

# *Recent research activities*

## Presentation overview

- CeCC research
  - Ongoing interest in understanding the impact of ICT on organisations and communities
  - Commitment to collaborative approaches
  - Goal of transferring knowledge and research capability to others
  - Opportunity to leverage new technologies to support research across all phases
- Some recent examples
  - Web 2.0, Web GIS, eMentoring, Knowledge management, Next generation broadband

# *BCG Wildlife Pond Scheme*



## Background



- Multimedia Victoria
  - Launched a \$15m competitive grants program in 2009 to accelerate the innovative use of next generation ICT
- CeCC
  - Engaged with client organisations to identify potential projects
- BCG
  - Worked with BCG (and others) to prepare expressions of interest (Mar 2009)

## Background

- Stage 1 outcome
  - Confirmation that application shortlisted to proceed to Stage 2 of the assessment process (Jun 2009)
- Business Case
  - CeCC worked with BCG and other project partners to develop full business plan (Aug 2009)
  - BCG advised that grant funding of \$150,000 secured (Nov 2009)
- Project implementation
  - February 2011 - December 2012

## Project goals

- Use next generation ICT to innovate
- Introduce landholders and other stakeholders to new communication and engagement approaches.
- Support collaborative monitoring of impacts of climate change
- Support BCG and other project stakeholders in extending their knowledge of new web 2.0 technologies.
- Foster the update of web 2.0 and other new technologies in parallel with this project





## Using Web 2.0 Technologies to enhance biodiversity on-farm

### Wildlife Ponds

Pond owner? Interested in constructing a pond?

[SIGN UP](#)

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#### Project homepage

[Interactive maps](#)

[Project blog](#)

[How-to guides](#)

[Multimedia](#)

[Project background](#)

[Back to the BCG website](#)

*"Web 2.0 is a term used to describe new internet applications that facilitate interactive information sharing and interoperability with a user-centred design."*

#### Mallee Frog Blog

##### Wet October

Our dry September is over. October started the same way but has finished with two big rainfall weeks, of about 40mm each. The first big rain was en...

Welcome to the homepage for the BCG Wildlife Ponds project. Still in its early stages, this website will demonstrate and promote the use of new web technologies to enhance biodiversity on-farm.

#### Interactive map

Click on the image below to access our wildlife ponds map.



#### Project blog

[RSS feed](#)



##### Frog Frenzy!

I feel like a murderer - driving home last week at about 9pm there were soooooo many frogs on the road that even with Mark Webber skills I was unable to avoid running over numerous little frogs! R...

[Read here](#)

#### How-to guides

[Installing a pond](#) (Other guides coming soon)



#### Q&A with Jonathan Starks

A series of 6 videos recorded with the BCG wildlife ponds project officer.



[Watch more videos >](#)

# *Gippslink*

*Strategic plan for Gippsland regional  
geographical information system (GIS)*



## Background

- In 2008 a consortium of Gippsland Local Governments made a preliminary submission to the MAV Broadband Innovation Fund (\$2.1m)
- While the application was not successful officers from MAV and the Victoria Government continued to work with the Gippsland region on their concept for a broadband network (GippsLink).
- CeCC was engaged in February 2010 to assist in researching the business case for a shared Geographic Information System (GIS) which was one of six identified priority areas.

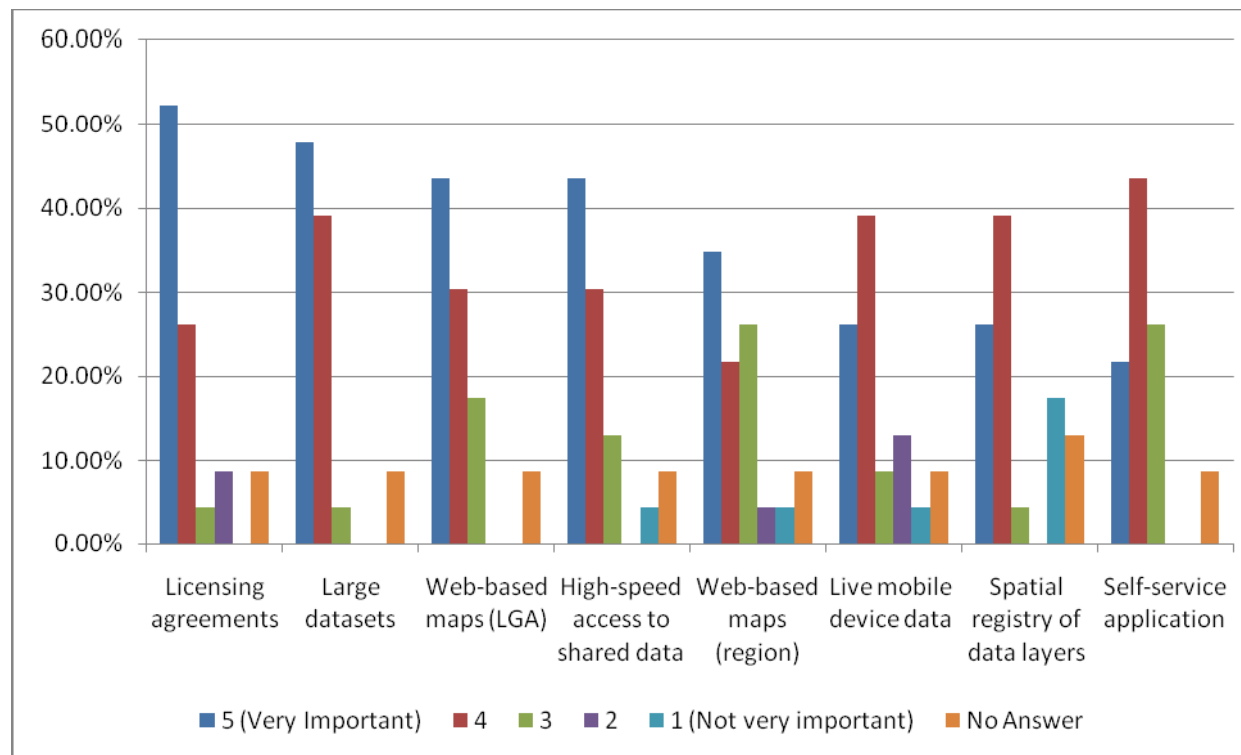
## Research activities

- Exploring current level of GIS adoption in the Gippsland region
- Stakeholder consultation and engagement with representatives of the six LGAs
- Liaison with data custodians and other potential project partners
- Consultation and desktop research to identify potential benefits, costs and challenges
- Documenting research findings

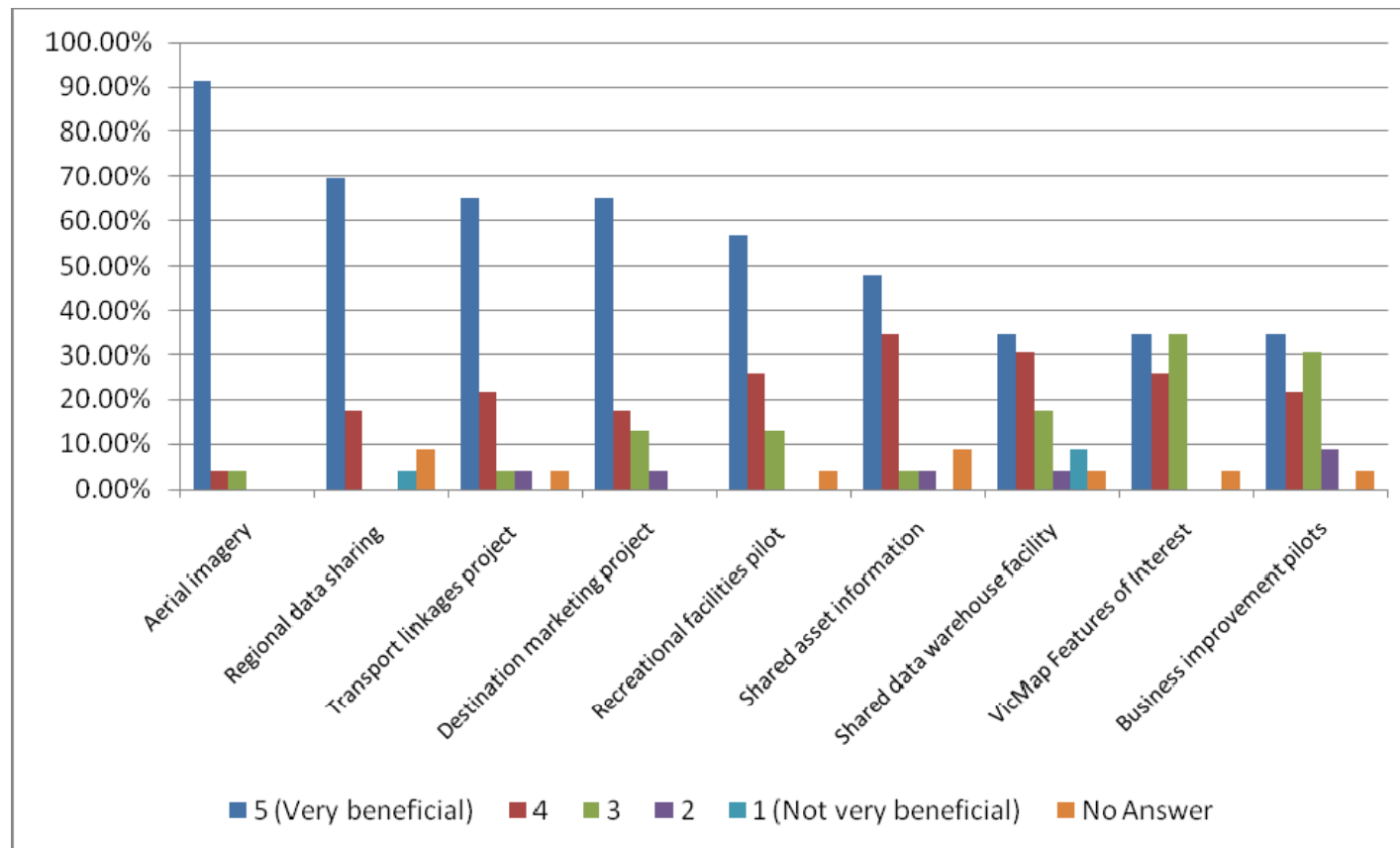
## Research findings

- Spatial information can inform 'big picture' understanding and enhance regional decision making processes, create greater efficiencies in communication, increase the quality of information and support policy formulation and evaluation
- Common infrastructure goals and objectives were confirmed
- The most important features of a shared GIS were identified
- Information was captured to inform the prioritisation of service delivery

- Ranking of potential model elements  
(respondents n=24)



- Shared GIS applications: public  
(respondents n=24)



*Young farmers for  
the Wimmera project  
eMentoring feasibility study*



## Project outline

- The eMentoring feasibility study was undertaken as one of the activities supported as part of the Young Farmers for the Wimmera project.
- Regional stakeholders had identified that eMentoring may offer significant potential to enhance career development and networking needs of Wimmera young farmers.
- CeCC was engaged by the Grampians Regional Management Forum to research the most appropriate eMentoring model.
- The feasibility study was completed during 2009/2010.
- Background information is accessible at:  
[www.cecc.com.au/cb\\_pages/wimmera\\_eMentoring.php](http://www.cecc.com.au/cb_pages/wimmera_eMentoring.php)

## Research activities

- Desktop research and telephone interviews
  - Identify examples of Australian and international agricultural mentoring programs
  - Identify examples of Australian and international eMentoring programs
- Consultations in the Wimmera
  - Mentoring - What does it mean?
  - Existing programs in the Wimmera
  - Other government or industry mentoring programs
  - Experience of mentoring programs - What has worked well? What challenges were experienced?
  - Likely demand for mentoring program in the Wimmera

## Research outcomes

- Identified the timing may not be ideal for initiating a mentoring program.
  - The Wimmera region has experienced extended periods of drought
  - Young farmers are strongly focused on their farming businesses - very time poor
  - Shortages of staffing resources on-farm and across broader agriculture sector
  - Potential participants need to be able to readily identify associated benefits before opting in
  - Lessons reinforced through planning for a two-day Leadership Program

# *Grains Research and Development Corporation*

*Final Reports and Online Libraries*

## Knowledge management

- Provide innovative and efficient ways of delivering knowledge to researchers, producers and advisors.
- Support collection, collation and delivery of final report information in a consistent format.
- Incorporate significant rigour while remaining user-friendly for researchers, producers and advisers.
- Provide flexibility within GRDC data management systems with the integration of existing and new data being key considerations.
- Present information in a format that enhances information sharing, knowledge dissemination and decision making.

# *Next Generation Broadband and Telecommunications*

*Regional ICT Studies*



## Reflections linked to policy context

- The ICT challenges which small communities and individual LGAs are facing are difficult to tackle alone.
- Collaboration at a regional scale may more effectively support advocacy and other actions directed towards ensuring all residents and businesses can access and effectively use quality ICT services.
- A continued focus on long-term regional scale planning will assist in identifying ICT initiatives which are capable of generating regional economic development and social inclusion benefits

## Presentation overview

- Update on ICT planning in the Grampians and other Victorian regions
  - Research outputs
  - Mapping
  - Collaboration models
- Application of research tools and data collection
  - Support regional ICT planning and capacity building
  - Achieve the fastest possible rollout of the NBN
  - Foster innovative use and application of ICT




## Research objectives


- Gather ICT related data from a regional level
- Map ICT adoption levels and service satisfaction
- Identify areas of pent up demand for ICT services
- Considering the aspirations and intentions of local government, residents, businesses and other stakeholders
- Identify areas of potential opportunity
- Recommend actions

# Information and knowledge management

www.cecc.com.au > Research > ICT Studies



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and Communications




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## ICT Studies


The Central Highlands and Wimmera Southern Mallee ICT Plans will map current ICT adoption levels and service satisfaction, and identify areas of pent up demand for services. They will identify how broadband technologies act as an enabler for economic and social development in the Central Highlands and Wimmera Southern Mallee regions. Associated research will be completed in the period between March and September 2010.


### Get Involved

One way for you to get involved is to complete an online survey. Your responses will assist the region in building and shaping its ICT policy in the coming years. Another way is to inform us about local examples of telecommunications and broadband usage that demonstrate the positive impacts of local adoption.

[Click here to start the online survey](#)

[Click here to download the Central Highlands PDF version of the survey to complete offline.](#) file size: 46KB

[Click here to download the Wimmera Southern Mallee PDF version of the survey to complete offline.](#) file size: 46KB

[Click here to start the online case study template](#)

RESEARCH

ICT Studies

[Background](#)

[Consultation](#)

[The Team](#)

[Project Updates](#)

[Useful Websites](#)

[Telecommunications Maps](#)

[NBN Map - Bacchus Marsh](#)

[GIS Studies](#)

[WimmerAlive](#)

[Online Surveys](#)

[Research Output](#)

### Search this Site

Keywords

**Search**

## Project activities and communications

- Stakeholder forums
  - Department of Broadband Communications and the Digital Economy
  - NBN Co
  - State Government
  - Regional Victorian RDAs
  - Regional and LGA briefings
- Regular project updates
- Media coverage
  - Profiling regional readiness for high speed broadband
  - Press, radio, television
  - 7.30 Report - 'Broadband Hangs in the Balance'



# Community and business survey

## ICT Survey

Welcome to the ICT online survey. This survey is supporting ICT studies in the Central Highlands and Wimmera Southern Mallee regions of Victoria. This survey consists of a total of 40 possible questions which may be asked depending on the responses you provide. As you provide your responses the questions will expand to display more of the possible questions. This survey includes some compulsory questions and will not submit until you have provided answers to them. The compulsory fields are denoted by a red asterisk (\*).

### Profile

\* What is your age group?

- ☐ Under 15 years
- ☐ 15 - 24
- ☐ 25 - 34
- ☐ 35 - 44
- ☐ 45 - 54
- ☐ 55 - 64
- ☐ 65 - 74
- ☐ 75 years and over

\* Which local government area do you live in?

Please choose... 

\* How many people under 18 years old live in your household?

*Only numbers may be entered in this field*

### Work

\* Do you work?

- ☐ Yes
- ☐ No

### Commuting

\* Do you commute between home and work?

## Key findings (Examples from Central Highlands)

- 'Word clouds' capturing regional sentiments about ICT services

3g able access adsl all any Ararat **area** available Ballarat better  
between black broadband business calls car clients communication  
conferencing connection contact cost could **coverage** currently  
data download driving drop email exchange faster frustrating gap get good great halls  
happy **have** high home ICT illegal improve internet  
issues lack line many Mamoo Melbourne **mobile** Moonambel  
more most much Navarre need network office often only Optus outs  
outside **phone** plan poor receive reception reliable rural satellite  
**service** shire short signal slow some sometimes speed  
spots Telstra text time town travel up upgrade use very video western  
when where wireless work would

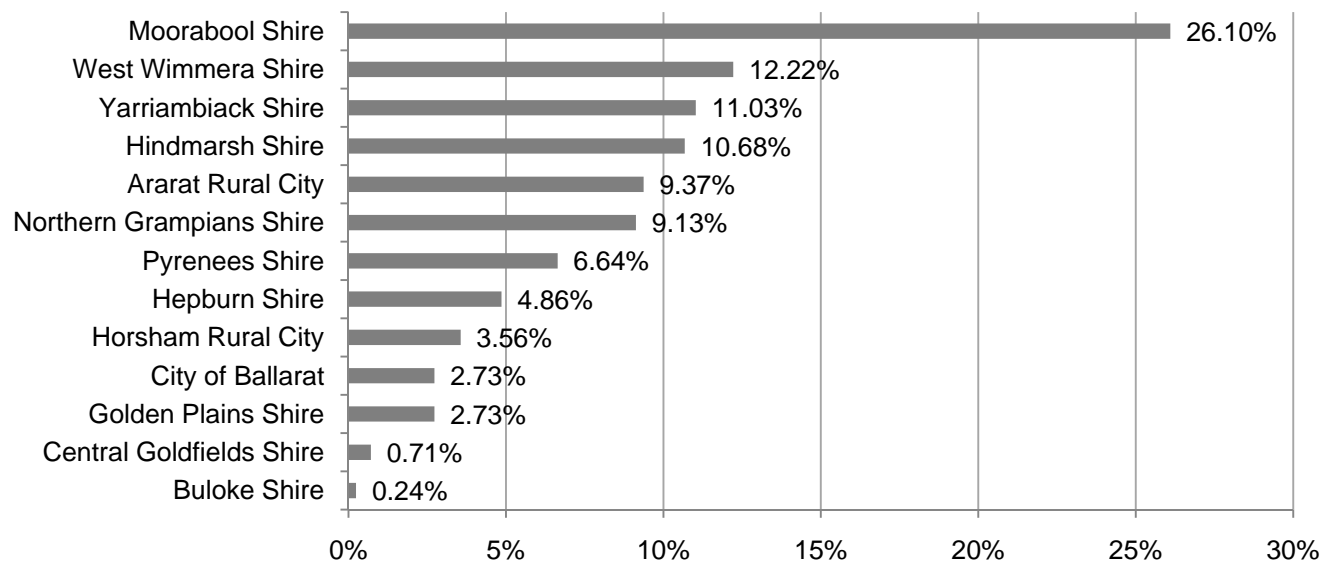
Source: Central Highlands ICT Survey n=525

2010 21st 3g able absolutely access ADSL all area bad better Blackwood broadband  
bushfire business call can't century CFA communication community connection

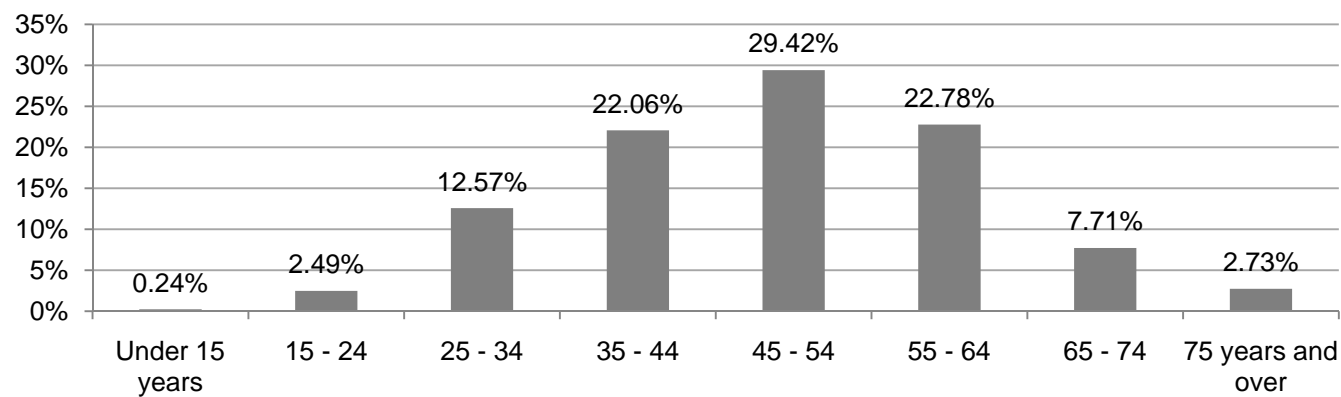
contact **coverage** customers dangerous  
Daylesford definitely desperately didn't direction doesn't don't down driving  
**emergency** enough essential everywhere fire get good have help  
here high home hopeless hurry hurts important improved inadequate internet issues  
limited long lot Lyonville mobile more much must **need** only  
Optus out overdue patchy people phone please poor prone  
reception required resident ridiculous risk rural safety season  
**service** shocking signal soon Telstra times town Trentham upgrade  
urgent very Vodafone waiting when work would wrong yes

Source: Hepburn petition n=800+

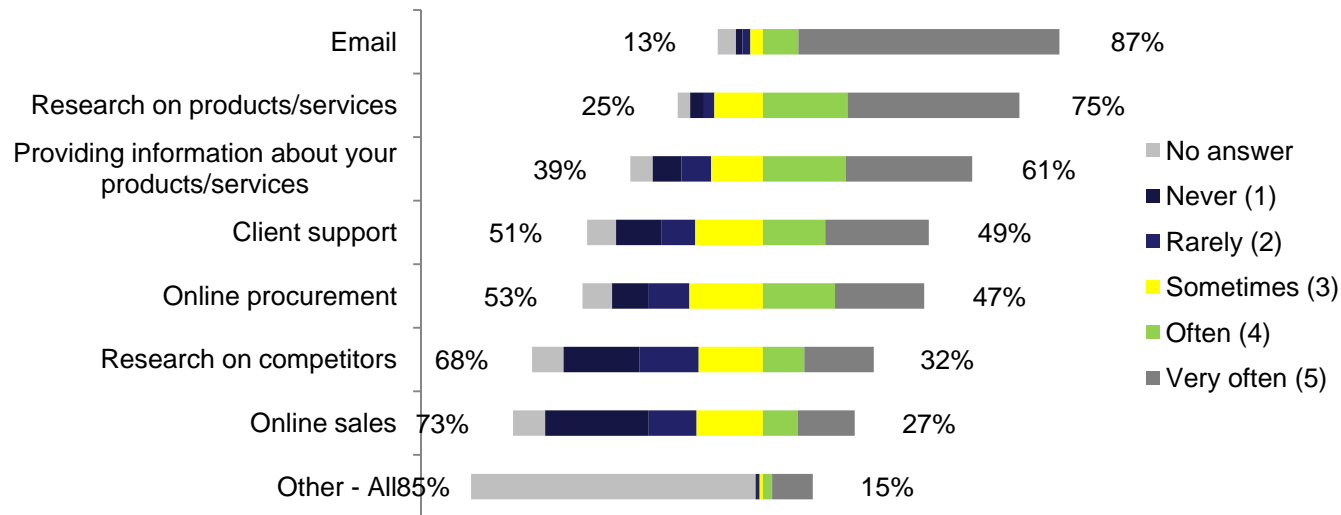
## LGAs (n=843)



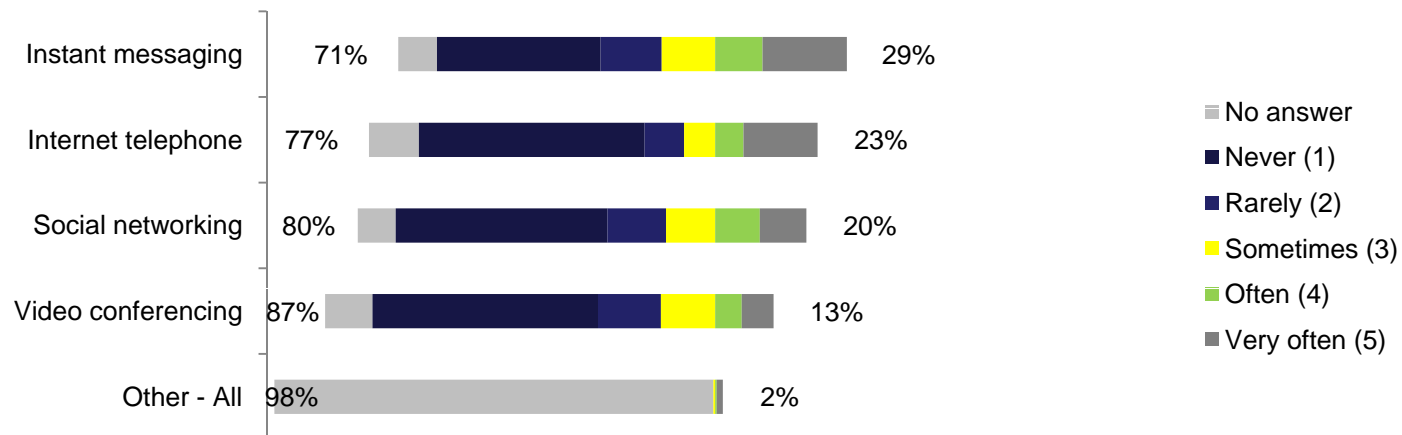
## Age (n=843)



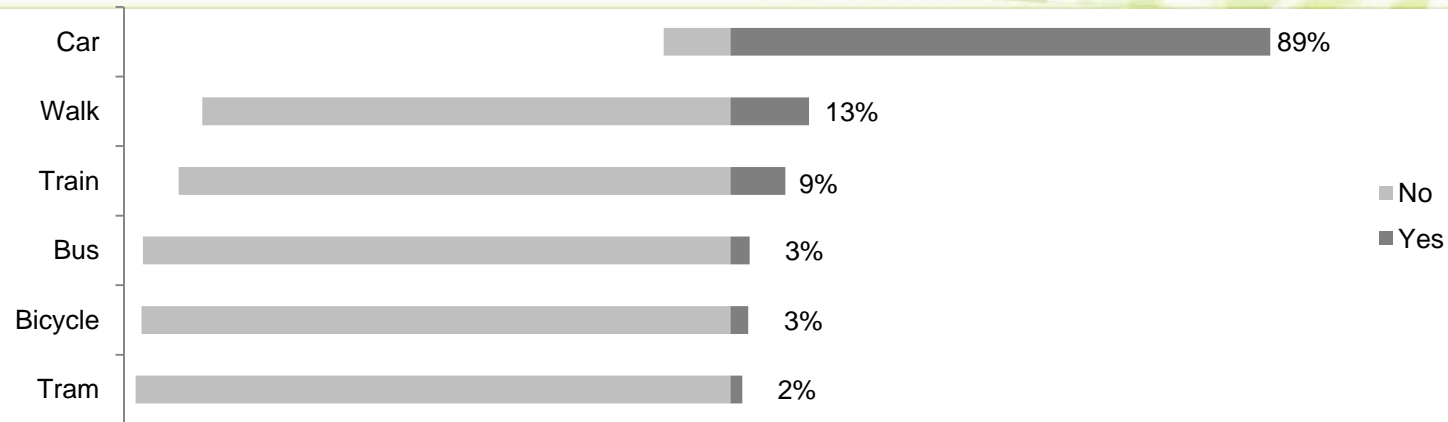
## Use of internet services at work (n=521)



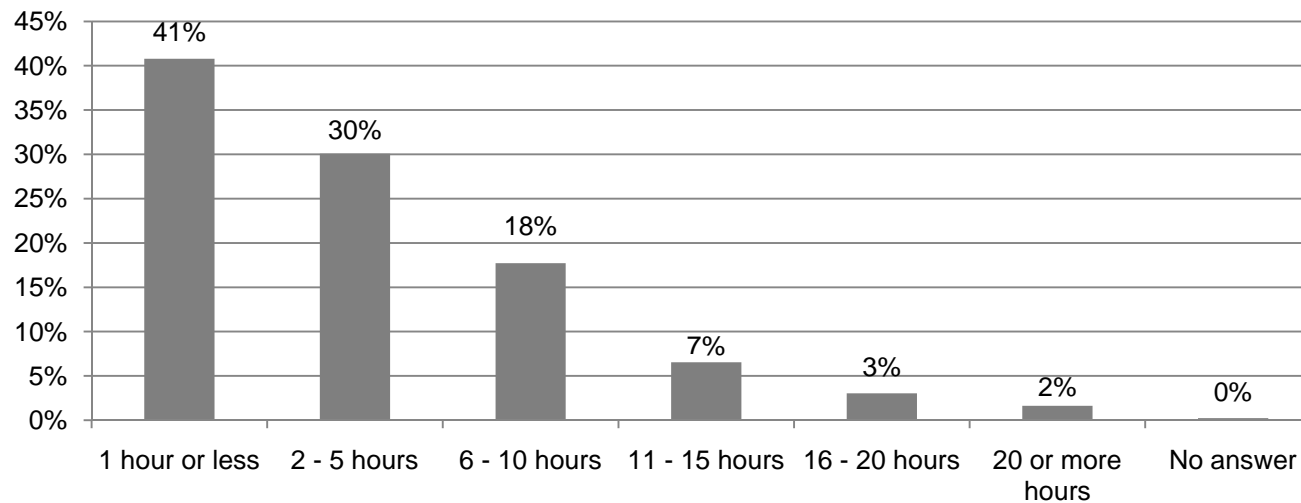
## Use of ICT services at work (n=521)



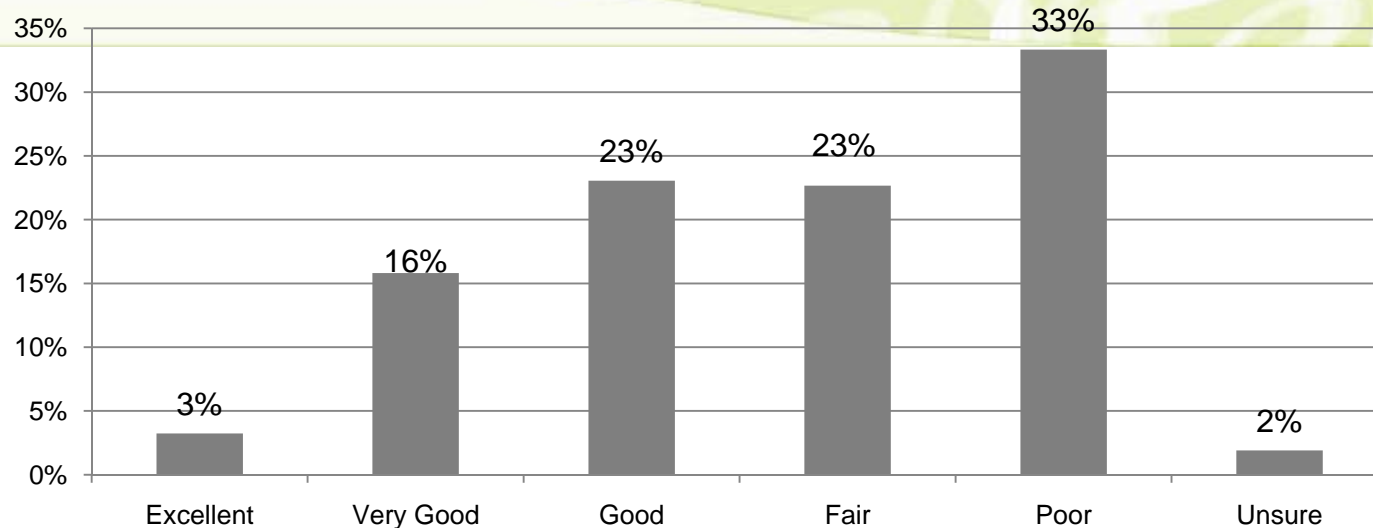
## Transport normally used to commute (n=409)



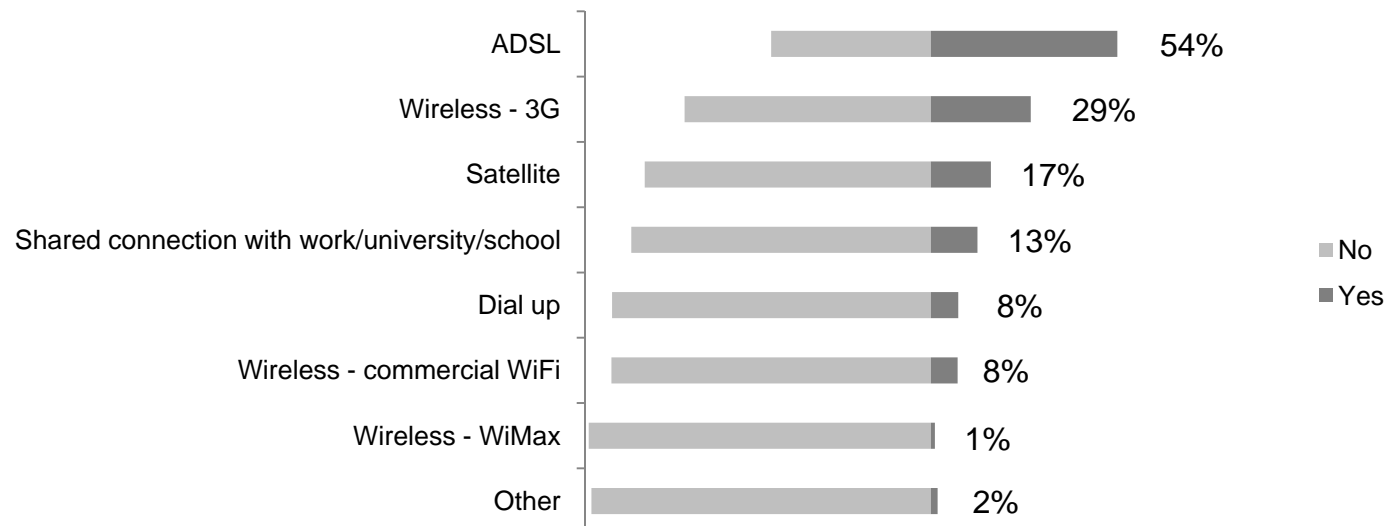
## Average hours spent commuting per week (n=429)



## Quality of mobile phone coverage (n=304)

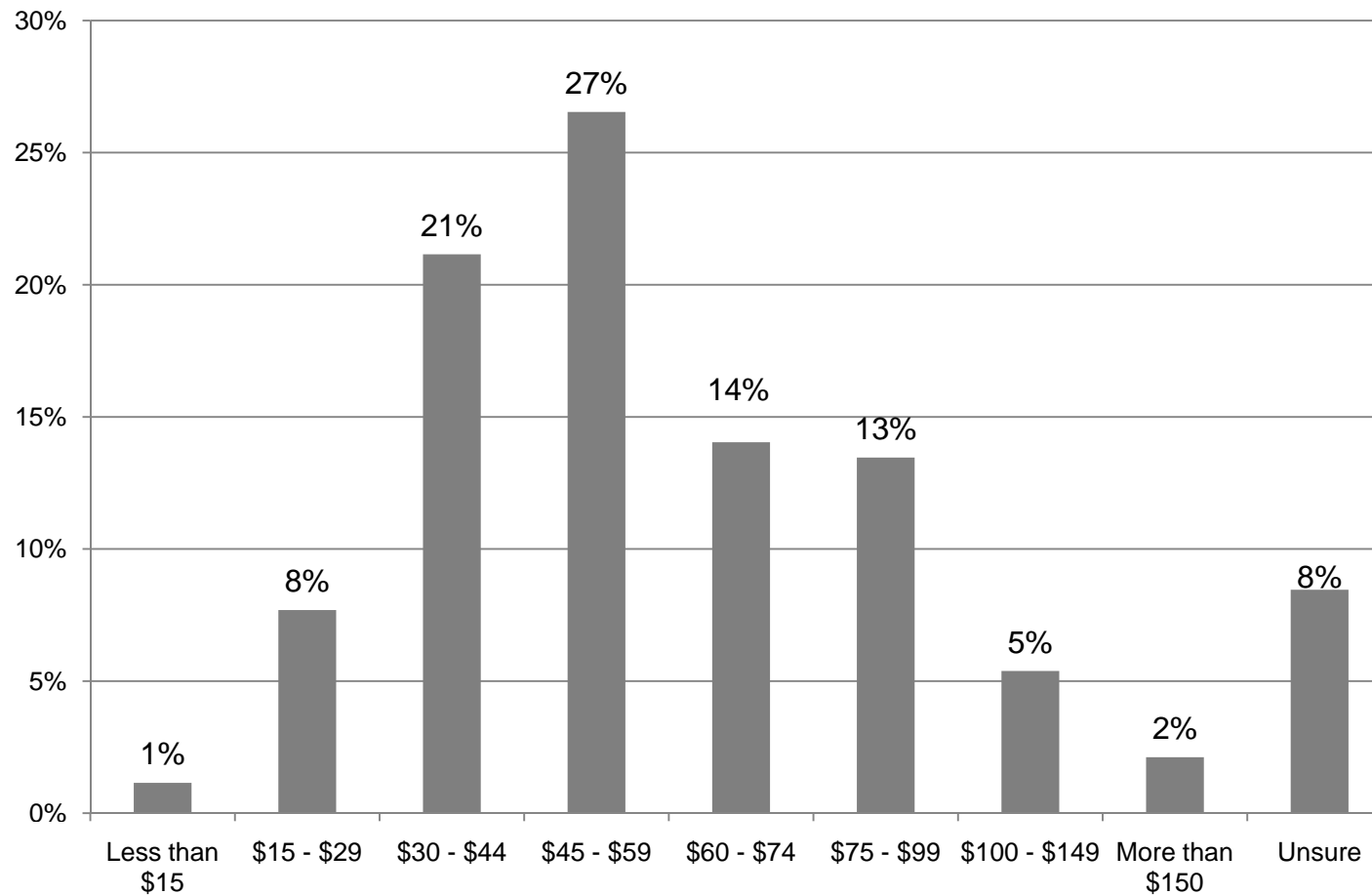


## Type of internet access (n=520)

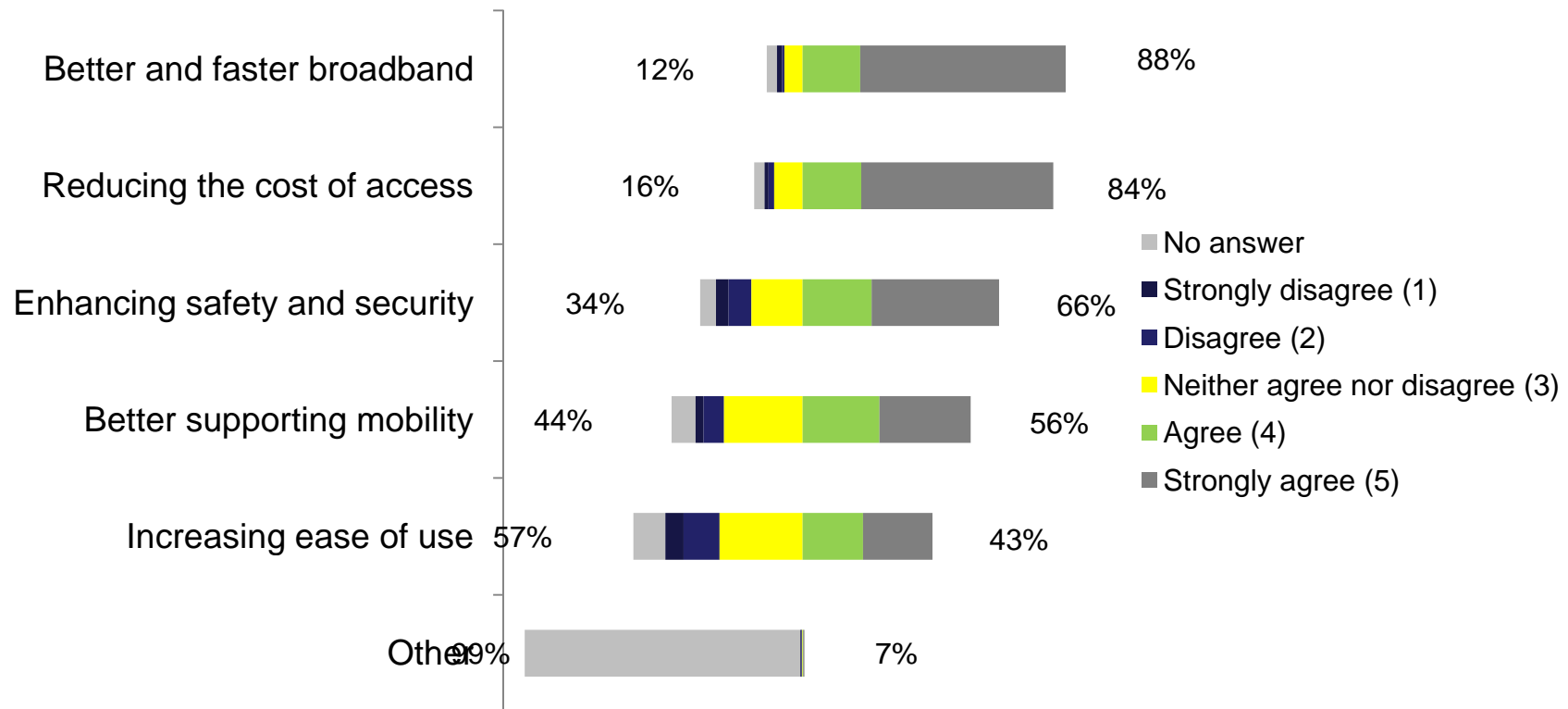




## Monthly cost of internet service (n=520)



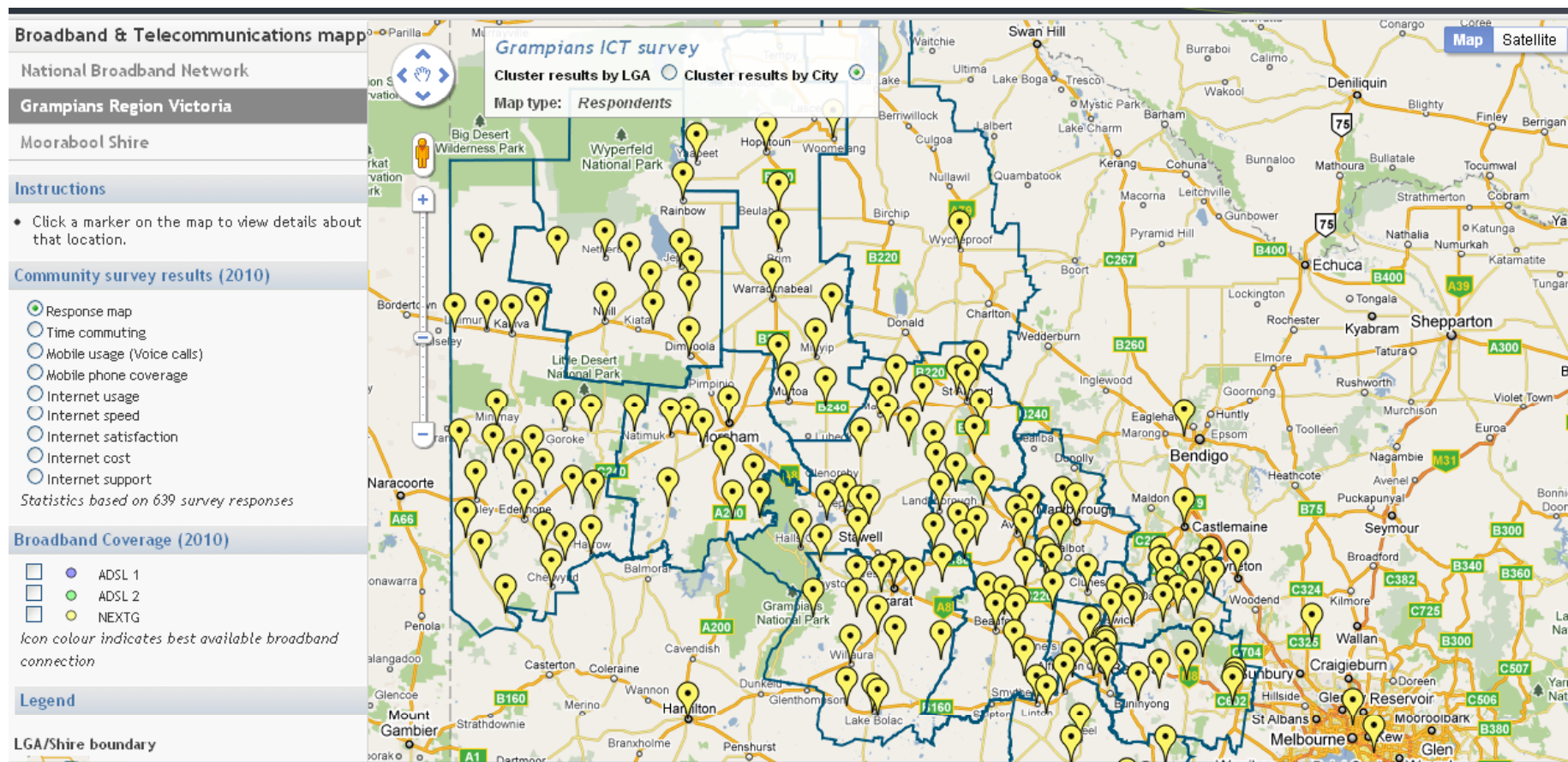
## The most important or pressing issues about the internet (n=525)



## Mapping

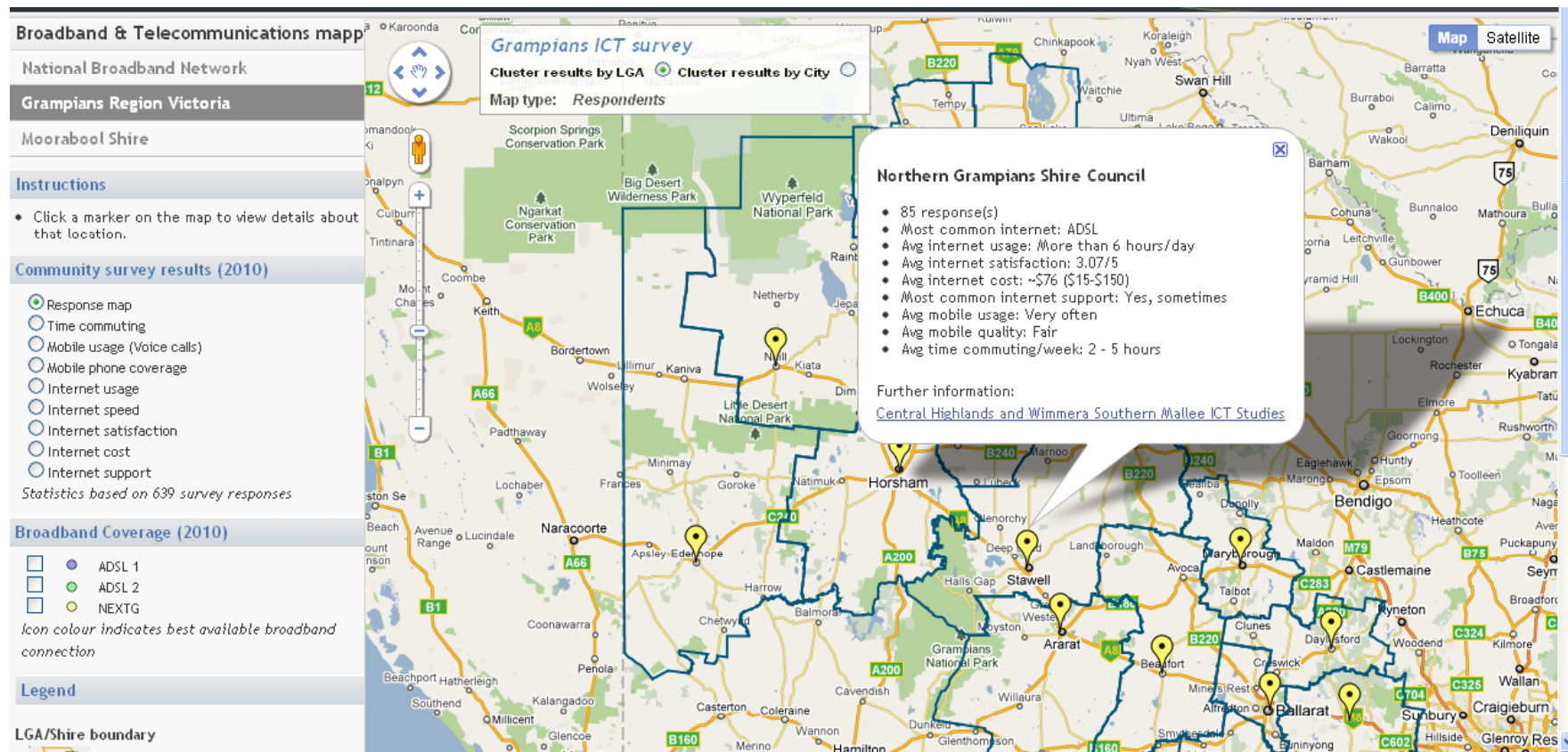
- Existing telecommunications infrastructure
- Current broadband coverage
- Business and resident feedback on telecommunications and ICT
- NBN coverage
  - Bacchus Marsh NBN Stage 2 release site area
  - Australia NBN initial, NBN fibre, NBN wireless

# Build a regional knowledge base



# Develop evidence base for local advocacy

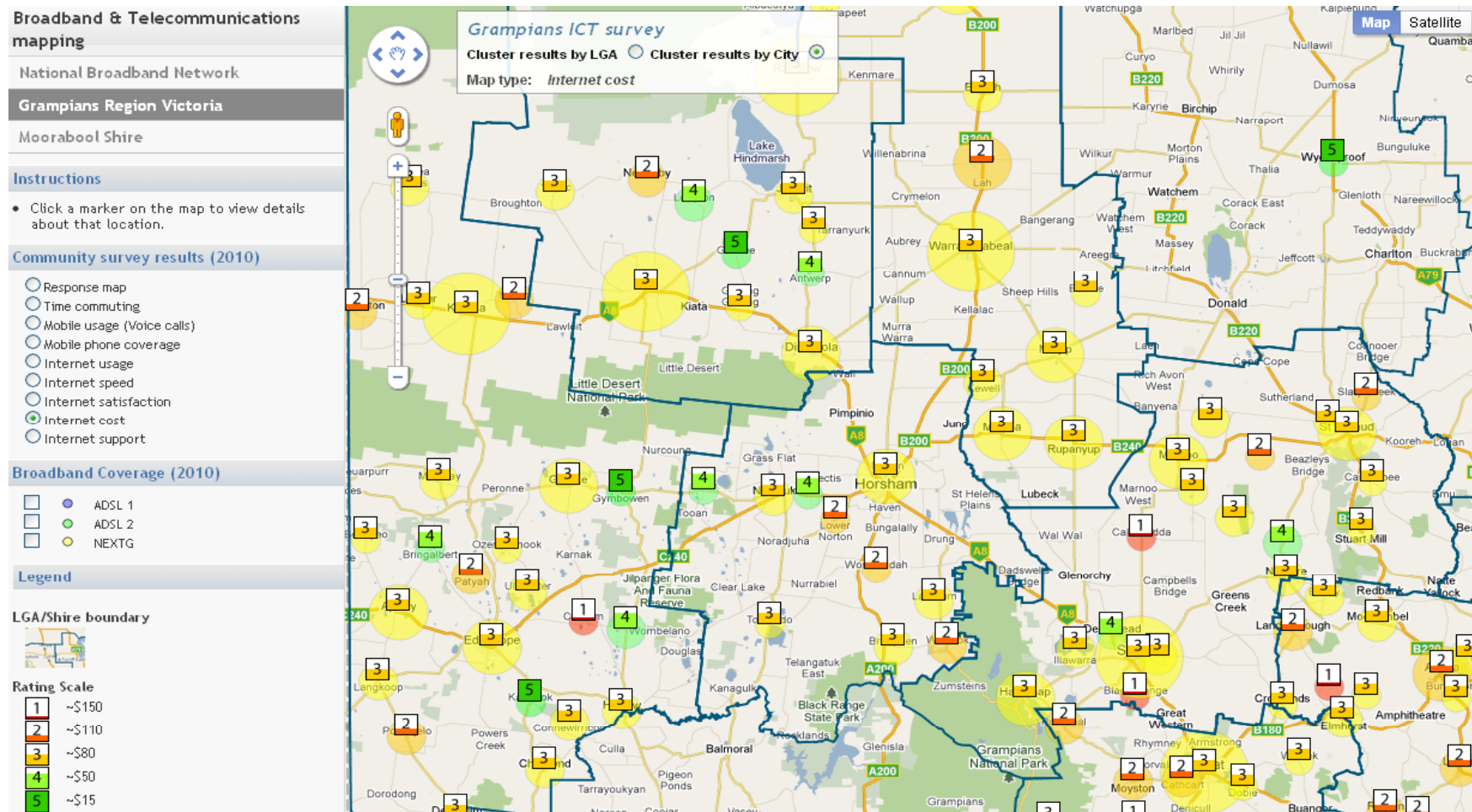
## Northern Grampians Shire response summary





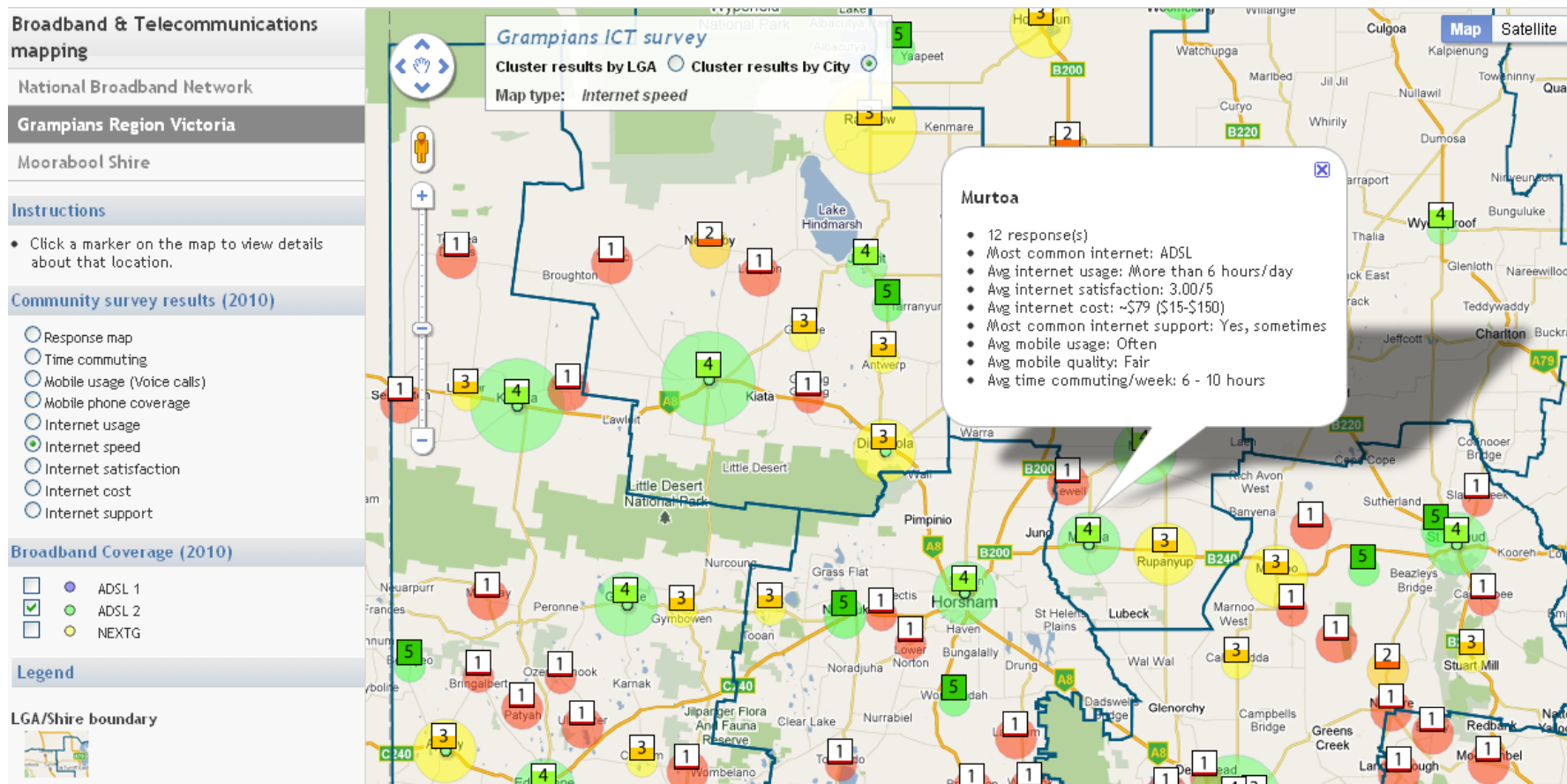
# Develop evidence base for local advocacy

Internet cost (1= \$150 per month - 5 = \$15 per month)



# Develop evidence base for local advocacy

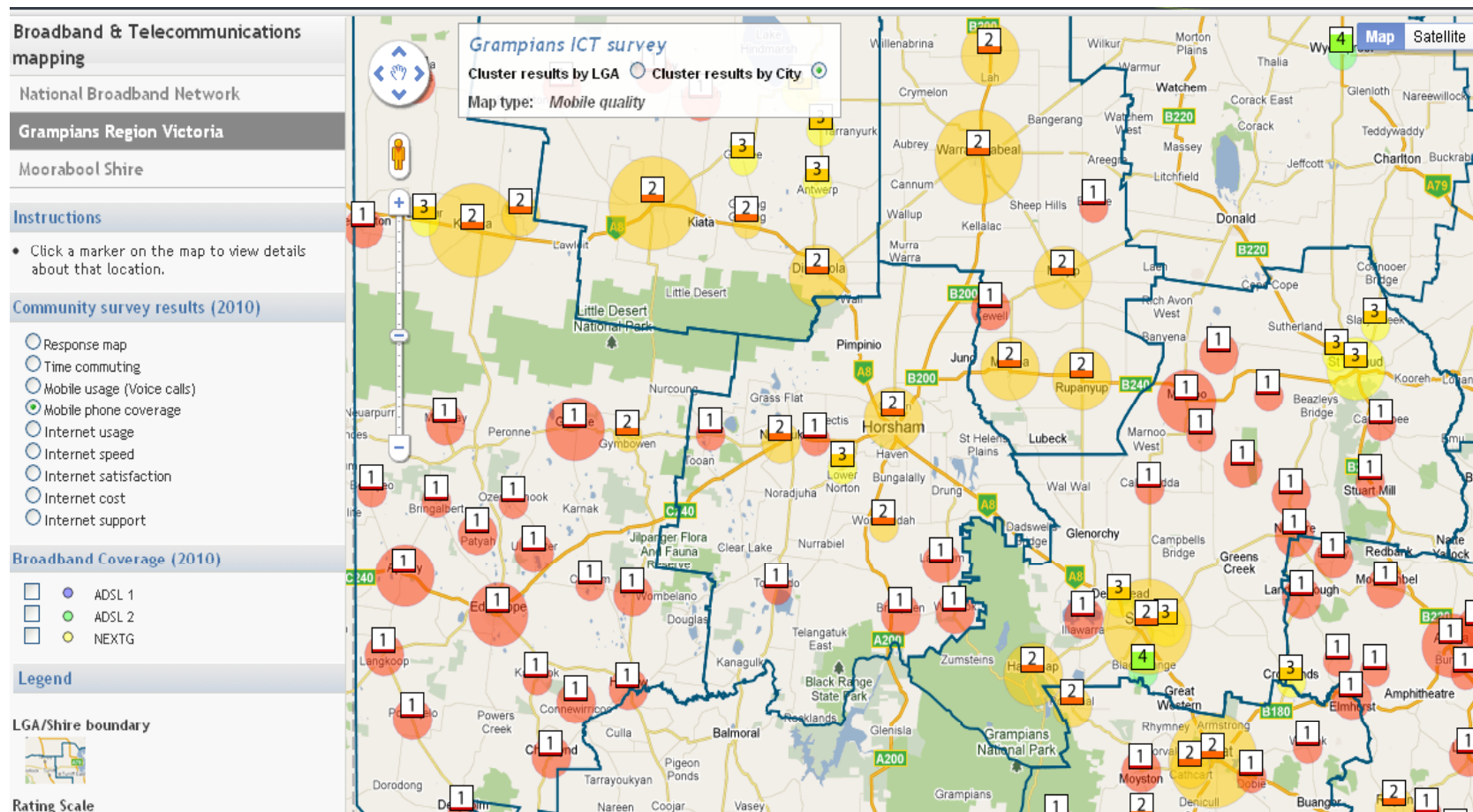
Internet speed rating (5 = excellent/very high - 1 = poor/very low)



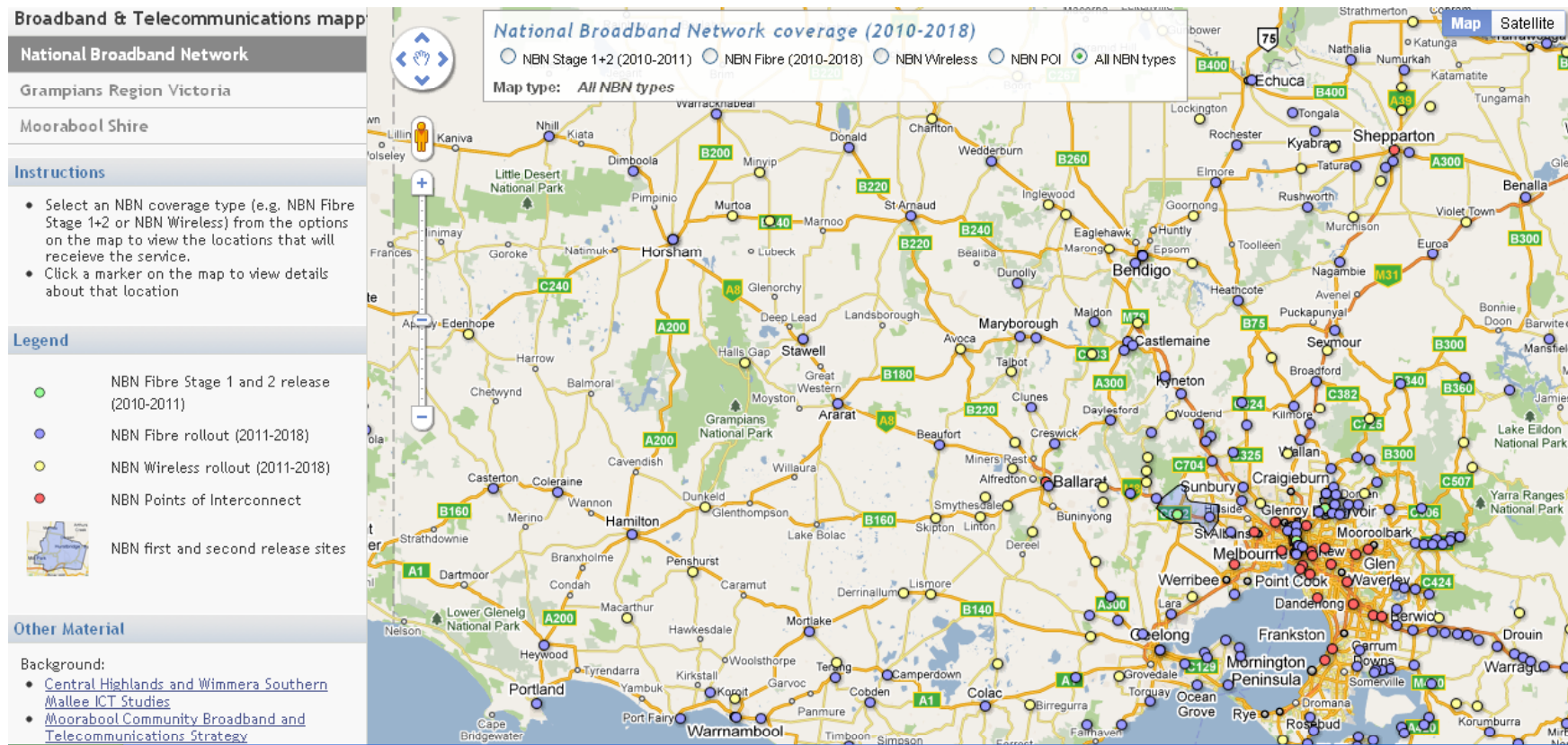


# Develop evidence base for local advocacy

Mobile phone coverage (5 = excellent/very high - 1 = poor/very low)

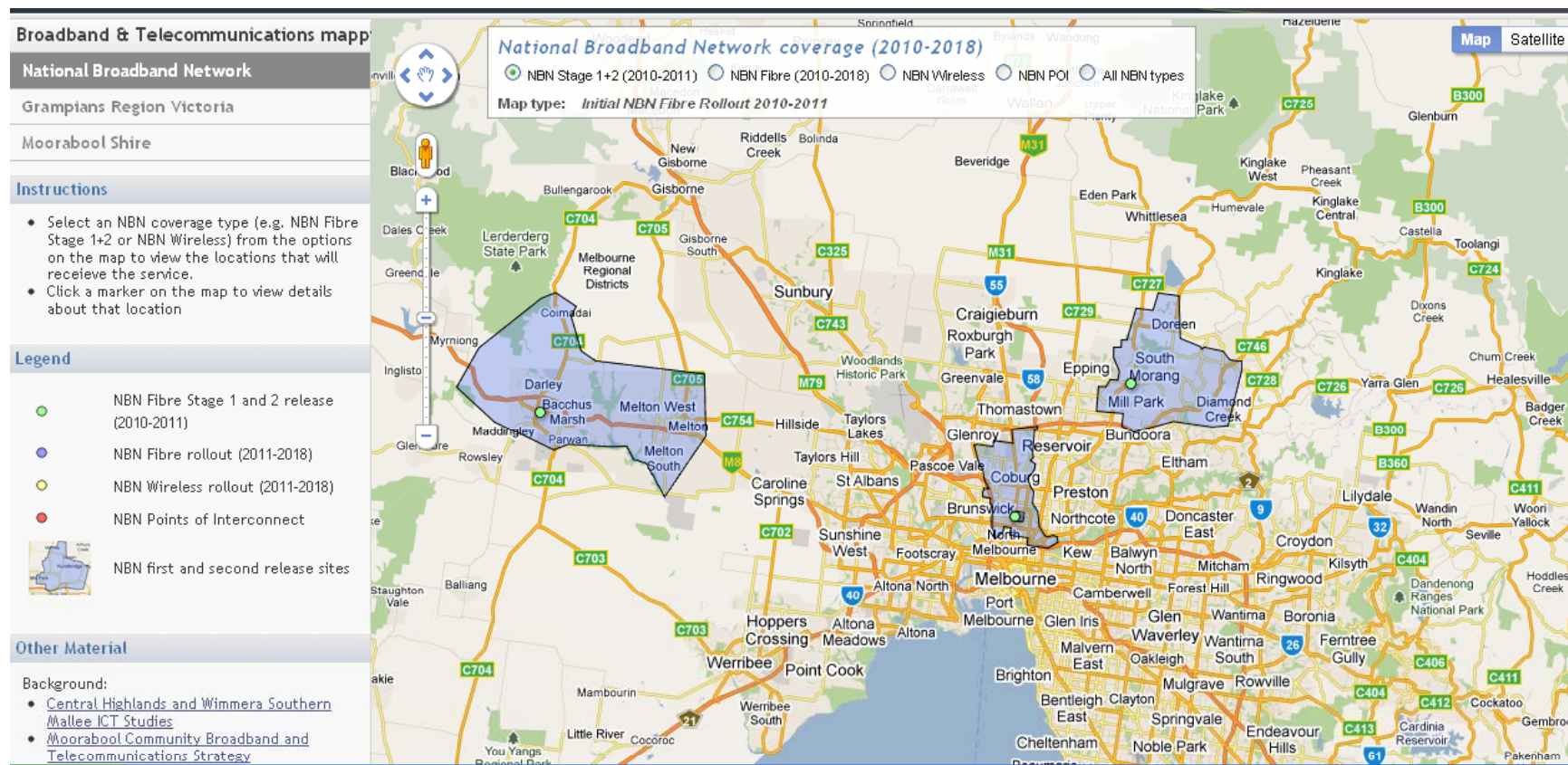


# Share knowledge about the NBN





# NBN 1<sup>st</sup> and 2<sup>nd</sup> Stage release sites



## Gather information to support NBN Co

- Work with NBN Co and others to identify planning information requirements and gaps
- Liaise with RDAs and LGAs so they can be informed about the type of data that would be beneficial
- Provide services to support the contribution of data from multiple custodians
- Map outputs on a local, regional and statewide basis
- Develop a knowledge base that potentially supports a more rapid rollout of the NBN in Victoria

## Example of NBN data requirements

- Demographic data (more current than ABS)
- Location of commercial, industrial precincts
- Growth corridors
- Greenfield sites
- Environmental and heritage overlays
- Areas currently poorly serviced by existing broadband
- Govt properties (Local, State and Federal)
- Educational and Health facilities
- Barriers to construction (rivers, highways, cliffs)
- Knowledge of existing infrastructure (exchanges, RIM & HFC)
- Infrastructure programs (significant LGA civil works and or other planned developments)

## Collaboration models

- Document regional readiness and build the business cases for utilising broadband communications in areas including:
  - Agribusiness
  - Health
  - Education
- Describe model for ongoing:
  - Regional ICT collaboration
  - Advocacy