rural relationships;
2. Protecting farm land;
3. Maintain agricultural production;
4. Establishing a clear difference in urban and rural resource land values; and
5. Fostering shared identity and cross metropolitan debate about the future.

Among the challenges that growth boundaries and green belts have created include:

1. Although set up as a flexible planning tool, they soon became fixed in the minds of residents and fiercely protected as a result;
2. Systems of compensation that become very expensive for local or metropolitan authorities and can sometimes result in restrictions being lifted; and
3. Growth controls can result in higher targets and big plans to create new concentrations of employment, but without the requisite funding from higher tiers to install basic services (water, sanitation) or bring forward transport infrastructure.

**Insight 2: for Greater Newcastle**

**Urban growth boundaries and metropolitan land supply**

An outer growth boundary is viewed as a tool to curtail sprawl but often has its clearest impact in helping to promote new forms of development inside the boundary, with better planning for mixed use and densification to optimise the use of land and to create a more desirable built environment within the city. It also changes the character the dialogue about how and where to accommodate growth and change.

Progress after a boundary or new controls are introduced is often slow, as plans are updated. It is useful to speed things up by revising all forms of planning to adapt to new growth boundaries.

The effectiveness of a boundary often hinges on the capacity and commitment of local planning agencies, and the extent to which there is effective co-ordination between municipalities across the metropolitan area, and active support from higher tiers of Government, especially with regards to transport investment, infrastructure, and the location of key assets.

It is important to review adequacy, feasibility, and desirability of current residential greenfield sites which are not developed and determine whether these should be considered for different uses.

It is essential to analyse the potential housing demand split between infill development, and greenfield residential to determine whether urban boundaries and planned land supply reflects likely future demand.

Growth controls and boundaries appear to be more successful when accompanied by governance adjustments to ensure that districts on either side of the boundary co-operate and do not ignore policy. Peer pressure should used to foster a culture if long term compliance. International experience suggest that green belts and boundaries work best as part of a larger package that includes other planning, economic and social tools to which all parties subscribe.

Strategic planning for land within an urban growth boundary should help improve infrastructure servicing and staging to support growth in Greater Newcastle and across the region.
1.4 The role of transport infrastructure in regional development

Large-scale infrastructure has played a transformative and integrative role in many regions that were previously quite fragmented. Metro rail projects, tram systems, bus rapid transit corridors, or regional airport and port upgrades, have been powerful in their ability to:

1. Bring regional partners to the table and spur collaborative decision-making and awareness that each part of the region would benefit from in time;
2. Expand labour market access and reduce the mismatch between jobs and homes;
3. Provide visible benefits and creates confidence in the possibility of change;
4. Become a source of pride and shared regional identity;
5. Connect areas that are socially and politically disconnected;
6. Unlock new land for strategic densification; and
7. Shape spatial development and the creation of complementary and secondary centres.

Cities that have been through one cycle of regional infrastructure-building usually develop the appetite for subsequent cycles. After two or three cycles they often have built up the range of transport options that serve a wide range of household types, ages and incomes.

Insight 3: for Greater Newcastle

How transport investment helps metropolitan areas achieve their potential

A key imperative for Greater Newcastle is to revitalise its city centre, and at the same time connect up its largest and fastest growing activity and employment centres, and logistics platform, so as to match up jobs and homes more efficiently, and stimulate a refocused and emerging geography of new centres. Other metropolitan areas have shown how an integrating transport project can help deliver these transformational outcomes while also creating other lasting positive effects.

In Bilbao, its first two Metro lines not only expanded the labour market catchment and unlocked new land for development. They are also observed to have had a huge effect on the pride and confidence of citizens, aided by its affordability, and high quality design and upkeep. Its second cycle of transport investment, in trams, also allowed the metropolitan area to develop new land value capture tools and user fee mechanisms. Because these investments required multi-level financing they began a new culture of financial and political collaboration between levels of government that previously had been in conflict. A second governance dividend was the creation of public-private development agencies to manage the opportunities that the transport projects gave rise to, that were able to operate over longer timeframes than the usual political terms.

For Gothenburg, the big benefit of its transport investment package was a series of road and rail tunnels that have dramatically expanded labour market access along a series of corridors. The investment has also had the effect of upgrading the co-ordinator ability of the metro area’s public transport company. This turned Gothenburg from a slow-moving city with an underperforming Port into a more integrated metropolitan area with lower car dependency and increased appetite for large-scale projects.

Transport investment can also be the catalyst for a larger ‘deal’ with higher tiers of government. This is the case in Cardiff, where its new Metro underpins an unprecedented City Deal which is also putting the building blocks in place for more systematic joint working and co-investment among the local governments in the metropolitan area. The Metro is also enabling the evolution of Cardiff from a monocentric to a more polycentric region that is expanding housing capacity while giving firms, institutions and public bodies more choice about where to locate.
In some cases, the catalytic investment is in logistics rather than commuter rail. In Halifax, investment in its trade gateway functions triggered the creation of a new council for transport providers to work together much better, with co-funding from public and private sectors. The resulting has increased the metropolitan area's visibility and capability of participating in global supply chains. This is relevant for how Greater Newcastle’s Port and Airport may need to adapt to changes in demand and spot opportunities for spillover activity and employment.

A first initial transport investment is often what it takes to bring partners in the metropolitan area to the table, and build consensus around the sequence and priority of projects so that some places do not see themselves as ‘losing out’. In Portland, its light rail project reassured local governments on the edge of the metropolitan area that they would benefit in the long-term if not the short-term, and as a result the line became a tool for the region's land-use and development strategy. Transport investment not only reversed dis-investment; it also resulted in a metropolitan area with many more living options to suit different household types, ages and incomes.

Finally, inter-city transport investment also creates new economic opportunities for a metropolitan area. The Øresund bridge which connected smaller Malmo to its larger neighbour Copenhagen allowed Malmo to build complementarities in its most advanced sectors, and to appeal to a higher skilled population attracted by its relative affordability. Malmo’s surge in business and housing demand at its end of the corridor points to the opportunities for Newcastle to capitalise on its inter-regional links to Sydney, and to approach enhanced connectivity with confidence.

Given the progress made with The Hunter Region and Hunter Development and Revitalise Newcastle there are many important similarities to observe.

1.5 Competitiveness and participation

The international examples all highlight the social challenges that many regions face in relation to housing, labour market and education outcomes. The international examples reviewed here highlight how regional co-ordination may enhance the focus on regional competitiveness as well as regional participation.

In terms of creating a more inclusive development model, regional co-ordination mechanisms in these seven examples have made it more possible to:

1. Pursue more mixed-use development in the better connected urban areas, as part of a general focus on an inclusive built environment that appeals to both local authorities and to developers;
2. Focus on addressing the skills mismatches and disparities that result from labour market restructuring;
3. Establish new technology or innovation locations that leverage the skills and specialisations of the former industrial economy;
4. Engage and incentivise large regional employers to become inclusive in their recruitment and internship practices;
5. Provide substantial affordable housing in the major regeneration areas in and around the inner city;
6. Work collaboratively to expand social entrepreneurship, inclusive startup funding, and SME technology utilisation;
7. Bid jointly to attract funding for lifelong learning projects;
8. Join up approaches to school education and skills at key junctures in student development; and
9. Adopt a clear measurable framework for equity and inclusion.
Insight 4: for Greater Newcastle

Metro areas can foster deeper labour markets and greater participation

Metro areas are defined by the fact that their labour markets are becoming larger and more functionally unified through travel to work patterns between local government areas. As internal road and rail connectivity within metro areas is improved, a greater level of inter-municipal commuting becomes possible. This increases the job choices that citizens enjoy and the talent available to employers, it increases both the range of jobs available and the talent pool that can be accessed, thus deepening the labour market.

In turn once a metropolitan economy enjoys such internal connectivity and deeper labour markets, increased productivity and specialisation become possible. Specialisation does not mean that the economy will become more narrow, but rather that it will increase its level of value added across a range of sectors.

In the aftermath of the mining boom, Greater Newcastle’s unemployment rate is now higher than the NSW average. Over time the risk of low employability, long-term unemployment, and diminished access to good jobs may grow, and this would be exacerbated by fragmented small-scale initiatives.

The strengthening of metro governance and partnerships has helped many cities to prioritise the issue of skills and opportunities of lower-skilled residents during a period of economic change and restructuring. Metro-governance is a means for the cities to commit themselves to joint work on a shared labour market. The metro government in Portland has been able to sustain a dedicated focus on social and economic benefits for residents. It also helped to set up an economic development organisation for the whole area that actively engages with large employers and co-creates large-scale programmes aimed at entrepreneurs and minorities. Portland illustrates how metros can build monitoring frameworks on spending and progress for more inclusive economies.

Metropolitan management results in larger-scale and better resourced agencies focused on access to economic opportunity. Bilbao has an impressive record of linking up excluded sections of the manufacturing labour force to a new generation of job opportunities in the metropolitan area.

For other cities, metropolitan co-operation has been the basis for more aggressive solutions to issues of isolated housing and single-use communities that reduce economic participation. In Gothenburg, its metro agenda has resulted in a shared government and developer commitment to create a more inclusive and less segregated built environment. It has also triggered the expansion of social entrepreneurship and more successful bids for higher tier inclusion funds. The metro area’s record of job creation in advanced manufacturing, automotive, trade and IT reflect the success of its combined approach.

1.6 Effective forms of collaboration among local governments

Each of the reviewed regions have pursued different models of regional governance. Some (Portland, Halifax) have created new regional authority, whether as an additional tier or via amalgamation, while others have built co-operation informally and created specialised delivery vehicles.

For regions that cannot or choose not to reform the governance system, co-operation is often most effectively built through regular ‘rounds’ of consultation and deliberation about the future, and scenario planning exercises. Though these coalitions lack binding authority, they become influential by setting a regional agenda and partnering with other non-governmental actors and allies. It is not uncommon for these voluntary associations to evolve into more statutory units of government over time.

The examples illustrate that effective regional governance models appear to benefit from:

1. Clear powers over planning, land-use and economic development;
2. Pooled assets and inventories of public land; and
3. The engagement and support of multiple tiers of government.
Often it has been intermediate tiers of government with some fiscal independence and devolved responsibilities that can take ownership of certain regional projects and can help ensure returns are re-invested. Higher tier agencies and authorities (e.g. transport, housing) have also been important allies in the attempt to co-ordinate infrastructure provision at the regional level. Vehicles that bring together public and private sectors have also been key.

Public-private agencies such as Bilbao Metropoli-30 and Greater Halifax Partnership have been critical for metro-regions:

1. To look beyond political timescales and provide oversight over the long-term;
2. To deliver a strategic plan;
3. To convene a diverse leadership function;
4. To create alignment between different stakeholders around common objectives;
5. To gather intelligence about the regional economy;
6. To lobby and advocate for necessary reform and investment projects;
7. To build a regional story and promote the region internationally;
8. To assemble and optimise the use of public land;
9. To adopt a less siloed regional perspective;
10. To foster entrepreneurship and skills development;
11. To increase the investment rate in key infrastructure; and
12. To initiate cross-border or multi-region collaboration and integration.

Leveraging the expertise of regional universities, in order to build a robust evidence base, address skills gaps, and support a transition towards a higher value economy (green economy, advanced business services, design, technology).

**Insight 5: for Greater Newcastle**

**The Metropolitan co-operation imperative for local governments**

Greater Newcastle can benefit from an enhanced governance framework that can provide a coordinated approach to metropolitan growth. Local Governments can lead the integration effort. In general, it is local strategies that give effect to the Metro Plan.

Many metropolitan areas have benefited from strengthened or simplified governance arrangements. In **Waterloo**, governance reforms have enhanced the metropolitan council’s capacity and appetite to invest more financial and political resources to manage growth. They have also enabled a more ambitious ‘smart growth’ metropolitan planning approach and more citizen awareness of the competing options for growth. Similarly, in **Halifax**, reforms helped stimulate institutional development and bigger roles for private representatives in investment promotion.

Increased powers to **Portland’s** Metro Council gave it the ability to prepare mandatory metropolitan system plans, and evolve from a reactive development agenda to one geared around urban densification and high quality design. Metro government that gained a reputation as a neutral body has also fostered a culture of long-term thinking and scenario-building where citizens are given clear outlines of the different trade-offs of different development approaches. For Newcastle, it is a powerful example of how metro governance is closely linked to the effective use of land assets and the ability to make projects more investor ready.
1.7 The cycles and timeframes for regional collaboration to succeed

Although there is no uniform cause or correlation, international experience suggests that many regions begin to experience a step change in economic development after two cycles of collaboration, over 10-20 years of building stable regional frameworks and partnerships. The time frame has been more accelerated in regions such as Gothenburg where an agenda for local government co-operation coincided with regional government reform and with an injection of infrastructure investment which had a catalytic effect. The length of time has been slower and more incremental in regions such as Halifax where the initial governance reform has not fully overcome scepticism about the distribution of benefits and where agreement about spatial development and growth nodes has been slow to emerge.

Insight 6: for Greater Newcastle

Time-frames and cycles in metropolitan development

All of the case studies show that whilst metropolitan strategic planning usually looks 15-30 years into the future, rapid progress is made on immediate challenges once a longer term is in place. Long term planning is an accelerator of short term action because it gives confidence and conviction to key interventions, and provides a rationale for making difficult choices. Metropolitan planning appears to work through 'development cycles' in which key projects are undertaken that have key immediate benefits and create a platform for the next cycle of development.
2.0 Case Studies

In the following section of the report we describe the successful metropolitan planning activity in the regions selected and we offer further insights for Greater Newcastle from these regions.

2.1 Bilbao Metropolitan Region

Located in the autonomous Basque region of Spain, Bilbao’s metropolitan region is situated entirely within the Bizkaia province, with a population of 0.95 million. Spain’s fifth largest metropolitan area has made a remarkable transition from a declining industrial and banking city in the 1980s, into a successful diversified post-industrial centre with strong tourism, creative, advanced manufacturing and services sectors.

Through a stable partnership involving more than 30 municipalities, three tiers of government, and several public-private agencies, Bilbao has managed to reverse physical and social decline, stabilise its population base and increase productivity.

Today it is considered one of the leading cultural locations in Europe.

Bilbao’s industrial sector had entered into rapid decline by the 1980s. Despite a large corporate economy and a deep exporting tradition, between 1975 and 1985, 60,000 manufacturing jobs were lost – half the total. Manufacturing’s share of total employment fell from 50% in 1975 to 27% in 1995, and today accounts for less than a sixth of metropolitan employment. Unemployment soared to 25% and working class municipalities along the west bank began to experience physical deterioration, poverty and housing problems, exacerbated by a major flood in 1983 and the rise of extremist separatist violence.
New metropolitan institutions

Bilbao’s transformation was made possible by the strong partnership and spirit of cooperation between multiple tiers of government. A network of regional (Basque), provincial (Bizkaia) and local authorities came together in the early 1980s and identified the need to act cooperatively to stem Bilbao’s decline and embark on bold reform in a bid to improve quality of life.

The Basque government’s high fiscal and political independence from Madrid, and the province’s devolved responsibilities for economic development, transport, culture, innovation and R&D, allowed higher tiers of government to take ownership of important local projects and ensure that their returns were re-invested locally.

What resulted was a new ‘Strategic Plan for the Revitalisation of Metropolitan Bilbao’, agreed in 1991 – calling for an integrated approach to regeneration. A dedicated agency, Bilbao Metrópoli-30, was founded to bring together all tiers of government and key business members in the metropolitan area to deliver the plan and ensure alignment of all stakeholders around its common objectives. The agency also gathered intelligence on the metropolitan economy, and promoted it abroad. Its aim was to:

- Transform Bilbao into a knowledge and technology based economy
- Drive inner city renewal
- Preserve the natural environment
- Strengthen Bilbao’s identity through cultural projects

By acting as a think tank, lobbying force and investment catalyst, Bilbao Metropoli 30 managed to promote the ideas and evidence to bring together public and private sector partners and support a diverse civic leadership.

Catalytic infrastructure investment

Large-scale infrastructure upgrades have been key to Bilbao’s regional success. In particular Metro Bilbao was the flagship debt financed €900m project (with stations designed by Norman Foster) that opened in 1995 and provided huge confidence that change was possible. The new 43km system consisted of two lines journeying through municipalities on both sides of the river. It offered cheap and reliable access to the city and unlocked new parcels of land for transport-led densification. The high quality aesthetics and maintenance of the Metro has had great symbolic value and helped to sustain citizen pride and buy-in across the metropolitan area. Bilbao won the 2000 European Union Public Transit Award in recognition of its well designed system.

In 2002 the city also re-established its tradition of trams. Suburban rail lines received considerable investment from land value capture and the Spanish government and were reorganised and integrated. The airport was also upgraded and expanded with a new terminal building to enhance wider connectivity to Europe. A new High Speed train line between Madrid and Bilbao will also be operational after 2019.

Many of these investments were enabled by the “Infrastructure Agreement” signed between the Basque and Central Government which guaranteed funding support. All public transport projects received financial contributions and co-ordination support from every tier of government, while the EU’s structural funds provided 12% of all port and metro projects. More recently the port’s €600m upgrade was financed by increasing port activity as it developed, while sanitation network upgrades were paid by increases in user fees.
City centre regeneration

A city level Master Plan was developed in 1989 and extended to the metropolitan area in 1994. It identified four ‘opportunity areas’ for regeneration and specifically called for major interventions in infrastructure (especially internal and international transport and sanitation), urban regeneration, and public management.4

A second development agency, Bilbao Ría 2000, was set up in 1992 to deliver change in these opportunity areas. It was a non-profit public partnership whose core objective was to acquire brownfield land in former harbour and railway sites to prepare for development, develop a strategic framework, and manage project delivery with the municipalities. By involving all tiers of government (national, regional, provincial, municipal and state transport and infrastructure agencies) it sustained support from all jurisdictions and authorities behind its projects. Key to its success was a long-term vision beyond political timescales. Initially funded by central and regional government, its role as a developer has allowed it to become self-financing which enables its profits to be re-invested.5

Much of Bilbao’s success is attributed to the physical renewal of its central ports and industrial neighbourhoods. A total of €560m was invested in projects between 1997 and 2006 under the guidance of Bilbao Ría 2000, including Abandodoibarra, a former railway and harbour area on the riverfront that had become a physical barrier detaching Bilbao from the river.

The arrival of the Guggenheim museum, publicly funded by the province and city as an anchor to stimulate investment, created significant tax and tourism uplift that saw the investment eventually pay for itself. This was accompanied by other architectural developments by leading names such as Pelli, Legorreta, Isozaki, Calatrava, Sterling, and Soriano. Bilbao has significantly increased tourist visitors, from 100,000 visitors in 1996 to 813,000 in 2011. There has also been a big increase in airport passengers from 1.4 million in 1994 to 4.2 million in 2015, while its number of major conferences has almost tripled from 7 in 2001 to 20 in 2015.6

Today Abandodoibarra has a new business district, a hotel, a conference venue, a university building and commercial centre, stitched together by high quality public spaces. Other central districts also became home to substantial new housing supply.

Insight 7: for Greater Newcastle

The key role of city centre renewal

Newcastle City Centre is an important catalyst of a vibrant and internationally facing Greater Newcastle, because of its capacity to accommodate corporate HQs, key institutions, and shared amenities. In order to successfully develop the urban core of a metropolitan area, the experience of Bilbao as well as Gothenburg and Halifax demonstrate the importance of:

- ‘opportunity areas’ targeted for high quality infrastructure and investment;
- strategic management of all public land, potentially by an independent board or agency;
- a deliberate focus on tourism;
- mixed use and mixed income communities; and
- high quality art, design and keynote buildings.
Spreading the benefits and building a polycentric region

With the leadership of the Basque government, Bilbao has successfully pursued a polycentric regional strategy whereby Bilbao is integrated with other regional nodes such as San Sebastian and Vitoria-Gasteiz, connected physically and strategically. This vision was presented in a 1997 strategic document, which highlighted the importance of critical mass, complementarity and connectivity between the main urban centres.7

As a result Bilbao has become more involved in cooperation around spatial and economic planning. Basque Y is the new high-speed rail network that by 2020 will connect Bilbao and its port with Vitoria-Gasteiz and San Sebastián, paid for by the Spanish government on behalf of the Basque government. At the same time the local EuskoTren rail infrastructure between Bilbao and the smaller towns on the route to San Sebastián, is also being upgraded.

The innovation economy and inclusive growth

Bilbao metropolitan region has been effective in mitigating the impacts of industrial decline. Inclusive development in the outer industrial and residential areas, and better mobility, as the means to achieve metropolitan social cohesion were twin planks of Bilbao’s social strategy.

Two agencies – Surbisa and Lan Ekintza – have managed neighbourhood renewal in flood-hit areas and connect excluded sections of the labour force to emerging job opportunities in the metropolitan area. Founded in 1998, Lan Ekintza in particular was crucial in fostering entrepreneurship, and offering job matching and re-skilling opportunities in the city given the skills mismatches that resulted from labour market restructuring. The project focused efforts on the area of La Vieja where many former industrial workers had struggled to find new jobs. It is estimated that it has facilitated the creation of 2,000 new jobs and 100 businesses a year.9

The Basque government also founded the Society for Industrial Promotion and Reconversion (SPRI), whose major intervention was the creation of a technology park around Zamudio close to the airport, which today employs over 8,000 people in aerospace, automotive, electronics, energy, environment, R&D, engineering, medical and biomedical and IT. Substantial EU structural funding has also helped to support re-skilling and economic restructuring initiatives.9

Meanwhile the metropolitan region has also provided state-subsidised housing in new urbanised land parcels, especially in the forming mining area of Miribilla.

Figure 5: High speed rail links between Bilbao and other urban centres in the region
Insight 8: for Greater Newcastle

Hosting the innovation economy

The innovation economy is an important target in Newcastle in response to long term industry restructuring in coal and power generation as well as scope for growth in high tech and other specialisms.

Other smaller metropolitan areas have observed the following requirements in order to accommodate the innovation economy:

• Fostering the interfirm dynamics and networks in the existing business base;
• Awareness of the spatial agglomeration patterns and preferences of different types of innovation industry, and of the implications on the kinds of space and development that are needed across the metropolitan area;
• Enhancing connectivity through public transport, active transport and improved amenity;
• Mobilisation of the key firm and knowledge anchors;
• Large scale projects capable of anchoring emerging tech sectors; and
• Competitive digital infrastructure.

Bilbao Today

Bilbao today boasts a resilient and diverse economy, and a high profile in cultural and tourism sectors. Its fastest growing sectors over the past 20 years are real estate, professional, scientific and technical jobs, arts and entertainment. Unemployment has fallen from its peak of 25% and amid Spain’s macro-economic woes it is still below the national average. From the 2000s, Bilbao’s population began to grow again – mainly in suburban municipalities of the metropolitan region.

Bilbao’s new development cycle is focused on smart city strategies and a focus on new tech economy. ‘NEXT’- New Economy and New Territory – focuses on supporting advanced business services, green industries and art, technology and design across the region, leveraging the Faculty of Engineering and Medicine, Sarriko University and Deusto Business School.

1st Cycle (1982 - 1990)
• Clean-up wastewater pollution
• 43km Metro Bilbao project
• Land-use Rationalisation
• Funding Agreements between 4 tiers of Government

2nd Cycle (1990 - 2002)
• 1ST Strategic plan
• 2 Specialist Agencies
• Tourism + Events
• Cultural projects
• City Centre redevelopment
• Tram, road upgrades

3rd Cycle (2002 - present)
• Entrepreneurship
• Growth & Diversification
• Business friendliness
• Innovation / Universities
• Smart city strategy

Hosting the innovation economy

1

2

3

Figure 6: Bilbao’s three cycles of metropolitan development
Cardiff is a metropolitan region of 1.5 million people that has overcome a zero-sum political mind-set that stymied its growth potential in the past. Moving beyond the perception that the gains of the city were losses for the region, the political leaders of the 10 municipalities have worked together to create the Cardiff Capital Region and agree a City Deal.

The City Deal has motivated all parties – in the public, private and third sectors of the metro region – to prove that what they have in common is greater than what divides them.

The City Deal’s major project, the Metro, is a unprecedented catalytic project that is set to transform Cardiff’s metropolitan identity and opportunity framework for the next 10-15 years. Cardiff’s experience is relevant for Newcastle because it shows how local governments can come together to advocate for new transformative investment in partnership with higher tiers of government. The region has brought forward an integrated economic strategy to be sequenced with increased investment in infrastructure, placemaking and renewal that is focused on multiple locations of growth.

**Governance**

Cardiff has always been dependent on its regional hinterland - the coalfields in the South Wales valleys. These allowed Cardiff to become the Coal Metropolis of the early 20th century. However the difference in economic and political character between the capital city and the rest of the region resulted in a deep hostility and opposition to initiatives that were perceived to favour Cardiff at the expense of the valleys.

The inter-dependence of Cardiff and its regional neighbours was first properly recognised again in planning and policy circles in the early 2000s. The Wales Spatial Plan captured the problem and the solution in 2004 when it described the area as an “inter-dependent but unplanned urban network” where the challenge was to become “a single networked city region on a scale to realise its international potential”.
Despite this initial sketch, local development plans continued to multiply, each expressing individual, local authority-level thinking on key areas such as housing and transport. However the introduction of the Planning (Wales) Act introduced the possibility of a new strategic/sub-national layer.

The City Deal is not just a one-off programme of investment, but a foundation for Cardiff’s local governments to increase joint working and co-investment. In particular, it involves a wide-ranging governance arrangement involving the public and private sectors. These include:

1. Cardiff Capital Region Cabinet, comprised of the 10 Local Authorities - this will form the ultimate decision making body in the governance structure. It has the status of a Joint Committee and will monitor the performance of the City Deal;

2. Cardiff Capital Region Economic Growth Partnership, established to bring together business, higher education and local government;

3. Independent Growth and Competitiveness Commission, will review activities related to the City Deal, examine the challenges and opportunities for economic growth and make recommendations as to how the region can achieve its growth potential;

4. Cardiff Capital Region Skills and Employment Board, which enhances the existing Learning, Skills and Innovation Partnership;

5. Cardiff Capital Region Transport Authority, a non-statutory body designed to co-ordinate transport planning and investment in partnership with Welsh Government; and

6. Cardiff Capital Region Business Organisation, which should provide a clearer voice to influence and shape business support programmes.

**Connectivity as the catalyst**

Although the Cardiff metro region functions as a substantially self-contained space, its connectivity between places within its borders has been lacking.

Strengthening this connectivity underpinned much of the City Deal agreement, most notably through the proposals for the South-East Wales Metro. Connectivity is seen as key to enabling the evolution of a more polycentric region where multiple locations can thrive and flourish.

Evidence has been gathered to demonstrate that Cardiff’s forthcoming Metro will:

1. Increase labour market participation by building one labour market system;

2. Increase locational options for firms, institutions and public bodies;

3. Drive enhanced quality of place and community wellbeing; and

4. Promote a much more resilient metropolitan region with enhanced capacity in housing and job markets.

**The spatial development equation**

The Metro’s spatial impact on Cardiff region is significant, and the region is seeking to maximise agglomeration effects while also spreading benefits and productivity as widely as possible. As such the ten local authorities identified broad corridors and areas of opportunity, where new investments in land and property development will be prioritised.

This process has encouraged Cardiff to review its inventory of assets, its anchor institutions and key infrastructures, to assess what role they can play in the development of the region.
Figure 10: Cardiff metro map

Figure 11: Cardiff Metro corridors and centres
Preparing Cardiff’s economy for future disruptors

Today the Cardiff Capital Region is a dynamic economy where GVA has increased by around 30% over the last 10 years, but where output GVA job filled remains about 10% lower than the UK average. Although employment opportunities are being created (in sectors such as Software, Medical Equipment and Energy Related Manufacturing), the available workforce is shrinking due to aging, and there is a clear need to raise productivity levels. At the same time, Cardiff faces risks due to cuts to public sector budgets, and uncertainties of the Brexit negotiations.

Leaders in the metro region observed that although Cardiff has real assets in terms of an attractive environment, a strong heritage, a growing economy and emerging opportunities, it is also a region where there are large concentrations disadvantage, high incidences of poor health, and limited access to jobs. Cardiff is now committed to increasing relative productivity and participation, and improving the business climate in order to grow its specialisations.

Promoting and organising the region

One of the most important tasks in the most recent cycle for Cardiff is to build a shared identity and visibility. This is not easy, as only 33% of surveyed residents were confident that they knew what the Capital Region was when asked at the time of the City Deal.

The Capital Region is seeking a single point of leadership and coordination on promotion in contested markets such as tourism, FDI, trade development, airline routes and hosting of events.

At the same time, the Cardiff Capital Region Cabinet is rapidly establishing itself as a key strategic decision making body with clear channels of partnership with Local and Welsh Government. It is now trying to gain appropriate strategic responsibilities in Economic Development, Spatial Development, Transport, and Skills and Employment, to avoid fragmented initiatives.

Figure 12: Cardiff’s three cycles of metropolitan development

Figure 13: Wharton Street, Cardiff, Wales
2.3 Gothenburg Metropolitan Area

Sweden’s second city, Gothenburg was historically a centre of trade, and even today processes a third of Sweden’s foreign trade and more than half of the nation’s container traffic. The metropolitan area endured the decline of its shipyards in the 1970s and 1980s which seriously damaged its economic base. Since the 1990s, Gothenburg has been working effectively at the metropolitan level to manage economic transition and population growth more coherently. The metropolitan area has just surpassed one million residents, with a younger demographic than Sweden as a whole, and the wider labour market is expected to grow to 1.75 million by 2030.

Gothenburg has successfully updated its manufacturing industries and complemented them with growing roles in IT, science, tourism and events, enabled by waterfront and brownfield redevelopment. The metropolitan area is home to Volvo and hosts major headquarters of Ericsson, AstraZeneca, SKV Sverige and Stena. It is an example of how in a context of regional devolution, collaboration between local governments can lead to a step change in approach towards entrepreneurship, inclusive skills development, spatial planning and infrastructure.

**Metropolitan working and enhanced governance**

Historically the character of Swedish politics bestows significant powers and responsibilities to local governments. More than two-thirds of the annual budget is derived from local income tax. Municipal co-operation and mutual trust in Gothenburg was also hindered by the political divisions by the predominantly centre-left core city and the centre-right outer municipalities. Until the 1990s there was a total absence of dialogue and collaboration.

In the mid 1990s, the 13 local governments in the region began co-operating effectively for the first time. Local leaders agreed to join an inter-municipal corporation, the Gothenburg Region Association of Local Authorities (GR), which operates a forum to promote co-operation around metropolitan planning, environment, traffic, labour market, welfare, social services and capacity building. The initiative was first taken by the charismatic leader of the City of Gothenburg, Mayor Göran Johansson, in order to combat the inefficiencies of competing for residents and capital. Rather than create a new governance system, the new approach was to organise regular ‘rounds’ of consultation and deliberation about the future of the Gothenburg metropolitan region.
This emerging metropolitan co-operation was supported by a civil servants’ network set up by the newly created higher tier Västra Götaland government, called HUR 2050, which brought together the Gothenburg region’s local and metropolitan planning officials with a strong focus on physical infrastructure. This process substantially improved informal cross-sector metropolitan collaboration, establishing many areas of consensus and resulting in rigorous scenario planning.14

After several rounds of consultation, in 2006 the region’s municipalities adopted a shared strategy around sustainable development.15 This strategy represented a breakthrough in that it:

1. Sought to stimulate further population growth and leverage the opportunities of metropolitan growth;
2. Established a clear metropolitan spatial vision based on the opportunities of the metropolitan area, with agreed transport corridors connecting to Gothenburg surrounded by well-preserved green wedges, and housing intensification around the key transport nodes; and
3. Committed to much-improved public transport systems to service a growing region with high quality of life needs.16

This coalitional association has become an important political actor even though it is not a formal public entity. GR has come to work closely with Business Region Gothenburg (BRG), a non-profit association focused on economic development and competitiveness.17 Representatives from Chalmers University of Technology and the West Sweden Chamber of Commerce have also become close allies in the governance system.

### Addressing the post-industrial work challenge

One of Gothenburg’s big metropolitan challenges has been segregation by wealth and race in terms of housing, the labour market, and schooling. High concentrations of deprivation in foreign-born neighbourhoods, and a lack of integration of new immigrants into the labour market, have been common.18 The causes have included a lack of housing diversity and a lack of mixed-use development in the better connected urban areas.

Since the process of metropolitan co-operation began in earnest, the Gothenburg/ Västra Götaland region has sought to leverage EU Social Funds and Structural Funds to address structural problems in the labour market and facilitate labour market entry for all population groups, including former industrial workers and women. Gothenburg has been particularly successful in expanding social entrepreneurship and SME technology improvement. A scheme called Microfonden Väst, which started in 2006, has become an important investor in social enterprises and co-operatives, co-financed by the public sector, with a clear orientation towards those active in sustainable development.19 Many of the businesses employ those who have struggled to access the labour market.

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**Insight 9:** for Greater Newcastle

**The role of leadership**

Gothenburg’s experience highlights the role of charismatic city leadership in driving a process of governance change in a metropolitan area where political divides exist. Mayor Göran Johansson’s persuasion of other local governments to participate in a new Association was achieved by convincingly illustrating the inefficiencies of competing for residents and capital. The core city recognised that the most viable way to incrementally build trust was via regular ‘rounds’ of consultation rather than big one-off reforms.

Gothenburg also stands out for the integration of civil servants within the metropolitan area. A civil servants’ network brings together all local and metropolitan planning officials with a strong focus on physical infrastructure. This process of distributed leadership substantially improved informal cross-sector metropolitan collaboration.
Metropolitan representatives in Gothenburg have also signed the ‘Kvillebäck Treaty’ which featured a series of ambitions for a more sustainable and inclusive built environment, and was signed by many building developers.\textsuperscript{20} The net results appear positive. Since 2000, the Gothenburg region has created 100,000 new jobs, and unemployment has consistently been 1 or 2 percentage points lower than across Sweden as a whole.\textsuperscript{21} The average wage growth has been 3% per annum, highest in the construction (4.4%) and services (3.8%), and lowest in the manufacturing (1.3%). Gothenburg has outperformed the rest of Sweden in terms of job growth in education, IT and manufacturing, and more jobs are being created in corporate services, the automotive sector, wholesale and retail trade, and health and social care.\textsuperscript{22}

**Catalytic infrastructure investment to enhance labour market access to jobs**

Historically, public transport in the Gothenburg region was slow, inefficient and had inadequate capacity. The city’s Port was also losing competitiveness because of limited capacity, and compared to other Swedish cities there was relatively low bike share and relatively high car dependency.

Signed in 2010, the SEK 34 billion (£3 billion) **West Sweden investment package** was designed to radically improve transport capacity within and around Gothenburg up until the late 2020s. Financed by a mix of national, regional and local funds, and 40% part-funded by a new congestion charge, it includes a railway tunnel, a new motorway tunnel, a new bridge across the River Göta, and wider investments in the rail service along the West Coast. The Package also enabled the creation of extended bus lanes on the routes into central Gothenburg, to help expand labour market access.

The result is a clear corridor strategy (see map) that supports the growth of sub-centres surrounding the core city. This is supported by Västrafik, the region’s public transport company, which is owned equally by the region and the 49 municipalities, and whose task it is to co-ordinate the public transport network.

The investment rate in the city’s Port has also improved as a result of a public-private partnership between the port authority and a global terminal operator. Terminal upgrades and diverse rail links inland have enabled the port to be one of the most rapidly improving and most sustainable rail ports in Europe.\textsuperscript{23}

**Core city urban regeneration: The River City project**

The Gothenburg region has agreed that the priority is to expand and rejuvenate the region’s core. Gothenburg city centre is undergoing extensive redevelopment to turn its river from an under-used barrier into a central part of the city fabric. As part of the Älvstaden programme of projects, five million square metres are being developed on both sides of the river, which will effectively double the size of the city centre. The creation of 25,000 new apartments and up to 45,000 workplaces is intended to catalyse a new approach to mixed income communities and social sustainability.
Innovation and enterprise economy, working together with foundation economy

Over the last decade, the region has made a successful transition into R&D, advanced manufacturing and logistics, with Gothenburg’s two universities playing an essential role. A key focus has been lifelong learning, migrant entrepreneurship and knowledge transfer between SMEs and universities, all designed to facilitate the involvement of working people. From an IT and infrastructure perspective, the aim has been to reduce skills shortages and inflationary pressures in the metropolitan area and improve connections between second tier cities and towns experiencing economic restructuring from traditional automotive dominance. The funding and delivery arrangements for these metropolitan approaches have been tied to ensuring that clear measures are in place for the most remote and most rural north western municipalities.

Gothenburg has begun to make a step change towards the enterprise economy and has reduced its reliance on a small number of large firms. Since 2004, micro-businesses (1-4 employees) have hired more workers than any other businesses, growing by 39% overall, compared to a 16% among larger (200+ employee) firms. Gothenburg has also fostered a rise in self-employment.

Figure 17: Gothenburg’s City Centre Alvstaden project

Figure 18: Gothenburg’s three cycles of metropolitan development
2.4 Halifax Metropolitan Area (Nova Scotia, Canada)

Located in the far East Coast of Canada, north of Boston, Halifax is a small centre of trade, naval shipping, logistics, healthcare, science and university research. The region has long possessed strong air and sea connectivity, a young and well educated workforce, and many quality of life assets, and over the last 20 years it has sought to manage its growth more effectively.

In the mid-1990s, the economic outlook for Halifax was gloomy. After a deep national recession, state and municipal budgets had been cut, as had public sector jobs. The reduced military presence of the national defense department in Halifax had a highly negative impact on the region’s job base, adding to consumer uncertainty. Metropolitan amalgamation and new public-private leadership networks have helped to re-build the economy and increase the employment prospects of residents in urban and rural areas.

In the second cycle of metropolitan government, there is now a more focused effort to densify an under-developed Downtown and expand transport connectivity.

The metropolitan governance model

Halifax is a low density region whose four municipalities had co-ordinated some public services via a Metropolitan Authority since the 1970s. Historically the region consisted of the core City of Halifax, suburban mainland and industrial areas, and large publicly owned forests. The share of population of the core city was falling and competition between municipalities was intense.

In 1996, with the local governments enduring consistent budget deficits, the City of Halifax was amalgamated with Dartmouth, Bedford and Halifax counties, and with the existing metropolitan transport agency, to form a single metropolitan municipality.

The new structure was very streamlined, composed of just 23 district councillors, and with three basic tax rates for urban, suburban and rural areas, to show a clear relationship between the costs and beneficiaries of public services. Community councils were also created to gain citizen input into land-use, recreation and public security decisions.

Halifax’s governance system is distinctive for the influential role played by multi-sector partnerships. Created at the time of amalgamation, the Greater Halifax Partnership has helped the region’s development and leadership become more outward-oriented and less siloed. The Partnership is co-funded by 130 influential businesses and three tiers of government, consolidating the region’s economic development functions within one institution where authority is evenly shared between the public and private sectors.

The Partnership works with the metropolitan government and the Chamber of Commerce to pursue a new economic growth model, implement the agreed economic strategy, and leverage municipal tax dollars to enhance the business climate. Since it merged with the metropolitan development agency in 2007, it has become more effective at promoting strategic investment and improving ties between city-level and province-level decision-makers around key development projects.25
Phase 2

In the second cycle, from the late 2000s as the governance model has matured, the aim has been to promote Halifax more effectively as the economic hub of Atlantic Canada, improve the interaction between tiers of government, and move beyond incrementalism. In 2014, the region developed a new branding campaign promoting the region simply as ‘Halifax’. One of the main aims is to retain a higher share of the city’s educated workforce.

Today the metropolitan government has an operating budget of around C$900 million. The amalgamation is still maturing and has not fully overcome interjurisdictional tension and self-interest in the region, and in particular has yet to fully bridge the interests of the urban and rural areas. However a number of important outcomes have been achieved.

The dividend of planning regionally: a revived core

Although there has been debate about whether amalgamation has been cost efficient from a public administration point of view, there is widespread agreement that it has had positive effects in terms of economic development and land-use planning. The amalgamation eliminated inter-municipal competition and provided a new opportunity to undertake and properly implement metropolitan planning, and adopt innovative approaches to other challenges.

A new cycle of metropolitan planning began in 2001, themed around compact growth principles of mixed-use development, public transport, placemaking, densification and housing mix. The amalgamation also successfully addressed disputes around business park competition, solid waste disposal and public service discrepancies.

Before 1996, most development took place outside of the core. Even after amalgamation, Downtown Halifax missed much of the next cycle of new building construction as the centre of gravity was still oriented towards suburban business parks. The region identified that the cost of not addressing the drift would be a loss of amenity, services and attractiveness in the urban core which would have damaging knock on effects on metropolitan economic development.

Since then a Strategic Urban Partnership has brought together the three tiers of government, big urban institutions and crown corporations to support the liveability and attractiveness of the urban core and attract up to 10,000 more residents to live there. The development of the Central Library as an icon for the region has been important in building confidence in the vision, while it also benefits from a new convention centre and waterside centre. There is now consensus across the region to revise zoning in suburban industrial parks and incentivise the development of affordable and family housing in the inner core.

Insight 10: for Greater Newcastle

Multi sector partnerships

Governance improvements in Newcastle will have to be complemented by other modes of partnership. Halifax highlights the importance of business, university, and government partnerships that are more outward-oriented and less siloed than previous institutions. It indicates the importance of leadership with private sector representation with:

- integrated economic development functions;
- intermediary relationships between the metropolitan area and higher tier of government; and
- branding and promotional insight.

For Newcastle, the advantage of this model is that it can solicit in ‘absent partners’ – organisations or private enterprise who can actively participate and add value.
In order to promote strategic densification, 42 groups including Downtown Halifax Business Commission, the Ecology Action Centre, Fusion Halifax, and the Halifax Trails Association, have formed the Our HRM Alliance, to strengthen the metropolitan plan to more comprehensively address sprawl.\(^{31}\)

The metropolitan perspective has allowed the region to act more purposefully around affordable housing. HRM has pursued opportunities to partner with non-profit organisations, and higher tiers of government to streamline planning, ensure a wide housing mix, introduce incentive or bonus zoning in targeted areas, and allow infill development. The region has improved the alignment between land use and transport planning, complemented by a 5-year $50 million capital improvement plan.\(^{32}\)

Although the current focus is on accelerating the slow growth of Downtown Halifax, since amalgamation more remote rural areas have also benefited from upgrades to infrastructure and facilities they could not have otherwise afforded, leading to a consistent rise in prosperity.\(^{33}\)

**Infrastructure investment to build a metropolitan trade platform**

In the Halifax metropolitan area, investment in its gateway functions has been the key priority to build demand and growth in the region. The Halifax multimodal trade platform employs around a tenth of the region’s workforce. The airport has benefited from a $34 million main runway extension, as part of a 10 year capital programme. Meanwhile a $75 million container terminal and multi-purpose terminal expansion at the Port enables it to handle increased roll-on roll-off activity.\(^{34}\) Other improvements to rail, port and logistics park facilities are underway to accommodate expanded traffic.\(^{35}\)

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**Figure 22: Halifax Metropolitan trade and logistics network**\(^{36}\)
Investment in this gateway infrastructure has been overseen by a new Halifax Gateway Council, established in 2004 as a forum for big transport providers to work collaboratively to build the system’s metropolitan efficiency. Co-funded by public and private sectors, the Council conducts research, advocates for funding from higher tiers of government, and markets the platform internationally. This collaboration reflects the increased desire to work collectively in the region.

Today the key priority is Halifax’s bus network, which needs to be enhanced and expanded, given that a light commuter rail network is unviable. A Bus Rapid Transit system is currently favoured as the most effective solution to offer a direct corridor to the dense concentrations of employment, integrated as a sub-system of the existing network.37 Elsewhere, Halifax’s transport network is still managed separately and poorly coordinated. Historic residential growth in outlying suburbs, competition among municipalities to create business parks, and increasing car use, has produced significant road congestion around the core city.38 The region’s new transport plan aims to redesign the public transport network to make it easier to understand and to navigate.

**Spreading the benefits**

Halifax is an example of a region where the net costs and benefits have been shared fairly evenly since the formation of a regional government. Since amalgamation there has been a more than 30% increase in the total number of jobs, a fall in unemployment from 8.7% to 6.6%, and 1 new housing start for every 10 residents in the region.39 Economic performance has been fairly even in the urban and suburban areas, with secondary centres Dartmouth and Bedford retaining their core strengths in logistics, finance, ICT and oceanography.

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**Figure 23: Halifax’s three cycles of metropolitan development**

   - New Regional Municipality
   - Public-Private leadership partnerships
   - Coast savings and budget management

   - Economic strategy
   - Revival of urban core
   - Land-use planning to guide growth strategically
   - Improvements to regional trade infrastructure (airport, port, logistics)

   - Regional public transport plan
   - Unified regional brand
   - Effective advocacy to higher tiers
   - Talent retention economy
2.5 Malmö Metropolitan Region

Malmö is an interesting example of a city whose growth has been substantially and positively shaped by improved connectivity with a nearby larger city – Copenhagen. Today, the dual-city is an increasingly mature and integrated region that crosses national borders. The complementary development that has taken place in both cities has had a number of important and unexpected impacts on their growth trajectories.

Back in the 1980s, Malmö was one of the European cities most heavily affected by de-industrialisation. By 1994 the city had a budget deficit of one billion SEK (£100 billion), and its entire base of heavy industry (shipyards, textiles) had disappeared. 30% of the city’s workforce had lost their jobs, and population fell to a century low, compelling city leaders to find a new set of economic roles and spatial approach.

Under the Swedish governance system, the City of Malmö had significant fiscal autonomy and control of public land and housing stock. This was leveraged in the 1990s to initiate a process of regeneration geared around sustainability and the knowledge economy. Among the largest projects have been the Western Harbour redevelopment, the retrofitting of suburban public housing estates (e.g. Augustenborg), and the creation of demonstration neighbourhoods that exhibit high standards of public space and environmental performance (e.g. Hyllie). Its municipal leadership has been committed to technical education in order to equip workers with the skills to access new jobs. A City Tunnel railway under the city and the establishment of a new Malmö University were important catalysts.

The role of inter-city connectivity

Malmö’s leaders observed the scale of opportunities for integration with the Danish Capital Region, which became possible with the decision to construct Oresund bridge connecting Copenhagen and Malmö. Shortly afterwards the City Tunnel between central Malmö and the Øresund Bridge opened, reducing the travel time between stations. During rush hour in the mornings and evenings, six trains now ran per hour between the two cities.
Among the effects that the improved connectivity had included:

1. The number of travellers crossing over the bridge doubled over 15 years to about 70,000 per day. Large house price differences between Malmo and Copenhagen was a major driver in the first 5-10 years. Danish families decided to move to the Malmö area and Copenhagen also attracted many Swedish workers to make the journey across the bridge. Many unemployed young people in Malmö gained their first job in Copenhagen in various service industries.

2. Malmö’s station redevelopments were major catalysts for station growth and redevelopment.

3. Over time Malmö has been ‘discovered’ by Copenhagen residents for its natural scenery and its retail opportunities. This has resulted in more trips from Copenhagen to Malmö. About 60 per cent of the passengers between the two cities are commuters. 75% of the train passengers live in Malmö, and 25% live in Copenhagen.

4. Over time, larger firms have increasingly set up in Malmö because of its proximity to Copenhagen. In 2015 IKEA opened its new headquarters in Malmö. Many more firms have begun to locate their back and middle office and distribution functions in the Malmö region.

5. By 2013, the price per square metre for a single-family home in the Malmö area was almost at the same level as in the Copenhagen Capital Region. Unemployment levels have also converged.

So to summarise, over time it is clear that the improved road and rail connections have had various effects for the smaller city of Malmö:

1. Increasing the effective asset base, market size, and ‘borrowed scale’ for both cities;
2. Unlocking gains in productivity on the routes with congestion;
3. Increasing access to opportunity and reduce job/skills mismatches;
4. Enabling specialisation between locations; and
5. Creating scope for land re-use and intensification around stations and corridor development increasing its ability to attract higher skilled workers.

Figure 27: Contributors to unlocking economic growth in cities
After the infrastructure programme to better connect the two cities began, an important programme of bi-regional collaboration ensued to build a larger functional region, which has had significant benefits on both sides. Infrastructure was clearly the catalyst for greater regional integration between Malmö and Copenhagen, but subsequently the cities and regions have focused on building complementary capabilities and niches, and enhancing agglomeration, often without national policy support. Many of their respective strengths have been enhanced by expanding the labour market and the whole region is now established as a leader in sustainable development and innovation in a way that would not have been possible before.

The bi-regional initiative

The Malmö-Copenhagen region has long had a distinct logic to pool resources and integrate. Separated by just 30km of water, Copenhagen is one the top 50 most globally connected business cities in the world while Malmö is among the top 200, and both have significant complementarities to the other. The two cities are highly specialised in services and research-intensive global firms, but together retain a large manufacturing sector, especially on the Malmö side. In the aftermath of industrial change, the region had a challenge of an ageing workforce and intensifying international competition in its key industries, but through the combined resources of its two main urban centres, could achieve the scale, specialisation and flexibility to become one of Europe’s leading 20 regions.

The Øresund project was established in the mid-1990s, as the bridge was being connected, in order that the two city-regions could achieve greater critical mass, and enjoy the benefits of agglomeration through increased size and labour market integration. A larger labour market was viewed to offer more efficient skills matching, share key assets (ports, airport), create an enhanced profile in international markets, build complementarities in high knowledge sectors, and offer more options in terms of housing price and location.

On the Malmö side, the impetus for participation came substantially from the creation of a new regional government called Skåne, established in 1999 as an experiment to take on economic development responsibilities from central government. Over time the cities of Malmö, Lund and Copenhagen have taken a strong lead to continue the bi-regional momentum.

The Øresund Committee is the main governance vehicle. It consists of regional and local authorities, and plays an influential role in convening governments, collecting data and lobbying national authorities to reduce barriers to integration. The Committee is financed by members according to population size, and supported by other organisations that provide data and advocacy support, while the Øresund Business Council, and the former Øresund University have helped influence the cross-border initiative. National governments have played a peripheral role so far, due to tensions around whether the priority should be support the local region rather than the cross border region.

Funding for the collaborative projects between the two regions is derived mainly from supra-national sources - the Nordic Council of Ministers and the European Territorial Co-operation programme.
The two regions have built a vision but as of 2016 are yet to fully implement a joint strategy. The Committee adopted a Regional Development Strategy around knowledge and innovation. In it there was a joint commitment to establish the region as:

- A leader in environmentally friendly transport and a laboratory for green technology;
- A fully integrated labour market;
- A model for integrating foreign-born workers into the labour market;
- Highly digitally integrated through ultra-fast broadband;
- A popular destination for events, tourism, and international students; and
- A place whose residents are able both to make use of all that the region offers and to explore its potential.

Both cities have experienced significant increases in demand as their connectivity has grown. In 2016 Malmö’s urban planning committee increased housing development targets from 50,000 to 80,000 units by 2040, to accommodate up to 160,000 new residents. Much of the development is taking places in districts close to the Øresund Bridge which have excellent proximity to Copenhagen and its airport.

![Economic performance in Malmö-Copenhagen since the Øresund bridge opened in 2000](Source: LSE Cities)
Combining knowledge and innovation assets

Developing complementarities in respective knowledge assets has been a key driver of regional integration. Both cities have possessed similarly strong profiles in the knowledge economy, with high capacity for innovation, and together are home to 12 universities, more than 150,000 students, and 12,000 researchers.51 Regional strategies have sought to align economic development strategies around life sciences, food, IT, design and clean technology.

In the years after the bridge opened, labour market integration increased significantly, especially with commuting flows from Malmö to Copenhagen, and with student flows between both cities. Total commuting inflows increased tenfold, mostly in the 25-44 year old age groups.52

Perhaps the most advanced programme is the Medicon Valley Alliance (MVA), which combines the two regions’ life science clusters to increase visibility and promote links with global life science centres.

One key initiative was the Øresund University, which helped devise and develop cross-border projects, including cluster platforms and policies to develop them and share information. It operated as a consortium of 14 universities which provided specialised services and supported firms to spin out. The University was discontinued due to national regulation rigidities around higher education, but many of its areas of co-operation continue through other means.

A brand for the two regions

Soon after the bi-regional Committee formed, the participating authorities agreed to develop a branding exercise to encourage citizens to affiliate with the larger two-metropolitan region and project the region into the global market.53 The Swedish government in particular has been engaged to build a shared “Øresund identity”, given the cultural, geographic and linguistic ties.

In particular the integration process accelerated the positioning of the region and its two main cities as leaders in sustainable development and clean technology. Copenhagen and Malmö have developed much stronger sustainability profiles, leveraging each other’s strengths.

![Figure 29: Medicon Valley, building critical mass of life sciences capability across two metropolitan areas.](image-url)
Insight 11: for Greater Newcastle

How to benefit from Increased connectivity with a larger neighbour and hinterland

In terms of implications for Newcastle and how links with Sydney may develop, the Malmö-Øresund experience has shown that:

The interplay of two cities can have benefits for both. Malmo initially feared that Copenhagen would reap the benefits as firms would move to the larger city. Although there was some initial consolidation in Copenhagen, the subsequent growth of jobs and firms in Malmo has been the key impact of the better connectivity. This has benefitted from several ingredients, that are relevant to Newcastle’s connectivity to Sydney:

- A deep understanding of economic networks and cluster activities is essential;
- The importance of the better-connected cities being part of larger metro regions where enhance transport integration and new land use planning is required to adjust to and optimise the benefits;
- Cross-border bi-regional integration can be developed if barriers are progressively removed that prevent integration (e.g. innovation policies, funding eligibility, regulations on students, labour mobility);
- The role of universities, the private and civic sectors are especially important to develop the programme of collaboration;
- Projects and initiatives that have visible impacts for firms and citizens have to be prioritised; and
- Incentives from national authorities to play an active role in achieving the goals of a cross-border initiative.

Figure 30: Malmö-Copenhagen’s three cycles of metropolitan development

1st Cycle (1996 - 2004)
- Bridge connecting to Copenhagen
- Awareness raising around critical mass and competitiveness
- Establishment of new regional government (Skane)

2nd Cycle (2006 - 2014)
- Committee to convene local and regional govs.
- Clustering and agglomeration focus
- Rail tunnel to complement bridge
- EU project funding
- Oresund University for innovation

3rd Cycle (2014 - )
- Green transport and technology
- Branding and communication
- Addressing regulatory and policy barriers to integration
2.6 Portland Metropolitan Region

In the last 30 years, Portland’s economy has evolved from a timber and agriculture based economy to a knowledge rich export and innovation economy attracted by the city’s climate, scenic assets, and quality of life. This transition has been enabled by big changes to the metropolitan area’s governance model, major investments in public transport, the development of a vibrant core and intensification of the region’s sub-centres.

Today, Metro Portland is the only city metropolitan entity in the United States whose representatives are elected. Representing 1.5 million residents, the metropolitan area has developed a strong system of metropolitan planning across 25 municipalities, spanning three counties. Intergovernmental co-operation has been supported by deep citizen involvement and enthusiasm for metropolitan solutions and the emergence of a genuine metropolitan consciousness and identity.

The metropolitan governance model

Portland’s mature model of metropolitan governance has its roots in the 1960s and 1970s, when the first multi-county planning efforts were initiated. The initial voluntary efforts over a much wider area were viewed as positive but mostly favouring the status quo, so in 1977 an Oregon-wide planning law made it possible for a Metro Council (‘Metro’) to be created as an autonomous unit of government rather than an association of local governments, over a slightly smaller territory.

Metro Portland was voted in by 55%-45% and was assigned the power to tax and to ensure local plans were consistent with metropolitan plans. Beginning operations in 1979, the Council was led by an elected president and six elected councillors elected from across six districts.

A number of factors led the Portland metropolitan area to begin this joint working:

• The shared experience of rapid growth and the deficits in the infrastructure systems, air quality and service delivery that were appearing at a metropolitan scale.

• The proximity and visibility of tensions at the urban-rural edge that created bipartisan appetite to support land-use planning especially in relation to the urban growth boundary.

• Bold leadership from governor Tom McCall.

• Active engagement from environmental and civic groups concerned with large-scale, long-term issues, including the protection of farms and forests from urbanisation.

Portland’s rich social capital, civic activism and leadership from non-profit organisations in the 1980s meant that the governance and infrastructure projects were developed with full involvement of the metropolitan area’s residents. The city also benefited from civic minded developers prepared to work in partnership with government to create desirable communities.

• Young political institutions, a high proportion of residents born outside the region, and therefore less entrenched politics and receptivity to new ideas.
Phase 2: reform and long-term vision-making

The 1980s continued this collaboration around land-use and transport policy, and this paved the way for a fully-fledged metropolitan government with comprehensive policies. Debate between the Metro Council and local governments to clarify the growth model and the future urban growth boundary, led to an amendment of the Oregon Constitution to allow Metro to have its own Home Rule Charter. This effectively gave Metro the ability to develop mandatory metropolitan system plans with which local governments must conform, oriented around a clear quality of life and environment agenda.

Metro’s responsibility for the urban growth boundary meant it evolved from being simply a restriction on settlement expansion and gradually became a platform for urban densification and design. The projection that 500,000 more people would move to the metropolitan area by 2010 triggered a realisation that other land management tools would be needed.

Through a long-term visioning process up until 2040, a consensus was formed around the need for densification, clustering around key nodes, and investing in the public transport network to enable redevelopment of aging districts. The Metro Council was given the authority to carry out functional land use planning. Ever since the region has been focused on:

- Transport (and integration with land-use and investment);
- Housing;
- Improvement of city centre and other ‘Downtowns’; and
- Job creation and inclusion.

The process of building Portland’s metropolitan governance provided real incentives for local jurisdictions to be at the table, making it clear how citizens would benefit. The suburban jurisdictions wanted to be involved because they were concerned that otherwise the City of Portland would dictate, and they viewed the Metro as a neutral body that would counteract the core city’s dominance. Local officials were given the right to veto major projects and policies via a policy advisory committee of mayors, fire districts, transit districts, and the port authority. The local municipalities have retained zoning and issue permits, but were prepared to give up certain powers in recognition of the need to combine the metropolitan transportation dimension with proper land-use planning.

Today Metro has 800 employees and a budget of $500m. Spanning an urban area of around 1,600km², it has built a portfolio of green spaces, and has come to run a convention centre, a performing arts centre and other visitor attractions, as well as solid waste transfer stations and land fill sites.

Among the positive outcomes of metropolitan governance include:

- Protection of surrounding agricultural land;
- More efficient and productive use of urban land and key assets; and
- Increased business and investor friendliness.

The importance of catalytic infrastructure investment

The rapid implementation of a light rail and tram system has been a fundamental part of Portland’s metropolitan growth.

In the 1970s a state government taskforce on Portland’s metropolitan transport began to set a new course towards a balanced, multi-modal system that rejected the plans for motorway expansion, thereby freeing up funding. The creation of metropolitan government involved the creation of a Joint Policy Advisory Committee on Transportation (JPACT), which has served as the main vehicle for transport planning, decision-making, and project prioritisation. Construction of the first route began in 1982, and the system opened in 1986, 80% federally funded.
JPACT was successful because it had the ability to allocate transportation funding and lead the implementation of the regional light rail network. The fact it was able to finance the initial 15-mile light rail route brought different partners to the table, and the collaborative decision-making that followed showed all parties that the regional system could not be built at once and that each part of the region had to wait its ‘turn’.

Portland’s transport investment was leveraged into new spatial development. The light rail system became a key tool for the region’s land-use strategy, and was essential to building metropolitan identity. Although the first line connected the two largest centres, Portland and Gresham, the subsequent lines have knitted together the entire metropolitan area, stimulating housing and development growth. More than $10 billion in development has taken place near the light rail stations. $3.5 billion in real estate investment was made, and over 7,000 homes built, within 2 blocks of the tram alignment between 2001 and 2008, from an initial capital cost of $100 million.58

City centre regeneration

In the 1970s and 1980s downtown Portland was the victim of major dis-investment and witnessed significant population decline and urban decay.60 One of the big impacts of metropolitan collaboration was a consensus that transport could enable higher density, mixed-use development that would revive the central city and also grow other regional centres.

One of the main areas of city centre redevelopment has been the 1.2km2 Pearl District, a former abandoned industrial district. Tram investment has helped attract investment to redevelop the warehouses and brownfield land, shaped by a 1994 district development plan. By 2002, the density in the district was higher than anywhere in the metropolitan area, at 120 housing units per acre, but with substantial surrounding green space.61 Between 2006 and 2013, employment in the district grew by more than 3,000, and tax-assessed property values in the wider area had increased fivefold between 1998 and 2014. Meanwhile the district has proved fairly successful at supplying mid-range and low-income affordable housing. Its model of regeneration has also reduced car use and associated pollution, and lowered energy use in buildings.62

Figure 34: The growth of the 5 line light rail system across Portland metropolitan area over the last 30 years57
Spreading the benefits

The model of densification and redevelopment has been applied to other centres in the metropolitan area as part of a clear sequence of public-private partnerships. In each case the aim has been to create market comparables for higher density buildings near public transport, build the capacity and expertise of developers working on higher-density mixed-use buildings, and increase enthusiasm for this model of development through high quality design and placemaking.63

Since 2000, commercial development in the metropolitan area has been decentralising from the central city and clustering in well-connected employment sub-centers.64 The second light rail line between Portland and Hillsboro opened in 1998, providing a service to a large Intel campus, which helped push Hillsboro above Gresham as the next largest employment centre after Portland. Current forecasts suggest that more new jobs will be created outside the central county by 2040, mostly in suburbs in the western part of the metropolitan area. Only a third of the 380,000 jobs to be created in the three-county region by 2040 are anticipated to be created in Portland. New bus lines to directly connect the outer centres with each other are now in train.65

Diversification and inclusive growth

Traditionally Portland was a mainly white metropolitan area with limited racial and ethnic diversity, but its demographics have been changing dramatically due to migration across different skill levels. Portland also has faced the challenge to improve the skills and opportunities of existing lower-skilled residents. For the last 10 years, most strategic plans in the metropolitan area focus on social and economic equity, with a deep awareness among civic and business leaders that social and economic disparities have negative effects on overall performance and prosperity. The big challenge is to connect strategy across jurisdictions to ensure a coordinated approach.

A variety of different initiatives have been developed at the metropolitan area level, many of which are co-ordinated by Greater Portland Inc., the regional economic development organisation, and which itself launched the Portland 2020 plan to achieve inclusive growth.66

Employer inclusiveness.

The Portland Metro STEM Partnership engages the large employers such as Intel to enlist minority and low-income students in STEM jobs, encouraging careers through hands-on tech and science learning. Under one initiative, more than 25 local companies pledged to increase diversity in their workforce and create an inclusive culture.67

Portland’s transport investment was leveraged into new spatial development. The light rail system became a key tool for the region’s land-use strategy, and was essential to building metropolitan identity. Although the first line connected the two largest centres, Portland and Gresham, the subsequent lines have knitted together the entire metropolitan area, stimulating housing and development growth. More than $10 billion in development has taken place near the light rail stations. $3.5 billion in real estate investment was made, and over 7,000 homes built, within 2 blocks of the tram alignment between 2001 and 2008, from an initial
Entrepreneurship.

The Portland Development Commission has developed several programmes aimed at entrepreneurship and the technology industry:

- **The INCREASE Project** to provide mentoring and capital to position minority-owned firms to enter higher growth sectors or tap national markets.

- **The Portland Inclusive Startup Fund** is an accelerator for high-growth start-ups founded by women or people from economically disadvantaged communities.

School education and skills. All Hands Raised has been improving graduation rates in high schools. The Cradle to Career initiative is a partnership between the City of Portland, Portland State University, Community Colleges, and public schools, to invest at key crossroads in school education.

More broadly the Metro government has adopted equity as one of the metropolitan area’s desired outcomes and has developed a Strategic Plan to advance racial equity and economic inclusion, given Portland’s growing racial diversity and risks of a “permanent underclass”.

Six community-based organisations created a framework for the metropolitan area to understand and measure equity, and use this framework to inform decisions about spending. The Plan is distinctive for identifying the key barriers that prevent disadvantaged communities from accessing jobs and information.

**Insight 12:** for Greater Newcastle

**Raising the skills level at metro scale**

Portland’s success at enhancing skills and employability, especially among its ex-industrial workforce, has been linked to:

- ownership by metropolitan authorities of the inclusion agenda;
- identification of the most important barriers that prevent disadvantaged communities from accessing jobs and information;
- mobilisation of the largest employers in the region to act as partners and leaders around apprenticeships and skills development; and
- strong monitoring systems.

**Figure 36:** Portland’s three cycles of metropolitan development
2.7 Waterloo Metro Region (Ontario, Canada)

The Waterloo Metro Region is located 70 miles west of Toronto, in a similar dynamic to Newcastle’s relationship to Sydney (94 miles). It is the 10th largest urban area in Canada. Waterloo is an example of a smaller metro comprised of just seven local governments which has evolved its long-standing tradition of local municipalism, and has maintained a smart growth, high innovation approach despite the costs and controversy.

Over 40 years of maturing metro collaboration has helped Waterloo to accommodate a highly specialised and diversifying economy, and deliver on pledges to protect rural areas through city centre renewal and light rail investment. This has helped Waterloo remain competitive and self-sustaining despite its proximity to Toronto. The role of its universities in fostering an internationally recognised innovation system also holds interesting lessons for Newcastle.

Metropolitan governance

Waterloo is a polycentric metro spanning three main cities - Cambridge, Kitchener and Waterloo. Its history of metropolitan collaboration is more than 40 years old, beginning when Waterloo Regional Municipality was established in 1973. This reform reduced the number of local governments in the area from 16 to 8 and brought into being a two-tier system of local government - a Regional Municipality above 7 local governments.

The momentum towards a metro level of government had already been growing for more than a decade. The provincial Liberal party included the idea in its 1962 manifesto, and the idea grew because planners agreed it was a ‘logical’ single region and financial integration made more and more sense in terms of service delivery.

The creation of the Regional Municipality did not solve governance issues at a stroke. At first the upper tier was charged with integrating policing, waste disposal, public health, and welfare, but there was a lack of clarity about roles and responsibilities. ‘White-collar’ Waterloo and ‘blue-collar’ Kitchener also had very different identities and organisational ways of working. The pace of change was slow at first.
But by 1997, the first ever direct election of the Regional Chair strengthened the institution and established it as the leading entity in the region, despite resistance from some local municipalities. The Region’s has a 16 member governing council that consists of 16 directly elected members. What is striking is that, as the structure of government has been reformed and enhanced over time, this council has increased its appetite to invest significant financial and political resources to achieve its growth management objectives.

The emergence of metropolitan planning

One of the main impacts of the creation of the new governance structure was that Waterloo began an entirely new urban planning process based on:

1. Intensification rather than sprawl, via the creation of an urban boundary;
2. Protection of environmentally sensitive areas;
3. Protection of vital water sources;
4. Efficient use of public infrastructure; and
5. Maintenance of the farmland and the agricultural economy.

The last factor has been especially important to the dynamics of building a managed metropolis: the region’s citizens were known for their long-standing respect for rural land and the importance of protecting farmland and water supply, and thus they had real appetite for a pro-urban intensification model to deter sprawl.

By 1976, the region had identified the catalyst to achieve these five aims: a ‘reurbanisation corridor’ that would run through the three main cities and that could provide a spine for rapid high-quality public transport. The case was made with planner calculations the costs of failing to build the spine would be $1.5 billion to build 500 lane-kilometres of roads.

Waterloo continued to grow within the urban boundaries agreed in the 1976 Plan. This still resulted in a strongly suburban built form, with growth centering around the single main transportation corridor the highway 8 corridor which connects the three main centres. As a result car dependence was high and fewer than 1 in 20 residents used public transport to commute.

In the 1990s the metro’s leaders realised a new plan to manage growth. This resulted in the Regional Council’s growth management strategy that accepted limited growth beyond the boundary, but within hard boundaries to preserve the environmental qualities of the area. This new stage of more strategic planning sought to intensify development along the corridor to increase density and proximity.

“We’ve taken a look at what 25 years of no planning and no transit in Greater Toronto had done down there – created grid lock, massive absorption of farmland – do we want our community to look like Greater Toronto? And we said ‘no we don’t’.”

Ken Seiling, Leader, Waterloo Regional Municipality

Connectivity at the heart of the metro planning strategy

Public transport was at this point recognised to be the essential tool to realise this strategy. Until 2000, two of the three cities in the metro had their own public transport provision, with Waterloo buying its transport from Kitchener’s. However the lack of coordination and gaps in transport services in some parts of the metro meant a change was demanded.

In 2000, responsibility for managing public transportation was shifted from the local level to the metro level. Grand River Transit (GRT) was created in 2000 by merging the former Cambridge and Kitchener bus systems. GRT came under the control of the Regional Municipality and resulted in an immediate increase in investment to grow public transport use. It now provides bus services throughout the three cities. Annual ridership increased by 130% in its first 15 years of operation.
An expanded system was however no longer enough. After debating the merits of light rail transit and bus rapid transit, the Region concluded that the higher capital light rail was better value because it would attract more riders, more development investment, and involve a lower per-passenger operating cost.

The LRT system is now being built in two stages.

2. An express bus 17 kilometre and 6-stop line extension to Cambridge.

The light rail line cost of C$800 million involved about 1/3 funding each from federal and provincial governments and a similar ratio from Waterloo region. The project is being delivered as a PPP with a rapid transit consortium called GrandLinq.

Although the light rail line has taken a long time to come online, it has already stimulated increased re-use of brownfield sites and increased market demand for residential apartments along the line. More than 10 major reuse, infill and brownfield remediation projects are underway. At one point, around $500m of new residential and non-residential units was being built per year along the corridor, accounting for 1/3 of the total development activity. More than 13,000 units have been established.

The forthcoming transport links have allowed the metro to target three areas for its growth plan - Uptown Waterloo, Downtown Kitchener and Downtown Cambridge. These will become high density major employment centres.

Organising and promoting the metropolitan economy

Waterloo’s inherited advantage during the first stages of Canada’s de-industrialisation was its industrial diversity, led by four sectors (electronic equipment; fabricated metal; food products; and machinery). Although the city lost many jobs in textiles, leather and other manufacturing during the 1990s recession, it also made a rapid transition into higher value sectors while maintaining the jobs base.

For the first 10-15 years after the creation of the Regional Municipality, the different cities and local governments pursued a competitive approach to their economies. But in 1987 the metro area set up a loose collaborative arrangement on economic development initiatives. This gave birth to the non-profit ‘Canada Technology Triangle’, whose promotion was co-ordinated to put it on the radar of potential investors.
Insight 13: for Greater Newcastle

Improving connectivity with other towns and cities in the wider region

As Greater Newcastle develops its own corridor approach, the role of public transport, Port and Airport and the coast as a whole are very significant. Waterloo’s experience has shown that:

- Alignment of transport and land-use planning has been key to the successful intensification process along the transport corridor.
- Active search for co-investment solutions enables smaller metropolitan areas to move forward more quickly than others that have relied on 100% higher tier funding.
- Enhancing the role of the Hunter’s satellite cities such as Maitland, Cessnock, and Singleton is likely to help improve economic outcomes in Greater Newcastle.
- Agreeing a package for improved rail connectivity between cities in a region can have a huge impact on the market demand for re-urbanisation. Light rail investment is a major signal to the business community about where future growth will take place.
- The mobilisation of parts of the city’s existing business base to support the projects can be important in building appetite among the rest of the business community and citizens.
- Clear demonstration of the costs of transport inaction, both in terms of competitiveness but also in terms of alternative road and congestion expansion, is an important part of the case-making process where there is a strong anti-transport instinct. Clear costing of all options and alternatives is also important.

The Triangle helped not only to create spin-offs in technology, and to host investment delegations: its also stimulated wider institutional capacity-building for a proper metropolitan economic development policy. By 1998 the Regional Municipality voted to create a regional Economic Development Corporation which would give the Triangle a stronger global presence and present a unified voice. At the same time, Communitech was founded by entrepreneurs as an industry-led attempt to raise the profile of the Waterloo Region tech community.

For a long time, the metropolitan government has been renowned for supporting and nurturing the advanced manufacturing sector. Today the region has the highest concentration of manufacturing workers in a metropolitan area in Canada, and is home to an impressively large share of Canadian start ups.

Towards a full economic strategy

Over time, the role of business and community leaders in the metro has deepened and the advocacy for a fully co-ordinated economic approach has become more vocal. The first fully fledged metropolitan Economic Development Strategy was launched in 2014, which highlighted the need for an arms length agency with its own CEO and a board with specialist skills.

Today Waterloo is one of the fastest growing metro regions in Canada, heading from 600,000 towards nearer 750,000 people by the mid-2030s. It is a high performing economy which is increasingly self-sustaining - more than 9 out of 10 residents work within the region. The next challenge is to deliver the new housing, jobs and services required to serve the needs of the growing and increasingly diverse population.

The role of community engagement

Community engagement has been fundamental to the metro area’s ability to deliver its growth plan. A five year process of consultation and presentations between 2006 and 2011, was key to demonstrating the benefits for different users and persuading community groups to support the investment. In particular the plan has largely been successful at convincing rural residents of the positive effects through the reduction of sprawl and traffic.
Insight 14: for Greater Newcastle

The role of universities in metropolitan development

Waterloo has shown the importance of pioneering, can-do universities to the specialisation and visibility of smaller metro regions. The rise of its two main higher education institutions - the University of Waterloo and Wilfried Laurier University - has been fundamental to the metro region’s economy and identity. Not only did they become major employers - their land acquisition had a big impact on the spatial shape of the city and beyond.

The knowledge creation and talent creation of the two universities, especially in maths, engineering and business management, was a catalyst for growth in technology firms and the emergence of the metro’s reputation as a centre for technology in addition to its long-standing insurance cluster.

Scholars at the University of Waterloo regularly engaged in collaborative research with firms, or created spin offs, while grad students became consultants and problem solvers in the innovation community. The university’s open IP policy was key to stimulating a commercial ethos. Moreover the University also launched the largest post secondary co-operative programme of its kind in the world, where students combine academic studies with up to 2 years of work experience.

The commercialisation of university research has helped cement the metro’s tech specialisation. By the mid-2000s the region hosted close to 500 high tech firms, as well as firms in biotech, environmental science, logistics, R&D, and telecommunications.  

Figure 41: Waterloo’s three cycles of metropolitan development

1st Cycle (1970 - 1990)
- Upper tier metro govt created
- First regional plan
- Urban growth boundary
- Development corridor identified
- University driving innovation system

2nd Cycle (1990 - 2005)
- Metro promotion
- Integration infrastructure ownership.
- Public transport led spatial development
- Business sector engagement
- Industrial diversification

- Multi-level finance agreements for big projects
- Integrated economic development strategy
- Polycentric development
- Accelerated intensification of city cores
3.0 Endnotes


11. ONS data provided for CCR


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