Executive Summary

Authors:
Professor Alan Lawton
Dr Michelle Duffy
Dr Ernesto Valenzuela
Dr Damian Morgan
Professor Therese Joiner
# The Gippsland Regional Resilience Monitor:
Socio-economic and Liveability Dimensions

## Contents

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Introduction</td>
<td>2</td>
</tr>
<tr>
<td>Key Deliverables</td>
<td>4</td>
</tr>
<tr>
<td>The Methodology</td>
<td>4</td>
</tr>
<tr>
<td>Existing Indices</td>
<td>5</td>
</tr>
<tr>
<td>Economic Health</td>
<td>5</td>
</tr>
<tr>
<td>Human Capital</td>
<td>7</td>
</tr>
<tr>
<td>Social Well-being</td>
<td>9</td>
</tr>
<tr>
<td>Liveability</td>
<td>11</td>
</tr>
<tr>
<td>New Dimensions</td>
<td>13</td>
</tr>
<tr>
<td>Entrepreneurialism</td>
<td>13</td>
</tr>
<tr>
<td>Social Capital and Social Networks</td>
<td>14</td>
</tr>
<tr>
<td>Conclusion</td>
<td>15</td>
</tr>
</tbody>
</table>
This executive summary integrates findings from two reports:

- Developing a Regional Resilience Monitor
- The Development of the Gippsland Economic Modelling Tool.

As an initiative of the Latrobe Valley Industry and Employment Roadmap, the reports' findings focus on three Gippsland local government areas: Baw Baw Shire Council, Latrobe City Council and Wellington Shire Council. The findings enable comparisons between the Gippsland regional average, the regional Victorian average and the state average.

The reports can be used by all three levels of government, community leaders and industry to measure changes in Gippsland's regional resilience and prioritise actions to improve the region's long term prosperity.

This executive summary and the two detailed reports can be viewed at www.rdagippsland.com.au

Introduction

Regions, as much as individuals, can be vulnerable to changes in economic, social, health or environmental conditions. What is important is how regions respond to, and anticipate the impact of those changes.

Much will depend on the resources – economic, social and human, that are available and can be leveraged by key stakeholders including community groups, government and business. The capacity to respond will depend upon a number of factors including current economic health, the quality of the relationships between different stakeholders, the support networks that exist within a community, the human capabilities and competencies that exist and the attitudes of individuals and groups to the challenge of change.


The first four elements can be measured using existing data which is contained in two detailed reports. Elements 5 and 6 can be measured using:
- a combination of existing data and
- a newly developed regional entrepreneurship survey and a newly conceived social network analysis.

These two dimensions reflect theoretical discussion on what makes up regional resilience.

The RRM was developed in, and for, the Latrobe Valley and the wider Gippsland region but can be applied across regional Victoria and Australia as a whole.
The RRM is a theory-based monitor of regional resilience. The RRM can:

- Identify critical barriers in the way of, and enablers for, economic productivity and social and community development.
- Facilitate more integrated planning.
- Provide new measures that will capture entrepreneurial activities, aspirations and attitudes (referred to as the entrepreneurial mind-set), social capital and community networks.
- Provide a set of validated social impact indicators, that can be monitored over time, as a basis for informed, engaged and institutionally integrated regional program planning, investment and policy-making.
- Differentiate between different levels of economic and social performance throughout the region, allowing for more specific policy recommendations.
- Provide evidence based input into future policy, programmes and funding decisions.

This report has captured the six elements or indices relevant to community health and economic performance for the Gippsland region. The methodology is based on two reports that have been compiled by the research team. The six indices specified are based on an extensive review of academic theory plus previous government and community initiatives that inform the measurement of the health, well-being and economic progress relevant to specified geo-political regions. Following this review, six identified indices captured the breadth and scope of community status and performance.

The existing indices utilise data from publicly available resources, for example, Australian Bureau of Statistics, Department of Health and Victoria Police. The new dimensions, Social Capital and Social Networks and Entrepreneurialism, have been piloted during this research and can provide new information as part of the project’s next steps. The Elements of the RRM provide a holistic instrument to capture community performance across a range of dimensions.

For the purpose of this report Gippsland is defined as the six local government areas:

- Bass Coast Shire Council
- Baw Baw Shire Council
- East Gippsland Shire Council
- Latrobe City Council
- South Gippsland Shire Council
- Wellington Shire Council
Index 1: Economic Health

Economic health is concerned with the extent, and type of, economic activity within a given location and the prospects for economic growth. This is made up of a number of different factors including the level of economic resources, the degree of equality in the distribution of resources and the scale of diversity in economic resources. It can be measured by, for example, employment levels, employment diversity, housing values, number and diversity of businesses, income levels and so on. Gross Domestic Product is used at the national level but is less useful at the regional and local levels.

It is considered that the more diverse the economy, and the higher the levels of employment the more resilient the region is likely to be. Figure 2 represents the Economic Health Index based upon existing data.

Findings: Economic Health

The Economic Health index is made up of eight indicators including personal income, house prices, average rent and mortgage payments, number of businesses and employment levels. Figure 2 represents the composite of all of these indicators and gives an overall value.

The findings on individual indicators reveal that:

- Personal income in Latrobe City is 16 percent higher than the Gippsland average, 26 percent higher than the regional Victoria average and 12 percent higher than the state average.
- Employment participation rates are higher than the Gippsland average in Baw Baw, and lower than the regional and state average in Latrobe and Wellington.
- Housing values in Baw Baw are 8 percent higher than the Gippsland average, and values in Latrobe City are 23 percent lower than the Gippsland average. Values for rent and mortgage payments follow this trend.
- Baw Baw performs particularly well with respect to building approvals and is higher than the regional averages in the number of businesses.

Overall findings:

- Gippsland region average is 12 percent lower than the state average.
- Gippsland region average is 17 percent higher with respect to regional Victoria.
- Baw Baw is performing 8 percent better than the Gippsland average.
- Wellington is performing at the Gippsland average.
- Latrobe City is performing below the Gippsland and state average.
Human Capital

The OECD defines human capital as “the knowledge, skills, competencies and attributes embodied in individuals that facilitate the creation of personal, social and economic well-being.” While human capital is held within the individual, the skills, knowledge, and capabilities and health status of a population generally are more broadly linked to the social and economic well-being of the community. Therefore human capital underpins the wider community and is not just the property of the individual. It also points to the importance of the physical health of the population as a contributor to human capital.

In contrast, social capital identifies the wider relations that exist amongst the population in terms of community engagement, family bonds and assimilation of different groups within the community.

The more diverse the skill sets of the workforce, the greater the influx of new skills, the higher levels of education and health are all likely to lead to a more resilient community.

Findings: Human Capital

The Human Capital index is made up of fifteen indicators and includes educational qualifications, apprenticeships, population density, new settler arrivals and a range of health indicators. Figure 3 represents the overall value of these indicators.

Individual findings include:

- The Gippsland average of people with higher education qualifications is 8 percent lower than the Victorian regional average and 38 percent lower than the state average.
- Baw Baw contains the larger proportion of higher education and year-12 completions.
- Latrobe City reports the lowest share of people with good health and is below the Gippsland and state averages. This measure includes people reporting type 2 diabetes, share of low weight birth babies and proportion of children developmentally vulnerable.
- Wellington Shire reports the highest share of residents overweight or obese within Gippsland (5 percent higher than the Gippsland average and almost 10 percent higher than the state average).
- Latrobe City is a large immigrant receiving region, with new settler arrivals 17 percent higher than the Gippsland average and close to 13 percent higher than the Victorian regional average.

Overall findings:

- Latrobe City is 28 percent higher (positive) than the Gippsland average, and almost 30 percent higher than the regional average. This can be attributed to Latrobe City’s higher population density.
- Wellington Shire performs lower in this dimension (7 percent lower than the Gippsland average and more than 37 percent lower than Latrobe City). This can be attributed to Wellington’s lower population density.
The targeted dimensions for Social Well-being are: community bonds, family bonding, volunteer work, density of general practitioners, attitudes towards drugs and alcohol, social assimilation, hospital admissions, criminal activity, relative socio-economic disadvantage, social housing, attitudes towards gambling, community openness and number of schools.

The Social Well-being index is made up of twenty-eight indicators and includes health provision, voluntary activities, crime, gambling, drug issues and community diversity. Figure 4 represents the overall value of these indicators.

Individual findings include:

- Citizen engagement is higher in regional areas, with a regional average participation of 63 percent in comparison to the state average of 57 percent.
- Latrobe City has the largest number of child care and aged care facilities in Gippsland with a total higher than the state average.
- Baw Baw is served with a higher density of general practitioners, while Latrobe City and Wellington are similar to the state average level. The availability of dental services and pharmacies is the lowest in Baw Baw.
- With respect to crime, Baw Baw has the lowest incidence among the focus LGAs, followed by Wellington Shire. Latrobe City is twice as high as the Gippsland average in this dimension, and more than double the state average.
- Baw Baw ranks the highest with respect to the index of socio-economic characteristics, with values close to the state average. Latrobe City has the largest proportion of social housing dwellings, almost doubling the Gippsland and state averages. Latrobe City also has a large incidence of gambling, with levels considerably higher than the Gippsland and state averages.

Overall findings:

- The three focus LGAs perform lower than the Victorian regional and state averages.
- Baw Baw is 5 percent higher than the Gippsland average, 12 percent lower than the Victorian regional average and about 14 percent lower than the state average.
- Latrobe City is 8 percent lower than the Gippsland average, about 22 percent lower than the regional average, and 25 percent lower than the state average. Wellington Shire is 9 percent lower than the Gippsland average, about 23 percent lower than the regional average, and 25 percent lower than the state average. This can be partly attributed to the provision of health care services in Wellington supporting a larger land mass than Latrobe City and Baw Baw.
Index 4: Liveability

Liveability is the ease of access to organisations and facilities within a given location accounting for physical/spatial links or networks and the quality of the physical environment.

Liveability is most often associated with the global liveable city rankings of the Mercer Quality of Living Survey (2014) and the Economist Intelligence Unit’s Global Liveability Report (2014). These rankings are based on factors such as political stability, health care, infrastructure, education, culture and environment.

The Planning Institute of Australia (PIA) has argued for government policy and strategies that address the increasing disparity between urban and regional places that are exacerbated by globalisation processes (PIA 2010). Their recommendations include considering how smaller towns and regions can be integrated into larger networks; improving localised public transport services, road connections, information and communication technologies; acknowledging that lifestyles outside of the major cities offer many benefits for families and older people and therefore regional centres may offer an attractive alternative to the continued sprawl of the bigger regional and metropolitan centres.

Findings: Liveability

The Liveability index is made up of twenty indicators and includes broadband internet, number of TAFEs and universities, commuting time to work, work-life balance and distance to health services. Figure 5 represents the overall value of these indicators.

Individual findings include:

• Latrobe City performs 55 percent better than the Gippsland average and 26 percent better than the regional average with respect to the dimension of overcoming remoteness and accessibility. Baw Baw is 10 percent better than the Gippsland average but ranks lower than the Victorian regional average. Wellington Shire ranks 32 percent lower than the Gippsland average and 80 percent lower than the regional average.

• Broadband internet connectivity is higher in Baw Baw, and the three focus LGAs are slightly above the Victorian regional average in this dimension.

• With respect to smoking preferences, Latrobe City has the greater participation and the lowest support to smoking bans in public areas.

• The alcohol preferences dimension, measured by liquor licenses and alcohol-related hospital admissions, indicates that there is a high incidence in Latrobe City.

• With regard to the perception of people about the availability of good facilities and services, Latrobe City ranks 6 percent higher than the Gippsland average and about 9 percent higher than the Victorian state average.

• Latrobe City ranks high as well with respect to a reduced work commuting time. This is explained by the availability of local jobs in agriculture, mining, energy, and services. This is linked to a similar finding with respect to an adequate work-life balance. This area also ranks high with respect to housing affordability.

Overall findings:

• Latrobe City ranks 32 percent higher than the Gippsland average, about 23 percent higher than the Victorian regional average, and close to 10 percent higher than the state average. This can be partly attributed to provision of tertiary education services and the availability of affordable rental housing in Latrobe City.

• Wellington Shire is in line with the Gippsland average, 7 percent lower than the regional average and 20 percent lower than the Victorian state average.

• Baw Baw performs the lowest, when considering all dimensions of liveability, in the focus LGAs, with a level of 7 percent lower than the Gippsland average, 15 percent lower than the regional average, and close to 30 percent lower than the state average. This can be partly attributed to more limited child care/kindergarten provision and less available affordable rental housing in Baw Baw.
Entrepreneurialism is important to the RRM for several different reasons:
1. It indicates the level of optimism in a region concerning new business opportunities
2. It encourages a more diverse economic base
3. It is closely linked to innovation

Our working definition of Entrepreneurialism is:
Entrepreneurialism involves human activity that identifies, and acts upon, opportunities that create value, whether economic, cultural or social, by exploiting new products, processes or markets.

We suggest that Entrepreneurialism involves three main factors and these are the activities, attitudes and aspirations on behalf of the individual entrepreneur (see Global Entrepreneurship Monitor (GEM) at http://www.gemconsortium.org/).

Activities is concerned with what is done; Attitudes involves that of both individuals and the wider community to entrepreneurialism and entrepreneurs; Aspirations is concerned with the optimism to start a new business or enterprise. We also need to consider the climate for entrepreneurial activity i.e. the extent to which there is government, financial, cultural and social support for entrepreneurial activity. We have developed a new measure to capture entrepreneurialism (adapted from GEM).

Social Capital and Social Networks

A further significant factor in healthy and resilient communities is that of social capital. Social capital is about the relationships that connect and create meaningful exchanges that form social ties. Physical relationships and face-to-face communication encourage engaged communities to sustain social capital. Strong networks and online communication through social media, for example, further enhances community conversations and sets up networks for ongoing communication.

Located within both informal and formal community networks, social capital facilitates the sharing of information, and supports collective action and decision-making. Thus we are interested in social support involving networks with family and friends; social participation through formal social networks individuals have with groups and organisations (professional, social, economic and health-related participation); and community bonds i.e. through participation in group and community activities.

Social Network Analysis is the method that can measure the relationships between individuals and between groups within a community. It focuses upon the structure of the relationships and how they may change and thus demonstrates the dynamic, and not static, nature of social relation. We can measure various aspects of these relationships such as the type and content of the exchange, the frequency of communications, the impact of the exchanges and the role of groups and individuals within the network. This is a new measure.

These two dimensions can be considered as part of a holistic model and have been piloted however require further research and data collection.

New Dimensions

Index 5:
Entrepreneurialism

Index 6:
Social Capital and Social Networks

We suggest that Entrepreneurialism involves three main factors and these are the activities, attitudes and aspirations on behalf of the individual entrepreneur (see Global Entrepreneurship Monitor (GEM) at http://www.gemconsortium.org/).

Activities is concerned with what is done; Attitudes involves that of both individuals and the wider community to entrepreneurialism and entrepreneurs; Aspirations is concerned with the optimism to start a new business or enterprise. We also need to consider the climate for entrepreneurial activity i.e. the extent to which there is government, financial, cultural and social support for entrepreneurial activity. We have developed a new measure to capture entrepreneurialism (adapted from GEM).

Social Capital and Social Networks

A further significant factor in healthy and resilient communities is that of social capital. Social capital is about the relationships that connect and create meaningful exchanges that form social ties. Physical relationships and face-to-face communication encourage engaged communities to sustain social capital. Strong networks and online communication through social media, for example, further enhances community conversations and sets up networks for ongoing communication.

Located within both informal and formal community networks, social capital facilitates the sharing of information, and supports collective action and decision-making. Thus we are interested in social support involving networks with family and friends; social participation through formal social networks individuals have with groups and organisations (professional, social, economic and health-related participation); and community bonds i.e. through participation in group and community activities.

Social Network Analysis is the method that can measure the relationships between individuals and between groups within a community. It focuses upon the structure of the relationships and how they may change and thus demonstrates the dynamic, and not static, nature of social relation. We can measure various aspects of these relationships such as the type and content of the exchange, the frequency of communications, the impact of the exchanges and the role of groups and individuals within the network. This is a new measure.

These two dimensions can be considered as part of a holistic model and have been piloted however require further research and data collection.
Conclusion

The Regional Resilience Monitor (RRM) is a new tool made up of six interlocking elements to measure, comparatively, resilience in regional Australia. Resilience is a dynamic concept and can be measured over time, thus indicating movements in performance. Each element can be given equal weighting or weighted according to their importance as determined by key stakeholders’ (local authority, community groups, local leaders etc) informed views.

The RRM relies on a mix of existing data and newly generated data. The former is available for different time periods so care needs to be taken in using these data. Newly generated data can be gathered and this will depend upon the extent of the comparisons that are to be made i.e. across Latrobe Valley, the Gippsland region or regional Victoria as a whole.

In seeking to provide overall values to our different indices we are aware that local differences need to be considered. Thus, Wellington Shire encompasses large extensions of land suitable to agriculture and tourism, and to potential mining development. Similarly, the available educational opportunities place Latrobe City as the highest performer with the Federation University campus at Churchill.

Whilst it is no surprise to see the Human Capital index much higher at the state level, including metropolitan Melbourne, and distorted by population density, it is instructive that overall the Economic Health of the Gippsland region is higher than the regional average and that Baw Baw is close to the Victorian state average.

Compilation of findings, benchmarked against selected local averages, indicates the relative strengths of locations on each index and potential opportunities for improvement. The value of the tool will become apparent through collection and application of longitudinal data over time. This will allow evaluation of policy and programs designed to improve community health and economic well-being.

Next Steps

The researchers are currently working on an expansion of the coverage at the State level, and which could be rolled out immediately to serve as a basis for the development of a uniform national monitoring tool. The RRM will accurately reflect regional relativities over time, tracking progress and informing more specific policy recommendations to impact regional sustainability.
Design, illustration and photographs by Anne Lorraine

Federation Design and Print
Federation University Australia, Gippsland Campus

This Executive Summary and the two detailed reports can be viewed at www.rdagippsland.com.au