

Greater Victoria's Next Chapter

A Series of Special Reports on Shaping the Future of Our Regional Economy



Acknowledgements

These reports were produced by The Business of Cities and commissioned through funding support from South Island Prosperity
Partnership, the City of Victoria, BCI and Aryze Developments. The content was generated through extensive research — both locally and internationally — and included several focus groups involving a cross-section of business and community leaders from across Southern Vancouver Island. Project partners would like to acknowledge the valuable contributions of these focus group participants.

While these reports are designed to spell out why our region must respond now to create the future we want, it's also essential to recognize the history that brought us to this point. This includes acknowledging the impacts of our colonial past on these traditional territories of the Coast Salish Peoples and the legacies of this history that necessitate meaningful reconciliation with First Nations and Indigenous peoples. We respect and, in partnership, desire to work with First Nations in building this collective future together.

How to Navigate these Reports

Executive Summary

An introduction to the work of The Business of Cities in benchmarking Greater Victoria's global fluency and the region's pathways to opportunity.

REPORT 1 Global Benchmarking →

This report provides an initial international benchmarking comparison of Greater Victoria's economic performance and prospects.

REPORT 2 Case Studies in Transformation and Change →

This report looks at more than 20 small- and mid-sized city-regions around the globe, with examples relevant to Greater Victoria's journey to global fluency.

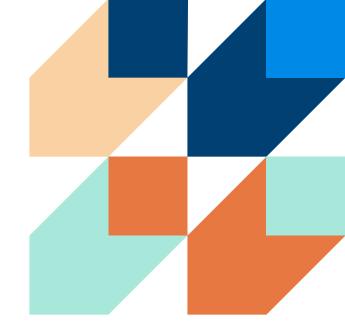
REPORT 3

Greater Victoria's Global Fluency →

This report lays out a path to becoming a globally fluent region — and the phases of evolution.

Introduction

A Time for Action



The idea for this research was conceived in early 2020, in response to growing recognition that Greater Victoria's economy is entering a new chapter.

Even before COVID-19, Greater Victoria leaders had begun a process — initiated by South Island Prosperity Partnership, the City of Victoria, BCI and Aryze Developments — to reflect on how the region can capitalise on the rise of a more distributed innovation economy and the shift from big metropolises to smaller regions that have distinctive appeal, amenities and resilience.

These stakeholders were motivated by concerns that if the region does not pivot to innovation-intensive industries and become more magnetic, it will lose out on the next cycle of good jobs that drive prosperity, underpin quality of life, and renew the buy-in and confidence of future generations of South Islanders.

COVID-19 has brought this context into even sharper relief. A reset in what people want from cities is coming into view alongside newly exposed risks for cities that are unequal, under-prepared, and complacent. A window of opportunity

has emerged for Greater Victoria — if the region wants it — to emerge on the international stage and find its path to a sustainable future.

Throughout 2020, The Business of Cities undertook a three-part detailed and original analysis on behalf of the region, to assess the region's attributes and aspirations through a global lens.

We drew on our experience working with regions around the world such as Oslo, Sydney, Barcelona, Philadelphia, and Malmö to explore Greater Victoria's path and potential in the years ahead. Our work was further enriched by dialogue with many South Island leaders. The three reports launched here reflect the outcome of this work.



Understanding the region's future prospects firstly depends on knowing where it really stands in an international context. Our assessment began with a first-of-its-kind benchmarking comparison of Greater Victoria against its real peers in the areas that are known to matter over the long-term (Report 1). The work identified an immediate 'peer group' of 10 city-regions — including Aarhus, Denmark and Hobart, Australia — as well as a second group of cities further along in their journeys, such as Helsinki, Finland and Christchurch, New Zealand.

This benchmarking indicates Greater Victoria possesses advantages that set it apart not just nationally but globally: an exceptional environment, low pollution, special access to nature, lower crime, superior healthcare, and quality education, all delivered within a region that is, for now, more compact and easier to get around than many.

Yet the benchmarking also reveals that other cities and metropolitan regions do better at consistently attracting and retaining younger workers, and have more of the urban fabric, infrastructure, and concentration necessary to support it. Less affordable housing and fewer large anchor firms than other peer regions are clear constraints. The evidence suggests that despite promising industry specializations, innovation outcomes do not yet match the region's entrepreneurial spirit and innovation infrastructure.

The Urgent Risks of Inaction

These gaps have become more urgent in a context where homes are getting more difficult to afford, people are getting older, and the jobs market has become more divided between winners and losers. The risk is that Greater Victoria goes the way of other cities that treated growth as an opponent of inclusion, failed to reinvest in the things that made the city great, and so eventually lost jobs, families and opportunities to other cities.

The indicators point to a clear risk — the potential for economic contraction resulting in new high-value jobs not being created to replenish the previous generation of good jobs.

Without more decisive moves, Greater Victoria may slowly and steadily become locked in to a development path that is medium-productivity, low-affordability, low-amenity, and vulnerable to future shocks.



Knowing where and how to shift onto a new path toward the right kind of growth and a more productive future requires the inspiration that good examples from around the world can provide.

And so, in the second phase of work, we explored more than 20 examples from around the world where smaller city-regions have shifted purposefully into a new gear after a period of crisis or transition (see Report 2).

From Christchurch's earthquake recovery to Miami's diversification from tourism, and from Auckland's innovation district to Amsterdam's reorganized economic leadership, a number of common themes emerge:

- a reimagined Downtown
- enhanced coordination between public and private sectors
- confidence and conviction to host the world
- making the most of knowledge-rich institutions
- vigilance about the reforms needed in future
- the need to address diversity, inclusion and climate change.

These themes are all fostered by a shared language for success and groups of agile leaders willing to move quickly.



How can Greater Victoria build and sustain its own fresh versions of these approaches to its economy, its development, its talent, its people, and its environment, both now in the aftermath of COVID-19 and into the future? Much depends on the 'fluency' of the region — to read, listen, and engage in global markets, build relationships and develop the instincts to adapt in new scenarios. It means turning accidental success into intentional planning, positioning and investment.

In Report 3, we explore the essential traits of this global fluency (an idea first

developed with the Brookings Institution). We observe which traits Greater Victoria already has and should use — and which it now urgently needs in order to pivot to what the future demands of it.

10 Traits

of Globally Fluent

Metropolitan Areas

1	adership with Vorldview	Local leadership networks with a global outlook have great potential for impact on the global fluency of a metro area
	gacy of Global ientation	Due to their location, size, and history, certain cities were naturally oriented toward global interaction at an early stage, giving them a first-mover advantage
wit	ecialisations th Global ach	Cities often establish their initial global position through a distinct economic specialisation, leveraging it as a platform for diversification
	laptability to obal Dynamics	Cities that sustain their market positions are able to adjust to each new cycle of global change
Kn	lture of owledge and novation	In an increasingly knowledge-driven world, positive development in the global economy requires high levels of human capital to generate new ideas, methods, products, and technologies
an	portunity d Appeal to e World	Metro areas that are appealing, open, and opportunity- rich serve as magnets for attracting people and firms from around the world
	ernational nnectivity	Global relevance requires global reach that efficiently connects people and goods to international markets through well-designed, modern infrastructure
Inv for	vility to Secure vestment Strategic forities	Attracting investment from a wide variety of domestic and international sources is decisive in enabling metro areas to effectively pursue new growth strategies
	overnment as a obal Enabler	All levels of government have unique and complementary roles to play in enabling firms and metro areas to "go global"
	Compelling obal Identity	Cities must establish an appealing global identity and relevance in international markets not only to sell the city, but also to shape and build the region around a common purpose

Source: The Brookings Institution (2013). The Ten Traits of Globally Fluent Metro Areas.

While the region does undoubtedly benefit from liveability appeal, pockets of forward-looking leadership, advantageous proximity to the Pacific and to the rest of Cascadia (including major metros like Vancouver and Seattle), and credibility as a centre for knowledge and tourism, these are insufficient by themselves for the region to achieve its goals. In other words, the region cannot expect to rely in perpetuity on its serene quality of life, entrepreneurial endowment, and 'safe haven' attributes. This third report observes the fluency gaps, relative to what others with similar starting assets have achieved: lower international profile, propensity to engage globally, institutional cooperation, and scale in advanced technological industries.

International experience suggests that the alternative is a future where the region's cherished strengths will be progressively eroded and undermined--with large costs and missed opportunities.

Becoming more globally fluent is not some distant dream or impractical ideal. It is essential to deliver prosperity and life chances to the next generations of South Islanders.



Taking global fluency seriously for Greater Victoria will mean addressing immediate priorities while also gaining momentum and confidence around longerterm agendas.

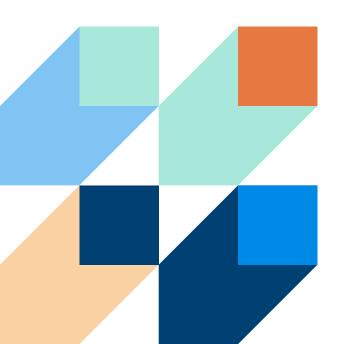
These longer-term agendas consider the desirable quality of economic growth (i.e. inclusive, clean and innovative) that corresponds to the region's values.

These include a larger innovation economy and more magnetic districts underpinned by better placemaking, multi-modal mobility and climate action. Bold re-imagination and a spirit of endeavour are needed to proactively make progress and use the region's assets with more intentionality.

To accomplish this, there is a major advantage that the region has already in place: a regional public-private alliance in the South Island Prosperity Partnership SIPP). Effective governance and building leadership capacity to act will be a top agenda for SIPP going forward. Setting the agenda for quality development that aligns to societal values for equity, inclusion, and environmental sensibility — and strategy to achieve — it requires the all-hands-on-deck approach that SIPP represents.



Bold re-imagination and a spirit of endeavour are needed to proactively make progress and use the region's assets with more intentionality.





Most of all, in a decade likely to be scarred by fiscal, political and environmental turbulence, these three reports highlight that Greater Victoria now needs to differentiate itself. The region requires a more memorable international reputation among more audiences, and a stronger business brand to match its excellent resident and visitor brands. This depends on a unifying story about what the region stands for and where it is going.

"

The new order of city-regions is being shaken up. Greater Victoria can become a reference point for what people want from a 21st-century metropolitan city...

This pursuit does not mean sacrificing local character or ignoring local needs: quite the opposite. Instead, it means future-proofing what makes Greater Victoria special. It is the vehicle to galvanize the region around bigger ideas and quality growth.

Over the coming months, SIPP will be developing and rolling out a project called "Telling our New Story," which will turn the ideas for a new story into a programme for execution. SIPP initiated this work through six focus groups in January 2021 featuring leaders in the following sectors:

- digital transformation
- clean tech and green economy
- ocean and marine
- creative (from artists and designers to dance companies and musicians).

Much more local engagement is to come to shape this. International perspectives will also continue to inform this storytelling and uncover new strategic approaches. International benchmarking centred on the economics of people, planet and prosperity will, for example, feature regularly within SIPP's annual Prosperity Index.

Everyone has a role to play in telling the story and fulfilling it. Civic and business leaders can step up, use their voices, grow their presence in some of the key agendas, and explore how they can work better together for the benefit of the

region. Science and research can build up and project the story of discovery and invention. Governments can provide the interventions and investment to bring the story to life.

In every region that has learned to tell its story differently, citizens have a fundamental role to play. Greater Victoria is no different. Everyone who lives, works and enjoys the region can participate in distilling what is unique about it, promote it in their networks, and in so doing help to unite the region through a common purpose, and position Greater Victoria for new, unseen opportunities.

Far from eliminating the rich differences of perspective and opinion, this process helps to identify Greater Victoria's shared, multi-layered identity. The crowdsourcing of stories, the shared access to key materials, the mapping and FAQs about different aspects of the region, and the nomination of ambassadors, are all set to be part of the next phase of collective storytelling.

The new order of city-regions is being shaken up. Greater Victoria can become a reference point for what people want from a 21st-century metropolitan city: connection, competence, civility, compactness, community, careers, cohesion and creativity. These reports provide an initial evidence base and resource to a region now looking with optimism to serve its people by reinvesting in their shared future. reinvesting in their shared future.

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The Business Of Cities

The Business of Cities is an urban intelligence firm that works with cities and companies worldwide. It uses advanced benchmarking and comparative analysis to help leaders to respond purposefully to the twin dynamics of urbanisation and globalisation. Over the last 10 years it has supported public and private leadership in cities and regions such as Amsterdam, Auckland, Glasgow, Helsinki, London, Oslo, Philadelphia, San Diego, Sydney and Tel Aviv, and collaborated closely with international organisations such as the OECD, World Bank and Brookings Institution.

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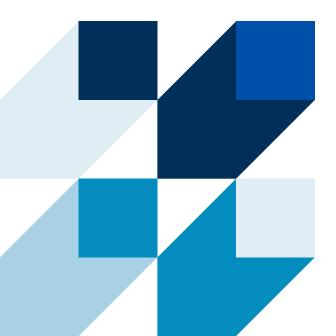
Global Benchmarking

Putting Greater Victoria's Economy in International Perspective



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Executive summary

This report, commissioned by South Island Prosperity Partnership (to aid the regional economic development strategic planning process), the City of Victoria (to aid the "Victoria 3.0" planning process), and Aryze Developments and BCI, provides an initial international benchmarking comparison of Greater Victoria's economic performance and prospects.

It draws on a variety of comparative performance and perception data that are important to the long-term growth and success of smaller city-regions, in order to provide Greater Victoria¹ with an 'outside-in' global perspective of its opportunities, imperatives and constraints.

One of this report's innovations is that it evaluates Greater Victoria against a 'peer group' of cities with whom it shares attributes, and a second group that are larger and further along their journey of high value economic transition and which Greater Victoria can aspire towards in the next cycle. This second group includes a mixture of world-class standard setters (e.g. Helsinki and Eindhoven), specialized secondary cities (e.g. Aarhus and Vitoria-Gasteiz), and improving nimble cities (e.g. Cork and Christchurch).

Performance outcomes

International benchmarking suggests that in 2020 Greater Victoria already had a number of critical ingredients to underpin a successful growth and productivity-raising cycle. Greater Victoria is already by many standards a high performing region. It has (to an extent unintentionally) become one of the world's most liveable small city-regions, and now possesses enduring advantages that continue to set it apart: an exceptional environment with low pollution and high access to natural and lifestyle assets; a lower crime rate, a more efficient healthcare system and a more highly educated population than many of its peers. Currently Greater Victoria is also able to deliver this liveability advantage within a relatively compact region setting, with shorter commute times and fewer externalities associated with car dependency.



Spidergram summary of Greater Victoria's performance compared to global peers

Source: The Business of Cities research. Based on use of an ELO algorithm to compare regional performance across multiple indicators against nominated peer regions. See appendix for details.

Executive Summary 3

COVID-19 provides Greater Victoria with a rare and unusual window of opportunity to accelerate a transition to a more innovative and productive economy. By international standards Greater Victoria already has promising industry specialisations, a capable cadre of technology-based firms, and an established culture of entrepreneurship. Greater Victoria's rapid response to COVID-19, ability to accommodate remote working, and proximity to the United States market during a period of fiscal and political turbulence, all create a context in which the region can now foster a higher calibre of jobs, talent and opportunity. If it can do so Greater Victoria will be much better placed to withstand the medium-term shocks and longer-term changes triggered by the pandemic.

But a successful move towards a higher-value, more resilient economy will also require Greater Victoria to proactively address key gaps. The benchmarking has revealed that other smaller city-regions that have accomplished this transition more consistently attract and retain younger workers to participate in a more diversified economy, and have more of the urban fabric, infrastructure, and concentration necessary to support it. Greater Victoria is more dependent on the public sector as an economic and jobs driver than other peer regions. It has produced fewer high-growth technology companies that can catalyse a wider ecosystem, and the evidence suggests that innovation outcomes do not yet match the region's entrepreneurial spirit and innovation infrastructure. Specialisms in advanced digital and maker sectors are still fairly small and purposeful clustering is not as established. Less affordable housing and fewer large anchor firms are two reasons for fewer younger people than among its peer regions.

Most indicators are bright for Greater Victoria, but the region has to act decisively to address its deficits, or the risk is that it will miss the chance to transition to a high-productivity, high-opportunity, high-interaction and high-amenity economy. Without a much larger innovation economy, more strategic anchor institutions, more magnetic commercial hubs, and improved urban placemaking underpinned by a stronger physical and spatial platform, there is a risk that Greater Victoria will be unable to reproduce and reinvest in the lifestyle ingredients that make the region so compelling. Greater Victoria may gradually become locked in to a development path that is medium-productivity, low-affordability, and vulnerable to future shocks.

The journey for Greater Victoria

Greater Victoria is entering an exciting but turbulent decade. Looking ahead to the recovery and the next cycle as it starts to take shape, the benchmarking data indicates that Greater Victoria may need to carefully consider:

- maximizing the potential of the innovation district by ensuring close coordination between landowners, local growth partners and place advocates in order to create an amenity-rich and high-quality place that creates a new level of visibility, co-location and specialisation
- increasing the population density of Downtown and the region's core in order to drive innovation and visibility, and deliver the agile urban environments fit for the post-COVID-19 generation
- making the most of anchor institutions, and the potential for greater proximity and spillovers with other key businesses and institutions to spur commercialisation
- monitoring and investing in the physical and digital infrastructure platforms necessary to connect and serve an agile regional economy and catalyse other positive changes.
- paying close attention to how it uses its edges to build a sharper and more memorable international reputation
 among more audiences, and a stronger business brand to match its excellent resident brand, all underpinned by a
 unifying story about Greater Victoria's past, present, and future.

The policies and approaches other regions have adopted in these areas are the subject of Report 2.

Executive Summary 4

Introduction

This paper was commissioned in Spring 2020 to provide an independent background investigation on Greater Victoria's competitive strengths and weaknesses in their global context. It is designed as part of a programme of work by The Business of Cities to support six actions specified in Victoria 3.0 (but also carrying it forward into regional economic development strategy through South Island Prosperity Partnership):

- 9.1 Measure the City and region against 10 Traits of Globally Fluent Metro Areas
- **9.2** Research policies and best practices
- **9.3** Undertake case studies on what cities/ regions have done with respect to SME innovation, R&D commercialisation, First Nations economic reconciliation, and recovery from crises.
- 9.4 Determine comparator, high-performing, high-calibre cities
- 9.5 Gain insight on advancing key projects
- **9.6** Develop a measurement framework to track progress over time.

This report provides specific insights on points 9.4 and 9.6, in Victoria 3.0, drawing on The Business of Cities' experience of comparative city and regional performance to provide a distinctive and customised benchmarking analysis that:

- compares Greater Victoria to a small 'peer group' of international locations with similar size, assets and relationships within a wider urban region.
- identifies the comparative strengths, gaps, and opportunities that can make Greater Victoria more internationally competitive.

This paper builds on the premises that Greater Victoria is a region that:

- is experiencing an important cycle of population growth, change and economic diversification and disruption, which takes on a new hue amid the effects of COVID-19.
- has inherited a distinct island character with a special lifestyle proposition, exceptional natural assets, and a lower density and less intentional model of urban development.
- has the potential to establish itself as a niche region that hosts high value-added activities to the benefit of BC,
- may need new approaches to optimise its participation in the innovation economy and become a clearer hub within the dynamic Pacific NorthWest region. ¹

What this paper is not

There are sometimes confusions about the origins and purposes of city and regional benchmarking. This particular work has NOT been designed as:

- an inside-out analysis of all of Greater Victoria's economic, sectoral and fiscal evolution data.
- an all-purpose assessment of Greater Victoria's strategies, governance, fiscal or policy models.
- a recommendation of new policies that Greater Victoria should adopt.
- a statistical comparison of Greater Victoria's brand and perception, and how that compares with the region's performance.

Instead, this paper presents an 'outside in' analysis of Greater Victoria's current performance relative to comparable international 'peers', using available data that are robust and relevant enough to compare cities and regions internationally, across a series of strategic themes relating to the City of Victoria's current priorities and ambitions as outlined in Victoria 3.0 (see below).

- 1. Economic Resilience
- 2. Innovation Economy
- 3. Land Use and Spatial Form
- 4. Mobility and Connectivity
- 5. Liveability, Amenities and Appeal
- 6. Health and Sustainability

Identifying Greater Victoria's peers

Understanding and tracking peer regions is an important task for globally aspiring regions. For Greater Victoria, it can help to:

- monitor progress, and spot areas of relative improvement and decline
- set meaningful targets and thresholds
- · engage and educate stakeholders locally
- track Greater Victoria's journey towards high value economic transition.

In the following sections we benchmark Greater Victoria's performance among a carefully selected group of 18 similar 'peer' cities globally (see Figure 1).

These peers consist of two groups:

- a 'core' peer group, with whom Greater Victoria shares many attributes now.
- a 'wider' peer group, composed mostly of slightly larger regions that have successfully acquired some or most of the ingredients of a high value economy.

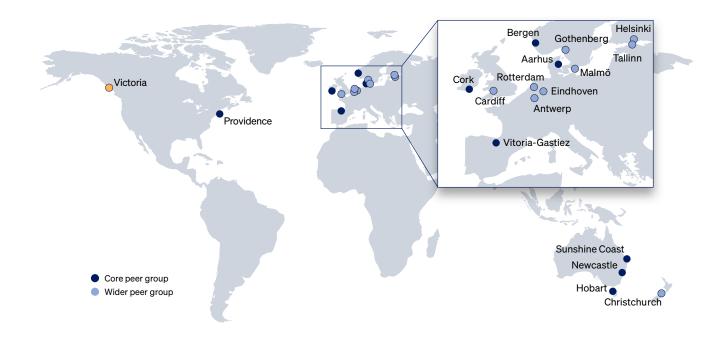


Figure 1: Greater Victoria's 'Peer' Cities Internationally

The eight core cities are:

Aarhus, Denmark

Aarhus, Denmark's second- largest city, is a rejuvenated coastal hub located 190km northwest of Copenhagen. Home to Scandinavia's second largest university, it is a major Nordic centre for research and education that has leveraged its knowledge, marine and green assets to become a centre for trade, services and the biotech industry. In recent years, Aarhus has adopted a clear internationalisation strategy to improve its ability to recruit and retain top talent, in which it has prioritised better cooperation with businesses, organisations and knowledge institutions.

Bergen, Norway

An Atlantic maritime hub whose growth was historically driven by offshore oil and gas, Bergen is Norway's 2nd largest city and has become more strategic about its strengths in subsea technologies, naval institutions and oceanography research. It has gradually established itself as the capital of 'Western Norway' and a national gateway to the country's world-famous fjords and mountains. Bergen has worked purposefully to diversify sources of tourism and to develop a broader economic identity as it looks to reduce dependence on extractive industries.

Cork, Ireland

Cork city region is the key driver of southwest Ireland's economy, and is an example of a smaller region whose higher level government has been proactive at facilitating growth and supporting secondary centres to become much more productive. Cork's advantages include success at attracting larger companies to achieve talent attraction, and universities that are industry focused. It is currently finding ways to accommodate population growth by permitting higher density development in the regional core, growing the network of town centres and investing in better connections and co-ordination with neighbouring cities.

Hobart, Australia

Hobart is the political capital and largest city of the Australian island state of Tasmania. With the second deepest natural port in the world, it is an important gateway to the Antarctic, and hosts a specialist cluster of cold climate products and services and scientific expertise. The city is home to a high concentration of marine scientists and many renowned Antarctic and Southern Ocean scientific institutions. Despite many challenges of social inequality, it has successfully optimised its well-preserved Georgian and Victorian architecture to drive cultural revival and renewal including strong engagement with its indigenous population.

Newcastle, Australia

Newcastle is Australia's seventh largest city, 160km north of Sydney. Formerly a hub for mining, steel production and trade, it is pivoting to knowledge industries for a more resilient economy. The five councils that compose Greater Newcastle are overcoming unsuccessful past attempts at collaboration to align their future visions for the region with this transition in mind. The population of Newcastle continues to rise, driven by the revival of the city centre, re-urbanisation of its university, and talent attraction from Sydney. This is creating new challenges to contain urban growth, attract larger new businesses and skilled workers and maximise the opportunities of its port and airport. ²

Providence, United States

Providence, the political capital of the US state of Rhode Island, is a fairly compact city famed for its historic buildings, extensive parkland system and large, deepwater seaport. The city is home to 8 hospitals and 7 post-secondary institutions, which have in recent years helped to drive growth in healthcare and high-tech industries. A "Great Streets" initiative to improve the city's public spaces and encourage greater uptake of active transport is part of the effort to support an urban fabric more conducive to the innovation economy.

Sunshine Coast, Australia

Sunshine Coast, Australia's twelfth largest urban area, is currently undergoing a cycle of rapid transformation. Its beach village lifestyle equation and access to natural inland amenities are helping the region to attract a new wave of workers from Brisbane and become more spatially attuned. The pro-growth local government has been focusing on how to win reputation as a smart community and preemptively maintain housing affordability. It is currently striving to secure nomination as a UNESCO biosphere in order to preserve its natural landscapes, and has strategically designated one of its many centres as a definitive CBD in an attempt to drive digital innovation and economic growth.

Vitoria-Gasteiz, Spain

Vitoria-Gasteiz is the seat of government of the Basque Country in Northern Spain. It is consistently voted as among Spain's top 5 places to live, and yet has grown genuine economic strengths in healthcare, aeronautics and gastronomy. A former European Green Capital and UN Global Green City Award winner, the focus of recent urban strategy efforts have been to accommodate a growing population in central neighbourhoods, and to build a broad base of jobs around its high value sectors.

The analysis of demographic, economic and strategic trends also identified a group of cities that have been making an intentional transition to a higher value economy for longer. These cities can act as a target peer group for Greater Victoria in the future.

These cities all share:

- a smaller population size within their national economies, with a regional population between 500,000 and 1,500,000, and/or core city population of less than 700,000
- a pivot to the knowledge economy and efforts to grow the innovation ecosystem
- an abundance of natural assets and their strong liveability proposition, including their coastal or river location and easy access to state or national parks and nature reserves
- an important role within the wider multi-city region
- experience of a strong growth and demand cycle, that has required optimisation of infrastructure and investment projects.

Many of these cities also share additional characteristics of specific relevance to Greater Victoria in the current period, for example:

- specialisation in marine and maritime industries
- track record of inner-city redevelopment and restructuring
- · successful efforts to promote economic and social inclusion and improve government agility
- successful response to previous crises
- joined-up approaches to growing the innovation ecosystem
- successful deployment of innovation districts.

City	City Size (m)	Metropolitan size (m)	Key Greater Victoria-relevant characteristics
Antwerp	0.52	1.2	Marine and maritime industry specialisation; track record of inner-city redevelopment and innovation district development.
Cardiff	0.36	0.5	Efforts to promote economic inclusion and reskilling; track record of inner-city reactivation and role of higher tier of government.
Christchurch	0.38	0.6	Successful response to crisis; efforts to promote economic and social inclusion of its indigenous population.
Eindhoven	0.23	0.8	Successful deployment of innovation district; joined-up approach to growing the innovation ecosystem; efforts to promote economic and social inclusion
Gothenburg	0.58	1.0	Efforts to promote economic and social inclusion; specialisation in marine and maritime industries
Helsinki	0.65	1.5	Joined-up approach to growing the innovation ecosystem; efforts to promote government agility
Malmö	0.32	0.7	Joined-up approach to growing the innovation ecosystem; track-record of inner-city redevelopment and restructuring
Rotterdam	0.65	2.5	Specialisation in marine and maritime industries; track record of inner-city redevelopment and restructuring; joined-up approach to growing the innovation ecosystem
Tallinn	0.43	0.6	Digital innovation and diversified economy; efforts to promote social and economic inclusion for a more advanced economy; efforts to improve government agility

Table 1: Characteristics of Victoria's peer cities

In this paper we compare these regions across 6 segments in order to gain a comprehensive understanding of Greater Victoria's:

- Economic Resilience
- Innovation Economy
- Land Use and Spatial Form
- Mobility and Connectivity
- Liveability Fundamentals, Amenities and Appeal
- Health and Sustainability

Greater Victoria's benchmarking and data context

There are now more than 600 global benchmarks, spanning everything from detailed analytical studies by inter-governmental organisations, to index reports produced by consulting firms and business schools, large-scale perception surveys, reviews of performance and readiness in specific urban themes, and longitudinal statistical databases.

The Greater Victoria region appears in very few of these studies. Over the past year, Greater Victoria featured in fewer than 10% of these benchmarks, a much lower share than in Vancouver (45%), or other small cities such as Rotterdam (26%) and Tallinn (22%). Greater Victoria is most visible in larger global studies on specific topics, such as exposure to air pollution, resident quality of life, or all-round innovation ecosystem strength. It is rarely featured in the most high-profile and globally influential comprehensive studies, which often focus on a few larger cities in each country.

This is important for several reasons. First, benchmarks provide an international resource on how a city and region is doing, without which the task of fully assessing Greater Victoria's progress becomes harder. Second, benchmarks themselves also exert influence. They inform and shape the perceptions and decisions of mobile asset allocators, such as businesses, investors, media, and institutions. Their public visibility means they also inform the choices made by mobile talent, and the appetites of global visitors and entrepreneurs.

In the next period, Greater Victoria may attract more interest from benchmark producers — they may also seek wider third-party endorsement through a new and expanded generation of benchmarks. This can help to create a larger evidence base for strategic conversation, and will provide more opportunities for Greater Victoria to excel and to promote its high scores.

The data

The rapid growth in comparative data on cities and regions means that assembling data that is truly comparable across regions, countries and continents has become a richer but also more complex and challenging task. There are in some cases inherent limitations relating to data availability, geographic scale comparisons and data quality. For this paper, data includes:

- data from longitudinal statistical databases from recognised international data providers such as the OECD, Eurostat
 and the UN
- · census, local and national statistics agency data
- real-time databases of firm, investment and employment dynamics
- crowd-sourced data uploaded by citizens on to online platforms
- public benchmarks of city and regional performance
- · other comparative studies.

For a full note on scale, terminology, and full data criteria, please see the Appendix.

Data and benchmarking in a post-COVID context

The equation for city and regional competitiveness is likely to change as a result of COVID-19. It is likely that a cycle of more 'managed globalisation' is beginning, defined by a more interventionist federal/state government environment, so multi-level government relationships will become a competitive differentiator. Meanwhile new dimensions to global competition, including between smaller cities and regions, are emerging: on business climate, health management, resilience, competence, and perceived 'safe haven' or stability status.

COVID-19 also presents scrutiny of the virtues and advantages of urban scale and density. This means there will be more competitive analysis of how resilient the industry mix is, how well smaller regions can play complementary roles to larger cities, and what the platforms are like to support a model of innovation, land use flexibility, and localisation. There will also be more attention to detail on how well regions optimise public transport usage and shared spaces, and how they shift towards a cleaner, climate conscious economy underpinned by sustainable metropolitan economies and infrastructure.

Post-Covid, the competitive advantage of smaller cities and regions will also manifest in how well they manage and mitigate negative impacts and shocks, such as:

- A permanently altered visitor economy and changing appetites of both business and leisure tourists
- A severely curtailed arts and culture ecosystem constrained by consumer caution and transport restrictions.
- An innovation economy inhibited by slower flows of talent and ideas to fuel the ecosystem.

New indicators will emerge to track these phenomena in more detail. This has observed some key metrics and analysis where data allows.

1. Economic resilience

SUMMARY

Modest productivity growth in recent years means Greater Victoria remains a medium productivity city region by global standards. It has the slowest productivity growth among peer regions since the height of the financial crisis, and is in the bottom 20% of small metropolitan areas in OECD nations. The narrower gap in productivity compared to the regional hub, Vancouver, indicates that wider regional efforts to create higher value jobs may be required in the next cycle.

Greater Victoria has a larger core of financial, professional, scientific and technical jobs relative to its peer city regions internationally. This has helped the region to serve regional and global commodity markets, and to create new high-earning jobs that have underpinned growth in other industries. It also means Greater Victoria has a higher concentration of jobs amenable to remote-working, which has helped to strengthen resilience to the current crisis.

Greater Victoria benefits from a dual advantage of having one of the most highly educated populations of any small city region, and complementary post-secondary institutions that share in the region's resilience objectives. Degree attainment in Greater Victoria is above major European and Australian talent hubs. Post-secondary institutions score highly for global agendas on sustainability in both research and practice, but are unusual by international standards for not having a downtown presence.

By international standards Greater Victoria has a larger working age population, but also fewer young people and more elderly dependents. This raises a challenge for Greater Victoria in the coming years, to achieve the economic mix, vibrancy, critical mass and lifestyle quotient to strengthen attraction and retention of younger generations.

Into the 2020s, economic resilience for a relatively small, remote region is no longer just about building a diversified economy. It also involves improving the ability to support and grow an agile workforce, pivot into new industries and growth sectors, and foster the industry relationships that will withstand unforeseeable global crises such as the COVID-19 pandemic. Resilience also goes hand in hand with the transition to a higher value economy. As this pandemic and multiple other examples illustrate, higher value economies tend to be better able to withstand economic shocks, and more successful in delivering a broad base of economic prosperity, across many decades.

In this section, we have reviewed data on:

- economic productivity
- industry and employment mix
- talent and university strengths
- · regional demographics.

Productivity

Greater Victoria remains a medium productivity city region, both by global standards and relative to other smaller regions among its international peer group. Current GDP per capita puts it in the bottom half of all OECD metropolitan areas, and the bottom 20% of small OECD metropolitan areas. There is a 10% productivity gap to the Canadian average and a 20% gap to its wider peer group (see Figure 2).

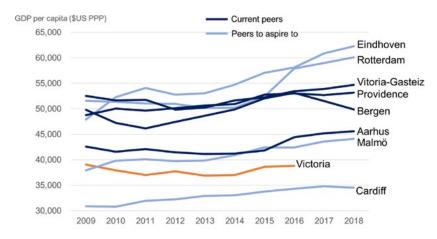


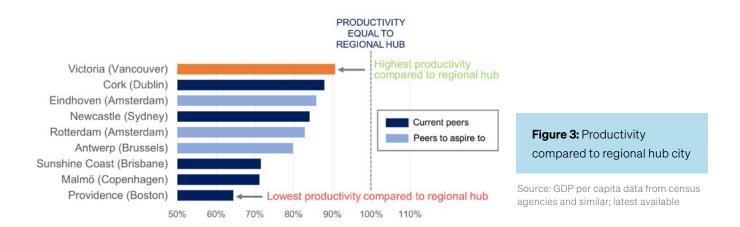
Figure 2: GDP per capita over time for Greater Victoria and selected peers

Source: OECD, Metropolitan Areas dataset. No data retrieved for Greater Victoria after 2016.

Greater Victoria's productivity grew very slowly in the last economic cycle. Greater Victoria stands out as being the only city among its measured international peers to have a lower productivity in 2016 than at the height of the financial crisis in 2009. International peer cities with much higher productivity in 2009 have in general further widened their gap with Greater Victoria, growing their productivity much more rapidly (see Figure 2).

Unusually in the current global economy, Greater Victoria is only a little less productive than its regional hub city,

Vancouver. In most OECD countries especially, the larger centres of multi-city regions are growing their high value jobs base faster than smaller city regions and rural areas, due to the variety of agglomeration effects that see workers, businesses, customers and investors benefit from the interactions deriving from scale and proximity. The small gap to Vancouver suggests that regional linkages may be fewer than in other peer regions, and that whole-region or whole-province efforts to improve productivity may be required in order for Greater Victoria to bridge the gap with international peers.



Industry mix

Greater Victoria's economy is more dependent on the public sector for employment relative to its international peer group.

Its industry and jobs breakdown shows a higher level of reliance on health and social care, and public administration, relative to other cities. More than 13% of the region's jobs are currently in public administration, which is 7% higher than the average among Greater Victoria's core international peer group, and also more than 6% higher on average among Canadian peer cities reporting to the World Council for Cities Open Data Portal.⁴

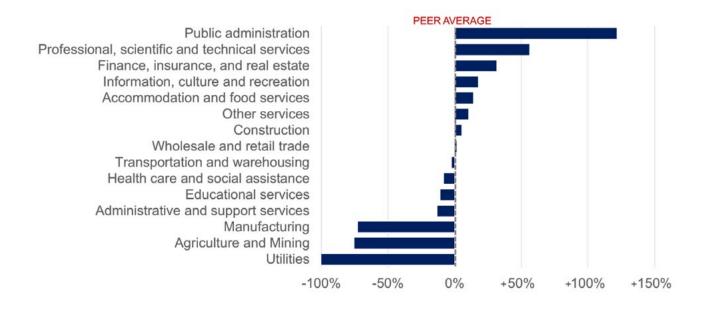


Figure 4: Indicative concentration of employment by major industry sector in Greater Victoria, relative to peer average (not to be used as direct like-for-like due to minor definition discrepancies)

Source: Census data. *Based on aggregation of sectors according to different national definitions (see Appendix for full details). Cork not included due to incompatible sector definitions.

Relative to international peers, Greater Victoria has a larger pool of digital, financial and real estate services professionals serving regional and global markets. Nearly 9% of workers are currently employed in professional, scientific and technical jobs in Greater Victoria, compared to 5.6% on average among Greater Victoria's core peer group. The share of people working in finance, insurance and real estate is now higher in Greater Victoria than on average among its peers, and the region has the 2nd highest share of jobs in the information, culture and recreation sector. Overall there is a significant concentration of high-value knowledge and business services that are remote-working friendly.

Talent and university strengths

Among small city-regions Greater Victoria has one of the most highly educated populations globally. With more than 50% bachelor's level degree attainment or higher, Greater Victoria has the highest attaining population among both its core and wider peer group. Greater Victoria's higher education attainment rate is also higher than in European talent hubs such as Zurich and Stockholm.⁵

Economic resilience has been supported by a responsible set of post-secondary institutions in University of Victoria, Camosun College and Royal Roads University. Each institution promotes efforts to reform curricula to focus on resilience, adaptation, and blended learning. In the latest study assessing universities' progress towards implementing the SDGs, the University of Victoria ranks an impressive 4th globally for climate action and 25th for responsible consumption and production.⁶ This highlights an opportunity for the region's post-secondary institutions to help lead the charge on major global agendas and be responsible stakeholders in Greater Victoria's journey to even stronger resilience.

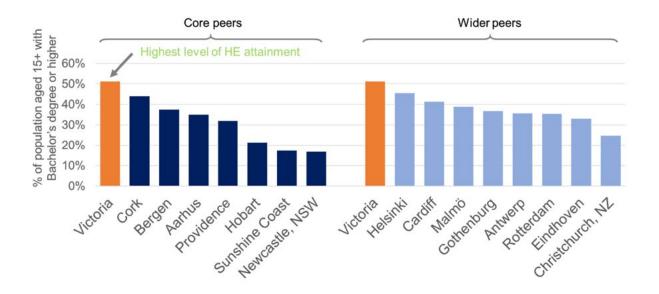


Figure 5: Higher Education attainment by region

Source: Census data (latest available). *In US cities, figures for 18+ converted to 15+ based on county-level population estimates. **Newcastle here defined at the Newcastle-Maitland urban area scale. *** Data for European peers is at the regional scale (NUTS 2).

Demographic fundamentals

Greater Victoria's population profile is currently favourable relative to peers but younger talent will become a priority.

Over the past 15 years, Victoria's built-up area population grew by 18%, putting it on a par with Seattle, Dublin and Vienna, and among the top 100 fastest growing small city regions in North America, Europe and Australasia. Over the next 15 years, Victoria is set to be among the top 100 fastest growing city regions in North America, and just outside the five fastest growing Canadian urban regions. Over this period, on a like for like basis, Greater Victoria will grow faster than Toronto, Montreal, Boston and New York, and faster than any of the cities in its wider peer group.⁷

Greater Victoria benefits from a larger working-age population than many of its international peers. More than 65% of Greater Victoria's population is between 15 and 64 years old, and the city region has the 2nd highest working age population among its core peer group.

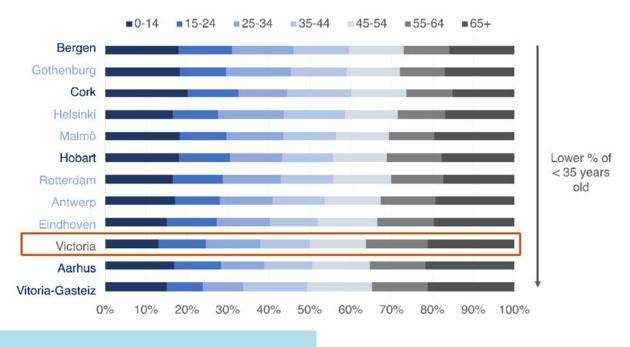


Figure 6: Relative breakdown of population by age groups

Source: Census data, latest available data. Dark blue = current peers. Light blue = peers to aspire to.

But by global standards, Greater Victoria is also home to fewer young people and more elderly dependents, which may raise challenges in the coming years as its working-age population retires. Greater Victoria already has the highest proportion of people aged over 65 among its wider peer group, and the lowest share of people aged 0-14. In addition, 15% of Greater Victoria's population is above 50 years old, the second highest share among its wider peer group after Vitoria-Gasteiz, and less than 25% of the population is between 15 and 35 years old (see Figure 6). This points to an emerging imperative for Greater Victoria to attract and retain younger workers to support its growing elderly population, and support its working-age residents. This may co-incide with wider imperatives around the co-location of housing, transport and healthcare services and the curation of new city centre locations that are attractive to younger generations.

2. Innovation economy

SUMMARY

Greater Victoria already has many of the promising fundamental ingredients necessary to grow its innovation ecosystem. On a like for like basis, it is home to more early-stage innovative start-ups than other regional economies. The concentration of jobs in finance, insurance, law and real estate can support companies scaling up, while there are also emerging signs of specialisation in creative industries and ocean tech that can be built upon in the next cycle. The entrepreneurial mindset and culture of risk taking is also very present.

However, there are also some important barriers to be addressed if the region is to fully exploit its innovation potential. The city region does not yet have a critical mass of rapidly scaling or globally influential technology companies, and appetite, incentives and ability to scale up the firms that do exist remains a key challenge. A much higher proportion of the region's innovative firms are small relative to international peer cities and barriers to accessing venture capital remain relatively high. Greater Victoria also has a lower level of specialisation in specific high-growth, future-ready industries such as Al, quantum computing, Greentech and MaaS.

Greater Victoria's post-secondary institutions stand out for their strong track record of supporting innovation and attracting international researchers. But the ability of these institutions to catalyse the innovation economy is held back by a lack of downtown presence and more limited research power. Greater Victoria remains one of the only city regions in its wider international peer group without a university presence downtown.

A region's innovation economy depends on scale, specialisation, and incentives to enterprise.

In this section, we have reviewed data on:

- innovative firm activity and performance
- innovative firm specialisations
- venture capital activity
- quality of entrepreneurial infrastructure
- employment dynamics
- innovation track record of post-secondary institutions.

The promise

Greater Victoria already possesses promising innovation intensity. On a like-for-like basis the Greater Victoria region has twice as many innovative companies as Malmö or Manchester, and is even on a par with Stockholm and Los Angeles. Greater Victoria also ranks 2nd among its core peers behind Providence for the number of recognised tech-enabled start-ups, scale-ups and companies, and is already on par with some of the cities it can aspire to becoming, such as Gothenburg. One major study places Victoria in the top 150 most innovative cities globally in terms of the all-round scale and maturity of its innovation ecosystem.⁸ This puts Victoria on a par with larger secondary cities such as Lyon, Porto, Glasgow and Adelaide, or among the top 25 among sub 1-million person city-regions, ahead of Cambridge, UK.

Greater Victoria is also home to a stronger cluster of services firms that have the potential to fuel and finance the innovation economy. 4.5% of Greater Victoria's workforce are employed in finance, insurance and real estate, compared to a peer average of 3.4%. Capable talent in these industries is one reason why Victoria ranks 117th globally in a major study of the world's best fintech ecosystems.⁹ Victoria is now in the global top 10 among small regions, or on a par with Lausanne, Utrecht and Gothenburg. Greater Victoria is also among the top 10 small regions globally for the presence of top companies with expertise in architecture, engineering and related urban services, or 2nd among all of its peers.¹⁰ These harbour potential to be part of the set of cross-fertilising innovative sectors of the next cycle.

Greater Victoria's innovation ecosystem benefits from a higher share of companies in creative-led industries. With 4.1% of tech enabled companies in creative industries, the city region ranks 2nd among its core peer group and above many of the cities in its wider orbit. The development of the Arts and Innovation District emerges as an opportunity to support the arts and culture sector, that can in turn boost the creation of high-value jobs.

Greater Victoria can leverage its emerging specialisation in ocean tech.¹¹ More than 1.6% of Greater Victoria's recognised tech-enabled firms are in ocean tech. This is the 5th highest share among its wider peer group and puts Greater Victoria on a par with or ahead of other regions with established marine and maritime clusters such as Rotterdam and Antwerp. The development of the Ocean Futures Cluster can help to support and grow existing companies and develop world leadership in that sector.

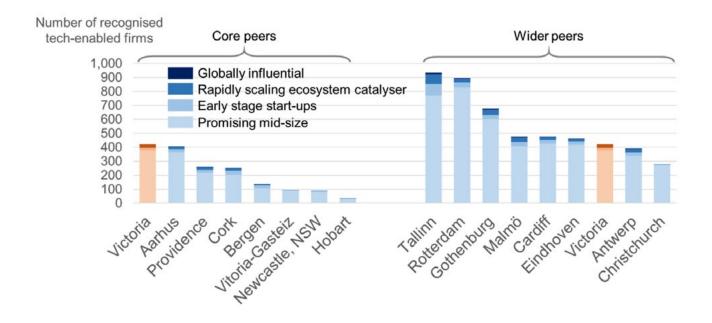


Figure 7: Number of recognised tech-enabled firms by stage of evolution

Source: Crunchbase (June 2020 data). See appendix for details of terminology used.

Companies are supported by a well established entrepreneurial infrastructure. Greater Victoria is 10th out of 220 regions globally for the number of co-working spaces per capita and in the top 20% globally for the number of tech meetup members per capita.¹² This indicates an active and can-do culture, but raises questions about the efficiency and effectiveness of entrepreneurship support.

Greater Victoria has a lower level of reliance on part-time and temporary jobs, and a more developed business culture of actively seeking employees with technical abilities. As a share of all new job postings, Greater Victoria has a relatively high share of full-time jobs, and also has the 2nd highest share of advertised remote jobs, at 3.86% of the total (see Table 1). Meanwhile Greater Victoria is 3rd among its core peers for the share of job postings requiring data analytics, coding or scientific experience, behind only Cork and Cardiff. This illustrates that Greater Victoria has a small but strong cadre of digital experts to draw upon. As more high-value jobs are created, it is imperative to ensure the workforce have the skills to meet the demand.

City	% full time jobs	% of remote jobs	Sectors of top recruiter firms by size
Providence	76.2%	2.3%	Healthcare, Consumer goods
Victoria	60.3%	3.9%	Public Health Administration, Public Administration, Food & Hospitality
Cardiff	50.1%	4.8%	Food & Hospitality, Public Administration
County Cork	49.4%	5.1%	Consumer electionics, ICT Research Centre, E-commerce & Cloud Computing Services
Hobart	47.9%	1.4%	Public Administration, Food & Hospitality
Christchurch	47.3%	0.7%	Public Health Administration, Food & Hospitality
Sunshine Coast	45.6%	3.7%	Public Administration
Newcastle, NSW	40.5%	1.6%	Food & Hospitality, Public Health Administration

Table 2: Share of FTE and remote job postings, and top recruiters across the region

Source: Indeed. Jobs do not sum to 100% as part-time jobs, apprenticeships and internships, and commission positions have not been included in the analysis. Some job postings also do not indicate the type of job. See appendix for further details and scale used.

The barriers

Greater Victoria does not yet have a critical mass of rapidly scaling or catalytic tech firms by international standards.

While the region has many tech-enabled firms operating in the region, it still has room to improve to catch up with the cities in its wider peer group. While its wider set of peers record on average 42 globally influential and rapidly scaling tech-enabled firms, Greater Victoria is only home to 25. In terms of globally influential firms, only Helsinki, Malmö, Tallinn, Rotterdam and Gothenburg are above Greater Victoria among its wider set of peers, but the gap increases when looking at the number of rapidly scaling ecosystem catalysers (see Figure 7).

Greater Victoria has many more small companies among its pool of tech firms, suggesting that appetite, incentives and ability to scale may be a challenge. Relative to its peers, Greater Victoria has the 3rd highest proportion of small firms,¹³ at around 88%.

Greater Victoria's innovation economy has fewer defined specialisms in high growth, future-ready industries relative to its peers. Relative to its full peer group, Greater Victoria is a HQ location for more high-tech innovation firms in financial services and fintech (+46%) and pharmaceuticals, biotech and life sciences (+41%), but fewer in low carbon and cleantech (-33%) and engineering and advanced manufacturing (-54%). Greater Victoria also falls slightly behind its peers for the share of companies specialised in next-generation, disruptive technologies such as artificial intelligence, quantum computing or augmented reality (-2%), and for adoption of sector-specific technologies such as advanced manufacturing, green tech, or mobility-as-a-service, with only 6.2% of its innovative firms specialising in those sectors compared to an average of 11.4% among its wider peer group (see Figure 8). Greater links between research institutions and industry can boost knowledge transfer from research to industry and support SMEs in product development and commercialisation.

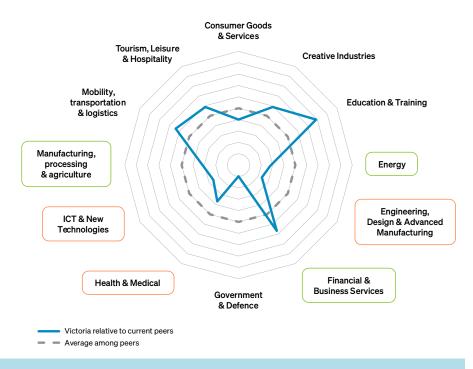


Figure 8: Breakdown of tech-enabled firm activity by major sector, compared to current global peers

Source: Crunchbase (June 2020 data). See appendix for methodology.

Greater Victoria's innovative firms appear to face more barriers to attracting venture capital. Greater Victoria does not yet have the venture capital activity required to support the innovation ecosystem, especially among early-stage ventures. Among its core peer group, Greater Victoria has the 2nd lowest share of start-ups and scale-ups backed by venture capital, with only 10.9% of its firms having received venture capital investment compared to an average of 25%.¹⁴ This is an even more important concern for Greater Victoria's early-stage ventures, as only 5% of firms raising seed funding or Series A have received VC investment compared to 32% on average among its core peer group. Of the firms that do succeed in attracting VC investment, 4.5% have received more than €1m in funding, compared to 8% in Newcastle, 7.4% in Cork and 6.5% in Sunshine Coast.¹⁵

Greater Victoria's innovation economy is not yet highly complementary to Vancouver and Seattle. Greater Victoria's innovation economy is quite similar to that of Vancouver and Seattle in terms of its overall sector mix. The differences in specialisation range between 4% and -4%, indicating that there are not yet highly distinctive specialisations in Greater Victoria that serve the whole region. Greater Victoria does however boast a higher specialisation in advertising, marketing, edtech and creative industries (see Figure 9).

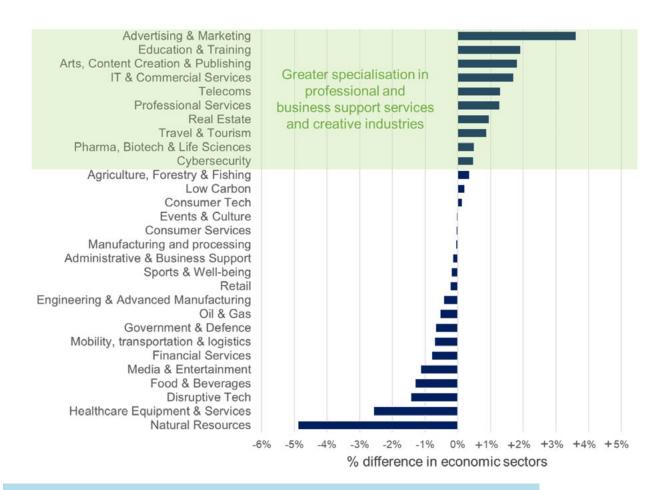


Figure 9: Greater Victoria's innovation economy relative to Vancouver and Seattle's sector mix

Source: Crunchbase (June 2020 data). See appendix for details of terminology used.

Higher education innovation catalysts

Greater Victoria stands out as having a critical mass of post-secondary institutions with a strong track record of supporting and driving innovation and attracting international researchers. The University of Victoria is currently ranked 61st globally in the major study of how well universities drive progress on Sustainable Development Goal 9 — Industrial Innovation and Infrastructure through creating new patents and spin-off firms and attracting research income from industry partners. Similarly, research programmes and curriculum initiatives of Camosun College Royal Roads University indicate appetite to adapt to the post-COVID context. The University of Victoria also ranks an impressive 2nd among its wider peer group for international outlook, reflecting its ability to attract students and academics from around the world (see Figure 10).

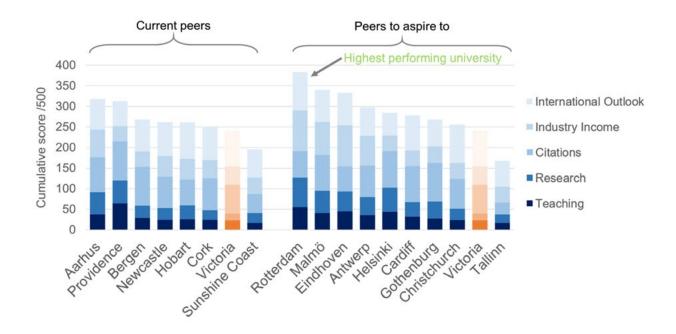


Figure 10: University performance of highest performing university in each region

Source: Times Higher Education (2020).

But the overall potential of Greater Victoria's post-secondary institutions to catalyse innovation is constrained by a lack of downtown presence and more limited research power. Its main research university, the University of Victoria, is located more than 5km away from the city centre, compared to an average of 2.4km among its peer cities. Meanwhile, although the University of Victoria's international outlook, citations and industry income are on a par with that of its international peers, its research influence is not yet viewed to have reached top global standards.

3. Land use and spatial form

SUMMARY

Greater Victoria has been slower than many of its peers to move to a medium-density development model.

It has the lowest built up area density among nearly all the city regions that Greater Victoria can aspire to in the next cycle except Helsinki and Malmö, and its city centre has the lowest residential density among its core peer group except for the Australian cities. In the face of sustained population growth, the risk may be that Greater Victoria sprawls, with attendant negative impacts on economic intensity, commuter liveability, and carbon emissions.

Greater Victoria has a more dispersed innovation ecosystem and a less established pattern of clustering and co-location among existing tech-enabled firms relative to its peers. The new Arts and Innovation District may help to boost the process of co-location and collaboration that has been critical to the success of smaller European regions' innovation journeys, but this will likely depend on close coordination between landowners, local growth partners and place advocates and on efforts to marry up innovation uses with amenities and public spaces.

In the next cycle, Greater Victoria will face new imperatives to pursue infrastructure projects as anchors of new high proximity, mixed-use precincts that can help ultimately to close the productivity gap with other regions. The current CBD growth project can help the region to develop the critical mass of city centre residents required to drive innovation, strengthen productivity, and deliver the next generation of high-amenity urban living.

In this section, we have reviewed data on:

- spatial form: built-up area density and city-centre (downtown) density
- spatial dynamics of the innovation ecosystem
- housing stock and dwelling type.

Spatial form

Greater Victoria's built-up area is less dense than that of its peers. Greater Victoria's built-up area is nearly a third less dense than other Canadian regions, and nearly half as dense as the European peer average of 3,100 per km^{2,17} Continuing to pursue ambitions for a medium-density development model may help the region to unlock the medium-density, high-amenity model that drives talent attraction in many of Greater Victoria's European peers.

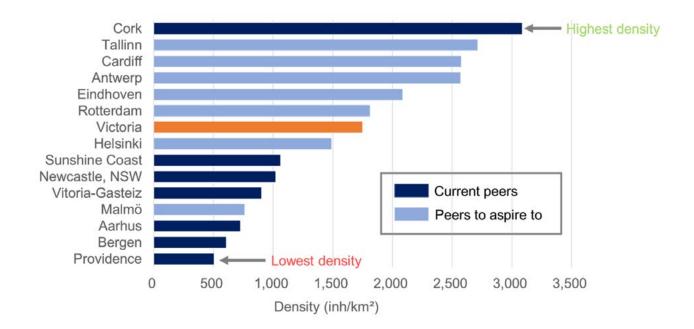


Figure 11: Built-up area density

Source: OECD, 2018.

Greater Victoria's downtown scale and density is also relatively low compared to that of its peers. Its city centre has the lowest residential density among measured regions in its current peer group outside of Australia, and at 3,970 people per sq.km., Greater Victoria's city centre density is significantly lower than the wider peer average of 6,500 people per sq.km. It has been well established that a larger residential population in the city centre has been a major driver of economic diversification and demand in other cities.

	Population	Size (km²)	Density (inhabitants/km²)	CBD* population as share of region
Vitoria-Gastiez	37,880	1.5	25,420	11.6%
Providence	17,800	1.7	10,220	1.1%
Rotterdam	34,000	4.9	6,970	5.2%
Helsinki	12,700	2.0	6,230	0.8%
Bergen	6,770	1.2	5,640	1.6%
Tallinn	4,440	1.1	4,030	1.0%
Victoria	6,150	1.6	3,970	1.7%
Malmö**	27,590	7.0	3,940	3.7%
Eindhoven	8,130	2.6	3,090	1.1%
Hobart	2,300	1.9	1,210	1.0%
Newcastle, NSW	4,910	5.9	830	1.5%

Table 3: CBD size and scale, and relationship with wider region

Census data. *See Appendix for details. *Malmö's size includes the port area.

Spatial dynamics

There is now evidence that proximity is a driver of innovation within city regions. The emergence of innovation districts worldwide reflects the recognised importance of firms in certain industries being more tightly clustered in order to drive discovery and create opportunities for people and small and medium-sized enterprises. Proximity between firms, institutions and investors typically enhances trust and collaboration, enables the sharing of spaces, infrastructure and equipment, and can facilitate knowledge transfer.

Relative to other cities, Greater Victoria's innovation ecosystem appears to be more dispersed, characterised by a less established pattern of clustering and co-location among tech-enabled companies. It is less clustered than the majority of international cities, and lacks the critical mass for a small city to develop a strong innovation economy. Learning from other cities, such as Eindhoven, Malmö or Helsinki, the city region can facilitate co-location of innovative firms and develop a more clustered economy. Around 95% of Greater Victoria's recognised tech-enabled firms are located in Victoria and Saanich.¹⁸ There are a few small pockets of innovation across the region, such as the Vancouver Island Technology Park, led by the University of Victoria, and pockets of clustered innovation-rich firms along Keating Cross Road (for example), but the creation of Victoria's Arts and Innovation District, as part of its Victoria 3.0 strategy, is clearly an essential part of the process of co-location and collaboration. Close coordination between landowners, local growth partners and place advocates will be essential in creating an amenity-rich and high-quality place to benefit residents and businesses.

Greater Victoria's innovation economy is also more evenly spread across multiple industries. Many other smaller regions are more specialised in particular sectors where they have advanced industrial functions or research niches (see Figure 12).

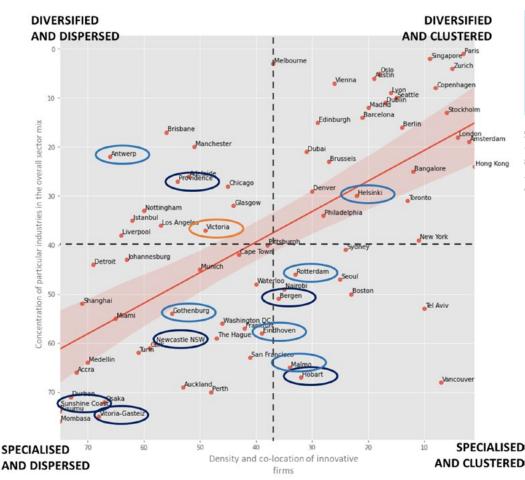


Figure 12: Spatial concentration and industry diversification of Greater Victoria and peer cities' innovation economies

Source: The Business of Cities – geo-analysis of firm location and industry activity – based on June 2020 Crunchbase data. See Appendix for details.

Housing stock

Greater Victoria's relatively low-rise, low density housing pattern means land consumption is still relatively high compared to other regions. 40% of the region's housing stock is composed of single detached houses, and a further quarter is made up of apartments in buildings with fewer than 5 storeys. Meanwhile, apartment buildings with more than 5 storeys represent only 6% of Greater Victoria's housing stock, compared to 10% across Canada. Greater Victoria has a higher share of multi-family buildings than the Canadian average, but significantly fewer than in peers, for example in Scandinavia.

Greater Victoria also has a relatively high home ownership rate. At 63%, the rate of homeownership in Greater Victoria is in line with that of its current peers (63%), but significantly higher than many of the European peers that Greater Victoria can aspire to, such as Malmö (50%), Cardiff (56%) and Gothenburg (57%).²⁰ This suggests there will become an important agenda about how Greater Victoria produces the mix of tenures and residential living styles to suit a flexible, high interaction economy.

4. Mobility and connectivity

SUMMARY

Greater Victoria still has an efficient commuting system compared to its international peers. The region benefits from short commuting times and an encouraging modal split, with 15% of its population adopting active transport modes to go to work. This is a strength that Greater Victoria can improve upon in the next cycle, especially as it directly links to regional productivity and well-being.

However, the region stands out for slower momentum in terms of high-capacity public transport infrastructure or wider pipeline of catalytic projects. Many of Greater Victoria's peer city regions are pushing forward with ambitious transport infrastructure projects and have amassed the tools necessary to deliver efficient bus rapid transit, light rail, subway and commuter rail systems. Although Greater Victoria is investing in important sustainability projects such as the Capital Regional Wastewater Treatment Project, larger catalytic projects to accelerate the growth of the low carbon economy may be needed.

As regional, global and digital connectivity become even more critical in the post-Covid economy, Greater Victoria needs to be vigilant about its physical and digital platforms. Improved connectivity to high innovation cities in the West Coast and beyond, as well as efforts to ensure greater consistency in regional internet speeds, may become more important competitive differentiators.

In this section, we have reviewed data on:

- spatial form: built-up area density and city-centre (downtown) density
- spatial dynamics of the innovation ecosystem
- housing stock and dwelling type.

Strengths

Greater Victoria is still efficient for car-driving commuters by global standards. More than 70% of Greater Victoria's population commutes for less than 30 minutes.²¹ This means the share of Greater Victoria's population with a short commute is higher than the Canadian and United States average of 61%.²² Greater Victoria also has the lowest average commute time among its 6 core international peers for which comparable data are available, and an average commute time nearly 4 minutes shorter than the United States average.²³ However, the experience of other smaller city regions globally shows that these advantages can be quickly eroded when population growth is not sequenced with effective, high-capacity public transport infrastructure, which will create an imperative for Greater Victoria to remain vigilant into the next cycle.

Greater Victoria inherits a lower car dependency than many of its core international peers, but shifts will be required. Only 60% of people drive to work, the lowest share among core peers for which comparable data are available. Greater Victoria also has the highest share of people choosing to commute via active transport among this core peer group, at more than 15%. The future development of Greater Victoria's regional bicycle network and other e-mobility options can increase this split, as car dependency is still higher than in many European regions. Antwerp and Malmö for example have a car dependency of around 50%, and an active transport split ranging between 20% and 32% (see Figure 13).

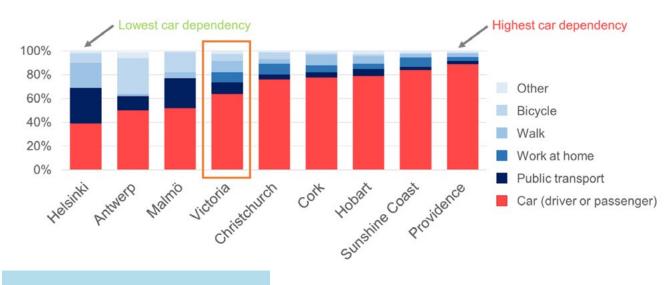


Figure 13: Mode share of travel to work trips

Source: Census data. *In all cases, "did not/prefer not to say" and "did not go to work" have been excluded from the denominator of total trips to work.
**Private vehicle = car, van, truck or motorcycle (driver or passenger).
***Other = taxi and "other".

Potential competitive challenges

Greater Victoria is alone among its peers to lack high-capacity public transport infrastructure. Apart from its local bus network, Greater Victoria does not yet have any high-capacity public transport systems. While this is in part due to the region's unique geography, it results in more cars per capita and reduced ability to accommodate CBD growth. With 68 cars per 100 people, Greater Victoria has the 2nd highest number of cars per capita among 11 peers, only behind Sunshine Coast (85) and significantly above its Nordic peers' average of 43 cars per 100 people. Driving a high-investment, high return public transport system appears to be challenged by the crowd-sourced perception that Greater Victoria's public transport is one of the most expensive as a proportion of income among its core peer group. The vast majority of Greater Victoria's international peers have or are planning for two or more forms of high-capacity public transportation infrastructure, including bus rapid transit, light rail and tram, metro or subway systems, and regional commuter rail (see Table 4). This has allowed these regions to anchor larger scale urban economy adjustments.

City	Bus rapid transit?	Light rail/tram?	Metro/subway?	Commuter rail?	Total
Antwerp	N	Υ	Y	Y	3
Gothenberg	Y	Υ	N	Y	3
Rotterdam	N	Υ	Y	Y	3
Vitoria-Gastiez	In progress	Υ	N	Y	2.5
Aarhus	N	Υ	N	Y	2
Bergen	N	Υ	N	Y	2
Eindhoven	Y	N	N	Y	2
Malmö	N	N	Y	Y	2
Providence	Y	N	N	Y	2
Tallinn	N	Υ	N	Y	2
Sunshine Coast	N	In progress	N	Y	1.5
Cardiff	N	N	N	Υ	1
Cork	N	N	N	Y	1
Newcastle	N	N	N	Y	1
Christchurch	N	N	N	N	0
Hobart	N	N	N	N	0
Victoria	N	N	N	N	0

Table 4

Other regions are pursuing larger catalytic projects that can drive positive spillovers. Greater Victoria is investing in important sustainability initiatives, and the Capital Regional District Wastewater Treatment Project is the 5th most expensive per capita among the largest infrastructure projects currently being delivered in Greater Victoria's peer cities. But many of Greater Victoria's international peers are proactively investing in infrastructure projects that are tailored to imperatives to accommodate growth, improve connectivity, and achieve significant emissions reductions. Identifying the next catalytic project post-Covid-19 that aligns with the economic vision will be an important task.

Greater Victoria is competing in a context where its regional rail and global air connectivity is much more limited than its peers'. Among the 150 most globally influential urban economies globally, Greater Victoria can only access 7 within a 5-hour journey time. This is significantly lower than the 21 that Greater Victoria's wider peer group can access (see Figure 14). At the same time, the time and speed for large scale non-air based travel between Vancouver and Victoria is much greater than other similar regions (see Figure 15). This has important implications for how Greater Victoria organises to overcome these disadvantages and build a complementary economy.



Figure 14: Number of global top 150 economies in a 5-hour flight reach

Source: Airport reports and desk research. *150 most globalised cities according to the GaWC Group

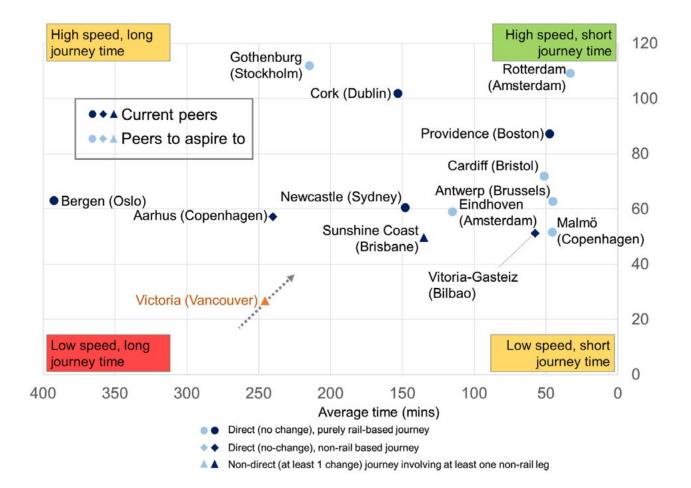


Figure 15: Internal connectivity with largest regional centre

Source: Google Maps. Measures time and speed from a defined central point/station in each region.

Greater Victoria's digital infrastructure appears to have room to improve relative to that of its peers. Fixed upload and download broadband speeds are still relatively slow by global standards. The region ranks 11th out of 12 major Canadian cities for its internet speeds and it is 12th among its wider peer group of 16.28 While some parts of the region record fast upload and download rates, up to 60 and 120 mbps respectively, speeds are more uneven across the region than in other regions.²⁹ Although the region has 2 submarine cable landing points within a 100km radius, wider peer regions are on average located much closer to these access points.³⁰ Optimising connectivity will be key for Greater Victoria to become a more recognised leader in digital and 'contact free' industries.

5. Liveability fundamentals, amenities, and appeal

SUMMARY

Greater Victoria inherits very high living standards by global standards, which it can promote even more decisively to domestic and global employers and talent. Its temperate climate, excellent access to natural assets, low crime rate and healthy air quality combine to make it both an attractive destination to visit and to live in. Greater Victoria can champion its livability credentials and demonstrate an aspiration for global leadership.

Greater Victoria has historically relied on its visitor economy more than in other regions. Now, COVID-19 has shone light on the necessity for the region to diversify its economy and transition to the innovation economy to build resilience.

Barriers of affordability and access are larger than in other regions, and mean the region's inherited lifestyle qualities have not yet been fully translated into broad-based millennial appeal. The housing market is among the top 5% most unaffordable in the English-speaking world. Despite provincial and local efforts, more decisive action in order will be required in order to accommodate a growing population. The next cycle of Greater Victoria's development may require new tools to proactively manage emerging growth externalities such as these.

In this section, we have reviewed data on:

- · perceptions of liveability, safety and environmental quality
- access to lifestyle and retail amenities
- crime rates
- exposure to air pollution
- · visitor to resident ratios
- housing and rental market affordability.

Strengths

Greater Victoria benefits from high living standards by both global and national standards. For current resident perceptions, Greater Victoria ranks in the top 20 city-regions with the best quality of life, and in the top 5 small city-regions globally.³¹ Victoria was also recently rated the 16th best small city to live in by Monocle's high-profile expert survey, due to the temperate climate, rich cultural life and emerging technology scene.³²

Greater Victoria's high quality of life indicators are improving in terms of its clean and green natural environment. With the 2nd highest share of outdoors activities among its core peer group, Greater Victoria offers many opportunities for workers to pursue an active, outdoor lifestyle (see Figure 16). Meanwhile, according to real-time, crowd-sourced sentiment data, Greater Victoria ranks 6th globally for residents' perception of the overall quality of its environment, measured by light and noise pollution, cleanliness and perceived quality of green spaces.³³ In a post-COVID context, Greater Victoria communicates these strengths more widely, and achieves wider global recognition.

Elements of the region's amenity offer are also an advantage for younger people. In a global study of the concentration of certain millennial-friendly amenities, such as vegan restaurants, coffee shops, tattoo studios, vintage boutiques and record stores, Victoria places in the top 100, and in the top 30 among small regions. It also ranks 3rd among its core peer group and 4th among its wider peer group, ahead of Rotterdam, Gothenburg and Antwerp (see Figure 16).

A lower crime rate is an advantage for working-age families. Greater Victoria ranks among the global top 20 small city-regions for residents' perceptions of crime and safety.³⁴ Greater Victoria also fares well in Canada for crime severity.

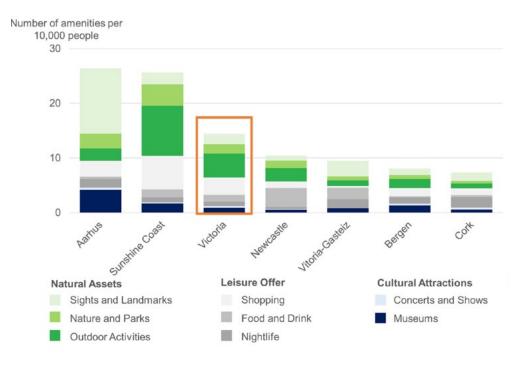


Figure 16: Access to variety of amenities

Source: TripAdvisor, July 2020 data. See appendix for details of methodology.

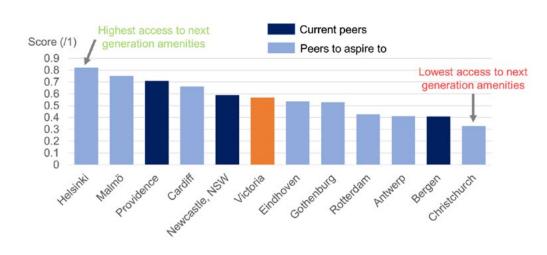


Figure 17: Access to next-generation in demand amenities

Source: MoveHub (2018 data).

Greater Victoria's low exposure to air pollution will become a more important advantage, but could be improved upon. In

2017, Greater Victoria had the 2nd lowest exposure to fine particulate matter (PM2.5) among its wider peer group (see Figure 18). At 5.4 μ g/m3, this is significantly lower than the peer average of 8.3 μ g/m3.³⁵ However, Greater Victoria also is measured as having the second lowest number of days where average air pollution is entirely in line with 'fresh air' guidelines. This performance should be explored in more detail as more consistent excellence would help Greater Victoria to achieve stronger global recognition for its environmental quality.

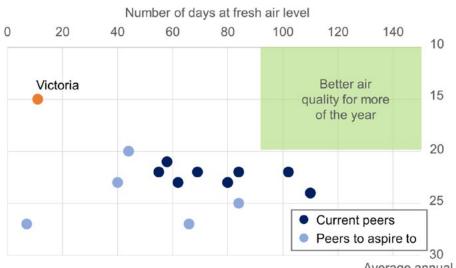


Figure 18: Average annual exposure to air pollution

Note: 'fresh air' level = average of < 20 ug/ m3. Main pollutants include PM 2.5, PM10, NO2 and O3

Source: AQI Air Pollution. Functional urban area scale

Average annual exposure to main pollutants (ug/m3)

Strategic challenges

Greater Victoria has, in relative terms, historically relied on tourism much more than other small peer regions. Prior to the crisis, it welcomed nearly 11 tourists per resident (10.7), more than core cities of established European destinations such as Porto (10.4) and Amsterdam (9.6) (see Figure 19). Moreover, 35% of Greater Victoria's visitors are international, the 2nd highest share among its core peer group. There is an opportunity post-Covid for Greater Victoria to re-imagine its visitor experience and align its visitor strengths with ambitions to grow its innovation ecosystem.

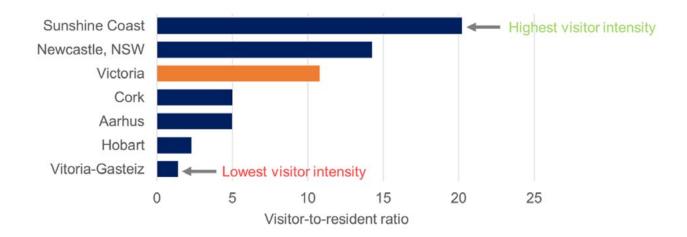


Figure 19: Visitor to resident ratio

Source: City and regional tourism agencies, latest available data.

Greater Victoria has one of the most unaffordable housing markets globally, which remains an important challenge to the long-term attraction and retention of top global talent. With a median multiple of 8.1, Greater Victoria is now among the top 5% least affordable housing markets in the English-speaking world. Among its core peer group, Greater Victoria is the second most unaffordable market, slightly behind Sunshine Coast (see Figure 20). The City of Victoria also ranks in the bottom 20% of its wider peer group for the cost of 1-bedroom flats to rent relative to the average monthly income, and it falls second to last for 3-bedroom flats to rent.³⁶ Importantly, the share of rental housing starts has increased by 11.5% between 2017 and 2019 and is more than double that of the Canadian peer city average, and more rental housing is being built now in Greater Victoria than at any time in the past 25 years.³⁷ Peer regions have been proactively prioritising a more flexible housing market with a wider range of tenures and co-investment sources and locations unlocked.

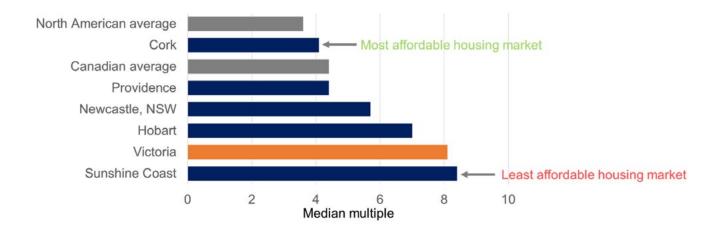


Figure 20: Median multiple housing affordability among English-speaking markets

Source: Demographia International Housing Affordability Survey 2020. Note: Median multiple = median house price / median household income.

6. Health and sustainability

SUMMARY

Greater Victoria's health performance is a major advantage in terms of liveability and, in due course, reputation. The region stands out for having the highest life expectancy among its peers, and for its efficient and affordable healthcare system. Greater Victoria's residents appear more satisfied with the affordability and availability of healthcare than on average among peers.

Greater Victoria has been more successful at containing urban sprawl, but less successful at preserving its natural assets, relative to peers. Greater Victoria has been gradually becoming more land use efficient over the past decade. But although tree coverage remains high, Greater Victoria also has a very high share of artificial land surfaces, which may be a threat to environmental resilience. The share of natural land surfaces has also declined relatively rapidly, putting Greater Victoria in the middle of the pack relative to its peers.

Greater Victoria is already a relatively low carbon region and can become globally recognised for its ambition to reduce emissions even further. Greater Victoria stands out for its rapid uptake of green mobility solutions relative to its global peers. It has recently been recognised as one of only 105 'A list' cities that are leading the transition to a climate safe future, in recognition of its ambition to cut emissions by 80% by 2050. Victoria is one of only 3 peers among its wider group to have been recognised in this way. The next steps for Greater Victoria will include efforts to ensure that it follows through and delivers on this promise, and uses these ambitions to drive growth of the green economy.

In this section, we have reviewed data on:

- life expectancy
- · perceptions of the affordability, accessibility and quality of healthcare
- urban sprawl
- preservation of natural assets
- uptake and deployment of electric vehicle charging stations
- CO2 emissions and reduction targets.

Health

Greater Victoria is a healthy region even by the high global standards set by its peers. It has the highest life expectancy among measured peer regions, with a life expectancy at birth of over 83 years old, higher than in Sunshine Coast and Newcastle. 38

Victoria stands out among peers for its efficient healthcare system. The city features in the top 100 best hospital cities globally.³⁹ It scores highly for its physical and financial accessibility and is in the middle of the pack relative to much larger North American cities.⁴⁰ Greater Victoria's two largest hospitals, Royal Jubilee Hospital and General Hospital, both feature in Canada's top 15 hospitals. ⁴¹

Existing data suggests Greater Victoria's residents are more satisfied with the cost of healthcare than elsewhere. Among its wider peer group, Greater Victoria's population is the 3rd most satisfied. However, among its wider peer group, the data shows that Greater Victoria has yet to reduce the waiting times in medical institutions to improve residents' satisfaction.⁴²

Sustainability

Greater Victoria has been more successful at containing urban sprawl than its peers in recent years. Greater Victoria's built-up area expanded by around 3% between 2000 and 2014, nearly 1.5% less than on average among the region's wider international peer group. Taking into account population changes, Greater Victoria stands out as a city that has become more land use efficient, albeit at a slightly slower rate than some of the more rapidly densifying cities among its wider peer group (see Figure 21). However, as the region is still on a journey to achieve a medium-density development model, vigilance will be required in the next cycle as population grows to ensure the region continues to densify rather than sprawls.

Greater Victoria's efforts to preserve natural assets have on the whole been less successful. From 2004 to 2018, the proportion of natural land surfaces and tree covered areas declined by around 2%, putting Greater Victoria in the middle of the pack relative to its wider peer group for preservation of natural assets. Although over a quarter of Greater Victoria's functional urban land area remains tree covered, Greater Victoria also has the 3rd highest proportion of artificial surfaces among its peer group, at around 60%, which represents a long-term threat to the region's resilience to natural and climate change disasters. Greater Victoria has however been more successful than other Canadian regions at preserving its natural assets, with the 7th lowest relative decline in the proportion of natural surfaces among the nation's 26 metropolitan areas.⁴³

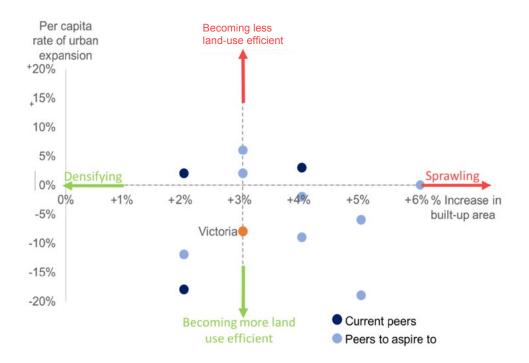


Figure 21: % increase in built-up area, absolute and per capita, 2000-2014

Source: OECD. *Functional Urban Area scale. *Excludes two outliers: Helsinki and Vitoria-Gasteiz.

Greater Victoria stands out for its rapid uptake and deployment of green mobility solutions. It ranks 2nd among its core peer group for the number of EV charging points per capita in the city region, only behind Bergen, or 3rd among its wider peer group, behind Rotterdam and Eindhoven.⁴⁴ Greater Victoria's performance is even more impressive in a wider regional and global context, featuring in the top 10 small North American city regions, and in the top 15 small regions globally.

Greater Victoria is, in general, a lower carbon intensity region than its peers. Current CO2 emissions are below 2 tonnes per capita, which is much lower than on average among most of Greater Victoria's measured peers (see Figure 22).⁴⁵ This is partly due to higher renewable energy consumption in Greater Victoria (61.1% in Greater Victoria versus 58.8% on average among Canadian peer city regions), and partly due to a higher mode share of non-car journeys (see also Section 4).⁴⁶

Victoria is globally recognised for its low-carbon ambition and climate leadership. The City of Victoria's carbon emission reduction ambitions have recently been recognised by the CDP Open Data Portal – one of the largest global repositories of climate data – who have listed it as one of 105 cities that are 'leading the transition to a climate-safe future'. The city is recognised as an 'A list' city for its ambition of an 80% reduction in carbon emissions by 2050.⁴⁷ Only two of Victoria's peers, Malmö and Vitoria-Gasteiz, have been recognised in this way, suggesting that there may be an opportunity for Victoria to promote itself globally in this area.

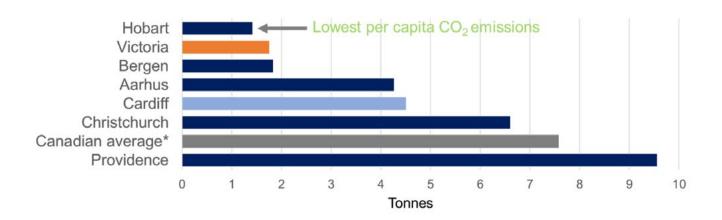


Figure 22: CO2 emissions per capita, Greater Victoria and selected peers, latest available

Sources: Local and national statistics agencies. *Canadian average = average among Canadian cities voluntarily signed up to the World Council on City Data. For Bergen, data is at the City of Bergen scale. For Cardiff, data is at the Cardiff Local Authority scale.

Appendix

A note on data scales and terminology

Wherever Victoria is mentioned, we are referring to Greater Victoria CMA, unless otherwise specified. All the other cities mentioned are also measured at the metropolitan/city-region scale, unless otherwise specified. When we refer to "small" city-regions, this means city-regions of less than 1m people.

We compare Greater Victoria as a region (population 367,770; area 696.15 sq.km.) to the scale which is most relevant in terms of population and land area, at which data are most readily available, and which reveals the most accurate competitive and comparative insights (see Table 1). The scales are:

- For Aarhus, Aarhus and 12 adjacent local authorities forming Aarhus Business Region (994,050; 5,840 sq.km.)
- For Bergen, Greater Bergen Region made up of Bergen and 8 other local authorities (425,000; 166 sq.km.)
- For Cork, County Cork (542,000; 7,500 sqkm)
- For Hobart, Greater Hobart (240,000; 1690 sq.km.)
- For Newcastle, the City of Newcastle and the 4 adjacent local authorities: Port Stephens, Lake Macquarie, Cessnock and Maitland (577,000; 4,175 sqkm)
- For Providence, Providence Metropolitan Area (1,621,000; 4,240 sq.km.)
- For Sunshine Coast (319,000; 2,250 sqkm)
- For Vitoria-Gasteiz, Vitoria-Gasteiz (249,000; 277 sq.km.)

The different data scales for specific indicators and datasets

Competitive Criteria	Scale
Productivity	OECD metropolitan area
Productivity compared to regional hub	Victoria CMA
Industry employment mix	Victoria CMA
Higher education attainment	Victoria CMA
Past and future population growth	UN-defined built-up area
Population age structure	Victoria CMA
Innovative firm activity, performance and specialisations	Victoria CMA
Share of FTE and remote job postings	TBC
Built-up area density	OECD-defined built-up area
Downtown scale and density	Downtown Greater Victoria
Spatial dynamics of innovation ecosystem	Victoria CMA
Housing stock, dwelling type and homeownership rate	Victoria CMA
Commute time	Victoria CMA
Modal split	Victoria CMA
Airport and internal connectivity	Victoria CMA
Internet speeds (global comparison)	Weighted average across main settlements in Victoria CMA
Access to variety amenities	Weighted average across main settlements in Victoria CMA
Air pollution exposure	OECD functional urban area
Visitor to resident ratio	ТВС
Housing unaffordability	Demographia-defined built-up area
Life expectancy	Victoria CMA
Change in built up area	OECD functional urban area
Land coverage	OECD functional urban area
EV charging infrastructure	25km radius from city centre
CO2 emissions	Victoria CMA
Renewable energy consumption	Victoria CMA

Table 5: Data scales for indicators and datasets

Definitions based on Crunchbase

Globally influential: No. of innovative firms ranking in the top 10,000 globally on aggregate in Crunchbase's database of over 850,000 firms that have a high technology quotient, are recognised in global media as having innovated in terms of product or process in the past 12 months, or have experienced significant VC investment (ranking based on an aggregate score across measures of firm activity, online and media visibility, investment momentum, etc.)

Rapidly scaling ecosystem catalysers: No. of innovative firms ranking in the top 50,000 globally on aggregate in Crunchbase's database of over 850,000 firms that have a high technology quotient, are recognised in global media as having innovated in terms of product or process in the past 12 months, or have experienced significant VC investment (ranking based on an aggregate score across measures of firm activity, online and media visibility, investment momentum, etc.)

Promising mid-size: No. of innovative firms ranking in the top 100,000 globally on aggregate in Crunchbase's database of over 850,000 firms that have a high technology quotient, are recognised in global media as having innovated in terms of product or process in the past 12 months, or have experienced significant VC investment (ranking based on an aggregate score across measures of firm activity, online and media visibility, investment momentum, etc.)

Early stage start-ups: No. of innovative firms ranking outside the top 100,000 globally on aggregate in Crunchbase's database of over 850,000 firms that have a high technology quotient, are recognised in global media as having innovated in terms of product or process in the past 12 months, or have experienced significant VC investment (ranking based on an aggregate score across measures of firm activity, online and media visibility, investment momentum, etc.)

The core data sources used in this report include:

- census data, including census profiles and the National Cities Performance Framework, and equivalents in other national systems.
- data from regional health, tourism and airport agencies
- global comparative reports and datasets (e.g. Brookings Global Metro Monitor, Demographia World Urban Areas report, Times Higher Education, OECD Functional Urban Areas database)
- web platforms and apps (e.g. McKinsey Urban World app, Indeed, Crunchbase, co-worker.com, TripAdvisor, Google Maps and testmy.net).

Notes to individual figures:

Overall performance spidergram:

- Each of the 8 overarching themes (see below) comprise multiple indicators. For each theme, the relative positions (1-7) of the city-regions in relevant indicators were analysed in an Elo algorithm. Designed as a Chess tournament ranking system, the Elo Rating System rates cities or regions by comparing their performance in every possible permutation against a list of other cities/regions. The system produces the most accurate comparative assessment of city/region performance, as it accounts for the fact that some cities/regions may appear in more comparative studies than do others, and that each ranking measures a different number of cities.
- The 7 regions were ranked 1-7 by their algorithm score so that every region had an overall ranking for each theme (7 for 1st place, 1 for 7th place)
- Where Victoria was ranked joint with another city for a theme, a median score was awarded for that theme

Indicators:

Innovation economy and spaces: Number of co-working spaces per 10,000 population, number of incubators and accelerators per 10,000 population, number of innovative tech firms.

Knowledge economy and skills: % employment in knowledge intensive business services, university performance, % HE attainment.

Smart strategies and land use: Extent and embeddedness of smart development strategies, % increase in built-up area footprint, 2000-2014.

Efficient and sustainable mobility: % of trips to work by car, mean commute time.

Liveability fundamentals: Life expectancy at birth, exposure to air pollution, median multiple housing affordability.

Amenities and appeal: Visitor numbers, access to variety amenities, access to next-generation, in-demand amenities.

Connectivity: Connectivity to/from regional centre (time), connectivity to/from regional centre (speed), current air passenger throughput (primary airport), forecast air passenger throughput (primary airport), internet speed.

Productive density and spatial form: Wider CBD residential density, population density (regional scale), population density (built-up area scale), share of wider CBD as % of regional population.

Figure 3, on sectoral economic activity

Aggregated sectors, where they do not directly overlap with Canadian classification system, include the following nationally recognised sectors:

Retail and wholesale trade: retail trade; wholesale trade

Finance, insurance, real estate, rental and leasing: financial and insurance services; real estate, rental and hiring services

Business, building and other support services: administrative and support services

Public administration: public administration and safety

Information, culture and recreation: information, media and telecoms; arts and recreation services

Agriculture and mining: agriculture, forestry and fishing; mining

Utilities: electricity, gas, water and waste services

Table 2 - on top firms and % of full-time jobs

Data scales used:

Exact location only: County Cork

25km radius: Victoria, Hobart, Sunshine Coast, Cardiff

50km radius: Newcastle, Christchurch

Figures 6, 7 and 8 - on innovative firm activity

We attributed the following terms based on Crunchbase's measure of all-round firm influence (global rank), which considers revenue, acquisitions, web and media traffic, patents and trademarks, etc.:

- Start-ups = ranked outside global top 100,000
- Rapidly scaling = ranked from 50,000 to 100,000
- Promising mid-size = ranked from 10,000 to 50,000
- Globally influential = ranked within global top 10,000

Sectoral innovation strengths were calculated using Crunchbase data on the total number of innovative technology firms in the region. To correct for the fact that many firms span more than one category, we counted all the categories assigned by Crunchbase to a given firm (e.g. a financial firm specialising in digital payments would result in a mention for finance, digital technology and payments). All Crunchbase-assigned categories that were too vague were discounted (e.g. "security", "service industry", "internet") from the analysis at this stage.

All categories were then organised into 8 broad category groups, giving a total number (total across all category groups and for each group) for all comparator regions. We calculated the share of each category group as a percentage of total innovative firm activity for each city.

Greater Victoria's relative strengths and weaknesses were calculated by comparing the percentage for each of Greater Victoria's 8 category groups to that of the average among comparators, and then correcting for relative differences between the groups by dividing by Greater Victoria's deviation from the average in each case.

Page 33 - on infrastructure projects

Greater Victoria: Wastewater Treatment for Regional Capital District

Aarhus: Port Renovation

Bergen: New highway and suspension bridge (E39 Coastal Highway Route)

Cork: Macroom Bypass

Hobart: Bryn Estyn Water Treatment Plant upgrade

Newcastle: Newcastle Power Station

Providence: Northbound Providence Viaduct Improvements

Sunshine Coast: Bruce Highway Upgrade: Cooroy to Curra, Section D

Tallinn: International Airport Expansion

Rotterdam: A16 Motorway project

Gothenburg: Gothenburg-Boras project

Malmo: Lund-Arlov railway upgrade

Cardiff: South Wales Metro

Antwerp: Ringland project

Page 34 - on internet speeds

For internet speed, average regional internet speeds were calculated by taking weighted averages based on the relative population sizes of the major centres for which data was available.

Localities: Saanichton, Sidney, Sooke, Victoria

Figure 15 – on access to amenities

For access to attractions, regional intensity was calculated by summing all attractions listed in the major centres for which data was available (see below for major centres with data available for Victoria).

Localities: Langford, North Saanich, Saanichton, Sidney, Sooke, Victoria

Table 3 - on wider CBD characteristics

Localities included in the 'wider CBD' include:

Bergen: Sentrum

Eindhoven: Centrum
Helsinki: Vironniemi

Hobart: Hobart City Centre

Malmö: Malmö Sankt Petri

Newcastle: Newcastle, Newcastle East, Newcastle West, Cooks Hill, The Hill, Hamilton South, Hamilton East, Junction

Providence: Downtown, Federal Hill

Rotterdam: Centrum

Sunshine Coast: Maroochydore Activity Centre Profile Area

Vitoria-Gasteiz: Casco Viejo, Ensanche, Lovania and Coronacion

Greater Victoria: Downtown Victoria

References

- 1 The Business of Cities (2018) Benchmarking SEQ in a Global Context
- 2 https://www.oecd.org/australia/business-brief-newcastle-in-australia-an-emerging-smart-city.htm; https://architectureau.com/articles/ newcastles-first-metropolitan-plan-released/
- 3 (Less than 1m people)
- 4 https://southislandprosperity.ca/wp-content/uploads/2019/12/ final-full-report-south-island-prosperity-project-prosperity-index-april-17-2019-1.pdf
- 5 https://appsso.eurostat.ec.europa.eu/nui/show.do?dataset=edat_lf-se 04&lang=en
- 6 https://www.timeshighereducation.com/rankings/impact/2020/climate-action#!/page/0/length/25/sort_by/rank/sort_order/asc/cols/undefined; https://www.timeshighereducation.com/rankings/impact/2020/responsible-consumption-and-production#!/page/0/length/25/sort_by/rank/sort_order/asc/cols/undefined
- 7 UN World Urbanisation Prospects 2018
- 8 https://www.startupblink.com/startups/
- 9 https://findexable.com/wp-content/uploads/2019/12/Findexable_Global-Fintech-Rankings-2020exSFA.pdf
- 10 The Business of Cities research, based on per capita concentration of 50 Advanced Urban Services firms with a global footprint in 500 cities.
- 11 Ocean tech includes the following company categories on Crunchbase: Aquaculture, Environmental Consulting, Marine Technology, Marine Transportation, Ports and Harbors, Shipping, Shipping Broker, Water, Water Transportation; as well as results of companies with any of the following words in their title: 'maritime', 'marine', 'ocean', 'port', 'remote sensing' and 'ship'.
- 12 https://teleport.org/cities/Victoria/
- 13 Small firms: less than 100 employees
- 14 Data from dealroom.co, June 2020.
- 15 Data from dealroom.co, June 2020.
- 16 https://www.timeshighereducation.com/rankings/impact/2020/industry-innovation-and-infrastructure#!/page/0/length/25/sort_by/rank/ sort_order/asc/cols/undefined
- 17 Compared to Winnipeg, Calgary, Saskatoon, Quebec, London, Sherbrooke, Edmonton, Kitchener, Windsor, Montreal, Victoria, Toronto, Ottawa, Hamilton, Vancouver, Halifax (source: OECD)
- 18 Crunchbase data, June 2020.
- 19 https://www12.statcan.gc.ca/census-recensement/2016/dp-pd/prof/details/page.cfm?Lang=E&Geo1=CMACA&Code1=935&Geo2=PR&Code2=01&SearchText=Canada&SearchType=Begins&SearchPR=01&B1=All&TABID=1&type=0

- 20 Census data. Current peers for which comparative data is available = Aarhus, Bergen, Providence, Newcastle, Cork, Sunshine Coast, Hobart
- 21 https://www12.statcan.gc.ca/census-recensement/2016/dp-pd/prof/details/page.cfm?B1=All&Code1=935&Code2=59&Data=Count&-Geo1=CMACA&Geo2=PR&Lang=E&SearchPR=01&SearchText=Victoria&SearchType=Begins&TABID=1
- 22 https://www12.statcan.gc.ca/census-recensement/2016/dp-pd/prof/details/page.cfm?B1=AII&Code1=935&Code2=59&Data=Count&Geo1=CMACA&Geo2=PR&Lang=E&SearchPR=01&SearchText=Victoria&SearchType=Begins&TABID=1; https://datausa.io/profile/geo/united-states
- 23 Census and transport agency data, latest available. Core peers included are: Cork, Hobart, Providence, Sunshine Coast, Vitoria-Gasteiz. US average data from https://datausa.io/profile/geo/united-states
- 24 Census data, latest available. Core peers included are: Aarhus, Bergen, Cork, Hobart, Providence, Vitoria-Gasteiz, Sunshine Coast. Wider peers included are: Antwerp, Gothenburg, Helsinki and Malmö.
- 25 Numbeo Cost of Living Index: https://www.numbeo.com/cost-of-living/ in/Victoria
- 26 Census data, project websites and local news agencies. See Appendix for list of projects and sources by city.
- 27 Global top cities: Alpha and Beta cities in Loughbourough University's Globalisation and World Cities, 2018
- 28 https://www.measurementlab.net/static/mlab10year/CIRA%20IPT%20 -%20M-Lab%20Anniversary%20-%20August%202018.pdf; testmy.net see Appendix for details.
- 29 https://performance.cira.ca/
- 30 https://www.submarinecablemap.com/
- 31 Numbeo Quality of Living Index (small city regions = <1m metropolitan population)</p>
- 32 https://monocle.com/magazine/the-forecast/2020/small-packages/
- 33 Numbeo Pollution Index
- 34 Numbeo Safety Index (small city regions = <1m metropolitan population)
- 35 OECD: Metropolitan datasets: https://stats.oecd.org/Index.aspx?Data-SetCode=CITIES#
- 36 Numbeo Cost of Living Index: https://www.numbeo.com/cost-of-living/ in/Victoria
- 37 https://southislandprosperity.ca/wp-content/uploads/2019/12/ final-full-report-south-island-prosperity-project-prosperity-index-april-17-2019-1.pdf
- 38 Based on census data (latest available)

References 50

References

- 39 https://www.medbelle.com/best-hospital-cities-world/
- **40** Numbeo Healthcare Index: https://www.numbeo.com/health-care/in/ Victoria
- **41** https://www.Victoriabuzz.com/2019/04/these-2-Victoria-hospitals-are-among-the-top-15-in-canada-report/
- **42** Numbeo Healthcare Index: https://www.numbeo.com/health-care/in/ Victoria
- **43** OECD data "Land cover in Functional Urban Areas" https://stats.oecd.org/Index.aspx?DataSetCode=LAND_COVER_FUA
- 44 The Business of Cities research, based on data from Open Charge Map.
- 45 https://southislandprosperity.ca/wp-content/uploads/2019/12/ final-full-report-south-island-prosperity-project-prosperity-index-april-17-2019-1.pdf

- 46 https://southislandprosperity.ca/wp-content/uploads/2019/12/ final-full-report-south-island-prosperity-project-prosperity-index-april-17-2019-1.pdf
- 47 https://data.cdp.net/w/krms-c95k/hh8z-a6hj?cur=SUf8zkHyuHc

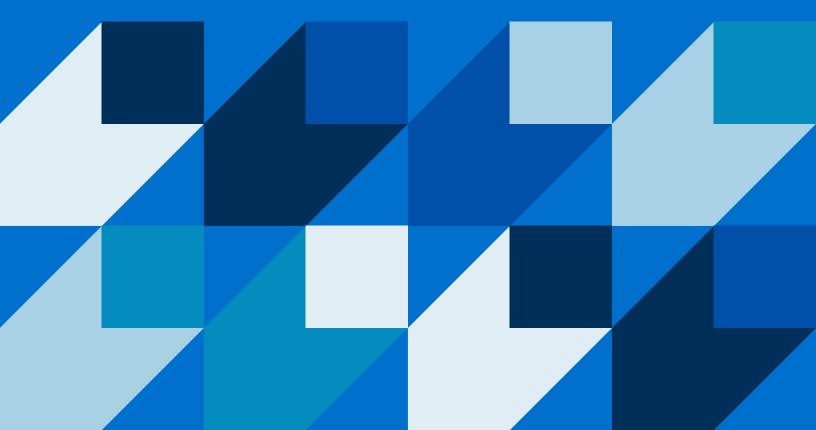
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The Business Of Cities

The Business of Cities is an urban intelligence firm that works with cities and companies worldwide. It uses advanced benchmarking and comparative analysis to help leaders to respond purposefully to the twin dynamics of urbanisation and globalisation. Over the last 10 years it has supported public and private leadership in cities and regions such as Amsterdam, Auckland, Glasgow, Helsinki, London, Oslo, Philadelphia, San Diego, Sydney and Tel Aviv, and collaborated closely with international organisations such as the OECD, World Bank and Brookings Institution.

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Case Studies in Economic Transformation and Change

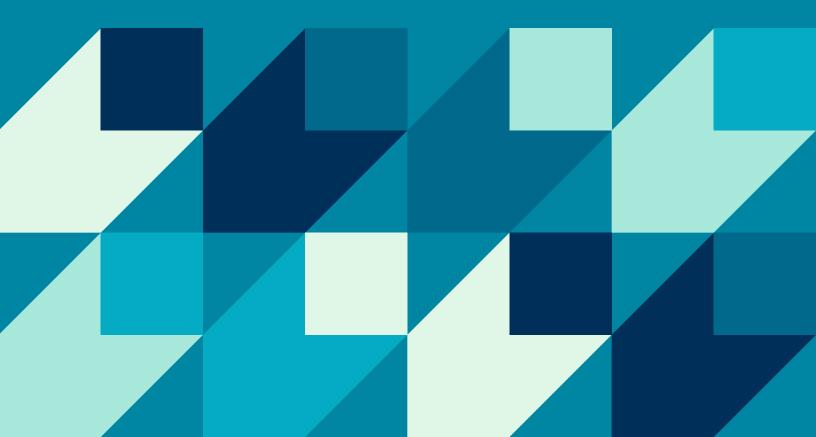


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Executive summary

Around the world other small city regions demonstrate approaches that can help Greater Victoria shift towards a more productive and resilient future. These precedents are relevant to Greater Victoria's future choices about how to emerge from COVID-19 confidently, pivot into a higher value economy, maintain good growth, extend the lifestyle advantage, and coordinate as a single outward-facing region.

This paper reviews more than 20 case studies from other smaller and medium sized city regions across Europe, North America and the Asia Pacific that illustrate a specific element of a journey that these places have gone on to shift purposefully into a new gear. They have been selected because of their relevance to Greater Victoria's current assets and opportunities. The 10 themes are:

- Disaster recovery as an opportunity for longer-term economic transition:
 Christchurch, New Zealand; Hong Kong and Barcelona, Spain
- 2. COVID-19 responses that see regions pursue opportunity to accelerate wider changes: Amsterdam, Netherlands and Busan, South Korea
- 3. High value economic transition to reconfigure reputation and raise economic resilience: Miami, USA and Aarhus, Denmark
- 4. Ecosystem development to create new high skilled jobs and improve productivity: Malmö, Sweden and Helsinki-Espoo, Finland
- Innovation districts as a venue to co-locate firms and build identity and destination pull:
 Eindhoven, Netherlands and Auckland, New Zealand
- 6. Anchor institutions to foster the scale and skills to participate in the innovation economy: Boulder, USA and Newcastle, Australia
- 7. Economic development initiatives to more widely share the benefits of growth: Auckland, New Zealand and Nashville, USA
- 8. Ocean, marine and port clusters that build specialisation and differentiation: Hamburg, Germany; Bergen, Norway and Antwerp, Belgium
- Multi-city collaboration in a region to borrow scale and sharpen complementarities:
 Malmö/Copenhagen and the Holland Metropole (Amsterdam/Rotterdam/The Hague/Utrecht/Eindhoven)
- Enhanced systems for regional economic organisation and delivery:
 Miami, USA; Amsterdam, Netherlands; Stockholm, Sweden and San Diego, USA

Specific implications for each of the ten themes are observed in each of the 10 sections of the main paper below.

Executive Summary 3

Overall the international case study experience points to seven approaches that others have prioritised in order to drive positive change across multiple strategic priorities, and which are relevant to Greater Victoria:

- 1. Treat crisis as opportunity. In the past and present, city regions have shown that periods of crisis are times of acceleration and reset when two or more cycles of change are condensed into one cycle and that advantages accrue to places that confront crisis on the front foot. Opportunities to revisit the industry mix, grow the digital economy, rethink the potential of city centres and public spaces, adapt land uses, experiment with new urban technologies and services, and change how locals and those far away see Greater Victoria, can all be captured. A crisis like COVID-19 creates a higher reputational flux for cities, and the challenge for Greater Victoria is to move quickly and show it can provide what the world now wants from cities local lifestyle, 15 minute city living, safe systems, services on demand, a strong social contract, cutting edge innovations, meaningful jobs, and climate change responsibility.
- 2. Maximise the ambition for Downtown, especially after COVID-19. City regions of Greater Victoria's calibre have continued to find that maximising the residential population and customer base in Downtown is one of the most important tools to simultaneously promote liveability and 'stickiness' for talent, host more of the Innovation Economy, promote a region's assets and identity, pioneer a smarter and more responsive urban environment, enable anchors and institutions to succeed, and animate the public and private sectors around mutual goals and a shared vision. Downtowns after COVID-19 will be different, with city regions recognising they will consist of more specialised and digitally enabled locations, full of convivial and civic uses, with more built-in flexibility, many more kinds of active mobility, and high quality placemaking with the capacity to inspire.
- 3. Turn knowledge assets into a whole region advantage. Smaller city regions that have been shifting to a higher value economy have found more routes to optimise the contribution from their knowledge producers. These include building upon the expertise and buying power of existing university and research institutions, developing knowledge partnerships around social and innovation missions, recruiting other education functions, and promoting university-anchored precincts with real porosity with business. The strategic relocation of post-secondary institutions into the region's core is also often a key dimension of this shift, as these institutions develop a consciousness of their interdependence with the region's success.
- 4. Elevate the scale and expectations of public-private co-ordination. Small city regions featured in this paper have realised that without a high trust and high partnership equilibrium, they cannot compete with regions with deeper pockets and larger talent pools. Shifting beyond zero-sum mindsets, and recognising the shared value of a 'whole neighbourhood' or 'whole region' appeal, has been key whether for local governments, for landowners within business locations, or for companies used to doing business their way. These regions have built organisations and digital platforms to start to work together more systematically and become better-informed and more agile in decision making. Private sector engagement, partnership and leadership has been increasingly core to the success of economic strategy delivery, an innovation district, and neighbourhood place making and place management. Over time the role of public policy tends to shift towards monitoring, fostering, and flexibly supporting the most promising activities, rather than designating, predicting and sole-funding.

Executive Summary 4

- 5. A shared language for success. These city regions have realised that if they are to prioritise investment and productivity, and attract capable companies and catalytic opportunities, they need a sharper collective identity, and a clear and consistent message that communicates the region's appetite for its own economic future and its role within a larger competitive region. For these regions, the voices championing the future are mainstream, and the story is well known. They have used their region's small size as a point of difference, pride, unity, agility and competence.
- 6. Be vigilant about the cycle after this one. The city regions in these case studies have learnt they have to be ready for more than one initial spike of success. Otherwise they will quickly lose the ingredients that made them desirable, and erode the social licence to maintain their success model. This not only means that physical development has to serve the amenity and affordability needs of families and workers. Nor does it only mean proactive protection of natural assets as growth pressures arise. It also means inventing new tools and approaches to deliver on more agendas at once: transport, innovation districts, investment promotion, business environment interface, skills, procurement, and governance reform. The ability to make incremental and continuous improvements later is just as important as the initial leadership catalyst.
- 7. Host the world. A high-value economy also means going after and being receptive to a different orbit of opportunity. Conventions, summits and events oriented to high value business, decision-making, leadership and futures have helped to build reputations of places in which to invest, innovate and conduct business. The role of art, culture and global values and institutions as drivers of this high value shift is also clear. For other city regions, the presence and endorsement of international leaders and influencers has resulted in improved know how and confidence of the existing business base, as well as improved ability to attract opportunity to the region.

Executive Summary 5

1. Disaster recovery and economic transition

Emerging lessons for Greater Victoria:

The shock and severity of COVID-19 should continue to galvanise the region to face up to the imperative to diversify the economy, audit its underlying assets, and accelerate with key infrastructure and district projects.

Speed, agility and purpose are key to a successful regionwide recovery effort, particularly in the first 12 months – 1 or 2 core projects are important to channel the impetus.

Crises create the chance to sustain broader non-partisan alliances. Collaborative governance in the post-crisis cycle is about raising the standards of what is delivered and how.

Unity, competence and ambition are powerful assets to communicate when attracting international opportunity to the region. The success of the crisis response should underpin a renewed sense of confidence among public and private sector leaders to compete and succeed globally.

Diversification and specialised precincts after crisis – Christchurch, New Zealand

Christchurch, New Zealand, was hit by a series of earthquakes between 2010 and 2011 that damaged more than 90% of the City and caused over NZ\$40bn (CA\$35bn) of damage. The City and the national government worked together to fast-track recovery process in three ways:

- 1. Institutionalising recovery in existing planning processes.
- 2. Creating a new cross-sector leadership entity to oversee implementation of new anchor projects.
- **3.** Taking steps to ensure that public and indigenous voices guided the recovery trajectory. A Fast-Track Recovery: Anchor projects and Economic Diversification

Participatory planning and a focus on strong community engagement provided the social licence for an ambitious globally-facing recovery process. To fast track rebuilding the city, the Canterbury Earthquake Recovery Act (CER) passed in February 2011, mandating Christchurch City council to develop a Recovery Plan, adopted within 9-months of the legislation.² The Plan enhanced public participation, drawing over 106,000 ideas from residents through web-based participation, in person conferences, public workshops, and stakeholder meetings. All plans relating to recovery targeted indigenous communities, by making their leaders part of the expert group governing the process, and by using traditional language as part of the documents.

Anchor Projects and planned economic precincts facilitated and concentrated public and private investment to aid recovery. Infrastructure projects were designed to anchor 11 new identified precincts, each built around sectors that would also help to foster economic diversification (see Figure 1). These included public benefit projects (parks, libraries, and public space) as well as those designed to build local capacity (commuter rail, convention centres).

Public investment also enabled the creation of the SALT district, a concept driven by local investors, businesses and authorities targeting engineering, technology, and research-based industries.³ This piloted a new kind of place activation, including community-funded murals and a permanent street art exhibition. The project won best major place project at the Asia Pacific Place Leaders awards, because of the success in encouraging owners and stakeholders to stop acting as separate entities and start becoming a cohesive neighbourhood with shared values. A charitable trust for SALT has since been formed to give a strong platform to facilitate future events and activities.

As a result of this more spatially-attuned mindset, investors and civic leaders have since developed a much clearer consciousness about 6 or 7 hyperlocal communities and what makes each neighbourhood unique in and around downtown. Forming a public-private partnership, they have attracted investment into events and projects that provide experiences that draw locals and tourists. They have helped raise the bar for new development and public realm, so that Christchurch aspires to the standards of international cities like Melbourne or Milan, and does not accept lower calibre outcomes.



Source: Adapted from Wikipedia and Otakaro Ltd. 4

SCIRT: A public-private governance entity to fast-track recovery projects.

Part of the strategic recovery process included the creation of two separate entities to rebuild faster and more costefficiently: the Canterbury Earthquake Recovery Authority (CERA) and Stronger Together Infrastructure Rebuild Team
(SCIRT). In particular, SCIRT was a collaborative coalition of public and private sector organisations that were incentivised to cut costs by working together to rebuild publicly owned infrastructure. The payment model incentives adopted a pooled system of profits, where the difference between target cost and actual cost was added to a shared pot to be divided by the contractors based on their work share.

Facing globally and seizing catalysts after economic crisis – Barcelona, Spain

Barcelona has always been a centre of Mediterranean trade. But by the late 1970s, the city was beset by unemployment, a decaying physical environment, and cultural decline: between 1970 and 1985, it lost 42% of its industrial jobs and 69% of its construction jobs.⁷

Communication of global orientation and ambition to build confidence

In the early 1980s, upon Barcelona's return to democracy but at the peak of the economic crisis, the city and surrounding municipalities formed a powerful Metropolitan General Plan to pursue a more attractive urban development model. Under the pragmatic and inclusive leadership of Pasqual Maragall, the mayor from 1982 to 1997, the city council's administrative structure was reformed to deliberately communicate its global orientation and ambition, distinctive Catalan culture and style and cosmopolitan openness.⁸

Maragall built a positive new vision for the city, fostered productive relationships with trade unions, civil society and businesses, who became more collectively invested in high-quality urban and waterfront design. In the post-crisis window, he and other leaders successfully convinced the influential decision-makers, designers and developers to endorse the role that art, architecture, design, and sport could play in capturing the imaginations of local and international audiences. ⁹

The catalyst for re-invention and partnership

The award of the Olympics in 1986, in the same year as Spain's accession to the EU, proved to be a defining moment in Barcelona's transformation.

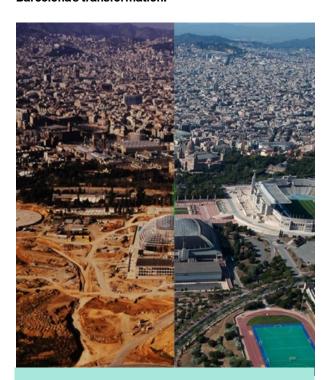


Figure 2: Barcelona's Olympic Stadium and surroundings, before and after the Olympic Games

Not only did it trigger a historic cycle of investment in the built environment, telecommunications systems and airport connectivity, but it also strengthened the region's self-confidence. A special urban development apparatus was established to carry out related urban improvement works. This allowed Barcelona to eliminate the rail line that separated the city from the sea, helping to activate new urban areas close to the waterfront. Improvements to the city's road and sewerage infrastructure, together with new public spaces, proved critical in generating incentives for private investment, especially in the tourism sector.¹¹

Overall, the Olympics not only helped to enable a collaborative ethos to be forged between the public and private sectors, but also encouraged business to become a much more active investor and leader in the region, spearheading new kinds of placemaking. The establishment of both Barcelona Activa, a cutting-edge development agency, and Barcelona Global, a business leadership group dedicated to attracting international talent to the city, reflected the city's new proactive mindset. Barcelona became an established and more diversified destination for media and the arts, education and tourism, and began its shift into innovation and entrepreneurship into the 1990s and beyond.¹²

Source: Barcelona City Hall 10

Mobilising business to lead after crisis — Hong Kong and SARS

In the late 1990s and early 2000s, Hong Kong's economy faced the triple burden of political uncertainty relating to constitutional changes, the Asian financial crisis, and the SARS outbreak. A purposeful response from the business community as well as from government helped the city to bounce back quickly.

In April 2003, the city welcomed fewer than 500,000 visitors, a 65% drop on the same period the previous year, and in May, hotel occupancy rates stood at 15%, down from 82%. Government forecasts assessed the overall economic impact at \$2bn per month.

Hong Kong responded quickly and purposefully, aligning government efforts with those of business leaders, who stepped up to marshal the recovery effort by:

- 1. Spearheading a three-phase recovery plan designed to instil investor and visitor confidence
- 2. Stepping up connectivity improvements to become a gateway to larger regional markets
- 3. Accelerating diversification from finance to culture, through campaigns and development

3-phase recovery plan to re-instil confidence

Almost immediately after the outbreak, the Hong Kong General Chamber of Commerce launched a 3-phase plan to support "Business After SARS", with 5-week, 5-month and 5-year time horizons:¹⁵

- 5 weeks (re-invigorate): reinforce Hong Kong's capacity to bounce back from the crisis through consensus and confidence building
- 5 months (re-launch): communicate hygiene and safety, target business travellers and high-end customers, highlight regional assets
- 5 years (re-build): lay groundwork for sustained, longer term effort to improve quality of life and confront structural issues with a view to strengthening future resilience

Connectivity improvements to grow gateway status

Together, the Hong Kong government and business leadership sponsored a new cycle of development and vigorously asserted the city's credentials as an interface with China. The Chamber of Commerce launched a campaign following the financial crisis to enter into a free-trade agreement with Mainland China, signed in 2003. Meanwhile the government launched the Individual Visit Scheme, allowing travellers from mainland China to visit Hong Kong and Macau on an individual basis as opposed to on business visas or on group tours, for the first time. The scheme began a 15-year surge in the number of mainland visitors and a big rise in B2B relationships.

Diversification from finance to culture and soft power, through campaigns and outreach

Business-sponsored campaigns and outreach were also a significant part of the recovery effort. The "Asia's World City" brand that was created endured for well over a decade. The Hong Kong Tourism Board kickstarted a 9-month marketing response, including a "Hong Kong Welcomes You" package of travel incentives and shopping discounts, and TV and advertising campaigns featuring well-known celebrities and ambassadors. West Kowloon Cultural District was also begun as a way to develop a more rounded offer and reputation.

2. COVID-19 responses

Emerging lessons for Greater Victoria:

COVID-19's public health crisis and focus on long-term resilience is seeing gains start to accrue to city-regions that proactively capture the opportunities to build their international reputation for safety, proficiency, climate change adaptation, environmental stewardship, and the green economy.

Digital tools and platforms are becoming more important to unlock civic innovation and better-informed decision making, as well as to enhance collaboration and information-sharing between the public, private and civic sectors.

Multi-level government co-operation is likely to become a more decisive element of the next cycle. The inclusion of scientists, private businesses, religious leaders and other community leaders in decision making processes, can help to enhance trust as well as decrease financial risk.

Forward thinking — Amsterdam's response to COVID-19

Amsterdam has quickly established itself as a leader in how to safely reopen different economic sectors. But what has really set the city apart is its appetite to use the public health crisis as an opportunity to push for innovation and longer-term changes to address underlying local issues.

An Inclusive Local Government Response

City and metropolitan officials have made sure to include city residents in the recovery process, connecting them to public services and each other through curated online platforms. For the short term the city created its own emergency fund of 50m euros (\$77m CAD) to provide access to internet and provide relief for certain affected businesses – especially arts and culture companies -(via waivers of advertisement taxes, terrace taxes, fees for markets etc.), as well as funding for individual art projects.¹⁹ The city also quickly saw the value of creating interactive platforms for citizens to cooperate, promote local initiatives, connect with each other, and of partnering with business and investment agencies to allow startups to continue receiving seed funding.²⁰

Long-Term Outlook: Using Crises to Restructure and Innovate

Prior to COVID, the tourism industry was one of the main pillars of the city's economy, bringing in more than €6 billion (\$9.2 billion CAD) a year, although concerns of over-tourism and loss of character from low value tourism had grown. As soon as tourism flows came to a halt, the Mayor and other officials, in collaboration with residents and businesses, took the opportunity to strengthen industry regulation, for example through tightening licensing requirements and limiting the number of available licenses for peer-to-peer vacation rentals, and enforcing a ban on stores catering solely to tourists.²¹

The pandemic has also spurred the city's efforts to shift into the Circular Economy. Its 2025 Circular Strategy is moving from aspiration to concrete initiatives in using circular principles to production and consumption in order to drive job creation in high tech and innovation sectors. (See "Amsterdam City Donut" below).

The built environment is one of three pillars of the approach (along with food supply chains and consumer goods). Amsterdam is using its role in spatial planning to influence precinct design, grant construction permits, commission public space, and cooperate with business and developers. Amsterdam is also exploring adjusting land fees or levies. Specific changes include:

- **1. Setting stringent circular criteria** for new and existing buildings in key precincts: building with fewer materials, building with reused and/or biobased materials, and adaptive and modular construction.
- 2. A circular procurement policy for public space, public land and buildings, schools, land allocation tenders, and renovation of private and social housing, that challenges the market to innovate.
- **3.** More financial instruments and incentives to use recycled and reusable materials, and adoption of a whole life cycle approach to assets.²²

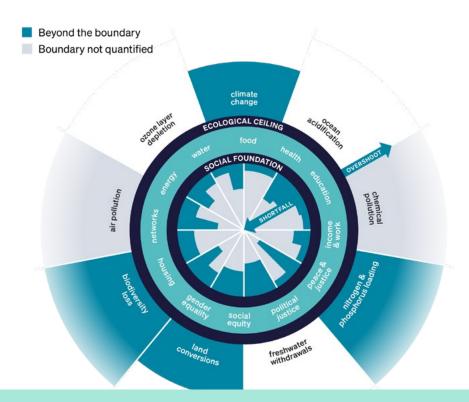


Figure 3: Amsterdam's new circular economy "doughnut" strategy, adopted during COVID-19

Source: Inhabitat. 23

Rapid response and positioning as a demonstrator — Busan and COVID-19

Busan, South Korea's second city, not only managed to implement a two-track emergency response system to implement quarantine and curb economic impact.²⁴ It also embarked on a new level of collaboration between government leaders, scientists, financial actors and the wider region to form a bold and urgent response to wider economic agendas.

First Track: Collaboration and Consensus Building at all governance levels

At the local and regional level, Busan created several teams to enact its "Test, trace and Isolate" protocol under one umbrella: the Busan Disaster and Safety Countermeasures Headquarters. To help streamline local and regional efforts, several Busan-Ulsan-Gyeongnam Joint Video Conferences were held, allowing the different local agencies to quickly establish a joint response system at the metropolitan level, including through embedding COVID-19 information sharing early on in the response.²⁵

Second Track: Mitigating the downsides through clear financial planning, local incentives and certification schemes

The city of Busan also quickly created an Emergency Economic Recovery Response Headquarters to facilitate collaboration between the public and private sectors and enhance public trust. To boost the economy and minimise the threat to local companies, Busan also:

- <u>Protected SMEs</u> by signing a joint agreement with BNK Busan Bank to extend loan maturity dates, applying special interest rates and providing an emergency fund to local business owners of 100 billion KRW irrespective of credit ratings.²⁶
- <u>Created its own local currency</u>, only usable in the city, to enhance local spending. The Local currency, available by preloading a card of mobile app with national currency, the local currency provides a 6% cashback reward upon payment, designed to spur local demand and spending.²⁷
- <u>Launched the Busan Clean Zone</u> Business certification scheme to reaffirm confidence among investors and visitors, revitalise small and micro businesses in neighborhoods, and ensure that companies could continue trading.²⁸

Third Track: Using COVID-19 to prioritise other public policy and change agendas

To continue economic growth and create a path towards the future, Busan metropolitan government is now strengthening partnerships with business to upgrade city systems and industry competitiveness. In particular it is prioritising investment in clean energy²⁹, efforts to enhance the port and foster competition and innovation within the tourism industry,³⁰ and pivot to creating innovation hubs for SMEs. ³¹ It has expanded its work with Amazon Web Services to pioneer real-world public sector technology reforms around traffic, health, well-being, logistics, and the environment, including internship programmes for local students to applying cloud technology to public sector challenges.³² Expansion of free trade zone arrangements around the Port aims to position Busan as a major player in maritime logistics and innovation.³³



Figure 4: A restaurant in Busan displays a "Busan Clean Zone" certificate to reaffirm confidence among consumers

Source: Wikimedia 34

3. High-value economic transition

Emerging lessons for Greater Victoria:

A high value economy for most small city regions who have achieved it has been a gradual outcome of long-term integrative goals: niche specialisation, a conducive business and enterprise climate, highly collaborative and well-incentivised knowledge institutions, and continuous infrastructure investment.

Upgrades to art and culture can be an important catalyst for transforming the profile of a region and triggering the rise of creative industries that directly and indirectly support cutting edge businesses, and drive a regional reputation as a place in which to invest, innovate and conduct business.

A high value economy spanning a variety of sectors is not only a driver of productivity in the medium term for smaller coastal regions: it is also proving essential in the longer term for them to bounce back from global economic shocks, re-calibrate their specialisms to new global demand, and ensure they do not get left behind or systematically lose residents to more dynamic locations.

International evidence from OECD, World Bank, the What Works Centre, and LSE point to a number of core approaches that can support smaller regions in the vicinity of larger hubs to grow their productivity:

- 1. Increase transport connectivity with regional locations, especially larger urban economies
- 2. Enhance business climate advantages such as digital connectivity, enterprise culture, and customised skills pools.
- 3. Develop complementarity with larger urban economies (Vancouver, Seattle) via sectors, supply chains, differentiation.
- 4. Develop clustered specialisations that play to strengths and foster enterprise.
- 5. Sustained effort to understand the needs of preferred customers and meet them.
- 6. Optimise the role of Knowledge Anchors and Networks and other large institutions in the region.
- 7. Focus on competition outside the mega-region and work as a regional team (ie Cascadia) to attract talent, investment.

Elements of these approaches are visible in Miami and Aarhus.

A common goal to diversify from 'sun and fun' — Miami, USA

Over the last 15 years, Miami's shift to a higher value economy has rested on a deliberate pivot to culture, facilitated by forward-thinking public, private and partnership investments in cultural infrastructure and events, creative spaces and arts initiatives across the city.³⁵

During the 1980s, Miami experienced large-scale creative brain drain. Business leaders from the Miami region came together, motivated by the risk of losing competitiveness due to the city's relatively peripheral location, comparatively undiversified economy, and negative brand image. In the mid-1990s, Mayor Penelas appointed a prominent business leader Jay Malina to spearhead the coordinated response of the region's businesses. Under One Community One Goal, 42 public and private partners came together to jointly pursue a long-term citizen owned agenda around diversification, trade, cosmopolitanism and entrepreneurship.³⁶

This commitment has left a substantial and positive legacy on Miami's economic competitiveness. It enabled the region's:

- Diversification into 7 high value sectors
- Pursuit of Latin American HQs of global firms (eg. HBO, Fedex)
- Investment in culture and Art Basel in a new kind of visitation and philanthropy
- Substantially improved air connectivity
- · Improvements in economic development agency
- Downtown zones transformed into contemporary mixed income districts, home to incubators and start-ups
- · Shift from "sun and fun" reputation towards one of design, culture, trade and innovation
- Longer-term retention of career age talent ³⁷

Since 2000, Miami has had great success establishing itself as a hub of contemporary art, fashion and architecture, encouraging creative talent to return to the city, and more importantly, providing them with a reason to stay. The role of large-scale catalytic events, prizes and incentives has been important in attracting artists to visit, showcase their work, and stay in Miami, alongside the role of the cultural infrastructure and arts spaces in providing focal points. The arrival of Art Basel in 2006 provided both an organising brand for cultural investment, and a means to recruit public and private investors to support art-based investment at different scales.³⁸

Leading the Transition

Miami's cultural improvements and economic diversification have been underpinned by an entrepreneurial and visionary group of developers, as well as enhanced financial and district management tools.³⁹ Neighbourhood management bodies run and financed by the private and public sector have been key to Miami's creative use of public space and diversification of locations. There is also a strong culture of Regional Planning spanning the three main cities in Southern Florida, which has overseen investment in infrastructure, public space, pedestrianisation, public safety and security.

Intersection between Culture, Business and Trade in Miami Today

Culture has worked hand in hand with efforts to develop Miami's reputation for trade, business and higher education.

Today, there is a strong link between Miami's cultural revival and its resurgent reputation as a city region to conduct business, innovate, and raise families. As Miami develops its role as a hub city for Latin America and the Caribbean, culture underpins its claim to host other high order functions. The Miami Customs District is one of the top 10 in the U.S., and with world-class facilities like Miami International Airport and PortMiami, Miami-Dade County has become a global centre for international trade. Both imports and exports have risen in recent years, and total trade in the Miami Customs District exceeded c.CAD\$160 billion in 2018.



Figure 5: The 7 tenets of Miami's "One Community, One Goal" initiative

Source: Miami Beacon Council 42

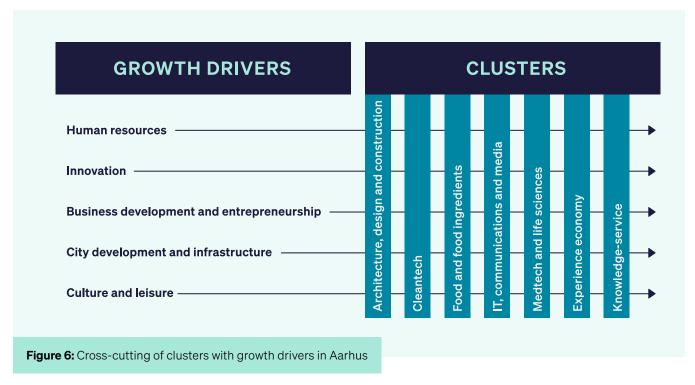
The new diversity of Miami's economy has helped the city to absorb some of the negative impacts of the COVID-19 pandemic. Like all major global cities, Miami is experiencing a downturn. But despite the cancellation of key events like Art Basel and the satellite festivals it has spawned, other areas of Miami's very diverse and inclusive business sector have been able to adapt quickly and positioned strongly in areas of digital healthcare and resilience management.

Institutions driving internationalisation — Aarhus, Denmark

Aarhus is Denmark's second city after Copenhagen and, as well as being the principal port of the country, is also the largest centre for trade, serves and industry in the central Jutland Region. It is the fastest growing city in the country, thanks to a successful economic transformation over the past decade, which has resulted in the attraction of 15,000 new residents and the creation of over 20,000 new jobs in the knowledge, service, and innovation industries.⁴³ Aarhus' successful transition has mainly been due to strategically targeted, publicly supported investments, long-term city government support of a pro-business, pro-education culture, and a shift from local anchor institutions to support specific cluster niches.

Long-term city support of a pro-business, pro-education culture

Over the course of 20 years, the City of Aarhus, collaborating with the business community via the Board of Business, has developed and realised multiple plans to create a city based on culture, business and education, all managed through a yearly implementation plan. The plan provides a clear framework for future business development and lays out policies characterised by an unusually high level of willingness to act on sound ideas, even if long-term solutions are not yet fully visible. The greater Aarhus area is also organised into Business Region Aarhus in order to coordinate synergies between the City of Aarhus and the surrounding 11 municipalities, in laying the foundations for future business growth.



Source: City of Aarhus 44

Leadership of the University towards economic diversification and high value clusters

More than 10 years of high cooperation and coordination between the city government, businesses, organisations and knowledge institutions have helped to spur the creation of sizeable economic clusters in industries with high growth potential. Financed predominantly through public private partnerships, and led in part by Aarhus University, these clusters have helped to put Aarhus on the map as an innovation city, and have also driven wider spillover productivity effects throughout the economy.

Aarhus University is a key partner in most of the economic initiatives in the City and its surroundings, and acts not only as a financial partner, but also as a funnel for talent in the different industries, and curator of the clusters themselves. Examples include:

- **INCUBA Science Park, an IT and biomedical cluster.** Partly owned by Aarhus University, and partly owned by the private sector, the Park has been successfully fostering closer relationships between public institutions and start-ups.⁴⁵
- **Aarhus Development Park,** home to several specific industry-related parks including Navitas Park which shares with the Aarhus School of Marine and Technical Engineering and AU Engineering.⁴⁶
- Agro Food Park in nearby Skejby, which facilitates cooperation between companies and public institutions working within food science and agriculture, led in part by Aarhus University.⁴⁷
- An "Innovation Institute", which assists in the translation of ideas into viable business propositions and continues to partner with Aarhus University to increase throughput of entrepreneurial talent from the region.⁴⁸

City government has geared its economic strategy strongly around clusters, with each of the 7 clusters tightly linked to current and future infrastructure. One example of this is the upcoming "axis of knowledge" light-rail infrastructure initiative, which will involve the creation of a new light-rail system to connect clusters along the city's central axis and ensure collaboration and cross-pollination.⁴⁹

Clear internationalisation strategy and focus on attracting corporate HQs to the city centre

Aarhus' shift to a higher value economy has also meant much more purposeful attraction of international talent to the region. As well as restructuring the proposition for businesses, the city launched the Business Aarhus pilot project, a one-stop service centre for international businesses and employees. In 2009, Aarhus City council adopted a new international strategy designed to help grow and attract international talent and investment. The strategy is supported by an Internationalisation Committee with representatives from the public and private sectors and a toolbox and campaign strategy designed specifically for companies seeking international talent.⁵⁰

Finally, successful economic transition has been accelerated by a focus on city-centre reinvestment and the attraction of large corporate HQ functions. Aarhus has worked hard to ensure that changes in priority land use for the city centre have gone hand in hand with public realm improvements and private sector investment in order to create a city centre that is more attractive for HQs of large global companies.

4. Ecosystem development

Emerging lessons for Greater Victoria:

Nurturing a handful of large innovation companies is important for smaller regions to build the scale of jobs and cutting edge experience, and to draw talent from all over the world to the region.

Recognise the strong innovation context in the Cascadia region, look to be part of it, and leverage it. Smaller places in much larger regions focus on connections, complementarities, and collaboration in order to help more of their firms survive, scale and overcome the so-called 'valley of death'.

Balance the focus on specific locations with clear attention to regionwide ecosystem development, which relies on fundamentals of business demand, liveability, talent attraction, spin-outs, spin-offs, spin-ins, corporate ventures, real estate and tenant services, and high levels of trust, openness and networking among key players.

Developing and communicating Greater Victoria's success with other innovation agendas, and building the region's innovation brand and reputation, will be an important priority.

What is the innovation economy and why does it matter?

Innovation is more than a single 'tech sector' or a 'start up scene' — it describes how whole portions of an economy embrace technologies and change. The 'innovation economy' describes how established industries experience new pressures and opportunities as a generation of technologies come to the fore. It has always been with us, but this time it's at a bigger scale and spread across more industries. There are an estimated 100 million innovation economy employees worldwide.

Cities and regions are realising that the activities and the interaction among these sectors and firms also trigger larger chains of multiplier effects for the rest of their economy. Jobs in the innovation economy more than double the demand for local professional and non-professional services compared to those in traditional economies.

The Innovation Economy is not space blind. Most industries' innovation models depend on proximity between firms and institutions, while the innovation economy talent pool benefits from larger urban markets and increasingly prefers urban environments and lifestyles.

For regions like Greater Victoria, the innovation economy matters because:

- It can provide a source of jobs that are comparatively well-paid and better able to withstand global cost pressures, helping
 to enhance resilience to global economic shifts and shocks and improve productivity
- Interactions among the sectors and firms that constitute the innovation economy trigger larger chains of multiplier
 effects for a whole region, not just urban cores. Supply chains for the innovation economy are deep and diverse, and the
 innovation economy efficiently re-uses and restructures land uses and the built environment.
- Innovation economy activities are well positioned to drive exports of high value goods and services, helping to improve resilience, reach and influence internationally.

Targeted ecosystem development — Helsinki-Espoo, Finland

The Helsinki-Espoo region consists of one larger and one smaller city, and is one of the most innovative in Europe. The two cities, which are located less than 20km apart, are home to a vibrant mix of academic institutions, local research institutes, headquarters of tech and telecoms companies, and several specifically designated innovation hubs, which serve as platforms for collaborative innovation.⁵¹

Helsinki-Espoo illustrates the importance of enshrining whole-region collaboration within an economic strategy with explicit targets and action points, and responsibilities for regional development organisations, educational institutions and citizens. The recent West Metro Growth Corridor infrastructure project, designed to link Espoo's Innovation Garden to Downtown Helsinki, reflects a regional shift towards a whole ecosystem approach.⁵²

New models of education as innovation drivers - Aalto University

In Helsinki and Espoo, post-secondary education courses have been designed around the concept of challenge-driven education in order to drive entrepreneurial thinking and actions. Across the region, 75% of Master's programmes are now developed in collaboration with companies.⁵³ For example, Aalto University's Product Development Project (PDP) adopts a problem-based learning approach designed to help local companies overcome issues.⁵⁴ The Aalto Design Factory provides a physical space to host courses and is used by 1500 students each year to develop prototypes to test new innovations in support of local company goals. The university specifically prioritises facilitating businesses' access to research with high innovation potential over more traditional methods of IP-related technology transfer.

Interconnected networks and collaboration – Espoo Innovation Garden

Helsinki-Espoo shows how innovation ecosystems function best when there is a high degree of collaboration, trust and openness throughout the industry mix which can be concentrated in key locations. The Espoo Innovation Garden has emerged as a new locus for collaborative innovation activity by providing an interconnected network of smart infrastructures and a space for citizens to come together with companies and universities to improve the area's quality of life. There is no formal, top-down governance model, which has led to much wider participation among local residents, R&D units, research institutions, corporate organisations and societies. The Mayor's Office serve as the primary matchmaker, advisor and facilitator, and benefits from the open platforms and processes that the Garden provides.



Reorganising for innovation – how Malmö put itself on the innovation map

A prosperous industrial city until the 1970s, Malmö made great strides in the mid-1990s to update its identity and reinvent itself as a leader in the green and knowledge economy. It developed a new development strategy, catalysed by the relocation of Malmö University, and transformed former industrial areas in the western parts of the harbour to pioneers of environmentally sustainable buildings.⁵⁸ Malmö is now the 2nd largest cluster of start-ups in Sweden, after Stockholm, and the region boasts one of the most dynamic start-up ecosystems among small city regions globally.

The role of local anchors in re-inventing and cross-fertilising new industries and clusters

Malmö cultivated sizeable clusters in sectors ranging from gaming, media and IT to life sciences and pharmacology.

Over the past two decades, the region hosted the growth of world-leading companies such as video game studio Massive Entertainment, whose success has in turn helped to scale up small and medium-sized companies within a strong culture of sharing between big and small teams. In the last few years, some of the largest players in the digital games industry have set up or invested in Greater Malmo: King, Supercell, Avalanche, Massive and Ubisoft, among others.⁵⁹ Massive helped to pull in many other game developers, who have found their own studios in the region or joined other emerging Malmo companies.

The reinvention of other industries in Malmo has been the product of deliberate joint ventures into new technology organized between public bodies, Research Institutes, domestic companies and local municipalities. Such a model for example led to the creation of the world's first automated textile recycling facility.⁶⁰

An important factor for some of Malmo's clusters is that specific organisations have become the go-to one-stop-shop for public officials, politicians, overseas businesses, and leaders from other industries, co-ordinating meet-ups and knowledge-sharing sessions.

"Maybe it's the smaller city, or southern feel. Either way, Malmö is perhaps where Stockholm was around 10 years ago, showcasing its flexible innovation to the rest of the continent, and indeed the world."

Vedrana Tabor, CEO, Boost Thyroid healthtech.

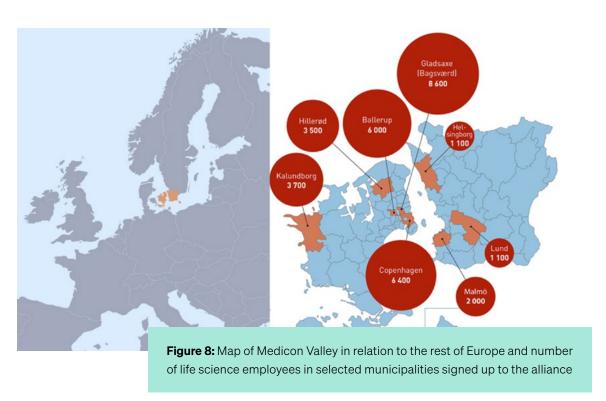
Regional integration to facilitate knowledge transfers and boost the ecosystem

Malmö's global innovation proposition has been strengthened by better physical and brand integration with Copenhagen, the Nordics' largest labour market. The Öresund bridge and rail line that now connects the two cities, and the efforts to coordinate and pool knowledge and life science assets that ensued, has raised two-way flows and communication and in effect created a more dynamic single 4 million person market. While Copenhagen inherits from Malmö a whole set of assets, opportunities and capabilities that would not otherwise be in the region, Malmö acquires from Copenhagen access not only to the scale that enables its leading industries and edges to amass greater depth, but also to much larger housing and labour markets and to a more advanced infrastructure and connectivity platform.

Enhanced connectivity also brings with it access to a 100 million person+ mega-region market. Malmö is set to be a key node in the Scandinavian-Mediterranean project – a future transport and innovation corridor running from the South of Italy to Stockholm and Oslo. This project is reducing transport times and integrating Malmö's innovation ecosystem with the rest of Europe and effectively expanding local companies' labour and consumer catchment.

Medicon Valley Alliance: a cross-border life sciences hub to promote global visibility

In recent years, stronger partnership with its larger neighbour Copenhagen has also allowed Malmö to be **part of a whole region** proposition called Medicon Valley. This area is home to over 350 leading Biotech, Medtech and Pharma companies⁶¹ and through the Medicon Valley Alliance (MVA), the two regions have combined their life science clusters to increase visibility and promote external links to other top-class life science hubs. As a result Malmö has managed to attract major companies to the region and to more closely play to the strengths of its existing innovation institutions, including expertise in bioengineering and biological surfaces at Malmö University.⁶²



Source: Adapted from BioPharma Reporter and Nordic Life Science Insight 63

5. Innovation districts

Emerging lessons for Greater Victoria:

Authentic character and identity tied to the history of the area is critical to a centrally located innovation district. Thriving districts have a 'whole place' perspective with innovation space pre-requisites matched with placemaking and rigorous community curation.

Lean and proactive district leadership, even with limited resources or capacity, can play an essential role in curating the mix and ensuring that as demand rises the project continues to align with the innovation mission.

Private sector engagement, partnership and leadership is important as innovation districts evolve. Public policy typically shifts towards facilitation and fostering connections, rather than designation or up-front investment.

Use Greater Victoria's urban infrastructure, land and water as a platform for experimentation. The variety of uses and infrastructures can be used as a basis for experimentation in new urban and ocean solutions. By inviting and permitting creative experiments, and encouraging ideas to co-locate with production, the city can observe which activities blossom and build a strategy around them.

Alongside the current Innovation District proposition, ensure there is flexibility and market choice that investors and growing firms might want, promoting multiple locations. Inspiring projects succeed when they complement other districts and are flexible to market preferences and choices. Ultimately multiple distinctive locations will emerge.

A co-operation platform that supports innovation locations — Eindhoven, Netherlands

Eindhoven, the Netherlands' 5th city, is now globally recognised as a world-leading Lighting Technology ecosystem and despite its small size has cemented its position as one of the main cornerstones of the Dutch economy. This is mainly due to the successful diversification of its economy and pivot towards innovation.⁶⁴ In the 1980s, the city lost most of its jobs, as the two main employers, Phillips and DAF had to downsize. Eindhoven had to strategically diversify by intensifying relationships between tech-driven companies, research institutes, universities and local government.⁶⁵

The Brainport Model: all players have clear roles and responsibilities

The initial strategic model was based on creating a development company to drive "triple helix" relationships between large firms, SMEs, the university and government. Its board is made up of local government officials, presidents of knowledge institutions, and business representatives of the four main business anchors. 66 The local government acts as a facilitator, providing financing and fostering collaboration. Education and research provide the strategic focus and knowledge to develop new ideas, and businesses provide funding and cooperation. 67

Five specialised campuses to promote cross pollination

To create economic value and facilitate business development, the city prioritised the creation of five clustered campuses, each with a specific area of expertise and closely linked to the others by communication networks that facilitate trust and collaboration. The five campuses focus on different niche sectors, each with their own anchor companies, that foster competition to promote innovation within the start-up ecosystem surrounding them.⁶⁸

As Brainport has evolved, it has taken seriously the need to continually reinvent itself by engaging with the wider community. The Brainport Development Board uses scenario planning exercises developed with experts and representatives from the ecosystem, ensuring constant adaptation and maintaining competitiveness with international innovation hubs.



Source: ITS in Europe.⁶⁹

Innovation community curation — Auckland, New Zealand

Auckland is an example of a city that has had great ambition to create an innovation district in its centre, but only limited capacity to support and finance one. As a result, the city government decided to focus first on creating the necessary conditions to catalyse the innovation ecosystem. The location, at the core of a regeneration project in the CBD and close to the main transport hub, offered many advantages to be a flagship of the region's ecosystem while boosting the urban vibrancy of the redeveloped Wynyard Quarter.

A 'whole place' perspective tries to optimise all spaces within the district

A multi-agency approach, arising from Auckland's unique and complex fragmented governance, helped to create the path for a 'whole place' perspective. The city council body responsible for purchasing, managing and selling property, Panuku Development, drove the physical regeneration of the waterfront, while a development agency, Wynyard Quarter, was also formed to deliver a place-based approach. ATEED, Auckland's economic development agency, was also involved in the regeneration, although it did not own any physical assets. This limitation encouraged them to think innovatively: in 2014, ATEED developed a prototype to test demand in the area, which then led them to work with Panuku Development on the design of 3 buildings that would provide a range of spaces to support business growth pathways by enabling firms to grow and move between sites, and access a range of services such as events spaces and training rooms. ATEED then adopted a more permanent "Campus Strategy", focused on delivering the space for co-location of early stage businesses while building on the growing vibrancy of the wider Wynyard Quarter to create a 'whole place' experience."

Pre-emptive curation of the ecosystem is needed to seed innovation

Aware that tensions could arise between commercial and innovative goals in this prime real estate location, the economic development agency prioritised protecting and curating the innovation ecosystem. Although they had the option to develop 24,000 sqm, ATEED decided to develop only half of it as the precinct's aim was to create a hub for people wanting to spend time there, rather than to accommodate the maximum number of innovative firms. Moreover, the growing interest from active corporate tenants and multinationals self-identifying as part of the innovation district resulted in the boundaries of the district expanding beyond the 6 initial blocks. As a result, ATEED's focus shifted from physical development to the provision of community services such as events to activate this space and ensure that businesses moving on would stay connected to the community and help it grow. They also launched a Public Innovation Lab with the aim of spurring collaboration between the public and private sectors.⁷¹

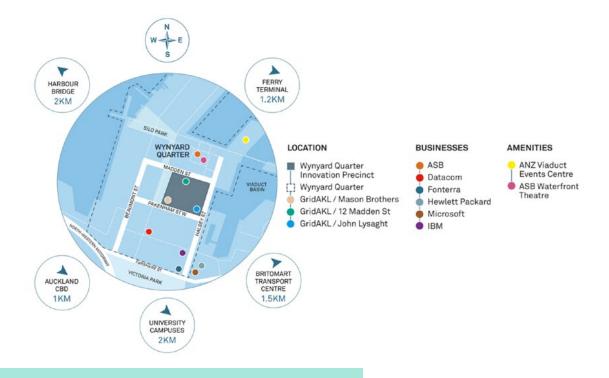


Figure 10: Map of GridAKL within Auckland's Wynyard Quarter

Source: https://gridakl.com/how-to-get-here/

Partnerships as a tool for shared commitment to an innovation district character

To overcome challenges of fragmented governance and ownership of assets, the economic development agency, together with the innovation campus, prioritised forming partnerships as a way to influence developers' tenant strategies. For the next cycle of development, ATEED and the innovation campus (GridAKL) are focusing on building more partnerships, especially with overseas markets and innovation hubs that can support a transfer of skills, benefits and market opportunities. Other key priorities include finding an anchor institution and increasing public and 3rd party investments.

6. Anchor institutions

Emerging lessons for Greater Victoria:

When operating at their maximum on behalf of a smaller city region, anchor institutions boost private investor confidence, build bridges between knowledge and entrepreneurship, and allow regions to build new economic edges, and stimulate a more rational and intelligent use of regional infrastructure. The roles they play allow a smaller region to retain its pull versus larger regions.

Anchors in small city regions are often the heart of efforts to move beyond short-term opportunities and political partisanship, and make the case for additional infrastructure at the right time. They are a source of leadership, expertise and long-term thinking on everything from the visitor economy to housing, growth management, social participation and environmental improvement.

In times of crisis, anchors play important roles in helping a region look ahead and at the same time connect with the past, re-build self-confidence, deliver on a social mission, and achieve national and international visibility.

Anchors like universities, stadia or teaching hospitals are often unique in possessing the scale to help build critical mass in key locations. But not all anchors (or parts of anchors) are equally effective at triggering a process of urban revitalisation. Decisions about which anchors to re-locate or re-invest in, and how, requires careful planning and sequencing. This includes selecting the right institutions or that benefit from proximity, networking and learning from cutting edge partners – rather than those which are more self-contained or mainly deliver services. It also means choosing locations where there is the right quality of place and access to space for future cycles of growth.

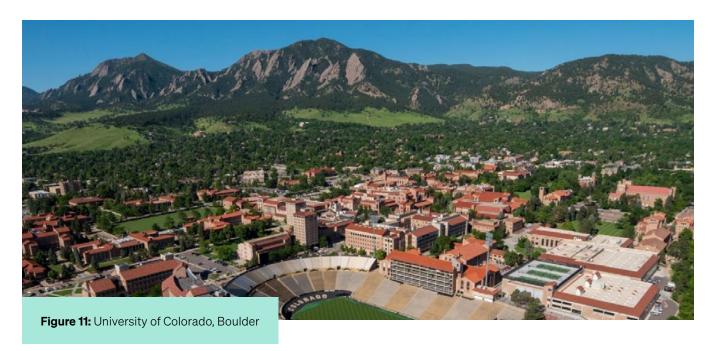
Appetite for partnership to drive local innovation — Boulder, USA

Located 40km from the booming business hub of Denver, Boulder is a proud and compact city whose thriving tech ecosystem is underpinned by decades of collaboration between Universities, Research Institutes and the local entrepreneurial community.

Partnership Between a National Research Institute and the University of Colorado

Research activity in STEM subjects at the University of Colorado Boulder has helped to develop high-tech, electronic and aerospace industries in and around Boulder County. The area has also benefited from the presence of a federal research facility, which arrived in the city in the 1950s and brought with it a critical mass of researchers. The Institute was attracted to Boulder because of the presence of the University. In 2005, the two research institutions established a formal partnership to jointly strengthen their innovation in STEM and fulfil their shared missions of using their expertise to address pressing social challenges. Experts in both institutions combine their scientific, technical and engineering competencies in major research collaborations and jointly promote the region's innovation specialisms to the world. The contract of the contra

The partnership is based in Boulder but actually fosters whole region collaboration because it incorporates multiple Institute and University campuses in several cities. Shortly after both institutions entered into their formal partnership, they began to share staff, facilities and equipment across these sites and campuses. This enabled the creation of an experimental programme that invites researchers to take up joint roles at the Institute and the University. This rare opportunity in Boulder is made possible by the close proximity of anchor institutions. In 15 years, it has attracted distinguished scientists and engineers from across the USA and around the world.



Source: University of Colorado Boulder.⁷⁶

University of Colorado's Entrepreneurial Network

An important part of the National Institute and the University's joint contribution has been training future generations of scientists and engineers and building bridges between their academic research and the commercial opportunities of the thriving local start-up scene. The University in particular has very strong links with local entrepreneurs, who are regularly invited to mentor and lecture students on campus.⁷⁷ In return, the University supports the local community of entrepreneurs and start-ups by providing grant funding and opportunities for entrepreneurs to engage with academic research collaborations.⁷⁸

Universities anchoring digital innovation downtown — Newcastle, Australia

Newcastle is Australia's 7th largest city. Located in the Hunter Region's Pacific coast, 160km north of Sydney, the city served as one of the nation's hubs for mining, steel production and trade, but is pivoting to knowledge industries in order to secure its economic future. In recent years, the University, colleges and local government have been working together to foster the business conditions for the innovation economy to grow.

Collaboration between University, Business Community and Two Tiers of Government

In the Hunter Region, the development of innovation precincts and investment in smart city infrastructure has become a shared priority. Newcastle City Council, University of Newcastle, Newcastle's business improvement association and the regional digital innovation taskforce have come together in a collaboration funded by the State Government, together with capital from a regional Infrastructure and Investment Fund, the city council and the university. The five city councils that compose Greater Newcastle and local governments in the wider Region are overcoming unsuccessful past attempts at collaboration by finding common ground in their visions for the region's future.⁷⁹

The three core projects are:

- A new Downtown Innovation Hub at Newcastle University: A purpose-built centre designed to incubate and test ideas in the region and deliver those ideas to the rest of the world. In 2020, the project was fast-tracked as a priority project by State Government to help re-stimulate the region's economy as it emerges from COVID-19.

 80 The innovation hub is part of the new Honeysuckle Campus, which has established the presence of University in downtown Newcastle for the first time (the university's main campus is located 12km from the city centre). The Honesysuckle campus has been enabled by the City's rezoning to allow mixed-use, open space and tourism activities.

 81
- A Digital Precinct: A transformational high-speed internet zone extending from the City Centre to the West End where high tech, digital and creative industries will be able to collaborate with each other and the world in real time. It is starting to evolve into a cluster of tech businesses and entrepreneurs who are attracted to the zone's guarantee of broadband with the highest levels of reliability and speed.⁸²
- **Smart City Infrastructure:** Connecting public services in the Hunter region on a cloud network to improve efficiency and encourage innovators to produce locally relevant services and applications.⁸³

The investments accelerated by the Partnership is already starting to raise the visibility of Newcastle University in Australia, increase talent attraction from other larger cities, and inspire the creation of many locally tailored technologies and apps.⁸⁴

Open Local Government to drive innovation and co-creation

The project aims to use knowledge-enabling infrastructure to support new and existing entrepreneurs and tech businesses.

The role of the City Council is to enable and implement the digital infrastructure that will make smart city applications and innovative business growth possible. One of the key projects under the initiative is the LoRaWAN Internet of Things platform: a low power, low cost network of sensors which bridges the gap between cellular and Wi-fi devices. This network is underpinning a range of initiatives aimed at raising Newcastle's liveability, including the integration of public transport, improved signalling to city council about when and where to collect waste, and a reduction in congestion by helping drivers to find parking spaces. Businesses and community groups are also able to use the data collected by the Council for free.⁸⁵



Source: The University of Newcastle, Australia.86

7. Inclusive pro-growth economic development

Emerging lessons for Greater Victoria:

More successful city region engagement with chronically marginalised and excluded communities has recently occurred through whole-of-life interventions, leverage of public procurement power, and through highly localised on-the-ground interventions.

Strategic partnerships and coalitions for inclusive growth among local companies, organisations and institutions are important because they create profile, iteration and improvement to agendas that are necessarily experimental and need sustained appetite to discover what works.

Regionwide economic development organisations can be an important convener of ideas and programmes to provide inclusive training and pathway initiatives at scale.

Integrated place-based commitment to inclusive growth — Auckland, New Zealand

In recent years, Auckland has led New Zealand's pioneering of more inclusive growth policymaking, designed to ensure the benefits of growth extend to indigenous populations, known collectively as the Maori. In Auckland 11.5% of the population is indigenous, and in addition to the adoption of equal opportunity approaches and including Maori in legislative decision making,⁸⁷ the local government has created several toolkits to support skills and inclusion, and enshrine Maori principles into its long-term strategic planning efforts.

Empowering Maori populations in decision making processes

Auckland has taken several steps to embed Maori voices into the processes that shape long-term economic growth and decision making. In 2010, the Auckland Council created an Independent Maori Statutory Board, with specific responsibilities and powers within the Council, including voting rights to ensure inclusiveness in decision making at the highest level of local government. Public plans ensure that Maori are consulted during decision making processes, that their native language and principles are used, and that the plans carve out specific opportunities for the co-design of future growth (i.e. The 2019 City Centre Masterplan, AT Economic growth). Se

Place-based inclusive growth through collaboration and co-designing innovation

Chronic disparities between indigenous and non-indigenous populations have seen Auckland City Council partner with the community to support Maori identity and well-being.⁹⁰ The most important programme is the Southern Initiative (TSI), founded in 2012, which promotes place-based approaches to social and economic development:⁹¹

- TSI adopts an integrated approach to community and economic development and promoting social innovation. Its success is based on tracking the whole lifespan of a person, following a "Cradle to Career" approach that ranges from strengthening early childhood education and family support, to adolescent skills training, high-quality job creation, career progression, and the promotion of healthy lifestyles (home programmes, family programmes, etc.)²⁴
- An enlarged City Council has created a large customer. With a budget of over \$3 billion NZD (\$2.7 billion CAD), TSI adopts social procurement approaches designed to create jobs and partners with the local government on procurement, housing, and innovation (see Figure). Leveraging Auckland Council's buying power since amalgamation in 2010 has been a key part of the effort to provide more career pathways. Large City contracts now require social measures such as to take on a set number of local newly-trained workers, incentives to employ women in trades roles, and ensuring workers have meaningful career paths.
- A spatial and development lens to inclusive growth has been important. The Panuku Development Auckland Organisation, the regional Public Development Authority, focus on Maori inclusion in planning for the future of the city's built environment (housing, skills development, heritage and natural environment, governance).⁹⁴

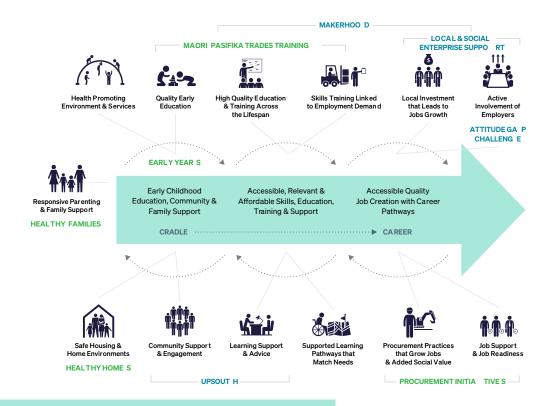


Figure 13: TSI initiatives following the 'Cradle to Career' spectrum

Source: Auckland Council 96

So far the Southern Initiative's accomplishments have included graduates from tech career accelerator programmes, schoolage makerspaces with nearly 400% social ROI, a system of mentors from top IT firms, hundreds of workshops for children and young people, and Upsouth – a digital engagement tool that rewards young people for their ideas with micropayments that has engaged more than 4,000 young people in South Auckland.²⁷

Business proactively addressing disparities: Nashville, Tennessee

Known as one of America's main creative cities, especially as a result of its thriving music scene, Nashville's economic boom of the early 2000s led to a rapid increase in city centre jobs and investment. The region's economic success even saw Nashville win part of the Amazon HQ2 bid.⁹⁷ However, rapid growth also led to high housing demand within the city centre and created an affordable housing crisis, pushing lower-income residents into suburban and other communities with a history of underinvestment, leading to a rise of distressed neighborhoods in the suburbs.⁹⁸

In recent years, Nashville has gone on a journey of learning how to encourage public and private teams to work together to create higher wage jobs for residents who have struggled to access the benefits of growth. From 2017, Nashville was one of three US cities to participate in an experimental programme to expand access to opportunity for more workers and communities and encourage critical reflection on how economic development organisations can be a key institution in the journey to inclusive growth.

Nashville Chamber of Commerce: Promoting equity by including promoting inclusion and business diversity

Nashville's knowledge-based and creative economy has become one of its most important competitive advantages. But jobs within the industry have typically required high levels of educational attainment, and have been dominated by larger incumbents.¹⁰⁰

The City Chamber of Commerce has stepped up to foster inclusive growth through ecosystem programmes such as:

- Including SMEs in decision making processes and business attraction efforts, through separating its regional governance structure into smaller Area Advisory Councils, enabling a more fine-grained geographic focus and enhanced communication between business leaders.
- Creating a process to expose leaders of small businesses to executives of larger firms, to widen diversity of leadership
 circles and consider concerns of all stakeholders, in addition to creating mentoring and training experiences for all
 business leaders.
- Capacity-building initiatives, such as those designed to improve capacity for small business owners, and targeting
 business recruitment and expansion efforts to disadvantaged areas to promote exchanges between residents and
 promote workforce development.
- Advocating for and implementing inclusionary zoning requirements for new developments, requiring workforce housing for large developments while promoting the use of land close to transit as a way to deliver transit-oriented development.¹⁰¹

Tech leadership and partnerships

The Nashville example also illustrates how business organisations can re-organise for inclusive growth. More recently, a coalition of private companies in the technology space, known as the Greater Nashville Technology Council (NTC), has established itself as a key player in the creation of the U.S.'s most ambitious collaborative and inclusive growth communities, spanning 50,000 tech professionals.¹⁰² To ensure diversity, most of the education and job placement programmes provided by the NTC target demographics usually left out of the tech space (i.e. women, veterans, minorities, etc.), with free training and paid placements.¹⁰³

8. Fostering ocean, marine, and science clusters

Emerging lessons for Greater Victoria:

Initial cluster strategies rely on committed partners focused on maximising long-term impact and seeking cross-pollination with other disciplines or ideas. People, trust, proximity and long-term skills investment are essential.

Specific cluster strategies appear more likely succeed when attached to other reforms in city and regional governments to upgrade investment promotion, business environment interface, and skills initiatives. Dedicated arms-length agencies with strong channels to political decision-making are one popular approach to ensure the efficiency, quality, and public accountability of a cluster strategy, and its alignment with wider goals.

Specific locations such as innovation district hubs can provide the essential testing capacity required for researchers and SMEs to develop scalable maritime solutions. Co-location of firms is also important in industries that have high up-front investment costs, in order so that for example marine start-ups can create prototypes and test ideas affordably.

Co-Location to accelerate marine innovation — Bergen, Norway

Bergen's economy has long been centred on shipping. The region brings together large international ship-owners with an ecosystem of legal firms, insurers, shipbrokers and technology providers and a mix of research institutions that provide advanced skills and knowledge for its maritime industries. Together, these elements form a maritime cluster known as the Hjort Centre.

Industry-education collaboration is key

Bergen's success as a maritime centre is due partly to close collaboration between research and industry. For instance, the local Shipping Association has an agreement until 2022 with the Norwegian School of Economics (NHH) in Bergen to provide research funding for a professorship and to create a critical mass of research on the future of maritime innovation.

Research institutions also work closely with one another. For 12 years eight research institutes including the University and local and national centres have been committed to sharing expertise, designed to fulfil the gap for interdisciplinary work to discover cross-cutting solutions across climate science, marine technology, and the marine environment.¹⁰⁴

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An innovation district to encourage knowledge exchange and improve SME mobility

In Bergen, the Marineholm Research Park, in consultation with national organisations such as the Ministry of Fisheries and the University of Bergen, has been developing a new innovation district to facilitate contact between research environments and marine industries. The Marineholmen urban redevelopment project aims to double the district's floor area for use by research and industry by building new, energy-efficient buildings which are specifically tailored for marine research and innovation. The Research Park currently promotes innovation, entrepreneurship and knowledge exchange across professional specialisms supporting approximately 1,000 full-time jobs in the marine research cluster and a shared infrastructure that allows start-ups to create prototypes and test research without the need to host their own research facilities.

Co-location to improve efficiency and share investment costs

In order that key research institutions and governmental departments maintain access to the natural resources they need, Bergen is prioritising a co-location approach. National government departments such as the Institute of Marine Research and the Directorate of Fisheries are re-locating with the aquarium to a single site. To Both of the government departments are heavily reliant on vessels for their research, for instance to collect samples, and thus need deep-water quay access. Relocation provides more efficient access to the essential resources that they both need for their work as well as the necessary space to develop future research facilities. Co-location is reducing the expensive infrastructure costs since the facilities built are used and financed by multiple different departments, institutes or SMEs – such as wet and dry laboratories, water supply for fish experiments and water recirculation facilities.

An important connector in Bergen is HATCH, a capable accelerator that has been assembling a cadre of entrepreneurs building scalable startups in aquaculture nutrition, health, aqua tech, genetics and biotech. Quality services, access to an industry-specific investor network, and strong funding capability, are all advantages as Bergen looks to grow its proposition as one of the world's most advanced marine clusters.



Source: University of Bergen 109

Institutional adaptation to build clusters — Hamburg, Germany

Hamburg's economic development has for many years been centred around its international maritime connections. The city's market share for container traffic among north-western European ports doubled between 1980 and 2005, resulting in many spin-off innovations in the transport equipment, aerospace and petrochemical sectors. In In response to the impacts of global economic recessions, Hamburg's main approach has been to harness its status as a fairly autonomous 'city state' within Germany's federal system to develop its clusters and increase support for SMEs. In contrast to other cities, Hamburg's cluster agencies have direct access to city government ministries, the ability to provide customised support, and the means to address skills gaps.

Cluster integration and tighter co-ordination

Recognising the opportunity to position itself as a green, business-friendly metropolis, re-embrace its waterfront and update its port functions, in 2007 Hamburg formulated a new spatial vision. The strategy involved two main tasks: expanding port facilities to accommodate larger Chinese ships and avoid market share loss to nearby ports such as Antwerp and Rotterdam; and increasing the growth of the SME-based and green economies. Vision Hamburg' integrated public marketing, tourism and business development bodies under one umbrella and consolidated the city's two main clusters: maritime and aviation. The strategy involved two main tasks:

Promoting clusters through incentives and collaboration

The Hamburg Innovation Trust launched incentives such as the Programme to Promote Innovation (PROFI) to support practical R&D projects in the mechanical engineering, maritime and logistics sectors.¹¹⁴ The bundling of multiple policy areas within individual ministries helped to re-affirm the role of cluster agencies.¹¹⁵



Figure 15: Schematic representation of Hamburg's clusters

Source: Hamburg Logistics Initiative. 116

In Hamburg, cluster agencies are managed by experienced networking professionals and founded by companies, universities and government offices. Crucially, they also have the strategic capability to address skills issues and help to provide each cluster with direct access to the relevant state ministry. This has in turn made the political process more responsive and helped to achieve a high level of customisation and iteration in order to fulfil cluster needs.¹¹⁷

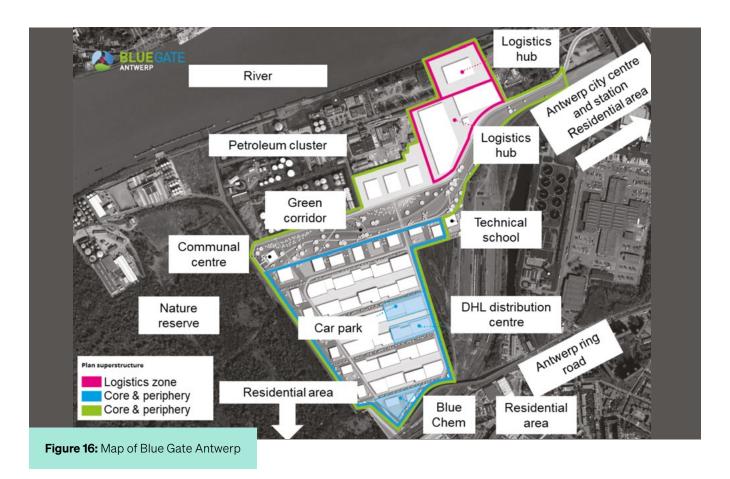
To prepare a new generation for jobs in logistics, maritime and renewable energy, the city has also prioritised collaboration between business sectors and secondary schools, introducing school-age courses on shipping and cruise liners, and cluster delegation trips to China, Korea and Japan, in order to bring more to send a delegation to Asia-Pacific markets that culminate in supply chain solution companies based there declaring a willingness to use Hamburg as their European hub.¹¹⁸

Activating urban land for more intentional clustering — Antwerp's Maritime Campus

In the past one of Europe's largest petroleum clusters, the Blue Gate Antwerp site three kilometres from the city centre has in recent years seen many companies move downstream to larger plots in the Port of Antwerp. The City of Antwerp, owner of the land, decided to use the 113-ha site to fulfil its aspiration to provide a home for future industries and demonstrate commitment to the SDGs. As part of a PPP, city government adopted the role of project manager with support from city and regional investment agencies, the regional waterway management authority and a consortium of two private specialists, DEME and Bopro, who led remediation, construction and real estate.

A flagship environment with clear ambitions and synergies between companies

The city government divided the site into 3 zones in order to define from the outset which business activities would be allowed in each area and set aside space for SMEs as well as larger firms that chose not to move to the Port of Antwerp. An emphasis was put on creating synergies between businesses and achieving sustainable development, for example to ensure that residual flows and waste from one firm can become resources for another firm, and on retaining any remaining, pre-existing petroleum firms. Using EU and Flemish funding, the city also established the Blue Chem incubator and accelerator for companies in sustainable chemistry, in partnership with the Port of Antwerp as well as major industry players such as BNP Paribas Fortis, Deloitte and the law firm Laga to provide a comprehensive range of support services to start-ups and scale-ups.¹²⁰



Source: Adapted from Blue Gate Antwerp 121

Phased development to spread costs and optimise delivery of amenities

Blue Gate is being developed in a sequence of phases to spread the cost of land remediation (€80 million per phase) and sequence the selling and development of land parcels. The clean up of the first section of land — the R&D zone — using an on-site purpose-built facility enabled partners to sell the first parcels of land to developers on the condition that they also build mixed use commercial space. Alongside remediation and development, placemaking and employee experience have become important priorities for Phase 2. The needs of the new workforce are informing the decisions about which amenities to include in a new centre on site (e.g. laundry, childcare, fitness), while a place management organisation will maintain the site's open spaces, branding and event programming.¹²²

Choosing the right partners for a maritime campus of the future

The city government sold a 5-ha site within Blue Gate to a local shipowner group, to form a 30,000 sqm maritime campus designed to bring together maritime players, government, education and R&D in one location to find solutions to maritime challenges.¹²³ The shipowner group undertook extensive screening to select partners that would share its vision and bring the right skills and means to the table. An innovative approach was to involve an interdisciplinary building team, made up of urban planners, architects and engineers, very early in the process to co-create the vision of the site and make the most of its water-bound character.¹²⁴

9. Collaborate to compete — the Pacific NorthWest opportunity

Emerging lessons for Greater Victoria:

In a global economy that continues to urbanise even after COVID-19, there is a strong rationale for Greater Victoria to expand its collaboration and joint positioning in the Cascadia region, even while investing in its own strong identity. All three cities would benefit from greater mutual understanding of the networks of companies and the flows within and between them. This would inform the kind of economic and R&D projects leaders in the two cities could undertake and the segments in which the whole region could be promoted globally.

Cities that have learnt to 'collaborate in order to compete', have found that:

- Starting small and building off pre-existing areas of soft collaboration, for example around business, education, or culture, can provide an initial impetus for more effective and ambitious regional collaboration and positioning. Any first initiatives need visible impacts for firms and citizens.
- Stronger information flow and data sharing within the wider Cascadia region is important to help
 identify the real complementarities and build a story about the cities' combined scale and common
 factors.
- Collaboration across a mega-region relies on universities, businesses with a large footprint, investors, and civic organisations with an enduring footprint, more than it does on high profile city leaders.
- Later in the collaboration journey, there may be an opportunity to explore what barriers prevent deeper integration, and opportunities for regulatory or business climate harmonisation, or catalytic infrastructure and digital platforms.

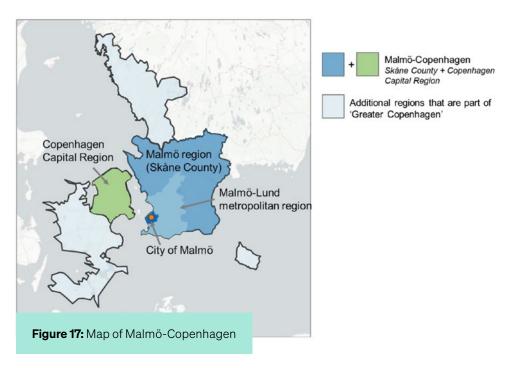
The 'innovation district' of a larger region — Malmö and Greater Copenhagen

City leaders in Malmö, Sweden's third city, have long observed the potential scale of opportunities deriving from deeper integration with the nearby Copenhagen region. In the 1990s, the beginning of the construction of the Øresund bridge to connect the two cities helped to kickstart an important programme of bi-regional collaboration that has ultimately helped to build a larger functional region and had significant benefits for both sides of the strait. Since then, both cities have focused on building complementary capabilities and niches, and enhancing agglomeration, often in the absence of national policy support.¹²⁵

Anticipating the new level of connectivity, the city of Malmö used its significant fiscal autonomy and control of public land and housing stock to initiate a process of regeneration geared around sustainability and the knowledge economy. When the Øresund bridge was due to arrive in 1999, the both sides had jointly launched the Øresund project, to effectively grow the size and integration of the labour and housing market.

Creation of a new regional vehicle to act as a convener

On the Malmö side, the main impetus for participation came from the creation of a new regional entity, established as an experiment to take on economic development responsibilities from central government. The main governance vehicle is the Øresund Committee, which 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 their population size, and supported by other organisations that provide data and advocacy support. The Øresund Business Council and former Øresund University (see below) have also helped to influence the initiative.¹²⁶



Source: The Business of Cities

Innovation as a driver of regional integration

Developing complementarities in the knowledge economy has been a key driver of joint work. The Committee adopted a Regional Development Strategy early on in the process, around knowledge and innovation, and regional strategies have sought to align economic development strategies around life sciences, food, IT, design and cleantech. The most advanced programme to date has been the Medicon Valley Alliance, which combines the two regions' life science clusters to increase visibility and promote links with global life science centres. Another key initiative was the Øresund University, a consortium of 14 universities which provide specialised services, supported firms to spin out, and helped to devise and develop cross-border projects, including cluster platforms and policies to develop them and share information. 128

The importance of brand

As the initiative has developed, branding and outreach has also become a key activity in particular market niches. Soon after the formation of the Committee, the participating authorities agreed to develop a branding exercise to encourage citizens to affiliate with the larger two-city region, and project the region into the global market.¹²⁹

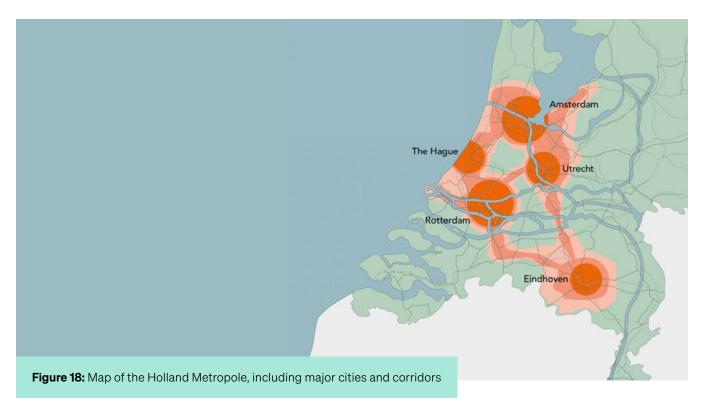
Together, the benefits of better physical connectivity, and the advantages fostered by collaboration, have led to a number of wider positive effects. These include increased market size and borrowed scale, productivity gains on both sides, enhanced access to high value jobs, greater specialisation, and increased scope for land re-use and intensification around key nodes. As a result, Malmö has also been able to position itself as having the best of both worlds: the scale, connectivity and business advantages of its links to Copenhagen (e.g. access to talent, shared labour market and industry edges), but also the advantages associated with compactness, efficiency and proximity that characterise smaller city regions.¹³⁰

The journey to complementary specialisation — Eindhoven, Utrecht and the 'Holland Metropole'

Eindhoven and Utrecht are examples of smaller city regions that have entered into productive tactical relationships with the larger cities surrounding them for mutual benefit. Through their participation in the Holland Metropole – an alliance between the five major Dutch cities (Amsterdam, Rotterdam, The Hague, Utrecht and Eindhoven), regional partners and major private real estate companies – these two cities have recognised the requirement to build a common regional proposition in order to more successfully compete in certain global markets. The Holland Metropole initiative is a story of cities working together to recognise the common factors for investment, discover and strengthen shared complementarities, and position themselves for investment as a single integrated region.

Common assets and complementary specialisations

Initially enabled by investment in rail and road infrastructure improvements that fostered improved connectivity between the five cities, the Holland Metropole and its constituent cities have since been on a journey to discover their common assets and complementary specialisations. Through joint international missions, research, and positioning for investment as one single 8-million-person region (through for example joint presence at major gatherings such as MIPIM and Expo Real), the five cities have learned both what it is that they have that the others do not, and what is common between them. The initiative has highlighted the importance of Schiphol airport, the port of Rotterdam, and universities with footprints across the whole region – for example in Leiden and Delft – not only as anchors, but also as allies in the regional projection and identity building effort.



Source: Holland Metropole 131

The journey of discovery that Holland Metropole's smaller cities have been on has also enabled them to more firmly enter the radar of global audiences. The focus on regional positioning means that cities such as Eindhoven and Utrecht are now seen not only as a top choice for cross-border real estate investment, but also as potential locations for corporate HQ functions and innovation platforms.

The focus on 5-year work programmes and concentration on relatively low-key international events and showpieces has helped to create the space for a longer term, strategic perspective and to develop a coherent voice as one region. The Holland Metropole has, as a result, been able to successfully articulate the unique selling points of each region, and how each city's functions complement the others. For example, it has highlighted:

- Amsterdam's status as the region's gateway city and gravitational centre for finance, creative industries and IT;
- Utrecht's young and very highly education population, which has helped to establish it as a top city for life sciences, healthy living and gaming;
- Rotterdam's close relationship to the port and its pioneering strengths in advanced manufacturing and clean-tech;
- The Hague's status as the country's political capital, its critical mass of international organisations and cybersecurity strengths; and
- Eindhoven's highly mature ecosystem of advanced IT and material science 131

The role of private partners

The Holland Metropole initiative demonstrates that effective and productive regional collaboration initiatives can be mounted by large companies, city marketing and promotion leaders, gradually drawing in the local governments in the region once the logic has been proven. HM has an unusually broad base of private partners, including pension funds and institutional investors, architects and start-ups, and a wider network of pro-growth advocates coalitions from across the region. ¹³⁴ All members share in the vision of building the data and communications to make the region more visible and well analysed, and to designing shared branding collateral to help develop a single coherent identity for the region that does not erode the very strong city brands.

Regional advocacy for infrastructure and housing

In recent years, the Holland Metropole has also started to think more carefully about how to build a more integrated regional labour and housing market. Constituent cities are accelerating plans for shared commitments to housing delivery, jointly agreeing priorities for the next cycle of regional infrastructure investment, and working together to build comprehensive corridor strategies that allow the smaller cities to absorb spillovers from Amsterdam as the latter begins to reach its effective capacity. Ambitions to build an all-encompassing 'Randstad loop' railway line, avoiding some of the delays that occur due to intensive use of existing lines at the centre of the region, are also high up on the current agenda. Future projects such as these will allow the five cities to continue to 'borrow scale' from one another, while also retaining their individual compactness and character.¹³⁵

10. Organisations for delivering economic development

Emerging lessons for Greater Victoria:

Several successful models of regional economic development strategy delivery have emerged in the last 20 years in city regions around the world pursuing diversification and global reach.

Consistency, flexibility and funding resilience are important criteria of successful peer organisations internationally. They build their profile, establish a shared language and rationale for their activities, diversify their funding sources over time, and become the natural locus for regionwide agendas such as brand and identity development.

International practice indicates that the most impactful organisations over the long-term:

- Jointly prioritise investment, productivity, co-ordination, promotion and sustainability
- · Attract and partner with the most capable business and investor-facing organisations
- Are equally adept at building horizontal alliances across local governments with vertical relationships to higher tiers of government, as well as B2B and other non-governmental relationships.
- Achieve buy in from citizens, maintain popular visibility, and viewed as an independent voice on behalf of the region rather than for business per se.
- · Prioritise incremental and continuous reforms and adopt an opportunity mindset
- Prepare to deliver on two fronts: winning growth, and managing the externalities of growth

This section summarises the experiences of four successful models of metropolitan economic organisation globally:

- 1. Miami Beacon Council
- 2. Amsterdam Economic Board
- 3. Stockholm Business Region
- 4. San Diego Regional Economic Development Corporation

Over time each has evolved to develop a broader base of tools and responsibilities as an implementing partner of a long-term economic development strategy.

City	Diversification	Trade promotion	Gateway functions	Inbound investment and HQs	Innovation economy	Regional data and benchmarking	Global identity	Arts & culture journey	Public-private trust and network building
Miami Beacon Council	**	**	**	**	*	**		*	**
Amsterdam Economic Board	*	*	**	*	**		*	*	*
Stockholm Business Region	*	*	*	*	**		**		*
San Diego REDC	**	*	*	*	*	*	**	*	*

Source: Business of Cities research

Table 1: Relative focuses of the four different metropolitan economic organisations

Miami-Beacon Council

The Miami Beacon Council is a non-profit public-private partnership separate from city and metropolitan government whose mission is to improve the quality of job opportunities and foster high value economic growth across the Miami-Dade region. The Council has over 80 board members, including a mix of civic leaders and business executives, and over 20 members of an executive committee with delegated decision-making powers. It is also organised into 10 industry and market committees, including in Aviation, Banking and Finance, Creative Design, and Technology.¹³⁶

Miami Beacon Council stands out for its consistent focus on economic diversification, data-led industry analysis, site selection support, and public-private network building. It has become the effective champion of the 'One Community, One Goal' initiative, first launched in 1996 by the Chamber of Commerce (see above). As an EDO it has had particular success building strong positive relationships with larger companies in the region, to tap into business insight, build shared agendas and leverage corporate funds for regional goals such as industry-specific re-skilling.¹³⁷

Amsterdam Economic Board

The Amsterdam Economic Board has evolved over the past decade as a small network of leaders composed of local and regional governments, knowledge institutions and businesses whose mission is to develop the Amsterdam region's innovation and connectivity credentials and promote sustainable economic growth across the metropolitan area.

The Board features 40 members, including 20 executive board members responsible for achieving a set of concrete deliverables in line with its strategy.¹³⁸ Two-thirds of the funding is provided by local governments in the Amsterdam region. The Board has earmarked 8 priority sectors in different parts of the region, and undertakes projects designed to strengthen triple helix collaboration between businesses, universities and governments in support of innovation.¹³⁹

In recent years, one of the Board's key goals has been to ensure a better match between education and the job market in the Amsterdam region, to ensure an inclusive labour market and skills ready for the jobs of the future. Other recent initiatives have included building a regional cultural narrative, by framing cultural sites in wider region as fitting within Amsterdam's heritage; accelerating adoption of the circular economy, by closing regional loops of materials and energy; and promoting knowledge exchange between the region's innovation districts, campuses and hubs via the Campus Amsterdam project.

Stockholm Business Region

15 years ago, Stockholm was a metropolitan region without a shared perspective on its future. Local governments of different political persuasions pursued their own economic visions, with weak co-ordination, and political leaders did not engage effectively with private sector leadership.

Strong regionwide population growth triggered the central city to begin in 2007 a process of setting up the Stockholm Business Region as a unified platform for local governments to build a shared approach to branding, economic development and investment promotion.¹⁴⁰ Today, as a wholly owned subsidiary of the City of Stockholm, Stockholm Business Region has become the major driver for municipal co-operation, representing 55 local governments spread across 8 provinces. This is partly because it possesses cross-party leadership: all political parties are represented on its Board, and over time there has been more or less broad consensus on the decisions made.¹⁴¹

Stockholm Business Region features over 60 members led by executive managers and 18 executive board members. It has developed a joint framework for local governments to increase FDI in target industries, helps to grow the capacity of local entrepreneurs by linking them to innovation centres, business advisors and local government representatives, and created subsidiary organisations to promote the region as a travel and business destination. Among its most significant achievements is its 10-12 year regional brand — Capital of Scandinavia — to provide a common identity and attract international business.

San Diego Regional Economic Development Corporation

The San Diego REDC has been providing long-term economic leadership for the San Diego region. It is made up of 90 board members comprising public agencies (e.g. San Diego Tourism Authority, City Governments, Regional Chamber of Commerce), Civic organisations (e.g. universities), and private companies (e.g. urban services, insurance, law), and 25 team members led by a President and CEO.

The Corporation has a US\$4 million budget and receives investment from over 160 private companies and public agencies at the city and regional level. 20% of its income is generated through services it delivers. Its flagship contributions to the multicycle growth agenda in San Diego include:

- Brand alliance and metropolitan identity. The REDC has forged a long-term brand alliance involving top firms, large
 infrastructure providers and others. This alliance has developed and championed the campaign San Diego: Life.
 Changing. in order to help convey to talent the region's innovation edge as well as its sunshine and lifestyle advantage.¹⁴²
- **Organising for global trade and investment**, through an affiliate trade association, the Corporation organises trade missions to key markets and grants funds to SMEs that explore export opportunities through Metro Connect.¹⁴³
- **Economic research and advocacy.** The REDC develops high quality industry reports and economic impact studies on specific companies and major industries in the region (e.g. genomics, technology, cybersecurity). It also works with public and private military organisations to advocate for the defence industry at federal, state and local level.

- 1 www.nbr.co.nz/article/christchurch-quake-cost-rises-10b-40b-bd-139278; www.100resilientcities.org/wp-content/uploads/2017/07/Greater-Christchurch-Resilience-Strategy-compressed.pdf
- 2 www.ccc.govt.nz/the-council/plans-strategies-policies-and-bylaws/ plans/central-city-recovery-plan/
- 3 www.ccc.govt.nz/assets/Documents/The-Council/Plans-Strategies-Policies-Bylaws/Plans/central-city/Draft-Central-City-Recovery-Plan.pdf
- 4 https://en.wikipedia.org/wiki/Christchurch_Central_Recovery_Plan#/ media/File:Christchurch-central-recovery-plan-anchor-project-map-a3-1_(cropped).jpg; https://www.otakaroltd.co.nz/anchor-projects/
- 5 www.stuff.co.nz/national/politics/78952664/five-years-of-cera-success-or-failure
- 6 https://scirtlearninglegacy.org.nz/story/competitive-collaboration
- 7 Antonia Casellas, "Barcelona's Urban Landscape: The Historical Making of a Tourist Product", Journal of Urban History, 35(6) (2009): 815-832. Available at: www.researchgate.net/publication/249679714_ Barcelona's_Urban_Landscape_The_Historical_Making_of_a_Tourist Product
- 8 www.brookings.edu/blog/the-avenue/2013/09/03/ the-10-traits-of-globally-fluent-metro-areas-barcelonas-compelling-global-identity/
- 9 Donald McNeill, "Mapping the European Urban Left: The Barcelona Experience," Antipode, 35 (1) (2003): 74-94. Available at: Mapping the European Urban Left: The Barcelona Experience
- 10 https://ajuntament.barcelona.cat/bombers/en/noticia/the-legacyand-impact-of-the-olympic-games-at-the-city-and-olympic-movement-series-of-talks_567877
- 11 Joaqium Llimona, "Barcelona: A Bid Towards Internationalization" (2012), available at: www2.lse.ac.uk/europeanInstitute/research/ catalanObservatory/documents/pdf/Crisi-and-Local-Gvt/Presentacio-LSE---JLlimona.pdf
- 12 Brookings Institution (2013) The 10 Traits of Globally Fluent Metro Areas: Barcelona case study
- 13 https://crc.pata.org/learn/case-studies/hong-kongs-recovery/; http:// news.bbc.co.uk/1/hi/business/3024015.stm
- 14 www.ncbi.nlm.nih.gov/books/NBK92473/
- 15 www.chamber.org.hk/en/advocacy/policy_comments.aspx?ID=124
- 16 https://ictsd.iisd.org/bridges-news/bridges/news/hong-kong-mainland-china-sign-free-trade-pact
- 17 www.tourism.gov.hk/english/visitors/visitors_ind.html
- 18 http://ntaonline.com/hong-kong-tourism-board-building-recoverycampaign/
- 19 https://globalparliamentofmayors.org/wp-content/uploads/2020/06/ COVID-19-Overview-measures-city-of-Amsterdam-02062020.pdf
- 20 www.amsterdam.nl/en/coronavirus/overview/; www.iamsterdam. com/en/business/news-and-insights/news/2020/initiatives,-offerings-and-programmes-supporting-startups-during-coronavirus

- 21 https://techcrunch.com/2020/06/26/amsterdam-ejects-airbnb-el-at-from-three-central-districts-in-latest-p2p-platform-limits/?gu-ccounter=1&guce_referrer=aHR0cHM6Ly93d3cuZ29vZ2xlLmN-vbS8&guce_referrer_sig=AQAAAM45hazoZtttPoQYaWWySUO-cbia-PIRCxLeD4r2DAE5C73abhlxVaf0mHCyKplFfBxAQB25lY4VA36v14P_pOU_bkpslwCRT43KQlquujuGmUrlW_HGRKq0slfovRj1G24Ug1TRx-o7o33QE03nBfnl3uPvYpDkarP_OwVUoQqCGhC; www.japantimes.co.jp/news/2020/06/09/world/amsterdam-clean-up-sex-drugs-tour-ism-coronavirus/#.XwXfiShKiUk
- 22 www.amsterdam.nl/en/policy/sustainability/circular-economy/
- 23 https://inhabitat.com/doughnut-economics-the-long-sought-alternative-to-incessant-destructive-growth/doughnut-growth-economics-raworth-2/
- 24 www.brookings.edu/blog/techtank/2020/04/13/combating-covid-19-lessons-from-south-korea/
 - www.citiesforglobalhealth.org/sites/default/files/documents/2020-04/COVID-19%20Situation%2C%20Response%2C%20 and%20Key%20Dvelopments%28Busan%20Metropolitan%20 City%2C%20ROK%29.pdf
- 25 www.citiesforglobalhealth.org/sites/default/files/documents/2020-04/COVID-19%20Situation%2C%20Response%2C%20 and%20Key%20Dvelopments%28Busan%20Metropolitan%20 City%2C%20ROK%29.pdf
- 26 www.citiesforglobalhealth.org/sites/default/files/documents/2020-04/COVID-19%20Situation%2C%20Response%2C%20 and%20Key%20Dvelopments%28Busan%20Metropolitan%20 City%2C%20ROK%29.pdf
- 27 www.busan.go.kr/dynamic/news/view?dataNo=63760&curPage=4&srchCl=News&bbsNo=10
- 28 https://english.busan.go.kr/bsnews01/1424041; www.busan. go.kr/dynamic/news/view?dataNo=64083&curPage=2&srch-Cl=News&bbsNo=10
- 29 www.investkorea.org/busan_en/archives/news.do?mode=view&articleNo=486367&article.offset=10&articleLimit=10
- 30 www.investkorea.org/busan_en/archives/news.do?mode=view&articleNo=486673&article.offset=10&articleLimit=10
- 31 www.investkorea.org/busan_en/archives/news.do?mode=view&articleNo=487613&article.offset=0&articleLimit=10
- 32 https://aws.amazon.com/blogs/publicsector/busan-metropolitancity-signs-new-agreement-with-aws-to-develop-smart-city-initiatives-and-foster-public-sector-innovation/
- 33 https://en.yna.co.kr/view/AEN20200406002900320
- 34 https://commons.wikimedia.org/wiki/File:20200303_%EC%BD%94%E B%A1%9C%EB%82%9819_%ED%81%B4%EB%A6%B0%EC%A1%B4_% EB%B0%8F_%EA%B2%BD%EC%A0%9C%EC%A7%80_%EA%B8%B0 %EC%9E%90_%EA%B0%84%EB%8B%B4%ED%9A%8C(%EB%8F%99 %EB%9E%98%EB%B0%80%EB%A9%B4) 06.jpg
- 35 https://knightfoundation.org/articles/a-city-transformed-how-thearts-have-shaped-miami/; https://issuu.com/miamidadearts/docs/ beacon_council_business_arts_survey
- 36 www.miamitodaynews.com/news/100211/story7.shtml

- 37 wws.beaconcouncil.com/facts-figures/trade; www.blancacre.com/ miami-herald-miamis-global-brand-is-urban-youthful/
- 38 www.businessinsider.com/best-cities-for-culture-2014-8?IR=T#4-houston-tx-17; www.miamiherald.com/opinion/editorials/article47447980.html
- 39 www.nytimes.com/2010/03/31/realestate/commercial/31goldman. html
- 40 www.beaconcouncil.com/data/economic-overview/trade/#:~:tex-t=A%20Global%20Hub%20of%20International%20Commerce&tex-t=Today%2C%20the%20Miami%20Customs%20District,trading%20 partners%20around%20the%20world.
- 41 www.latradeconnect.org/wp-content/uploads/documents/TN14LA-FullBookweb.pdf
- 42 https://www.beaconcouncil.com/wp-content/uploads/2020/06/ BEA_ANNUAL-REPORT-2021_FINAL.pdf
- 43 https://urbact.eu/sites/default/files/internationalise_with_aarhus.pdf
- 44 http://www.techtour.com/userfiles/file/Brochure%20Aarhus.pdf
- 45 www.mikehedges.org.uk/wp-content/uploads/2018/10/economy.pdf
- 46 www.mikehedges.org.uk/wp-content/uploads/2018/10/economy.pdf
- 47 www.mikehedges.org.uk/wp-content/uploads/2018/10/economy.pdf
- 48 http://webcache.googleusercontent.com/search?q=cache:5pN8UT-HdOPoJ:www.evaluationsonline.org.uk/evaluations/Documents. do%3Faction%3Ddownload%26id%3D417%26ui%3Dbrowse+&c-d=1&hl=en&ct=clnk&gl=uk
- 49 http://www.techtour.com/userfiles/file/Brochure%20Aarhus.pdf
- 50 http://www.techtour.com/userfiles/file/Brochure%20Aarhus.pdf
- 51 https://timreview.ca/article/933
- 52 https://urbanmillblog.files.wordpress.com/2015/04/eka_final_cover_hires.pdf
- 53 www.eua.eu/downloads/publications/eua%20innovation%20ecosystem%20report_final_digital.pdf
- 54 https://urbanmillblog.files.wordpress.com/2015/04/eka_final_cover_hires.pdf
- 55 www.eurocities.eu/eurocities/documents/Espoo-Innovation-Garden-WSPO-ATUGNE
- 56 https://unico.ai/blog/16/?language=en
- 57 http://www.helsinki-finland.fi/materials/Locate-in-Espoo.pdf
- 58 www.fdiintelligence.com/Locations/Europe/Sweden/How-Malmöwent-from-oil-tankers-to-green-tech
- 59 Malmö Partners Pitch 2019
- 60 www.thelocal.se/20190711/Malmö-to-host-groundbreaking-textilerecycling-plant
- 61 Malmö Partners Pitch 2019

- 62 http://mva.org/wp-content/uploads/2019/11/State-of-Medicon-Valley-2019-web.pdf
- 63 https://www.biopharma-reporter.com/Article/2018/11/12/Medicon-Valley-How-Denmark-and-Sweden-are-bridging-the-biotech-gap; https://www.nlsinsight.com/post/medicon-valley-has-the-highestconcentration-of-biotech-companies-in-northern-europe-north-oflondon
- 64 https://innovationorigins.com/make-eindhoven-brainport-ecosystem-future-proof/; www.tno.nl/media/7608/info-brainport-eng.pdf
- 65 www.ccic-project.eu/wp-content/uploads/2013/09/SV2-Brain-port-Foundation.pdf
- 66 https://books.google.co.uk/books?id=iTopDwAAQBAJ&p-g=PA135#v=onepage&q&f=false
- 67 www.tno.nl/media/7608/info-brainport-eng.pdf
- 68 https://brainporteindhoven.com/int/business/campuses/
- 69 https://2019.itsineurope.com/demonstrations-venue/
- 70 The Business of Cities research, derived from interviews with Patrick McVeigh and Rachael Child
- 71 https://hatchboxnz.com/
- 72 https://gridakl.com/how-to-get-here/
- 73 www.city-data.com/us-cities/The-West/Boulder-Economy.html
- 74 www.colorado.edu/research/federal-industry-research-partnerships
- 75 www.nist.gov/news-events/news/2005/03/nist-and-university-colorado-establish-partnership
- 76 https://www.colorado.edu/
- 77 https://bldrfly.com/features/2020/05/12/how-cu-enhances-boul-ders-startup-ecosystem/
- 78 www.colorado.edu/innovate/getfunding;
- 79 www.oecd.org/regional/business-brief-newcastle-in-australia-anemerging-smart-city.htm
- 80 www.newcastleherald.com.au/story/6738365/unis-inner-city-campus-fast-tracked/
- 81 www.newcastleherald.com.au/story/5339728/what-does-the-university-have-planned-for-its-city-expansion/
- **82** www.engineersaustralia.org.au/News/newcastles-hunter-innovation-project-receive-178-million-transform-area-digital-innovation
- 83 www.startupdaily.net/2016/09/hunter-innovation-project/; http:// hunterinnovationproject.com.au/
- **84** www.govtechreview.com.au/content/gov-digital/article/newcastle-engaging-start-ups-in-smart-city-push-992820640
- 85 www.zdnet.com/article/nnnco-rolling-out-newcastle-iot-network/
- 86 https://www.newcastle.edu.au/engage/development-projects/honeysuckle-city-campus-development

- 87 https://journals-sagepub-com.proxy.library.upenn.edu/doi/abs/10.1177/0261018306059773; www.stats.govt.nz/tools/2018-census-place-summaries/auckland-region
- 88 www.imsb.maori.nz/about-us/introduction/
- 89 https://at.govt.nz/media/1981758/at-diversity-and-inclusion_v92.pdf; www.greaterauckland.org.nz/2019/07/03/making-the-city-centereven-greater/
- 90 www.aucklandcouncil.govt.nz/plans-projects-policies-reports-bylaws/our-plans-strategies/auckland-plan/maori-identity-wellbeing/ Pages/implementing-maori-identity-wellbeing-outcome.aspx
- 91 www.tsi.nz/about-us
- 92 www.aucklandcouncil.govt.nz/plans-projects-policies-reports-by-laws/our-plans-strategies/place-based-plans/docstsireports/TSI-review-august-2017.pdf
- 93 www.tsi.nz/social-procurement
- 94 www.panuku.co.nz/about/how-we-operate
- 95 https://www.aucklandcouncil.govt.nz/plans-projects-policies-re-ports-bylaws/our-plans-strategies/place-based-plans/docstsire-ports/TSI-review-august-2017.pdf
- 96 https://static1.squarespace.com/static/5cf74c8f2829e20001db-724f/t/5ed84ca46521f36f6299a45b/1591233853924/South+Advantage+Collective_Report.pdf
- 97 www.tennessean.com/story/news/local/2018/11/13/amazon-hq-2-headquarters-announcement-nashville/1987258002/
- 98 www.brookings.edu/wp-content/uploads/2017/09/metro_20170927_ committing-to-inclusive-growth-iedl-report.pdf
- 99 www.brookings.edu/research/opportunity-for-growth-how-reducing-barriers-to-economic-inclusion-can-benefit-workers-firms-and-local-economies/
- 100 www.nashville.gov/Portals/0/SiteContent/Planning/docs/NashvilleNext/ECD%20background%20reportforonline%20posting.pdf
- 101 https://eu.tennessean.com/story/opinion/columnists/david-plazas/2017/01/29/costs-growth-and-change-nashville/97064252
- 102 https://technologycouncil.com/about-us/
- 103 www.nashvillepost.com/business/nashville-post-magazine/article/21005708/high-time-to-move-the-needle
- 104 www.nhh.no/en/nhh-bulletin/article-archive/2017/august/ber-gens-maritime-cluster-extends-its-investments-in-nhh/
- 105 www.norwayexports.no/bergen-norways-aquaculture-fishing-capital/
- 106 http://marin.bergen-chamber.no/en/The-marine-cluster-at-Marine-holmen-bridging-great-people/
- 107 https://pahoyden.no/bergen-marine-forskningsklynge-fiskeridirektoratet-havforskningsinstituttet/na-starter-jakten-pa-ny-tomt-forhavforskningen/380073

- 108 www.marineholmen.com/english/about-us/the-marine-cluster/
- **109** https://www.uib.no/marin/118228/statlige-million-er-til-marin-n%C3%A6ringsutvikling-p%C3%A5-marineholmen
- 110 https://pdfs.semanticscholar.org/bf82/36b3a2e5aa719a7f633a6b-2c4ed9251a3dad.pdf
- 111 www.oecd.org/cfe/leed/OECD-LEED-Local-Economic-Leadership. pdf
- 112 www.oecd.org/cfe/leed/OECD-LEED-Local-Economic-Leadership. pdf
- 113 www.oecd.org/cfe/leed/OECD-LEED-Local-Economic-Leadership. pdf
- 114 www.ifbhh.de/programme/gruender-and-unternehmen/innovationen-realisieren/forschen-und-entwickeln/profi-transfer-plus
- 115 www.oecd.org/cfe/leed/OECD-LEED-Local-Economic-Leadership. pdf
- 116 https://www.hamburg-logistik.net/
- 117 www.oecd.org/cfe/leed/OECD-LEED-Local-Economic-Leadership. ndf
- **118** www.hafen-hamburg.de/en/news/port-of-hamburg-delegation-in-china-completes-successful-tour---35819
- 119 Blue Gate (2020) Be Good and Dare CSR Report, available at: www.bluegateantwerp.eu/be-good-and-dare-the-first-csr-report/?lang=en
- 120 https://bluechem.be/en/
- 121 https://www.bluegateantwerp.eu/wp-content/uploads/2020/05/ BGA_kaart_website_200224_EN_Ir.png
- 122 The Business of Cities research, derived from site visit.
- 123 https://mer.lne.be/merdatabank/uploads/merkennis5987.pdf
- 124 www.cmb.be/en/new/maritime-industry-joins-forces-on-the-maritime-campus-antwerp; www.kcap.eu/downloads/ENG%20Persbericht%20MCA%20partners%202020505.pdf
- 125 https://gsc-public-1.s3.amazonaws.com/s3fs-public/international_ case_studies_of_connected_cities_-_clark_moonen_-_october_2017. pdf
- 126 https://gsc-public-1.s3.amazonaws.com/s3fs-public/international_ case_studies_of_connected_cities_-_clark_moonen_-_october_2017. pdf
- 127 https://mva.org/about-mva/
- 128 www.oecd.org/education/imhe/37544309.pdf
- 129 www.oresundskomiteen.org/about-the-oresund-committee/
- 130 https://gsc-public-1.s3.amazonaws.com/s3fs-public/international_ case_studies_of_connected_cities_-_clark_moonen_-_october_2017. pdf

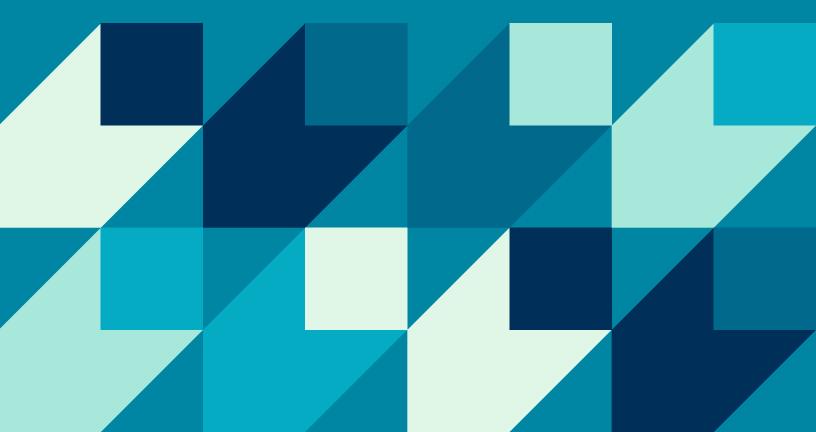
- 131 https://gsc-public-1.s3.amazonaws.com/s3fs-public/international_ case_studies_of_connected_cities_-_clark_moonen_-_october_2017. pdf
- 132 https://hollandmetropole.com/wp-content/up-loads/2019/09/190913-FftF-FP-magazine-binnenwerk_WEB.pdf
- 133 https://hollandmetropole.com/
- 134 https://hollandmetropole.com/
- 135 https://gsc-public-1.s3.amazonaws.com/s3fs-public/international_ case_studies_of_connected_cities_-_clark_moonen_-_october_2017. pdf
- 136 www.beaconcouncil.com/
- 137 www.beaconcouncil.com/wp-content/uploads/2020/06/BEA_ANNU-AL-REPORT-2021_FINAL.pdf
- 138 https://amsterdameconomicboard.com/en/frequently-asked-questions-faqs
- 139 https://amsterdameconomicboard.com/en/what-we-do
- 140 www.stockholmbusinessregion.com/faq/
- 141 www.stockholmbusinessregion.com/company-facts/
- 142 www.sandiegobusiness.org/about-edc/our-initiatives/san-diego-life-changing/
- **143** www.sandiegobusiness.org/wp-content/uploads/2020/01/Annu-al_Report_Board-2019_Final.pdf

The Business Of Cities

The Business of Cities is an urban intelligence firm that works with cities and companies worldwide. It uses advanced benchmarking and comparative analysis to help leaders to respond purposefully to the twin dynamics of urbanisation and globalisation. Over the last 10 years it has supported public and private leadership in cities and regions such as Amsterdam, Auckland, Glasgow, Helsinki, London, Oslo, Philadelphia, San Diego, Sydney and Tel Aviv, and collaborated closely with international organisations such as the OECD, World Bank and Brookings Institution.

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Greater Victoria's Global Fluency

The Path to Sustainable Prosperity

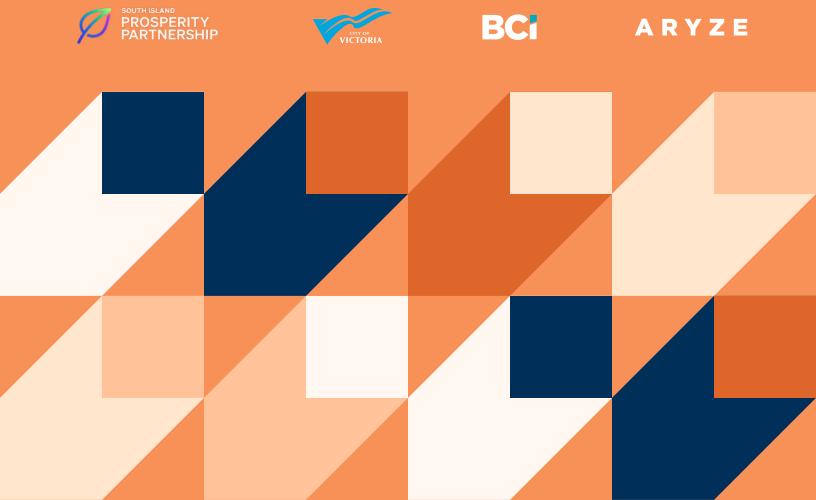


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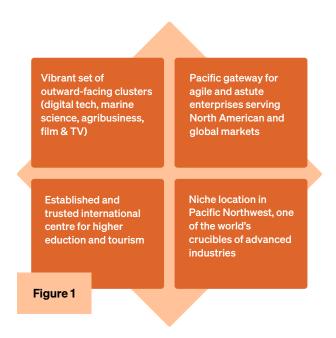
Executive summary

COVID-19 is a shock to the system of cities and regions. Its effects demand a new phase of international orientation for those seeking a long-term success model.

New economic realities are hitting — rapid digitisation and automation, ageing societies, insufficiently diversified economies, trade conflicts, and competition from emerging markets. They demand fresh approaches to talent, technology, development, resilience and value creation.

Adopting and executing new approaches come naturally to regions that have global fluency.¹ A globally 'fluent' region, an idea pioneered by the Brookings Institution, is one that can not only 'read' the global market, but also listen and speak confidently. It is one that understands how to use the assets and relationships it has already gained and combine those with deliberate efforts to change path and fill new competitive niches. By contrast, regions that are unprepared or unwilling to adjust become stuck in narrow formulas for success, and ultimately are unable to deliver prosperity over multiple business cycles

In recent cycles, Greater Victoria has largely had an insular orientation. And yet the region today plays at least four interlocking roles that fuel many global relationships:.



- A vibrant set of outward-facing clusters in digital technologies, marine science, agribusiness, film and TV.
- A Pacific gateway for agile and astute enterprises serving North American and global markets.
- An established and trusted international centre for higher education and tourism.
- A niche location in the Pacific Northwest mega-region, one of the world's crucibles of advanced industries.

Changes in the global economy, accelerated by COVID-19, mean that the region cannot expect to rely on its serene quality of life, entrepreneurial endowment and island identity to stay competitive. It will need to use its international assets much more intentionally for a new cycle.

Becoming more globally fluent is not some distant dream or impractical ideal. It is essential to deliver prosperity and life chances to the next generations of Victorians. The alternative is a medium-productivity, low-amenity, low-affordability future – and a future where Greater Victoria's cherished strengths will be progressively eroded and undermined.

Greater Victoria's traits

More than a century of international experience has observed that globally fluent regions have a combination of 10 main traits.

A small, highly liveable region like Greater Victoria usually heads on to a path to global fluency by acquiring one or two of the traits in sufficient depth such that it becomes aware of global opportunities and energetically starts to prepare and pivot to future drivers of demand.

<u>Currently, however, Greater Victoria exhibits only a small number of the traits of global fluency and these need to be</u> developed further.

One of Victoria's most visible traits is its forward-looking leadership with a world view (Trait 1). The City is promoting a concerted strategic agenda for the region's future economy, aligning with global issues and being generous to the world. There are also promising signs that previously dormant civic and business leadership is combining, via the Rising Economy Taskforce, to agree on the central strategic issues, and develop a collaborative, whole-region approach that provides a depth and durability of vision, skills, and delivery capability.

The region's comfortable quality of life and spectacular natural assets give it a sense of opportunity and appeal to newcomers (Trait 6). It also has elements of a culture of knowledge and innovation (Trait 4), embedded in its entrepreneurship base and its knowledge and defence institutions.

On the other hand, there are traits which are either not widely visible or are so absent as to present significant barriers to Greater Victoria's competitive success:

Greater Victoria's limited international profile (Trait 10) inhibits its potential to grow its innovation economy. Its tourism and sedate quality of life assets are more visible than its business or entrepreneurship qualities. The region's legacy of trading internationally has not yet translated into an instinct to think and engage globally (Trait 2). And Greater Victoria does not benefit from an enabling government framework (Trait 9) whereby higher levels of government consistently support the region to be physically and commercially connected to the global economy, or provide the incentives or reforms to deliver 'whole region' solutions and approaches.

And there are other traits that will need to be sharpened as the region embarks on global opportunity.

Greater Victoria has some promising specialisations with potential to gain genuine global reach (Trait 3), but these require effective eco-system organisation, infrastructure and visibility. Its connectivity platform (Trait 7) could link local companies to international markets even more successfully than it does. It has only had occasional success in securing investment for larger strategic priorities (Trait 8), and as the region grows more mechanisms will be needed to fund and co-ordinate investment.

Many of Greater Victoria's biggest advantages are more the product of happy accident than of intentional cycles of investment, leadership and innovation. Much of the capacity created by its advantages has been used up, and there is a need to galvanise its business know how and knowledge institutions in light of global competition (Trait 5) and seize the opportunities inadvertently presented to it by COVID-19.

Towards a globally fluent Greater Victoria

Taking global fluency seriously for Greater Victoria will mean sequencing immediate priorities and becoming prepared for the future dilemmas and challenges of regional growth in the next business cycles.

A pathway to global fluency is visible for Greater Victoria, over multiple phases.

International experience suggests that in **the 1st phase** it will be important to gain momentum, build confidence in the new agenda with the civic and business communities, and demonstrate impacts that have both a business benefit and a public good. Public leadership within the City is essential to shift to being proactive and intentional towards global markets for the first time, to developing a more integrated brand proposition that links business to tourism, and to building networks of organisations and exploring how they might work better together. This phase is often given momentum by a catalytic quarter or district connected to a CBD or waterfront location, as can be the case with the Arts and Innovation District.

In the 2nd phase, regions on a path to global fluency start to demonstrate the region-wide benefits of a global approach. More of the region recognises the connections between innovation, enterprise, good jobs, creativity, culture, cohesion and place-making. Strategic plans start to be adopted by more of the region, and initial efforts toward fostering a second hub location for innovation may be attempted. Public leadership still plays key roles in financing and strategising for global engagement, but wider leadership groups have been fostered outside Government, and multi-agency coordination across local governments has grown. Educational and cultural institutions start to become fully engaged, and collaboration on innovation agendas with the private sector has scaled up.

In the 3rd phase, regions embed a globally fluent approach across a wider range of social, environmental, and economic policies. There is greater buy-in to larger reform agendas, and confidence to advocate with one voice to higher tiers of government. In this phase, a region has begun to tell its unique story with great confidence and a differentiating voice. It makes a shift from simply attracting and accommodating business and investment, to being widely recognised for its innovative production. Diversification, both of the industry offer and the locations, is established.

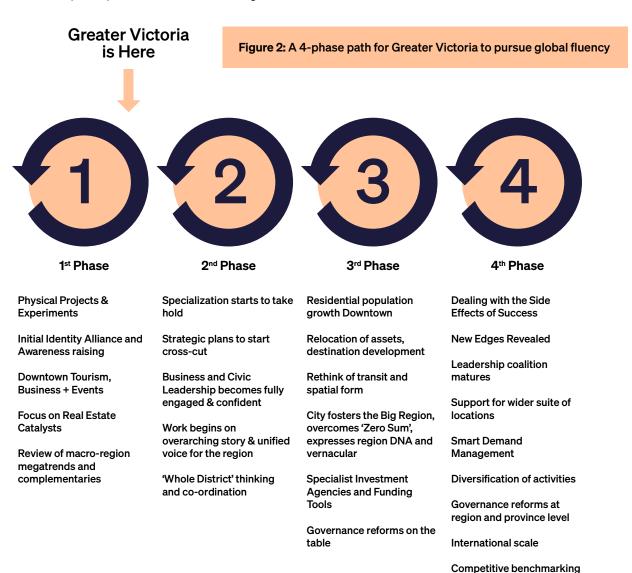
Regions in this phase are usually growing their population base and redefining their spatial strategies, with new locations reinforcing the identity. In this phase networked and dispersed leadership has begun to achieve a level of coordination, trust, and confidence with each other. Public leadership shifts more towards convening other province or national leaders, and greater emphasis on fostering a climate for innovation and experiments. The region's identity is no longer mainly a consumable asset for tourists, but more a carrier of metropolitan DNA, a driver of design and placemaking, and a source of belonging and cohesion.

Some regions eventually reach a **4th phase**, when all their development strategies, and wider liveability goals are infused with a shared aspiration for competitive success and resilience.

Leadership is shared and flexible but united by high trust, and there is a common venture to innovate and experiment across many parts of government and civic life. Private and philanthropic investment is optimised and previously novel financial mechanisms have become normalised to guide growth and demand effectively. Regions that have reached this phase will usually have a variety of specialised economic locations, with others evolving all of the time.

Public leadership continues to play the role of convenor and co-creator of strategy and joint venture funder, but it has learned how to optimise the role of civic leadership from across its institutional and social base in the region's promotion and development. Government frequently then combines these co-leadership roles with new initiatives to tackle 'wicked issues' and the 'unintended consequences' of growth in the region. These might include acute affordability challenges, inclusion of the most marginalised people in society, longer term financing of new catalytic projects, or winning the most competitive global contests.

Government brings to these deeper challenges the skills of convening, soft power, and coalition building. It recognises that public finances and public policies alone are not enough.



The time to begin

The 12 months after the peak of COVID-19 represent a window when the new order of city regions will be shaken up. Benefits will accrue if Greater Victoria can be decisive and relentless in pursuing new opportunities.

As the international evidence **Report 1** and **Report 2** shows, Greater Victoria can take confidence from the fact that by global standards it has a clear liveability and enterprise advantage, and industry specialisations that have the potential to flourish in a compact regional setting. But it will need to start now to proactively address key gaps around talent retention, urban fabric, affordability, and producing scalable innovation outcomes.

In the 1st phase three imperatives stand out for Greater Victoria:

- 1. A resilient, innovation-led economy Downtown. This means first and foremost a relentless focus on the Catalytic project of the Arts and Innovation District and Ocean Futures Cluster, to signal the commitment to a diversified, innovation-led and green economy. This will be key alongside the arrival of visible regional business headquarters and knowledge anchors, such as the Telus Ocean project. It may also make sense to set a target for a larger residential population in Downtown, and to develop a 'whole of place' approach to Downtown that fosters the experience economy and continually invests in tactical urbanism to animate Downtown's capacity to surprise and inspire. Greater Victoria can also explore mechanisms for permanent improvement and reinvestment between the public and private sectors and amongst multiple land owners.
- 2. An outward-facing innovation and business brand. Greater Victoria does not fully reach out to the world despite its edges and proficiency. Its technological, cultural and innovation assets are under-recognised. Greater Victoria needs to create a new positive story about the region and its future that aligns with global economic and social megatrends. A new narrative will help restore private sector confidence, build a broader and more inclusive culture of leadership in civil society, and focus attention on strategic initiatives that can gain political backing in the short term.

This logically begins with the region starting an Identity Building process, which enlists all parts of the leadership ecosystem to develop a story of Greater Victoria's DNA that draws on internal pride to build confidence for the future. Greater Victoria can define a narrative that allows different sectors to adopt common stories across markets.

Once this narrative has been refined, this may be distilled and communicated through a cross-sector promotion alliance that shares costs and benefits. This alliance can seek catalysts for brand exposure, in the form of events, media exposure, film, TV and third-party endorsement from diaspora, alumni and awards. And it also involves mobilising new and established Victorians to habitually spread information about the region worldwide through their family and business networks.

3. A clear and complementary role in the Cascadia region. The Pacific Northwest region brings with it the scale, clout, visibility and diversity to be a major global player in the upcoming cycles where the primary sources of growth will be beyond North America and Europe. Becoming globally fluent means understanding how Greater Victoria can smartly serve, specialise and borrow from this hugely exciting mega-region. Greater Victoria should be working to identify complementarities and initial forms of soft collaboration, and seeing what kinds of connectivity (personal, physical, digital) will be necessary to become more integrated with the region. The creation of shared capability and joint projects involving institutions across the region (e.g., the universities, the airports, large firms) may offer one way forward.

These three priorities can be a lead focus in the next period. Later on, once momentum has been clearly established in these three areas and Greater Victoria has become truly globally oriented, the region can usefully focus on what will be needed in the next phases, including potentially:

- SIPP's evolution into a permanent independent leadership platform to consistently support the whole region
 to be ambitious for its future. This would include diversified funding for a comprehensive array of services
 and strategies for Regional Economic Delivery, that eventually spans Global Identity, Diversification, Gateway
 functions, Innovation Economy, Regional Benchmarking, Public-Private Trust and Communication, and
 Ecosystem Orchestration.
- 2. A clear and compelling set of demands and tactics for Federal Government, including for prioritised investment, asset relocation and conducive industry policy. This may mean learning how to work with Halifax, Ottawa and others to build a commanding case for mid-sized city regions.
- 3. Eventually recruiting the rest of the institutional framework and building momentum for full metropolitan strategic planning. When Greater Victoria's specialisation and innovation credentials start to grow the base of well-paying jobs and intensify housing, land and skills constraints, it will become essential to achieve a long-term regional consensus to maintain momentum and appetite for growth and success. An efficient multi-centre region will become more of a necessity.

Greater Victoria can chart a path to a future where it is instinctively intentional in adjusting to new economic circumstances, when it can orchestrate transition rapidly and purposefully with its partners, and when it is consistently able to negotiate advantageous relationships with higher tiers of government. These are the hallmarks of fluency in the global economy. They are also the route to a productive and sustainable future.

Introduction

Despite the shock of COVID-19, city regions remain fundamentally connected to the global economy. Yet they have different degrees of global understanding, competence, behaviour and reach. These 'traits' affect how they optimise their role in globalisation and ultimately impact on future progress and productivity.

The Business of Cities co-created and authored the International 'Ten Traits' framework with the Brookings Institution. For this paper The Business of Cities has applied this framework for Greater Victoria as an independent assessment. It has not sought authentication from Brookings to undertake this particular analysis.

Why global fluency matters

Global fluency is about how regions read the world, navigate the map of global opportunity, and develop the capabilities and outreach to continually succeed and compete.

Regions that are globally fluent are better able to turn the benefits of globalisation into long-term citizen advantages – better paying jobs, resilient industries and strong communities. The more globally fluent regions and their businesses and governments become, the better they will be able to influence their own destinies, and increase their competitiveness. Equally, these places learn how to minimise and mitigate the downsides of globalisation. City regions that cannot read global opportunity tend to get stuck in narrow economic formulas that ultimately reduce their appeal.

Achieving global fluency is like learning a new language. It is a long-term process that requires intentional efforts and willingness to take risks. Smaller city regions evolve from being globally aware, to globally oriented, to globally fluent—over the course of decades.

New pathways to enter and succeed in globalisation are opening up all the time. More cities than ever participated intentionally in the most recent cycle (2008-2020), and this trend is likely to continue after the sharpest effects of COVID-19 recede.

This report

This report evaluates Greater Victoria's position within the Ten Traits of Global Fluency framework, observing the city region's strengths and imperatives in each of the ten trait areas.

This evaluation is not designed as a comprehensive 'balance sheet', but as a strategically informed diagnosis, based on stakeholder dialogues, benchmarking analysis, and international practice and case studies undertaken between March and August 2020. These also inform Report 1 and Report 2 of this work.

The 10 traits evaluation below features comments and quotes made by stakeholders in Greater Victoria during interviews and roundtables conducted in May and June 2020.

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The 10 Traits of Global Fluency					
1. Leadership with a Worldview	6. Opportunity and Appeal to the World				
2. Legacy of Global Orientation	7. International Connectivity				
3. Specializations with Global Reach	8. Ability to Secure Investment for Strategic Priorities				
4. Adaptability to Global Dynamics	9. Government as Global Enabler				
5. Culture of Knowledge and Innovation	10. Compelling Global Identity				

Source: Brookings Institution (2013) Ten Traits of Global Fluency

The Ten Traits model identifies the common journey cities and regions take from (1) Globally Aware to (2) Globally Oriented and (3) Globally Fluent.

Cities in Stage 1 — Global Awareness — are preoccupied with the domestic context; they have some internationally traded sectors and certain players read the global market with some level of proficiency, but the city as a whole is not yet able to speak or listen fluently. They do not yet have momentum for a unified effort to embrace global dynamics and enact local change.

Cities in Stage 2 — Globally Oriented — have a broader set of local business, government, universities, and non-profits connected to global markets. They adopt a vocabulary and lens of global competition and global contribution, and build metrics and strategies to match. They start to seize more of the opportunities that come their way through intentional behaviour. They understand implicitly the ultimate advantages of continuously seeking to increase global reach, visibility, and influence. These are the hallmarks of Stage 3 — Global Fluency.

We can observe that Greater Victoria currently is starting to shift from Stage 1 to Stage 2 of this journey.

This initial summary points towards the progress in each trait and potential to take the next step.

Introduction 10

1. Leadership with a worldview

Local leadership networks with a global outlook have great potential for impact on the global fluency of a metro area.

There is a high level of latent ambition in the Victoria region, underpinned by high civic trust and goodwill and a commitment to shared prosperity. Current elected city leadership is viewed to be effective, bold and consensus-oriented. There is growing confidence in Greater Victoria's capability and competence, abetted by recent figures that it is one of the fastest recovering regions in the world from COVID-19. Many recognise the chance to stake a leadership role in larger arenas, as Greater Victoria heads towards a population of 500,000.

But the overall impression is that leadership is disjointed and the ambition not fully calibrated. Greater Victoria has been unable to decisively decide what the priority should be. Ocean innovation can be a catalyst around which the region can build.

Initially, Greater Victoria's positioning can be led by the City of Victoria, and many regions have begun their journey with visionary core city leadership and a persistent City voice for the region. Over time however, small regions need conducive metropolitan governance to achieve the scale of reach and investment. Currently metropolitan governance is missing in Greater Victoria. The 13 municipalities that make up the region (plus the Capital Regional District Board) are not co-ordinated, and there is no natural forum or guiding mind for the region. There has been very slow progress with reforms to local government or the possible creation of a directly elected regional council. Inter-municipal competition for resources remains strong. The result is Greater Victoria does not easily mobilise higher levels of government around a common proposition and better ensure key decisions about regional priorities and investments are evaluated through a global lens.

Leadership also comes from outside of Government. The soft leadership roles of Business do not appear to be sufficiently developed. Business is too remote from much of the political leadership. There is not currently enough impetus within the Chamber of Commerce, and the gravitas of the five-year-old metropolitan alliance — the South Island Prosperity Partnership — is still in its early stages. Most stakeholders regard B2B and B2G relationships as too decentralised and informal and ad hoc.

There is growing confidence in Greater Victoria's capability and competence, abetted by recent figures that it is one of the fastest recovering regions in the world from COVID-19.

Greater Victoria also needs local and international champions and ambassadors. The region benefits from many ambitious and capable leaders, but few stakeholders can readily name individuals who act as independent voices on behalf of the future of Victoria. The region is home to many people who have come from elsewhere who have an interest in making it better, but few have been harnessed to lead strategically. The next task will be to recruit more business and institutional allies to lead this effort into the next phase.

2. Legacy of global orientation

Due to their location, size, and history, certain cities were naturally oriented toward global interaction at an early stage, giving them a first mover advantage

Modern Victoria was founded 180 years ago as a region of trade, and long-distance links were built in to its DNA and identity. Victoria's early success as an entrepot was a product of its gateway location, its port, its British legal and financial frameworks, and its openness to entrepreneurship. These remain relevant to the region's edge today.

Victoria welcomed diverse newcomers through several cycles of economic boom, bust and change, and its leadership from the start had an eye on global opportunity associated with the region's port and resources. Deep links to the UK and early designation as a seat of government have made Victoria unusually conscious of global values and trends.

"In a way we've always felt at the edge of things, but now the proximity to Asia, climate change, and the strategic importance of the Pacific changes that. We have to change our behaviours accordingly."

Greater Victoria inherits physical assets that remain decisive advantages as the global economy evolves. Its natural deepwater harbour is a key differentiator. It has an outstanding natural geography and a conducive climate, while as an island it also inherits something of a 'safe haven' status.

These natural assets have only just started to be explicitly recognised and taken advantage of. Up until now, most of Greater Victoria's economic health has been something of a happy accident.

Changing geopolitical dynamics also make this a decade of opportunity for Greater Victoria. The Pacific Rim is a global centre of gravity where much of the planetary pivot towards sustainable growth will be won and lost. This is also a decade of Arctic Ocean exploration for which Greater Victoria is a gateway.

The rise of new advanced industries and the Pacific-leaning centre of gravity also provides Greater Victoria with an opportunity to differentiate itself from city regions on Canada's East Coast, as a region committed to sustainable and inclusive growth industries (as opposed to extractive and non-broad based).

3. Specialisations with global reach

Cities often establish their initial global position through a distinct economic specialization, leveraging it as a platform for diversification.

Greater Victoria has a small but diverse ecosystem that includes AgTech, CleanTech, CivicTech, and a growing Marine Cluster. There is clearly a lot accumulated expertise spurring companies to early success in competitive markets. The presence of institutions such as the Coastguard, the Navy, Ocean Networks Canada, and post-secondary educational institutions, are an important advantage in driving investment.

There has been at least some track record at clustering technology companies in suburban business parks. There is also a fairly small but growing community of VC funded and impact-funded Indigenous businesses, with opportunity to become a leading Indigenous entrepreneur ecosystem in North America.

Global positions are established by leveraging a distinct niche – a cluster, business environment, natural resources or strategic location. However, we have observed the need for a clearer focus in Greater Victoria on the economic specialisations and innovation leadership. There appears a lack of agreement as to the pathways to specialise and what kind of company mix Greater Victoria really should be a great place for. Big firms on north Vancouver Island do not seem to be currently mobilised to play a role in the ecosystem or the prospective.

"There are constantly new incubators or hubs being set up — we seem to be very good at that — but we're missing the mentors, the execution, the networks, the business growth skills."

What we have seen suggests that the region will not just need a compelling economic development strategy document. It also needs catalysts to drive specialisation, which will include more anchor tenants in the City Centre with an international footprint. Into its second phase it will need to show clear wins to build interest and attention from higher tiers of government and confident ownership of the strategy by business and post-secondary institutions.

4. Adaptability to global dynamics

Cities that sustain their market positions are able to adjust to each new cycle of global change.

Greater Victoria has enjoyed a long period of relative economic prosperity and insulation from the volatility and externalities that other cities experience. The economy has been spread throughout cities and suburbs and hinterlands, and much of it is accustomed simply to selling the current product (degrees, holidays, retirement homes). With an exceptional natural environment, few growth constraints, and an improving lifestyle brand, adaptability and intentional adjustment has not been required up until now.

Many commentators have remarked that the problem is that there is no clear 'burning platform' for Greater Victoria. There is no 'clear and present danger' that presents a compelling reason to act and to make real changes. The geopolitical dynamics in the Pacific also, it is thought, will allow Greater Victoria to attract more diverse talent and participate in the high value Pacific markets.

Greater Victoria has only just begun to diversify from dependence on the Public Sector, the Military and Tourism. The challenge will be to do so more rapidly and effectively. Tourism and higher education in particular may become more vulnerable, especially as customers become more competitive and discerning. Japanese higher education, Korean ocean expertise, Taiwanese health care, and holidays in Greater China and ASEAN are all part of the emerging picture.

"The response I get from people is always, 'why should I care? why should we change?' They take the good life as a given rather than something we all have to actively maintain."

Greater Victoria is well placed to adapt successfully to the new post-Covid normal. One feature of the region's economic structure and geographic location is that upper income Victorians have been remote working for most of their lives. The region can benefit from a shift to smaller agile teams, and a corporate culture shift towards greater employee ownership, and more mission-driven business. But high value sectors and activities will still need high-amenity urban locations for their well-paying jobs.

One of the main risks of failing to adapt is growing frustration among the motivated people who live and work in Greater Victoria but are impacted by higher costs and eroding lifestyles. Sustained success will soon reveal underlying weaknesses and fresh horizons, just as other smaller cities such as Austin have found.

The burning platform needs to be clearly articulated. Without a change:

- Greater Victoria will slip into a low amenity, high cost, high commuting model along growth corridors, with few varied combinations of lifestyle choices, and a reduced sense that hard work will produce prosperity.
- Greater Victoria will become vulnerable to different kinds of economic shock. The institutional framework does not easily produce collaborative governance, sustained consensus, or a path for the private sector to provide a leadership role when adaptation of the urban environment is required.
- Greater Victoria will not continue to attract or retain top talent. Without more jobs clustered with high amenity lifestyles in cities, through better use of land to promote mixity and proximity, Greater Victoria's ability to attract working-age residents may come under threat. Dependency ratios will rise.

5. Culture of knowledge and innovation

In an increasingly knowledge-driven world, positive development in the global economy requires high levels of human capital to generate new ideas, methods, products, and technologies.

Greater Victoria has a strong ethos of entrepreneurship. While part of its progressive outlook includes a large and vocal antibusiness and anti-growth perspective, the overall propensity is one of autonomy, self-help and pro-prosperity. The relative seclusion and self-selection of the labour force fosters a community and cooperative mindset.

However from an ecosystem point of view it is apparent that Greater Victoria's commercialisation chain is incomplete - companies and ideas do not find a very active capital market to tap into. Companies that grow to a certain size usually have to move out, due to talent and resource constraints.

Greater Victoria is home to two universities, three colleges and two art schools, that are all collaborative and complementary. They invest in joint marketing. These post-secondary institutions support the production of capable professional and artistic talent as well as Greater Victoria's emerging global strengths in oceans, clean energy, carbon management and climate science. With 20% of international students staying in the region, they also serve a talent retention function. Relative to other city-regions the education system has fairly strong provision for disadvantaged populations.

There is a recognition that these institutions need to take next steps to take advantage of their combined capacity for purposes of advocacy, impact and commercialisation – and that this is more urgent given likely provincial and federal treasury strains in coming years. The track record of commercialisation is not strong, despite the presence of many incubators and accelerators, not helped by a pervasive 'build it and they will come' philosophy. Know how appears to be more of a challenge than mindset.

"There is a need for greater intentionality and architecture around local relationships. We don't quite get it right, but we don't quite know why."

Currently no major university or college campuses are Downtown, despite many propositions. The institutions have not seen the business case adequately made. Over time this will become a major disadvantage to Greater Victoria.

Despite regular predictions to the contrary, not least in this post-Covid scenario, businesses and other large employers will continue to favour Downtowns because of superior visibility to customers, greater access to talent, and opportunities to cluster and collaborate productively. High amenity Downtowns with sizeable residential populations consistently prove to be the places best equipped to meet lifestyle preferences and act as the magnet of tourism, leisure, culture and identity-building. Most peer regions to Greater Victoria internationally have knowledge institutions as major players Downtown, to serve an enlarged market, anchor the new economy, share infrastructure with business, and support inner city communities.

Establishing an Ocean Innovation Hub is a key opportunity to sharpen the region's innovation edge. Leadership of this agenda should include a laser focus to optimise the standards of membership, incentives for collaboration, and improved global linkages to monitor global market conditions.

6. Opportunity and appeal to the world

Metro areas that are appealing, open, and opportunity-rich serve as magnets for attracting people and firms from around the world.

Greater Victoria has magnetism as a compact region for people seeking a certain kind of relaxed quality of life with superb natural assets, alongside a quality of career opportunity and very strong high schools, private schools and post-secondary institutions.

Greater Victoria stands out in North America in having closely interconnected urban villages around a central core with excellent access to parks, beaches and amenities. The urban skeleton of Greater Victoria is a strong platform to build additional appeal.

However Greater Victoria is not yet perceived as synonymous with entrepreneurial spirit, unique cultural assets and experiences, accepting attitudes, or respect for religious and racial diversity. It also does not appear that new and established Victorians habitually spread information about the city worldwide through their family and business networks.

"As a region we have great connections overseas but for some reason we are too shy to tell our friends, and our friends of friends, all about what makes Victoria special. Other places I go, I see locals setting up businesses that serve the countries where they have ties, always making the pitch about why this is a great place to work or to settle down."

Only some leaders in Greater Victoria currently perceive talent and proficiency of the labour force as a critical gap, but this concern is likely to grow as the innovation imperative becomes more widely grasped. Providing more pulls for younger people to stay will have to be a priority. This is principally a question on the one hand of vibrancy, variety and housing affordability, and on the other hand of larger business HQs, strong business brands and anchors, and the ability to forge nimble teams in a more distributed economy after COVID-19.

7. International connectivity

Global relevance requires global reach that efficiently connects people and goods to international markets through well-designed, modern infrastructure.

Connectivity will remain critical in the post-Covid economy, to reach the international marketplace and connect people and decision-makers. Local roads, rail, public transportation, as-a-service transport, and bike and walking paths, are also essential as more people seek a version of the '20 minute city'. So is the spatial arrangement of households, businesses, and amenities in relation to that infrastructure, or what economic developers call "spatial efficiency."

We noticed that few stakeholders interviewed had a strong spatial lens of where the economy is, how it should cluster, and the relationship between density and productivity. In globally fluent city regions, there is a more established conversation at play about what different districts and neighbourhoods require in terms of land use, mobility and placemaking to foster innovation, depending on their location and economic composition.

In previous cycles air connectivity has not been perceived as a significant barrier to growth. Victorians have a muscle memory of getting off the island to Vancouver and beyond.

"If there is one quick win we have to address, it is the border preclearance that makes nonstop flights to the U.S. viable. Halifax has done it. So must we."

But optimising flight connections and clearances to Seattle, San Francisco and other centres is an important priority if Greater Victoria is to become a place where a daily return business trip is practical and manageable. Greater Victoria ultimately will need improved connectivity to key West Coast hubs as well as other centres such as Denver and Austin.

8. Ability to secure investment for strategic priorities

Attracting investment from a wide variety of domestic and international sources is decisive in enabling metro areas to effectively pursue new growth strategies.

Protecting and reinvesting in city systems has not been described as a critical gap in Greater Victoria in recent years. Many of those we interviewed did not view public investment deficits as a major barrier, which is in itself an indication that relative to other city-regions there has been a satisfactory level of continuous re-investment. Most are content with standards of education, mobility, health, energy, utilities and leisure infrastructure.

Infrastructure enablers that have been mentioned include:

- Improved rail connectivity to suburbs
- Much improved public spaces and international calibre places and amenities
- Bringing post-secondary institutions into the City Centre

"It's going to be very important that we get the investment in resilience to charge our economic recovery. We have to get on the front foot in making the case for low carbon investments, climate mitigation, and the kind of infrastructure that can really drive our marine sector."

Investment is not just a means to create assets. It is also a tool to grow and change. To attract multiple sources of investment, regions need to align with the needs of both public and private investors through their value-added development strategies, compelling identity and consistent leadership. If more investors outside Greater Victoria can see the region's long-term path to success, and clear pathways to co-investment, then the region will capture more capital for innovation and infrastructure projects.

9. Government as global enabler

Federal, provincial, and local governments have unique and complementary roles to play in enabling firms and metro areas to "go global."

Greater Victoria will need multiple levels of governments to provide co-ordination, visible leadership and on-the ground advocacy on behalf of regional business in foreign markets, and on behalf of the region to federal government. The provincial government in particular sets the tone for how globally engaged Victoria can aspire to be by establishing the level of appetite, transparency and dependability.

"A global Victoria will have a stronger presence and influence in Ottawa, probably working alongside other cities."

There does not appear to be a strong history of partnership between levels of government to support Greater Victoria's international competitiveness. Higher tiers of government have not historically appreciated the unique specialisations and potential of Greater Victoria, although the ocean opportunity is starting to change this. The provincial government has not wished to be seen as favouritist to its capital city, and has been more focused on remote communities. Continuing to alert the provincial and federal governments to Greater Victoria's ambitions, and helping federal government to see Greater Victoria's proposition as a global hub for low-carbon ocean technology, will be a serious task.

Within the region itself there are clearly constraints around:

- High levels of local government fragmentation leading to incoherent strategies and initiatives
- Few clear incentives or obligations for local governments to build common cause beyond the basics
- Low innovation in terms of place management, public-private partnerships, demonstration projects and pilots
- Low expectations of what business and civic leadership can contribute to urban and metropolitan governance and overly high reliance on Government and Policy solutions
- Barriers around how land use decision-making takes into account (or not) the full set of economic spillovers and multipliers of development

10. Compelling global identity

Cities must establish an appealing global identity and relevance in international markets not only to sell the city, but also to shape and build the region around a common purpose.

Greater Victoria's identity within Canada has gradually been taking sharper form. At the same time Canada's brand in the 21 century has been rising relative to United States, while the British Columbia brand within Canada has also become more distinctive.

Some distinctive assets and advantages of Greater Victoria's identity can already be observed:

- The deep DNA of Victoria with its role in ancient human migration and settlement, trade instincts, and high quality of contemporary indigenous business and culture.
- Inspirational landscape. The scenery, topography, and climate. Victoria's history and geography touches on deep human themes.
- Composure and Competence. The Victorian mindset and sense of personal and civic autonomy, and unpretentiousness, which drives innovation and excellence. The fact that Vancouver Island is now mainly COVID free is another demonstration that Victoria is lucky, but also smart and well organised.
- Tech with a social conscience, and a broader commitment to global values and fairness.

However Greater Victoria's overall Identity and Story is fundamentally missing. A pattern of eager but disjointed storytelling is apparent.

"There's a willing choir but not an agreement on the hymn sheet. People want to sing, but don't know the lyrics."

Behind this lie a series of imperatives to:

- Overcome a Zero Sum mindset between left and right, public and private sector, and between municipalities, by pursuing common agendas.
- Demonstrate when and how jobs and capital have a positive collective effect
- Deploy tools, visuals, demonstrations, and data more effectively

An important part of the identity process is also about re-centring the role of indigenous populations and communities in the story and the future of Greater Victoria. Global identity is also a vehicle for inter-cultural understanding, corporate citizenship and business leadership.

1 Brookings (2013), Ten Traits of Global Fluency

The Business Of Cities

The Business of Cities is an urban intelligence firm that works with cities and companies worldwide. It uses advanced benchmarking and comparative analysis to help leaders to respond purposefully to the twin dynamics of urbanisation and globalisation. Over the last 10 years it has supported public and private leadership in cities and regions such as Amsterdam, Auckland, Glasgow, Helsinki, London, Oslo, Philadelphia, San Diego, Sydney and Tel Aviv, and collaborated closely with international organisations such as the OECD, World Bank and Brookings Institution.

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