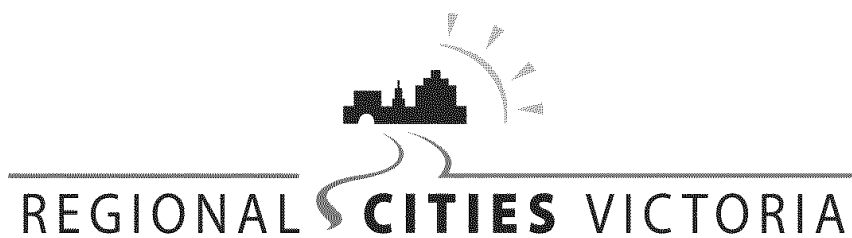


ATTACHMENT TO AGENDA ITEM

Ordinary Meeting

15 October 2013

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Executive Summary

Regional Cities Victoria Growth Framework

Introduction

Established in 2000, Regional Cities Victoria (RCV) represents the State's 10 largest regional cities, including Ballarat, Bendigo, Geelong, Horsham, Latrobe, Mildura, Shepparton, Wangaratta, Warrnambool and Wodonga.

In 2012, RCV commissioned an update of its previously released report, *Implications of Population Growth on Infrastructure and Resources in Regional Cities*. The revised report estimated that Regional Cities' combined population could increase by more than 288,000 people between 2011 and 2031¹ and confirmed the urgency of making integrated Regional City planning a high priority.

That report showed that Regional Cities have the capacity to support population and business growth at levels above current forecasts. However, significant additional infrastructure and service investment would be required.

To provide a methodology to guide Regional Cities as they undertake their own integrated planning, RCV commissioned the Regional Cities Victoria Growth Framework in late 2012.

The Growth Framework is a guide to help Regional Cities plan for future growth and development and to prioritise investment in services and infrastructure.

It creates an ordered structure for the broad range of priorities that Regional Cities need to consider and provides a logical approach for Regional Cities to develop their own flexible growth plans.

Importantly, it recognises the uniqueness of each Regional City in the context of local, regional, state, national and global environments.

Why Regional Cities need a Growth Framework

By 2031, Australia's population is projected to reach more than 28 million – up from 23 million in 2013².

Victoria's Regional Cities will see an estimated 12.2 per cent share of state population growth, with regional Victoria anticipated to attract 25.3 per cent³. Migration from Melbourne is expected to be the main contributor to that growth.

Regional Cities and surrounding towns play a pivotal role in contributing to balanced population growth across the state, thereby reducing congestion, infrastructure and service constraints on metropolitan Melbourne, while also providing new employment, industry and lifestyle opportunities in Regional Victoria.

RCV's Growth Framework positions Victoria's Regional Cities as leaders in managing the challenges and opportunities ahead.

The State Government and RCV share a vision of a State of Cities as a new way of addressing regional development in Victoria that also could be applied nationally.

The principle of a State of Cities recognises the role of Regional Cities in supporting the State's growth and prosperity by fostering conditions that stimulate the economies within Regional Cities and their catchment areas.

The RCV Growth Framework supports that vision.

Most notably, the framework provides a platform for the development of an implementation strategy that identifies ways in which investment in infrastructure and services can be coordinated to enable timely delivery that meets the needs of growing Regional Cities.

¹*Implications of Population Growth on Infrastructure and Resources in Regional Cities*, 2012 Report, Essential Economics.

²Australian Bureau of Statistics.

³Department of Planning and Community Development, *Victoria in Future 2012*.

Looking ahead to 2031

RCV's updated research focuses on the impact and implications of population growth projections in 2031. The research provides a base for RCV to plan how those population and economic growth projections could be realised.

The Growth Framework provides the platform for further planning and investment in regional Victoria in preparation for 2031.

The Growth Framework

The Growth Framework's aim is to harness integrated Regional City planning to advance the drivers of population growth and economic activity.

International evidence shows that while population growth itself can stimulate economic activity, there are many other diverse stimulators. They include access to:

- Appropriately zoned land
- Timely funding and capital investment
- Innovation, skills and technology
- Infrastructure
- Services
- Secure energy resources, and
- Potential markets.

The Growth Framework has three core components:

1. A **resource paper** explaining the economic theory underlying Regional City growth
2. A set of **growth indicators** enabling each Regional City to determine its current position and to set measurable benchmarks
3. A **Diagnostics Tool** each Regional City can use to set targets and priorities in achieving aspirational outcomes.

The Growth Framework draws on a wide range of variables in the economic value chain. It also identifies those variables that Regional Cities can influence by investment and/or policy and those variables they can't influence because they are external, such as major economic downturns or natural disasters.

The State Government and RCV share a vision of a State of Cities as a new way of addressing regional development in Victoria that also could be applied nationally.

The Growth Framework is a guide to help Regional Cities plan for future growth and development and to prioritise investment in services and infrastructure.

The Growth Framework structure

1. The resource paper

The paper, titled *Regional Cities Victoria Growth Framework*, explores the economic theories and principles underlying the Growth Framework. It reveals the regional value chains and the characteristics most applicable to each region for analysis purposes.

It establishes a clear and consistent method for assessing short and medium-term priorities for action – both investment and regulatory responses – to support future growth across the Regional Cities.

2. The growth indicators

Primary, secondary and tertiary indicators have been developed as a consistent data set to understand and model growth.

Regional Cities will be provided with a baseline of data inputs, using known primary indicators, which have already been filled out.

The sources for the known primary indicators for their Local Government Areas include the 2011 ABS Census. This locates each Regional City's current position and enables benchmark comparisons with, for example, other Regional Cities.

With much of this initial data inputting done, Regional Cities can focus on defining the secondary and tertiary indicators that are relevant to their own scenarios. They can also set their target indicators for 2016 and 2021, coinciding with the Census years, defining short-term (1-5 years) and medium-term (5-10 years) aspirations.

Primary indicators

State and local governments rely on a diverse range of primary economic and market-based indicators when developing regulatory systems and planning policies. Examples of primary indicators include: the value of expenditure by sector, skills diversity and the number of hospitals.

Primary indicators are measured frequently but they are 'lag' indicators; they reveal past movements, events or trends. Regulatory systems that are tied to primary indicators such as Census data do not necessarily keep pace with local and regional investment signals.

Primary indicators are used to define regional benchmarks, for comparison purposes, and their narrow focus and 'lag' factor has tended to distort the way Regional Cities are perceived. In some instances, these distorted perceptions have influenced planning, infrastructure investment and funding priorities.

Secondary and tertiary indicators

Secondary and tertiary indicators reveal deeper insights into local conditions by highlighting the unique nature of regions. When used to complement primary indicators, they can provide a more accurate analysis of each Regional City's economic focus and planning needs for achieving growth.

An example of using secondary and tertiary indicators to complement primary indicators would be to measure the quality of regional health services, rather than just the number of hospitals.

Interpreting the Growth Framework variables

The Growth Framework identifies variables that influence Regional City size, capacity and growth. In the resource paper, these variables are grouped under global themes, such as Regional City characteristics, economic value and scalability, and community infrastructure and services.

As noted earlier, Regional Cities can influence some

variables – via investment, regulation and policies – but not other variables, such as shocks due to natural disasters.

The Growth Framework distinguishes between:

- Direct control variables that Regional Cities can influence, such as market-based mechanisms
- Indirect control variables that Regional Cities can try to influence, such as local political and cultural networks, and
- External factors over which Regional Cities have little or no influence, such as external market shocks, and 'big picture' policy and economic drivers.

While the Growth Framework focuses on the variables that Regional Cities can influence, Regional Cities need to have the resilience to respond to the potential impact of external variables. By having the capacity to distinguish between the variables a Regional City can and can't influence, the Growth Framework can assist cities in allocating their resources more effectively.

Regional Cities can actively influence direct control variables and indirect control variables via public, private or not-for-profit investment, policy and regulation.

Federal Government funding of transport infrastructure is an example of public investment that a Regional City could influence, directly or indirectly. A Local Government policy action that expedites house-planning approvals, thereby attracting more new residents, would be an example of a Regional City's direct influence over a key variable.

3. The Diagnostics Tool

The Diagnostics Tool analyses primary, secondary and tertiary indicators to support Regional Cities' goal setting for growth. It also provides stronger evidence for securing investment.

After using the Diagnostics Tool, each Regional City will be able to clearly identify:

- The most significant indicators for influencing Regional City growth
- Key focus areas for strategic action to achieve their own aspirations, including:
 - Capacity-building initiatives to address infrastructure and services 'gaps'
 - Future-proofing initiatives to address economic and city-building requirements, and
 - Potential turning points in a Regional City's economic capacity.

Using the Diagnostics Tool

Undertaking a diagnostics assessment using the Diagnostics Tool involves five steps.

Step 1: Data Inputs

Step 2: Benchmark Comparison

Step 3: Establish Objectives

Step 4: Diagnostics Assessment

Step 5: Action Plan

Below is a summary of the process Regional Cities would follow in using the Diagnostics Tool.

Step 1 – Define appropriate data inputs for the known indicators outlined in the Diagnostics Tool for the Local Government Area. Known indicator sources include the ABS Census for 2011.

Step 2 (optional) – Undertake a high-level comparison with a Regional Cities average and/or Regional Victorian average, where this information exists. This comparison may highlight potential target areas for improved activity/performance.

Step 3 – Establish objectives for key indicators (where possible) for the period 2016 and 2021, as a minimum. These dates coincide with ABS Census data and allow both short-term (1-5 years) and medium-term (5-10 years+) aspirations to be set.

Steps 1 to 3 identify appropriate data inputs for analysis, and set individual, aspirational performance targets for key indicators. Regional Cities are now ready to undertake a

diagnostics assessment to identify focus areas for current and future action.

The diagnostics assessment involves:

Step 4 – Individual Regional Cities comparing activity or performance for the current period (i.e. 2011, 2013) against targets set in Step 3. This involves identifying key focus areas for current and future action that will enable the Regional City to achieve its objectives.

Step 5 – Developing an action plan by defining appropriate policy/regulatory and/or investment actions (and permutations of each) to be taken during the immediate term and longer term to enable the Regional City to achieve its objectives.

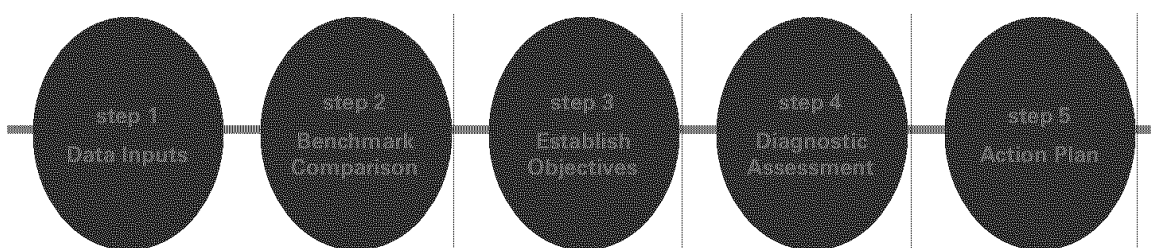
The Diagnostics Tool enables a Regional City to identify current and future growth and investment priorities and the policy or regulatory responses needed to meet future growth challenges.

In essence, the outputs of regional diagnostics reporting using the Diagnostics Tool can:

- Identify priority projects within Regional Growth Plans
- Enable State and Federal Government to target funding across Regional Cities.

The Growth Framework provides the overall contexts – the ‘what’, ‘where’ and ‘why’ of Regional City growth. The Diagnostics Tool provides the pragmatic means – the ‘how’ – of delivering that growth.

The Growth Framework’s strong evidence base enables Victoria’s Regional Cities to confidently undertake their diagnostics assessments, and contribute to the future prosperity of their regions and their State.



Regional Cities Victoria

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www.regionalcitiesvictoria.com.au

Regional Cities Victoria Growth Framework & Diagnostics Tool

Resource Paper

11 July 2013



About this Paper

The following resource paper was prepared by MacroPlan Dimasi (the Author) for Regional Cities Victoria. This report presents a framework for defining drivers of regional city growth and a diagnostics tool supporting analysis of the regional cities identified in this study.

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Guide for Users of the Regional Growth Framework & Diagnostics Tool

This paper describes the steps involved in developing and applying the Growth Framework and Diagnostics Tool which are the subject of this study. This is a resource paper for use by Councils in understanding and defining variables and drivers underpinning Regional City growth and performance.

The regional cities represented by Regional Cities Victoria (RCV) refers to the following municipalities: Bendigo, Ballarat, Geelong, Warrnambool, Horsham, Mildura, Shepparton, Wangaratta, Wodonga and Latrobe, (hereafter collectively referred to as 'Regional Cities').

This resource paper:

- ❖ explores some of the general theories and principles underlying the Growth Framework, which broadly reflect common sense ideas and feedback received from various stakeholders as part of this study;
- ❖ sets out a logical process for interpreting the Growth Framework and Diagnostics Tool for ease of interpretation for users; and
- ❖ establishes a clear, consistent and sophisticated method for assessing short-term and longer-term priorities for action – both investment and regulatory responses – to support future growth across the Regional Cities.

It is advised that all parts contained in this paper should be read in conjunction to ensure readers gain an understanding of the basis for the Growth Framework and the Diagnostics Tool.

Users of the Diagnostics Tool are advised to read this paper first before attempting to undertake regional diagnostics analysis and reporting.

Part 1 presents a broad strategic approach for considering Regional Cities in context – the general policy context relevant to the Regional Cities; the roles and relative importance of the Regional Cities and the regions they serve; significant factors influencing the performance of Regional Cities over time; and different regional city characteristics for analysis purposes.

Part 2 explores some of the important variables (economic and otherwise) that influence Regional City performance – including how such variables independently (and jointly) influence regional economic value chains and growth potential; the relative degree of influence between Regional Cities and regions they serve and how this may change over time; and the criteria used to assess the strategic priorities for regional city growth across the different characteristics defined in Part 1.

Part 3 sets out the Regional Cities Growth Framework and describes how regulatory and investment drivers relate to the important variables (economic and otherwise) discussed in Part 2.

This section presents an assessment for each of the Regional Cities – indicating the particular regional value chains applicable to each of the Regional Cities and the characteristics most applicable to each region for analysis purposes.

The characteristics described in this study describe what is readily observed today among the Regional Cities and where common attributes (strengths, weaknesses, opportunities and threats) may face Regional Cities now and in the future.

Part 4 outlines the general approach used for undertaking diagnostics analysis and reporting. The Diagnostics Tool itself is a template comprising four assessment themes, each of which contains a series of primary indicators relating to each theme, which may be used for assessment purposes. When interpreted collectively, the indicators may highlight current and future investment priorities for each Regional City and associated regulatory responses which may be required.

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Introduction

Background

The Victorian State Government is currently preparing a metropolitan planning strategy for Melbourne and regional growth plans for Victoria's regions. RCV is working closely with the Victorian Government to prepare a regional growth framework and diagnostics tool that will support the preparation of regional growth plans and guide funding decisions for Regional Cities.

RCV has engaged the Author to undertake a study to develop a consistent Growth Framework for the Regional Cities identified by their respective Local Government Areas (LGAs) – Bendigo, Ballarat, Geelong, Warrnambool, Horsham, Mildura, Shepparton, Wangaratta, Wodonga and Latrobe.

The following steps will be undertaken to define the Regional City Growth Framework and regional Diagnostics Tool:

Task 1 - Development of a Regional City Growth Framework

- Task 1.1 Literature review discussion paper
- Task 1.2 Research and analysis
- Task 1.3 Define assessment criteria & Growth Framework
- Task 1.4 Review & agree assessment criteria
- Task 1.5 Finalise Framework

Task 2 - Strategic Diagnostics Tool & Reporting

- Task 2.1 Regional Cities audit
- Task 2.2 Audit review & moderation
- Task 2.3 Diagnosis reporting

The following paper focuses on Tasks 1.3-1.5 and Tasks 2.1-2.2. This paper follows an earlier Literature Review dated 5 February 2013 addressing Tasks 1.1-1.2.

Structure of this report

This report contains the following Parts which need to be read in conjunction to ensure readers gain an effective understanding of the basis for the Regional Cities Growth Framework and Diagnostics Tool.

Part 1 – Strategic Framework for Regional Cities

- Step 1 – Establish Line of Sight
- Step 2 – State of Cities: Region and Regional City relationships
- Step 3 – Historic and strategic orientation
- Step 4 – Regional City characteristics

Part 2 – Value Chain/ Value Adding Criteria

- Step 5 – Regional City value chain logic map
- Step 6 – Value adding tests defined
- Step 7 – Regional City growth variables

Part 3 – Regional Cities Growth Framework

- Step 8 – Growth framework
- Step 9 – Regional value chain assessment
- Step 10 – Regional City characteristics assessment

Part 4 – Regional Cities Diagnostics Tool

- Step 11 – Diagnostics framework
- Step 12 – The Diagnostics Tool
- Step 13 – Regional diagnostics scorecard
- Step 14 – Regional investment logic framework

Introduction

Methodology

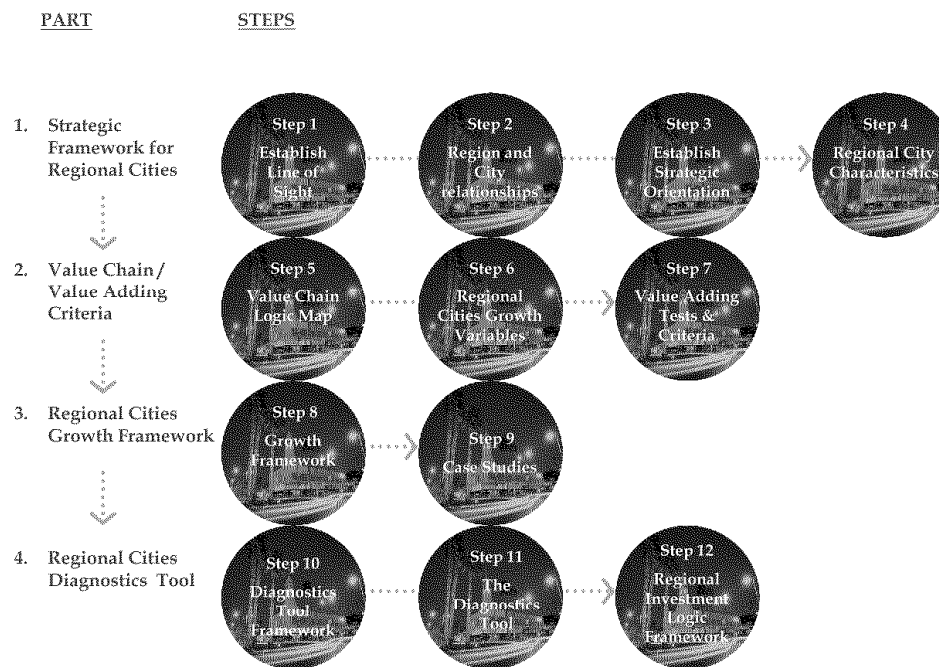
The following flow chart describes each of parts of the methodology and associated steps which were undertaken by the Author to establish the Regional Cities Growth Framework and Diagnostics Tool.

There are four Parts to the methodology:

1. Strategic Framework for Regional Cities
2. Value Chain / Value Adding Criteria
3. Regional Cities Growth Framework
4. Regional Cities Diagnostics Tool

The way each of the steps relates to the Regional Cities identified has been depicted using lines of direction (i.e. dotted arrows).

The approach outlined in this paper is highly adaptable and may be applied to regional cities more generally in Victoria and other regional areas throughout Australia.



Introduction

References

In addition to the information already referenced in the Literature Review, the author has made further reference to the following information and data in preparing this paper:

- ❖ Regional Australia Institute Catalysing Local Infrastructure Renewal, December 2012
- ❖ Regional Australia Institute, Regional Competitiveness Index, November 2012
- ❖ Implications of Population Growth on Infrastructure and Resources in Regional Cities, Essential Economics Pty Ltd, 2012
- ❖ Change and Disadvantage in Regional Victoria, 2011
- ❖ Regional Victoria: Trends and Prospects, 2010
- ❖ OECD Place based policies for rural development, - the Micro-regions strategy (Mexico), April 2005
- ❖ IMF Country Report 04/418, Mexico: Selected Issues, 2004
- ❖ Australian Bureau of Statistics 2005 Innovation in Australian Business, Doc. no. 8158.0, 2003
- ❖ The Journal of Economic Perspectives, Endogenous innovation in the theory of growth, Grossman G and Helpman E 1991b, 8 / 23-44, September 2001
- ❖ Meeting the challenge of change in Regional Australia, Productivity Commission, November 2000

Limitations

The findings and recommendations in this report are given in good faith but, in the preparation of this report, we have relied upon and assumed, without independent verification, the accuracy, reliability and completeness of the information made available to us in the course of our work, and have not sought to establish the reliability of the information by reference to other evidence.

Any findings or recommendations contained within this report are based upon our reasonable professional judgement, based on the information which is available from the sources indicated. Should the project elements, external factors and assumptions change, then the findings and recommendations contained in this report may no longer be appropriate.

Accordingly, we do not confirm, underwrite or guarantee that the outcomes referred to in this report will be achieved.

This report does not constitute an expression of opinion as to whether any forecast or projection of RCV will be achieved, or whether assumptions underlying any forecast or projection of RCV are reasonable. We do not warrant or guarantee any statement in this report as to the future prospects of RCV and the Project.

There will usually be differences between forecast or projected and actual results, because events and circumstances frequently do not occur as expected or predicted, and those differences may be material.

Part I

Strategic Framework for Regional Cities



Part III Strategic Framework for Regional Cities

Overview

This section contains four elements which together provide a strategic approach for considering how Regional Cities grow within a wider regional context and the factors that influence Regional City growth.

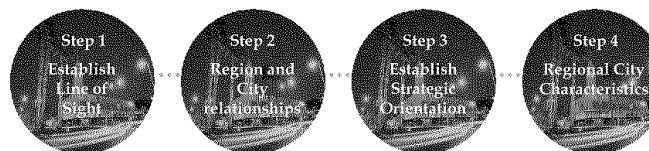
- ❖ The first element involves establishing a clear line of sight between global, national, state and local policy frameworks relating to regions; identifying potential gaps in alignment across various regulatory systems; and identifying opportunities for market based responses.
- ❖ The second element involves defining the relationships between Regional Cities and the regions they serve generally as well as relationships between individual Regional Cities and broader relationship between Regional Cities and Metropolitan Melbourne.
- ❖ The third element involves establishing the strategic orientation of Regional Cities. Strategic orientation has been defined by the Author as a combination of: (1) the historic context underpinning the Regional City and the wider Region it serves; (2) the relative economic size and growth capacity of the Regional City and the region it serves; (3) the relative position the Regional City holds in the current economic cycle (post-GFC); and (4) the importance of natural systems and events for Regional City growth (i.e. availability of water / energy / resources and the impacts of drought, flood, bushfire).
- ❖ The fourth element involves defining the broad characteristics of Regional Cities, having regard to a wide range of variables. This is important for establishing common themes as well as differences across Regional Cities within a regional, state, national and global context.

Each of these elements is important for interpreting the Regional Cities Growth Framework outlined in this paper.

Structure of this section

This section unpacks Steps 1-4 and describes the relative importance of each in establishing Regional City growth characteristics.

Each step provides an important element used in defining the Regional City Growth Framework and Regional Cities Diagnostics Tool.



Part III Strategic Framework for Regional Cities



Step 1- Line of Sight

What is line of sight and why is it important?

Line of sight seeks to establish the strength (and relevance) of relationships between global, national, state and local policy frameworks relating to regions, and how such systems support regional growth and investment.

The earlier literature review as part of this study assessed the strength of alignment across various regulatory systems (global, national, state and local) and identified a number of areas where gaps between regulatory mechanisms might be addressed through market based (i.e. investment) responses.

Regions tend to grow organically and respond differently to a variety of economic and market forces and other variables over time.

- ❖ The way Regional Cities evolve often reflects what is happening more broadly in the regions they serve including a combination of unique circumstances and events, which are often beyond the control of regulatory systems.
- ❖ Investment and innovation in many regions is happening at a pace that is quicker than regulatory or planning systems are capable of addressing. It is clear in some instances that regulatory systems are out of pace with local and international investment signals.

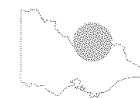
Line of sight is important in reinforcing the importance of greater coordination between global/national, state and local regulatory systems to deliver clear signals for local and international investment in regions.

Where there is strong line of sight, governments and industry share a strategic, long term vision for growth and make coordinated decisions about priority projects and investments required at a regional level to achieve this vision.

ELEMENTS (i.e.)



1. COAG criteria, National policy, regulatory & investment programs, systems and frameworks



2. State/Regional policy, regulatory & investment programs, systems and frameworks



3. Regional City policy, regulatory & investment programs, systems and frameworks



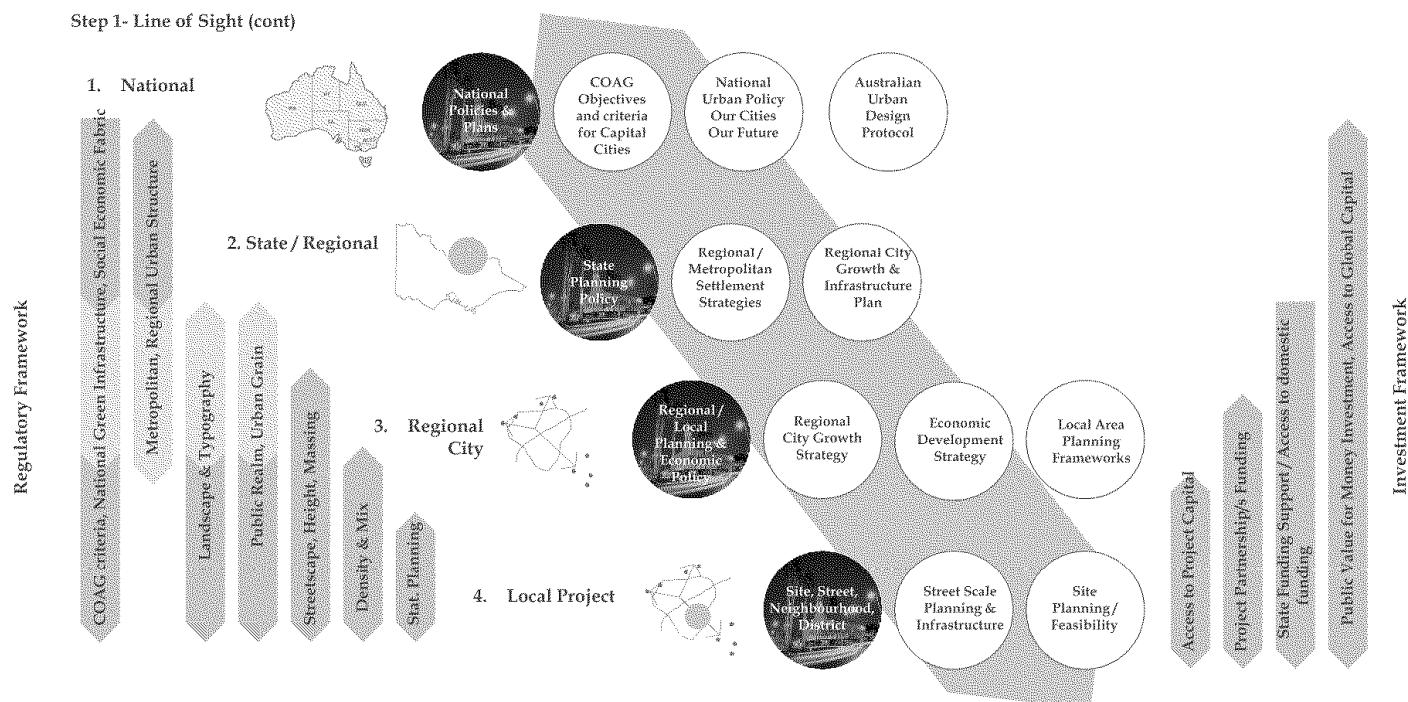
4. Local Project investment and delivery outcomes

Part 1

Strategic Framework for Regional Cities



Step 1- Line of Sight (cont)





Part II Strategic Framework for Regional Cities

Step 1 – Line of Sight (cont)

Why is it important to have global line of sight?

Australia is a relatively small, open economy with well established and important global trade links. Melbourne is home to Australia's largest port which processes in excess of 2.5 million container movements annually totalling \$85 billion in traded goods. Melbourne's port infrastructure links local producers and their associated supply chains in Victoria and throughout other parts of Australia to global markets.

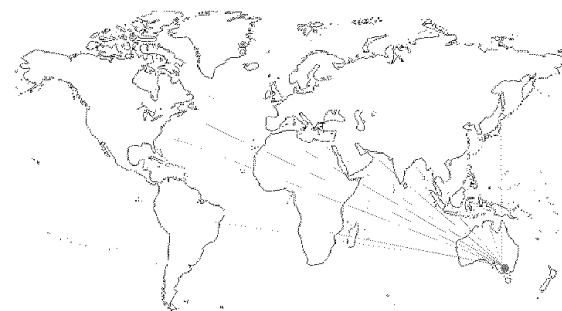
Both the Federal and Victorian State Government – in collaboration with major industry groups here and overseas – have a shared understanding of the priorities for growth in traded goods, particularly mineral resources, manufactured products and food and fibre exports. The way Victoria's regions grow and respond in response to this shared understanding isn't particularly well defined or coordinated. There does not appear to be a well articulated or commonly accepted future vision for Victoria's regions.

There are a number of other global and national challenges influencing Regional City growth, which lacks coordination at various levels, including:

- ❖ An ageing population, access to skills, shrinking labour market by 2050 and implications for regions, particularly food and fibre production;
- ❖ Education, skills and productivity and labour force participation and implications for regions;
- ❖ Health services requirements and planning for regional city growth;
- ❖ Transport infrastructure (freight and passenger systems) and how such systems facilitate access for labour and key markets; and
- ❖ Natural systems issues and risks, water, clean energy and biodiversity.

These themes are considered within a regional growth framework to ensure regional city growth plans reflect broader objectives relating to achieving long term sustainable growth outcomes.

Global



KEY ASPIRATIONS (e.g.)

- Globally competitive industries investing locally with well established and connected networks
- Access to international capital, skills and technology at a regional level
- Healthy trade growth (exports/imports) and competitive markets
- Attractiveness as a destination for Global HQ (i.e. Manufacture/food production)



Part III

Strategic Framework for Regional Cities

Step 1 – Line of Sight (cont)

Why is it important to have State and Regional line of sight?

The earlier Literature Review demonstrated there a commitment at a State Government level to achieve future growth throughout Victoria's regions. However in reality, there appears to be a lack of policy coordination across some State Government agencies in relation to what the future looks like for Victoria's regions.

Policy systems, processes and tools in place at the State level are not always well aligned and don't appear to enable a consistent focus regarding how to achieve sustainable regional growth in Victoria over time.

- ❖ Consideration of the capacity for population growth within Victoria's Regional Cities and the role of transport infrastructure (particularly public transport to Regional Cities) appears to lack consistent policy focus.
- ❖ Metropolitan growth-area planning differs in many ways to the planning systems supporting regional cities across Victoria – some of which border metropolitan growth areas and other states and territories.
- ❖ Processes for delivering health and education infrastructure and services differ in some ways to growth-area planning for the same types of infrastructure, presenting interesting opportunities and challenges for defining a Regional City growth framework.
- ❖ Whilst there are generally consistent policy arrangements for planning for regional growth at a local level, such systems are generally applied in different ways to achieve localised outcomes reflecting unique local characteristics and requirements.

This demonstrates that, while there is general alignment between State and Local regulatory systems in many areas, a much stronger alignment across policy, regulatory and public investment frameworks would result in more coordinated decision making about priority projects and provide clearer signals for local and international investment within Regional Cities. It also acknowledges competing forces on state government funds with large growth fronts occurring closer to Melbourne therefore the need to develop an evidence base for all cases submitted.

State / Regional



KEY ASPIRATIONS (e.g.)

- Inter-state and regional competitiveness
- Regional population growth and sustainable employment growth
- Economic and social participation including education, skills development and employment opportunities
- Investment in regional infrastructure and economic multipliers (i.e. freight and logistics)
- Certainty for business and investors
- Housing affordability and cost of construction

Part III Strategic Framework for Regional Cities



Step 1 – Line of Sight (cont)

Regional City / Local level

It is clear that Local Government policy frameworks, planning systems and practices provide a strong basis for achieving targeted outcomes at a local level. However, it is apparent in many instances such systems but may not always relate closely to what is happening within the national or global economies.

Having said that, it is difficult to envision a one-size-fits all approach to regional planning and investment in Victoria which addresses location, national and global themes at all times. This reflects the unique nature of regions and the individual economic focus for regional development and planning required to achieve targeted growth and development at a local level.

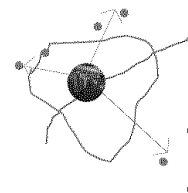
This means a level of flexibility in local regulatory systems is required to ensure balanced and effective growth across different regions, reflecting unique local economic structures and other variables beyond the control of some regions.

- ❖ Some regions are able to play an immediate role in influencing local, state and national growth outcomes reflecting their size, economic significance and local governance and leadership.
- ❖ Others may be less capable of achieving this and will therefore require strong investment and a supportive regulatory responses to facilitate such growth outcomes.

As a consequence, local regulatory mechanisms may need to provide greater flexibility in some areas as regions grow organically and respond differently to a variety of economic and market forces and other variables over time.

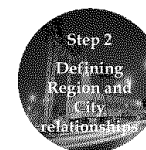
This paper addresses some of the priorities for local regulatory systems and investment required for growth in Regional Cities.

Regional City / Local level



KEY ASPIRATIONS (e.g.)

- Increased labour force participation and productivity
- Enhanced regional economic value and productivity
- Enhanced regional and global attractiveness
- Improved social infrastructure and lifestyle amenity
- Business incentives, reduced costs of doing business
- Sustainable use of rural and urban land
- Increased local workforce participation



Part III Strategic Framework for Regional Cities

Step 2- State of Cities: Defining region and Regional City relationships

What do we mean by a State of Cities?

Victoria is geographically the smallest mainland state in Australia with a total population of approx 5.6 million people (2011). Victoria is Australia's most densely populated state with the bulk of its population concentrated in and around Melbourne.

- ❖ Melbourne is Victoria's Capital City and serves as the largest metropolitan activity centre with a population of around 4.17 million people (2011). Melbourne is Australia's second largest Capital City.
- ❖ Victoria comprises a number of major Regional Cities, which encompass both the urban area of the city and outlying regional areas which can span thousands of square kilometres.
- ❖ Many of these Regional Cities are among the largest and most populous inland cities in the State and service their own capital city populations (some in excess of 90,000 people) as well as wider a regional population.

Due to the number of large Regional Cities and their relative proximity and connectivity to Melbourne and each other, this means Victoria is unlike Australia's other States – it represents what may be described as a State of Cities.

Why is it important to define region and Regional City relationships?

A State of Cities, in reality, is likely to mean different things to each of the Regional Cities themselves, depending on their role and function in the wider regions they serve as well as the Victorian (and Australian) economy.

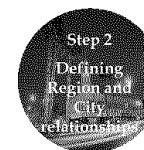
Many Regional Cities service significant regional populations, some of which are located in other states and territories.

Some Regional Cities will have a relatively strong relationship to metropolitan Melbourne through infrastructure, roads and public transport, while other Regional Cities will have stronger connections to neighbouring regions and Regional Cities.

This means it is important to consider not only capital city populations defined by Local Government Areas (LGAs) but the wider regions served by Regional Cities and the different relationships between Regional Cities located throughout Victoria and elsewhere.

The next section describes some of these relationships in further detail and the implications for a Regional Growth Framework.

Further information relating to region and Regional City relationships is also provided in Step 4 – Regional City Characteristics.



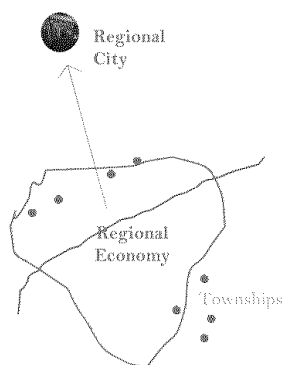
Part III

Strategic Framework for Regional Cities

High Dependency on Economic & Natural Systems

OBSERVATIONS / IMPLICATIONS

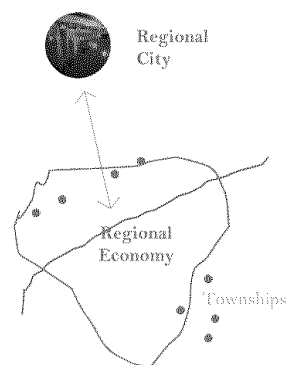
- ❖ Activity and growth in the Regional City tends to be highly dependent on (and/or constrained by) what is happening in the surrounding regional economy and its population
- ❖ The level of population growth in the Regional City, including daily/ weekend in-migration tends to remain largely static meaning the size and growth of the services sector within the Regional City is also generally constrained.
- ❖ The region itself is highly susceptible to seasonality and natural systems (i.e. water, energy, soil quality, changing weather conditions, global warming) meaning the residents of the Regional City are exposed to the impacts of such variables



Existing / Declining Regional City Dependency

OBSERVATIONS / IMPLICATIONS

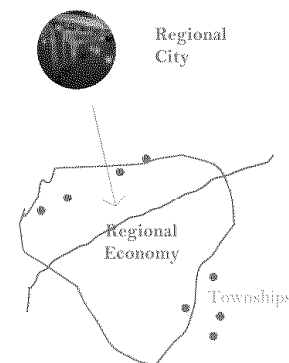
- ❖ Activity and growth in the Regional City is affected to some extent by what is happening in the surrounding regional economy although the effects are less prominent
- ❖ Population growth in the Regional City is becoming more dynamic reflecting permanent in-migration from surrounding regions as people seek to reside closer to services and amenity meaning the size of the services sector is growing to keep pace with such changes.
- ❖ The Regional City is less susceptible to seasonality and natural systems although the impacts of events such as drought still impact surrounding regions which can influence the general context for activity and growth within the Regional City



Mainly Self-Sufficient Regional City Independent of Regional Economy & Variables

OBSERVATIONS / IMPLICATIONS

- ❖ The Regional City functions like a Major City and is self sufficient and generally not adversely affected by what is happening in the surrounding regional economy or other Regional Cities
- ❖ Population in the Regional City is growing relatively strong reflecting steady in-migration, resulting in significant demand for a full range of business, government, health, education and other services meaning the Regional City has a mature, self sufficient services sector.
- ❖ The Regional City is not directly susceptible to seasonality and natural systems although the impacts of events such as drought may impact some surrounding regions with no direct consequences for Regional City growth or outlook





Part III Strategic Framework for Regional Cities

Step 3 – Establish Historic & Strategic Orientation

HISTORY

Why is history important?

Many of the Regional Cities identified in this study have rich histories dating back to the early 1800s, with many achieving a level of prominence during the 1850s gold rush which coincided with the time of Ned Kelly.

The history of the Regional Cities is important as it reveals a lot about the earliest influencing factors which shaped the cities as they are today. Some Regional Cities started as early European settlements providing centres of commerce and industry linked to gold mining while others were colonial sheep and cattle stations linked by horse and cart, railways and early inland ports connected via a network of Murray River paddle steamers.

History shows how each of the cities has changed in response to significant regional economic factors, including international events, which have transformed Regional Cities in ways well beyond their control.

Well documented events during the past two centuries show how Victoria's Regional Cities responded to the effects of droughts, floods, fires, World Wars, the Great Depression, immigration and a changing political landscape as Australia has ventured onto the global political stage.

In 1851 Australia's population was 437,655 people and Victoria was home to 77,345 people, or 18 per cent of the national total.

By 1861 Australia's population had grown to 1,151,947 people and Victoria's population had reached 538,628, or 47 per cent of the national total. Victoria had just witnessed a seven-fold increase in population during a decade.

By 1886 Victoria's population reached 1 million, exceeding the population of New South Wales during this period.

Regional Cities such as Bendigo and Ballarat (among others) were bustling centres of trade during this time with growing populations, large expanding city centres and strong links to international markets.

This was a significant period in the history of these Regional Cities and underpins their relative prominence today.

Victoria's population doubled from 1million to 2 million people between 1886 and 1944 (almost 58 years) with a significant portion of this growth occurring within metropolitan Melbourne and growing regional centres such as Ballarat, Bendigo and Geelong.

During the 1920s the Latrobe Valley coalfields were exploited for power generation with the State Electricity Commission of Victoria building Yallourn Power Station.

Between 1944 and 1962, Victoria's population grew from 2 million to 3 million people (18 years) and from 3 million to 4 million people between 1962 and 1982 (20 years).

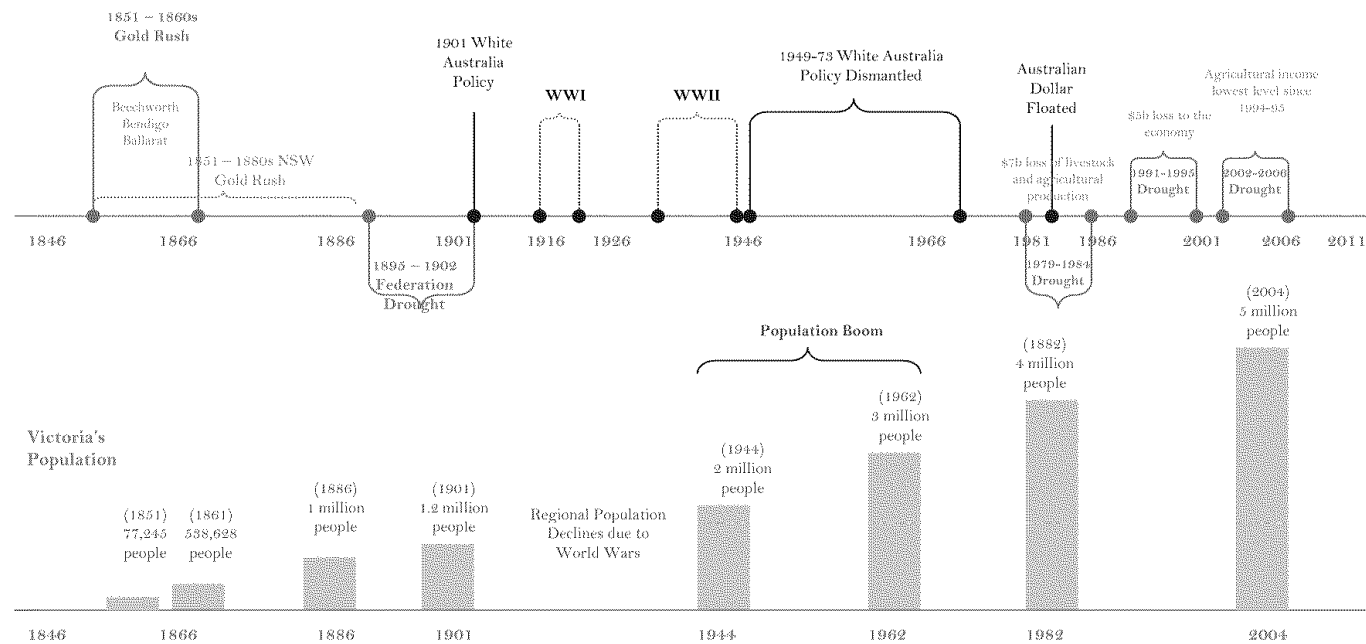
During this period regions such as Shepparton, Wodonga, Wangaratta and Latrobe experienced population increases and significant growth in regional economic output owing largely to construction, major infrastructure projects and skilled migration. Hazelwood Power Station was built between 1964 and 1971.

Victoria's population increased from 4 million to 5 million people between 1982 and 2004 (22 years) with steady growth in Melbourne and surrounding Regional Cities with relatively subdued growth within some of Victoria's other Regional Cities during this time.



Part III Strategic Framework for Regional Cities

Some of the Major Events





Part III Strategic Framework for Regional Cities

Step 3 – Establish Historic & Strategic Orientation

HISTORY

What does this mean for a Regional Cities Growth Framework?

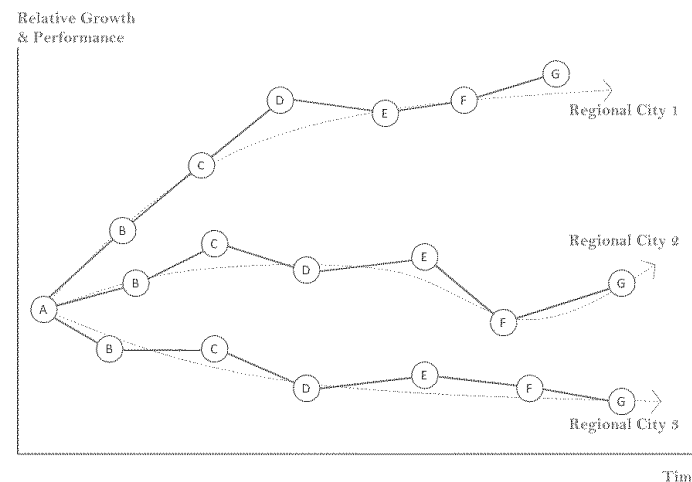
In many ways there is a strong correlation between past events and population growth in Victoria, particularly regional population growth.

History shows us that a large proportion of early population growth occurred in Victoria's regions. Regional Cities serving Victoria's key economic regions were major centres for commerce and services supporting growth in mining, wool, grain and meat production and supported by major rail, road and steam trade routes. Examples include Ballarat, Bendigo, Geelong, Wodonga, Wangaratta, Shepparton and Mildura.

History provides a reference point for interpreting the future – it enables us to understand how the past has shaped the DNA of Regional Cities and how this DNA structure may need to evolve or adapt over time to meet future challenges supporting future needs.

The Regional Cities Growth Framework accounts for the DNA structure of regions and highlights areas for potential DNA structural change.

The figure show on this page shows how the DNA structure of Regional Cities may have evolved in response to historic events at various points in time, indicating how significant certain events were in establishing economic determinants such as local wealth and investment, a strong services sector, the creation of key sectors and industries within the economy and importantly, investments in key infrastructure supporting population growth.



Regional City 1

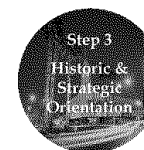
Evolves from (A) to (B) much faster than Regional Cities 2 and 3 – with particularly marked growth at (C) and (D) meaning long term growth pattern (G) is much higher by comparison.

Regional City 2

Evolves from (A) to (B) relatively quickly ahead of Regional City 3 – with particularly marked growth at (C) but declines at (D) and recovery at (E) followed by a decline event at (F) followed by recovery to (G), below Regional City 1 and ahead of Regional City 2.

Regional City 3

Experiences a decline event from (A) to (B) compared with Regional Cities 2 and 3 – with some recovery at (C) with another moderate decline at (D) followed by modest recovery events at E and F meaning steady state growth (G) is much lower by comparison.



Part III Strategic Framework for Regional Cities

Step 3 – Establish Historic & Strategic Orientation

SIZE AND CAPACITY

What are some of the drivers of scale and capacity?

The economic scale and capacity of a Regional City is strongly influenced by its historic context and relative capacity for growth over time. Some of the important variables influencing current Regional City size and growth capacity include:

Economic Capacity, Land

- ❖ Population growth – a strong resident population, diverse demographic structure and relative household incomes/wealth and capacity to attract and retain population and skills
- ❖ Regional City capacity & vitality – a strong centrally located business and retail services sector and strong access to government services and capacity for urban renewal and revitalisation within the city centre capable of supporting a strong city
- ❖ Industry clusters, diversity and value adding capacity – including the type, size and capacity of industries and emergence of clusters and investment hubs capable of creating value adding capacity
- ❖ Capital investment – including a strong history of public investment, corporate business investment, private wealth and investment
- ❖ Labour force sustainability – including access to both locally based and regionally sourced labour, growth in labour productivity
- ❖ Innovation, skills and technology – including access to skilled labour / qualifications and a technology enabled workforce
- ❖ Land / Floorspace Sustainability – through availability of adaptive land to core economic and higher value uses, availability of zoned serviced residential land, availability of zoned serviced employment land and capacity to mitigate risks and constraints to development of land/floorspace

Infrastructure

- ❖ Transport Infrastructure & Systems – strong public transport links, heavy rail/freight and logistics, high speed roads and freeways, port, airport, ferry and other infrastructure systems supporting access and connectivity for residents and industry
- ❖ Natural resources such as minerals, energy forestry, aquaculture and fishing – including highly effective resource utilisation and infrastructure supporting capture/storage/extraction and transportation of natural resources and sustainable resources
- ❖ A nationally significant energy sector located in the Latrobe Valley supplying more than 85 per cent of Victoria's electricity and accounts for 98.5 per cent of Australia's brown coal production. An estimated 500 years of easily accessed coal remains in the Latrobe Valley.
- ❖ Sustainable water resources for domestic and industry/agricultural use and methods for mitigating supply and price risks
- ❖ Data systems and technology – including access to high speed data networks (cable, mobile, satellite)
- ❖ Tourism Infrastructure – including sustainable natural tourist attractions within the region and appropriate tourism infrastructure and services

Community

- ❖ Health Infrastructure & Services – including access to high quality regional level public and private hospital and primary/allied health care
- ❖ Education Services – including access to public and private primary and secondary school education services as well as higher education (TAFE/Technical) and tertiary (University) institutions
- ❖ Social / Cultural / Sporting / Recreational Infrastructure & Services – including a full mix of general community infrastructure and services as well as services for specific user groups, sporting and active/passive

cont...



Part 3 Strategic Framework for Regional Cities

Step 3 – Establish Historic & Strategic Orientation

SIZE AND CAPACITY

What are some of the drivers of scale and capacity? (cont)

Community (cont)

- ❖ Community Safety / Justice Infrastructure & Services – including law enforcement services, justice and legal infrastructure and support services for various groups
- ❖ Other community based institutions, coordination & collaboration – including chambers of commerce and industry, social, institutional structures conducive to local knowledge diffusion, participation and cooperation

Environment

- ❖ Responsiveness to climate change – including access to funding and programs for ensuring water and energy sustainability
- ❖ National Climate Change policy initiatives with direct implications for electricity production as well as forestry and indirect implications for energy prices flowing through to industry and household consumers
- ❖ Conservation initiatives as well as local investment in sustainability research and infrastructure including water re-use/adaptive water sustainability and other initiatives for land use adaption/transition favouring long term environmental sustainability

There are a range of other variables influencing a Regional City's capacity for growth, which are described in further detail in Parts 2 and 3 of this paper.

For the purposes of analysis the Author has defined the following indicators of scale and capacity adopted in Part 2 of this study. Appropriate measures pertaining to each are defined in Part 3.

- | | |
|--|--|
| <div style="border: 1px solid black; border-radius: 50%; width: 40px; height: 40px; margin: 0 auto; display: flex; align-items: center; justify-content: center;">S1</div> | <p>Limited discernible scale with general capacity constraints</p> |
| <div style="border: 1px solid black; border-radius: 50%; width: 40px; height: 40px; margin: 0 auto; display: flex; align-items: center; justify-content: center;">S2</div> | <p>Moderate measurable economic scale with some defined capacity constraints</p> |
| <div style="border: 1px solid black; border-radius: 50%; width: 40px; height: 40px; margin: 0 auto; display: flex; align-items: center; justify-content: center;">S3</div> | <p>Strong measurable economic scale & capacity supporting future growth</p> |

Part III Strategic Framework for Regional Cities



Step 3 – Establish Historic & Strategic Orientation

BUSINESS CYCLE

Why are economic cycles and trends important?

The current economic performance and relative position of a Regional City in the business cycle (including local and international contexts) is important.

It provides a reference point for interpreting a Regional City's current economic context and the likely direction of change in the future – including the type of change and likely magnitude of change.

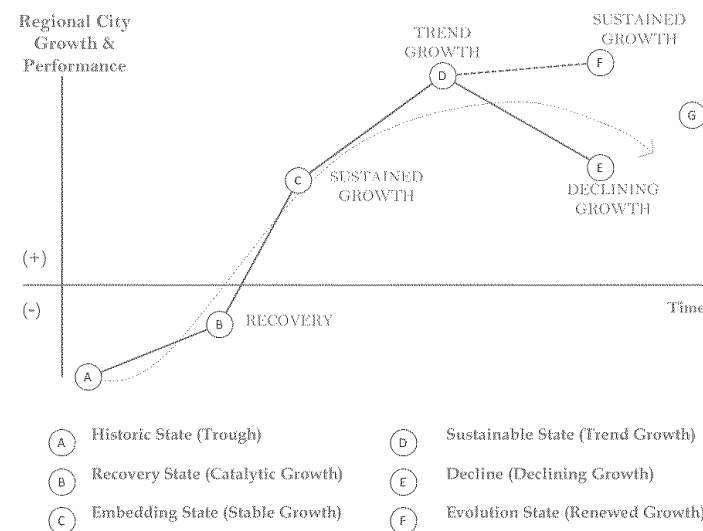
A Regional City that is currently experiencing declining growth (E) or has experienced a long period of subdued activity (A) will likely require actions to stimulate an economic recovery or correction (i.e. Replacement of capacity) – and these actions may require access to external capital for investment.

- ❖ Access to capital (both public and private) in the current economic climate remains relatively constrained.
- ❖ This means a targeted approach to both investment and regulatory mechanisms will be required, specifically highlighting local and regional benefits for investors.

A Regional City that is experiencing strong trend growth and sustained economic performance (D) is less likely to require actions to stimulate recovery or correction but rather focused investment for future growth and capacity.

This would require a long-term strategic investment plan addressing a clear future growth outlook for the Regional City and the region/s it serves.

A Regional City currently experiencing sustained growth resulting from a recent recovery (B) will likely require actions to ensure sustained growth along a desired trajectory. Such actions are likely to be different to those taken in the earlier circumstances described above.



This means that investment and regulatory actions need to be targeted to address a Regional City's relative capacity for growth now and in the future. It is important to have regard to relative economic capacity among Regional Cities in developing a Regional City Growth Framework.



Part III

Strategic Framework for Regional Cities

Step 3 – Establish Historic & Strategic Orientation

NATURAL EVENTS

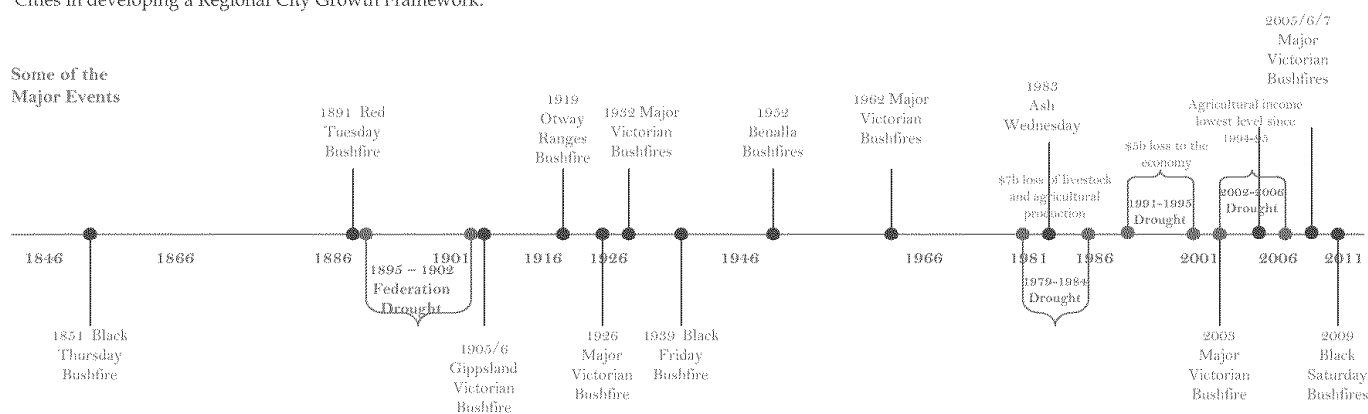
Natural events can be significant in the course of regional development

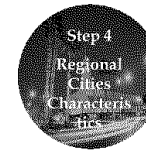
Natural events such as droughts, floods, fires and storms for example are known to have devastating and lasting impacts on communities and regional economies.

There is strong evidence in economic data relating to the impacts of natural disasters and scarce resources on regional economic output, productivity, investment, renewal and performance over time.

Whilst such impacts are not specifically examined in this paper, it is important to have regard to such events and their impacts on Regional Cities in developing a Regional City Growth Framework.

Some of the Major Events





Part 4 Strategic Framework for Regional Cities

Step 4 – Regional City Characteristics

Why define Regional City characteristics?

This step involves defining the broad characteristics of Regional Cities having regard to a wide range of variables, many of which have been discussed in this section.

This is important for establishing common themes as well as differences across Regional Cities within a regional, state, national and global context including, but not limited to:

- ❖ Metropolitan Interdependency
- ❖ Inter-Region Dependency
- ❖ Dependency on (or independence from) the surrounding regional economy, natural systems, external markets and shocks
- ❖ Regional Independence

This information is provided for discussion and further refinement by RCV in developing a consistent Growth Framework and Diagnostics Tool and not for any other purposes.



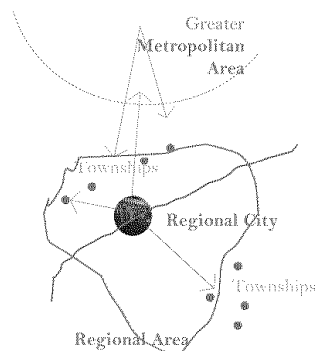
Part III Strategic Framework for Regional Cities

Step 4 – Regional City Characteristics

Metropolitan Interdependency

OBSERVATIONS

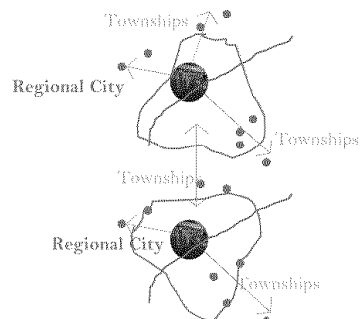
- ❖ Relatively close to Melbourne (i.e. 1-1.5 hours drive) with well established and high quality transport linkages including roads, rail and public transport
- ❖ Evidence of a high degree of population transfer between metropolitan Melbourne (in-bound daytime population as well as out-bound population) for work, education, health, access to services
- ❖ A very strong Major City function for neighbouring regional Townships including a regional servicing role for business services (government services, legal, finance), major health (hospital), education (school, university) and justice (courts), etc



Inter-Region Dependency

OBSERVATIONS

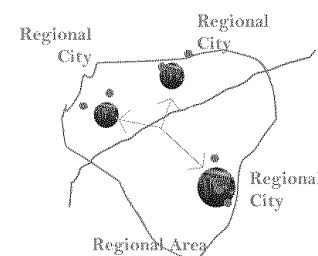
- ❖ Direct and well established transport linkages between Regional Cities located in different regions via roads, rail and public transport
- ❖ Evidence of a degree of population movement between regions (in-bound daytime as well as out-bound) for work, education, health, access to services
- ❖ A relatively strong Major City focus for surrounding townships although there may be a level of shared servicing for Townships located between each Regional City



Intra-Region Dependency

OBSERVATIONS

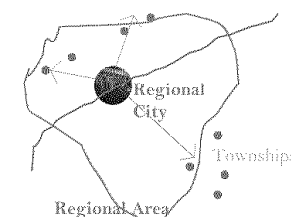
- ❖ Direct and well established transport linkages between Regional Cities located in the same region via roads, rail and public transport
- ❖ Evidence of a degree of population movement between Regional Cities in the same region (in-bound daytime as well as out-bound) for work, education, health, access to services
- ❖ There may not necessarily be a clear Major City focus for individual Regional Cities, although some may provide higher order functions and provide shared servicing for Townships located between Regional Cities



Regional Independence

OBSERVATIONS

- ❖ Evidence of a strong Major City function for neighbouring regional townships and a significant regional servicing role for major health (hospital), education (school, university) and justice (courts) as well as interstate user requirements
- ❖ Direct and well established transport linkages with different states and territories via roads, rail and public transport
- ❖ Evidence of a degree of interstate population movement (in-bound daytime as well as out-bound) for work, education, health, access to services



Part 2

Value Chain / Value Adding Criteria



Part 2

Value Chain / Value Adding Criteria

Overview

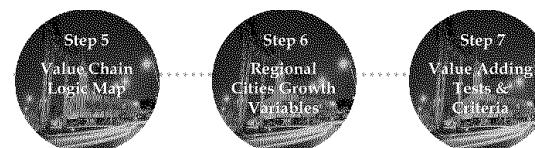
This section explores some of the important variables (economic and otherwise) that influence regional city performance, and involves four elements:

- ❖ The first element relates to how variables independently (and jointly) influence regional economic value chains and growth; and the relative lack of direct influence over many of these variables means the focus for the Regional City Growth Framework lies with value adding/economic growth variables, which may be more directly influenced through investment and regulatory actions over time;
- ❖ The second element identifies the economic growth variables which are the subject of analysis in the Regional Growth Framework and Diagnostics Tool; and
- ❖ The third element outlines the criteria used to assess the strategic priorities for regional city growth across the different characteristics defined in Part 1.

Structure of this section

This section unpacks Steps 5-7 and describes the relative importance of each in establishing Regional City growth characteristics.

As in the earlier section, each step provides an important element used in defining the Regional City Growth Framework and Regional Cities Diagnostics Tool.








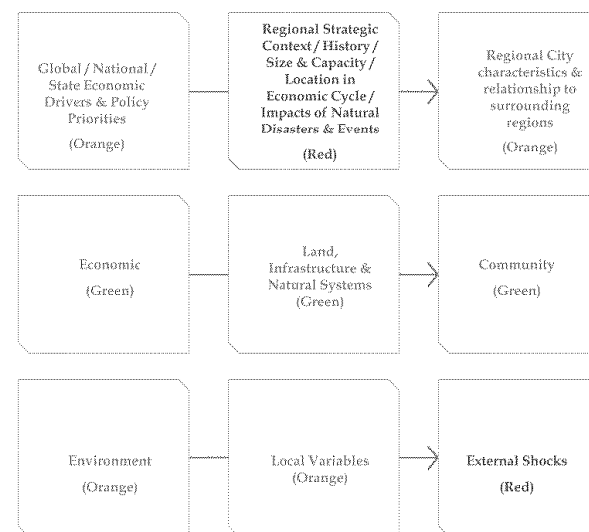
Part 2 Value Chain / Value Adding Criteria

Step 5 Value Chain Logic Map

There are a number of variables influencing Regional City size, capacity and growth over time, some of which are able to be influenced more or less directly, including:

- 
1. Direct control variables – can actively influence (Green)
 - ❖ Economic, policy and regulatory mechanisms
 - ❖ Land/Floorspace, health, education infrastructure and services and community infrastructure
 - ❖ Market based mechanisms
- 
2. Indirect control variables – can seek to measure and control (Orange)
 - ❖ Global / National / State Economic Drivers & Policy Priorities
 - ❖ Environmental systems
 - ❖ Local socio-institutional, political and cultural networks, behaviours and trust
- 
3. Exogenous factors – unable to directly influence or manage despite mitigation efforts (Red)
 - ❖ Regional Strategic Context / History / Size & Capacity / Location in Economic Cycle / Impacts of Natural Disasters & Events
 - ❖ Natural events
 - ❖ External market shocks

Regional Value Chain Map





Part 2

Value Chain / Value Adding Criteria

Step 5 Value Chain Logic Map

Each of the variables described in the boxes below have been allocated an alphabetic prefix to denote a short-name for the indicator. These short-names are referred to in the following sections.



Global / National / State Economic Drivers & Policy Priorities

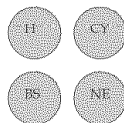


KEY ISSUES

- There are a number of variables relating to 'big picture' policy and economic drivers, most of which are beyond the control of Regional Cities.
- However, the extent of local influence over Global (G), National (N) and State (S) policies relating to the role and functions of Regional Cities can be more clearly addressed in regional growth plans and through policy alignment
- To some extent Regional Cities can seek to directly influence National and State policy across various themes through a much stronger alignment of policy and investment programs
- Regional Cities have less control over external market drivers and risks, despite having mitigation strategies in place in most instances



Regional Strategic Context



KEY ISSUES

- As discussed in the earlier sections of this report, Regional Cities have little or no control over past events (H), although it is important to recognise how history has shaped a Regional City's DNA, which provides an important reference point for the future
- Similarly, the inherited economic size, structure and capacity (CY) of the Regional City and regions it serves is not something that can be changed quickly owing to the inherent complexity of the economic systems in place.
- Strategic investments over time (both public and private) have the potential to build on and enhance existing systems and capacity and influence the Regional City's growth trajectory relative to its current position in the business cycle (BS)
- It is often difficult for regions to avoid natural disasters and events (NE) despite having relatively sophisticated risk mitigation strategies



Regional City characteristics & relationship to surrounding regions



KEY ISSUES

The following variables typically take time to influence and achieve significant change, owing to the complexity of existing systems, processes and capacity. Influencing such variables can often require major investments or external drivers:

- Relative Size / Capital City services sector (C)
- Self-Sufficiency as Regional City (C)
- The direction of influence between a Regional City and the region it serves (R)
- Inter-Region Dependency (R)
- Intra-Region Dependency (R)
- Regional Independence (R)
- Extent of dependency on economic & natural systems (R)

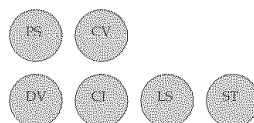


Part 2 Value Chain / Value Adding Criteria

Step 5 Value Chain Logic Map

Each of the variables described in the boxes below have been allocated an alphabetic prefix to denote a short-name for the indicator. These short-names are referred to in the following sections.

Economic Value & Scalability

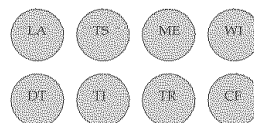


KEY VARIABLES

Some of the important economic variables Regional Cities are able to influence over time are listed below and described in further detail in the next section:

- Region & City Population Sustainability (PS)
- Regional City Capacity and vitality (CV)
- Industry Clusters & Diversity & Value Adding Capacity (DV)
- Capital Investment (CI)
- Labour Force Sustainability (LS)
- Innovation, Skills & Technology (ST)

Land, Infrastructure & Natural Systems

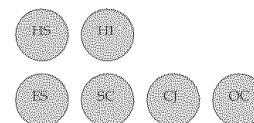


KEY VARIABLES

Some of the important infrastructure related variables Regional Cities are able to influence over time are listed below and described in further detail in the next section:

- Region & City Land Sustainability (LA)
- Transport Infrastructure & Systems (TS)
- Minerals & Energy (ME)
- Water Infrastructure & Systems (WI)
- Data Systems & Technology (DT)
- Tourism Infrastructure (TI)
- Timber Resources (Harvestable) (TR)
- Commercial Fishing & Aquaculture (CF)

Community



KEY VARIABLES

Some of the important community infrastructure and services related variables Regional Cities are able to influence over time are listed below and described in further detail in the next section:

- Region & City Housing sustainability (HS)
- Health Infrastructure & Services (HI)
- Education Services (ES)
- Social / Cultural / Sporting / Recreational Infrastructure & Services (SC)
- Community Safety / Justice Infrastructure & Services (CJ)
- Other community based institutions, coordination & collaboration (OC)

Environment



KEY VARIABLES

Some of the important environmental sustainability variables Regional Cities are able to influence over time are listed below and described in further detail in the next section. It is noted that Regional Cities may have limited direct capacity (without significant funding) to influence natural systems.

- Responsiveness to Climate Change
 - Water Sustainability
 - Energy Sustainability
 - Biodiversity
- Conservation Initiatives
 - Funding for conservation
 - Commitment to conservation policy direction



Part 2 Value Chain / Value Adding Criteria

Step 5 Value Chain Logic Map

Each of the variables described in the boxes below have been allocated an alphabetic prefix to denote a short-name for the indicator. These short-names are referred to in the following sections.



Local Variables



KEY ISSUES

- Local variables are important (L) – the quality of the knowledge base, localised drivers such as absorptive capacity and knowledge diffusion, visibility and accessibility of private wealth and inheritance.
- The relative extent of local leadership & governance, social relationships and structures and local knowledge sharing through trust are typically hard to define and measure accurately.
- Such variables are informal and as such often do not involve strict market processes meaning such factors are unable to be influenced or controlled using typical regulatory or market based mechanisms.



External Market / Exogenous Shocks



KEY ISSUES

The following exogenous factors tend to be outside the capacity of Regional Cities to directly influence or manage using regulatory or market mechanisms, despite mitigation efforts

- Natural disasters and events (N)
- Global warming (N)
- External market shocks (E)

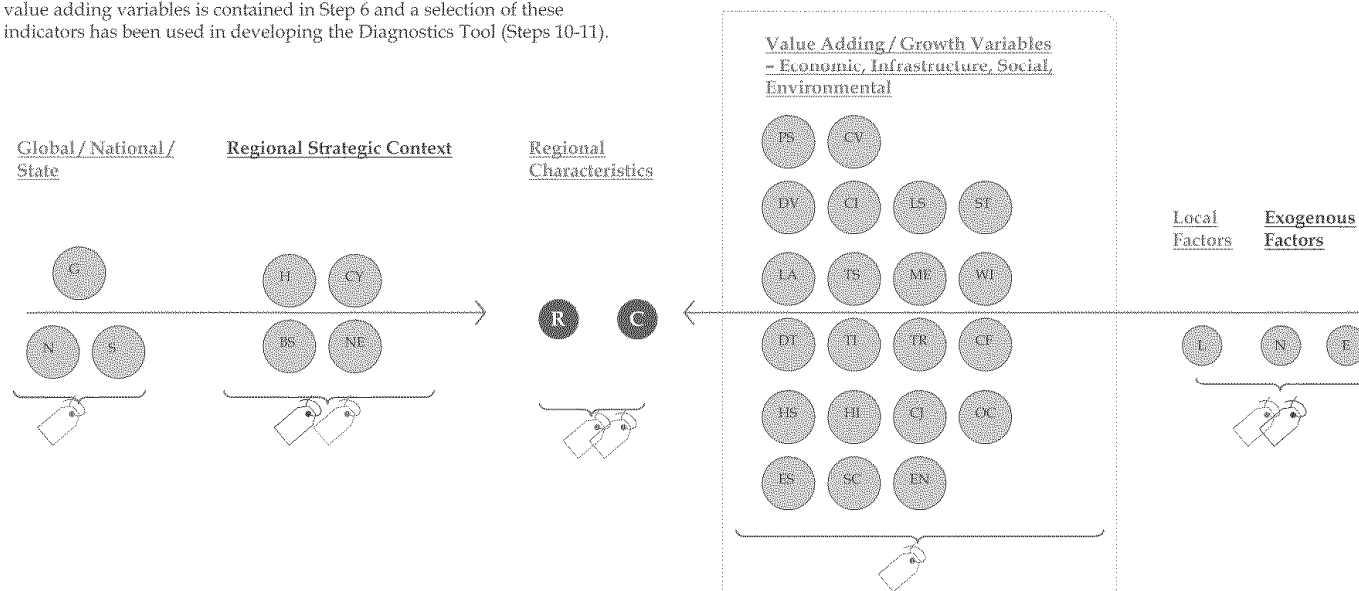


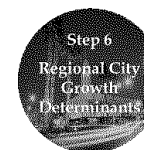
Part 2 Value Chain / Value Adding Criteria

Step 5 Value Chain Logic Map

The following value chain logic map shows how each of the variables described earlier relates to the Regional City and regions it serves and the extent to which such variables are generally able to be influenced directly or indirectly through regulatory or market based actions.

The value adding / growth variables highlighted in the dashed line box shown below. The comprehensive list of indicators relating to each of the value adding variables is contained in Step 6 and a selection of these indicators has been used in developing the Diagnostics Tool (Steps 10-11).



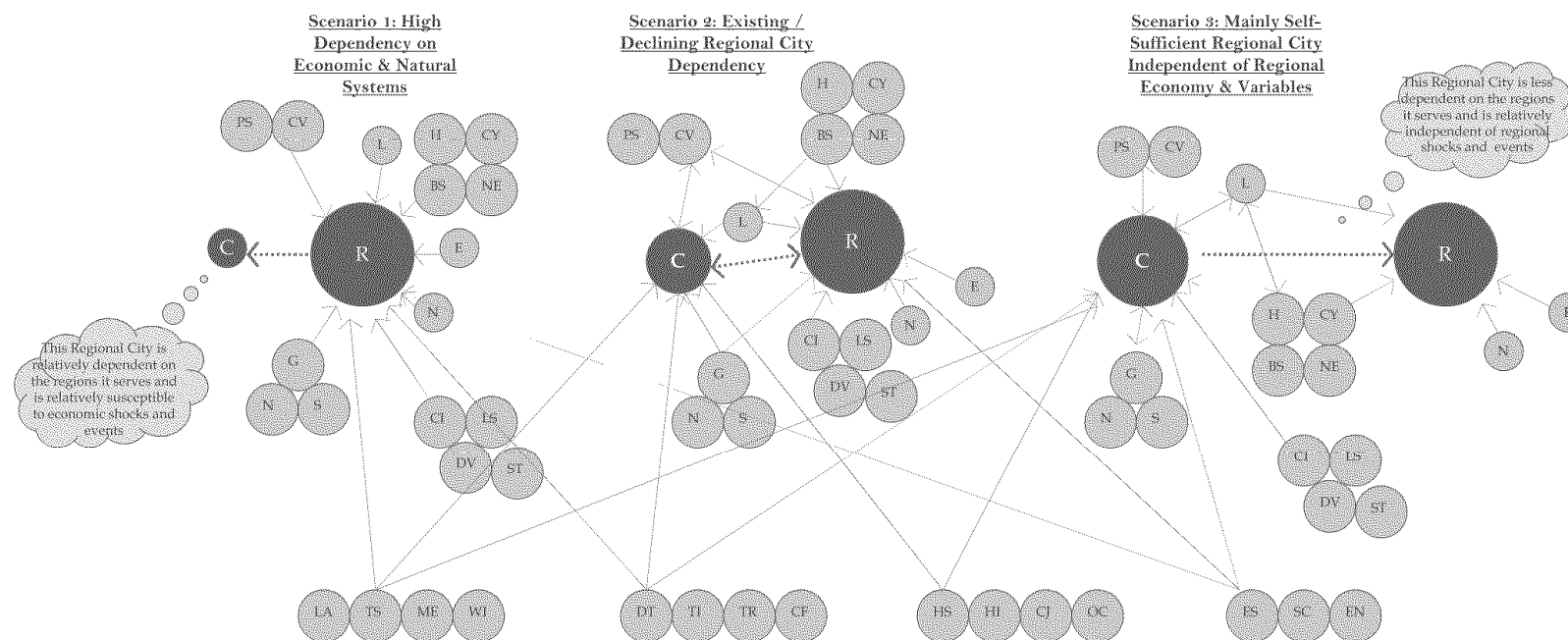


Part 2

Value Chain / Value Adding Criteria

Step 5 Value Chain Logic Map

The following diagrams show three different scenarios and the relative extent and direction of influence of the different variables in each case. It is apparent that more self sufficient Regional Cities (Scenario 3) have greater potential to influence a wider range of economic variables through both market based responses as well as regulatory actions when compared with Regional Cities that are highly dependent on the regions they serve (Scenario 1).





Part 2 Value Chain / Value Adding Criteria

Step 6 Regional Cities Growth Variables



Economy

KEY THEMES

- **Region & City Population Sustainability**
- **Regional City Capacity and vitality**
- Industry Clusters & Diversity & Value Adding Capacity
- Capital Investment
- Labour Force Sustainability
- Innovation, Skills & Technology

KEY CRITERIA

Region & City Population Sustainability

Population growth

- Resident population – Region and City
- Non-resident visitation to the Region and City (work/holiday/other)
- Propensity for resident population turnover, transience
- Local population servicing capacity (Labour force/residents)
- Capacity to mitigate risks of an ageing population (youth, families)

Demographic structure & diversity

- Household type, size / formation
- Relative household incomes, socio-economic advantage and welfare dependence (SEIFA)
- Relative share of working families, younger people and youth unemployment
- Cultural diversity and multi-cultural advantages for the region and city
- Capacity to attract skilled migrants to the area

Population Attraction & Retention

- Active marketing of the region as a place to live and work
- Proximity and accessibility (by rail/road) to metropolitan Melbourne for work/business/other
- Relative remuneration and benefits for workers in the region and city
- Community infrastructure capabilities and amenity within the region and city
- Continued employment opportunities through life-long learning and development opportunities

Regional City Capacity & Vitality

Central City Activity / Services Sector

- Access to centrally located retail shops and business services within the city
- Access to major retail supermarket and specialty shops within the city
- Access to a diverse services sector offering within the city
- Access to Government sector services and support within the city
- Capacity to address future floorspace requirements within the city

Public & Business Services (Size of services sector)

- Relative size and importance of government services sector within the city
- Share of business and professional services industries as a portion of total industry
- Potential to attract major government services to the regional city
- Potential to create business services sector hub/incubator/centre of activity within the city
- Capacity to strengthen investment and employment opportunities within the city

Urban renewal and revitalisation

- Capacity for urban renewal capable of revitalising the Regional City and creating new investment
- Potential for the creation of new centrally located residential and accommodation opportunities
- Potential for creation of commercial spaces capable of supporting higher value employment
- Potential for creation of mixed-use activity including retail, community and business services
- Capacity to strengthen the existing centres hierarchy and create a stronger network of centres



Part 2

Value Chain / Value Adding Criteria

Step 6 Regional Cities Growth Variables



Economy

KEY THEMES

- Region & City Population Sustainability
- Regional City Capacity and vitality
- **Industry Clusters & Diversity & Value Adding Capacity**
- **Capital Investment**
- Labour Force Sustainability
- Innovation, Skills & Technology

KEY CRITERIA

Industry Clusters & Diversity & Value Adding Capacity

Industry type, size, capacity

- Number of established industries by type / mix
- Share of growth industries / value adding industries
- Relative size and importance of Government sector as an employer
- Proximity to business networks, supply chains and other industries
- Access to domestic and international trade / export/import markets

Industry Clusters & Diversity

- Access to business centres/hubs and industry precincts (business park, industrial hubs)
- Capacity for establishment of Government services cluster/hub
- Capacity for establishment of regional services clusters (health, education, finance, business services)
- Capacity for establishment of regional industry hubs (agriculture, food, manufacturing, energy, water)
- Expenditure on business parks / incubators

Industry Value Adding Capacity

- Capacity for innovation, knowledge creation within key 'growth' and 'value adding' industries
- Expenditure on research and development in key growth industries
- Extent of new enterprise development programs / business growth initiatives
- Potential for large employers to drive value adding in key sectors
- Extent of partnerships with university/TAFE sector for skilled sectors addressing skills shortages

Capital Investment

Public investment

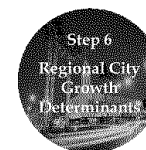
- Historic funding of major infrastructure by the public sector
- Relative current importance of Government sector as an employer/investor in the region
- Extent of current requirement for Federal Government funding for major infrastructure, programs and services
- Extent of current requirement for State Government funding for major infrastructure, programs and services
- Capacity for Local Government to fund infrastructure / programs

Corporate business investment

- Current access to global capital markets / investment networks
- Capacity and willingness for corporate sector to partner with the public sector to fund infrastructure
- Existing access to domestic banks / finance / lending institutions
- Capacity to leverage private capital to support investments in value adding infrastructure
- Capacity to leverage private investment in value adding industries

Private wealth & investment

- Access to private wealth/historical inheritance for investment in key growth / value adding industries
- Propensity for investment of private capital in local business ventures
- Capacity for networks of private individuals within the region to co-fund projects
- Capacity to leverage private wealth from outside regions through local relationships/partnerships
- Relationships with the banking/finance sector and capacity to leverage domestic finance



Part 2

Value Chain / Value Adding Criteria

Step 6 Regional Cities Growth Variables



Economy

KEY THEMES

- Region & City Population Sustainability
- Regional City Capacity and vitality
- Industry Clusters & Diversity & Value Adding Capacity
- Capital Investment
- **Labour Force Sustainability**
- **Innovation, Skills & Technology**

KEY CRITERIA

Labour Force Sustainability

Labour force participation, diversity, mobility

- Resident labour force participation in major sectors (Resident worker)
- Non-resident labour force participation in major sectors (In-migration)
- Access to apprenticeships, training programs across key 'growth' and 'value adding' industries
- Dominance of large employers / industry clusters including the public sector
- Location of employment and extent of mobile workforce (FIFO/DIDO)

Labour productivity

- Level of employment (or relative unemployment) by sector / type / location
- Existing share of employment in value adding industries
- Capacity for future skills creation in key 'growth' and 'value adding' industries
- Potential for creation of employment clusters through physical proximity (Hubs)
- Existence of business education partnerships supporting knowledge, innovation and continuous improvement

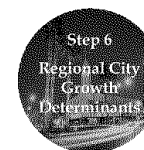
Innovation, Skills & Technology

Skilled labour / qualifications

- Extent of higher school qualifications among resident/non-resident worker population
- Extent of tertiary qualifications among resident/non-resident worker population
- Industry expenditure on strengthening skilled labour, knowledge, innovation and higher education
- Extent of local/national/international linkages between research organisations and industry
- Existence of research organisations in the area, knowledge products involving partnerships with university/TAFE sector

Technology enabled workforce

- Extent to which NBN/ICT rollout will facilitate employment in higher value industries
- Capacity for technology to facilitate work-life balance / work from home / telecommuting / support systems
- Capacity for technology facilitated e-health services
- Capacity for technology to enhance regional city attractiveness
- General capacity for technology enabled labour productivity



Part 2

Value Chain / Value Adding Criteria

Step 6 Regional Cities Growth Variables



Infrastructure

KEY THEMES

- **Region & City Land Sustainability**
- Transport Infrastructure & Systems
- Minerals & Energy
- Water Infrastructure & Systems
- Data Systems & Technology / ICT
- Tourism Infrastructure
- Timber Resources (Harvestable)
- Commercial Fishing & Aquaculture

KEY CRITERIA

Region & City Land Sustainability *Agricultural Land*

- Availability of land for agricultural purposes (current and future supply)
- Capacity for adaptive land use to higher value uses (agri-food/research/food security)
- Ability to attract multi-national expertise and capital to drive value adding investments
- Ability to harness local capacity and skills to drive value adding agricultural investments
- Capacity to mitigate risks and constraints to development of land (agricultural)

Residential Land

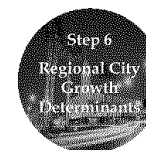
- Availability of zoned residential land for development approval (current and future supply)
- Capacity for Brownfield/infill development (residential/mixed use)
- Relative affordability (land prices) and costs of construction and infrastructure
- Ability to attract local and outside capital investment and expertise
- Capacity to mitigate risks and constraints to development of land (residential) including buffers

Employment Land

- Availability of zoned employment land for development approval (current and future supply) supporting key industries
- Capacity for Brownfield/infill development (employment/commercial/manufacturing)
- Relative affordability (land prices) and costs of construction and infrastructure
- Ability to attract local and outside capital investment and expertise
- Capacity to expand existing employment lands to address future supply considerations

Conservation Land

- Strength of policy commitment to ensuring conservation land
- Amount of conservation land (current and future)
- Demonstrated impacts of conservation land on balancing private development
- Demonstrated impacts of conservation for the environment
- Capacity to mitigate risks and constraints to development of land (industrial)



Part 2 Value Chain / Value Adding Criteria

Step 6 Regional Cities Growth Variables



Infrastructure

KEY THEMES

- Region & City Land Sustainability
- **Transport Infrastructure & Systems**
- Minerals & Energy
- Water Infrastructure & Systems
- Data Systems & Technology / ICT
- Tourism Infrastructure
- Timber Resources (Harvestable)
- Commercial Fishing & Aquaculture

KEY CRITERIA

Transport Infrastructure & Systems

Public transport services (Train, Tram, Bus, Ferry)

- Access to public transport (train, tram, bus, ferry)
- Frequency of services (day, night, weekend)
- Reliability of services (timetable consistency)
- Patronage and utilisation (level of usage)
- Quality of infrastructure and services

Heavy Rail (Freight)

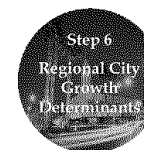
- Access to heavy rail lines for freight
- Connection of heavy rail to regional port, airport, logistics
- Reliability of freight rail services
- Patronage and utilisation (service levels)
- Quality of infrastructure and services

Roads (Freeways/Highways/Main Roads)

- Access to high speed freeways, highways
- Distance of Regional City to freeway bypass
- Patronage and utilisation (level of usage - passenger/freight)
- Quality of main road infrastructure
- Local road maintenance systems and programs

Port, Airport, Logistics

- Access to and quality of port, airport, railway infrastructure with connections to supply chains/markets
- Access to logistics infrastructure with connections to markets/supply chains
- Size, capacity and suitability of logistics infrastructure
- Active connections between port, airport, rail, road and logistics and local and international markets
- Industry utilisation of infrastructure



Part 2 Value Chain / Value Adding Criteria

Step 6 Regional Cities Growth Variables



Infrastructure

KEY THEMES

- Region & City Land Sustainability
- Transport Infrastructure & Systems
- **Minerals & Energy**
- **Water Infrastructure & Systems**
- **Data Systems & Technology / ICT**
- Tourism Infrastructure
- Timber Resources (Harvestable)
- Commercial Fishing & Aquaculture

KEY CRITERIA

Minerals & Energy

Minerals resources & utilisation

- Access to natural minerals / mineral resources
- Infrastructure and systems for capture / extraction / storage of mineral resources
- Access to local and international markets, capital investment and expertise
- Capacity to optimise value adding potential through transformation of natural resources
- Capacity to harness Government and industry support to unlock new market opportunities

Energy Infrastructure & Systems

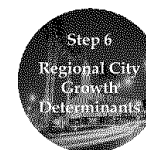
- Access to base load energy resources for industry and household use
- Reliability of access to energy sources for industry (particularly manufacturing)
- Capacity for co-generation supporting industry requirements and reducing supply risks
- Access to renewable energy production technology and resources
- Capacity to mitigate risks to reliance on electricity production / as a source of employment

Water Infrastructure & Systems

- Access to water supplies (reservoir, dam, river, aquifer) for business and residential use
- Reliability of water supply for industry (particularly agricultural production) and household use
- Potable and grey-water quality
- Existing access to alternative water sources (i.e. Recycling, desalination)
- Capacity to mitigate risks to reliance on water for food production, business and household risks

Data Systems & Technology / ICT

- Access to high speed data networks (cable, mobile, satellite)
- Relative speed of connectivity to data networks for business, institutions, households
- Reliability of network access for business and households
- Capacity for significant value adding through National Broadband Network (NBN)
- Capacity to mitigate technology constraints and risks



Part 2

Value Chain / Value Adding Criteria

Step 6 Regional Cities Growth Variables



Infrastructure

KEY THEMES

- Region & City Land Sustainability
- Transport Infrastructure & Systems
- Minerals & Energy
- Water Infrastructure & Systems
- Data Systems & Technology / ICT
- **Tourism Infrastructure**
- **Timber Resources (Harvestable)**
- **Commercial Fishing & Aquaculture**

KEY CRITERIA

Tourism Infrastructure

- Natural Heritage (accessible)
- World heritage sites, national parks, state forests
- Mountain ranges, alpine regions, walking trails, snowfields
- Marine, coastal areas and patrolled surf beaches
- Water based recreation, fishing, diving, rafting, boating (rivers, lakes, dams, waterfalls)
- Sub-terranean sites (caves, mines, aquifers)

Other Tourism Infrastructure & Services

- Access to tourist / theme parks and man-made attractions
- Access to tourist accommodation (hotel, motel, caravan trailer park, cabin) amenities and facilities
- Access to regionally significant artistic, cultural, historic and heritage sites
- Access to regional food, wine, produce districts
- Tourist programs and events (tours, sight-seeing activities, whale watching)

Timber Resources (Harvestable)

- Natural endowment of forested areas / Old Growth Tree Cover
- Capacity for natural resources to be used for sustainable timber harvesting
- Existing commercial plantations (X years viable timber supply)
- Capacity to establish a sustainable commercial timber supply through appropriate markets
- Capacity to mitigate risks to future sustainable supply/production and environmental impacts

Commercial Fishing & Aquaculture

- Access to fresh and salt water aquatic infrastructure (streams, lakes, estuaries, dams, rivers, ocean)
- Capacity for natural resources to be used for sustainable fishing and aquaculture
- Existing commercial aquaculture and commercial fishing operations
- Capacity to establish sustainable aquaculture through appropriate markets
- Capacity to mitigate risks to future sustainable supply/production and environmental impacts



Part 2

Value Chain / Value Adding Criteria

Step 6 Regional Cities Growth Variables



Community

KEY THEMES

- **Region & City Housing sustainability**
- **Health Infrastructure & Services**
- Education Services
- Social / Cultural / Sporting / Recreational Infrastructure & Services
- Community Safety / Justice Infrastructure & Services
- Other community based institutions, coordination & collaboration

KEY CRITERIA

Region & City Housing sustainability

Existing Housing stock (current supply, quality, diversity, affordability)

- Access to appropriate quantity of existing dwelling stock
- Quality and suitability of existing dwelling stock
- Relative affordability of existing dwelling stock
- Diversity of existing dwelling stock
- Availability of key worker accommodation

Future Housing stock (future supply characteristics)

- Planned / known quantity of planned / future stock
- Quality and suitability of planned/future housing stock
- Relative affordability of future housing stock
- Capacity to address diversity needs (key workers, students, etc)
- Availability of key worker accommodation

Community Housing & Support Services

- Access to community housing / group accommodation
- Access to support services (food services, hospitality)
- Access to open space, active and passive recreation facilities and amenity
- Connectivity to community services and places of work
- Connectivity to public transport

Health Infrastructure & Services

Private health (hospital, primary and allied care services)

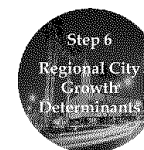
- Effective local access to major private hospital
- Effective local access to private primary and allied health care
- Quality of existing private health services
- Capacity to address current and future health requirements
- Capacity to mitigate risks and constraints to community health sector

Community health (hospital, primary and allied care services)

- Effective local access to public hospital or community health clinic
- Effective local access to publically provided community health care centre
- Quality of existing community health and wellbeing services
- Capacity to address current and future health requirements
- Capacity to mitigate risks and constraints to private health sector

Not for Profit Sector Health Service Provision

- Effective local access to NFP sector primary/allied health care services
- Quality of NFP health care services and programs
- Capacity to address current and future community health requirements
- Capacity to mitigate risks and constraints to public/private health sector
- Relative importance of NFP sector



Part 2

Value Chain / Value Adding Criteria

Step 6 Regional Cities Growth Variables



Community

KEY THEMES

- Region & City Housing sustainability
- Health Infrastructure & Services
- **Education Services**
- **Social / Cultural / Sporting / Recreational Infrastructure & Services**
- Community Safety / Justice Infrastructure & Services
- Other community based institutions, coordination & collaboration

KEY CRITERIA

Education Services

Private schools (including religious) - primary and secondary

- Effective local access to private primary school education
- Effective local access to private secondary school education
- Quality of existing private primary and secondary schools
- Capacity to address current and future education requirements
- Capacity to mitigate risks and constraints to public sector education

Public schools - primary and secondary

- Effective local access to public primary school education
- Effective local access to public secondary school education
- Quality of existing public primary and secondary schools
- Capacity to address current and future education requirements
- Capacity to mitigate risks and constraints to private sector education

Higher Education (TAFE / Technical College)

- Direct local access to TAFE / Technical College or equivalent
- Quality of TAFE/Technical College
- Capacity to address current and future higher education requirements
- Contribution to local population attaining higher education achievements
- Partnerships with local health, education, business services and employers

Tertiary Institutions (University)

- Direct local access to one (or more) tertiary institutions
- Quality of existing tertiary education facilities
- Capacity to address current and future tertiary education requirements
- Contribution to local population attaining higher education achievements
- Partnerships with local health, education, business services and employers

Social / Cultural / Sporting / Recreational Infrastructure & Services

General Community Infrastructure

- District community centre / Community Hall
- Neighbourhood centre / meeting rooms
- Library
- Arts centre (exhibition, performance, visual, installation)
- Cultural centre (market place/ multi cultural)

Services for Specific User Groups

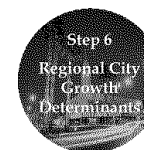
- Childcare centre and services
- Youth centre and services
- Women's centre/refuge / services
- Men's workshop
- Seniors centre and services

Sporting, active recreation facilities

- Playing Fields / Courts
- Aquatic Centre
- Indoor recreation centre (gym, health club, basketball, tennis courts)
- Outdoor recreation facilities and amenities (BMX Track/Skate park)
- Golf-course (or similar)

Passive recreation facilities

- Local parks, gardens, reserves
- Local playgrounds and amenities
- Community open spaces
- Places of open assembly
- Combined indoor/outdoor recreation facilities



Part 2 Value Chain / Value Adding Criteria

Step 6 Regional Cities Growth Variables



Community

KEY THEMES

- Region & City Housing sustainability
- Health Infrastructure & Services
- Education Services
- Social / Cultural / Sporting / Recreational Infrastructure & Services
- **Community Safety / Justice Infrastructure & Services**
- **Other community based institutions, coordination & collaboration**

KEY CRITERIA

Community Safety / Justice Infrastructure & Services

- Access to appropriate police services, police station
- Access to criminal and civic law courts and tribunal process
- Juvenile justice processes, programs and support systems
- Appropriate access to remand centres, prisons and rehabilitation centres / programs
- Availability of support programs for victims and families

Other community based institutions, coordination & collaboration

- Relative effectiveness of existing Chambers of commerce
- Existence of Industry groups, clubs and associations
- Existence of Churches and established outreach groups
- Social / Institutional structures conducive to local knowledge diffusion / absorption
- Localised business trust, participation and cooperation



Part 2

Value Chain / Value Adding Criteria

Step 6 Regional Cities Growth Variables



Environment

KEY THEMES

- Responsiveness to Climate Change
- Conservation Initiatives

KEY CRITERIA

Responsiveness to Climate Change

Water Sustainability

- Access to National, State and local funding for water sustainability
- General adoption of Commonwealth/State water sustainability policy measures (i.e. Basin Plan)
- Demonstrated demand management outcomes
- Local investment in water sustainability research and infrastructure
- Level of risk analysis and climate change management

Energy Sustainability

- Access to National, State and local funding for energy sustainability
- General adoption of Commonwealth/State energy sustainability policy measures (i.e. MRET)
- Demonstrated demand management outcomes
- Local investment in energy saving/ sustainability initiatives, research and infrastructure
- Level of risk analysis and climate change management

Biodiversity

- Access to National, State and local funding for biodiversity conservation and management
- General adoption of Commonwealth/State biodiversity measures
- Demonstrated biodiversity / flora/fauna species management outcomes
- Local investment in biodiversity initiatives, research and infrastructure
- Level of biodiversity risk analysis and climate change management
- Commitment to maintaining soil quality and reducing the risks of salinity and soil erosion

Conservation Initiatives

Funding for conservation

- Access to National, State and local funding for conservation
- Applications for grants by local business for conservation initiatives
- Expenditure by regional/local businesses on environmental conservation initiatives
- Business partnerships with conservation agencies and peak bodies
- Professional associations with global, national and regional conservation organisations

Commitment to conservation policy direction

- Capacity to achieve climate change policy objectives (i.e. carbon capture and storage / clean coal for energy initiatives)
- Capacity for water re-use/adaptive water sustainability through demand management and other initiatives
- Capacity for land use adaption/transition favouring long term environmental sustainability
- Commitment to achieving high air quality
- Commitment to maintaining soil quality and reducing the risks of salinity and soil erosion

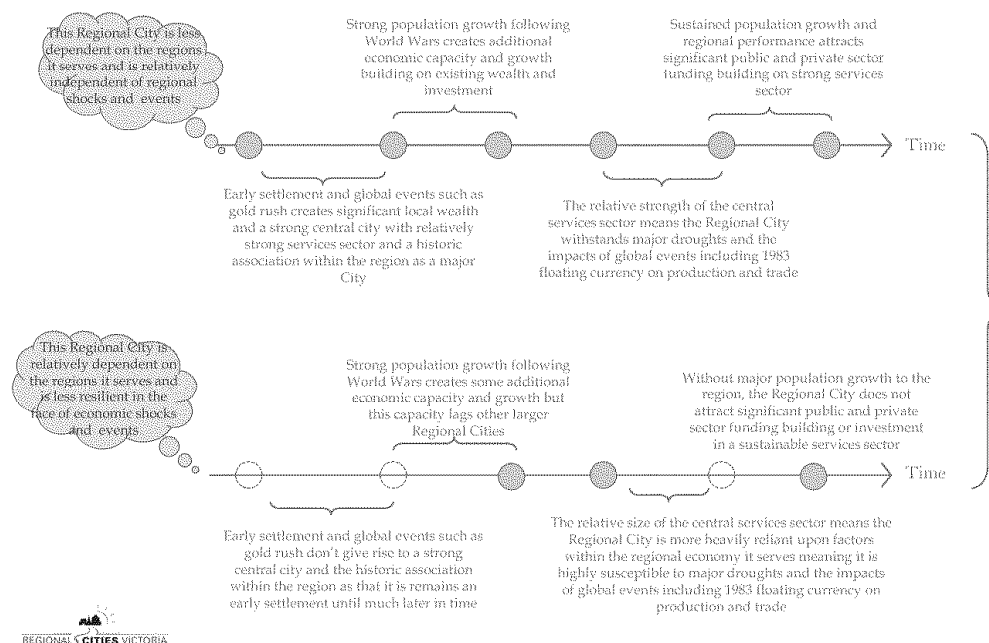


Part 2

Value Chain / Value Adding Criteria

Step 7 Value Adding Tests & Criteria

The following diagram shows a set of Tests relating to a Regional City's relative economic size and capacity, reflecting (among other things) the significant role of historic events which have shaped circumstances and which highlight gaps in Regional City's DNA structure which may be addressed either through investment in 'Capacity Building' infrastructure and/or 'Future Proofing' infrastructure and services.



Today Actions
Capacity building initiatives to address existing or previous infrastructure and services 'gaps'

Future Actions
Future proofing initiatives to address future economic and city building requirements reflecting growth vision for the Regional city to 2030+

Limited Regional City Capacity Building

Additional Regional City Capacity Building

Major Regional City Capacity Building & Investment

Major Future Proofing the Regional city

Future Proofing the Regional city

Future Proofing the Regional city

Part 3

Regional Cities Growth Framework



Part 3 Regional Cities Growth Framework

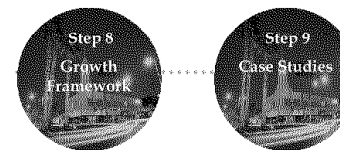
Overview

This section sets out the Regional Cities Growth Framework and presents case studies describing how a range of regulatory and investment drivers relate to the important variables (economic and otherwise) as discussed in Part 2.

Structure of this section

The third part of this paper unpacks Steps 8-10 and describes the relative importance of each in establishing Regional City growth characteristics.

As in earlier sections, each step provides an important element used in defining the Regional City Growth Framework and Regional Cities diagnostics reporting.





Part 3 Regional Cities Growth Framework

Step 8 Growth Framework

As discussed in Part 2, Step 5, there are four key value adding / growth themes – namely Economic, Infrastructure, Social and Environmental. There are a number of variables associated with each of these discussed in Part 2 and explored further in this section.

How do the variables relate to the broad objectives of this study?

These variables are selected as they relate directly to the broad study objectives outline by RCV in defining the study brief, namely:

KEY VALUE ADDING / GROWTH VARIABLES

- ❖ Labour Force Participation & Productivity
- ❖ Regional Economic Value & Productivity
- ❖ Regional & Global Attractiveness
- ❖ Social Infrastructure & Lifestyle Amenity

Each of the variables relating to the themes above form the basis of a multi-criteria Diagnostics Tool defined in Part 4.

How do these variables relate to the Growth Framework?

This section describes a Regional City Growth Framework framework which shows how each of the themes and variables discussed may be influenced by market based responses and regulatory actions, namely through:

KEY DRIVERS / ACTIONS

- ❖ Investment – public, private, not-for profit
- ❖ Policy and regulatory actions – international, national, state and regional

Each of these is described in further detail in the following sections.

Economy

KEY VARIABLES

- Region & City Population Sustainability
- Regional City Capacity and vitality
- Industry Clusters & Diversity & Value Adding Capacity
- Capital Investment
- Labour Force Sustainability
- Innovation, Skills & Technology

Infrastructure

KEY VARIABLES

- Region & City Land Sustainability
- Transport Infrastructure & Systems
- Minerals & Energy
- Water Infrastructure & Systems
- Data Systems & Technology / ICT
- Tourism Infrastructure
- Timber Resources (Harvestable)
- Commercial Fishing & Aquaculture

Society

KEY VARIABLES

- Region & City Housing sustainability
- Health Infrastructure & Services
- Education Services
- Social / Cultural / Sporting / Recreational Infrastructure & Services
- Community Safety / Justice Infrastructure & Services
- Other community based institutions, coordination & collaboration

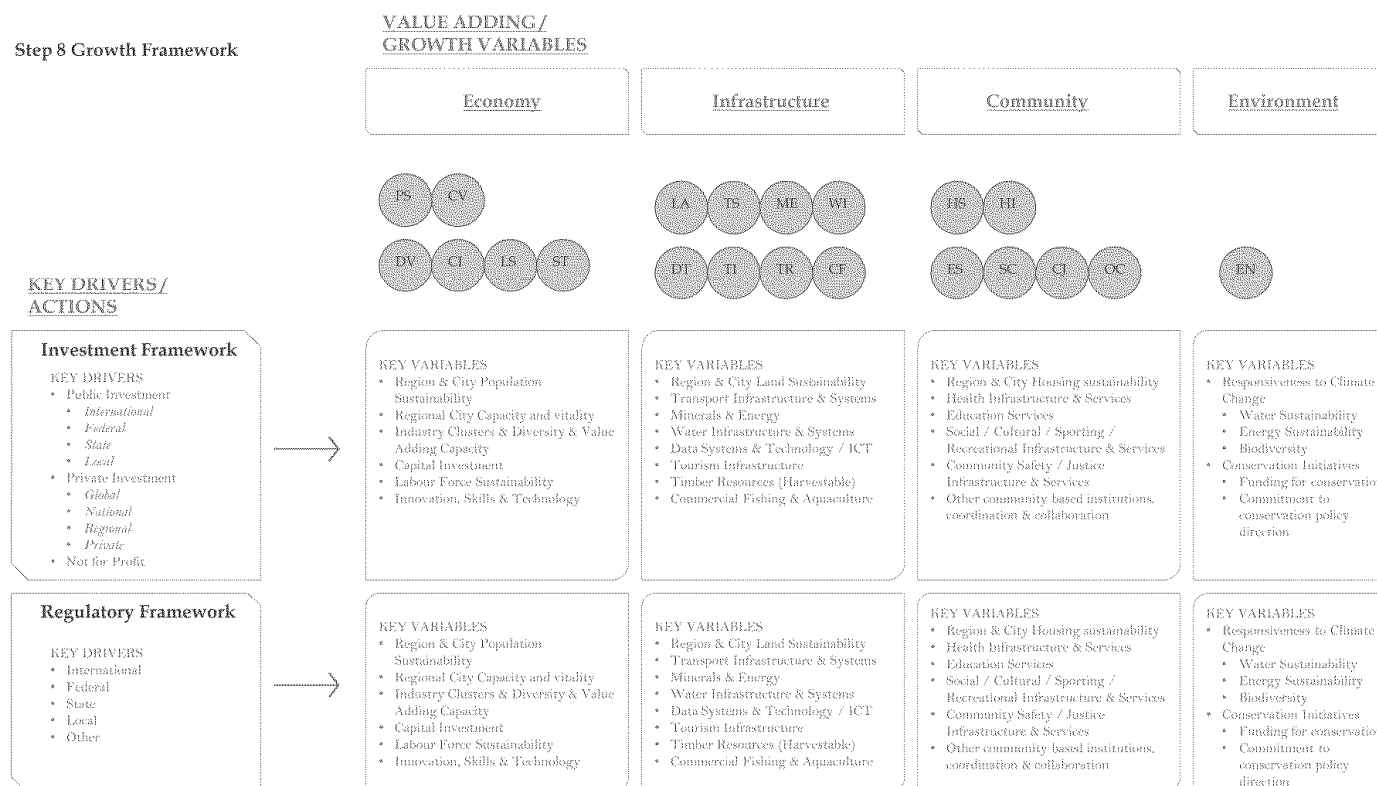
Environment

KEY VARIABLES

- Responsiveness to Climate Change
 - Water Sustainability
 - Energy Sustainability
 - Biodiversity
- Conservation Initiatives
 - Funding for conservation
 - Commitment to conservation policy direction



Part 8 Regional Cities Growth Framework





Part 3 Regional Cities Growth Framework

Step 8 Growth Framework

This section identifies key investment and policy related actions which may be used to influence these value adding/growth variables directly and indirectly at the Regional City level:

The key actions explored in this paper include:

- ❖ Investment – public, private, not-for profit
- ❖ Policy and regulatory actions – international, national, state and regional

Each of these is summarised below and supported by a number of case studies which follow highlighting the effects of major funding decisions (Federal, State, private sector) and major policy actions with consequences for investment at a Regional City level. The case studies are offered as examples only.

INVESTMENT ACTIONS

Public Investment / Not for Profit

- ❖ International funding – such as loans, sovereign funding agreements, foreign aid programs for industries, regional trade initiatives and funding
- ❖ Federal – such as the Future Fund, Regional Development Australia Fund and nation building initiatives including national broadband, major infrastructure such as ports, road and rail, higher education, health, defence, foreign trade links, immigration, financial assistance for regions
- ❖ State – refers to a full suite of State Government funding involving all agencies with direct and indirect implications for Regional Cities
- ❖ Local – refers to a full suite of Local Government funding initiatives with implications for Regional Cities
- ❖ Not for profit – refers to investments by all types of not-for profit organisations with direct implications for Regional Cities.

Private Investment

- ❖ Foreign direct investment into production or businesses by companies in other countries. This does not include foreign portfolio investments in Australian securities
- ❖ Australian business investment – measured by private gross fixed capital formation in non-dwelling construction, machinery and equipment, livestock and intangible fixed assets by private businesses
- ❖ Angel investors – typically wealthy individuals or groups looking to make an investment in a start-up business with the aim of generating strong investment returns

POLICY ACTIONS

- ❖ International – includes sovereign treaties between Australia and other countries; free trade agreements; foreign partnerships which have direct implications for States, Territories and regional cities within these jurisdictions.
- ❖ Commonwealth Government policy initiatives - specifically those which are agreed between the Commonwealth, States and Territories which have direct implications regional cities within these jurisdictions
- ❖ State – refers to a full suite of State Government policy and regulatory actions involving planning infrastructure and service delivery agencies with direct and indirect implications for Regional Cities
- ❖ Local – refers to a full suite of Local Government policy and regulatory actions involving land use planning, city development, infrastructure and service delivery with implications for Regional Cities

An example of Local Government policy and regulatory actions to stimulate population mobility based on housing affordability and competitive land prices, might involve implementing faster planning approvals or greater flexibility for priority projects currently delayed in the approval system.

Part 3 Regional Cities Growth Framework



Step 9 Case Studies

CASE STUDY 1 - Investment Initiatives & Partnerships: Bendigo Hospital

Overview

The new Bendigo Hospital is the largest regional hospital developments in Victoria's history and one of the largest hospital projects across Australia.

The Victorian Government has committed an additional \$102 million for the expansion of the new Bendigo Hospital, making a total investment of \$630 million. The additional funding will deliver a world class hospital for Bendigo that will provide 21st century facilities, enabling Bendigo Health to deliver improved patient care according to recognised best practice, develop a skilled health workforce for the future, improve operational efficiency and provide for the health needs of a growing population.

Outcomes

The new facility will accommodate 372 beds, 10 operating theatres, 80 acute same-day beds, a five-bed mother-baby service, an integrated cancer centre, an integrated mental health unit and expanded research and education facilities.

Other benefits for patients, visitors and staff include: a large atrium entrance with retail, cafes and multiple internal courtyards; a childcare centre and a wellness centre; 128 serviced and 15 short stay apartments; 180 seat conference facilities; enhanced landscaping across the entire hospital precinct.

When complete in 2016, the growing communities of Bendigo and north-west Victoria will have access to a world-class major regional hospital featuring modern technologies to support treatment and recuperation in hospital and at home (where possible). The new hospital will have the capacity to meet projected growth for health services in Bendigo and the greater Loddon Mallee region, treating an extra 10,000 acute patients every year.

Impact on Value Adding Variables

The project aims to improve local career opportunities, support local businesses to secure work and ensure the local economy maximises the benefits of the project.

Construction of the new hospital will generate in the order of 735 new jobs in the construction industry and supply chain, and at least 500 of these jobs will be maintained for at least three years during the peak construction period. It is expected to employ 1,000 extra staff on its completion beyond 2016. Facilitating longer term employment will support the economic growth and job security in the region more broadly.

The new Bendigo Hospital will be connected with, and will be, an integral part of the surrounding academic precinct (including Monash University, Latrobe University and Bendigo Primary Health Centre), offering a co-ordinated approach to education and training through joint appointments. Bendigo Health's roles as a regional and as a local hospital will be clearly defined in healthcare and in clinical education.

The project will demonstrate connections to the community and the history of Bendigo making the project for everyone by promoting cultural ties and links with history. Bendigo Health is part of a health service system in and beyond Bendigo and is the regional hospital for the Loddon Mallee region.

The project provides for operating partnerships with other providers which is a vital aspect of effective care delivery.

Source: various



Part 6 Regional Cities Growth Framework

Step 9 Case Studies

CASE STUDY 2 – Investment Initiatives & Partnerships: Wodonga Logic

Overview

“Logic” is a Wodonga City Council initiative aimed at developing an inland intermodal distribution hub for south eastern Australia. All land is owned by Council except that land already sold to tenants at Logic.

Logic is within an overnight drive of Sydney, Melbourne, Canberra, and is central to 75 per cent of Australia’s population and to regional labour force of 80,000 people.

Logic is situated 14 kilometres west of Wodonga at the intersection of the Hume Freeway and Murray Valley Hwy and adjacent to the Melbourne to Sydney rail line. Logic is located 290 km from Melbourne and 580 km from Sydney.

More than 84 hectares has already been sold to six tenants. Woolworths regional distribution centre, Border Express and the Wodonga TAFE’s National Industrial Skills Training Centre currently operating at the site. During the next 20 to 30 years, Logic will become home to large-scale industry which will generate significant employment for the region.

Impact on Value Adding Variables

- ❖ Economic
 - ❖ Provide direct links into the Port of Melbourne and Sydney’s Botany Bay and hence attracts importers and exporters to Logic and Wodonga. Logic would be an inland port.
 - ❖ Reduce bottlenecks at the major ports and hence create greater import and export efficiencies.
 - ❖ Allow for inland bonding activities so as to reduce bottlenecks at the respective ports.
 - ❖ Allow for the economic transport of goods long distance and hence provide a case for Logic to be not just a regional distribution hub but a national distribution hub as well.

- ❖ More efficient linking of road, rail and ports leading to more efficient transport and logistics which can assist in encouraging export.
- ❖ Local employment.
- ❖ Industry diversity.
- ❖ Lower capital and operating costs to encourage manufacturing.
- ❖ Boost to economic growth and investment in the region.
- ❖ Potential for the establishment of driver education and skills development facilities.
- ❖ Allow for the transport of heavy freight to the Logic distribution hub.
- ❖ Reduced Infrastructure maintenance.
- ❖ Social
 - ❖ Regional Job creation.
 - ❖ Decentralisation, as the Councils marketing is based on the business case for relocation of distribution and manufacturing facilities from the capital cities to a purpose built logistics hub that leverages off strategic location, excellent infrastructure, labour markets of critical size and cheaper property costs.
 - ❖ Encouragement of freight movements outside of Wodonga’s urban areas.
- ❖ Environment
 - ❖ Less air and noise pollution.
 - ❖ More attractive town centre for Wodonga as Logic provides an alternative freight centre to the existing one in the centre of town.

Source: various



Part 3 Regional Cities Growth Framework

Step 9 Case Studies

CASE STUDY 3 – Investment Initiatives & Partnerships: Victorian Regional Centre for Agricultural Education at Horsham

Overview

The Victorian state government formally announced a \$3million grant to the University of Ballarat to work in partnership with these regional TAFE institutes to begin building capacity to enable their TAFE teachers to gain the teaching qualifications to teach these programs in their local TAFE institute.

The University of Ballarat has also applied to the commonwealth for \$36.3million under the regional Education Investment Fund to construct a Victorian regional centre for agricultural education at Horsham, a major campus of Ballarat University.

The University is proposing that the centre be co-located with the Grains Innovation Park in Horsham. The purpose of this centre will be to rejuvenate agricultural education in this state by providing a major centre that would link with the regional TAFE institutes in Victoria to address the primary industry skill, career, leadership and generational change concerns that are now apparent.

Impact on Value Adding Variables

It is seeking to have the facility as a hub for certainly that part of western Victoria, but more particularly for Victoria. This has the potential to rejuvenate agricultural education in Victoria through a new and innovative model of delivery involving the University of Ballarat and its partnership arrangements with TAFE institutes.

The co-location with the Grains Innovation Park, where there are 70 to 75 research scientists working, presented an ideal synergy between the opportunity for research and the existing research infrastructure there particularly built around grains but more generally around primary industries.

The new initiatives out of agricultural education in Victoria also pivot on the importance of student accommodation – and it has to be moderately priced student accommodation.

The Victorian government has granted an initial \$5million in relation to leveraging money from the Commonwealth again under the national rental affordability scheme to put in place some additional accommodation.

Outcomes

The projections indicate that over the next five years 2,000 students from across regional Victoria and some from interstate will be taking VET in school, certificate, diploma and degree programs associated with the centre in Horsham and working in close partnership with regional TAFE institutes in Victoria.

These programs would be in primary industries – horticulture, agribusiness, transport logistics, dairy, food processing, low-carbon farming, environmental studies, grains, vegetables, livestock, equine studies and a range of other programs – taking advantage of what is already available across regional TAFE institutes in Victoria and providing articulation to applied degree programs offered by the University of Ballarat.

Source: various

Part 5 Regional Cities Growth Framework



Step 9 Case Studies

CASE STUDY 4 – Policy Initiatives: Latrobe Valley

Overview

The Victorian Government is committed to helping the Latrobe Valley become one of Australia's leading economic regions, assist address barriers to growth and transition to a more diversified economy. These initiatives build on existing Victorian Government commitments to the region's development and have been funded through the 2012–13 State Budget and Regional Growth Fund.

Policies/ Initiatives

The Victorian Government is determined that the region is supported to make the most of local employment and business opportunities in a transitioning energy sector through:

- ❖ Securing the Brown Coal Resource – The Victorian Government is committed to securing an economically viable future for the use of the region's brown coal asset and is progressing, through the new Coal Allocation Framework. This provides commercial opportunities to develop new industries as there is considerable global interest in the Latrobe Valley's brown coal.
- ❖ An allocation from the new \$6 million Industry Transition and Specialist Training initiative to provide any retrenched workers in the Latrobe Valley (who may be ineligible for the Victorian Training Guarantee) with State Government-subsidised training through Central Gippsland TAFE.
- ❖ International Engagement Strategy – will provide opportunities accessible to Latrobe Valley based businesses that will enable them to enter new markets and develop the skills and experience to succeed. The strategy aims to internationalise Victorian businesses through initiatives including a comprehensive trade program that will connect regional companies with opportunities in global growth markets.

The Victorian Government has taken early action to drive innovation in the energy sector through:

- ❖ Increasing the **Energy Technology Innovation Strategy** fund by \$41 million to provide funding for prospective pre-commercial investments in low-emission energy technologies
- ❖ Brown Coal Innovation Australia which provides research and development grants
- ❖ The CarbonNet project which progresses development of Carbon Capture and Storage
- ❖ The Latrobe Valley Shallow Geothermal project, to confirm the potential for producing electricity from lower temperature, shallow geothermal resources.

The introduction of a **carbon price** drives the necessity for businesses to innovate to offset increased costs.

- ❖ Early action to support businesses has been delivered through the \$10 million Latrobe Valley Industry and Infrastructure Fund.
- ❖ A number of companies are developing technologies to produce high value products for import replacement or export, such as exportable brown coal, liquid fuels, char products and taking advantage of the opportunities to move to a broader energy sector that is not wholly reliant on traditional brown coal generation.

The Victorian Government will continue to support knowledge enhancement, through coal upgrading technologies – encourage and support companies developing low emission coal upgrading technologies in the Latrobe Valley.

Source: various



Part 3 Regional Cities Growth Framework

Step 9 Case Studies

CASE STUDY 5 – Policy Initiatives: Avalon International Airport

Overview

In October 2012, the Federal Government announced the selection of Avalon as the second Melbourne International Airport.

Avalon Airport is a key asset for the region and it is poised to make a major contribution to the economic development of the region. It is Australia's only dedicated low-cost commercial airport.

Policies/ Initiatives

The *Geelong Economic Development Strategy (2005-2010)* identified Avalon Airport as an important economic asset for the region, with opportunities for further aviation and aerospace industry growth, an increase in domestic travel through Avalon, and potential to act as an export point for the local seafood industry.

Melbourne @5 Million identified Avalon-Werribee-Melton-Melbourne Airport-Donnybrook as one of three employment corridors that are to receive priority attention for future investment and employment growth.

The G21 Regional Alliance has identified the development of Avalon Airport as Economic Development Pillar Project (as part of the *G21 Geelong Region Plan*) and a priority project for the Geelong Region. The G21 has also identified securing approvals and funding to facilitate an international terminal at Avalon Airport as one of the region's top priorities for the upcoming Federal election.

The State Government has commenced a planning process to develop options for an Avalon Airport Rail Link project. A rail link to Avalon Airport will not only provide a high standard public transport service for passengers to and from the airport, but will also represent a massive injection into economic and employment opportunities in the area.

The expansion of Avalon Airport is in-line with the Federal Government's Aviation White Paper, which supports greater competition within the aviation industry, encourages low-cost operators, and recognises the need to improve connecting air services between regional communities and major capital cities.

The Federal Government has committed to a variation of the airport lease which will fast track the new international airport terminal provided the works do not exceed 10,000sqm and cost more than \$15 million.

The Victorian State Government:

- ❖ will continue to support Avalon Airport as the host of the Australian International Airshow until 2015
- ❖ will support the development of Geelong as an international aerospace, defence and aviation hub
- ❖ has committed \$50 million for the design, planning, land acquisition and preliminary construction works of a rail link to Avalon Airport (total estimated cost at \$250 million)
- ❖ has committed \$3 million to create an aviation fuel pipeline by connecting into the existing Geelong to Melbourne Shell pipeline infrastructure
- ❖ has committed \$2.7 million to progress development of an Airport Precinct Master Plan.

Source: various

Part 4

Regional Cities Diagnostics Tool



Part 4 Regional Cities Diagnostics Tool

Overview

This section outlines the general approach used as the basis for the Diagnostics Tool which may be used for undertaking diagnostics analysis and reporting.

The Diagnostics Tool itself is a spreadsheet comprising four assessment themes, each of which contains a series of sub-criteria relating to each theme.

The Author has identified a comprehensive list of primary, secondary and tertiary indicators as part of the Growth Framework (Step 8) which may be explored further. However for simplicity the Author has focused on a series of measurable primary indicators at the Local Government Area (LGA). These indicators are highlighted in the following section.

When interpreted collectively, the indicators contained in the Diagnostics Tool provide a comprehensive assessment of current and future investment priorities for each regional city and highlight associated investment and regulatory responses which may be required to address:

- ❖ **Today Actions** – Capacity building initiatives to address existing or previous infrastructure and services ‘gaps’
- ❖ **Future Actions** – Future proofing initiatives to address future economic and city building requirements reflecting growth vision for the Regional city to 2030+
- ❖ **Turning Points** – Potential changes in a Regional City’s characteristics owing to significant changes in the underlying structure of the regional economy served or other major factors affecting the size, servicing capacity and overall size of the services sector

Structure of this section

The fourth part of this paper unpacks Steps 8-10 and describes the relative importance of each in establishing Regional City growth characteristics.

As in earlier sections, the step below provide an important element used Regional Cities diagnostics reporting.





Part 4 Regional Cities Diagnostics Tool

Step 10 Diagnostics Tool Framework

The Diagnostics Tool will enable a Regional City to identify current and future growth and investment priorities and associated policy or regulatory responses which may be required to address future growth challenges.

Upon completion of regional diagnostics analysis using the Diagnostics Tool, an individual Regional City will be able to clearly identify:

- A. Indicators which have the most significant impact on/relationship to Regional City Growth as identified in the Growth Framework;
- B. Key focus areas for strategic action in the future to achieve future aspirations, including:
 - ❖ Capacity building initiatives to address existing or previous infrastructure and services 'gaps'
 - ❖ Future proofing initiatives to address future economic and city building requirements for the future.
 - ❖ Potential for a major change or turning point in a Regional City's economic role reflecting its economic capacity or potential to generate significant regional economic growth

The outputs of regional diagnostics reporting using the Diagnostics Tool may be used to identify priority projects within Regional Growth Plans and enable State and Federal Government to target funding across Regional Cities reflecting a clear and systematic approach to defining individual aspirations for growth across different Regional Cities.

An assessment of each of the indicators in the Diagnostics Tool against a Regional City's objectives may highlight current and future investment priorities for each Regional City and associated regulatory responses which may be required to address:

- ❖ Today Actions – Capacity building initiatives to address existing or previous infrastructure and services 'gaps' within the next 1-5 years
- ❖ Future Actions – Future proofing initiatives to address future economic and city building requirements reflecting growth vision for the Regional city during the coming 5-10 years+

The Growth Framework and Diagnostics Tool identified in this study will greatly assist in developing Regional Growth Plans.



Part 4 Regional Cities Diagnostics Tool

Step 10 Diagnostics Tool Framework

Users of the Diagnostics Tool are encouraged to undertake the following steps to complete a diagnostics assessment for a Regional City.

The steps outlined are offered as a guide to assist Councils to define appropriate and consistent data inputs; undertake a high level benchmark comparison of activity against known comparable data; and perform a diagnostics assessment for the current period (i.e. Census 2011, 2013) against targets set by Council for future periods i.e. 1-5 years and 5-10 years from the date of assessment.

The Diagnostics Tool involves the following steps:

- Step 1 – Defining appropriate data inputs for the indicators outlined in the Tool for the Local Government Area using known indicators (ABS Census or otherwise). The period of assessment (i.e. 2011, 2013)
- Step 2 – Undertaking a high level (optional) comparison for a Regional City highlighting similarities or differences relative to Regional Cities, Regional Victoria, Metropolitan Melbourne and Victoria averages (Regional Vic, Metropolitan Melbourne and Vic benchmarks are provided in the Annexure), where this information exists. This comparison may highlight potential target areas for specific action that may result in improved activity/performance

- Step 3 – A Regional City Council establishes objectives for key indicators (where this is possible) for the period 2016 and 2021 as a minimum. These dates coincide with ABS Census data and allow both short-term (i.e. 1-5 year) and longer-term (i.e. 5-10 years+) aspirations to be achieved.

Having completed Steps 1-3 to identify appropriate data inputs for analysis, followed by setting individual targets for future performance for key indicators, users of the Diagnostics Tool may now undertake a diagnostics assessment to identify focus areas for current and future action. This involves:

- Step 4 – Individual Regional Cities undertaking diagnostics analysis to compare activity or performance for the current period (i.e. 2011, 2013) against targets per Step 3. This involves identifying key focus areas for current and future action/intervention that will enable Council to achieve its objectives.
- Step 5 – Defining appropriate policy / regulatory and/or investment actions (and permutations of each) to be taken during the immediate term and longer-term to enable Council to achieve objectives





Part 4 Regional Cities Diagnostics Tool

Step 10 Diagnostics Tool Framework

The first step involves defining data inputs for the indicators listed below:

- ❖ Economic Value & Scalability
- ❖ Land, Infrastructure & Natural Systems
- ❖ Community Infrastructure & Services
- ❖ Environmental Sustainability

Data identified in this step will relate to the Local Government Area (LGA) for the Census period 2011 and recent information (including current 2013 data) that may be available.

The second step involves a high level (optional) comparison for a Regional City against a Regional Cities average and/or Regional Victorian average can be undertaken where this information exists and is reported in the accompanying tables. This comparison may highlight potential target areas for specific action that may result in improved activity/performance.

Economic Value & Scalability

The size and structure of regional economic systems is important as this defines the relative importance of key variables and activity drivers as well as future growth potential across Regional Cities.

Key indicators include:

- ❖ Estimated resident population (no. residents by LGA, 2011, 2012) and estimates of population growth (VIF 2016, 2021)
- ❖ Per capita income and variation from Regional Victorian average

- ❖ Relative socio economic advantage/disadvantage (SEIFA)
- ❖ Age distribution (% population)
- ❖ Household formation
- ❖ Diverse cultural and demographic structure
- ❖ Labour force sustainability – including total persons employed, unemployment and participation rate
- ❖ Innovation, skills and technology – including access to skilled labour / qualifications and a technology enabled workforce
- ❖ Capacity to attract and retain population and skills
 - ❖ University qualified - % working age population with university qualifications
 - ❖ Technical qualification - % working age population with university qualifications
- ❖ Regional economic output – regional gross product (\$m), ABS
- ❖ Industry diversity – including output and employment by type
- ❖ Capital investment – including a strong history of public investment, corporate business investment, private investment
- ❖ Innovation, skills and technology – including access to skilled labour / qualifications and a technology enabled workforce

Part 4 Regional Cities Diagnostics Tool

Step 10 Diagnostics Tool Framework

Land, Infrastructure & Natural Systems

Key indicators include:

- ❖ Building approvals – number and/or value of building approvals (\$m) as an indicator of development as well as current and future construction activity
- ❖ Land Sustainability – availability of zoned serviced residential and employment land and median land prices as an indicator of relative affordability
- ❖ Floorspace Sustainability – availability of commercial/retail and ancillary floorspace servicing a diverse labour market located within the city centre and/or areas proximate to the city centre
- ❖ Transport Infrastructure & Systems – strong public transport links, heavy rail/freight and logistics, high speed roads and freeways, port, airport, ferry and other infrastructure systems supporting access and connectivity for residents and industry
- ❖ Tourism Infrastructure – including tourism employment and appropriate tourism infrastructure and services
- ❖ The value of production in key natural resources sectors as agriculture, minerals, energy forestry, fishing as an indicator of the strength of key value adding sectors linked to food and fibre production and export markets
- ❖ Technological readiness – data systems and technology – including access to high speed data networks (cable, mobile, satellite) and employment in technology related industries and occupations

Community Infrastructure & Services

Key indicators include:

- ❖ Dwelling structure – including the % of dwellings by type as an indicator of housing diversity and choice
- ❖ Housing status – including % of households who own/purchasing or renting their place of residence as an indicator of relative purchasing power and median house price (i.e. Relative affordability)
- ❖ English proficiency – % of population with English as first language or, if second language who speaks English well
- ❖ Early childhood performance – % of children developmentally vulnerable on one or more domains (higher ranking indicates fewer children developmentally vulnerable)
- ❖ Primary, secondary education – % students in top 2 Bands for reading, writing, spelling, grammar, punctuation and numeracy
- ❖ Attending University – % working age population attending university or another higher education institution
- ❖ Attending TAFE/Equivalent – % of working age population attending technical or further education institutions
- ❖ Lifelong learning – % of working age population participating in education and training
- ❖ Health Infrastructure & Services – including access to high quality public and private hospital and primary/allied health care
- ❖ Health of population – adults with at least one of four of the risk factors of smoking, harmful use of alcohol, physical inactivity and obesity (*higher ranking means fewer adults with risk factors*)
- ❖ Employment within hospitals and the health sector and access to GP services per '000 resident population
- ❖ Community Safety / Justice Infrastructure & Services – including law enforcement services, justice and legal infrastructure and support services for various groups





Part 4 Regional Cities Diagnostics Tool

Step 10 Diagnostics Tool Framework

Community Infrastructure & Services

Community infrastructure and services play an important role in enabling and enhancing enabling regional attractiveness, liveability, social amenity, inclusion and participation and in creating places and spaces for diverse users of all ages. The existence of and quality of community infrastructure contributes towards a positive sense of place and belonging for visitors and residents.

Key indicators are listed in the accompanying table and include a full mix of social / cultural / sporting / recreational infrastructure & services and general community infrastructure and services as well as services for specific user groups.

e.g.

- ❖ District community centre / Community Hall / Cultural centre
- ❖ Library, arts centre (exhibition, performance, visual, installation)
- ❖ Youth centre and services, women's centre/refuge / services, men's workshop, seniors centre and services
- ❖ Playing Fields / Courts, indoor active recreation centre (gym, health club, basketball, tennis courts), outdoor active recreation facilities and amenities (BMX Track/Skate park), local playgrounds and amenities
- ❖ Aquatic Centre

(cont)

- ❖ Outdoor active recreation facilities and amenities (BMX Track/Skate park)
- ❖ Golf-course (or similar)
- ❖ Local parks, gardens, reserves
- ❖ Places of assembly

Environmental Sustainability

Key indicators include:

- ❖ Sustainable water resources for domestic and industry/agricultural use and methods for mitigating supply and price risks
- ❖ Responsiveness to climate change – including access to funding and programs for ensuring water and energy sustainability
- ❖ National Climate Change policy initiatives with direct implications for electricity production as well as forestry and indirect implications for energy prices flowing through to industry and household consumers
- ❖ Conservation initiatives as well as local investment in sustainability research and infrastructure including water re-use/adaptive water sustainability and other initiatives for land use adaption/transition favouring long term environmental sustainability



Part 4 Regional Cities Diagnostics Tool

Step 10 Diagnostics Tool Framework

The third step involves a Regional City Council establishing objectives for key indicators (where this is possible) for the period 2016 and 2021 as a minimum. These dates coincide with ABS Census data and allow both short-term (i.e. 1-5 year) and longer-term (i.e. 5-10 years+) aspirations to be achieved.

Defining Regional City aspirations addressing primary indicators may present challenges. Targets need to be established and agreed in Regional City Growth Plans and reflect Council's own policy setting arrangements.

The fourth step involves individual Regional Cities undertaking diagnostics analysis to compare activity or performance for the current period (i.e. 2011, 2013) against targets per Step 3. This involves identifying key focus areas for current and future action/intervention that will enable Council to achieve its objectives.

The fifth step involves defining appropriate policy / regulatory and/or investment actions (and permutations of each) to be taken during the immediate term and longer-term to enable Council to achieve objectives.

The key actions explored in this paper include:

- ❖ Investment – public, private and not-for profit
- ❖ Policy and regulatory actions – international, national, state and regional



Part 4 Regional Cities Diagnostics Tool

Step 11 - Diagnostics Tool

Overview

Users of the Diagnostics Tool will require a number of primary, secondary and tertiary indicators as inputs to the model.

Key Assessment Areas:

- ❖ Economic value and scalability
- ❖ Land, infrastructure and natural systems
- ❖ Community infrastructure and services
- ❖ Environmental sustainability

An assessment of primary indicators for each of the above assessment areas can be undertaken today reflecting available information.

Economic Value & Scalability

KEY VARIABLES

- Region & City Population Sustainability
- Regional City Capacity and vitality
- Industry Clusters & Diversity & Value Adding Capacity
- Capital Investment
- Labour Force Sustainability
- Innovation, Skills & Technology

Land, Infrastructure & Natural Systems

KEY VARIABLES

- Region & City Land Sustainability
- Transport Infrastructure & Systems
- Minerals & Energy
- Water Infrastructure & Systems
- Data Systems & Technology / ICT
- Tourism Infrastructure
- Timber Resources (Harvestable)
- Commercial Fishing & Aquaculture

Community Infrastructure & Services

KEY VARIABLES

- Region & City Housing sustainability
- Health Infrastructure & Services
- Education Services
- Social / Cultural / Sporting / Recreational Infrastructure & Services
- Community Safety / Justice Infrastructure & Services
- Other community based institutions, coordination & collaboration

Environmental Sustainability

KEY VARIABLES

- Responsiveness to Climate Change
- Water Sustainability
- Energy Sustainability
- Biodiversity
- Conservation Initiatives
- Funding for conservation
- Commitment to conservation policy direction



Part 4 Regional Cities Diagnostics Tool

Step 11 Diagnostics Tool

Users of the Diagnostics Tool are required to populate all indicators for the current period (i.e. 2011 Census or 2013 year) and indicate targets for the periods 2016 and 2021 both in terms of the direction of movement (up, down, no change, unknown) and in real terms (i.e. No, %)

Economic Value & Scalability

Indicators	Current	2016	Indicator	2021	Indicator
Population					
Estimated Resident Population	x	x	x	x	x
Income & Socio-economic advantage					
Per capita income	x	x	x	x	x
Var. from Regional Vic benchmark	x	x	x	x	x
Avg. household income	x	x	x	x	x
Var. from Regional Vic benchmark	x	x	x	x	x
SEIFA	x	x	x	x	x
Age distribution (% of population, date)					
Aged 0-14 (%)	x	x	x	x	x
Aged 15-19 (%)	x	x	x	x	x
Aged 20-29 (%)	x	x	x	x	x
Aged 30-39 (%)	x	x	x	x	x
Aged 40-49 (%)	x	x	x	x	x
Aged 50-59 (%)	x	x	x	x	x
Aged 60+ (%)	x	x	x	x	x
Average age (no.)	x	x	x	x	x
Family type (% of households, date)					
Couple with dep't children (%)	x	x	x	x	x
Couple with non-dep't child (%)	x	x	x	x	x
Couple without children (%)	x	x	x	x	x
One parent with dep't child (%)	x	x	x	x	x
One parent w non-dep't child (%)	x	x	x	x	x
Other family (%)	x	x	x	x	x
Lone person (%)	x	x	x	x	x
Avg. household size (no.)	x	x	x	x	x
Birthplace (% of population, date)					
Australian born (%)	x	x	x	x	x
Overseas born (%)	x	x	x	x	x

⊗ - unchanged; ▲ - increase; ▼ - decrease; ○ - direction of change uncertain



Part 4 Regional Cities Diagnostics Tool

Step 11 Diagnostics Tool

Users of the Diagnostics Tool are required to populate all indicators for the current period (i.e. 2011 Census or 2013 year) and indicate targets for the periods 2016 and 2021 both in terms of the direction of movement (up, down, no change, unknown) and in real terms (i.e. No, %)

Economic Value & Scalability

Indicators	Current	2016	Indicator	2021	Indicator
Labour Force (date)					
Total Persons Employed (Qtr)	x	x	x	x	x
Full Time (%)	x	x	x	x	x
Part Time (%)	x	x	x	x	x
Casual (%)	x	x	x	x	x
Unemployment rate (%)	x	x	x	x	x
Labour force participation rate (%)	x	x	x	x	x
Human Capital (date)					
Secondary School qualified (%)	x	x	x	x	x
Technical / TAFE qualification (%)	x	x	x	x	x
University degree qualification (%)	x	x	x	x	x
Regional gross product (\$m)					
Industry composition (% share output)					
% share by industry type	x	x	x	x	x
% share by industry type	x	x	x	x	x
% share by industry type	x	x	x	x	x
% share by industry type	x	x	x	x	x
Industry composition (% share employment)					
% share by industry type	x	x	x	x	x
% share by industry type	x	x	x	x	x
% share by industry type	x	x	x	x	x
% share by industry type	x	x	x	x	x
Gross Fixed Capital Formation (\$m)					
Private business investment	x	x	x	x	x
Public business investment	x	x	x	x	x
Technology enabled workforce					
Technology businesses - % of workforce	x	x	x	x	x
Workers in ICT and electronics - % employed in ICT and electronics	x	x	x	x	x

⊞ ~ unchanged; ▲ ~ increase; ▼ ~ decrease; ○ ~ direction of change uncertain



Part 4 Regional Cities Diagnostics Tool

Step 11 Diagnostics Tool

Users of the Diagnostics Tool are required to populate all indicators for the current period (i.e. 2011 Census or 2013 year) and indicate targets for the periods 2016 and 2012 both in terms of the direction of movement (up, down, no change, unknown) and in real terms (i.e. No, %)

Land, Infrastructure & Natural Systems

Indicators	Current	2016	Indicator	2012	Indicator
Land & development					
Building approvals (no.)	x	x	x	x	x
Value of building approvals (\$m)	x	x	x	x	x
Net office leasable floor area (m2)*	X	x	x	x	x
Net shop retail leasable floor area (m2)*	x	x	x	x	x
Net commercial floor area (excl office/shop) (m2)*	x	x	x	x	x
Zoned serviced residential land, Year (ha)	x	x	x	x	x
Zoned serviced industrial land, Year (ha)	x	x	x	x	x
Median residential land price (\$/m2)	x	x	x	x	x
Median industrial land price (\$/m2)	x	x	x	x	x
Transport infrastructure					
No. Regional public transport services daily (V-line trains, bus)	x	x	x	x	x
Patronage and utilisation (level of usage)	x	x	x	x	x
Volume heavy rail freight daily	x	x	x	x	x
No major high speed freeways servicing LGA	x	x	x	x	x
Airport domestic passengers	x	x	x	x	x
Airport freight volumes	x	x	x	x	x
Tourism infrastructure & services					
No persons employed in tourism (%)	x	x	x	x	x
Short-stay accommodation (bed nights)	x	x	x	x	x
Tourism related industry output (\$m)	x	x	x	x	x
Resource industries					
Agriculture (\$m)	x	x	x	x	x
Forestry (\$m)	x	x	x	x	x
Fishing (\$m)	x	x	x	x	x
Mining (\$m)	x	x	x	x	x
Technological Readiness					
Internet connection - % households	x	x	x	x	x
Broadband connection - % households	x	x	x	x	x

⊖ - unchanged; ▲ - increase; ▼ - decrease; ○ - direction of change uncertain
Note - * refers to floor space located within/proximate to the city centre



Part 4 Regional Cities Diagnostics Tool

Step 11 Diagnostics Tool

Users of the Diagnostics Tool are required to populate all indicators for the current period (i.e. 2011 Census or 2013 year) and indicate targets for the periods 2016 and 2012 both in terms of the direction of movement (up, down, no change, unknown) and in real terms (i.e. No, %)

Community Infrastructure & Services

Indicators	Current	2016	Indicator	2012	Indicator
Dwelling structure (% of dwellings)					
Separate house	x	x	x	x	x
Semi-detached/townhouse	x	x	x	x	x
Flat/unit/apartment	x	x	x	x	x
Other	x	x	x	x	x
Median House Price (\$) (date)	x	x	x	x	x
Housing status (% of households)					
Owner/purchaser	x	x	x	x	x
Renter	x	x	x	x	x
Other	x	x	x	x	x
Education, Skills & Services					
English proficiency (%)	x	x	x	x	x
Early childhood performance (%)	x	x	x	x	x
Primary education performance (%)	x	x	x	x	x
Secondary education performance (%)	x	x	x	x	x
Technical / TAFE attendance (%)	x	x	x	x	x
University attendance (%)	x	x	x	x	x
Lifelong learning (%)	x	x	x	x	x
Health, Infrastructure & Services					
Health of local population (%)	x	x	x	x	x
Employed persons in hospitals (%)	x	x	x	x	x
Employed persons in health care (other than hospitals) (%)	x	x	x	x	x
GP services (per '000 population)	x	x	x	x	x
Community safety, Justice					
Employed persons in police services (%)	x	x	x	x	x
Employed persons in justice, courts (excluding police) (%)	x	x	x	x	x

⊖ - unchanged; ▲ - increase; ▼ - decrease; ○ - direction of change uncertain
 Note - * refers to floor space located within/proximate to the city centre



Part 4 Regional Cities Diagnostics Tool

Step 11 Diagnostics Tool

Users of the Diagnostics Tool are required to populate all indicators for the current period (i.e. 2011 Census or 2013 year) and indicate targets for the periods 2016 and 2012 both in terms of the direction of movement (up, down, no change, unknown) and in real terms (i.e. No, %)

Community Infrastructure & Services

Indicators	Current (no.)	Current (m2)	2016 (no.)	2016 (m2)	Indicator	2021 (no.)	2021 (m2)	Indicator
Community Infrastructure								
District community centre / Community Hall / Cultural centre	x	x	x	x	x	x	x	x
Library	x	x	x	x	x	x	x	x
Arts centre (exhibition, performance, Visual, installation)	x	x	x	x	x	x	x	x
Youth centre and services	x	x	x	x	x	x	x	x
Women's centre/refuge / services	x	x	x	x	x	x	x	x
Men's workshop	x	x	x	x	x	x	x	x
Seniors centre and services	x	x	x	x	x	x	x	x
Playing Fields / Courts	x	x	x	x	x	x	x	x
Aquatic Centre (cont)	x	x	x	x	x	x	x	x
Indoor active recreation centre (gym, health club, basketball, tennis courts)	x	x	x	x	x	x	x	x
Outdoor active recreation facilities and amenities (BMX Track/Skate park)	x	x	x	x	x	x	x	x
Golf-course (or similar)	x	x	x	x	x	x	x	x
Local parks, gardens, reserves	x	x	x	x	x	x	x	x
Local playgrounds and amenities	x	x	x	x	x	x	x	x
Places of assembly	x	x	x	x	x	x	x	x

⊖ - unchanged; ▲ - increase; ▼ - decrease; ○ - direction of change uncertain
Note - * refers to floor space located within/proximate to the city centre



Part 4 Regional Cities Diagnostics Tool

Step 11 Diagnostics Tool

Users of the Diagnostics Tool are required to populate all indicators for the current period (i.e. 2011 Census or 2013 year) and indicate targets for the periods 2016 and 2012 both in terms of the direction of movement (up, down, no change, unknown) and in real terms (i.e. No, %)

Environmental Sustainability Initiatives*

Indicators	Current	2016	Indicator	2021	Indicator
Water supply infrastructure including aqueducts, channels pipelines (Capital Expenditure & Programs)					
Council funded programs (\$m)	x	x	x	x	x
State funded programs	x	x	x	x	x
Federal funded programs	x	x	x	x	x
Authority funded programs	x	x	x	x	x
Water sustainability (demand management) initiatives (Capital Expenditure & Programs)					
Council funded programs (\$m)	x	x	x	x	x
State funded programs (\$m)	x	x	x	x	x
Federal funded programs (\$m)	x	x	x	x	x
Authority funded programs (\$m)	x	x	x	x	x
Energy sustainability (demand management) initiatives (Capital Expenditure & Programs)					
Council funded programs (\$m)	x	x	x	x	x
State funded programs (\$m)	x	x	x	x	x
Federal funded programs (\$m)	x	x	x	x	x
Authority funded programs (\$m)	x	x	x	x	x
Biodiversity conservation initiatives (Capital Expenditure & Programs)					
Council funded programs (\$m)	x	x	x	x	x
State funded programs (\$m)	x	x	x	x	x
Federal funded programs (\$m)	x	x	x	x	x
Authority funded programs (\$m)	x	x	x	x	x
Land & Resources conservation (Capital Expenditure & Programs)					
Council funded programs (\$m)	x	x	x	x	x
State funded programs (\$m)	x	x	x	x	x
Federal funded programs (\$m)	x	x	x	x	x
Authority funded programs (\$m)	x	x	x	x	x

⊖ - unchanged; ▲ - increase; ▼ - decrease; ○ - direction of change uncertain
Note - * refers to instances where this information exists or is available



Part 4 Regional Cities Diagnostics Tool

Step 11 Diagnostics Tool

Users of the Diagnostics Tool are encouraged to identify priority projects for action and explore the timing of actions required to achieve Council's objectives (1-5, 5-10 year timeframe); Investment actions including capital and program funding where this information is known; the likely policy action/response required to facilitate the priority project including clearly identifying how such policy actions relate to Regional Growth Plans; and details of Council resource implications such as funding programs and other resources needed to facilitate the project.

This table sets out an indicative approach for reporting the above for priority projects

Priority Project Initiatives*

Indicators	Timing of action	Investment action required (\$m if known)	Policy or regulatory action	Council Resource Implications
Priority Projects by type (e.g.)				
Major new public library	1-5, 5-10	Council (\$m)	1	10 year capital works
Priority project B	x	x	x	x
Priority project C	x	x	x	x
Priority project D	x	x	x	x
Priority project E	x	x	x	x
Priority project F	x	x	x	x
Priority project G	x	x	x	x
Priority project H	x	x	x	x
Priority project I	x	x	x	x
Priority project J	x	x	x	x
Priority project K	x	x	x	x
Priority project L	x	x	x	x
Priority project M	x	x	x	x
Priority project N	x	x	x	x
Priority project O	x	x	x	x

Note - * refers to instances where this information exists or is available
(1) e.g. As documented in Council's Community Library Strategy



Part 4 Regional Cities Diagnostics Tool

Step 11 - Diagnostics Tool

Useful Ratios

Users of the Diagnostics Tool are encouraged to use the indicators contained in the Tool to generate ratios which may provide a leading indicator of change/growth and support a Regional City prepare forecasts of types of activities. These ratios may be used by Regional Cities for comparison purposes with other Regional Cities, regional Victoria and/or metropolitan averages if required and appropriate.

Some important ratios include (but are not limited to):

- ❖ Economic value and scalability (e.g.)
 - ❖ Labour force participation rate = no. persons in the labour force / total resident population
 - ❖ Sustainable labour force = no. employed persons / total resident population
 - ❖ Skilled industry sustainability by type of occupation = white collar or blue collar employees / total adult working age population
 - ❖ Technological readiness = persons employed in technology related businesses as an ICT/technology expert / total employed persons
- ❖ Industry sustainability: e.g. Tourism
 - ❖ Employment sustainability = no persons employed in tourism industry / total labour force
 - ❖ Sustainable Local Accommodation Provision = no. accommodation units (beds) / employed persons in tourism industry
 - ❖ Sustainable Industry Share = no. accommodation units (beds) / total accommodation units (beds) for Regional Cities

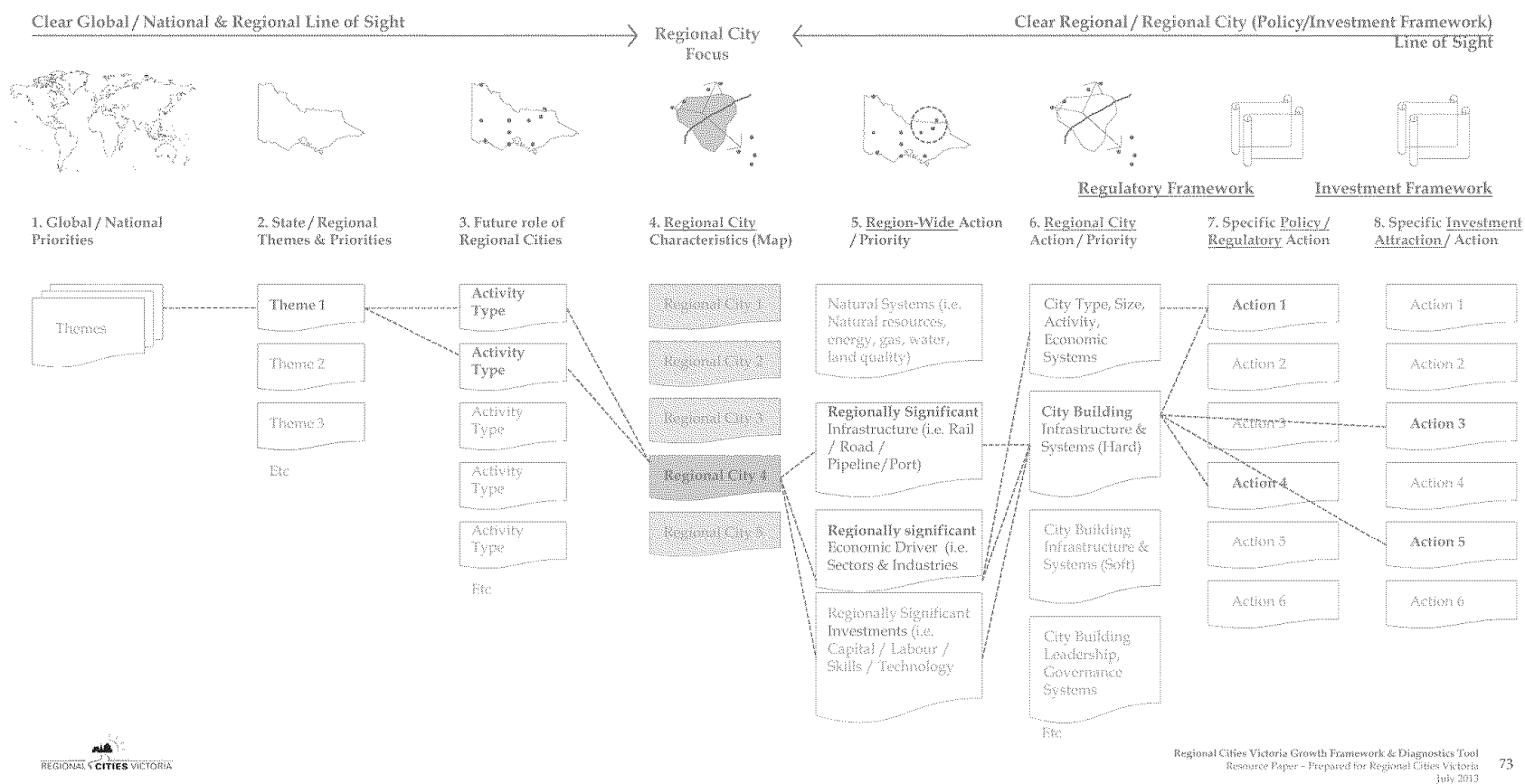
- ❖ Land, infrastructure and natural systems (e.g.)
 - ❖ Employment land sustainability = forecast available serviced residential and/or employment land / forecast blue collar employment*
 - ❖ Residential land supply sustainability = forecast available zoned serviced residential land / forecast resident population growth^
 - ❖ Relative building approvals = \$value building approvals (year) / total \$ value building approvals (year)*
 - ❖ Central city (CBD) retail floorspace sustainability = Net retail floor area by type / resident population
 - ❖ Central city (CBD) commercial floorspace sustainability = Net office floor area / white collar employees
 - ❖ Sustainable public transport = journey to work by public transport into the LGA / total journey to work trips (LGA)
- ❖ Community infrastructure and services (e.g.)
 - ❖ Community Infrastructure sustainability = Quantity (no, m2) of community infrastructure by type / resident population.
- ❖ Environmental sustainability (e.g.)
 - ❖ Sustainable environment = Council expenditure on water or energy sustainability measures / resident population.
 - ❖ Sustainable investment = Council expenditure on water/energy sustainability measures / total expenditure on water/energy sustainability

*Note * both the numerator and denominator relate to the same period*

^ - this assumes a fixed ratio of household formation and both the numerator and denominator relate to the same forecast period.

Part 4 Regional Cities Diagnostics Tool

Step 12 Regional Investment Logic Map



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Regional Cities Victoria Growth Framework

Diagnostics Tool
Greater Shepparton City Council

19 July 2013



Purpose

The Diagnostics Tool will enable a Regional City to identify current and future growth and investment priorities and associated policy or regulatory responses which may be required to address future growth challenges.

Upon completion of regional diagnostics analysis using the Diagnostics Tool, an individual Regional City will be able to clearly identify:

- A. Indicators which have the most significant impact on/relationship to Regional City Growth as identified in the Growth Framework documentation;
- B. Key focus areas for strategic action in the future to achieve future aspirations, including:
 - ❖ Capacity building initiatives to address existing infrastructure and/or services 'gaps'
 - ❖ Future-proofing initiatives to address future economic and city building requirements for the future
 - ❖ Potential for changes or turning point in a Regional City's economic role reflecting its economic capacity or potential to generate significant regional economic growth

The outputs of regional diagnostics analysis using the Diagnostics Tool may assist Councils to identify priority projects for delivery through Regional Growth Plans and related economic and land use planning and policy frameworks; and enable Councils and State / Federal Governments to target funding to priority projects across Regional Cities now and in the future.

The Growth Framework and Diagnostics Tool identified in this study will greatly assist in developing Regional Growth Plans.

Data Sources

Data referred to in the following tables have been obtained from the following sources:

1. Australian Bureau of Statistics (ABS) data
2. ABS Census 2011
3. ABS National Regional Profile
4. Regional Australia Institute
5. Economic.id
6. Victoria in Future Forecasts (VIF)
7. Socio-economic Indicator for Areas (SEIFA)
8. Council (where this information exists)
9. State Government (e.g. Department of Transport, Planning & Local Infrastructure (DTPLI), Public Transport Victoria)
10. PriceFinder
11. Other (relevant authority/industry group)
12. Social Health Atlas of Australia
13. MySchools Data
14. Regional Australia Institute
15. Federal Government (relevant agency)

Diagnostics Assessment - General Instructions

Users of the Diagnostics Tool are encouraged to undertake the following steps to complete a diagnostics assessment for a Regional City.

The steps outlined are offered as a guide to assist Councils to define appropriate and consistent data inputs; undertake a high level benchmark comparison of activity against known comparable data; and perform a diagnostics assessment for the current period (i.e. Census 2011, 2013) against targets set by Council for future periods i.e. 1-5 years and 5-10 years from the date of assessment.

The Diagnostics Tool involves the following steps:

Step 1 – Defining appropriate data inputs for the indicators outlined in the Tool for the Local Government Area using known indicators (ABS Census or otherwise). The period of assessment (i.e. 2011, 2013)

Step 2 – Undertaking a high level (optional) comparison for a Regional City highlighting similarities or differences relative to Regional Cities, Regional Victoria, Metropolitan Melbourne and Victoria averages (Regional Vic, Metropolitan Melbourne and Vic benchmarks are provided in the Annexure), where this information exists. This comparison may highlight potential target areas for specific action that may result in improved activity/performance

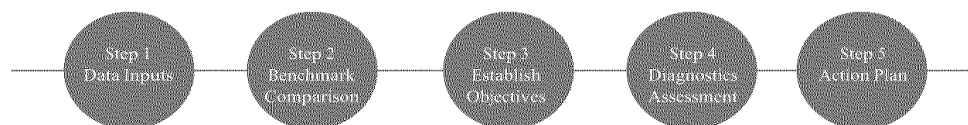
Step 3 – A Regional City Council establishes objectives for key indicators (where this is possible) for the period 2016 and 2021 as a minimum. These dates coincide with ABS Census data and allow both short-term (i.e. 1-5 year) and longer-term (i.e. 5-10 years+) aspirations to be achieved.

Having completed Steps 1-3 to identify appropriate data inputs for analysis, followed by setting individual targets for future performance for key indicators, users of the Diagnostics Tool may now undertake a diagnostics assessment to identify focus areas for current and future action. This involves:

Step 4 – Individual Regional Cities undertaking diagnostics analysis to compare activity or performance for the current period (i.e. 2011, 2013) against targets per Step 3. This involves identifying key focus areas for current and future action/intervention that will enable Council to achieve its objectives.

Step 5 – Defining appropriate policy / regulatory and/or investment actions (and permutations of each) to be taken during the immediate term and longer-term to enable Council to achieve objective

A set of useful ratios have been provided, which may be used by Regional Cities as a leading indicator of change/growth and forecast analysis as well as comparison with other Regional Cities, regional Victoria and/or metropolitan averages if appropriate.



Action Plan

The action plan involves defining appropriate policy / regulatory and/or investment actions (and permutations of each) to be taken during the immediate term and longer-term to enable Council to achieve objectives.

It will be important for Councils to determine the most appropriate timing of investment (i.e. 1-5 years and/or 5-10 years and beyond) and related governance arrangements to facilitate such investments in line with Council's policy objectives.

The key actions explored in this paper include:

- ❖ Investment – public (Council, State, Federal), private and not-for profit
- ❖ Policy and regulatory actions – which may include Council-based actions as well as other actions such as state, national and/or international actions.

Each of these is summarised below.

INVESTMENT ACTIONS

Public Investment / Not for Profit

- ❖ International funding – such as loans, sovereign funding agreements, foreign aid programs for industries, regional trade initiatives and funding
- ❖ Federal – such as the Future Fund, Regional Development Australia Fund and nation building initiatives including national broadband, major infrastructure such as ports, road and rail, higher education, health, defence, foreign trade links, immigration, financial assistance for regions
- ❖ State – refers to a full suite of State Government funding involving all agencies with direct and indirect implications for Regional Cities
- ❖ Local – refers to a full suite of Local Government funding initiatives with implications for Regional Cities
- ❖ Not for profit – refers to investments by all types of not-for profit organisations with direct implications for Regional Cities.

Private Investment

- ❖ Foreign direct investment into production or businesses by companies in other countries. This does not include foreign portfolio investments in Australian securities
- ❖ Australian business investment – measured by private gross fixed capital formation in non-dwelling construction, machinery and equipment, livestock and intangible fixed assets by private businesses
- ❖ Angel investors – typically wealthy individuals or groups looking to make an investment in a start-up business with the aim of generating strong investment returns

POLICY ACTIONS

- ❖ International – includes sovereign treaties between Australia and other countries; free trade agreements; foreign partnerships which have direct implications for States, Territories and regional cities within these jurisdictions.
- ❖ Commonwealth Government policy initiatives – specifically those which are agreed between the Commonwealth, States and Territories which have direct implications regional cities within these jurisdictions
- ❖ State – refers to a full suite of State Government policy and regulatory actions involving planning infrastructure and service delivery agencies with direct and indirect implications for Regional Cities
- ❖ Local – refers to a full suite of Local Government policy and regulatory actions involving land use planning, city development, infrastructure and service delivery with implications for Regional Cities

An example of Local Government policy and regulatory actions to stimulate population mobility based on housing affordability and competitive land prices, might involve implementing faster planning approvals or greater flexibility for priority projects currently delayed in the approval system.

⊖ – unchanged, ▲ – increase, ▼ – decrease, ? – direction of change uncertain

Indicators	STEP 1&2 - DATA REVIEW (CURRENT)			STEP 3&4 - DIAGNOSIS ASSESSMENT				STEP 5 - ACTION PLAN				
	Source	LGA (Current)	Regional Cities (Current)	LGA (2016)	Direction of change (if known)	LGA (2011)	Direction of change (if known)	Timing of action (1-5 years; 5-10 years)	Council / Government or Other Investment action required (Yes if known)	Council Policy or Regulatory Action	Other Policy or Regulatory Action	Council Resource Implications
Economic value & Scalability												
Population												
Census 2011 (no.)	1, 2	61,737	714,460									
ERP 2012 (no.)	1	62,320	722,373									
VIF 2016 (Estimate no.)	6	67,699	793,541									
VIF 2021 (Estimate no.)	6	71,288	846,864									
Income & Socio-economic advantage (2011)												
Per capita income	2	\$510	\$512									
Var. from Regional Vic average	2	3.43%	3.83%									
Avg. household income	2	\$980	\$979									
Var. from Regional Vic average	2	3.70%	3.57%									
SEIFA	7	942	958									
Age distribution (% of population, 2011)												
Aged 0-14 (%)	2	21.42%	19.57%									
Aged 15-19 (%)	2	7.22%	7.11%									
Aged 20-29 (%)	2	11.69%	12.62%									
Aged 30-39 (%)	2	12.34%	12.19%									
Aged 40-49 (%)	2	13.91%	13.53%									
Aged 50-59 (%)	2	12.95%	13.12%									
Aged 60-74 (%)	2	13.41%	14.14%									
Aged 75+ (%)	2	7.06%	7.72%									
Average age (years)		38	39									
Family type (% of households, 2011)												
Couple family with no children	2	25.64%	25.84%									
Couple family with children	2	29.67%	27.58%									
One parent family	2	11.57%	11.71%									
Other family	2	0.83%	0.94%									
Lone person household	2	25.02%	26.71%									
Group household	2	2.91%	3.45%									
Other household	2	4.36%	3.77%									
Avg. household size (persons)	2	2.3	2.4									
Birthplace (% of population, 2011)												
Australian born (%)	2	79.12%	82.12%									
Overseas born (%)	2	20.88%	17.88%									
Labour Force (2011)												
Total Persons Employed	2	26,650	315,593									
Full Time (% of employed)	2	61.67%	59.75%									
Part Time (% of employed)	2	31.56%	33.69%									
Other (% of employed)	2	6.77%	6.56%									
Unemployment rate (%)	3	5.50%	5.72%									
Labour force participation rate (%)	3	59.40%	59.92%									
Human Capital (2011)												
Secondary School qualified (%)	2	25.32%	29.86%									
Technical / TAFE qualification (%)	4	30.70%	34.82%									
University degree qualification (%)	4	13.00%	15.44%									
Regional gross product (\$m, 2011-12)	5	\$2,536	\$29,458									

Industry composition (% share output, 2010-11)			
Agriculture, Forestry and Fishing	1, 2	12.13%	4.72%
Mining	1, 2	1.36%	5.17%
Manufacturing	1, 2	13.16%	11.11%
Electricity, Gas, Water and Waste Services	1, 2	4.88%	3.92%
Construction	1, 2	7.24%	7.91%
Wholesale Trade	1, 2	4.42%	3.82%
Retail Trade	1, 2	7.86%	7.74%
Accommodation and Food Services	1, 2	2.50%	3.16%
Transport, Postal and Warehousing	1, 2	5.34%	5.17%
Information Media and Telecommunications	1, 2	2.50%	2.88%
Financial and Insurance Services	1, 2	6.74%	9.30%
Rental, Hiring and Real Estate Services	1, 2	1.47%	1.93%
Professional, Scientific and Technical Services	1, 2	4.72%	5.22%
Administrative and Support Services	1, 2	2.86%	2.93%
Public Administration and Safety	1, 2	3.60%	5.42%
Education and Training	1, 2	6.44%	6.97%
Health Care and Social Assistance	1, 2	9.58%	9.33%
Arts and Recreation Services	1, 2	0.56%	0.97%
Other Services	1, 2	2.63%	2.31%
Industry composition (% share employment, 2011)			
Agriculture, Forestry and Fishing	2	8.16%	3.25%
Mining	2	0.19%	0.73%
Manufacturing	2	12.42%	10.71%
Electricity, Gas, Water and Waste Services	2	2.17%	1.78%
Construction	2	7.95%	8.87%
Wholesale Trade	2	3.45%	3.05%
Retail Trade	2	12.68%	12.75%
Accommodation and Food Services	2	5.23%	6.74%
Transport, Postal and Warehousing	2	4.10%	4.06%
Information Media and Telecommunications	2	1.10%	1.30%
Financial and Insurance Services	2	1.78%	2.51%
Rental, Hiring and Real Estate Services	2	0.81%	1.09%
Professional, Scientific and Technical Services	2	3.84%	4.34%
Administrative and Support Services	2	2.68%	2.81%
Public Administration and Safety	2	4.12%	6.34%
Education and Training	2	7.79%	8.61%
Health Care and Social Assistance	2	14.15%	14.07%
Arts and Recreation Services	2	0.75%	1.32%
Other Services	2	4.11%	3.69%
Other	2	2.51%	1.99%
Gross Fixed Capital Formation (\$m)			
Private business investment	1	x	x
Public business investment	1	x	x
Technology enabled workforce (2011)			
Technology businesses (% of workforce)	4	4.70%	4.87%
Workers in ICT and electronics (% employed in ICT and electronics)	4	0.80%	1.12%
Land, Infrastructure & Natural Systems			
Land & development			
Building approvals (no. 2012)	1	1,480	23,968
Value of building approvals (\$m, 2012)	1	\$535	\$9,440
Net office leasable floor area (m2)*	8	x	x
Net shop retail leasable floor area (m2)*	8	x	x
Net commercial floor area (excl office/shop) (m2)*	8	x	x
Zoned serviced residential land, Year (ha)	8	x	x
Zoned serviced industrial land, Year (ha)	8	x	x
Median residential land price (\$/m2, 2012-13)	8, 10	\$144	\$186
Median industrial land price (\$/m2, 2012-13)	8, 10	\$49	\$58
Transport infrastructure			
Journey to work (2011)	9		
From the LGA by car	9	90.00%	89.00%
From the LGA by public transport	9	1.00%	2.00%
To the LGA by car	9	91.00%	90.00%
To the LGA by public transport	9	1.00%	1.40%
Access to a private motor vehicle (% household)	2	77.45%	77.42%
No. Regional public transport services daily (V-line trains, bus)	9	x	x
Patronage and utilisation (level of usage)	9	x	x
Volume heavy rail freight daily	9	x	x
No. major State arterial roads servicing LGA	8	x	x
Airport domestic passengers	11	x	x
Airport freight volumes	11	x	x

Tourism infrastructure & services			
No persons employed in tourism (%)	2	x	x
Short-stay accommodation (bed spaces, 2012)	1	1,665	12,300
Tourism related industry output (\$m)	2	x	x
Resource industries (production \$m, 2011)			
Agriculture (\$m)	1, 2	\$291.28	\$1,296.17
Forestry (\$m)	1, 2	\$0.86	\$33.96
Fishing (\$m)	1, 2	\$0.99	\$10.71
Mining (\$m)	1, 2	\$34.40	\$1,579.51
Technological Readiness			
Internet connection - % households	9	60.10%	61.60%
Broadband connection - % households	9	61.90%	63.02%
Community			
Dwelling structure (% of dwellings 2011)			
Separate house	2	85.32%	85.00%
Semi-detached/townhouse	2	3.54%	5.09%
Flat/unit/apartment	2	9.00%	8.70%
Other	2	2.13%	1.22%
Median House Price (\$, 2012-13)	2	\$240,000	\$262,300
Housing status (% of households, 2011)			
Owner/purchaser	2	64.74%	66.84%
Renter	2	27.68%	26.92%
Other (i.e. Not reported)	2	7.58%	6.23%
Education, Skills & Services			
English proficiency (%)	13, 14	92.00%	94.98%
Early childhood performance (%)	13, 14	23.50%	21.82%
Primary education performance (%)	13, 14	29.20%	33.55%
Secondary education performance (%)	13, 14	17.40%	20.31%
Technical / TAFE attendance (%)	2	2.22%	2.33%
University attendance (%)	2	1.50%	3.18%
Lifelong learning (%)	13, 14	47.00%	45.80%
Health, Infrastructure & Services			
Health of local population (%)	12, 14	61.20%	56.24%
Employed persons in hospitals (% of ERP)	2	2.19%	2.34%
Employed persons in health care (other than hospitals) (% of ERP)	2	2.45%	2.49%
GP services (per capita)	12, 14	5.1	5.09
Community safety, Justice			
Employed persons in police services (% of ERP)	2	0.15%	0.27%
Employed persons in justice, courts (excluding police) (% of ERP)	2	0.03%	0.03%
Environmental			
Water supply infrastructure including aqueducts, channels pipelines (Capital Expenditure & Programs)			
Council funded programs (\$m)	8	x	x
State funded programs (\$m)	9	x	x
Federal funded programs (\$m)	15	x	x
Authority funded programs (\$m)	11	x	x
Water sustainability (demand management) initiatives (Capital Expenditure & Programs)			
Council funded programs (\$m)	8	x	x
State funded programs (\$m)	9	x	x
Federal funded programs (\$m)	15	x	x
Authority funded programs (\$m)	11	x	x
Energy sustainability (demand management) initiatives (Capital Expenditure & Programs)			
Council funded programs (\$m)	8	x	x
State funded programs (\$m)	9	x	x
Federal funded programs (\$m)	15	x	x
Authority funded programs (\$m)	11	x	x
Biodiversity conservation initiatives (Capital Expenditure & Programs)			
Council funded programs (\$m)	8	x	x
State funded programs (\$m)	9	x	x
Federal funded programs (\$m)	15	x	x
Authority funded programs (\$m)	11	x	x
Land & Resources conservation (Capital Expenditure & Programs)			
Council funded programs (\$m)	8	x	x
State funded programs (\$m)	9	x	x
Federal funded programs (\$m)	15	x	x
Authority funded programs (\$m)	11	x	x

⊖ – unchanged; ▲ – increase; ▼ – decrease; ○ – direction of change uncertain

Indicators	STEP 1&2 - DATA REVIEW (CURRENT)			STEP 3&4 - DIAGNOSIS ASSESSMENT						STEP 5 - ACTION PLAN				
	Source	LGA (Current No.)	LGA (Current m2)	LGA 2016 (no.)	LGA 2016 (m2)	Direction of change (If known)	LGA 2021 (no.)	LGA 2021 (m2)	Direction of change (If known)	Timing of action (1-5 years; 5-10 years)	Council / Government or Other Investment action required (\$m if known)	Council Policy or Regulatory Action	Other Policy or Regulatory Action	Council Resource Implications
Community Infrastructure*														
District community centre / Community Hall / Cultural centre	8	x	x											
Library	8	x	x											
Arts centre (exhibition, performance, Visual, installation)	8	x	x											
Youth centre and services	8	x	x											
Women's centre/refuge / services	8	x	x											
Men's workshop	8	x	x											
Seniors centre and services	8	x	x											
Playing Fields / Courts	8	x	x											
Aquatic Centre (cont)	8	x	x											
Indoor active recreation centre (gym, health club, basketball, tennis courts)	8	x	x											
Outdoor active recreation facilities and amenities (BMX Track/Skate park)	8	x	x											
Golf-course (or similar)	8	x	x											
Local parks, gardens, reserves	8	x	x											
Local playgrounds and amenities	8	x	x											
Places of assembly	8	x	x											

⊖ – unchanged; ▲ – increase; ▼ – decrease; ○ – direction of change uncertain
Note *: where this information is available

Useful Ratios - Overview

Users of the Diagnostics Tool are encouraged to use the indicators contained in the Tool to generate ratios which may provide a leading indicator of change/growth and support a Regional City prepare forecasts of types of activities. These ratios may be used by Regional Cities for comparison purposes with other Regional Cities, regional Victoria and/or metropolitan averages if required and appropriate.

Some important ratios include (but are not limited to):

- ❖ Economic value and scalability (e.g.)
 - ❖ Labour force participation rate = no. persons in the labour force / total resident population
 - ❖ Sustainable labour force = no. employed persons / total resident population
 - ❖ Skilled industry sustainability by type of occupation = white collar or blue collar employees / total adult working age population
 - ❖ Technological readiness = persons employed in technology related businesses as an ICT/technology expert / total employed persons
- ❖ Industry sustainability: e.g. Tourism
 - ❖ Employment sustainability = no persons employed in tourism industry / total labour force
 - ❖ Sustainable Local Accommodation Provision = no. accommodation units (beds) / employed persons in tourism industry
 - ❖ Sustainable Industry Share = no. accommodation units (beds) / total accommodation units (beds) for Regional Cities
- ❖ Land, infrastructure and natural systems (e.g.)
 - ❖ Employment land sustainability = forecast available serviced residential and/or employment land / forecast blue collar employment*
 - ❖ Residential land supply sustainability = forecast available zoned serviced residential land / forecast resident population growth^
 - ❖ Relative building approvals = \$value building approvals (year) / total \$ value building approvals (year)*
 - ❖ Central city (CBD) retail floorspace sustainability = Net retail floor area by type / resident population
 - ❖ Central city (CBD) commercial floorspace sustainability = Net office floor area / white collar employees
 - ❖ Sustainable public transport = journey to work by public transport into the LGA / total journey to work trips (LGA)
- ❖ Community infrastructure and services (e.g.)
 - ❖ Community Infrastructure sustainability = Quantity (no, m2) of community infrastructure by type / resident population.
- ❖ Environmental sustainability (e.g.)
 - ❖ Sustainable environment = Council expenditure on water or energy sustainability measures / resident population.
 - ❖ Sustainable investment = Council expenditure on water/energy sustainability measures / total expenditure on water/energy sustainability

*Note * both the numerator and denominator relate to the same period*

^ - this assumes a fixed ratio of household formation and both the numerator and denominator relate to the same forecast period.

Useful Ratios - Overview

	LGA (Current)	LGA (2016)	LGA (2021)
Economic value & Scalability			
Labour force participation rate = no. persons in the labour force / total resident population	59.40%		
Sustainable labour force = no. employed persons/total resident population	43.17%		
Technological readiness = persons employed in technology related businesses as an ICT or technology expert / total employed persons	0.80%		
Industry sustainability: e.g. healthcare			
Employment sustainability = no persons employed in health industry / total labour force	14.15%		
Employed persons in hospitals / total resident population	2.19%		
Employed persons in health care (other than hospitals) / total resident population	2.45%		
Sustainable Local Healthcare Provision = no. GP services per capita	5.1		
Land, infrastructure and natural systems (e.g.)			
Employment land sustainability = forecast available serviced residential and/or employment land / forecast blue collar employment*			
Residential land supply sustainability = forecast available zoned serviced residential land / forecast resident population growth^			
Relative building approvals = \$value building approvals (year) / total \$ value building approvals (year)*			
Central city (CBD) retail floorspace sustainability = Net retail floor area by type / resident population			
Central city (CBD) commercial floorspace sustainability = Net office floor area / white collar employees			
Sustainable public transport = journey to work by public transport into the LGA / total journey to work trips (LGA)			
Community infrastructure and services (e.g.)			
Community Infrastructure sustainability = Quantity (no. m2) of community infrastructure by type / resident population.			
Environmental sustainability (e.g.)			
Sustainable environment = Council expenditure on water or energy sustainability measures/ resident population.			
Sustainable investment = Council expenditure on water/energy sustainability measures / total expenditure on water/energy sustainability			

Note * both the numerator and denominator relate to the same period

^ - this assumes a fixed ratio of household formation and both the numerator and denominator relate to the same forecast period.

Indicators	Benchmarks		
	Regional Victoria	Metropolitan Melbourne	Victoria
Economic value & Scalability			
Population			
<i>Census 2011 (no.)</i>	1,365,423	4,169,103	5,534,526
<i>ERP 2012 (no.)</i>	1,377,147	4,246,345	5,623,492
<i>VIF 2016 (Estimate no.)</i>	x	x	6,067,702
<i>VIF 2021 (Estimate no.)</i>	x	x	6,500,653
Income & Socio-economic advantage (2011)			
Per capita income	\$493	\$591	\$561
<i>Var. from Regional Vic average</i>	0.00%	19.88%	13.79%
Avg. household income	\$945	\$1,333	\$1,216
<i>Var. from Regional Vic average</i>	0.00%	41.06%	28.68%
SEIFA	x	x	989
Age distribution (% of population, 2011)			
Aged 0-14 (%)	19.21%	18.48%	18.66%
Aged 15-19 (%)	6.82%	6.33%	6.45%
Aged 20-29 (%)	10.74%	15.43%	14.27%
Aged 30-39 (%)	11.34%	15.04%	14.11%
Aged 40-49 (%)	13.67%	14.46%	14.26%
Aged 50-59 (%)	14.00%	12.06%	12.54%
Aged 60-74 (%)	16.02%	11.99%	13.00%
Aged 75+ (%)	8.20%	6.22%	6.71%
<i>Average age (years)</i>	41	36	37
Family type (% of households, 2011)			
Couple family with no children	27.82%	23.50%	24.64%
Couple family with children	26.94%	33.57%	31.82%
One parent family	10.53%	10.42%	10.45%
Other family	0.83%	1.44%	1.28%
Lone person household	26.76%	22.30%	23.48%
Group household	2.92%	4.48%	4.07%
Other household	4.20%	4.28%	4.26%
<i>Avg. household size (persons)</i>	2.4	2.6	2.6
Birthplace (% of population, 2011)			
Australian born (%)	83.12%	60.70%	66.33%
Overseas born (%)	16.88%	39.30%	33.67%
Labour Force (2011)			
Total Persons Employed	600,191	1,927,924	2,530,630
<i>Full Time (% of employed)</i>	59.24%	63.60%	62.56%
<i>Part Time (% of employed)</i>	33.91%	30.48%	31.29%
<i>Other (% of employed)</i>	6.84%	5.93%	6.15%
Unemployment rate (%)	5.20%	5.50%	5.40%
Labour force participation rate (%)	58.20%	62.50%	61.40%
Human Capital (2011)			

Secondary School qualified (%)	28.32%	42.70%	39.20%
Technical / TAFE qualification (%)	35.78%	27.83%	32.24%
University degree qualification (%)	15.82%	28.25%	21.34%
Regional gross product (\$m, 2011-12)	\$58,365	\$248,316	\$306,681
Industry composition (% share output, 2010-11)			
Agriculture, Forestry and Fishing	11.24%	0.71%	2.88%
Mining	5.62%	1.49%	2.25%
Manufacturing	10.61%	10.58%	9.75%
Electricity, Gas, Water and Waste Services	3.31%	1.99%	2.11%
Construction	7.81%	6.87%	6.52%
Wholesale Trade	3.78%	5.87%	4.96%
Retail Trade	6.97%	6.05%	5.76%
Accommodation and Food Services	3.13%	2.58%	2.50%
Transport, Postal and Warehousing	5.21%	5.81%	5.23%
Information Media and Telecommunications	2.34%	4.74%	3.86%
Financial and Insurance Services	7.38%	16.78%	13.47%
Rental, Hiring and Real Estate Services	1.82%	2.48%	2.14%
Professional, Scientific and Technical Services	4.70%	10.12%	8.18%
Administrative and Support Services	2.66%	3.45%	3.01%
Public Administration and Safety	5.14%	4.10%	4.00%
Education and Training	6.54%	6.06%	5.68%
Health Care and Social Assistance	8.58%	6.92%	6.72%
Arts and Recreation Services	0.96%	1.28%	1.11%
Other Services	2.20%	2.13%	1.98%
Industry composition (% share employment, 2011)			
Agriculture, Forestry and Fishing	7.83%	0.52%	2.25%
Mining	0.80%	0.22%	0.36%
Manufacturing	10.36%	10.82%	10.71%
Electricity, Gas, Water and Waste Services	1.52%	0.96%	1.09%
Construction	8.86%	8.17%	8.34%
Wholesale Trade	3.05%	4.96%	4.51%
Retail Trade	11.62%	10.57%	10.82%
Accommodation and Food Services	6.78%	5.86%	6.08%
Transport, Postal and Warehousing	4.14%	4.84%	4.67%
Information Media and Telecommunications	1.07%	2.26%	1.98%
Financial and Insurance Services	2.02%	4.80%	4.14%
Rental, Hiring and Real Estate Services	1.05%	1.49%	1.38%
Professional, Scientific and Technical Services	3.96%	8.94%	7.75%
Administrative and Support Services	2.58%	3.51%	3.29%
Public Administration and Safety	6.09%	5.09%	5.33%
Education and Training	8.18%	7.94%	7.99%
Health Care and Social Assistance	13.11%	11.08%	11.56%
Arts and Recreation Services	1.32%	1.85%	1.72%
Other Services	3.55%	3.62%	3.60%
Other	2.12%	2.51%	2.42%
Gross Fixed Capital Formation (\$m)			

Private business investment	x	x	x
Public business investment	x	x	x
Technology enabled workforce (2011)			
Technology businesses (% of workforce)	4.82%	10.60%	7.39%
Workers in ICT and electronics (% employed in ICT and electronics)	1.06%	2.88%	1.87%
Land, Infrastructure & Natural Systems			
Land & development			
Building approvals (no. 2012)	45,944	151,540	197,484
Value of building approvals (\$m, 2012)	\$18,186	\$74,466	\$92,652
Net office leasable floor area (m2)*	x	x	x
Net shop retail leasable floor area (m2)*	x	x	x
Net commercial floor area (excl office/shop) (m2)*	x	x	x
Zoned serviced residential land, Year (ha)	x	x	x
Zoned serviced industrial land, Year (ha)	x	x	x
Median residential land price (\$/m2, 2012-13)	x	x	x
Median industrial land price (\$/m2, 2012-13)	x	x	x
Transport infrastructure			
Journey to work (2011)	x	x	x
From the LGA by car	x	x	x
From the LGA by public transport	x	x	x
To the LGA by car	x	x	x
To the LGA by public transport	x	x	x
Access to a private motor vehicle (% household)	72.90%	77.31%	76.06%
No. Regional public transport services daily (V-line trains, bus)	x	x	x
Patronage and utilisation (level of usage)	x	x	x
Volume heavy rail freight daily	x	x	x
No. major State arterial roads servicing LGA	x	x	x
Airport domestic passengers	x	x	x
Airport freight volumes	x	x	x
Tourism infrastructure & services			
No persons employed in tourism (%)	x	x	x
Short-stay accommodation (bed spaces, 2012)	54,453	61,018	115,471
Tourism related industry output (\$m)	x	x	\$7,300
Resource industries (production \$m, 2011)			
Agriculture (\$m)	\$6,088.97	\$1,215.71	\$7,316.52
Forestry (\$m)	\$119.64	\$32.27	\$153.46
Fishing (\$m)	\$51.01	\$18.04	\$69.05
Mining (\$m)	\$3,307.61	\$2,951.94	\$6,274.00
Technological Readiness			
Internet connection - % households	57.66%	69.88%	63.09%
Broadband connection - % households	63.16%	72.50%	67.31%
Community			
Dwelling structure (% of dwellings 2011)			

Separate house	87.79%	71.12%	75.82%
Semi-detached/townhouse	4.20%	11.77%	9.63%
Flat/unit/apartment	6.48%	16.56%	13.72%
Other	1.53%	0.56%	0.83%
Median House Price (\$, 2012-13)	x	x	x
Housing status (% of households, 2011)			
Owner/purchaser	32.85%	39.47%	37.37%
Renter	11.42%	15.65%	14.32%
Other (i.e. Not reported)	3.01%	3.94%	3.65%
Education, Skills & Services			
English proficiency (%)	95.12%	89.98%	92.83%
Early childhood performance (%)	20.90%	20.15%	20.57%
Primary education performance (%)	32.90%	42.70%	37.26%
Secondary education performance (%)	20.42%	27.80%	23.70%
Technical / TAFE attendance (%)	2.12%	2.13%	2.13%
University attendance (%)	2.38%	5.12%	4.45%
Lifelong learning (%)	45.14%	45.00%	45.08%
Health, Infrastructure & Services			
Health of local population (%)	56.10%	51.40%	54.01%
Employed persons in hospitals (% of ERP)	2.13%	1.68%	1.79%
Employed persons in health care (other than hospitals) (% of ERP)	2.38%	2.35%	2.36%
GP services (per capita)	5.22	5.70	5.43
Community safety, Justice			
Employed persons in police services (% of ERP)	0.26%	0.27%	0.27%
Employed persons in justice, courts (excluding police) (% of ERP)	0.02%	0.06%	0.05%
Environmental			
Water supply infrastructure including aqueducts, channels pipelines (Capital Expenditure & Programs)			
Council funded programs (\$m)	x	x	x
State funded programs (\$m)	x	x	x
Federal funded programs (\$m)	x	x	x
Authority funded programs (\$m)	x	x	x
Water sustainability (demand management) initiatives (Capital Expenditure & Programs)			
Council funded programs (\$m)	x	x	x
State funded programs (\$m)	x	x	x
Federal funded programs (\$m)	x	x	x
Authority funded programs (\$m)	x	x	x
Energy sustainability (demand management) initiatives (Capital Expenditure & Programs)			
Council funded programs (\$m)	x	x	x
State funded programs (\$m)	x	x	x
Federal funded programs (\$m)	x	x	x
Authority funded programs (\$m)	x	x	x

Biodiversity conservation initiatives (Capital Expenditure & Programs)			
Council funded programs (\$m)	x	x	x
State funded programs (\$m)	x	x	x
Federal funded programs (\$m)	x	x	x
Authority funded programs (\$m)	x	x	x
Land & Resources conservation (Capital Expenditure & Programs)			
Council funded programs (\$m)	x	x	x
State funded programs (\$m)	x	x	x
Federal funded programs (\$m)	x	x	x
Authority funded programs (\$m)	x	x	x