Resilience Profiles Project

Final Report
June 2012

Acknowledgements

The Queensland Council of Social Service Inc (QCOSS) and project partners Griffith University would like to acknowledge and thank the Natural Disaster Resilience Program (NDRP) which is a competitive grant program funded by shared contributions by the Australian and Queensland Governments.

They would also like to acknowledge and thank the following individuals, organisations and government departments:

- Community Indicators Queensland Steering Committee
- Australian Bureau of Statistics, Brisbane office
- Queensland Department of Community Safety
- The Resilience Project reference group includes representatives from: Department of Communities, Local Government Association of Queensland, Australian Bureau of Statistics and the Office of Economic and Statistical Research (QLD Treasury).
- Attorney Generals Office – Mt Macedon emergency management institute
- All focus group participants from the Tablelands communities, Rockhampton and Chinchilla.

Special Acknowledgement

Community Resilience in Queensland would like to give special acknowledgement to the work of Community Indicators Victoria. Much of the foundational work for the Community Resilience Queensland website has been generously provided and supported by Community Indicators Victoria.

Special acknowledgement also must go to the Office of Economic and Statistical Research for their generous assistance, support and contribution to the development, delivery and analysis of the community survey.

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Executive Summary

Community resilience is a term that is used with greater frequency, especially in the context of disaster management. While research agrees that it is something for which communities should strive, there is no common definition of resilience, and even less research around its effective measurement. This project was not intended to be an academic piece of work, although it has been rigorous in its attention to process and methodology. Its intention was to challenge assumptions pertaining to the relationship between poverty and resilience, and to provide a preliminary framework of measurement that is relevant and useful for communities themselves.

The Resilience Project embraced a number of key objectives that sought to draw attention to a broader definition or notion of resilience beyond disaster management. It sought to:

- deepen our understanding of the human and social elements of a community that contribute to resilience;
- explore potential measures of resilience through the use of community indicators; and
- provide a framework or assessment tool for communities to measure capacity through a "resilience profile" (that can be used as a baseline to measure improvement over time).

Community indicators are an appropriate measurement option for a number of key reasons:

- they enable a composite measure of resilience, rather than a reliance on individual variables or the creation of an index, which is better able to reflect the complexity of the term;
- they can be used as a democratic tool to engage communities; as a policy tool for evidence-based planning; and as a reporting tool for tracking progress towards agreed goals and outcomes.

The project adopted as a starting point a draft framework of indicators developed by Community Indicators Queensland (CIQ) to measure community wellbeing. The CIQ framework is based primarily on an established framework in Victoria, Community Indicators Victoria (CIV). The framework for wellbeing encompasses a number of key domains, which have been used by this project. A number of sub-categories were not used as they were outside the primary focus on the human and social elements of resilience. The indicators themselves were developed and tested in conjunction with communities.

The purpose of the project was to explore the understanding and assumptions related to socio-economic disadvantage and community resilience through a participatory action research process. This methodology included a number of key components which both informed and responded to each other in positive synergy. The process itself, including engagement with key stakeholders in the pilot communities, was integral to the development of indicators that reflected the uniqueness of communities, and were relevant and useful to a broad audience.

A **literature review** was undertaken to enhance understanding of existing research on community resilience, and to both inform and validate the development of the indicators. Existing literature predominantly focuses on structural and environmental capacity of communities in relation to natural disasters, while those that explored social capacity placed their primary emphasis on vulnerability. A resilience approach incorporates vulnerable groups into a strength based framework.

Focus groups were facilitated with the dual purpose of gathering qualitative data and narratives around resilience in particular communities, and to generate discussion around potential measures or indicators to inform the profiles. Key components or indicators of resilience that were raised through the focus groups for which no existing data was available, were developed into questions for the community survey.

The **Community Survey** was a key element of the project. It was the mechanism used to generate data around the human and social elements of resilience that was unavailable through existing data sets, or not able to be collated at a local level. It consisted of primarily quantitative questions but included a number of qualitative questions to reinforce material collected through the focus groups.

Relevant indicators were selected across the six domains with due consideration to the literature review and focus group analysis. Each indicator has its own rationale which includes what measure was used, a brief description or rationale of why it is relevant to community resilience in a disaster recovery context and the source of the data.

Using quantitative and qualitative data from the community surveys, existing data and focus groups, **resilience profiles** were developed for the Tablelands Regional Council area; Rockhampton Regional Council area; and Chinchilla in the Western Downs Regional Council area. These profiles are unique to each community. The profiles form a baseline set of data that can be measured over time to track community resilience.

The **Community Resilience Queensland website** (www.communityindicatorsqld.org.au) is the public repository of the resilience profiles. 'Community Resilience in Queensland' is a database and information portal providing community resilience indicators and data at a local level for the three pilot communities. The website is a publicly accessible, informative and interactive database. It is a mechanism for continuing to engage people from the pilot communities in both the process and the results of the project.

The project's key research question—what links exist between socio-economic disadvantage and community resilience in the context of disaster recovery—found very little evidence of such links in the community survey. The only statistically significant outcome came from correlating income levels with feelings of safety in the local neighbourhood. Those respondents in the higher income brackets felt significantly safer than those in the lower income brackets. Given the diverse range of questions asked respondents reflecting the human and social elements of resilience more broadly, we cannot draw any significant conclusions linking the impact of income levels on community resilience. What can be assumed from this is that socio-economic status (SES) may *be less* of a factor in assessing resilience than might be assumed or presumed.

The survey's findings provide additional evidence to demonstrate the multiple dimensions that contribute to assessing resilience in any community, especially how they play out at a local level. A key message that has emerged through the project is that communities need to be the principal drivers of measuring and assessing their own resilience. This is fundamental to sustaining and building their capacity to plan and respond to natural disasters or other challenges. It is important to note that the survey tool was never intended to be used to compare resilience between communities. It was designed to assess the characteristics thought to contribute to resilience, and not to provide a tool of comparative analysis.

Data from both the focus groups and the community survey indicated that a key element for communities in building resilience was the informal supports, networks and relationships that exist within communities with neighbours, friends and families. Feeling connected to others in your community and having opportunities to participate in events, groups and places to meet were all key themes that emerged. Neighbourhood and Community Centres are considered an integral and central hub to provide these opportunities and supports. Having a

diverse economic base was also considered central to resilience, to reduce reliance on a single industry to provide employment and investment. Community led processes were considered essential to resilience and a number of narratives emerged through the focus groups of community members and groups recognising need and sourcing ways to meet that need. A healthy proactive community that has this capacity is reliant on the multiple factors that contribute to resilience (such as networks/relationship etc.).

Community Resilience Indicators developed through this project provide a basis for broader state-wide measurement of community resilience. For the indicators to be useful, they need to have the capacity to provide measures over time which would require the community survey to be undertaken every three to four years. Further study could more fully capture the complex interplay of factors that impact on community resilience as demonstrated through this project. Additional research would also benefit greatly from engaging a discrete Indigenous community as well as targeting Indigenous people, community groups and service providers as a sub population group within disaster affected communities.

Introduction

Natural disasters have significant impact across the globe, although it is difficult to assess whether or not they have increased in severity and frequency. The recovery for communities in the aftermath of disaster can take years and requires substantial human and financial resources. Community Resilience is increasingly used in relation to disaster management and recovery as a desirable goal, despite the fact there is no common working definition and limited research associated with its measurement.

There is a growing body of national and international research on what contributes to community resilience. A number of studies have been undertaken with communities in the aftermath of extreme disasters, such as in Japan, and New Orleans. There is increasing evidence to support the theory that communities with high levels of trust in their community members and in civic/political leaders; strongly networked communities (informal supports, friends, family, neighbours); and communities where members take an active interest in their community (collective action) and have strong ties to their community, are those that are more resilient in the face of natural disaster (or indeed any hardship). It is these human and social elements in our communities that could be the key to resilience. This does not underestimate the essential nature of emergency services and immediate response teams, or for the necessity of rebuilding roads and infrastructure. However, we now have an understanding of the boundaries of these human and social elements, and how to measure their contribution to community resilience.

Natural disasters have a critical impact on those individuals and neighbourhoods that experience them. Media attention is focused on damaged infrastructure, property and the environment; yet there is growing attention placed on the ability of communities to bounce back from such events. Being able to measure the 'bounce' or resilience will assist communities to develop strategies that increase their capacity to survive and thrive after the experience of a natural disaster; to measure what exists, investigate the gaps and develop strategies to build future capacity.

The new National Framework for Disaster Resilience released in 2011 promotes a position of 'shared responsibility' between communities, governments, business and community organisations. While government has an integral role to play, we need to develop and strengthen more holistic responses to disaster and hardship, so that communities have a greater capacity for resilience in the face of crisis.

Background

In mid-2010, the Queensland Council of Social Service (QCOSS) and Griffith University's Urban Research Program (URP) partnered to investigate the linkages between socio-economic disadvantage and natural disaster resilience. Both organisations had an existing commitment to Community Indicators Queensland (CIQ), which aims to establish community indicators of wellbeing in Queensland.

The connection between the human and social elements of resilience and community wellbeing led to a research proposal to develop a measurement tool in partnership with communities that could be used to assess the strengths and vulnerabilities (resilience) in a community. A successful application to the Natural Disaster Resilience Program (NDRP) led to a 12 month research project to achieve the following objectives:

- develop 'resilience profiles' for three diverse Queensland communities;
- to test and develop specific community resilience indicators in a disaster recovery context; and
- to provide an assessment tool or framework to measure a community's capacity for resilience.

The key research question driving the Resilience Profiles project was to discover if there is a link between disadvantaged communities and community resilience. This aimed to test the hypothesis that material advantages enable communities to recover faster.

The project uses the existing draft Community Indicators Queensland (CIQ) framework (which is based on an exemplar in Victoria; Community Indicators Victoria), to test and develop specific 'resilience' indicators. CIQ presents over 80 indicators under six domains, clustering a variety of measures in sub categories. These are:

- **Domain One:** Healthy, safe and inclusive communities;
- **Domain Two:** Dynamic, resilient local economies;
- **Domain Three:** Sustainable built and natural environments
- **Domain Four:** Culturally rich and vibrant communities;
- **Domain Five:** Democratic and engaged communities;
- **Domain Six:** Demography.

Project Governance consisted of an advisory group and a project management group. The project also reported back to the CIQ Steering Committee. The advisory group included the following:

- The Australian Bureau of Statistics
- Department of Communities
- Department of Community Safety
- Local Government Association of Queensland
- Office of Economic and Statistical Research (Queensland Treasury)

Project process

Overview

The development and collection of data for the community resilience indicators and hence the resilience profiles of the three trial sites, was based on focus groups and a community survey with both quantitative and qualitative components. The aim of the focus groups was dual: to inform the survey development and to collate a rich narrative of stories of resilience, key factors contributing to it and potential measures of resilience. The primary purpose of the community survey was to gather new quantitative data around the human and social elements of resilience. The survey also included two qualitative questions, which replicated those posed to focus group participants. This provided a richness to the profiles that was also enhanced by the addition of Queensland Health data. Self-reported health status provided a relevant and available source of information that added to the picture of the pilot communities.

The draft CIQ framework provided the foundation for developing the indicators of community resilience. Some measures from the CIQ framework were excluded from the final resilience profiles, as there was no clear link between the measure and resilience. New indicators were developed from concepts arising from the literature review and data collected during the community survey and the focus groups. Whenever possible existing, pre-validated survey questions were used to draw out and further develop the measures. Questions relating to new concepts such as "interaction with neighbours" and "faith and values" were reviewed by the advisory group using the expertise of the Office of Statistical Research (OESR) and the Australian Bureau of Statistics (ABS).

These key elements of the project and their interrelationship are comprehensively explained in the following section.

Action research

A methodological approach that embraces action research processes as well as participation from community members and organisations was considered appropriate due to the ambiguity of the term "community resilience". Community indicators are an appropriate tool of measurement for resilience as they provide a range of potential outcomes for communities.

The project used both qualitative and quantitative tools. The literature on measuring community resilience mostly focuses on quantitative approaches, that is, using quantifiable evidence delivering valid and reliable statistical analysis. The literature recognises the lack of a qualitative approach to measuring community resilience, although some recent community based initiatives have developed tools to assist communities to measure their own resilience on a variety of scales[i].

As the project progressed the suitability of an action research approach was reinforced. The ability to adapt to new knowledge and insights gained from the various sources of data was critical to the development of meaningful community resilience indicators.

Literature review

A review of available national and international literature was undertaken to provide insights into the nature, characteristics and possible measures of community resilience. This also provided additional context to the project and placed the emerging knowledge within a contemporary framework.

Site selection

A rigorous process was undertaken to select the three pilot areas, with a focus on getting broad representation across Queensland. The selection indicators included:

- areas at high risk of, and experience with, natural hazards;
- high levels of socio-economic disadvantage;
- diversity of geography (coastal / rural / urban) and type of hazard (flood / bushfire / cyclone / drought); and
- accessibility and capacity to participate in the project.

The site selection process was carried out in close consultation with relevant government and community sector agencies including Department of Community Safety, the Local Government Association of Queensland, Volunteering Queensland and Department of Communities. This was in addition to the broader collaborative partnerships that have sustained and informed the overall project. Consideration was also given to other pilot and research projects being undertaken by universities and non-government organisations within similar timeframes across Queensland. Many communities were still experiencing ongoing trauma related to the previous season's extreme events, and the project was mindful of this in the selection process. Local government areas were preferred as boundaries for pilot sites because of the relevance of community indicator work to local government and its planning processes, and the accessibility of sourcing existing data. The selection of a small township like Chinchilla however, was recognition of the importance of locality based assessments and local communities as areas for engagement.

The three areas selected for the Resilience Profiles project were:

- **Tablelands Regional Council area**: The Tablelands communities, while experiencing some impact from Cyclones Larry and Yasi, have also experienced other extreme weather over the last 100 years.
- **Rockhampton Regional Council area**: Rockhampton city experienced flooding in January 2011, and has had bush fires threatening the city in recent years.
- **Chinchilla in the Western Downs Regional Council area**: Chinchilla was affected by floods a number of times in 2010/2011. In the past 50 years, the town has been inundated by floodwaters several times. Chinchilla was chosen to enable a comparison with a smaller township. Due to its small population size, and for data purposes, the statistical local area has been used for aggregating existing data on Chinchilla and for the Resilience Survey sample population. Initially, the project team considered both the Condamine and Dalby communities for inclusion. They were not selected as both communities were still suffering impacts from the floods of 2010/11.

All three areas have significant populations affected by socio-economic disadvantage, based on the SEIFA Index of Relative Socio-Economic Disadvantage 2006[ii].

In the project design phase, the project team considered including a discrete Indigenous community as one of the trial sites. Indigenous communities, particularly in far north Queensland, are vulnerable to natural disasters, and it is important to recognise the unique resilience characteristics of Aboriginal and Torres Strait Islander communities. Ultimately, based on advice from key stakeholders, the team decided not to engage with a discrete

Aboriginal or Torres Strait community in this initial pilot project, as the scope and level of the engagement was a specific piece of work needing different resources and processes outside the resources available through this project. There is recognition of the importance of pursuing this element of the project in future explorations, and working in partnership with Aboriginal organisations and agencies to measure Indigenous resilience through community indicators.

Focus groups

The focus groups were primarily designed to determine the characteristics of community resilience and to gather some of the important narratives that reflected the uniqueness of the communities, rather than as a definitive approach to measuring it. The survey tool development needed an understanding of how communities themselves characterised their resilience. It was particularly integral to the community survey development by embedding the research within a Queensland context.

Two focus groups were held in the Tablelands (one in Atherton, one in Mareeba), two in Rockhampton, and one in Chinchilla. As the project workers were Brisbane based, the engagement process used existing networks and relationships in the pilot site communities as much as possible. Formal invitations to participate in the research were extended to the mayors of each local government area, due to the relevance of the research to local government planning and accountability processes. QCOSS regional workers, QCOSS members and connections, as well as CIQ Steering Committee connections (local government, regional Department of Communities offices), were involved to ensure the information about the project and the process was communicated to relevant stakeholders.

This process of engagement was initiated some months before visiting the communities and was essential to getting a diverse range of participants and stakeholders to attend the focus groups. It also enabled the initiation of a dialogue of community resilience and measurement in a disaster context, and for information to be gathered about the communities involved. All pilot communities had experienced natural disasters in the last twelve months and many representatives were keen to debrief and share their understandings.

Invitations to participate in the focus groups were sent to key representatives from local community organisations, local government, the emergency services sector, state government departments, and other relevant stakeholders identified through consultation with the community. Participants were encouraged through the process to wear 'two hats'. All group members lived and worked in the pilot community, so they were asked to share their local knowledge and experiences in addition to their professional understandings.

The transcripts and notes from the focus groups were analysed manually to extract themes and issues identified by participants as relevant to resilience in both a disaster context and more broadly. These themes were then classified under the general domains of the CIQ wellbeing framework. The domains have been retained, however some categories were eliminated and additional ones incorporated to adapt the framework to a community resilience context. In the focus group analysis, where a theme or characteristics did not fit within existing resilience categories, they have been separated at the end of the domain under 'additional characteristics'.

Each focus group was co-facilitated by the two project workers, with one acting primarily as a scribe. Each session was recorded to provide transcripts of the focus group process and content to ensure accuracy. These transcripts have not been archived to ensure the confidentiality of participants.

Community survey

The development of a community survey had a number of parallel objectives. Its primary purpose was to gather new quantitative data around the human and social elements of resilience. This element was integral to the success of the project, providing relevant, reliable and statistically significant data in areas not before measured at this level in Queensland.
The survey also included a qualitative component to provide additional data about the profile of resilience in each community surveyed and ideas about how to measure and strengthen disaster resilience.

The survey questions were tested and refined through the focus groups. The survey was a means of gathering information from the general community about their perceptions of resilience, and how engaged they are in their communities. As focus group participation was limited to service providers, organisations and government representatives, the survey was a mechanism for gathering data from the broader community. It was also intended to raise community awareness of the project, community indicators and the importance of community resilience in a disaster context.

The project team developed the survey questions with generous assistance from the Office of Economic and Statistical Research (OESR), the Australian Bureau of Statistics and other members of the Resilience Project Advisory Group. A draft version of the questionnaire was also sent to the focus group participants prior to being distributed to the sample population.

The characteristics and themes evident through the focus group narratives were carried through to survey questions. Where possible and relevant, a pre-existing question was sourced from available piloted surveys, to facilitate state and/or national data comparisons. As such, the survey questions are from a range of sources including; the ABS General Social Survey, ABS Census of population and Housing, Victorian Community Survey, and the Queensland Household Survey. Where no pre-existing questions could be sourced, a new question was created that best reflected the characteristic of resilience identified through the focus groups.

The project team contracted the Queensland Office of the Government Statistician to coordinate the key deliverables of the community survey including survey frame, survey administration and data analysis. The survey was delivered to a random sample of 1000 households in each pilot site. As the town of Chinchilla did not have a sufficient population size, the sample was expanded to include the statistical local area of Chinchilla. A comprehensive survey review has been provided by OESR.[iii]

Queensland Health self-reported health status 2011

Queensland Health has been a significant partner in the development of Community Indicators Queensland. This relationship has extended to support for the Resilience Profiles Project. Queensland Health made a significant contribution to the project through additional analysis of the data obtained through its annual survey series on the self-reported health status of Queenslanders. This data provides a richer picture of the communities concerned than was able to be undertaken within the resources of the project itself given the relationship between resilience, social capital, well being and mental health.

Discussion

Literature review

The literature review revealed a lack of consensus on the definition of community resilience and how it is effectively measured. It highlighted a diverse range of indicators from an international and Australian perspective that are being used to assess community resilience. These indicators include economic development, social capital and vulnerability, ecological, institutional and infrastructure, community competence and resources, information and communication and governance. A range of themes emerged from the literature, including:

- Resilience is a desirable characteristic for communities.
- The ability to measure resilience will benefit policy makers for resource allocation and hence communities themselves.
- Resilience occurs at multiple levels within a community. These factors/levels are interrelated and integrated.
- Approaches to building resilience need to include the people affected, as they are best placed to know their community, and interventions will be more sustainable if the community is part of the process.
- Social capital in a community is a key indicator of resilience and long term recovery from a disaster. Economic, human, physical and natural capital, are also critical indicators in measuring community resilience.
- Effective disaster responses require collaboration and shared responsibility from three levels of government, business and the private sector, the not for profit sector and individual community members.
- The relationship between vulnerability and resilience is complex. The identification of vulnerable neighbourhoods can improve targeting of resources at all stages of disaster management and recovery.
- To adequately represent the uniqueness of individual communities, unique indicators for individual communities may be warranted.

The literature review reinforced the need for an action research methodology and participation from community members and organisations to define community resilience and how it is measured. The emergence of social capital as a critical issue in community resilience also impacted on the indicators chosen to measure community resilience.

Focus groups

The focus group process was a structured conversation around five key questions:

1. What do you think makes a community resilient?
2. Can you tell us a story from your experiences as a worker or as a community member that you think demonstrates community resilience in this community?
3. Reflecting on the characteristics of community resilience that we put together earlier on, are there some ways in which these could be measured through indicators?
4. How do we measure community resilience?
5. Reflecting on all the discussion that we have done today, can you identify what elements are most important with respect to community resilience?

The narrative generated through the focus groups had a specific focus on the human and social aspects of community resilience. Participants reflected upon their own experience of adversity, on the strengths and limitations of their community and what makes their community resilient. While there was some congruence of the characteristics of resilience

across the groups, each community also contributed its own unique perspective and additions.

It is evident in the analysis that the narrative often touches upon vulnerability as well as resilience. Even though the project's primary aim was to investigate resilience and 'strengths' in community, resilience is closely aligned with vulnerability or susceptibility at both an individual and a community level. The focus group discussion and analysis has been categorised under the six domains of the framework and highlights some of the key themes that emerged.

Domain One: healthy, safe and inclusive communities

CIQ framework: personal health and wellbeing, community connectedness, lifelong learning, service availability.

Key resilience themes: community connectedness, volunteering and perceptions of safety.

The key themes create a picture of how a resilient community could look. It is a place:

- where residents have a sense of connection to others in their community and neighbourhood;
- where people have social networks and don't feel isolated;
- where there are public facilities and places to meet;
- where there are a diverse range of people who volunteer their time in a variety of roles in the community;
- where people are connected enough to know where vulnerable people are in their community, not just those connected to services;
- where people know their neighbours enough to communicate and share information and resources when necessary; and,
- where people have a sense of safety.

A combination of many of these factors contributes to an individual's sense of belonging to their community.

Connectedness is a key component of community resilience in a disaster context and was identified as such across all focus groups. In many instances, while government and non-government organisations provide resources for communities to recover from natural disaster events, residents often rely on neighbours, friends and relatives for information, emotional assistance, borrowing equipment (e.g. chainsaws and generators) and providing occasional childcare (Aldrich 2010). Close personal networks can have additional benefits such as confidence, emotional support, practical help, contacts, resources and other forms of assistance. Within a natural disaster context, these benefits are a significant contribution to the recovery process. Enhancing an individual's social networks contributes to a community's capacity to withstand upheaval.

Contact with neighbours is an indicator of trust and co-operation in the community. Knowing your neighbours increases the likelihood that people will assist one another when a crisis occurs. This may be at either a personal or community level. Knowledge of your neighbourhood can assist in the identification of vulnerable and isolated people in preparation for a natural disaster event, as well as contributing to the recovery process.

A resilient community is characterised by strong social networks that offer support to neighbours, individuals and families in a time of crisis.

> *"It's the individual's willingness to share...neighbourliness...know your neighbours, and you are willing to share with them...there are places where that just don't exist."*

> *"You don't need to be in your neighbours' pocket, but you do need to know if there is an 80 year old or someone with a disability..."*

All participants of focus groups agreed on the importance of volunteers in the healthy functioning of their community and as a key characteristic of resilience. The number of volunteers spread across a community is an indicator of civic engagement and demonstrates a means of building social capital (Aldrich 2010).

> *"Volunteering is connected with being connected in your community, and networking..."*

> *"...a healthy community has an even spread of volunteers across age groups; a volunteering profile versus a vibrant volunteering profile."*

Associated with both volunteering and social connectedness is the capacity to have access to community infrastructure such as neighbourhood and community centres and community meeting places. Community and neighbourhood centres have a key role to play in community capacity building and resilience as "research shows that neighbourhood centres form a key element of the social infrastructure of disadvantaged communities. The infrastructure provided by the centres can be quickly mobilized, expanded or readjusted to respond to local needs, emerging issues or opportunities" (Izmir, 2009). They generally incorporate a significant trained volunteer base, and provide multiple entry points for social and crisis support, information and referral and connection with other community members.

> *"…two practical things, one is to have good meeting places, and the other is to have reasons to connect...most importantly it helps develop relationships, which are most important to develop caring. It is more likely that you will care about someone that you know…"*

Another characteristic discussed was the level of trust in neighbourhoods, initiated in reference to people having to evacuate their homes and worrying about leaving possessions behind. This was then specifically linked to perceptions of safety. The more connected you are the safer you feel in your community. There is some correlation between these discussions and additional characteristics that do not fit neatly within the existing categories in the framework for resilience. Characteristics such as compassion and kindness, caring for others and having faith in people, optimism and a sense of humour were all considered to be characteristics of resilience. Although individual traits, it was considered that if exhibited by community leaders it created a culture within the community that was modelled or set a benchmark for citizens to follow.

Compassion and kindness, while difficult to measure in a community, were identified as aspirational values contributing to community resilience. These values were seen as essential in building healthy and diverse communities. Compassion and kindness foster an inclusive approach to community building. They assist in creating an environment where an individual's happiness and wellbeing is encouraged.

The terms flexibility, "bouncebackability" (created to encompass a range of hard-to-define characteristics) and ability to adapt and change are, almost by definition, core components of resilience. A community's ability to withstand any kind of shock - economic downturn, natural disaster or other – can be determined and influenced by its flexible approach and the amount of co-operation that exists in and between individuals, organisations, government and businesses.

"a belief or perception in the capacity of good in others…goodness in a community"
"A perception of trust in others in the community to do the right thing, it's related to safety…"

"Social isolation prevents people from having trust in others in their community, you mistrust what you don't know. Connection with others develops trust."

There was discussion during focus groups around communication and the importance of access to reliable, accurate information in a disaster context. It was considered that a resilient community had equitable access to services for its population.

Domain Two: dynamic, resilient local economies

CIQ framework: economic activity, employment, income and wealth, skills and work-life balance.

Key resilience themes: diversity of economic base, locally owned and produced business, financial security, food security, formal and informal education, skills and knowledge.

Focus group participants across all communities recognised the importance of a diverse and strong local economy as essential to community resilience. Diversity of economic base was particularly recognised in the Tablelands and in Chinchilla, both rural communities with a strong agricultural base. The drought and the end of the tobacco industry had a significant impact on these communities. The mining industry has boomed in many towns in the Western Downs including Chinchilla, and has also affected the Rockhampton region, in both positive as well as challenging ways.

Discussion of the relationship between mining and community resilience focused on a number of issues: the impermanence of the industry, the social impact on both the existing community and also the families of workers who relocate to work in mining; the creation of a culture of 'us and them' in the community which compounded the 'haves' and 'have nots', due to the amount of money earned in mining in comparison to 'normal' wages. However the opportunities were also highlighted in terms of employment for young people that kept them closer to family and their community; and locals and farmers who were struggling to make a living from the land due to the impacts of drought and flood. There was some discussion of the separateness of the mining camps and how they were not really a part of the local community. However, this was also counteracted by stories of how mine workers and companies had assisted in recovery efforts in some communities.

There was some linking between business diversity and networking capacity in communities, as this was seen as a key component in the ability of business to diversify and work cooperatively in times of hardship. There was also some linking of economic diversity with economic security in a community. This connection with wealth was stated a number of times. It also contrasted with discussion around the resilience of the rural and farming communities who withstand continual hardship and lack of security. "…bounce back for farmers, they keep getting hit, but keep going…" This demonstrates a link between hardship and resilience.

"It's a generalisation, but economic security helps, wealth helps…I call that diversity of the economic base. If it's only one thing like a mine that supports the whole community and it goes bust, there is not resilience, or if you rely too much on tourism."

Access to food was identified as a component of community resilience. Within a disaster context, availability of food relates to a household's preparedness to sustain itself for at least three days after the event if supplies and roads are cut off. For families and households

experiencing poverty and disadvantage, the ability to stockpile food for an emergency can be beyond their capacity. Many families live from pay check to pay check to buy essentials. It is difficult to be prepared in advance. Many families also access emergency relief programs[iv], which supply food and essential items for those in need.

> "Low socioeconomic families/individuals can't afford to buy prepared food and stockpile. They buy essentials on pay day."

Education, both 'formal' and 'informal', was identified by all communities as a key component of resilience. Formal education is connected to community capacity for economic security; however this can also be accessed in more informal ways. Education also contributes to equity and the opportunity to make lifestyle choices. The skills and knowledge contained in communities can also contribute to their capacity to engage in emerging industries such as mining. Some participants discussed the flexibility of individuals to reskill or educate themselves across industry from agriculture to mining related employment. Flexibility of education or workforce was identified through the focus groups as a characteristic of resilience.

There was recognition across communities that they could no longer rely on one industry or sector to provide economic security. There was also recognition for the need to be creative in how that diversity came about including the need to encourage innovation in locally based businesses and industries. There was also some concern about the creation of local jobs and the employing of local people in industry. This had a direct relationship with the retention of young people, successive community leadership and knowledge in communities.

Domain Three: sustainable built and natural environments

CIQ framework: housing affordability, transport accessibility, water

Key resilience themes: community meeting places, sustainable and affordable housing, safe reliable transport, self-responsibility, knowledge and awareness of natural disasters, single source of authoritative information

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The discussions categorised under the domain of 'Sustainable built and natural environments', were primarily around having accessible public open space, affordable housing options, and accessible transport and road infrastructure across and connecting regions. A number of additional characteristics were discussed which fit more broadly under this domain. These characteristics included knowledge and awareness of natural disasters and environment in the local community, the impact of legislation on self reliance, and risk management and resilience.

The focus groups recognised the importance of places to meet and gather for community members that were not formal groups or occasions. There was recognition that many people don't join groups or attend social functions but that does not mean that they are not networked and connected with each other and others in the community. Stories were shared of the many informal ways that people gather in communities for example: outside supermarkets; on seats in the main street; between buildings; and in parks.
Good accessible, common community meeting places that can be shared and are available to all are important ways that all communities connect. It was in these informal ways that many multicultural and Indigenous groups connect in communities. Recognising the multitude of ways that people connect in communities and ensuring there are accessible spaces that encourage connection are integral to social and resource network building and hence resilience.

Affordable housing was identified as another key issue for communities. This was identified as an issue not just in times of crisis or natural disaster. Without sustainable and affordable housing there is no resilience or wellbeing in communities. People residing in rental

properties affected by natural disasters were sometimes more disadvantaged than property owners due to the expense of repairing properties. Either the rents were increased to assist in covering costs or things were not fixed awaiting insurance claims. When rental properties are small in numbers this can force people out of their neighbourhoods and support networks. Enforced evacuation of homes caused similar issues for some people.

Some focus groups identified access to safe, reliable transport, both public and private as a key issue for their community. These discussions were generally related to roads and infrastructure. Limited access to public transport was a specific issue for people in rural and regional areas. In regional communities, the lack of public transport can make it difficult for people to access a range of services such as medical facilities, daily shopping, employment and recreational opportunities. Many families or households have access to only one private vehicle or have no private vehicle which severely limits their capacity to prepare or evacuate if needed. This lack of transport also influences an individual's social isolation and connection with others.

> *"Transport is another issue...if a person feels unsafe in their house, and they have no car, and there is no public transport, how do they get to an evacuation centre? …they have to walk…"*

Additional characteristics and discussions that have been grouped under this domain include knowledge and awareness of hazards and natural disasters. Participants believed that new residents and community members have a degree of self responsibility to understand and be aware of the risks involved in their local environment, that is, if you move to an area that is prone to disasters such as cyclones, flooding or bushfire you make yourself aware of this. In regard to the issue of personal responsibility, the discussion involved an obvious need for education and awareness-raising of the risk environment. It was felt this would lead to greater self reliance as people would potentially become more prepared. There was some related discussion about the culture of risk management and increasing regulation, and the impact that this can have on the natural resilience contained within communities.

> *"Knowledge and training of what to do for new people in areas is related to self responsibility… we can inform people but they need to take responsibility in the end that they are moving to an area that is at risk of natural disasters…"*

Warning systems and access to appropriate information in the event of a natural disaster were also discussed. The need for a single authoritative source of information is key to a community's capacity to deal with the impacts of a natural disaster. The information may be disseminated via several different media (radio, TV, internet, social media). Some communities experienced sources of conflicting information which caused anxiety for some residents.

Domain Four – culturally rich and vibrant communities

CIQ framework: arts and cultural activities, sporting and recreational activities, cultural diversity.
Key resilience themes: arts, cultural and sporting activities, acceptance of cultural diversity, community tolerance, religious and spiritual beliefs, values, self belief.

All focus group discussions endorsed acceptance of cultural diversity as a sign of resilience. While there was acknowledgement that some communities needed to become more inclusive in their approach to other cultures, it was recognised that the contribution of the migrant community to their local community was significant. It was acknowledged that migrants had added to the community's economic diversity and helped to foster local knowledge of other cultures, their language, foods and lifestyles. An additional characteristic that arose through this discussion was the need to acknowledge that people send and receive messages differently according to culture.

However information is communicated, people will interpret things differently and some people will be unable to access it via that source.

Another significant characteristic was considered to be community cultural events and festivals. All communities indicated that a festival or celebration that happens annually or regularly was integral to resilience on a number of levels. It created an opportunity to celebrate and connect around something positive (as opposed to getting together in memoriam, or in times of crisis), it assisted in provided a sense of pride in community and subsequently a sense of belonging, and that events also contribute to the local economy.

> "…events create local economy, social and recreational connections and identity in the community, which all contribute to belonging and a sense of place…"

Festivals and events were seen as a key way of celebrating and respecting diversity within community, whether it was a multicultural festival, National Aboriginal and Islander Day of Celebration or a celebration of produce and agriculture. They also demonstrated inclusiveness as all people in the community could participate and be involved. Respect for diversity was especially important. The groups drew a distinction between *having* cultural diversity in a community, and *respecting* cultural diversity.

An interesting characteristic of resilience generated through one focus group was the role of faith and religion in resilience, an element that is often not articulated or explored in contemporary Australian culture.

> "…an observation made in a number of different recovery contexts...and it is controversial in a secular, progressive sort of setting; I think faith and spirituality are highly connected to resilience…"

There was energetic debate around the separation of religion and church based faith, and other types of faith or spirituality and what the relationship was, if any, with resilience. Some of the discussion offered that they provide an 'absence of blame' and 'no need to look for an external cause' for events such as disaster or hardship. They can provide a level of acceptance for circumstance that gives resilience that may not be attainable otherwise.

> "It's not just a faith issue...it's the belief that you can survive...you will get through. You will see your family...there is something bigger than you...as long as you have that belief."

Other contributions suggested that a capacity for faith and belief in something outside you gives strength in times of adversity. Other comments related to a system of values and self-belief. Living by a certain set of values and having faith in yourself and your capacity was seen to give a level of self reliance that contributed to resilience.

> "…we have our own way of translating the world and most people do…having a spiritual, a belief system is one of the core things of necessity along with food and shelter...it's your values."

This discussion of values extended from faith to how we pass values on through generations, having shared values in a community and how values have in certain groups in the community replaced religious or faith based frameworks for being. A key issue related to resilience that arose from this was how young people in communities are mentored to be leaders and how to pass value systems to them.

The role of young people in a community was also highlighted as an indicator of community resilience. With many regional and rural communities experiencing drought, the impact of economic restructuring, reduction in education and health services, and the relocation of businesses to major regional centres, a large number of young people leave for educational

and employment opportunities. This results in an increasingly older age profile for many communities.

A community exhibits resilience when the outflow of young people slows. Chinchilla is experiencing this dynamic with the establishment of the resources and coal seam gas industries, more jobs and training are available locally for young people to explore. The flow-on effects of youth retention for a community impacts on a range of factors – more volunteers, participants in community, sporting and social groups and development of new potential leadership.

Domain Five – democratic and engaged communities

CIQ framework: citizen engagement.

Key resilience themes: citizen engagement and support groups, identification of need, community leadership, and community led processes, creativity, problem solving, self-reliance, communication, community identity.

Focus groups identified that the existence of a diverse range of community and social groups is an important characteristic of resilience. People's involvement in groups increased their connections and networks within those communities and provided opportunities for them to get together. A key to the success of groups was ongoing, regular engagement, which was seen as different to sporadic or one-off engagement with festivals and events. Involvement with school programs and fund raising outside of groups was also viewed as important to resilience in a community, and importantly provided opportunities for people who were not so interested in what groups had to offer.

All three communities had stories that demonstrated the capacity of community to recognise a social, community or health need that was not being met, then to find ways to work together to meet that need, whether this was through different community avenues, community owned and built infrastructure such as an aged care facility or a neighbourhood centre, or a new model for health service delivery. There was a level of self reliance in all three communities that recognised that 'help may not always be forthcoming' and that looked for creative ways to solve problems. This capacity was seen as integral to community resilience. In a disaster context, this was seen as being prepared and having a plan but recognising that you can never know exactly what is going to happen therefore you need to be flexible in the delivery of that plan and adapt how you respond.

> *"One is preparedness and having a plan, helps with the sense of control, doesn't matter...if it is economic downturn etc...if you have thought about it, it makes it feel more controllable."*

A connected and engaged community was identified as having a high degree of cooperation between all levels; neighbours, local government, services, non government organisations, service users and government.

> *"…creative problem solving for community issues and a community that gets behind the solutions…"*

The concept of leadership was strongly linked to the capacity for acting to meet local need. According to the focus groups a resilient community had strong, compassionate and communicative leaders that the community had confidence in. Leadership was discussed both in reference to elected leaders and to informal leaders. Informal leaders included strong leaders within organisations and community groups that were active across a number of issues; leaders that worked together and collaborated in shared solutions; and also young people that were motivated, engaged and ready to create the next generation of community leaders. Local government was also seen as playing a key role in community in terms of

leadership.

> *"…councillors and mayor pretty much stand out there in the wind and let us know what is happening…they are really strong leaders…"*

Local governments were seen as having the opportunity to model leadership and provide a 'benchmark' of engagement and values that could set the tone for the rest of community.

> *"…open, transparent, accountable local government with councillors/workers that are kind, compassionate and open…this creates a flow on effect in the community…"*

Elements of the discussion that do not fit neatly under a particular category are often interlinked with other aspects of community and resilience or draw upon a particular feature. A number of related themes such as 'fighting spirit', 'belief and pride in community', 'a shared vision of where community is going' and 'community identity', could all be seen as outcomes of a democratic and engaged community. Communication was also seen as a key characteristic. Participants identified the need for clear lines of communication between leaders and the community so that people had reliable sources of information, which were delivered in a flexible manner through a variety of media. The media was identified as having a key role in resilience and reliable communication, but also in promoting optimism and community spirit. Media that support and encourage rather than vilifying certain groups in the community enhances resilience. This element was also related to the respect of cultural diversity.

Domain Six – Demography

CIQ framework: population size and structure, population stability, diversity and family structure.

Key resilience themes: length of time in a community.

The key issue related to demography that emerged through focus group discussion was the length of time that someone had spent living in a particular community. This indicator was related to a range of other elements. The question discussed was what links someone to a particular community and what makes those links to community?

> *"…people with someone buried in community have strong links as it's an investment and a sense of history that they have…they belong… history with place and a generational connection…"*

The length of time someone had spent in a community created a sense of history which was then related to their level of engagement, for example, in local social and sporting groups. It can also be an indicator of their sense of ownership and connectedness to the community and issues affecting it. In terms of a natural disaster, it can affect an individual's decision to stay, rebuild and assist with recovery efforts or move to another community. Participants suggested that if people had family and long standing relationships in a community they were more committed to staying and engaging in what that community looks like in the future.

Qualitative survey

The qualitative component of the community survey provided additional data about the profile of resilience in each community surveyed and ideas about how to measure and strengthen disaster resilience. The survey responses from the community survey sample population and also the responses from the open invitation survey have been grouped into responses with similar themes and tabled below.

The following table shows the total number of responses from the survey population sample for the question: Thinking about where you live, what do you think makes your community resilient?

Table 1: Question 45 Community Survey results

Thinking about where you live, what do you think makes your community resilient? (Q45)	Frequency	Total	Per cent
Small community/small town/everyone knows each other	144	644	22.4
Community spirit/Aussie spirit/connectedness	94	644	14.6
Support/help each other/pull together	264	644	41.0
Family/good friends/good neighbours/good people	142	644	22.0
Total	644	644	100

Base=644

Note that numbers and percentages may add to more than (sub) population totals since multiple responses were allowed.

The following table shows the total number of responses from the survey population sample for the question: Thinking about where you live, what do you think could happen to make your community more resilient?

Table 2: Question 46 Community Survey results

Thinking about where you live, what do you think could happen to help make your community more resilient? (Q46)	Frequency	Total	Per cent
Improved Local Council (not amalgamated) and more support	55	263	20.5
Community spirit, more community events, neighbourhood interaction and caring for one another	103	263	38.2
Better roads and transport	39	263	16.3
More communication, information, education and warnings/preparation.	66	263	25.1
Total	263	263	100

Base=263

Note that numbers and percentages may add to more than (sub) population totals since multiple responses were allowed.

The purpose for the inclusion of qualitative questions on the community survey was to explore in richer detail community perceptions of resilience and the ways in which they considered it affected or was built into their community. The questions intentionally reflected those posed in the focus groups to assess any similarities or extension of the narratives that were gathered through those forums. As previously stated, focus groups were made up of those employed in the human and social services, and those related to emergency management. Including qualitative questions in the survey was an opportunity to collate another layer of data to reinforce or value add to the focus group narrative.

Community survey

The project team commissioned the Office of Economic and Statistical Research (OESR) to undertake the administration of the community survey and analyse the data collected. The purpose of the survey was to gather new quantitative data around human and social elements of resilience. The following information summarises key elements of a report provided by OESR that reviews the survey process. A copy of the full report is provided as **Appendix B.**

Results

Final status and scope of respondents on sample frame

The final response status of respondents on the Resilience Profiles Project – Community Survey 2011 frame is described in **Table 1.** Almost thirty two percent of respondents in the frame completed the survey.

Table 3: Final status of respondents on sample frame

Final status	Frequency	Percentage
Completed (Mail-out)	735	24.5
Completed (Web)	211	7.0
No response	1,711	57.0
Refused	116	3.9
Unable to participate	13	0.4
Undeliverable	197	6.6
Out of scope	19	0.6
Total	3,002	100.0*

*Percentages may not add to exactly 100.0 due to rounding.

Respondents were classified as *in-scope responding* if the participant completed or partially completed the survey. Two hundred and eleven householders completed the web survey and 735 respondents completed the paper survey.

Respondents were classified as *out-of-scope* if the participant was in aged care and too frail to participate, a business office, deceased, did not open the survey or no longer resided in Queensland (n = 19).

The remaining respondents (n=2,037) were classified as *in-scope non-responding*.
Table 2 describes the percentage of respondents who completed or partially completed the survey as a function of the total number of in-scope respondents on the frame.

Table 4: Final status of in-scope respondents

Status	In-scope responding	In-scope non-responding	Total in-scope	Percentage %
Completed (Mail-out)	735	0	735	24.6
Completed (Web)	211	0	211	7.1
No response	0	1,711	1,711	57.3
Refused	0	116	116	3.9
Unable to participate	0	13	13	0.4
Undeliverable	0	197	197	6.6
Total in-scope	**946**	**2,037**	**2,983**	**100.0***

*Percentages may not add to exactly 100.0 due to rounding.

Survey response rate

The response rate is a measure of the quality of response achieved in a survey. This is defined as the number of completed web surveys used in the analysis as a percentage of the total number of potential surveys that would have been achieved had every in-scope respondent completed the survey.

Resilience Profiles Project – Community Survey 2011 achieved a response rate of **31.7 per cent**.

Response rate = In-scope responding / (in-scope responding plus in-scope non-responding)

= 946 / 2,983

= 31.7%

Table 5: Response rate by region.

	Total respondents	In-scope responding	In-scope non-responding	Out of scope	Response rate (%)
Tablelands	1,000	324	672	5	32.6
Rockhampton	1,001	300	691	9	30.3
Chinchilla	1,001	322	674	5	32.3
All respondents	3,002	946	2,037	19	31.7

Note: Non-respondents includes participants defined as in-scope who did not respond to the survey. Respondents defined as out-of-scope are excluded from response rate calculations.

Weighting

Household questions

This survey makes use of a household sample frame to estimate household characteristics in three demographic regions. Each responding household in the survey represents a certain number of households within the population of the frame. These numbers are referred to as weights and are used as multipliers in calculations.

Household weights for each region were calculated to reflect the differing probabilities of being selected and responding. A stratified simple random sample number-raised weight was calculated for each unit as follows:

Weight = Number of households in region / Number of randomly selected households in region that responded to survey

The survey was designed to maximise the representativeness of the results, however, 100 per cent accuracy is not possible. As a result, estimates of household characteristics have a level of imprecision associated with them (See Section 5).

Person questions

When collecting survey data, response rates may differ between different groups. A higher rate of non-response in certain groups, may lead to contact bias in the estimates. For example, older people and women are usually easier to contact than younger people and men and, without adjustment in the weighting process, may have a disproportionately large influence on the results. However, information is unavailable as to how this bias may affect estimates and so it was not possible to weight the person-specific responses.

As a result, person-specific responses are presented in the output tables as sample frequencies only. No inferences about the wider population beyond the respondents themselves may therefore be made from these person-specific questions.

Reliability of estimates

Summary

Although the survey has been designed to maximise the representativeness of the household-specific results, it is not possible to be perfectly representative.

Estimates based on a sample survey are subject to two types of error:

- *Sampling error.* Estimates based on information obtained from a sample of households may differ from figures that would have been produced if all households had been included in the survey.
- *Non sampling error.* Errors may also occur due to non-response to the survey, inadequacies of the sampling frame, inaccuracies in reporting by respondents and processing errors.

The inclusion and administration of the community survey was an integral part of the overall project design. There was acknowledgement at the concept development stage that existing data was not available to provide the information needed to create a rich snapshot of the human and social elements of resilience. The survey was a tool to gather the data to fill these gaps. Give the exploratory nature of the project, it was acknowledged that the administration of a paper survey was the most appropriate given the available resources. Future extension of the project recommends the use of computer assisted telephone interviewing (CATI) to ensure that the results can be weighted and can be used as indicative of the population as a whole.

Self-reported health status 2011

Quality of life, mental health and wellbeing and associations with preventive health indicators, Queensland

Queensland Health undertakes an annual survey series on self-reported health status of Queenslanders to assist in understanding and responding to health needs. They are a key participant and supporter of Community Indicators Queensland and a member of the Resilience project reference group. One report in the series is related to quality of life, mental health and wellbeing. Elements of this report have been used to supplement the resilience profile indicators. The report in its entirety is designed for Queensland-level reporting and is available online[v].

As part of their support for and contribution to the project, Queensland Health aggregated data from the Rockhampton and Tablelands local government areas from *Self-reported health status 2011: quality of life, mental health and wellbeing and associations with preventive health indicators, Queensland (*2011). The results for Chinchilla could not be extracted as the sample size was not sufficient to provide data of statistical significance.

This data provides a richer picture of the communities concerned than was able to be undertaken within the resources of the project itself given the relationship between resilience, social capital, well being and mental health.

General quality of life

General quality of life is measured using three questions. Questions regarding ratings of quality of life and satisfaction with health were sourced from the WHOQOL-BREF quality of life assessment instrument[vi]. A third question, sourced from the SF-36 instrument[vii], measures self rated health status. Both instruments have been extensively validated internationally as well as for use amongst populations with specific health conditions[viii ix x xi xii].

Data source

Self-reported Health Status 2011. Analysis provided by the Population Epidemiology Unit, Division of the Chief Health Officer, Queensland Health.

Measure

- *the proportion of adults reporting their quality of life as 'very good' or 'good'.*
- *the proportion of adults reporting their health is 'excellent', 'very good' or 'good'*
- *the proportion of adults reporting that they are 'very satisfied' or 'satisfied' with their health*

Table 6: Quality of life Self rated health and satisfaction with health

Persons (18+ years)	Quality of life	Self-reported health	Satisfaction with health
Rockhampton	88.5%	83.5%	69.1%
Tablelands	90%	*85.1%	*90.2%

*Estimate has a relative standard error of 25% to 50% and should be used with caution.

Social capital and locus of control

The Short Form Social Capital Index© (SCI-11) is an eleven item brief version of the Social Capital Index developed by Janice Dillon, Curtin University[xiii]. The SCI-11 measures three principle composite dimensions of the social capital construct.

1. Generalised reciprocity and cohesion (GRC) includes norms of generalised reciprocity, social interdependence and bonding, solidarity, local social structures of cooperation, supportive relationships and climate.
2. Community identify (CID) includes elements relating to common membership/community/identification; satisfaction with residential environment; perception of shared values and degree of homogeneity; perception of a stable structure, and implies safety and security within the community.
3. Generalised trust (GT) includes the perception of trustworthiness of other people in the community, and a thorough internalisation of values, norms and roles.

Locus of control is related to whether or not a person feels that they have control over decisions that affect their life.

Data source
Self-reported Health Status 2011. Analysis provided by the Population Epidemiology Unit, Division of the Chief Health Officer, Queensland Health.

Measure
- *The score of participants aged 18 years and older for three social capital domains; generalised reciprocity and cohesion, community identity and generalised trust[xiv]*
- *Percentage of adults who agreed with the statement that they have control over decisions that affect their life (internal locus of control)[xv]*

Table 7: Social capital domain scores and locus of control percentages

Persons (18+ yrs)	Generalised reciprocity & cohesion*	Community identity *	Generalised trust *	Locus of control
Rockhampton	3.8	4.1	3.9	83.1%
Tablelands	4.2	4.4	4.1	95.5%

* For each item participants rated whether they agree with a statement on a five-point scale ranging from *strongly agree* to *strongly disagree*. A domain score is calculated from the items using formulae provided by the developer. Domain scores range from 1 to 5

Psychological distress
The Kessler 10 (K10) is a validated instrument measuring non-specific psychological distress[xvi],[xvii]. It is widely used nationally and internationally. Respondents use a scale ranging from "all of the time" to "none of the time" to rate how often they have experienced ten specific negative emotional states (for example, nervousness, hopelessness, restlessness or depression) over the past 30 days. Scores are summed and then classified into one of four categories: low, moderate, high, or very high psychological distress based on cut points used by the ABS[xviii].

Data source
Self-reported Health Status 2011 dataset. Analysis provided by the Population Epidemiology Unit, Division of the Chief Health Officer, Queensland Health.

Measure
The percentage of adults scoring high or very high on the Kessler Psychological Distress Scale (K10)

Table 8:   Levels of psychological distress

Person (18+ years)	High or very high psychological distress
Rockhampton	17.5%
Tablelands	11%

Project Deliverables

Community Resilience Profiles

Using quantitative and qualitative data from the community surveys and focus groups, resilience profiles were developed for the Tablelands Regional Council area; Rockhampton Regional Council area; and Chinchilla in the Western Downs Regional Council area. These profiles are unique to each community. The profiles form a baseline set of data that can be measured over time to track community resilience. It is hoped those communities invited to participate in the project will come to a greater understanding of community resilience, the factors that affect it, and how resilience levels might influence policy and program development in the management of future natural disasters.

The resilience profiles are captured using the community resilience indicators developed through this project. The indicators are based on the CIQ framework. Additional indicators, developed through the project are linked to the existing CIQ domains:

Domain One: Healthy, safe and inclusive communities
Domain Two: Dynamic, resilient local economies
Domain Three: Sustainable built and natural environments
Domain Four: Culturally rich and vibrant communities
Domain Five: Democratic and engaged communities
Domain Six: Demography

The profile data is not intended to offer comparisons across and between communities but rather to reflect the unique nature of localities and regions. The resilience profiles and indicators can assist communities to measure and assess their resilience and provide an integrated map of how issues and elements fit together. It assists in identifying how strengths and vulnerabilities are connected and how building capacity in one area will strengthen another. This enhances community capacity to plan and respond to natural disasters or other challenges. If the data is collected and maintained over time, indicators can show how well a community is travelling towards strengthening local resilience and capacity.

There are 72 indicators that together contribute to the resilience profile. This is a substantial amount of data across three communities. It was considered by the project team that the data is most appropriately presented though a data repository rather than in a report. The Community Resilience Queensland website has been developed to complement the project report and provide a repository for the data. Profiles for each community have been collated and presented as tables in **Appendix A** of this report. It is important to note that the data presented in the tables from the community survey does not provide a full data picture, as only one element of the question has been reported. The Community Resilience Queensland website provides graphs to demonstrate the full response.

Community Resilience Queensland

The Community Resilience Queensland website (www.communityindicatorsqld.org.au) is the public repository of the resilience profiles. Community Resilience in Queensland is a database and information portal providing community resilience indicators and data at a local level for the three pilot communities. The website is a publicly accessible, informative and interactive database. It is a mechanism for continuing to engage people from the pilot communities in both the process and the results of the project.

The website includes contextual information on community resilience, resilience profiles and stories of resilience from the pilot communities. It includes interactive elements which aim to

engage the broader community on community resilience. This includes capacity for stories of resilience to be added by other individuals and communities, and a link to a community door forum on community resilience.

Community resilience in Queensland is a useful resource for a wide range of people including:

- Anyone with an interest in the resilience of their community
- Local government mayors and councillors
- Local government policy and planning staff
- State government policy and planning staff
- Non-government organisations

The website has the capacity to expand to include any future project extension or expansion, similar to Community Indicators Victoria and Community Accounts in Canada.

Indicators of Community Resilience

Decisions regarding which indicators to use when measuring community resilience were based on the following:

- the nature of the project research question;
- the Community Indicators Queensland framework;
- international and Australian experience as garnered through the literature review; and
- focus group outcomes.

The CIQ framework, based on Community Indicators Victoria (CIV), provides the basic framework of indicators to consider when measuring community resilience. Relevant indicators were chosen across the six domains of the CIQ framework after due consideration from the literature review and focus group analysis. Each indicator has its own rationale which includes a brief description, why it is relevant to community resilience in a disaster recovery context and data source.

The research question central to the project is to explore what links exist between socio-economic disadvantage and community resilience in the context of disaster recovery. Given this question, the majority of indicators chosen are those relevant to community and social well-being. It is acknowledged other indicators related to ecology, infrastructure and governance are integral to a broader measurement of a community's life. As the research question is related to socio-economic disadvantage, a range of relevant economic indicators were chosen, for example, the SEIFA index, employment and unemployment rates and economic diversity. However, the project scope limited the choice to those that targeted the social and human elements of community resilience.

With emerging trends in the literature on the role of social capital in communities recovering from disasters (Aldrich, 2010), a cohort of chosen indicators focuses on social capital - trust in neighbours, participation in sporting and social groups and levels of community safety. The focus group process undertaken across the three sites endorsed existing indicators in the six domains of CIQ, such as community connectedness, strong local economies, open space and affordable housing, cultural and sporting activities, spirituality and religious belief, citizen engagement and support groups, and demography.

As local workers and residents within their respective communities, focus group participants developed indicators that mattered to them and are relevant to their local community. These indicators came from the real life experience of focus group participants having observed their communities over many years.

The indicators are categorised below according to domains and sub categories. Each indicator lists the measure used, a rationale that links it with the concept of resilience, and where the data for this indicator has been sourced.

Domain 1: Healthy, safe and inclusive communities

Personal health and wellbeing

1.   People with a disability

Measure: *Percentage of population who identify as having a profound disability*

People with a profound or severe disability are those who need "help or assistance in one or more of the three core activity areas of self-care, mobility and communication because of a disability, long term health condition (6 months or more) or old age" (OESR, 2011).

 Age and disability are often associated with vulnerability. Although there is a range of ability and circumstance involved at an individual level, it is important to recognise the impact that the need for assistance can have on the capacity of individuals to respond and recover (Morrow, 2008). In a natural disaster context, identifying the population that needs intensive support will help with emergency management planning, especially if evacuation is required.

Data source: Queensland Regional Profiles**,** Office of Economic and Statistical Research, QLD Treasury, 2012

2.   Subjective wellbeing

Measure: *Percentage of respondents who agree or strongly agree that they are satisfied with their life as a whole*

"Quality of life measures the fit between a person's hopes and expectations and their present experience. Objective quality of life is about fulfilling the societal and cultural demands for material wealth, social status and physical wellbeing, whereas subjective quality of life is about feeling good and being satisfied with things in general. The overall quality of life reflects the difference, that is, the gap between the hopes and expectations of a person and their present experience" (Community Indicators Victoria, 2006).

Data source: Resilience Profiles Survey 2011

3.   Vulnerability

Measure: *Percentage of survey households with a person requiring assistance or supervision, and type of assistance required*

The relationship between vulnerability and resilience is complex. Vulnerabilities are about susceptibility rather than the strength and capacity associated with resilience (Vella, 2011). Vulnerability could be viewed as one element of a community that could weaken its ability to adapt to challenges and change.

Traditional approaches identify vulnerability as a deficit in a community, and something to be overcome by the introduction of outside resources. A resilience approach builds on the existing capacity and resources in a community so that challenges and change can be managed more positively (Maguire & Cartwright, 2008). Groups with particular risks or

vulnerabilities may also have valuable networks and relationships and need to be included in processes for building and sustaining resilience (Morrow, 2008).

Data source: Resilience Profiles Survey 2011

4. Perception of support

Measure: *The percentage of respondents who could ask someone who does not live with them for support in a crisis, and what type of support that would be*

Informal supports and relationships are integral to social capital, which has strong associations to a community's capacity to both respond to and recover from disaster (Aldrich, 2010). However, not everyone has someone they can turn to for support. The relationships and networks provided through family and friends can be an important resource for information and other forms of assistance in a crisis. There is some indication that the perceived capacity to access support could be more related to recovery for individuals than whatever support is given (Norris & Kaniasty, 1996 cited Hawe, 2009).

Some groups in a community can have less access to support networks, such as: recent immigrants, older people who live alone, new residents and homeless people. The social isolation associated with lack of support networks can make people more vulnerable generally (Morrow, 2008). The more connected a person is, the better resourced they are in terms of short term loans, free housing, child care, emotional support and tangibles such as generators and transport (Aldrich, 2010).

Data source: Resilience Profiles Survey 2011

Community connectedness

5. Social support

Measure: *The source of support in a crisis for survey respondents*

This indicator measures what supports people access in times of crisis and whether people are part of a social network. It is closely linked with the indicator *perceptions of support*. Informal supports and networks are often the ones that people turn to first and they can be an important source of emotional support, practical help, contacts, resources and assistance.

The need to measure social networks is:
> "based on the knowledge that Australian society is changing. The birth rate and marriage rate are both declining whilst the divorce rate is escalating. The rising generation is also likely to postpone marriage and parenthood. These factors, plus others associated with an ageing population, are driving the rise of single-person households. Social engagement in paid work, caring for others, and participation in clubs and sporting groups act as buffers against social isolation. Close personal networks can be sources of benefits such as confidence, emotional support, practical help, contacts, resources and other forms of assistance" (CIV, 2006).

In a natural disaster context, these benefits can make a significant contribution to the recovery process.

Data source: Resilience Profiles Survey 2011

6. Volunteering

Measure: *Percentage of respondents who provided unpaid (volunteer), help excluding manmade or natural disasters, for any organisations in Queensland*

Volunteering contributes to a community on a number of levels. It has a strong association with the economic capacity of a community because of its value and relationship to unpaid work. Volunteering also has a role in building social networks and increasing social cohesion. These factors can cultivate or contribute to a sense of belonging in the community, which benefits both the individual and the community (Hegney et al., 2008).

A 2006 ABS survey showed that almost two-thirds of people in the last 10 years who initially volunteered were either asked to or did so because they knew someone involved. This suggests that volunteering not only builds social networks, but grows out of them (CIV, 2006). The number of volunteers in a community contributes to an aggregate picture of community engagement, social connectedness and social capital, and is influenced by age, gender and the current social climate (Aldrich, 2010; CIV, 2006).

Data source: Resilience Profiles Survey 2011

7.   Helping others in the community

Measure: *Percentage of respondents who helped someone, who does not live with them, with a range of activities in the last 12 month. Who this help was given to, expressed as a percentage of recipients receiving support*

Assisting neighbours and others in the community demonstrates the strength of informal networks, supports and social capital. Informal supports and relationships build trust, and are integral to social capital. Social capital has strong associations to a community's capacity to both respond and recover from disaster and other challenges (Aldrich, 2010).

Data source: Resilience Profiles Survey 2011

8.   Interaction with neighbours

Measure: *Percentage of respondents who:*

- *would leave a key with their neighbour if they went away;*
- *have the phone number of a neighbour;*
- *would contact them if you required assistance;*
- *would contact a neighbour to see if they required assistance.*

Relationships between neighbours are indicative of trust and cooperation in the local community. People are more likely to assist someone they know if help is required. Assisting neighbours and others in the community demonstrates the strength of informal networks, supports and social capital. Informal supports and relationships build trust, and are integral to social capital. Social capital has strong associations to a community's capacity to both respond and recover from disaster and other challenges (Aldrich, 2010).

Knowing who is in your neighbourhood can ensure that any vulnerable or isolated people are not forgotten in a crisis. Having a relationship with neighbours contributes to a sense of belonging to a community, raises the cost of exiting and increases feelings of safety (Aldrich, 2010).
Research in Australia on the aftermath of disaster has shown that neighbours are one of the greatest sources of support and assistance in a crisis and in recovery (Hawe, 2009).

Data source: Resilience Profiles Survey 2011

9.   Social isolation

Measure: *Percentage of respondents who participated in social activities*

Social contact or activities can happen in a variety of settings with friends, family and work colleagues. People with limited or no social contact are at risk of social isolation. There are a

multitude of factors that could contribute to someone becoming socially isolated. Once social isolation occurs, it can become increasingly difficult for people to reconnect. Social isolation can impact significantly on a person's wellbeing and can also reduce both social and economic opportunities (OECD, 2005).

There are some groups in the community who are at higher risk of social isolation than others, particularly older people. Research exploring issues of health and social isolation in the veteran community revealed key factors related to low levels of social activity, including mobility and transport limitations and feelings of safety (Gardner, Brook, Ozanne and Kendig, 1998).

In a disaster context, social isolation can have repercussions in relation to increased levels of anxiety, lack of access to resources and information and increased vulnerability.

Data source: Resilience Profiles Survey 2011

10.   Trust in local community

Measure: *Percentage of respondents who:*

- *strongly agree or agree that most of their neighbours can be trusted*
- *feel safe or very safe walking in their community after dark*

Neighbourhoods that are perceived as safe by local residents contribute in a number of ways to community cohesion, wellbeing and resilience. Safe neighbourhoods foster community participation and encourage physical activity and community connectedness. Neighbourhood safety can only be achieved through the development and support of partnerships which identify local solutions to local issues in local communities, with business, residents, community groups, police, agencies and councils. The built environment and the way neighbourhoods are designed and maintained greatly affect perceptions of safety and are critical factors in any strategy for improving safety in neighbourhoods (CIV, 2006).

Trust in neighbours and feeling safe in your community can influence a person's social activities and affect their mental health and sense of belonging to community (ABS, 2010).

Data source: Resilience Profiles Survey 2011

11.   Stability of resident population

Measure: *Length of time spent living in current community*

The longer a person lives in an area or community, the stronger and more complex will be their networks and supports. Length of time spent living in an area can contribute to a person's sense of belonging and emotional attachment to place (Bow & Buys, 2003).

Evidence suggests that groups that have had less time to embed themselves in community, such as recent immigrants, new residents and people who are homeless, have lower levels of social capital. Social capital is integral to building resilience in communities. People in private rental properties are also likely to have fewer connections in their neighbourhoods due to insecure tenancies (Morrow, 2008).

Data source: Resilience Profiles Survey, 2011

12.   Social media

Measure: *Percentage of survey respondents who used a variety of social media, and how often*

Social media describes a variety of internet-based applications accessed via computer or

smart phone. It includes but is not limited to: Facebook, Twitter, YouTube, weblogs, internet forums, chat rooms and email. Social media has become an important means of communication and information sharing across all demographics, and affects our interpretation of both social networks and community. Due to the immediacy and 24 hour accessibility of social media, it is increasingly used to disseminate information in a disaster context (Lindsay, 2011; emergency20wiki.org/).

Data source: Resilience Profiles Survey, 2011

Lifelong learning

13.   Home internet access

Measure: *Percentage of survey households with an internet connection*

Access to information via the internet has become an essential element of how we stay connected and informed. Information is vital to building strong knowledge economies and the internet ensures instant access to a vast range of information across the globe. This indicator is about having the resources to participate fully in the community and the capacity to make informed decisions (CIV, 2006).

Data source: Resilience Profiles Survey 2011

14.   Vocational education and training students

Measure: The *number of vocational education and training students in a local government area*

> "Vocational education and training is important as it caters for young people, and addresses skill shortages. Apprenticeships and vocational training are designed to be responsive to the needs of industry by providing specialised skills and pathways to new careers for employees. They are also measures of the investment business makes in education and skilling of the workforce. It is also indicative of the resilience of local economic activity" (CIV, 2006).

Data source: Queensland Regional Profiles**,** Office of Economic and Statistical Research, QLD Treasury, 2012

Service availability

15.   Service availability

Measure: *Percentage of survey households with a member who finds it difficult to access medical services, and reason for lack of access*

> "Access to services is a measure of community connectivity in terms of transport infrastructure, physical distance and urban planning. It is believed that when community members have access to the services they need, when they need them, they are more likely to have feelings of civic engagement and wellbeing. Not having access to such services can place vulnerable groups at greater disadvantage and signal pockets of social isolation "(CIV, 2006).

Data source: Resilience Profiles Survey 2011

16. Community development programs

Measure: *Number of community development programs in the local government area*

Community development is a way of working, a process, that is relational based and looks at ways of engaging community members, building local leadership and providing opportunities for community members to have a say in what happens in their community. It differs substantially from a service delivery model in its processes and how it involves community itself in identifying needs/services and how they can best be met to suit local needs. However service delivery can embrace community development processes.

Community development is a framework for practice that builds community resilience and community capacity at a local level while encouraging mechanisms for linking and learning with other regions. Community development is inextricably linked with neighbourhood and community centres, as most centres engage in community development methodology to build capacity in their local area (Caniglia and Trotman 2011).

Data source: Department of Communities, 2011.

17. Neighbourhood centres

Measure: *Number of funded community/neighbourhood centres*

Community and neighbourhood centres are generally small, not for profit organisations that have evolved through a 'grass roots' process in their local area. Each centre offers a unique range of services, activities and opportunities depending on community energy or need. Although diverse in size and focus, they share a common framework of community development which enables them to respond to local needs and demands as they arise (Rooney, 2011).

Community and neighbourhood centres have a key role to play in community capacity building and resilience as "research shows that neighbourhood centres form a key element of the social infrastructure of disadvantaged communities. The infrastructure provided by the centres can be quickly mobilized, expanded or readjusted to respond to local needs, emerging issues or opportunities" (Izmir, 2009).

There were many examples in the flooding and cyclone of the summer of 2010/11 where neighbourhood and community centres were able to draw upon their existing local knowledge and networks to respond to vulnerable community members, mobilize and manage volunteers, distribute emergency assistance and relief and provide a base for information. (Caniglia 2011).

Data source: Department of Communities and local non-government organisations, 2011.

Domain Two: Dynamic, resilient local economies

Economic activity

18. Economic diversity

Measure: *The Regional Index of Economic Diversity*

The Regional Index of Economic Diversity determines the degree to which the region's industry mix differs from that of the nation. When the index value is close to one, the industrial profile of a region mirrors that of the national economy and is considered more

diverse. A local economy that has a diverse economic base and does not rely heavily on a particular industry will be more resilient to market fluctuations.

Data source: Data on request from, Lawrence Consulting, The Regional Index of Economic Diversity, 2011.

19.   Retained retail spending

Measure: *Percentage of survey respondents who prioritise locally produced and owned as an important factor when buying products and services*

Investing in local business and purchasing local produce where possible insures that money remains in a community, especially in rural and regional areas. This strengthens community capacity, builds business, provides employment and ensures that a variety of services are available in a community. Communities with a diverse local economy are more resilient to external changes and improve the quality of life for all residents (Hegney et al., 2008).

A region's ability to capture local consumption expenditure is vital in providing local employment and is related to business diversity. Buying local services and products helps create diverse business and employment opportunities for local residents. This helps sustain local economies to create communities as a desirable place to live and work (CIV, 2008).

Data source: Resilience Profiles Survey 2011

20.   Highly skilled workforce

Measure: *Percentage of highly skilled workers in the labour force*

> "The quantum and types of skills available within an area will delineate its capacity to support particular industries and consequently its outlook for economic growth. Areas where the requisite skills base and knowledge capacity are in place are more likely to attract particular industries, which will lead to more dynamic economic outcomes.
>
> A knowledge-based economy is synonymous with an information society. It is defined as an economy 'directly based on the production, distribution and use of knowledge and information' (ABS 2002). Successful modern economies are more knowledge-intensive than ever as jobs for process and manufacturing workers become automated (ABS, 2002). Although high-tech industries are traditionally associated with knowledge economies, all industries can be knowledge intensive, including extractive industries and agricultural products" (CIV, 2006).

Data source: Queensland Regional Profiles, Office of Economic and Statistical Research, QLD Treasury, 2012

21.   Innovation/creative industries

Measure: *Percentage of population employed in creative class occupations*

The Creative industry and occupation segments are defined as: Music and Performing Arts; Film, TV, Radio; Advertising and marketing; Software, Web and Multimedia development; Writing, Publishing and Print Media and Architecture, Design and Visual Arts.

The term Creative Industries is now widely used by business and government in similar ways to the more established terms of cultural sector, primary and manufacturing industries. The economic potential of this sector is increasingly recognised by government and communities (Higgs, Cunningham & Pagan, 2007). There are links between the creative capacity contained within communities and community resilience.

Data source: data sources to be explored further.

22. Business growth

Measure: *Net change in number of workplaces*

"The purpose of this indicator is to detect those factors which have an impact on firm growth and performance and to measure that impact. This information is keenly sought by small business policy makers and researchers both in Australia and around the world. The information will also enable a much more detailed analysis of: where employment growth occurs in the Australian and Queensland economy, by which type of firm, and how widespread this growth is. A key feature of the ABS survey is that it is a longitudinal survey i.e. where a sample of businesses are surveyed across each year of the survey. This enables firms with similar characteristics to be compared and contrasted with other firms with different characteristics, both at the same time point i.e. each year, and over time i.e. across years.

Business growth provides information about changes in small to medium sized businesses operating in an area and is a good indicator of economic activity. However, there is no necessary connection between the number of workplaces in the region and the performance of those workplaces (ABS, 2003)" (CIV, 2006).

Data Source: data sources to be explored further.

Employment

23. Employment rate

Measure: *Percentage of population aged 15 years and over who are employed*

"Employment for all is an important social goal. People out of a job may have a sense of less than full membership of the community. Improving employment options for young people, people with disabilities, indigenous people and older residents is important for a community that values people. Local employment options for residents will make the region a desirable place to live and reduce economic leakage and greenhouse gas emissions due to reduced travel demands. One of the key outcomes of local industry is local employment provision. Adequate employment levels are an important social goal (Freebairn 2005). Employment gives people the opportunity to make lifestyle choices and is associated with levels of personal satisfaction (Freebairn, 2005). Insufficient employment opportunities may lead to a decline in health and skill levels of unemployed people, family breakdowns and increasing crime rates (Austin, Shoemark, Stokes, Stone, Terril , 2001)" (CIV, 2006).

Data source: ABS National Regional Profile/ABS Regional Population Growth 2009/10

24. Unemployment

Measure: *Percentage of labour force who are unemployed*

"According to John Freebairn, 5% unemployment should not be regarded as the best which can be achieved. He argues that "the headline unemployment rate substantially understates the numbers who would like a job". Even unemployment at 5% "leaves over 500,000 people out of a job and with a sense of less than full membership of the community. Over 17% of children are living without an employed parent" (Freebairn, 2005). Improving employment options for young people, single parents, people with disabilities, indigenous people and older residents is important for a community that values people.

Data source: Queensland Regional Profiles, Office of Economic and Statistical Research, QLD Treasury, 2012

25. Local employment

Measure: *Percentage of workforce who live and work in the same local government*

Local employment is integral to a sustainable society. Local employment contributes to making the local government area a desirable place to live and reduces income leaving a local community. People who live and work in an area are more likely to shop locally and become embedded in the local community, contributing to community building (ABS, 2001; Austin et al., 2001). Local employment also has environmental benefits, as decreased travel demands reduce greenhouse gas emissions and helps workers attain better work-life balance (CIV, 2006)

Vibrant local economies have a healthy mix of business. The local economy is then less susceptible to cyclical and structural change. An understanding of the types of business in the area will highlight demands placed on infrastructure, services and skills base. Local employment options for residents will make the local government area a desirable place to live and reduce economic leakage and greenhouse gas emissions due to reduced travel demands. "One of the key outcomes of local industry is local employment provision. It is defined as the ratio of workers engaged in an area to the residential population. Many regions in Australia, especially in the metropolitan areas, attract large numbers of commuters to the region for work on a daily basis. These regions receive a high rating for local employment provision. Conversely a low level of employment provision suggests that residents have to travel outside the region to their places of work" (National Institute of Economic and Industry Research, 2004)" (CIV, 2006).

Data source: Measure under development

Income and wealth

26. Household income

Measure: *Percentage of survey households expressed as income categories*

Economic wellbeing is a crucial element contributing to quality of life because most basic needs such as food, water, shelter, health care and many forms of recreation have to be purchased (CIV, 2006).

Data source: Resilience Profiles Survey 2011

27. Individual income

Measure: *Percentage of survey respondents expressed as income categories*

Economic wellbeing is a crucial element contributing to quality of life because most basic needs such as food, water, shelter, health care and many forms of recreation have to be purchased (CIV, 2006).

Data source: Resilience Profiles Survey 2011

28. Distribution of income

Measure: *P80/P20 Ratio of Equivalised Gross Weekly Household Income*

Equivalised household income[xix] can be viewed as an indicator of the economic resources available to a standardised household. For a lone person household it is equal to household income. For a household comprising more than one person, it is an indicator of the household income that would be needed by a lone person household to enjoy the same level of economic wellbeing.

Economic wellbeing is a crucial element that contributes to quality of life because most basic needs such as food, water, shelter, health care and many forms of recreation have to be purchased. However, quality of life is not based solely on income and wealth; rather it is an integration of social, environmental and economic factors. Measures of income levels do not necessarily account for the way in which income is distributed amongst the population. For example, income increases concentrated in a small sector of the population (e.g. CEOs) do not translate into an increase in the standard of living for the general population even though there has been a rise in average weekly earnings. It therefore becomes important to have a measure of dispersion for both income and distribution (CIV, 2006).

Data source: ABS, Census of Population and Housing, 2006. Data available on request.

29.   Financial stress

Measure: *Percentage of survey respondents who could raise $2,000 in two days in an emergency*

The most common approach to measuring and defining poverty is the low-income approach. It has been suggested that an alternative approach, or one that could be combined with measures of low income in order to improve measurement of economic wellbeing, is to assess poverty and disadvantage by measuring "financial stress". A symptom of financial stress is the inability to raise a moderate sum of money to deal with an emergency of the kind created by the need to pay an unexpected bill (CIV, 2006).

The inability to access funds in an emergency is a form of financial exclusion. You are more likely to experience financial exclusion if you have a low level of education, were born overseas, are unemployed and are aged (18-24) years or over 65 (Connolly, Georgouras, Hems, Wolfson, 2011). Other forms of financial exclusion include the inability to purchase basic levels of insurance cover and access to a transaction account.

Data source: The Resilience Profiles Survey 2011

30.   Food security

Measure: *Percentage of survey respondents who ran out of food in the last 12 months and could not afford to buy more*

> "This indicator seeks to identify people who may be at risk of a poor diet and nutrition due to their financial incapacity to purchase food, as well as at risk of social exclusion. Food security refers to the availability of food and one's access to it. Food and nutrition have long been recognised as important contributors to health. However, food and nutrition affect more than just the physical aspects of health and wellbeing. The buying, preparing and eating of food is part of everyday life. For many Australians, food is a focus for social interactions with family and friends" (CIV, 2006).

An important element of preparedness for disaster is the capacity to have a stockpile of food to sustain a household for a minimum of 3 days in an emergency. For some households, the capacity to stockpile food and other household essentials is not attainable.

Data source: Resilience Profiles Survey 2011

31. Emergency relief

Measure: *Percentage of individuals who have accessed emergency relief services in the last twelve months*

This indicator seeks to measure the number of people seeking financial support through emergency relief services in the community. Emergency relief funding is provided for personal emergencies and should not be confused with disaster relief funding. It is provided through both the Commonwealth and state governments and is administered through community sector organisations. Some community groups and organisations self fund emergency relief programs and it is subsequently difficult to measure. Assistance can include vouchers for food, transport or medicines, part payments of rent and utility bills, material goods such as clothing and household items, food parcels and budgeting assistance. People accessing emergency relief services often need information and referral to other agencies for support.

Data source: Federal Department of Families, Housing, Community Services and Indigenous Affairs[1] – measure under development

32. Socio-Economic Disadvantage

Measure: *Percentage of households in the lowest quintiles*

Socio-economic disadvantage is an abstract concept that is challenging to measure. The Socio –economic index of disadvantage attempts to gauge the level of disadvantage in an area through the individual and household's capacity to access material and social resources, and their ability to participate in society. It focuses on such indicators as low income earners, low educational attainment, high unemployment and dwellings without a motor vehicle. Low index values represent areas of most disadvantage and high values represent areas of least disadvantage.

Evidence suggests that socio-economically disadvantaged communities may take longer to recover from a natural disaster or sustained hardship due to their inability to access adequate resources for a range of reasons (Morrow, 2008).

Data source: Queensland Regional Profiles, Office of Economic and Statistical Research, QLD Treasury, 2012

Skills

33. Educational qualifications

Measure: *Education levels of survey respondents expressed as a percentage of overall respondents*

Education is an essential component of community wellbeing, enabling humans to develop their intellectual potential and maximising their capacity to deal with all aspects of life. The education and skills base of community members can influence their capacity to gain employment and participate in their community. A more educated community also has greater capacity to engage in the emerging knowledge economy (CIV, 2006).

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[1] Note: our request to FaHCSIA for this data for the three pilot areas was denied due to the lack of a 'project champion' in the department.

Data source: Resilience Profiles Survey, 2011

Domain Three: Sustainable built and natural environments

Disaster Vulnerability

34.   Houses affected by natural disasters

Measure: *Percentage of survey households whose house had been affected or was at risk of being affected by a natural disaster*

Two measures of disaster vulnerability are the number of households affected by a natural disaster and the types and level of insurance that households have. The number of houses and properties affected by natural disasters is important for planning and recovery purposes. Data on houses destroyed or damaged by a natural disaster provides the basis for financial and economic recovery and planning for future events.

Data source: Resilience Profiles Survey, 2011

35.   Household insurance

Measure: *Percentage of survey households who had adequate household insurance and type of insurance*

A key component of financial exclusion is the inability to purchase insurance. Insurance is a means of providing a safety net for individuals and households in the protection of key assets and as a means of risk management (Connolly, Georgouras, Hems, Wolfson, 2011). A household insurance measure can provide a snapshot of the economic vulnerability of a community.

Population growth has resulted in housing developments in areas that are more vulnerable to climate change and disaster impact (Crompton & McAneney, 2008). Insurance costs are increasing and some areas have been denied insurance altogether, which removes an integral mechanism for recovery and rebuilding and increases vulnerability (Morrow, 2008).

An appropriate level of household insurance is a major strategy in reducing vulnerability to natural disasters. Insurance assists households' recover faster from the impact of a natural disaster. Insurance allows households to manage their risk (COAG, 2009).

Data source: Resilience Profiles Survey, 2011

36.   Natural disaster assistance

Measure: *The source of critical information accessed by survey respondents in an emergency*

Being able to access reliable and current information is critical in a natural disaster. How this information is communicated or received is just as critical. A significant issue that has affected communities during a disaster has been inconsistent and contradictory information disseminating through the community (COAG, 2009). This can have significant impact. Emergency Services and other providers are exploring new ways of communicating and social media is at the forefront of this. In saying that, many people rely on informal sources such as friends and family to keep informed.

Data source: Resilience Profiles Survey, 2011

Housing

37. Housing affordability

Measures:
- *Median price of houses*
- *Median price of units/flats/apartment*
- *Percentage of survey households privately renting*
- *Percentage of survey households publicly renting (e.g. social housing)*
- *Percentage of survey households who own or are purchasing their house*
- *Percentage of households in receipt of rent assistance from Centrelink*
- *Percentage of low-income households experiencing mortgage stress*
- *Percentage of low-income households experiencing rental stress*

"Housing satisfies the essential needs of people for shelter, security and privacy. Shelter is recognised throughout the world as a basic human right. The adequacy or otherwise of housing is an important component of individual wellbeing. Housing also has great significance in the national economy, with its influence on investment levels, interest rates, building activity and employment. Affordability of housing will affect choice of location, access to employment, education, essential services and proximity to social and family networks" (CIV, 2006).

The cost of housing is significant for people on lower incomes. When costs are high, people have less residual income to spend on other essential household items. There is no accepted definition of housing affordability. It is a relative term about the capacity to enter the housing market; that is, cost and availability. The cost of housing relates to the prosperity of the community, the functioning of the economy, location choices relating to employment opportunities, and transportation issue (CIV, 2006)

Data source: Queensland Housing Market Report, Department of Communities, June Quarter 2011; Compiled by PHIDU using data from Centrelink as agent for the Department of Families, Housing, Community Services and Indigenous Affairs, June 2009; Department of Veterans' Affairs, 1 July 2009; Resilience Profiles Survey 2011; on request from Department of Communities.

38. Shelter capacity

Measure: *Number of shelters available during a natural disaster*

The availability of disaster resistant shelters is a measure of community preparedness in a natural disaster. Shelters and evacuation centres can provide accommodation and a range of other services such as counselling, financial support, and food. Shelters have been identified by local government authorities as suitable and designated for use in an emergency.

Data source: Local government, Local Disaster Management Plan, Potential evacuation centres.

39. Institutional facilities

Measure: *Number of people*

- *resident in correctional facilities,*
- *resident in aged care facilities,*

- *resident in boarding schools and*

Sections of the population present different challenges in terms of vulnerability in a natural disaster. If evacuation needs to occur, substantial planning is needed for the transportation and rehousing of large numbers of people safely. This particularly affects aged care facilities, boarding schools and correctional facilities (Cherry, Allen & Galea, 2009).

Data source:

- ABS, Prisoners in Australia, 2011
- Australian Govt, Department of Health and Ageing, 2010
- Australian Boarding School Association, 2011.
- Census of Population and Housing 2006; SAAP Client Collection 2006;

Transport accessibility

40.   Transport limitation

Measure: *Percentage of survey households with a member who experiences transport limitation*

Safe, reliable, affordable transport is a key determinant of people's opportunities to access health services and programs, education and secure employment. It is especially important for the elderly to have access to public transportation. Limitation in regard to transport is related to social isolation and also has a relationship with sedentary lifestyles (CIV, 2006).

Having access to transport is essential for wellbeing, but is also essential for individuals and households if there is need to evacuate or access services and supplies. Transport disadvantage is a term used to describe having difficulty accessing transport due to cost, physical disability or limited availability of services. In Australia, it has also been associated with difficulties maintaining private transport, as we are heavily reliant on cars to travel around (Rosier & McDonald 2011).

Data source: The Resilience Profiles Survey, 2011

41.   Private transport

Measure: *Percentage of survey households whose licensed drivers own or have unlimited access to a private vehicle*

Safe, reliable affordable transport is a key determinant of people's opportunities to access health services and programs, education and secure employment. It is especially important for the elderly to have access to public transportation. Limitation in regard to transport is related to social isolation and also has a relationship with sedentary lifestyles (CIV, 2006).

Having access to transport is essential for wellbeing, but is also essential for individuals and households if there is need to evacuate or access services and supplies. Transport disadvantage is a term used to describe having difficulty accessing transport due to cost, physical disability or limited availability of services. In Australia, it has also been associated with difficulties maintaining private transport, as we are heavily reliant on cars to travel around (Rosier & McDonald 2011).

Data source: Resilience Profiles Survey, 2011

Domain Four: Culturally rich and vibrant communities

Arts and cultural activities

42. Opportunities to participate in arts and cultural activities

Measure: *Percentage of survey respondents who agree or strongly agree that there are enough opportunities in their local areas to participate in arts and related activities*

Art and culture are aspects of community identity and social life. They are integral in forming national identity, community networks and preserving social knowledge. Pursuits involving art and culture such as sculpture, history (museums and historic buildings), music, indigenous culture, mixed media and the like also, provide a social commentary, add interest to our surroundings, and remind us of our heritage. Much of art and culture examines social events and trends, thereby facilitating reflection on societal values (ABS, 2001).

As growth industries, culture and leisure are important to Australia's economic wellbeing. The culture and leisure sector also contributes to economic development through facilitating creativity, innovation and self-reflection (ABS, 2001) (CIV, 2006).

Data source: Resilience Profiles Survey, 2011

43. Participation in arts and cultural activities

Measure: *Percentage of survey respondents who participated in arts and related activities in the last month*

Most types of arts involvement have a social dimension that is an important basis for building social capital and community identity.

> "The arts, through their communicative power, enhance individual engagement with the world in ways that have both personal and public benefits. These effects are instrumental in that they can open people to life and create the fabric of shared values and meanings that improves the public sphere. Collective artistic activity has the potential to provide a forum for voice, affect social change, or promote a community's unique cultural identity. Participation builds social cohesion and connectedness, thereby reducing isolation. Through building a collective identity, event and cultural facilities also build community strength. Community and cultural events provide a range of socially inclusive activities that contribute to overall community wellbeing" (CIV, 2006).

Data source: Resilience Profiles Survey, 2011

Sporting and recreational activities

44. Participation in community or sporting events

Measure: *Percentage of survey respondents who attended a community or sporting event in the last 12 months*

> "This indicator is a measure of participation in the wider community. Participation builds social cohesion and connectedness, thereby reducing isolation. By building a collective identity, event and cultural facilities also build community strength. Community and cultural events provide a range of socially inclusive activities that contribute to overall community wellbeing.

Both culture and leisure activities assist in developing national identity and forming community networks and bonds crucial to social cohesion. Industries associated with culture and leisure are growth industries and are thus important to Australia's economic wellbeing. The culture and leisure sector also contribute to economic development through facilitating creativity, innovation and self-reflection (ABS, 2001) "(CIV, 2006).

Data source: Resilience Profiles Survey, 2011

Cultural diversity

45. Community acceptance of diverse cultures

Measure: *Percentage of survey respondents who agree or strongly agree that it is a good thing for a society to be made up of people from different cultures; and that their local community is welcoming of people from different cultures*

For more than two centuries, the combined effort of immigrants and those born in Australia have helped make one of the world's most successfully diverse societies. Harmony has been a cornerstone of Australia's development as an economically strong and peaceful nation. Migrants have been crucial to building Australia's strong and robust economy, helping to create its national infrastructure, contributing new ideas and technology and fostering local knowledge of other cultures, languages, foods and lifestyles (CIV, 2006).

In a natural disaster framework, people prepare, respond and recover from a disaster in the context of their culture. Acceptance of diverse cultures implies emergency management authorities need to cater for specific needs in engaging with such communities. Education and public awareness, programs and policies may require adaptation. The needs of diverse populations must be integrated into risk communication and community engagement (Andrulis, Siddiqui, Gantner, 2007). Acceptance of diversity and inclusiveness are key values in a community that contribute to the building of social capital (ABS, 2006).

Data source: Resilience Profiles Survey, 2011

46. Faith and spirituality

Measure: *Percentage of survey respondents who have a connection to something outside of themselves, or formal religious beliefs*

Faith and spirituality can incorporate a range of different belief systems that contribute to individual wellbeing; providing additional meaning to life and for some, an extended range of networks and support systems. There is some evidence linking religious belief with enhanced physical and mental health and life satisfaction (Hegney et al., 2008)

The connection between faith, religion and resilience is a complex one however in many cultures spiritual belief could be seen as a sustaining factor in times of crisis. (Mooney, 2010).

Data source: Resilience Profiles Survey, 2011

Values

47. Values

Measure: *a rated list (with one being most important) of the top five values to pass on to the younger generation*

The values that people personally uphold guide how they interact with others and how they build their lives. In a community, values can shape the way that connection happens and how people support and assist each other. Having shared values enables stronger relationships, and often communities of choice are shaped around values. Values are often culturally defined and can change over time depending on social and economic conditions.
Data source: Resilience Profiles Survey, 2011

Domain Five: Democratic and engaged communities

Citizen engagement

48. Participation in community support groups and their activities

Measure: *Percentage of survey respondents who have been actively involved in community support groups or the activities they have organised*

The level of participation in community support groups is an indicator of the level of engagement residents have in their local community. Residents' ability to participate in groups, demonstrates a sense of engagement within their community and their ability to make a difference in the quality of their own life and that of other residents.

"Participation builds social cohesion and connectedness, thereby reducing isolation. By building a collective identity, events and cultural facilities also build community strength. Community and cultural events provide a range of socially inclusive activities that contribute to overall community wellbeing.

Both culture and leisure activities assist in developing national identity and forming community networks and bonds crucial to social cohesion. Industries associated with culture and leisure are growth industries and are thus important to Australia's economic wellbeing. The culture and leisure sector also contribute to economic development through facilitating creativity, innovation, and self reflection" (CIV, 2006).

Data source: Resilience Profiles Survey, 2011

49. Social groups

Measure: *Percentage of survey respondents who in the last 12 months had been actively involved in social groups or taken part in an activity they organised*

Involvement with or membership of formal groups in a social context is an important element of social cohesion. The connections and structure that exists in formal groups could have positive implications for strategies to increase resilience in a disaster context. Established groups have relationships already formed and in times of crisis or change local communities will gravitate towards organisations that they know and trust. Policy makers can tap into these existing resources and build upon them to enhance resilience in communities for disaster preparedness and recover.

Charles Ng (2011) terms this phenomenon "proximity of affection":
> "Proximity of affection — in organisations where friends and family have built strong ties — has been demonstrated to be more important, since people look first to communities they have found historical resonance with for leadership, aid and resources in the face of change".

Data source: Resilience Profiles Survey, 2011

50. Participation in citizen engagement

Measure: *Percentage of survey respondents who participated in civic or political groups and/or associated actions in the last 12 months*

"Citizen engagement is a broad field, which includes a range of activities including public consultation. Citizen or community engagement is about involving the community in the decision making process and is critical in the successful development of acceptable policies and decisions in government, the private sector and the community. In democratic societies, people participate in decision-making and local government processes are transparent and accountable. People then have confidence that government will make good decisions and run for elected positions. Because they are engaged, they feel empowered, that they have personal political efficacy and are in control of their destinies" (The Pew Research Centre for the People and the Press 1998)" (CIV, 2006).

Data source: Resilience Profiles Survey, 2011

51. Membership of local community organisations and decision-making bodies

Measure: *Percentage of survey respondents who are members of a decision-making board or committee*

"In a democratic community, people participate in decision making and local government processes that are transparent and accountable. People run for elected positions and have confidence that government will make good decisions. Because they are engaged, they feel empowered, that they have personal political efficacy and are in control of their destinies. People feel that they have equality before the law and fair and equal access to the justice system" (CIV, 2006).

In times of a natural disaster or other crisis, people go to local clubs and community and religious organisations they know and trust to find support and resources (Ng, 2011). For example, the role of neighbourhood centres in the Brisbane 2010 floods is evidence of the role of local community-based organisations play in providing support and resources for families and individuals in a time of crisis (Caniglia & Trotman, 2011).

Data source: Resilience Profiles Survey, 2011

52. Community leadership

Measure: *Percentage of survey respondents who agree or strongly agree they can identify local community leaders they can trust*

Leadership is integral to community resilience whether it is formal or informal. Good leaders are trusted and have the capacity to adapt their style to achieve shared community goals and changing environments (Hegney et al., 2008). Community leaders can be associated with membership of community organisations and local groups and/or are easily identified by other community members. This is an important resource in a disaster context.

Data source: Resilience Profiles Survey, 2011

Domain Six: Demography

Population size and structure

53. Population change

Measure: *Percentage of average annual population change in the most recent five-year period 2005-2010*

Examining population trends in a community can provide information about the future demands placed on the social and economic infrastructure of a region for local government planning and policy development. Population demographics provide valuable information about what groups make up a particular community for the purpose of disaster mitigation, education and cultural appropriateness.

Data source: ABS, Regional Population Growth, Australia, 2009-10 (cat. No. 3218.0)

54. Population change future

Measure: *Average annual population change from 2007 to 2031 period*

Examining population trends in a community can provide information about future demands on the social and economic infrastructure of a region. Population demographics provide valuable information about what groups make up a particular community for the purpose of disaster mitigation, education and cultural appropriateness.

Data source: ABS, Census of Population and Housing, 2006

55. Age dependency ratio

Measure: *Percentage of people aged 0-14 and 65 and over per 100 people aged 15-64 years*

This measure calculates how many people are economically active in a community, compared with those who are not, using age as a determinant (ABS, 2001). A lower value on the dependency ratio indicates that there are more people of working age to support the dependent population. Areas with a high dependency ratio are often areas where more retirees live. This can impact on the economic capacity and social infrastructure of the community. A high dependency ration requires greater levels of support and services.

Data source: ABS, population by ages and sex, Regions of Australia, 2010.

56. Median age

Measure: *Median age in a local government area*

Queensland's general population is ageing. This trend is projected to increase significantly over the next few decades, which has implications for health, employment, housing, community infrastructure and levels of resilience in the community (ABS, 2010).

Data source: ABS, Census of Population and Housing, 2006

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57. Dependents

Measure: *Percentage of people aged less than 15 years*

A dependent, as defined by this measure, is a person under the age of 15 living in a household. Dependents can be a measure of vulnerability in a community, but also a measure of the potential for the future.

Data source: ABS, Population by Age and Sex, Australian states and territories

58. Gender

Measure: *Ratio of men/women*

Statistics on gender in a community can help us to understand a range of issues regarding how gender can affect employment, participation in community, families, health, volunteering and general wellbeing.

Data source: ABS, Census of Population and Housing, 2006

Population stability

59. Residual Net Migration

Measure: *Difference between total population change and natural increase*

This indicator looks at the difference between how many people have moved in and out of an area by changing their usual place of residence. This can help to understand how stable a community is in population terms. A natural increase is births minus deaths.

Changing homes affects community connections. Contact with former friends and acquaintances may be disrupted and broken and new associations are typically formed with others in the new neighbourhood. The length of time spent living in a community is considered to influence the number of ties with others in that community and the strength of those ties. Levels of social and civic participation are also likely to be higher among long-term residents of a community (ABS Aspects of Australia's social capital 2006).

Data source: ABS, Census of Population and Housing 2006.

60. Youth retention (18-24 year olds)

Measure: *Net inflow migration (18-24 year olds) as a percentage of the population aged 18-24 years*

A significant element of an ageing population in many communities has been the loss of young people. This is particularly significant in rural and regional areas where the trend is for young people to leave for education and employment opportunities. This can impact on the sustainability and wellbeing of communities.

Data source: ABS, Census of Population and Housing, 2001

61. Turnover

Measure: *Sum of arrivals and departures as a percentage of beginning (or end) of year population; length of time lived in the community*

This indicator looks at the number of people moving into an area compared with the number moving out of the area over a twelve month period, in relation to the total population in a community. An individual's connection to their community can be indicative of their commitment to stay and rebuild after a major natural disaster and assist the community return to its former wellbeing.

Changing homes affects community connections. Contact with former friends and acquaintances may be disrupted and broken and new associations are typically formed with others in the new neighbourhood. The length of time spent living in a community is considered to influence the number of ties with others in that community and the strength of those ties. Levels of social and civic participation are also likely to be higher among long-term residents of a community. (ABS Aspects of Australia's social capital 2006)

Data source: ABS, Census of Population and Housing; Resilience Profiles Survey, 2011

62.   Temporary population (tourists)

Measure: *Visitors as a percentage of total population*

Understanding the numbers of visitors to an area is important for communities, as it can put pressure on services and infrastructure. However it can also bring economic benefits to a community through tourism and seasonal workers. In a disaster context, it can help in preparation and planning around shelter and housing, transport and social issues.

Data source: data unavailable at this time

Diversity

63.   Aboriginal and Torres Strait Islander

Measure: *Percentage of population who identify as Aboriginal and/or Torres Strait Islander*

To ensure that communities reflect the diversity within them and that programs and policies are inclusive and culturally appropriate, it is important to know how many Aboriginal and Torres Strait Islander people are living in an area. It is important in a disaster context to ensure that information and programs are culturally appropriate and respectful, and that the local knowledge of Aboriginal groups is valued and accessed.

Data source: ABS, Census of Population and Housing, 2006.

64.   Born overseas

Measure: *Percentage of the population born overseas*

Understanding the cultural diversity and heritage that is in a community can contribute to resilience through the celebration of difference. Within a disaster framework it is important to understand that people prepare, respond and recover from challenges in the context of culture and that any programs and policies developed need to reflect this (Andrulis, Siddiqui, Gantner, 2007).

Data source: ABS, Census of Population and Housing, 2006

65.   Language other than English

Measure: *Percentage of the population with language other than English*

In preparation for natural disasters, planning authorities need to be aware of the linguistic needs of its community. Community engagement materials need to be produced in a range of languages suitable to particular demographic requirements.

Data source: ABS, Census of Population and Housing, 2006

66. Family Structure

Measure: *Percentage of survey households identifying as a particular family structure*

Information about family structures in a community can provide an indication of levels of connectedness or barriers to access of services.

Data Source: Resilience Profiles Survey, 2011

Income Support and Concessions

Evidence shows that individuals and households receiving income support payments struggle to meet the basic cost of living and can experience significant financial stress (QCOSS, 2011). This can impact on their capacity to be involved in their community, and be prepared for natural disaster.

67. Age pension

Measure: *Percentage of males aged 65 years and over and females aged 63 years and over receiving aged pension*

Data Source: Compiled by PHIDU using data from Centrelink as agent for the Department of Families, Housing, Community Services and Indigenous Affairs, June 2009; Department of Veterans' Affairs, 1 July 2009

68. Disability support pensioner

Measure: *Percentage of males aged 16-64 and females aged 16-62 receiving the disability support pension*

Data Source: Compiled by PHIDU using data from Centrelink as agent for the Department of Families, Housing, Community Services and Indigenous Affairs, June 2009; Department of Veterans' Affairs, 1 July 2009

69. Single parent payment

Measure: *Percentage of females aged 15-54 receiving single parent payment*

Data Source: Compiled by PHIDU using data from Centrelink as agent for the Department of Families, Housing, Community Services and Indigenous Affairs, June 2009; Department of Veterans' Affairs, 1 July 2009

70. Health Care Card holders

Measure: *Percentage of people aged 0 to 64 years with a Health Care Card*

Data Source: Compiled by PHIDU using data from Centrelink as agent for the Department of Families, Housing, Community Services and Indigenous Affairs, June 2009; Department of Veterans' Affairs, 1 July 2009

71. Pension concession card holders

Measure: *Percentage of people aged 15 years and over with a pension concession card*

Data Source: Compiled by PHIDU using data from Centrelink as agent for the Department of Families, Housing, Community Services and Indigenous Affairs, June 2009; Department of Veterans' Affairs, 1 July 2009

Conclusion

The project's key research question—what links exist between socio-economic disadvantage and community resilience in the context of disaster recovery—found very little evidence of such links in the community survey. Indeed, the only statistically significant outcome from correlating personal income with all questions in the survey was in relation to Q25: "How safe or unsafe do you feel walking in your community after dark?" Some 70 percent of those in the highest income brackets felt very safe or safe whereas only 25 percent in the lowest two income brackets agreed. With no other statistically significant correlations between personal income and the diversity of questions posed in this survey, there is little conclusive evidence from the survey's findings that personal income levels affect a community's levels of resilience. While acknowledging that each of the three sites survey respondent samples reflected below average personal income levels characteristic of each area's SEIFA scores, it would also be a mistake to infer that lower incomes were more likely to strengthen a community's levels of resilience.

What ought to be emphasised from the survey's findings is that socio-economic status (SES) may be less of a factor in assessing a community's levels of resilience than might be assumed or presumed. It is often assumed for example that education levels have a link with resilience and ability to cope in the face of disaster. Again, there were no statistically significant correlations between levels of education and other variables in this project's community survey to warrant such an assumption.

It is also important to note that the community survey never sought to undertake a thorough comparative analysis of findings between each of the three sites. Although some responses to particular questions clearly differed between sites, the main objective of the survey was to assess and measure characteristics thought to contribute to community resilience. As such there was very little to be gained in assessing whether Chinchilla was more or less resilient than the Tablelands or Rockhampton for example, with the concept so broadly defined and interpreted.

What should be most evident from the community survey is that it provides more solid empirical evidence of the multiple dimensions that contribute to assessing any community's levels of resilience. Documentation above about how the survey was composed together with indicator rationales that also affect choice of questions draws attention to the importance of including as many components impacting on such a broad concept as resilience, especially how it plays out at a local community level. Hence, the principal purpose of implementing the community survey was to assess how useful it was as a tool in assessing a community's resilience, rather than to focus on any single dimension's (e.g. SES) capacity to impact on community resilience. Indeed, if any of the community survey responses ought to be prioritised, it could be argued that these are most evident in the Qualitative Survey Questions (summary tables above on pp 21) which asked directly about community resilience.

The project also sought to broaden horizons of what might be considered when assessing a community's resilience. As the literature review highlighted, measuring community resilience to date has overwhelmingly focused on resilience in relation to natural disasters, particularly response vis-à-vis preparation. But communities can obviously have resilient characteristics unrelated to their preparedness or response to natural disasters.

Consequently, the project has been determined to assemble as much secondary data as possible to complement the community survey and focus groups, to further enable communities *themselves* to gain a more comprehensive picture of what is going on locally. Of course, not all of this data is likely to equally contribute to how a community may assess its own resilience, but its breadth and depth ought to facilitate a more engaging and thorough

process to help communities track their progress and respond proactively to changes and challenges.

If the project has an overall ambition then, it is to try to help communities to assess resilience at a local community level as comprehensively as possible. Much was heard in each site in initial meetings and subsequent focus groups about what characteristics contributed to each community's sense of resilience, but the project was acutely conscious of directing such discussion to the key research question of "How would you know that this community is resilient?" Clearly, there must be some evidence in the form of indicators if such claims are to be substantiated but this process cannot be restricted to existing social data that profiles a community's demography – it is obliged to ask more specific questions about what contributes to or diminishes a community's resilience. Some of these questions found an apt home in the form of the community survey; others were readily canvassed through qualitative assessment in focus groups and open-ended discussion. These questions took on an extra resonance in the face of an extraordinary summer of flood disasters just prior to the commencement of this project. The experience of undertaking this project in each of the three sites was that the fundamental trait of having communities be the principal drivers of measuring and assessing their resilience is the ultimate key to sustaining such measures. In turn, sustaining such measures is not possible without a baseline community capacity to plan and respond appropriately, whether it be in the face of natural disasters or other challenges.

Key lessons

Methodology
Resource limitations ensured that the resilience profiles project was limited to the exploration of how community resilience can be measured through community indicators in three pilot areas. A significant part of this exploration was engaging in a flexible methodology and process to develop appropriate indicators of measurement. A paper survey was decided upon after considerable consultation with expert stakeholders as the best available option to collect new data given the limited resources. This approach created some issues in terms of the capacity to make broader assumptions about the population from the results of the survey. A state-wide approach to measuring community resilience would need to embrace a more resource intensive approach such as computer assisted telephone interviewing (CATI). This approach would allow data to be collected that was statistically reliable, less time intensive and enable a significant sample population to be engaged in responses so that data collected through the survey draw broader assumptions about the general community. Another significant methodological challenge as outlined in detail earlier in this report was identifying those aspects of community resilience that were measurable in the form of a survey vis-à-vis more qualitative assessment tools. It is strongly recommended that future attempts to measure community resilience continue to utilise multiple methodologies, particularly for a concept that continues to be interpreted in increasingly varied ways.

Website
The extensive development of the Community Resilience Queensland website was reliant on two key factors; the use of the existing CIV site format and content; and the internal support and expertise of QCOSS Information Technology staff. The integral nature of the website to the dissemination of the project results became more evident as the project progressed. Its role is much more central than was initially anticipated in the original proposal. It became clear that a public repository for the data contained within the resilience profiles was required, as well as a mechanism for ongoing engagement and interaction with the pilot communities.

A critical component of a more comprehensive statewide approach to measuring community resilience requires significantly more investment in website development and maintenance, including interactive technologies and ongoing promotion and sustainability.

Engaging Indigenous Communities
The project did not include a discrete Indigenous community as one of the trial sites. The project workers attempted to engage with and include Indigenous organisations and groups in the focus groups in each community with some success. Limited time and resources within the scope of the project impeded the appropriate relationship building processes and protocols. The methodology and process used by the project, was not necessarily appropriate for Aboriginal and Torres Strait Islander groups, especially the administration of the community survey. Using a paper survey, reliant on postal access, limited the scope of respondents on a number of levels.

Ultimately it was decided that the scope and level of engagement required for working with Indigenous communities was a specific piece of work, needing different resources and processes not available through the resilience project. Indigenous communities, particularly in Far North Queensland, are vulnerable to natural disasters, and it is important to recognise the unique resilience characteristics of Aboriginal and Torres Strait Islander communities. Further study of community resilience would benefit greatly from engaging a discrete Indigenous community, as well as targeting Indigenous people, community groups and service providers as a sub population group within disaster affected communities. While the broad principles of participatory action research are relevant to Indigenous communities there are some specific considerations that need to be taken into account in planning for

engagement. It requires locally tailored processes to facilitate community participation. This needs to be designed and resourced appropriately.

Scope of research

The research question sought to test whether socio-economic disadvantage was a key factor in community resilience to disaster. Although the project found little direct evidence of a link, it did reinforce the multidimensional aspects of poverty and disadvantage, and the complexity of community resilience as a concept. This is especially evidenced by the rich stories and data that emanated from the focus groups. The project provides a significant starting point to engage in a more comprehensive state wide initiative to measure resilience across communities in Queensland. This approach can utilise the learnings from the pilot project to more full capture the complexity of the interplay of factors that impact on and contribute to community resilience.

A way forward

Linkages

The project adds to the knowledge base regarding community resilience in Queensland. Climate change experts predict that the natural disasters will increase in frequency and severity. The ability of communities to measure and assess their resilience can sustain and build their capacity to plan and respond to natural disasters or other challenges. Policy makers need to consider the individual, community and cost benefits of the broader application of community resilience measures across Queensland as a key plank in disaster preparedness and recovery.

A key factor in locality based responses in the range of natural disasters across Queensland in 2010/11 was Neighbourhood and Community centres (Caniglia, 2011). There are significant links between the range of human and social factors contributing to resilience and the social capital benefits associated with neighbourhood centres. They have the capacity to provide both immediate response and recovery efforts in the event of a significant disaster, as well as more broadly building capacity and resilience in local communities. There were many examples in the flooding and cyclone of the summer of 2010/11 where neighbourhood and community centres were able to draw upon their existing local knowledge and networks to respond to vulnerable community members, mobilize and manage volunteers, distribute emergency assistance and relief and provide a base for information (Caniglia 2011).

QCOSS continues to support an enhanced and legitimate role for neighbourhood centres in managing natural disasters. Although much of their core business is working with vulnerable communities and individuals, they are flexible enough to provide a critical whole of community resource in recovering from recent natural disasters in Queensland. The flexibility and resourcefulness of Neighbourhood Centres exemplify the strong community spirit and leadership so eloquently described through the focus groups as a key factor in community resilience.

QCOSS also continues to be an active supporter of the development of Community Indicators Queensland (CIQ), actively participating in its steering committee and working groups to ensure that local community indicators can be developed, implemented and assessed in close collaboration with local communities across Queensland. The importance of this project in sharpening conceptualisation and application of community resilience indicators is a vital contribution to the development of the CIQ initiative.

[i] Wilding, N. (2011). Exploring community resilience in times of rapid change. Fife, Fiery Spirits Community of Practice

[ii] http://statistics.oesr.qld.gov.au/qld-regional-profiles

[iii] To view a copy of the survey questionnaire see Appendix C*.
 To view the complete survey review see Appendix B*.

[iv] Note: These programs are not related to disaster relief. The programs are available at all times for individuals and families to access in times of personal financial hardship or emergency.

[v] http://www.health.qld.gov.au/epidemiology/documents/srhs11-mh.pdf

[vi] The WHOQOL Group. Development of the World Health Organisation WHOQOL-BREF quality of life assessment. Psychological Medicine 1998;28:551-558

[vii] Ware Jr J, Kosinski M, Bandek B. *SF-36® Health Survey: manual and implementation guide*. Lincoln, RI: Quality Metric Incorporated; 2000.

[viii] Jenkinson C, Wright L, Coulter A. Criterion validity and reliability of the SF-36 in a population sample. *Qual Life Res* 1994; 3:7-12.

[ix] McHorney CA, Ware JE, Jr., Lu JF, Sherbourne CD. The MOS 36-item Short-Form Health Survey (SF-36): III. Tests of data quality, scaling assumptions, and reliability across diverse patient groups. *Med Care* 1994; 32:40-66.

[x] McHorney CA, Ware JE, Jr., Raczek AE. The MOS 36-Item Short-Form Health Survey (SF-36): II. Psychometric and clinical tests of validity in measuring physical and mental health constructs. Med Care 1993; 31:247-263.

[xi] Skevington SM, Lotfy M, O'Connell KA. The World Health Organization's WHOQOL-BREF quality of life assessment: psychometric properties and results of the international field trial. A report from the WHOQOL group. *Qual Life Res* 2004; 13:299-310.

[xii] Saxena S, Carlson D, Billington R. The WHO quality of life assessment instrument (WHOQOL-Bref): the importance of its items for cross-cultural research. *Qual Life Res* 2001; 10:711-721.

[xiii] Dillon J. Social Capital Index©: Curtin University, WA; 2001.

[xiv] For each item in the domain, participants rated whether they agree with a statement on a five-point scale ranging from *strongly agree* to *strongly disagree*. A domain score is calculated from the items using formulae provided by the developer. Domain scores range from 1 to 5.

[xv] Strongly agree or agree

[xvi] Kessler RC, Andrews G, Colpe LJ, Hiripi E, Mroczek DK, Normand S-LT, et al. Short screening scales to monitor population prevalences and trends in non-specific psychological distress. *Psychological Medicine* 2002; 32:959-976.

[xvii] Kessler RC, Andrews G, Colpe LJ, Hiripi E, Mroczek DK, Normand S-LT, et al. Short screening scales to monitor population prevalences and trends in non-specific psychological distress. *Psychological Medicine* 2002; 32:959-976.

[xviii] Australian Bureau of Statistics. *Information paper: use of the Kessler psychological distress scale in ABS health surveys, 2001*. Cat. No. 4817.0.55.001. ABS: Canberra; 2003

[xix] See:
http://www.abs.gov.au/AUSSTATS/abs@.nsf/Latestproducts/A390E2529EC00DFECA25720A0076F6C6?opendocument

References and Bibliography

Aldrich, D. (2010). "Fixing Recovery: Social Capital in Post-Crisis Resilience". Journal of Homeland Security: June.

Anderson-Berry, L. & King, L. (2005 "Mitigation of the effect of tropical cyclones in northern Australian through community capacity enhancement." Mitigation and Adaptation Strategies for Global Change 10: 367-392.

Andrulis, D., Siddiqui, N., & Gantner, J. (2007). *Preparing Racially And Ethnically Diverse Communities For Public Health Emergencies,* Health Affairs, 26:5, pp1269-1279.

Apan, A.; Keogh, D.; King, D.; Thomas, M.; Mushtaq, S.; Baddiley, P. (2010) The 2008 floods in Queensland: A case study of vulnerability, resilience and adaptive capacity. Report for the National Climate Change Adaptation Research Facility, Gold Coast, Australia.

Austin, T., Shoemark, S., Stokes, S., Stone, S., & Terril, A. (2001) *Part 1-Developing A Draft Set of Sustainability Indicators for the Shire of Cardinia,* Graduate School of Environmental Science, Monash University November 2001.

Australian Bureau of Statistics (2010). 1370.0 - Measures of Australia's Progress. Retrieved from http://www.abs.gov.au/ausstats/abs@.nsf/Lookup/by%20Subject/1370.0~2010~Chapter~Housing%20affordability%20for%20home%20buyers%20(5.4.4)

Australian Bureau of Statistics (2006) 2039.0 - Information Paper: An Introduction to Socio-Economic Indexes for Areas (SEIFA). Retrieved from http://www.abs.gov.au/ausstats/abs@.nsf/Latestproducts/2039.0Main%20Features32006?opendocument&tabname=Summary&prodno=2039.0&issue=2006&num=&view=

Australian Bureau of Statistics (2006), 4911.0, Aspects of Social Capital Australia. Retrieved from http://www.ausstats.abs.gov.au/ausstats/subscriber.nsf/0/DAD0CFD697AE9B25CA2571AD0082E1C6/$File/49110_2006%20(Reissue).pdf

Australian Bureau of Statistics (2002) "Australian Social Trends 2002". Retrieved from http://www.abs.gov.au/AUSSTATS/abs@.nsf/Previousproducts/0A02678DB58E9564CA2570EC000B51B6?opendocument

Australian Bureau of Statistics (2010) "Australian Social Trends 2010". Retrieved from http://www.abs.gov.au/AUSSTATS/abs@.nsf/Previousproducts/4102.0Main%20Features1Jun%202010?opendocument&tabname=Summary&prodno=4102.0&issue=Jun%202010&num=&view=

Australian Bureau of Statistics (2009). ANZSCO – Australian and New Zealand Standard Classification of Occupations, First Edition, Revision 1, 1220.0. Retrieved from http://www.abs.gov.au/ausstats/abs@.nsf/Latestproducts/1220.0Contents0First%20Edition,%20Revision%201?opendocument&tabname=Summary&prodno=1220.0&issue=First%20Edition,%20Revision%201&num=&view=

Australian Bureau of Statistics (2001). 1272.0 - Australian Standard Classification of Education (ASCED) Retrieved from http://www.abs.gov.au/ausstats/abs@.nsf/mf/1272.0

Australian Bureau of Statistics (2001) "Measuring wellbeing: Frameworks for Australian Social Statistics" retrieved at http://www.abs.gov.au/ausstats/abs@.nsf/mf/4160.0

Australian Bureau of Statistics (2003) Estimating Workplace Growth from Work Cover Data (cat. no. 1367.2 September Qtr 2003). Retrieved from http://www.ausstats.abs.gov.au/ausstats/subscriber.nsf/0/48BEBCED389CCFB7CA256DD400764F23/$File/13672_sep%202003.pdf

Australian Government, Department of Families, Housing, Community Services and Indigenous Affairs (2011). Retrieved from http://www.facs.gov.au/sa/communities/progserv/pages/emergencyreliefprogram.aspx

Australian Government, Australian Social Inclusion Board (2009), Building Inclusive and Resilient Communities. Retrieved from http://www.socialinclusion.gov.au/sites/www.socialinclusion.gov.au/files/publications/pdf/building-community-resilience-brochure.pdf

Bacon, N. and Mguni, N. (2010) Taking the temperature of local communities. The wellbeing and resilience measure: WARM. The Young Foundation. www.youngfoundation.org

Bastian, A. (Ed.) (2000). Monitoring Outcomes, Achieving Goals: *A practical guide for using community indicators to monitor the strategic directions of a local government area or region.* City of Onkaparinga, South Australia. Retrieved at http://www.aisr.adelaide.edu.au/cio/guide/

Bow, V., & Buys, L., (2003). Sense of Community and place attachment: the natural environment plays a vital role in developing a sense of community. Paper presented at the Social Change in the 21st Century Conference, Brisbane.

Buckle, P. and E. Coles (2004). "Developing community resilience as a foundation for effective disaster recovery." The Australian Journal of Emergency Management 19(4): 6-15.

Bushnell, S. and A. Cottrell (2007). "Increasing community resilience to bushfire - implications from a north Queensland community case study." The Australian Journal of Emergency Management 22(2): 3-9.

Caniglia, F. (2011) Strengthening People and Places: the role and value of community and neighbourhood centres. Compiled on behalf of Benawarra Community Development Association, Sherwood Neighbourhood Centre, Acacia Ridge community Support Inc, Yeronga Flood Recovery Centre, Communify and New Farm Neighbourhood Centre. West End Community House, Brisbane, retrieved at http://www.westendcommunityhouse.org.au/2011/12/strengthening-people-and-places/

Caniglia, F. & Trotman, A. (2011). A Silver Lining: Community Development, crisis and belonging-Exploring the role of community development in Queensland's recovery from the January 2011 floods. Under 1 Roof, Brisbane.

Cherry, K., Allen, P., & Galea, S. (2009). Older Adults and Natural Disasters: lessons learned from hurricanes Katrina and Rita, Ch 8. P115-130. In Dass-Brailsford. P. (Ed.). Crisis and disaster counselling**:** lessons learned from Hurricane Katrina and other disasters. Sage, New York.

Council of Australian Governments (COAG). (2009). National Strategy for Disaster Resilience: Building our nation's resilience to disasters, accessed at: http://www.coag.gov.au/coag_meeting_outcomes/2011-02-13/docs/national_strategy_disaster_resilience.pdf

Community Indicators Victoria (CIV) (2007) Metadata, Retrieved from http://www.communityindicators.net.au/indicator_metadata

Connolly, C., Georgouras. M., Hems, L., & Wolfson, L. (2011) *Measuring Financial Exclusion in Australia,* Centre for Social Impact (CSI), University of New South Wales, for National Australia Bank.

Crompton, R. & McAneney, J. (2008), The cost of natural disasters in Australia: the case for disaster risk reduction, The Australian Journal of Emergency Management, Vol. 23, No. 4.

Cutter, S. L., L. Barnes, et al. (2008). "A place-based model for understanding community resilience to natural disasters." Global Environmental Change 18(4): 598-606.

Cutter, S.L., B.J. Boruff, and W.L. Shirley. (2003). "Social Vulnerability to Environmental Hazards."*Social Science Quarterly*84(1): 242-261.

Cutter, S.L., Barnes, L., Berry, M., Burton, C., Evans, E., Tate, E., Webb, J. (2008). Community and Regional Resilience: Perspectives from hazards, disasters and emergency management. Community and Regional Resilience Initiative (CARRI), Research Report 1, Hazards and Vulnerability Research Institute, Dept of Geography, University of South Carolina.Cutter, S.; Burton, C.; Emrich, C. (2010). "Disaster resilience indicators for benchmarking baseline conditions." Journal of Homeland Security and Emergency Management, Vol 7, Issue 1, Article 51.

Dale, A., Vella, K., Cottrell, A., Pert, P., Stephenson, B., King, D., Boon, H., Whitehouse, H., hill, R., Babacan, H., Thomas, M. and Gooch, M. (2011). Conceptualising, evaluating and reporting social resilience in vulnerable regional and remote communities facing climate change in tropical Queensland. Marine and Tropical Sciences Research Facility (MTSRF) Transition Project Final Report. Reef and Rainforest Research Centre Limited, Cairns.

Daly, M.; Becker, J.; Parkes, B.; Johnston, D.; Paton, D. (2009) Defining and measuring community resilience to natural disasters: a case study from Auckland, Tephra.

Dwyer, A. (2005). Chapter 6: Community Recovery, in 'Natural Hazard Risk in Perth, WA'. Canberra, Geoscience Australia

Eldar, R., (1992). *The Needs of Elderly Persons in Natural Disasters: Observations and Recommendations,* Disasters. Volume 16, Issue 4 p157-73.

Emergency 2.0 Wiki: Sharing and Advancing knowledge on Emergency Communications in the Digital Age (nd). Retrieved at http://emergency20wiki.org/

Flanagan, B. E. , Gregory, E. W. , Hallisey, E. J. , Heitgerd, J. L. , & Lewis, B. . (2011). "A Social Vulnerability Index for Disaster Management". *Journal of Homeland Security and Emergency Management, 8*(1), 22.

Freebairn, J. (2005). Opinion. Melbourne Institute News. September 2005. Melbourne Institute of Applied Economic and Social Research. Issue 9.

Gardner, I., Brooke, E., Ozanne, E., & Kendig, H. (1998). Improving Health and social isolation in the Australian Veteran Community: Research findings from the Improving Social Networks Study. Prepared for the Commonwealth Department of Veterans Affairs. Retrieved at http://www.dva.gov.au/aboutDVA/publications/social_research/Pages/Improving_Social_Networks_Study.aspx

Hawe, P. (2009). Community Recovery after the February 2009 Victorian bushfires: an evidence check rapid review. Brokered by the Sax Institute (http://www.saxinstitute.org.au) for the Public Health Branch, Victorian Government Department of Health, Melbourne.

Hegney, D., Ross, H., Baker, P., Rogers-Clark, C., King, C., Buikstra, E., Watson-Luke, A., McLachlan, K., & Stallard, L.(2008). Building Resilience in Rural Communities Toolkit. Toowoomba, Queensland: The University of Queensland & University of Southern Queensland.

Heine, W., Langworthy, A., McLean, N., Pyke, J., Raysmith, H., & Salvaris, M. (2006) Measuring Wellbeing Engaging Communities, Developing a Community Indicators Framework for Victoria: The final report of the Victorian Community Indicators Project, Melbourne: Institute of Community Engagement and Policy Alternatives (ICEPA), Victoria University.

Higgs, P., Cunningham,S., Pagan, J. (2007) *Australia's Creative Economy: Definitions of the Segments and Sectors,* ARC Centre of Excellence for Creative Industries & Innovation (CCI), Brisbane.

Izmir, G., Katz, I., Bruce, J. (2009) Neighbourhood and Community Centres: results for children, families and communities. Social Policy Research Centre, University of New South Wales, Sydney.

King, D. and C. MacGregor (2000). "Using social indicators to measure community vulnerability to natural hazards." The Australian Journal of Emergency Management Spring: 52-57.

Lawrence Consulting (2008). Retrieved from www.lawrenceconsulting.com.au

Lindsay, B. (2011). Social Media and Disasters: Current Uses, Future Options, and Policy Considerations. Congressional Research Service Report for Congress. Retrieved from http://www.fas.org/sgp/crs/homesec/R41987.pdf

Liebmann, M., Pavanello,S. (2007), 'A critical review of the Knowledge and Education Indicators of Community-Level Disaster Risk Reduction'. Unpublished report for the Benfield UCL Hazard Research Centre. Retrieved from http://www.benfieldhrc.org/disaster_studies/projects/communitydrrindicators/community_drr_indicators_index.htm

Magis, K. (2010). "Community Resilience: An Indicator of Social Sustainability." Society & Natural Resources 23(5): 401-416.
    Maguire, B.; Cartwright, S. (2008): Assessing a community's capacity to manage change: A resilience approach to social assessment. Canberra: Bureau of Rural Sciences.

Maybery, D., Pope, R., Hodgins, G., Hitchenor, Y. & Shepherd, A. (2009). "Resilience and well-being of small inland communities: community assets as key determinants." Rural Society 19(4): 326-339.

Mayunga, J.S. (2007), 'Understanding and applying the concept of community disaster resilience: a capital-based approach' (Draft Working Paper), *Summer Academy for Social Vulnerability and Resilience Building*, Munich, Germany, 22-28 July 2007.

McDonald, M., (2011). Social exclusion and social inclusion: Resources for child and family services, Australian Institute of Family Studies, May 2011, 10 pp. [ISSN 1838-7349]. Retrieved from http://www.aifs.gov.au/cafca/pubs/sheets/rs/rs3.html

Mensah, G.A., Mokdad, A.H., Posner, S.F., Reed, E., Simoes, E.J., Engelgau, M.M., (2005), When Chronic Conditions Become Acute: Prevention and Control of Chronic Diseases and Adverse Health Outcomes During Natural Disasters, Chronic Diseases and Vulnerable Populations in Natural Disasters Working Group. Preventing Chronic Disease, 2(Special Issue): A04. Published online 2005 October 15. Retrieved from http://www.ncbi.nlm.nih.gov/pmc/articles/PMC1459465/

Morrow, B. H. (2008). Community Resilience: a social justice perspective. Community And Regional Resilience Institute (CARRI), Research Report 4.

Ng, C. (2011). *National Resilience: Developing a Whole-of- Society Response,* Ethos, Issue 10, Retrieved from http://www.cscollege.gov.sg/cgl/pub_ethos_13f1.htm.

Norris, F.; Stevens, S.; Pfefferbaum, B.; Wyche, K.; Pfefferbaum, R. (2008). "Community Resilience as a Metaphor, Theory, Set of Capacities and Strategy for Disaster Readiness." American Journal of Community Psychology 41(1): 127-150.

Organisation for Economic Co-operation and Development (OECD). (2005) Society at a Glance: OECD Social Indicators—2005 Edition, p. 82. Retrieved from http://www.oecd-ilibrary.org/docserver/download/fulltext/8105031ec008.pdf?expires=1329886235&id=id&accname=guest&checksum=D5FF6A3CADF5354AFA26301659B2B271

Onyx, J. and Bullen, P. (1997), *Measuring Social Capital in Five Communities in NSW: An Analysis,* Working Paper No. 41, Centre for Australian Community Organisations and Management, University of Technology, Sydney.

The Pew Research Center for the People and the Press (1998), *How Americans View Government: Deconstructing Distrust*, Retrieved from http://www.people-press.org/files/legacy-pdf/Trust%20in%20Gov%20Report%20REV.pdf

Pinstrup-Andersen, P., *Food security: definition and measurement*, Food Security, Vol 1, No. 1.

QCOSS (2011). Cost of Living Report 2011: Ensuring low income households a basic standard of living.

QCOSS (2011). QCOSS Submission to the Queensland Floods Commission of Inquiry. Brisbane, Queensland Council of Social Services.

Queensland Government, Department of Public Works (2010) Disaster Resilience: Cyclone Shelters. Retrieved from http://www.works.qld.gov.au/tdd/safe_build/cyclone-shelter.asp

Queensland Government, *Queensland Treasury,* Office of Economic and Statistical Research, (2011) *Queensland Regional Profile. Retrieved from http://statistics.oesr.qld.gov.au/qld-regional-profiles*

Rooney, D (2011) Centres 'Down Under': mapping Australia's neighbourhood Centres and learning, Australian Journal of Adult Learning, Volume 51 (2), 203-255.

Rosier,K., & McDonald, M., (2011). *The relationship between transport and disadvantage in Australia,* Australian Institute of Family Studies. Retrieved from http://www.aifs.gov.au/cafca/pubs/sheets/rs/rs4.pdf

Seymoar, N. (2007). Strengthening Community Resilience. International Centre for Sustainable Cities. Retrieved from http://sustainablecities.net/docman-resources/cat_view/110-resources/99-resiliency

Twigg, J. (2007). Characteristics of a Disaster-Resilient Community: A Guidance Note, Version 1. For the Department For International Development (DFID) Disaster Risk Reduction Interagency Coordination Group.

Wilding, N. (2011). Exploring community resilience in times of rapid change. Fife, Fiery Spirits Community of Practice.

Appendix A

Tablelands Regional Council Local Government Area (TRC LGA) Community Resilience Indicators

Indicator	Key result	Source
Domain One: Healthy, safe and inclusive communities		
Personal health and wellbeing		
People with a disability	4.7% of the TRC LGA population has a sensory, physical or intellectual disability.	Queensland Regional Profiles, Office of Economic and Statistical Research, Queensland Treasury, 2012
Subjective wellbeing	79.3% of TRC LGA survey participants agree or strongly agree that they are satisfied with their life as a whole	Resilience Profiles Survey 2011
Vulnerability	35.8% of TRC LGA survey households have a person requiring assistance or supervision.	Resilience Profiles Survey 2011
	70.4% of TRC LGA survey households contained an old or young person who is vulnerable.	
Perceptions of support	78.2% of TRC LGA survey respondents could ask someone for advice	Resilience Profiles Survey 2011
Community Connectedness		
Social support	81.3% of TRC LGA survey participants could ask a family member for support	Resilience Profiles Survey 2011
Volunteering	18.5% of TRC LGA survey respondents had provided unpaid help to a religious organisation.	Resilience Profiles Survey 2011
Helping others in the community	48.2% of TRC LGA survey respondents provided transport or ran errands for someone	Resilience Profiles Survey 2011
	64.9% of TRC LGA survey respondents gave help to a friend.	
Interaction with neighbours	49.1% of TRC LGA survey respondents would leave a key with a neighbour if they went away	Resilience Profiles Survey 2011
	73.3% of TRC LGA survey respondents have a neighbour's phone number	
	88.7% of TRC LGA survey respondents would contact a neighbour if the respondent needed assistance	
	92.1% of TRC LGA survey respondents would ask a neighbour if they needed assistance	
Social isolation	86.5% of TRC LGA survey respondents visited or were visited by a friend in the last month.	Resilience Profiles Survey 2011
Trust in local community	74.1% of TRC LGA survey respondents agreed or strongly agreed that they could trust most of their neighbours	Resilience Profiles Survey 2011
	56.1% of TRC LGA survey respondents felt safe or very safe walking in their community after dark	
Stability of resident population	Length of time spent living in current community	Resilience Profiles Survey 2011
	Less than a year — 7.6%	
	1-less than 3 years — 9.5%	
	3-less than 6 years — 15.5%	

Indicator	Key result		Source
	6-less than 10 years	12.3%	
	More than 10 years	55.2%	
Social media	41.9% of TRC LGA survey respondents do not use Facebook		Resilience Profiles Survey 2011
	98.4% of TRC LGA survey respondents do not use Twitter		
	17.9% of TRC LGA survey respondents use YouTube once a month or less.		
	90.2% of TRC LGA survey respondents do not use weblogs		
	8.1% of TRC LGA survey respondents use internet forums once a month or less		
	34.8% of TRC LGA survey respondents use email several times a day		
	13.3% of TRC LGA survey respondents use instant messaging several times a day		
	14.1% of TRC LGA survey respondents use Skype once a month or less		
	6.2% of TRC LGA survey respondents use other social media once a day		
Lifelong learning			
Home internet access	63.3% of TRC LGA survey households have a broadband internet connection		Resilience Profiles Survey 2011
Vocational education and training students	TRC LGA has 3,602 vocational education and training students.		Queensland Regional Profiles, Office of Economic and Statistical Research, Queensland Treasury, 201
Service availability			
Service availability	32.8% of TRC LGA survey households had a member who found it difficult to access medical services because transport or distance		Resilience Profiles Survey 2011
Community development programs	Data not available at this time		Dept of Communities, Child Safety and Disability Services,
Neighbourhood Centres	TRC LGA has 6 neighbourhood/community centres.		QCOSS; Dept of Communities, Child Safety and Disability Services, 2011
Domain Two – Dynamic resilient local economies			
Economic Activity			
Economic diversity	The TRC LGA region has an economic diversity rating of .579 compared to Queensland being 1.		The Regional Index of Economic Diversity Lawrence Consulting, 2011
Retained retail spending	22.6% of TRC LGA survey respondents chose 'locally produced/owned' as a major factor when		Resilience Profiles Survey 2011

Indicator	Key result	Source
	purchasing products or services for their household.	
High skilled occupations (knowledge economy ready)	45.3% of the TRC LGA population is employed in high skilled ANZSCO levels 1-3	Queensland Regional Profiles, Office of Economic and Statistical Research, Queensland Treasury, 2012
Innovative Creative Industries	Data not available at this time	
Business growth	Data not available at this time	
Employment		
Employment rate	TRC LGA has an employment rate of 36.9 % of the population aged 15 years and over (2009).	ABS National Regional Profile/ABS Regional Population Growth 2009/10.
Unemployment rate	TRC LGA has an unemployment rate of 9.3%.	Queensland Regional Profiles, Office of Economic and Statistical Research, Queensland Treasury, 2012
Local employment	Data not available at this time	
Income and wealth		
Household income	28.1% of TRC LGA survey households' income is in the lowest bracket.	Resilience Profiles Survey 2011
Individual income	34.5% of TRC LGA survey respondents' income is in the lowest bracket	Resilience Profiles Survey 2011
Distribution of income	Data not available at this time	
Financial stress	60% of TRC LGA survey respondents could raise $2000 within two days in an emergency	Resilience Profiles Survey 2011
Food security	9.9% of TRC LGA survey respondents' households had run out of food and could not afford to buy more on at least one occasion in the last 12 months	Resilience Profiles Survey 2011
Emergency relief	Data not available at this time	
Socio-Economic Index of Disadvantage	42.7% of TRC LGA population is in the most disadvantaged quintile.	Queensland Regional Profiles, Office of Economic and Statistical Research, Queensland Treasury 2012
Skills		
Educational Qualifications	24.2% of TRC LGA survey respondents had a TAFE or trade certificate or diploma	Resilience Profile Survey 2011
Domain Three - sustainable built and natural environments		
Disaster Vulnerability		
Disaster	38.9% of TRC LGA survey respondents' homes were	Resilience Profile

Indicator	Key result	Source
vulnerability	affected by a natural disaster event in the last 12 months.	Survey 2011
	73.8% of TRC LGA survey respondents believe their home is at risk of storms due to its location	
Household insurance	62.7% of TRC LGA survey respondents believe they have adequate household insurance	Resilience Profile Survey 2011
	83% of TRC LGA survey respondents have contents insurance	
Natural disaster assistance	73.1% of TRC LGA survey respondents are likely or very likely to get help or critical information from neighbours or people in their local community if their home was affected by a natural disaster.	Resilience Profile Survey 2011
	77% of TRC LGA survey respondents are likely or very likely to get help or critical information from friends or family neighbours if their home was affected by a natural disaster	
	43.3% of TRC LGA survey respondents are likely or very likely to get help or critical information from their local council if their home was affected by a natural disaster	
	57.4% of TRC LGA survey respondents are likely or very likely to get help or critical information from the SES (132500) if their home was affected by a natural disaster	
	24% of TRC LGA survey respondents are likely or very likely to get help or critical information from social media websites such as Twitter or Facebook if their home was affected by a natural disaster	
	27.8% of TRC LGA survey respondents are likely or very likely to get help or critical information from other internet websites if their home was affected by a natural disaster	
Housing		
Housing	23.9% of TRC LGA survey respondents privately rent their residence	Resilience Profiles Survey 2011
	Median house price - no data currently available for TRC LGA	
	Median unit price - no data currently available for TRC LGA	
	18.9% of TRC LGA dwellings receive rent assistance from Centrelink	Social Health Atlas Public Health Information Development Unit 2011 (based on 2009 data)
	11.1% of low-income households in TRC LGA (households in bottom 40% of income distribution) are in mortgage stress	Social Health Atlas Public Health Information Development Unit 2011 (based on 2009 data)
	24.5% of TRC LGA low-income households (households in bottom 40% of income distribution)	Social Health Atlas Public Health

Indicator	Key result	Source
	are in rental stress	Information Development Unit 2011 (based on 2009 data)
	TRC LGA has 478 government managed social housing dwellings.	Dept of Communities, Child Safety and Disability Services, 2011
	TRC LGA has 202 non-government managed social housing dwellings.	Dept of Communities, Child Safety and Disability Services 2011
	TRC LGA has a 4.7% vacancy rates as a percentage of the market.	REIQ, September Survey 2011
Shelters	TRC LGA has designated shelters as required	Tablelands Regional Council, 2011, www.trc.qld.gov.au/disaster-management/disaster-plans
Institutional facilities	TRC LGA has 547 people in correctional facilities	ABS, Prisoners in Australia, 2011
	TRC LGA has 5 aged care service providers with 408 community care places, residential high care, residential low care and transition care places	Dept of Health and Ageing 2010
	TRC LGA has 110 boarding school beds	Australian Boarding School Association
Homelessness	No data is available for homelessness.	
Transport accessibility		
Private transport	89.4% of all licensed drivers in TRC LGA survey households own or have unlimited access to a private vehicle	Resilience Profiles Survey 2011
Transport limitation	66.8% of TRC LGA survey respondents can easily get to the places they need.	Resilience Profiles Survey 2011
Domain Four - Culturally rich and vibrant communities		
Arts and cultural activities		
Opportunities to participate in arts and cultural activities	51.2% of TRC LGA survey respondents agree or strongly agree there are enough opportunities in their local area to participate in arts and related activities.	Resilience Profiles Survey 2011
Participation in arts and cultural activities	20.3% of TRC LGA survey respondents participated in arts and related activities in the last month	Resilience Profiles Survey 2011
Sporting and cultural activities		
Opportunities to participate in community or sporting events	85.1% of TRC LGA survey respondents attended an event that brought people together such as fetes, festivals, shows or other community or sporting events in the last 12 months.	Resilience Profiles Survey 2011
Cultural diversity		
Community acceptance of	61.8% of TRC LGA survey respondents agree or strongly agree that it is a good thing for a society to be	Resilience Profiles Survey 2011

Indicator	Key result	Source
diverse cultures	made up of people from different cultures.	
	61.3% of TRC LGA survey respondents agree or strongly agree that their local community is welcoming of people of different cultures	
Faith and spirituality	26% TRC LGA survey respondents described their understanding of faith and spirituality as a formal religious belief (e.g. Christianity, Islam etc).	Resilience Profiles Survey 2011
	25.9 % of TRC LGA survey respondents identify as Anglican.	
Values		
Values	41.5% Of TRC LGA survey respondents nominated independence as their most important value to pass on to children and young people.	Resilience Profiles Survey 2011
Domain Five - Democratic and engaged communities		
Citizen engagement		
Community support groups	12.6% of TRC LGA survey respondents in the last 12 months have been actively involved in education and training community support groups or taken part in an activity they organised.	Resilience Profiles Survey 2011
Social groups	33% of TRC LGA survey respondents in the last 12 months have been actively involved in a sport or physical recreation group or taken part in an activity they organised.	Resilience Profiles Survey 2011
Participation in citizen engagement	84.2% of TRC LGA survey respondents had no active involvement in the last 12 months in any of these groups or taken party in an activity they organised.	Resilience Profiles Survey 2011
	14.4 % of TRC LGA survey respondents in the last 12 months deliberately bought or boycotted products for environmental, ethical or political reasons	Resilience Profiles Survey 2011
Membership of local community organisations and decision-making bodies	27.7 % of TRC LGA survey respondents in the last 12 months have been a member of a committee that makes decisions.	Resilience Profiles Survey 2011
Community leadership	43% of TRC LGA survey respondents agree or strongly agree that there are local community leaders they can trust.	Resilience Profiles Survey 2011
Domain Six – Demography		
Population size and structure		
Population change	TRC LGA has an average annual population change (most recent 5 yr period 2005-2010) of 1.9%.	ABS Regional Population Growth Australia 2009-10 (cat. no. 3218.0)

	2011	2016	2021	2026	2031
	47,572	50,622	53,464	56,590	59,873

Indicator	Key result	Source
Population change future		Queensland Regional Profiles, Office of Economic and Statistical Research, Queensland Treasury, 2012
Age dependency ratio	TRC LGA has 16.6% of persons aged 65 and over per 100 persons aged 15-64 years.	ABS Population by Ages and Sex Regions of Australia

Indicator	Key result	Source
		2010
Dependents	19.5% of TRC LGA population is aged under 15 years.	ABS Population by Ages and Sex Regions of Australia 2010
Median age	The median age of the TRC LGA is 42.2.	Queensland Regional Profiles, Office of Economic and Statistical Research, Queensland Treasury, 2012
Age profile of TRC LGA survey respondents	18-24: 2.4% 25-34: 19% 35-44: 19.7% 45-54: 16.6% 55-64: 16.2% 65+ : 26.2%	Resilience Profiles Survey 2011
Gender profile of TRC LGA survey respondents	47.2% male 52.8% female	Resilience Profiles Survey 2011

Population stability		

Indicator	Key result	Source
Residual net migration	<table><tr><td></td><td>Natural increase</td><td>Assumed net migration</td><td>Total population change</td></tr><tr><td>Year to June 30 2005</td><td>174</td><td>360</td><td>534</td></tr><tr><td>Year to June 30, 2006</td><td>154</td><td>629</td><td>783</td></tr><tr><td>Year to June 30, 2007</td><td>238</td><td>637</td><td>875</td></tr><tr><td>Year to June 30, 2008</td><td>277</td><td>789</td><td>1,066</td></tr><tr><td>Year to June 30, 2009</td><td>215</td><td>701</td><td>916</td></tr></table>	Population growth highlights and trends 2011, Office of Economic and Statistical Research, Queensland Treasury; and unpublished ABS data
Youth retention (aged 18-24 years)	Within the last 12 months, 27.6% of 18-24 year old TRC LGA residents changed their place of residence	Census Population and Housing, 2006
Turnover – TRC LGA 2006, proportion of population with different address	<table><tr><td></td><td>Place of usual residence 1 year ago</td><td>Place of usual residence 5 years ago</td></tr><tr><td>TRC LGA</td><td>16.6%</td><td>40.1%</td></tr><tr><td>Qld</td><td>19.7%</td><td>47.6%</td></tr></table>	Queensland Regional Profiles, Office of Economic and Statistical Research, Queensland Treasury, 2012
Temporary population (tourists)	Data not available at this time	

Diversity		

Indicator	Key result	Source
Aboriginal and Torres Strait Islander	8.9% of persons in the TRC LGA identify as Aboriginal and Torres Strait Islander	Queensland Regional Profiles, Office of Economic and Statistical Research, Queensland Treasury, 2012

Indicator	Key result	Source
Born overseas	14.7% % of TRC LGA population are born overseas.	Queensland Regional Profiles, Office of Economic and Statistical Research, Queensland Treasury, 2012
Language other than English	97.8% of TRC LGA survey respondents speak English at home as their main language	Resilience Profiles Survey 2011
Family Structure	36.6% of TRC LGA survey respondents identify their household as a couple with children.	Resilience Profiles Survey 2011
Income support and concessions		
Age pension	70.2% of TRC LGA of males aged 65 years and over, and females aged 63 years and over, receive the aged pension.	Social Health Atlas Public Health Information Development Unit 2011 (2009 data)
Disability support pension	7.2% of TRC LGA males aged 16-64 and females aged 16-62 receive the disability support pension.	Social Health Atlas Public Health Information Development Unit 2011 (2009 data)
Single parent payment	8.7% of females aged 15-54 in TRC LGA receive the single parent payment	Social Health Atlas Public Health Information Development Unit 2011 (2009 data)
Health care cardholders	10.4% of persons aged 0 to 64 years in the TRC LGA have a health care card	Social Health Atlas Public Health Information Development Unit 2011 (2009 data)
Pension concession cardholders	24.6% of persons aged 15 years and over in the TRC LGA have a pension concession card.	Social Health Atlas Public Health Information Development Unit 2011 (2009 data)

Rockhampton Regional Council Local Government Area (RRC LGA)
Community Resilience Indicators

Indicator	Key result	Source
Domain One: Healthy, safe and inclusive communities		
Personal health and wellbeing		
People with a disability	4.2% of the RRC LGA population has a sensory, physical or intellectual disability.	Queensland Regional Profiles, Office of Economic and Statistical Research, Queensland Treasury, 2012
Subjective wellbeing	79% of RRC LGA survey participants agree or strongly agree that they are satisfied with their life as a whole	Resilience Profiles Survey 2011
Vulnerability	26.6% of RRC LGA survey households have a person requiring assistance or supervision	Resilience Profiles Survey 2011
	57.9% of RRC LGA survey households had a person with a disability lasting 6 months or longer.	
Perceptions of support	75.3% of RRC LGA survey respondents could ask someone for advice	Resilience Profiles Survey 2011
Community connectedness		
Social support	82.8% of RRC LGA survey participants could ask a family member for support	Resilience Profiles Survey 2011
Volunteering	11.6% of RRC LGA survey respondents had provided unpaid help to a sport and physical recreation club.	Resilience Profiles Survey 2011
Helping others in the community	47.2% of RRC LGA survey respondents provided transport or ran errands for someone	Resilience Profiles Survey 2011
	66.7% of RRC LGA survey respondents gave help to a relative in another household	
Interaction with neighbours	43.5% of RRC LGA survey respondents would leave a key with a neighbour if they went away	Resilience Profiles Survey 2011
	70% of RRC LGA survey respondents have a neighbour's phone number	
	88.3% of RRC LGA survey respondents would contact a neighbour if the respondent needed assistance	
	96.1% of RRC LGA survey respondents would ask a neighbour if they needed assistance	
Social isolation	89.5% of RRC LGA survey respondents visited or was visited by friends in the last month.	Resilience Profiles Survey 2011
Trust in local community	66.3% of RRC LGA survey respondents agreed or strongly agreed that they could trust most of their neighbours.	Resilience Profiles Survey 2011
	49.1% of RRC LGA survey respondents felt safe or very safe walking in their community after dark	
Social media	45.1% of RRC LGA survey respondents do not use Facebook	Resilience Profiles Survey 2011
	97.1% of RRC LGA survey respondents do not use Twitter	
	21.8% of RRC LGA survey respondents use YouTube once a month or less.	
	91.8% of RRC LGA survey respondents do not use weblogs	

Indicator	Key result	Source
	11.2% of RRC LGA survey respondents use internet forums once a month or less	
	35.9% of RRC LGA survey respondents use email several times a day	
	22.5% of RRC LGA survey respondents use instant messaging several times a day	
	17.2% of RRC LGA survey respondents use Skype once a month or less	
	5.7% of RRC LGA survey respondents use other social media several times a day	
Lifelong learning		
Home internet access	66.7% of RRC LGA survey households have a broadband internet connection	Resilience Profiles Survey 2011
Vocational education and training students	RRC LGA has 8,614 vocational education and training students	Queensland Regional Profiles, Office of Economic and Statistical Research, Queensland Treasury, 2012
Service availability	21.4% of RRC LGA survey households had a member who found it difficult to access medical services because of overstretched services	Resilience Profiles Survey 2011
Community development programs	No data available at this time	
Neighbourhood Centres	RRC LGA has 1 neighbourhood/community centre.	Dept of Communities, Child Safety and Disability Services 2011
Domain Two – Dynamic resilient local economies		
Economic activity		
Economic diversity	The RRC LGA region has an economic diversity rating of .817 compared to Queensland being 1.	The Regional Index of Economic Diversity Lawrence Consulting 2011
Retained retail spending	20.9% of RRC LGA survey respondents chose 'locally produced/owned' as a major factor when purchasing products or services for their household	Resilience Profiles Survey 2011
High skilled occupations (knowledge economy ready)	42.7% of the RRC LGA population is employed in high skilled ANZSCO levels 1-3	Queensland Regional Profiles, Office of Economic and Statistical Research, Queensland Treasury, 2012
Innovative Creative Industries	No data is available at this time	
Business growth	No data is available at this time	
Employment		
Employment rate	RRC LGA has an employment rate of 42.9 % of the population aged 15 years and over (2009).	ABS National Regional Profile/ABS Regional Population

Indicator	Key result	Source
		Growth 2009/10.
Unemployment rate	RRC LGA has an unemployment rate of 6.9%.	Queensland Regional Profiles, Office of Economic and Statistical Research, Queensland Treasury, 2012
Local employment	No data is available at this time	
Income and wealth		
Household income	28.7% of RRC LGA survey households' income is in the lowest bracket.	Resilience Profiles Survey 2011
Individual income	32.4% of RRC LGA survey respondents' income is in the lowest bracket	Resilience Profiles Survey 2011
Distribution of income	No data is available at this time	
Financial stress	66.6% of RRC LGA survey respondents could raise $2000 within two days in an emergency	Resilience Profiles Survey 2011
Food security	8.7% of RRC LGA survey respondents' households had run out of food and could not afford to buy more on at least one occasion in the last12 months	Resilience Profiles Survey 2011
Emergency relief	Data for RRC LGA is under development.	
Socio-Economic Index of Disadvantage	33.7% of RRC LGA population is in the most disadvantaged quintile.	Rockhampton Regional Council, Queensland Regional Profiles, OESR, p17, February 2012,
Skills		
Educational qualifications	22.8% of RRC LGA survey respondents had a TAFE or trade certificate or diploma	Resilience Profile Survey 2011
Domain Three - sustainable built and natural environments		
Disaster vulnerability		
Disaster vulnerability	19.9% of RRC LGA survey respondents' homes were affected by a natural disaster event in the last 12 months.	Resilience Profile Survey 2011
	69.7% of RRC LGA survey respondents believe their home is at risk from winds from a cyclone	
Household insurance	72% of RRC LGA survey respondents believe they have adequate household insurance	Resilience Profile Survey 2011
	80.9% of RRC LGA survey respondents have contents insurance	
Natural disaster assistance	63.7% of RRC LGA survey respondents are likely or very likely to get help or critical information from neighbours or people in their local community if their home was affected by a natural disaster	Resilience Profile Survey 2011
	72.8% of RRC LGA survey respondents are likely or very likely to get help or critical information from friends or family neighbours if their home was affected by a natural disaster	
	38.4% of RRC LGA survey respondents are likely or very likely to get help or critical information from their local council if their home was affected by a natural disaster	

Indicator	Key result	Source
	58.6% of RRC LGA survey respondents are likely or very likely to get help or critical information from the SES (132500) if their home was affected by a natural disaster	
	22.5% of RRC LGA survey respondents are likely or very likely to get help or critical information from social media websites such as Twitter or Facebook if their home was affected by a natural disaster	
	32.4% of RRC LGA survey respondents are likely or very likely to get help or critical information from other internet websites if their home was affected by a natural disaster	
Housing		
Housing	76.5% of RRC LGA survey respondents privately rent their residence	Resilience Profile Survey 2011
	Median house price in RRC LGA is $327,000.	Queensland Housing Market Report Department of Communities June Quarter 2011
	Median price of units/flats/apartment in RCC LGA is $279,500	Queensland Housing Market Report Department of Communities June Quarter 2011
	20.6% of RRC LGA dwellings receive rent assistance from Centrelink	Social Health Atlas Public Health Information Development Unit 2011 (based on 2009 data)
	6.1% of low-income households in RRC LGA (households in bottom 40% of income distribution) are in mortgage stress.	Social Health Atlas Public Health Information Development Unit 2011 (based on 2009 data)
	24.5% of RRC LGA low-income households (households in bottom 40% of income distribution) are in rental stress	Social Health Atlas Public Health Information Development Unit 2011 (based on 2009 data)
	RRC LGA has 1,520 government managed social housing dwellings	Dept of Communities, Child Safety and Disability Services 2011
	RRC LGA has 503 non-government managed social housing dwellings	Dept of Communities, Child Safety and Disability Services 2011

Indicator	Key result	Source
	RRC LGA has a 1.2% vacancy rate as a percentage of the market	REIQ, September Survey 2011
Shelters	RRC LGA has designated shelters as required	Rockhampton Regional Council, Local Disaster Management Plan, Potential Evacuation Centres.
Institutional facilities	RRC LGA has 431 people in correctional facilities	ABS, Prisoners in Australia, 2011
	RRC LGA has 15 aged care service providers with 1,375 community care places, residential high care, and residential low care and transition care places.	Dept of Health and Ageing 2010
	RRC LGA has 660 boarding school beds	Australian Boarding School Association
Homelessness	RRC LGA has 476 people identified as homeless.	Census of Population and Housing 2006; SAAP Client Collection 2006; National Census of Homeless School Students 2006.
Transport accessibility		
Private transport	86.2% of all licensed drivers in RRC LGA survey households own or have unlimited access to a private vehicle	Resilience Profiles Survey 2011
Transport limitation	80% of RRC LGA survey respondents can easily get to the places they need.	Resilience Profiles Survey 2011
Domain Four - Culturally rich and vibrant communities		
Arts and cultural activities		
Opportunities to participate in arts and cultural activities	48.4% of RRC LGA survey respondents agree or strongly agree there are enough opportunities in their local area to participate in arts and related activities.	Resilience Profiles Survey 2011
Participation in arts and cultural activities	19.9% of RRC LGA survey respondents participated in arts and related activities in the last month	Resilience Profiles Survey 2011
Sporting and recreational activities		
Opportunities to participate in community or sporting events	67.2% of RRC LGA survey respondents attended an event that brought people together such as fetes, festivals, shows or other community or sporting events in the last 12 months.	Resilience Profiles Survey 2011
Community acceptance of diverse cultures	56.3% of RRC LGA survey respondents agree or strongly agree that it is a good thing for a society to be made up of people from different cultures.	Resilience Profiles Survey 2011
	50% of RRC LGA survey respondents agree or strongly agree that their local community is welcoming of people of different cultures	
Faith and spirituality	22.9% RRC LGA survey respondents described their understanding of faith and spirituality as a system of morality and values	Resilience Profiles Survey 2011

Indicator	Key result	Source
	24.5 % of RRC LGA survey respondents identify as Anglican.	
Values		
Values	48.1% Of RRC LGA survey respondents nominated independence as their most important value to pass	Resilience Profiles Survey 2011
Domain Five - Democratic and engaged communities		
Citizen engagement		
Community support groups	12.4% of RRC LGA survey respondents in the last 12 months have been actively involved in a welfare organization (e.g. local neighbourhood centre, Lifeline, Red Cross)	Resilience Profiles Survey 2011
Social groups	29% of RRC LGA survey respondents in the last 12 months have been actively involved in a sport or physical recreation group or taken part in an activity they organised.	Resilience Profiles Survey 2011
Participation in citizen engagement	82.6% of RRC LGA survey respondents had no active involvement in the last 12 months in any of these groups or taken party in an activity they organised.	Resilience Profiles Survey 2011
	26% of RRC LGA survey respondents in the last 12 months signed a petition.	
Membership of local community organisations and decision-making bodies	20.4% of RRC LGA survey respondents in the last 12 months have been a member of a committee that makes decisions.	Resilience Profiles Survey 2011
Community leadership	28.9% of RRC LGA survey respondents agree or strongly agree that there are local community leaders they can trust.	Resilience Profiles Survey 2011
Domain Six – Demography		
Population size and structure		
Population change	RRC LGA has an average annual population change (most recent 5 yr period 2005-2010) of 1.9%.	ABS Regional Population Growth Australia 2009-10 (cat. no. 3218.0)

Population change future	2011	2016	2021	2026	2031	Queensland Regional Profiles, Office of Economic and Statistical Research, Queensland Treasury, 2012
	117,612	127,915	138,933	150,450	162,873	

Indicator	Key result	Source
Age dependency ratio	RRC LGA has 13.4% of persons aged 65 and over per 100 persons aged 15-64 years.	ABS Population by Ages and Sex Regions of Australia 2010
Dependents	20.9% of RRC LGA population is aged under 15 years.	ABS Population by Ages and Sex Regions of Australia 2010
Gender	47.2% male 52.8% female	Resilience Profiles Survey 2011
Population stability		
Residual net		Natural	Assumed	Total	Population growth

Indicator	Key result				Source
migration		increase	net migration	population change	highlights and trends 2011, Office of Economic and Statistical Research, Queensland Treasury; and unpublished ABS data
	Year to June 30 2005	556	1, 239	1,795	
	Year to June 30, 2006	553	1,799	2,352	
	Year to June 30, 2007	592	2,007	2,599	
	Year to June 30, 2008	570	1,216	1,786	
	Year to June 30, 2009	947	1,255	2,202	
Youth retention (aged 18-24 years)	Within the last 12 months, 19.6% of 18-24 year old RRC LGA residents changed their place of residence				2006 Census of Population and Housing.
Turnover		Place of usual residence 1 year ago	Place of usual residence 5 years ago		Queensland Regional Profiles, Office of Economic and Statistical Research, Queensland Treasury, 2012
	RRC LGA	19.8%	45.7%		
	Qld	19.7%	47.6%		
Temporary population (tourists)	No data available at this time				
Stability of resident population	Average amount of time residents have lived in that community				Resilience Profiles Survey 2011
	Less than a year	3.7%			
	1-less than 3 years	8.8%			
	3-less than 6 years	13.3%			
	6-less than 10 years	12.2%			
	More than 10 years	61.9%			
Diversity					
Aboriginal and Torres Strait Islander	5.2% of persons in the RRC LGA identify as Aboriginal and Torres Strait Islander				Queensland Regional Profiles, Office of Economic and Statistical Research, Queensland Treasury, 2012
Born overseas	7.5% of RRC LGA population are born overseas.				Queensland Regional Profiles, Office of Economic and Statistical Research, Queensland Treasury, 2012
Language other than English	97.3% of RRC LGA survey respondents speak English at home as their main language				Resilience Profiles Survey 2011
Family Structure	41.4% of RRC LGA survey respondents identify their household as a couple with children.				Resilience Profiles Survey 2011

Indicator	Key result	Source
Income support and concessions		
Age pension	75.3% of RRC LGA of males aged 65 years and over and females aged 63 years and over receive the aged pension.	Social Health Atlas Public Health Information Development Unit 2011 (2009 data)
Disability support pension	6.5% of RRC LGA males aged 16-64 and females aged 16-62 receive the disability support pension	Social Health Atlas Public Health Information Development Unit 2011 (2009 data)
Single parent payment	6.9% of females aged 15-54 in RRC LGA receive the single parent payment	Social Health Atlas Public Health Information Development Unit 2011 (2009 data)
Health care cardholders	7.8% of persons aged 0 to 64 years in the RRC LGA have a health care card	Social Health Atlas Public Health Information Development Unit 2011 (2009 data)
Pension concession cardholders	21.6% of persons aged 15 years and over in the RRC LGA have a pension concession card.	Social Health Atlas Public Health Information Development Unit 2011 (2009 data)

Chinchilla Statistical Local Area
Community Resilience Indicators

Indicator	Key result			Source
Domain One: Healthy, safe and inclusive communities				
Personal health and wellbeing				
People with a disability	4.5% of the Chinchilla SLA population has a sensory, physical or intellectual disability.			Queensland Regional Profiles, Office of Economic and Statistical Research, Queensland Treasury, 2012
Subjective wellbeing	74.8% of Chinchilla SLA survey participants agree or strongly agree that they are satisfied with their life as a whole			Resilience Profiles Survey 2011
Vulnerability	36.5% of Chinchilla SLA survey households have a person requiring assistance or supervision.			Resilience Profiles Survey 2011
	53% of Chinchilla SLA survey households had an old or young person requiring assistance.			Resilience Profiles Survey 2011
Perceptions of support	66.3% of Chinchilla SLA survey respondents could ask someone for advice			Resilience Profiles Survey 2011
Community connections				
Social support	79.9% of Chinchilla SLA survey participants could ask a family member for support			Resilience Profiles Survey 2011
Volunteering	12.3% of Chinchilla SLA survey respondents had provided unpaid help to a sport and physical recreation club.			Resilience Profiles Survey 2011
Helping others in the community	45.1% of Chinchilla SLA survey respondents provided transport or ran errands for someone			Resilience Profiles Survey 2011
	69.6% of Chinchilla SLA survey respondents gave help to a friend			
Interaction with neighbours	50.6% of Chinchilla SLA survey respondents would leave a key with a neighbour if they went away			Resilience Profiles Survey 2011
	75.8% of Chinchilla SLA survey respondents have a neighbour's phone number			
	91.2% of Chinchilla SLA survey respondents would contact a neighbour if the respondent needed assistance			
	93.7% of Chinchilla SLA survey respondents would ask a neighbour if they needed assistance			
Social isolation	84.6% of Chinchilla SLA survey respondents visited or was visited by friends in the last month.			Resilience Profiles Survey 2011
Trust in local community	70.8% of Chinchilla SLA survey respondents agreed or strongly agreed that they could trust most of their neighbours.			Resilience Profiles Survey 2011
	51.9% of Chinchilla SLA survey respondents felt safe or very safe walking in their community after dark			Resilience Profiles Survey 2011
Stability of resident population	average amount of time residents have lived in that community			Resilience Profiles Survey 2011
	Less than a year		3.9%	
	1-less than 3 years		6.8%	
	3-less than 6 years		9.6%	

Indicator	Key result		Source
	6-less than 10 years	15.8%	
	More than 10 years	64%	
Social media	51.9% of Chinchilla SLA survey respondents do not use Facebook		Resilience Profiles Survey 2011
	97% of Chinchilla SLA survey respondents do not use Twitter		Resilience Profiles Survey 2011
	17.8% of Chinchilla SLA survey respondents use YouTube once a month or less.		Resilience Profiles Survey 2011
	92.2% of Chinchilla SLA survey respondents do not use weblogs		Resilience Profiles Survey 2011
	9.3% of Chinchilla SLA survey respondents use internet forums less than once a month or less		Resilience Profiles Survey 2011
	25.5% of Chinchilla SLA survey respondents used email several times a day		Resilience Profiles Survey 2011
	11.5% of Chinchilla SLA survey respondents use instant messaging several times a day		Resilience Profiles Survey 2011
	22.4% of Chinchilla SLA survey respondents use Skype once a month or less		Resilience Profiles Survey 2011
	6.1% of Chinchilla SLA survey respondents use other social media once a day		Resilience Profiles Survey 2011

Lifelong learning

Indicator	Key result	Source
Home internet access	70.3% of Chinchilla SLA survey households have a broadband internet connection	Resilience Profiles Survey 2011
Vocational education and training students	Chinchilla SLA has 675 vocational education and training students.	Queensland Regional Profiles, Office of Economic and Statistical Research, Queensland Treasury, 2012

Service availability

Indicator	Key result	Source
Service availability	31.4% of Chinchilla SLA survey households had a member who found it difficult to access medical services because of inadequate services in the area.	Resilience Profiles Survey 2011
Community development programs	No data available at this time	
Neighbourhood Centres	Chinchilla SLA has 1 neighbourhood/community centre.	Dept of Communities, Child Safety and Disability Services 2011

Domain Two – Dynamic resilient local economies

Economic activity

Indicator	Key result	Source
Economic diversity	The Chinchilla SLA region has an economic diversity rating of .375 compared to Queensland being 1.	The Regional Index of Economic Diversity Lawrence Consulting 2011
Retained retail spending	22.6% of Chinchilla SLA survey respondents chose 'locally produced/owned' as a major factor when	Resilience Profiles Survey 2011

Indicator	Key result	Source
	purchasing products or services for their household.	
High skilled occupations	47.6% of the Chinchilla SLA population is employed in high skilled ANZSCO levels 1-3	Queensland Regional Profiles, Office of Economic and Statistical Research, Queensland Treasury, 2012
Innovative Creative Industries	No data available at this time	
Business growth	No data available at this time	
Employment		
Employment rate	Chinchilla SLA has an employment rate of 39% of the population aged 15 years and over.	ABS National Regional Profile/ABS Regional Population Growth 2009/10.
Unemployment rate	Chinchilla SLA has an unemployment rate of 3.4%.	Queensland Regional Profiles, Office of Economic and Statistical Research, Queensland Treasury, 2012
Local employment	No data available at this time	
Income and Wealth		
Household income	42.7% of Chinchilla SLA survey households' income is in the lowest bracket.	Resilience Profiles Survey 2011 $2435 or more - * Relative standard error exceeds 25%: use estimate with caution.
Individual income	32.4% of Chinchilla SLA survey respondents' income is in the lowest bracket	Resilience Profiles Survey 2011
Distribution of income	No data available at this time	
Financial stress	61.8% of Chinchilla SLA survey respondents could raise $2000 within two days in an emergency	Resilience Profiles Survey 2011
Food security	10.8% of Chinchilla SLA survey respondents' households had run out of food and could not afford to buy more on at least one occasion in 12 months	Resilience Profiles Survey 2011
Emergency relief	No data available at this time	
Socio-Economic Index of Disadvantage	9.3% of Chinchilla SLA population is in the most disadvantaged quintile.	Queensland Regional Profiles, Office of Economic and Statistical

Indicator	Key result	Source
		Research, Queensland Treasury, 2012
Skills		
Educational qualifications	25.2% of Chinchilla SLA survey respondents had a TAFE or trade certificate or diploma	Resilience Profile Survey 2011
Domain Three - sustainable built and natural environments		
Disaster vulnerability		
Disaster vulnerability	63.4% of Chinchilla SLA survey respondents' homes were affected by a natural disaster event in the last 12 months.	Resilience Profile Survey 2011
	90.8% of Chinchilla SLA survey respondents believe their home is at risk from winds from a cyclone	
Household insurance	69.4% of Chinchilla SLA survey respondents believe they have adequate household insurance	Resilience Profile Survey 2011
	73.5% of Chinchilla SLA survey respondents have contents insurance	
Natural disaster assistance	59.4% of Chinchilla SLA survey respondents are likely or very likely to get help or critical information from neighbours or people in their local community if their home was affected by a natural disaster.	Resilience Profile Survey 2011
	70.9% of Chinchilla SLA survey respondents are likely or very likely to get help or critical information from friends or family neighbours if their home was affected by a natural disaster	
	33.4% of Chinchilla SLA survey respondents are likely or very likely to get help or critical information from their local council if their home was affected by a natural disaster	
	51.8% of Chinchilla SLA survey respondents are likely or very likely to get help or critical information from the SES (132500) if their home was affected by a natural disaster	
	18.3% of Chinchilla SLA survey respondents are likely or very likely to get help or critical information from social media websites such as Twitter or Facebook if their home was affected by a natural disaster	
	33.6% of Chinchilla SLA survey respondents are likely or very likely to get help or critical information from other internet websites if their home was affected by a natural disaster	
Housing		
Housing	75.2% of Chinchilla SLA survey respondents privately rent their residence	Resilience Profile Survey 2011
	Median house price in Chinchilla SLA is $269,000.	Queensland Housing Market Report Department of Communities June Quarter 2011

Indicator	Key result	Source
	Median unit price in Chinchilla SLA - data unavailable at this time	
	13.9% of Chinchilla SLA dwellings receive rent assistance from Centrelink	Social Health Atlas Public Health Information Development Unit 2011 (based on 2009 data)
	8.5% of low-income households in Chinchilla SLA (households in bottom 40% of income distribution) are in mortgage stress.	Social Health Atlas Public Health Information Development Unit 2011 (based on 2009 data)
	13.5% of Chinchilla SLA low-income households (households in bottom 40% of income distribution) are in rental stress	Social Health Atlas Public Health Information Development Unit 2011 (based on 2009 data)
	Chinchilla SLA has 0 government managed social housing dwellings	Dept of Communities, Child Safety and Disability Services 2011
	Chinchilla SLA has 0 non-government managed social housing dwellings	Dept of Communities, Child Safety and Disability Services 2011
	Vacancy rates as a percentage of the market - data under development	
Shelters	Chinchilla SLA has designated shelters as required.	Western Downs Regional Council Disaster Management Plan.
Institutional facilities	People in correctional facilities - not applicable	
	Chinchilla SLA has 2 aged care service providers with 80 community care places residential high care residential low care and transition care places.	Dept of Health and Ageing 2010
	Boarding school beds - not applicable	
Homelessness	No data available at this time	
Transport accessibility		
Private transport	86.3% of all licensed drivers in Chinchilla SLA survey households own or have unlimited access to a private vehicle	Resilience Profiles Survey 2011
Transport limitation	63.9% of Chinchilla SLA survey respondents can easily get to the places they need.	Resilience Profiles Survey 2011
Domain Four - Culturally rich and vibrant communities		
Arts and cultural activities		
Opportunities to participate in	45.5% of Chinchilla SLA survey respondents agree or strongly agree there are enough opportunities in	Resilience Profiles Survey 2011

Indicator	Key result	Source
arts and cultural activities	their local area to participate in arts and related activities.	
Participation in arts and cultural activities	19.2% of Chinchilla SLA survey respondents participated in arts and related activities in the last month	Resilience Profiles Survey 2011
Sporting and recreational activities		
Opportunities to participate in community or sporting events	72.3% of Chinchilla SLA survey respondents attended an event that brought people together such as fetes festivals shows or other community or sporting events in the last 12 months.	Resilience Profiles Survey 2011
Community acceptance of diverse cultures	62.8% of Chinchilla SLA survey respondents agree or strongly agrees that it is a good thing for a society to be made up of people from different cultures.	Resilience Profiles Survey 2011
	56% of Chinchilla SLA survey respondents agree or strongly agree that their local community is welcoming of people of different cultures	
Faith and spirituality	22.8% Chinchilla SLA survey respondents described their understanding of faith and spirituality as a system of morality and values	Resilience Profiles Survey 2011
	34.1% of Chinchilla SLA survey respondents did not identify with any religion.	
Values		
Values	45.5% Of Chinchilla SLA survey respondents nominated independence as their most important value to pass on to children and young people.	Resilience Profiles Survey 2011
Domain Five - Democratic and engaged communities		
Citizen engagement		
Community support groups	14% of Chinchilla SLA survey respondents in the last 12 months have been actively involved in education and training organisations.	Resilience Profiles Survey 2011
Social groups	23.5% of Chinchilla SLA survey respondents in the last 12 months have been actively involved in a sport or physical recreation group or taken part in an activity they organised.	Resilience Profiles Survey 2011
Participation in citizen engagement	81.3% of Chinchilla SLA survey respondents had no active involvement in the last 12 months in any of these groups or taken party in an activity they organised.	Resilience Profiles Survey 2011
	32.5% of Chinchilla SLA survey respondents in the last 12 months signed a petition.	
Membership of local community organisations and decision-making bodies	19.5 % of Chinchilla SLA survey respondents in the last 12 months have been a member of a committee that makes decisions.	Resilience Profiles Survey 2011
Community leadership	29.3% of Chinchilla SLA survey respondents agree or strongly agree that there are local community leaders they can trust.	Resilience Profiles Survey 2011
Domain Six – Demography		
Population size and structure		
Population change	Chinchilla SLA has an average annual population change (most recent 5 yr period 2005-2010) of 2.8%.	ABS Regional Population Growth

Indicator	Key result						Source
							Australia 2009-10 (cat. no. 3218.0)
Population change future	2006	2011	2016	2021	2026	2031	Queensland Regional Profiles, Office of Economic and Statistical Research, Queensland Treasury, 2012
	6,302	7,034	7,598	8,133	8,606	9,065	
Age dependency ratio	Chinchilla SLA has 13.1% of persons aged 65 and over per 100 persons aged 15-64 years.						ABS Population by Ages and Sex Regions of Australia 2010
Dependents	21.4% of Chinchilla SLA population is aged under 15 years.						ABS Population by Ages and Sex Regions of Australia 2010
Gender	44.5% male 55.5% female						Resilience Profiles Survey 2011
Residual net migration	No data available at this time						
Youth retention (aged 18-24 years)	Within the last 12 months, 22% of 18-24 year old RRC LGA residents changed their place of residence						2006 Census of Population and Housing
Turnover		Place of usual residence 1 year ago	Place of usual residence 5 years ago				Queensland Regional Profiles, Office of Economic and Statistical Research, Queensland Treasury, 2012
	Chinchilla SLA	19.4%	45.0%				
	Qld	19.7%	47.6%				
Temporary population (tourists)	No data available at this time						
Diversity							
Aboriginal and Torres Strait Islander	2.9% of persons in the Chinchilla SLA identify as Aboriginal and Torres Strait Islander						Queensland Regional Profiles, Office of Economic and Statistical Research, Queensland Treasury, 2012
Born overseas	4.7% of Chinchilla SLA population are born overseas.						Queensland Regional Profiles, Office of Economic and Statistical Research, Queensland Treasury, 2012
Language other than English	94.4% of Chinchilla SLA survey respondents speak English at home as their main language						Resilience Profiles Survey 2011
Family	42.4% of Chinchilla SLA survey respondents identify						Resilience Profiles

Indicator	Key result	Source
Structure	their household as a couple with children.	Survey 2011
Income support and concessions		
Age pension	74.2% of Chinchilla SLA of males aged 65 years and over and females aged 63 years and over receive the aged pension (2009).	Social Health Atlas Public Health Information Development Unit 2011 (2009 data)
Disability support pension	5.2% of Chinchilla SLA males aged 16-64 and females aged 16-62 receive the disability support pension (2009).	Social Health Atlas Public Health Information Development Unit 2011 (2009 data)
Single parent payment	5.8% of females aged 15-54 in Chinchilla SLA receive the single parent payment	Social Health Atlas Public Health Information Development Unit 2011 (2009 data)
Health care cardholders	7.2% of persons aged 0 to 64 years in the Chinchilla SLA have a health care card	Social Health Atlas Public Health Information Development Unit 2011 (2009 data)
Pension concession cardholders	20.3% of persons aged 15 years and over in the Chinchilla SLA have a pension concession card.	Social Health Atlas Public Health Information Development Unit 2011 (2009 data)

Appendix B: Resilience Survey Review

Office of Economic and Statistical Research
Office of the Government Statistician

Queensland Government

SURVEY REVIEW

Resilience Profiles Project: Community Survey 2011

prepared for

Queensland Council of Social Service Inc. and Griffith University

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1/06/2012
Final

1. Introduction

The Resilience Profiles Project is a partnership between Queensland Council of Social Service (QCOSS) and Griffith University's (GU) Urban Research Program. The project is funded through the Natural Disaster Resilience Program which is jointly funded by the Australian Government Attorney-General's Department and the Queensland Department of Community Safety.

Information gathered from such profiles will be released publicly in 2012 and can be used by communities, government and other service providers to help understand the strengths in a community and what areas may need greater investment and attention.

1.1 Purpose

This purpose of this project is to ascertain ways in which a community's resilience, that is, its ability to deal with major disturbances or shocks, whether they are natural disasters or tough economic times, might be measured. It's about a community's capacity to anticipate disaster; absorb and recover from the impact and be innovative and creative in its response.

1.2 Structure of this review

The review is organised into eight sections. The next section, Section 2, describes the design of the Resilience Profiles Project – Community Survey 2011. Section 3 describes the response rates achieved by this survey and Section 4 covers the field operations process. Sections 5 and 6 detail statistical background to the survey outputs. Section 7 addresses limitations and recommendations of the study. Section 8 provides definitions for response status categories used in Section 3 of this report and Section 9 indicates which of the questions were processed as household or person items.

2. Survey Methodology

2.1 Survey objective

The objective of the Resilience Profiles Project – Community Survey 2011 is to assess and measure community resilience in three specific Queensland regions.

2.2 Survey frame

The scope of the population encompasses residents of three geographical regions: Atherton/Mareeba, Rockhampton and Chinchilla. Using combined mail-out and web methodologies, the Office of Economic and Statistical Research (OESR) collected the opinions and knowledge of a cross-section of the population in the specified regions of interest, randomly sampling approximately 1,000 households from each region.

In addition, QCOSS and GU invited a non-random sample of residents (i.e., convenience sample) to participate in the survey, by issuing them with a direct link to a separate but similar web survey. This represents a supplementary sample to the household sample selected by OESR.

Of the 946 households completing a questionnaire 324 (34.2%) were surveyed in the Atherton/Mareeba region; 300 (31.7%) in the Rockhampton region; and 322 (34.0%) in the Chinchilla region.

2.3 Data collection method and fieldwork

Survey Administration

Respondents were invited by mail to participate in a mail-out or web-based version of the survey. OESR distributed paper questionnaires and cover letters (the latter included the respondent's unique web address for the online version of the survey) to each selected household. Respondents were given the option of selecting the most convenient methodology for survey completion.

Included in the cover letter was an 1800 number that a respondent could call to address any technical difficulties they may be experiencing with the web survey. QCOSS/GU also provided a telephone number should any participants have further questions about the research outcomes.

Paper questionnaires were printed with a four-digit identification number as a reference to regional location.

The web-based survey had the following specifications:

- Secure login ability (convenience sample excluded), with the capacity to save a partially completed survey and login at a later point to complete it;
- Fully functional survey interface, with capacity for single-response, multiple-response and open-ended questions;
- Validations to ensure that mandatory fields are completed; and
- Skip logic to filter questionnaire sections according to population and sample characteristics.

The data collection period was between 31st October 2011 and 5th December 2011. During this period, the respondents received an invitational cover letter to participate and

approximately two weeks after the initial dispatch of cover letter/questionnaire, a reminder letter or SMS text was forwarded to those who had not returned their completed questionnaire by either web or mail. In order to further boost response, telephone reminders were also initiated.

<u>Data/Responses</u>

When received, all paper questionnaires were data entered by trained OESR survey operations staff.

With QCOSS and GU requesting an additional supplementary convenience sample for the web survey, two separate web surveys were implemented with different web links for access. The inclusion of this second sample resulted in two data extractions and two files with the supplementary convenience sample survey data sent directly to QCOSS and GU in Excel format. OESR was not involved with any further processing of this supplementary sample other than to remove identifying data. Sequencing checks were carried out by OESR.

3.   Operational Results

3.1   Final status and scope of respondents on sample frame

The final response status of respondents on the Resilience Profiles Project – Community Survey 2011 frame is described in Table 1. Almost thirty-two percent of respondents on the frame completed the questionnaire.

Table 1 Final status of respondents on sample frame

Final status	Frequency	Percentage
Completed (Mail-out)	735	24.5
Completed (Web)	211	7.0
No response	1,711	57.0
Refused	116	3.9
Unable to participate	13	0.4
Undeliverable	197	6.6
Out of scope	19	0.6
Total	**3,002**	**100.0***

Note: *Percentages may not add to exactly 100.0 due to rounding.

Respondents were classified as **in-scope responding** if the participant completed or partially completed the survey. Two hundred and eleven householders completed the web survey and 735 respondents completed the paper survey.

Respondents were classified as **out-of-scope** if the participant was in aged care and too frail to participate, a business office, deceased, did not open the survey or no longer resided in Queensland (n = 19).

The remaining respondents (n=2,037) were classified as **in-scope non-responding**.

Table 2 describes the percentage of **respondents who completed or partially completed the survey** as a function of the total number of in-scope respondents on the frame.

Table 2 Final status of in-scope respondents

Status	In-scope responding	In-scope non-responding	Total in-scope	Percentage %
Completed (Mail-out)	735	0	735	24.6
Completed (Web)	211	0	211	7.1
No response	0	1,711	1,711	57.3
Refused	0	116	116	3.9
Unable to participate	0	13	13	0.4
Undeliverable	0	197	197	6.6
Total in-scope	**946**	**2,037**	**2,983**	**100.0***

Note: *Percentages may not add to exactly 100.0 due to rounding.

3.2　Survey response rate

A measure of the quality of response achieved in a survey is the response rate. This is defined as the number of completed web surveys used in the analysis as a percentage of the total number of potential surveys that would have been achieved had every in-scope respondent completed the survey. Resilience Profiles Project – Community Survey 2011 achieved a response rate of **31.7%**.

Response rate = In-scope responding / (in-scope responding plus in-scope non-responding)
= 946 / 2,983
= 31.7%

Response rates were highest for Atherton/Mareeba (32.5%) and Chinchilla (31.7%).

Table 3 Response rate by region

	Total respondents	In-scope responding	In-scope non-responding	Out of scope	Response rate (%)
Atherton/Mareeba	1,000	324	672	5	32.6
Rockhampton	1,001	300	691	9	30.3
Chinchilla	1,001	322	674	5	32.3
All respondents	**3,002**	**946**	**2,037**	**19**	**31.7**

Note: Non-respondents includes participants defined as in-scope who did not respond to the survey. Respondents defined as out-of-scope are excluded from response rate calculations.

3.3　Respondent inquiries

A small number of inquiries were received on the 1800 number. Some calls were from respondents experiencing difficulties accessing the website; others had lost their paper versions. In all cases, respondents were either mailed another questionnaire or given a login to complete the survey online, whichever was the more convenient method.

A number of respondents to the 'convenience sample' survey were attempting to paste the URL link into their browsers rather than following the instruction to click on the link.

3.4　Data cleaning

The raw results from the data collection were edited and cleaned before analysis.

- Free text fields were neatened and spell-checked, and identifying information was removed where applicable.

- One open-ended comment provided details of a specific event that may have allowed the respondent to be identified. This comment has been removed, however, the intent of this verbatim is summarised below:

  - Tablelands (Atherton/Mareeba) – A crime was allegedly perpetrated on a young female victim during the recent floods and local police and medical services were unable to provide sufficient services to effectively deal with the situation. Accessing appropriate ongoing therapeutic services involves long distance car travel.

- In addition, the free text fields for Questions 45 and 46 were partially categorised into commonly occurring themes.

- The results for Question 48 (Age in years) were categorised into six ranges specified by the clients. The single-year age is not given in the output files for purposes of confidentiality.

- Responses to Question 14 were split into two questions (14a and 14b) to record:
    - Whether a person in the respondent's household required assistance
    - The type of assistance required

- Due to the small number of respondents who identified as Aboriginal and/or Torres Strait Islander (ATSI), there is increased potential to identify these respondents. Moreover, using this data to produce cross-tablulations results in many cells with unacceptably low counts, and estimates based on these respondents are unreliable. Hence, all data relating to a person's ATSI status has been removed.

4. Interviewer and data entry feedback

The following feedback was received from interviewers conducting reminder calls and data entry staff during the field survey period:

4.1 Telephone interviewer feedback

The telephone interviewers were only responsible for reminding potential respondents to either complete the web or paper versions of the survey; no feedback was received.

4.2 Data entry feedback

Q6 – Respondents may have answered this question thinking that 1 meant "very likely" and 5 meant "very unlikely". This was ascertained through some minor inconsistencies in responses where a participant might say for example 'yes' to Q22 a/b/c but rate friends and family poorly for Q6.

Q13 and Q50: Income questions – Some pensioners just wrote 'old age pension' or 'pensioner' next to these questions. In these cases, participants were entered into the lowest income brackets (Q13 = $0-$581); (Q50 = $0-$399).

Q18 – Some respondents may have been interpreting this question as 'would you ask someone for these types of support in a crisis'.

Q27 – A number of respondents reported very little/infrequent internet but selected 'several times a day' for 'instant messaging'. This seems inconsistent with their other internet usage and suggests that they are interpreting 'instant messaging' as 'text messaging'.

Q28 – A number of respondents did not understand the meaning of 'social media' with answers such as TV, radio, ABC recorded.

Q49: Education question – Some respondents ticked both 'high-school (year 12)' and 'Tafe/Trade/Cert'; there may be some confusion as to whether 'TAFE/Trade/Certs' are higher educational qualifications than 'high-school (year 12)'.

5.   Weighting

5.1   Household questions

This survey makes use of a household sample frame to estimate household characteristics in three demographic regions. Each responding household in the survey represents a certain number of households within the population of the frame. These numbers are referred to as weights and are used as multipliers in calculations.

Household weights for each region were calculated to reflect the differing probabilities of being selected and responding. A stratified simple random sample number-raised weight was calculated for each unit as follows:

Weight = Number of households in region / Number of randomly selected households in region that responded to survey

The survey has been designed to maximise the representativeness of the results, however, 100% accuracy is not possible. As a result, estimates of household characteristics have a level of imprecision associated with them (See Section 5).

5.2   Person questions

When collecting survey data, response rates may differ between different groups. A higher rate of non-response in certain groups, may lead to contact bias in the estimates. For example, older persons and females are usually easier to contact than younger persons and males and, without adjustment in the weighting process, may have a disproportionately large influence on the results. However, information is unavailable as to how this bias may affect estimates and so it was not possible to weight the person specific responses. As a result, person-specific responses are presented in the output tables as sample frequencies only. No inferences about the wider population beyond the respondents themselves may therefore be made from these person-specific questions.

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6.   Reliability of estimates

6.1   Summary

Although the survey has been designed to maximise the representativeness of the household-specific results, it is not possible to be perfectly representative.

Estimates based on a sample survey are subject to two types of error:

- *Sampling error.* Estimates based on information obtained from a sample of households may differ from figures that would have been produced if all households had been included in the survey.

- *Non sampling error.* Errors may also occur due to non-response to the survey, inadequacies of the sampling frame, inaccuracies in reporting by respondents and processing errors.

One measure of the sampling error is the standard error (SE). It measures the extent to which an estimate may vary by chance because only a sample of households was included in the survey.

Given a large enough sample size, there are about two chances in three that an estimate will differ by less than one standard error from the figure that would have been obtained if all households had been included, and about 19 chances in 20 that the difference will be less than two standard errors.

An alternative measure of the sampling error is the relative standard error (RSE), which expresses the standard error as a percentage of the estimate. The RSE of an estimate is given by the following expression:

RSE = (SE/Estimate) x 100

where SE stands for the standard error of the estimate.

6.2   Calculation of standard errors

The standard errors for each estimate were calculated using a stratified simple random sample number raised standard error estimation methodology.

6.3   Confidence intervals

The standard errors were used to construct confidence intervals on the estimates. These intervals represent the range within which there is a 19/20 (or 95%) chance that the population value falls. For example an estimate of 65% might have an associated confidence interval of (59.5%, 70.5%). Thus, the probability that the actual value of that percentage is between 59.5% and 70.5% is 0.95.

Confidence intervals can be obtained from the standard error using the general formula:

CI = Estimate + Z x SE

where Z is the appropriate value from the standard normal table. For example, for a 95% confidence interval, Z = 1.96 (often rounded to 2).

7.   Recommendations

- In order to accurately weight both the person and household data and ensure it is representative of the population, a random sample from each region was required. Unfortunately, due to the methodology selected (i.e., mail out/web) it was not possible to reliably select one person randomly from within each household to complete the survey. Any future replication of this survey may wish to elect for a telephone survey.

    - One way to effectively randomise the selection process is to ask for the number of people living in the household aged 18 plus. Collect their initials and randomly select one of these sets of initials for interviewing. This question is also valuable when applying household weights.

    - Another way is to ask to speak with a person in the household 18 years plus who has the next birthday.

- This study's objectives suggest the adoption of multivariate analysis techniques. The general purpose of multiple regression is to learn more about the relationship between several independent variables and a dependent variable. For example, by selecting any number of independent predictors (e.g., high income/low income: renters/home owners etc.) a researcher would be able to predict the likely value of the dependent variable (e.g., who is more likely to 'help neighbours or people in the local community').

- Participants receiving a letter informing them of a forthcoming survey focussing on community resilience to disasters may not easily identify the relevance of questions pertaining to social interaction and community involvement. These factors may not be readily associated with disaster response without some additional explanation.

8. Appendix A Status Descriptions

Completed	The respondent completed the survey, answering all or most questions.
No response	The respondent did not complete the survey.
Out-of-scope	Household – The person who answered the phone indicated that there are no usual residents aged 18 or more in the household. Business – The person who answered the phone advised that it was a business number only.
Refused	The respondent refused to undertake the survey.
Unable to participate	The selected person could not be contacted within the call period because of any number of reasons (e.g., away from the residence, illness, sight/hearing difficulties, intellectual or language disability).
Undeliverable	The respondent's address was incorrect and OESR's invitation to participate in the survey was returned as Undeliverable.

9. Appendix B Person vs. Household Questions

Questions 1 through 15 'Household Section'

- Exceptions are:
- Q6: On a scale from 1 'very likely' to 5 'very unlikely', how likely are you to get help or critical information from any of the following sources if your home was affected by a natural disaster event?
- Q10: When buying products/services (electrical appliances, furniture, hiring tradespeople) for your household which factor is MOST important to you?

Questions 16 through to 52 'Person Section'

- Exception is:
- Q26: Does your household have an internet connection?

Appendix C: Final Survey Document

Resilience Profiles Project: Community Survey

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Welcome to the Resilience Profiles Project: Community Survey

There are two separate items included in this pack; a questionnaire for you to complete and a reply-paid envelope for you to return the questionnaire. The questionnaire should take approximately 15-20 minutes.

It is important to get as many responses as possible, so it would be greatly appreciated if you can spend the time to provide your feedback and return it within the timeframe. Please return your questionnaire in the reply-paid envelope provided.

This series of questions are specifically related to your household.

The following questions are about you and your households' awareness of, and preparedness for natural disasters.
This is a key element of community resilience.

1. **In the last 12 months has your home been affected by any natural disaster events (e.g. floods, cyclones, bushfires)?**
   Yes..☐1
   No...☐2
   Can't remember/don't know.....................................☐3

2. **Due to its location, is your home at risk from being affected by any of the following natural disaster events in the future?** *(tick all that apply)*
   Floods..☐1
   Wind from a cyclone..☐2
   Storm surge (rise in coastal water levels due to cyclone)...........☐3
   Storms (hail, lightning, wind, heavy rain)..................☐4
   Bushfires...☐5
   Mud or landslides..☐6
   Earthquakes...☐7
   Other (please specify) ☐8
   Don't know..☐9

3. **Do you think you have adequate household insurance if your home was affected by a natural disaster?**
   Yes..☐1
   No...☐2
   Don't know...☐3

4. **What type of household insurance do you have?** *(tick all that apply)*
   Building insurance..☐1
   Contents insurance...☐2
   Not currently insured..☐3
   Don't know...☐4

5. **How would you describe this household?** *(select one only)*
   Couple without children..☐1
   Couple with children
   (includes children aged 18 and older living at home)......☐2
   One parent family..☐3
   Group household (people non -related)......................☐4
   One person household...☐5
   Something else [e.g. Siblings living together, multigenerational families] (please specify) ☐6
   Don't know...☐7

6. **On a scale from 1 'very unlikely' to 5 'very likely', how likely are you to get help or critical information from any of the following sources if your home was affected by a natural disaster event?**

	1	2	3	4	5	Don't know
Neighbours or people in your local community a	☐1	☐2	☐3	☐4	☐5	☐6
Friends or family b	☐1	☐2	☐3	☐4	☐5	☐6
Your local council c	☐1	☐2	☐3	☐4	☐5	☐6
The SES (132 500) d	☐1	☐2	☐3	☐4	☐5	☐6
Social media web sites such as Twitter or Facebook e	☐1	☐2	☐3	☐4	☐5	☐6
Other internet web sites f	☐1	☐2	☐3	☐4	☐5	☐6

The following questions are about transport and access to medical services.

It is important to have an understanding of the ability of residents to get where they need to go and how accessible essential services are in their area.

7. **Do you or anyone in your household, find it difficult to access medical services (including GP's, specialists, hospital, dental) for any of these reasons?** *(tick all that apply)*
   Transport/distance...☐1
   Cost of service..☐2
   Disability restricts access to service........................☐3
   No service in your area...☐4
   Overstretched services ....☐5
   Inadequate services in your area.............................☐6
   No problems accessing medical services....................☐7
   Other (please specify) ☐8

8. **Do all licensed drivers in your household own or have unlimited access to a private vehicle?** *(select one only)*
   Yes..☐1
   No, have limited access to a vehicle (vehicles are shared)..........☐2
   No, do not own a private vehicle.............................☐3
   Don't know...☐4

9. **Consider all the places members of your household need to go to by car or other transport. Which statement best describes your situation** *(select one only)*
   Can easily get to the places we need........................☐1
   Sometimes have difficulty getting to the places we need............☐2
   Often have difficulty getting to the places we need.......☐3
   Can't get to the places we need...............................☐4
   Rarely go out/housebound......................................☐5

10. **When buying products/services (electrical appliances, furniture, hiring tradespeople) for your household which factor is MOST important to you?** *(select one only)*

Locally produced/owned .... ☐1
Cheapest price .... ☐2
Low impact on the environment (e.g. energy use ratings) .... ☐3
Variety (big choice) .... ☐4
Convenience .... ☐5
Quality .... ☐6
Other (please specify) ⬚ 7

11. **Is anyone in your household of Aboriginal or Torres Strait Islander origin?**

No .... ☐1
Yes, Aboriginal .... ☐2
Yes, Torres Strait Islander .... ☐3
Yes, Aboriginal and Torres Strait Islander .... ☐4
Don't know .... ☐5

12. **What language is mainly spoken in your household?** *(select one only)*

English .... ☐1
Arabic .... ☐2
Cantonese/Mandarin .... ☐3
Greek .... ☐4
Italian .... ☐5
Serbian/Croatian .... ☐6
Spanish .... ☐7
Tagalog (Filipino) .... ☐8
Vietnamese .... ☐9
Other (please specify) ⬚ 10
Don't know .... ☐11

13. **Please indicate the approximate total of the <u>household weekly</u> income from wages/salaries, government benefits, pensions, allowances and other income <u>before tax</u>? (annual amount in brackets)** *(select one only)*

$0-$581 (0-$30,199) .... ☐1
$582-$1,063 ($30,200-$55,299) .... ☐2
$1,064-$1,640 ($55,300-$85,299) .... ☐3
$1,641-$2,434 ($85,300-$126,599) .... ☐4
$2,435 or more ($126,600 or more) .... ☐5
Don't know .... ☐6

14. **Would you describe anyone in your household as a person requiring assistance or supervision?**

Yes (tick all that apply below) .... ☐1
No .... ☐2
Short-term health condition (lasting less than six months) ..... ☐3
Disability (lasting six months or more) .... ☐4
Old or young age .... ☐5
Difficulty with English language .... ☐6
Other (please specify) ⬚ 7

15. **Is your residence** *(select one only)*

Privately rented (e.g. through a real estate agent or directly with home owner) .... ☐1
Publicly rented (e.g. social housing) .... ☐2
Owned or being purchased by you .... ☐3
Other (please specify) ⬚ 4

The next series of questions are about you as an individual

The following questions help us understand the networks that people have in their communities.

16. **In the last 12 months, did you help anyone [who does not live with you] with the following activities?** *(tick all that apply)*

Domestic work, home maintenance or gardening .... ☐1
Providing transport or running errands .... ☐2
Any unpaid child care .... ☐3
Any teaching, coaching or practical advice .... ☐4
Providing any emotional support .... ☐5
Other activities (please specify) ⬚ 6
Did not help anyone *(Go to Q18)* .... ☐7

17. **Who did you give this help to?** *(tick all that apply)*

Relative in another household .... ☐1
Friend .... ☐2
Neighbour .... ☐3
Work colleague .... ☐4
Other person .... ☐5

18. **If you needed to, could you ask someone [who does not live with you] for any of these types of support in a crisis?** *(tick all that apply)*

Advice on what to do .... ☐1
Emotional support .... ☐2
Help in maintaining family/work responsibilities .... ☐3
Provide emergency money .... ☐4
Provide emergency accommodation .... ☐5
Provide emergency food .... ☐6
No, couldn't ask someone for support *(Go to Q20)* .... ☐7

19. **Who could you ask for this support in a crisis?** *(tick all that apply)*

Friend .... ☐1
Neighbour .... ☐2
Family member .... ☐3
Work colleague .... ☐4
Community, charity or religious organisation .... ☐5
Local council or other government service .... ☐6
Health, legal or financial professional .... ☐7
Other (please specify) ⬚ 8

20. **How many times in the last 12 months has your household run out of food and could not afford to buy more?** *(select one only)*

Once a week .... ☐1
Once a fortnight .... ☐2
Once a month .... ☐3
Less than once a month .... ☐4
Never .... ☐5
Other, please enter number of times in the last 12 months 6
⬚

21. If you went away would you leave a key with a neighbour?
Yes .... ☐ 1
No .... ☐ 2
Don't know .... ☐ 3

22a. Do you have the phone number of a neighbour?
Yes .... ☐ 1
No *(Go to Q23)* .... ☐ 2

b. Would you contact them if you needed assistance?
Yes .... ☐ 1
No .... ☐ 2
Don't know .... ☐ 3

c. Would you contact them if they needed assistance?
Yes .... ☐ 1
No .... ☐ 2
Don't know .... ☐ 3

23. If you needed to, could you raise $2,000 within two days in an emergency?
Yes .... ☐ 1
No .... ☐ 2
Don't know .... ☐ 3

The following questions are around levels of trust in the community. This helps us understand people's perceptions of community safety.

24. How strongly do you agree or disagree with the following statement?

Most of my neighbours can be trusted.

Strongly agree .... ☐ 1
Agree .... ☐ 2
Neither agree nor disagree .... ☐ 3
Disagree .... ☐ 4
Strongly disagree .... ☐ 5

25. How safe or unsafe do you feel walking in your community after dark?
Very safe .... ☐ 1
Safe .... ☐ 2
Neither unsafe or safe .... ☐ 3
Unsafe .... ☐ 4
Very unsafe .... ☐ 5
Don't walk in my community after dark .... ☐ 6

Many people now communicate and connect with each other in different ways and the internet is an important tool which people of all age groups use. Innovative ways of sharing information are constantly being developed, and social media plays a big part in this. The following questions are about your own use of social media.

26. Does your household have an internet connection?
(tick all that apply)
No internet connection .... ☐ 1
Yes, broadband (ADSL, Cable, Wireless, Satellite) .... ☐ 2
Yes, dial up, (analogue modem and ISDN connections) ...... ☐ 3
Yes, but don't know what type of internet .... ☐ 4
Other (internet through mobile phones etc) .... ☐ 5

27. What types of social media do you use and how often?
(tick all that apply)

	Several times a day	Once a day	Every 2-3 days	Once a week	Once a month or less	Do not use
Facebook a	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5	☐ 6
Twitter b	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5	☐ 6
You Tube c	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5	☐ 6
Weblogs d	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5	☐ 6
Internet forums e	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5	☐ 6
Email f	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5	☐ 6
Instant messaging g	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5	☐ 6
Skype h	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5	☐ 6
Other i	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5	☐ 6

28. Please specify what other types of social media that you use. Other:

The following questions are around levels of social interaction and community involvement. A strong and diverse community provides lots of different opportunities for people to get involved in activities that they are interested in.

29. In the last 12 months, have you been actively involved in any of these social groups or taken part in an activity they organised? *(tick all that apply)*
Sport or physical recreation group (e.g. football, tennis club) ... ☐ 1
Arts or heritage group (e.g.choirs, drama groups) .... ☐ 2
Religious or spiritual group or organisation .... ☐ 3
Craft or practical hobby group .... ☐ 4
Adult education, other recreation or special interest group ...... ☐ 5
Ethnic/multicultural club .... ☐ 6
Social clubs providing restaurants or bars (eg.RSL) .... ☐ 7
Other social interest groups (please specify) 8

No active involvement in social groups .... ☐ 9

30. In the last 12 months have you been actively involved in any of these community support groups or taken part in an activity they organised? *(tick all that apply)*
Service clubs (e.g. Lions or Rotary) .... ☐ 1
Welfare organisation (e.g. local neighbourhood centre, Lifeline, Red Cross) .... ☐ 2
Education and training .... ☐ 3
Parenting/youth/children (e.g. Scouts, Guides, playgroups) ..... ☐ 4
Health promotion and support (e.g. cancer support group) ..... ☐ 5
International aid and development .... ☐ 6
Emergency services (e.g. SES) .... ☐ 7
Other community support groups (please specify) 8

No active involvement in community support groups .... ☐ 9

31. In the past month have you participated in any of these activities? *(tick all that apply)*
Visited or was visited by friends .... ☐ 1
Went out with or met a group of friends (outdoor activities) ..... ☐ 2
Went out with or met a group of friends (indoor activities) .... ☐ 3
Spent time in internet social activity .... ☐ 4
Other social activities (please specify) 5
No social activities .... ☐ 6

Continued over the page

32. In the last 12 months have you been actively involved in any of these groups or taken part in an activity they organised? *(tick all that apply)*

Trade union, professional/technical association .... ☐ 1
Political party... ☐ 2
Civic group or organisation (e.g. Neighbourhood Watch)........... ☐ 3
Environmental or animal welfare group............................... ☐ 4
Human and civil rights group (e.g. Amnesty International etc) ☐ 5
Body corporate or tenants association................................. ☐ 6
Consumer organisation.. ☐ 7
Other civic or political groups (please specify)

_____ 8

No active involvement in civic or political groups..................... ☐ 9

33. In the last 12 months have you participated in any of the following political or civic actions? *(tick all that apply)*

Participated in a community consultation or attended a public or council meeting.. ☐ 1
Written to the government/council or contacted a government member/local councilor.. ☐ 2
Contacted a member of parliament...................................... ☐ 3
Signed a petition... ☐ 4
Attended a protest march, meeting or rally .... ☐ 5
Written a letter to the editor of a newspaper......................... ☐ 6
Participated in a political campaign...................................... ☐ 7
Deliberately bought or boycotted products for environmental, ethical or political reasons.............................. ☐ 8
Other (please specify) _____ 9
Engaged in none of these in the last 12 months............................. ☐ 10

34. In the last 12 months have you been a member of a committee that makes decisions (like a body corporate, council, church, sport or school committee)?

Yes .... ☐ 1
No.. ☐ 2
Don't know.. ☐ 3

35. In the last 12 months have you attended any events that bring people together such as fetes, festivals, shows or other community or sporting events?

Yes .... ☐ 1
No.. ☐ 2
Don't know.. ☐ 3

36. How strongly do you agree or disagree with the following statement?

There are enough opportunities in my local area to participate in arts and related activities (e.g. music, visual arts, dance, performance, craft)

Strongly agree.. ☐ 1
Agree .... ☐ 2
Neither agree nor disagree.. ☐ 3
Disagree... ☐ 4
Strongly disagree .... ☐ 5

37. Did you participate in arts and related activities in the last month (e.g. music, visual arts, dance, performance, craft)?

Yes .... ☐ 1
No.. ☐ 2
Don't know.. ☐ 3

38. In the last 12 months, excluding man made or natural disasters did you provide any unpaid help (volunteer) for any of the following types of organisations in Queensland? *(tick all that apply)*

Sport and physical recreation clubs..................................... ☐ 1
Education or training organisations, (e.g. schools)................... ☐ 2
Welfare or community groups (e.g. Meals on Wheels)................. ☐ 3
Parenting, children or youth groups...................................... ☐ 4
Religious organisations/churches .... ☐ 5
Health organisations (e.g. hospitals).................................... ☐ 6
Arts and Cultural Heritage .... ☐ 7
Emergency service organisations (e.g., SES, Rural Fire Service)...... ☐ 8
Other (please specify) _____ 9
Did not provide any unpaid help.. ☐ 10

39. How strongly do you agree or disagree with the following statement?

There are local community leaders I can trust.

Strongly agree.. ☐ 1
Agree .... ☐ 2
Neither agree nor disagree.. ☐ 3
Disagree... ☐ 4
Strongly disagree .... ☐ 5

A community is made up of individuals with many different ways of looking at the world. The following questions are about your own personal wellbeing, beliefs and values. These help us to understand what is important to people in a community and how we can better work together.

40. How strongly do you agree or disagree that it is a good thing for a society to be made up of people from different cultures?

Strongly agree.. ☐ 1
Agree .... ☐ 2
Neither agree nor disagree.. ☐ 3
Disagree... ☐ 4
Strongly disagree .... ☐ 5

41. How strongly do you agree or disagree that your local community is welcoming of people of different cultures?

Strongly agree.. ☐ 1
Agree .... ☐ 2
Neither agree nor disagree.. ☐ 3
Disagree... ☐ 4
Strongly disagree .... ☐ 5

42. Which of the following statements best describes your understanding of faith or spirituality? It is: *(select one only)*

A sense of connection to something outside myself................... ☐ 1
Something that sustains me through times of hardship .... ☐ 2
A system of morality and values.. ☐ 3
Maintaining a sense of hope... ☐ 4
A formal religious belief (e.g. Christianity, Islam etc) .... ☐ 5
I don't think about issues of faith or spirituality............................. ☐ 6
None of the above... ☐ 7
Other (please specify) _____ 8

43. Please number in order of importance the <u>TOP 5 values</u> that you think are most important to pass on to our children/young people *(with 1 being the most important)*

Independence .... ☐ 1
Hard work .... ☐ 2
Feeling of responsibility .... ☐ 3
Resilience .... ☐ 4
Tolerance/ respect for other people and cultures ... ☐ 5
Saving money .... ☐ 6
Determination, perseverance , persistence .... ☐ 7
Religious faith .... ☐ 8
Unselfishness .... ☐ 9
Obedience .... ☐10
Other (please specify) [   ] 11

44. Thinking about your own life circumstances, how strongly do you agree or disagree with the following statement?

I am satisfied with my life as a whole.

Strongly agree .... ☐ 1
Agree .... ☐ 2
Neither agree nor disagree .... ☐ 3
Disagree .... ☐ 4
Strongly disagree .... ☐ 5

The following questions are about community 'resilience'.

Most communities pull together when the going gets tough, and we have seen many examples of this through the recent disasters across Queensland.

45. Thinking about where you live, what do you think makes your community resilient?

46. Thinking about where you live, what do you think could happen to help make your community MORE resilient?

The following questions tell us a little bit about you.

47. Gender

Male .... ☐ 1
Female .... ☐ 2

48. What was your age at your last birthday (in years)?

[   ]

49. What is the highest level of education you have completed? *(select one only)*

Never attended school .... ☐ 1
Some primary school .... ☐ 2
Completed primary school .... ☐ 3
Some high school .... ☐ 4
Completed high school (year 12) .... ☐ 5
TAFE or Trade certificate or Diploma .... ☐ 6
University undergraduate degree or equivalent ...... ☐ 7
Postgraduate university (Honours, Masters, PhD) ... ☐ 8
Don't know .... ☐ 9
Other (please specify) [   ] 10

50. Please indicate the approximate total of all wages/salaries, government benefits, pensions, allowances and other income <u>you personally</u> receive per <u>week before tax</u>? (annual amount in brackets) *(select one only)*

$0-$399 ($52-$20,748) .... ☐ 1
$400-$799 ($20,800-$41,548) .... ☐ 2
$800-$1499 ($41,600-$77,948) .... ☐ 3
$1,500-$2,000 ($78,000-$104,000) .... ☐ 4
$2,000 or more ($104,000 or more) .... ☐ 5
Don't know .... ☐ 6

51. How long have you lived in this community (not necessarily in your current home but within the area)? *(select one only)*

Less than a year .... ☐ 1
1-less than 3 years .... ☐ 2
3-less than 6 years .... ☐ 3
6-less than 10 years .... ☐ 4
More than 10 years .... ☐ 5

52. What is your religion? *(select one only)*

Catholic .... ☐ 1
Anglican (Church of England) .... ☐ 2
Uniting Church .... ☐ 3
Presbyterian .... ☐ 4
Baptist .... ☐ 5
Islam .... ☐ 6
Greek Orthodox .... ☐ 7
Buddhism .... ☐ 8
Other (please specify) [   ] 9
No religion .... ☐10

Thank you for taking the time to complete this survey, we appreciate your contribution.