



Ipswich: Preparing Local Government for the NBN

Matthew Schultz
Critical Horizons NBN
Conference
1 December 2011



Presentation Outline

Ipswich City – A Vital Part of South East Queensland - AUSTRALIA

2 x Focus Areas:

1. Preparing for the NBN – Ipswich Case Study
2. Transition to a Digital Economy



Digital Economy

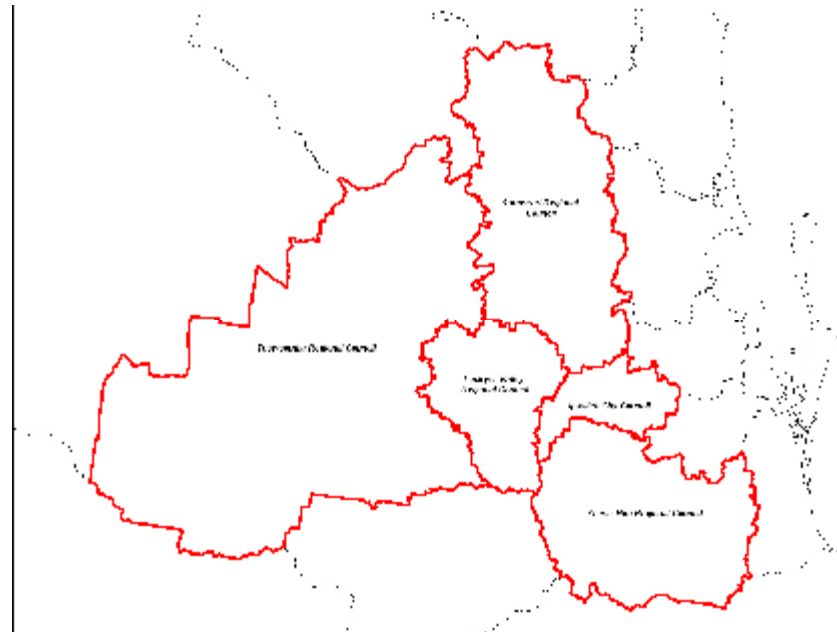
Ipswich City – A Vital Part of South East Queensland - AUSTRALIA

Preparing for the NBN – Ipswich Case Study

Ipswich Orientation

Ipswich City – A Vital Part of South East Queensland - AUSTRALIA

- South East Queensland
- Ipswich Population 175,000 today, 465,000 by 2031
- ACT is 347,000, NT, 221,000 and Tasmania, 500,000
- Fastest growing City in QLD
- 3rd fastest in Australia





Positioning the Ipswich Region

Ipswich City – A Vital Part of South East Queensland - AUSTRALIA

- The Western Corridor region of SEQ is the following local government areas:
 - Ipswich City Council
 - Toowoomba Regional Council
 - Lockyer Valley Regional Council
 - Somerset Regional Council
 - Scenic Rim Regional Council
- The fastest growing region in Queensland
 - Moving from a current population of 416,000 to a projected 824,000 in 2031
- Infrastructure development in the Western Corridor is a key feature of the SEQ Regional Development & Infrastructure Plans
 - Encourage residential & industrial development growth away from the coasts
- Identification of the importance of high speed broadband infrastructure
- The region needs to be 'NBN Ready' to position for accelerated regional implementation of the NBN



Region needs & demand for high speed Broadband

Ipswich City – A Vital Part of South East Queensland - AUSTRALIA

- Major Greenfield development areas
 - Ripley Valley – projected 120,000 population by 2031
 - Springfield – From current 20,000 to projected 85,000 population by 2031
- Major Industrial Development
 - Aerospace Defence Support Centre – Amberley
 - Ebenezer Regional Industrial Area
- Approximately 61% of the regions premises cannot access todays high speed broadband at its highest capacity (ADSL2+ / 20Mbps)
- Access to competitive fibre backhaul infrastructure limited to one or two centralised corridors (for example – Ipswich to Toowoomba rail corridor)
- Broad areas of existing ADSL 'Blackspots' – especially newly developed areas such as Greater Springfield and many others

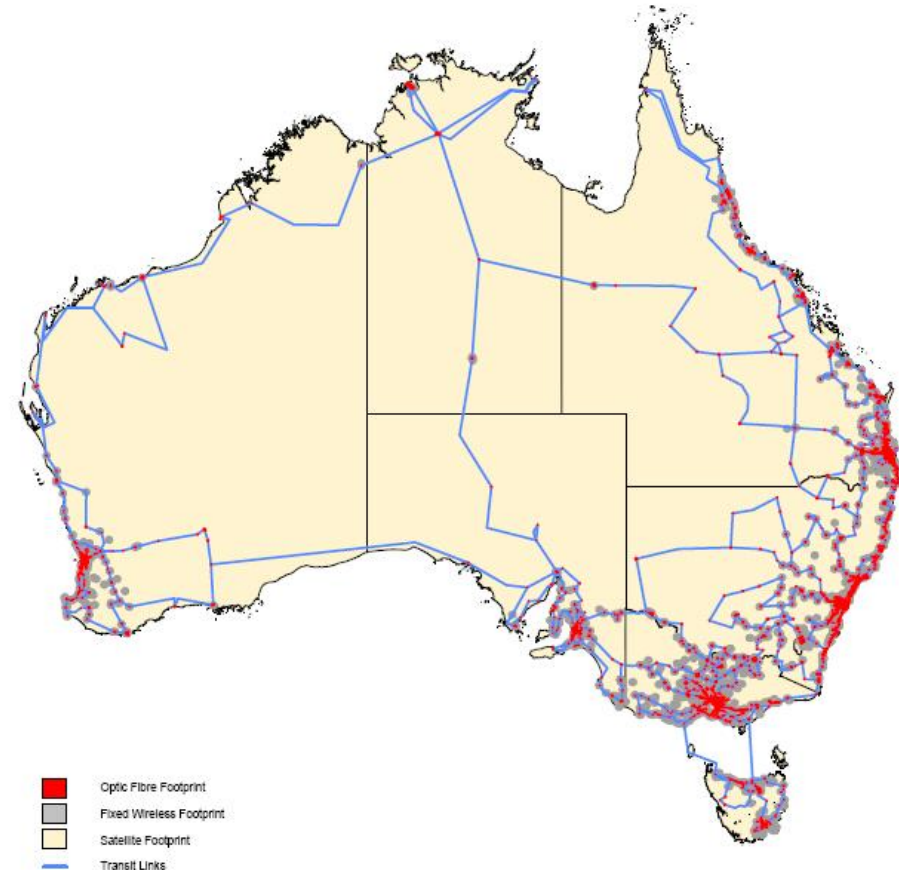
What is the NBN?

Ipswich City – A Vital Part of South East Queensland - AUSTRALIA

- What is the NBN?
- Fibre to the Premise – 93% population footprint
- Wireless – next 4% population footprint
- Satellite – next 3% population footprint
- Speeds
 - Fibre 100Mbps to 1 Gbps
 - Wireless – 12Mbps
 - Satellite – 12Mbps

National Map

These maps provide an indicative representation of the fibre and wireless components of the National Broadband Network. The information in these maps is based on initial detailed modelling work done by NBN Co which may be subject to change following more detailed planning and design work. The fibre modelling is based on NBN Co's current optical fibre design rules rather than detailed premise location and density and may not result in contiguous coverage of all locations within the indicated fibre footprint. The wireless modelling does not take into account terrain modelling and clutter, and may not result in contiguous coverage of all locations within the indicated wireless footprint. These maps also assume that satellite services will be provided to remaining premises. The Transit links represent indicative connectivity. The physical path will vary depending on the geography and the presence of existing infrastructure.



Map from <http://www.nbnco.com.au/assets/maps/coverage-australia.pdf>

- Jul to Sept 2009 – Identification of requirement to be NBN proactive
- Oct to Dec 2009 – Development of internal Business Case
- Jan to July 2010 - Western Corridor National Broadband Network (WCNBN) project
 - Ipswich, Toowoomba, Lockyer Valley, Somerset and Scenic Rim Councils
 - 'As is' and 'To Be' Broadband Infrastructure GIS / Spatial Mapping
 - 'NBN Ready' Planning & Development, Infrastructure Management & Telecommunications Facilities Access Framework
 - Submission for accelerated NBN rollout to the State and Federal Governments and NBN Co – Sent May 31 2010
- July 2010 - Announcement of Springfield and Toowoomba as NBN 2nd release sites on July 8 2010



Ipswich & the NBN

Ipswich City – A Vital Part of South East Queensland - AUSTRALIA

- Goodna among the second round of locations in mainland Australia to receive NBN fibre rollout
- NBN fibre network will be expanded from this initial rollout site – large 2nd release rollout area expected
- Design & Construction subcontractor has been selected – Silcar (Siemens / Thiess JV)
- Preliminary site works to commence in November 2011
- 16,700 premises over next 12 months

Goodna
QUEENSLAND



Copyright © 2011 NBN Co Limited. All rights reserved. Not for general distribution.

Issue date: 14 November 2011

NBNCo



* This map identifies one or more construction areas where NBN Co has commenced building or intends to build its fibre optic network. From the commencement of work through to when services "go live" for a construction area, NBN Co undertakes a series of construction steps that may result in changes to the design of the network in the respective area, possibly involving the movement of the boundaries. NBN Co may update this map in the future in the event of boundary changes during construction.

This map is for illustrative purposes only. It is not suitable for legal, engineering, or surveying purposes.

Map from <http://www.nbnco.com.au/assets/maps/goodna-qld-rollout-map.pdf>



NBN Coordination Aspects

Ipswich City – A Vital Part of South East Queensland - AUSTRALIA

- Elements of the NBN Fibre network may require Council development approval
 - Aerial cabling in particular
 - Upcoming changes to Low Impact Facilities Determination of Telco Act – Aerial cabling exempt
- NBN Fixed Wireless – DA approval for new / colo Towers
- Other network elements fall under the low impact provisions of the Telecommunications Act
 - Council to be advised and consulted – some ability to influence final design
 - Areas of Environmental Significance – Heritage Areas
 - Placement of Fibre Distribution Hubs (cabinets) as an example
- Other potential Council impacts
 - Processing Land Activity & Access Notices & Permits for works on road reserves
 - Construction oversight (Remediation works etc)
 - Support for community consultation activities
 - Rolling community updates notifying construction activities on suburban streets



Recommendations for successful NBN Co engagement

Ipswich City – A Vital Part of South East Queensland - AUSTRALIA

- 'Put your NBN Co hat on'
 - How can your Council or Region provide practical assistance to NBN Co?
 - Assistance with Construction logistics, Community Consultation, Provision of local detailed information, Single point of coordination within Council
- Existing Telecommunications Infrastructure Scan
 - Have a knowledge of existing Fibre Backhaul, ADSL 'Blackspots', Identification of NBN enabling infrastructure (Tower sites, Council owned Ducts / Fibre, Alternative FAN sites), Poles etc
- Planning Cooperation
 - Promote local knowledge of Planning impacts
 - Council comfortability level with Aerial Fibre, FDHs (Cabinets) etc
 - Streamlining of planning and development approvals (where applicable)
- Support of Local Stakeholders
 - Local Business and Industry support for NBN and future services
- Training & Skilling
 - Pilot programs for local Workforce and Employment skilling – NBN Construction for example
- Digital Economy strategy
 - What next generation services, applications and toolsets can be enabled by the NBN?
 - Building local capacity – Digital Inclusion
 - Promotion of increased Knowledge Sector Investment opportunities



Digital Economy

Ipswich City – A Vital Part of South East Queensland - AUSTRALIA

Transition to a Digital Economy



How is the Internet transforming the Australian Economy?

Ipswich City – A Vital Part of South East Queensland - AUSTRALIA

Recent report by Deloitte Access Economics and commissioned by Google states the following (see <http://www.deloitte.com/au/connectedcontinent>):

- The direct contribution of the internet to the Australian economy is worth approx. \$50bn or 3.6% of Australia's GDP– similar to the value of the retail sector or iron ore exports.
- Benefits extend beyond the specific IT industry and the 190,000 people employed in occupations that are directly related to the internet. These wider benefits – which are not fully captured in GDP calculations – include:
 - i. Approx. \$27bn in productivity increases (by 2015) to businesses and government in the form of improvements to the way they operate and deliver services. These services also flow through to consumers through lower prices and the introduction of new products
 - ii. The equivalent of \$53bn in benefits (by 2015) to households in the form of added convenience (e.g. of internet banking and bill paying) and access to an increased variety of goods, services & information.



Why is it important?

Ipswich City – A Vital Part of South East Queensland - AUSTRALIA

Transition to a Digital Economy

Current challenges:

- Ageing population
- Declining productivity
- Increasing urbanisation
- Globalisation
- How to strengthen & diversify regional economies?

Current Developments:

- Deployment of ubiquitous high speed broadband infrastructure (NBN & 4G networks)
- Adoption of 'cloud computing' infrastructure, software and applications
- Continued uptake of mobile & wireless computing
- Increased demand for digital content accessed anywhere anytime
- Increased focus on low energy and sustainability
- Deployment of smart systems and networks across key infrastructure



5 x key indicators

Ipswich City – A Vital Part of South East Queensland - AUSTRALIA

Five critical indicators for a successful Digital Economy (according to the Intelligent Community Forum www.intelligentcommunity.org):

#1 BROADBAND CONNECTIVITY

Broadband is the new essential utility, as vital to economic growth as clean water and good roads.

#2 KNOWLEDGE WORKFORCE

A knowledge workforce is a labour force that creates economic value through the acquisition, processing and use of information.

#3 DIGITAL INCLUSION

Promote digital inclusion by creating policies and funding programs that provide “have-nots” with access to digital technology and broadband, by providing skills training and by promoting a compelling vision of the benefits that the broadband economy can bring to their lives.





5 x key indicators

Ipswich City – A Vital Part of South East Queensland - AUSTRALIA

#4 INNOVATION

Work to build the local innovation capacity of new companies, because these produce all of the job growth in modern economies, and invest in e-government programs that reduce their costs while delivering services on the anywhere-anytime basis that digitally savvy citizens expect.

#5 MARKETING & ADVOCACY

Like businesses facing greater global competition, communities must work harder than ever to communicate their advantages and explain how they are maintaining or improving their position as wonderful places to live, work and build a growth business.



Graphic from <http://intelligentcommunity.org>





InfoCity Plan

Ipswich City – A Vital Part of South East Queensland - AUSTRALIA



INFOCITY PLAN
ECONOMIC DEVELOPMENT PLAN FOR
IPSWICH CITY
2009 - 2031

www.ipswich.qld.gov.au

Planning tomorrow today...

Ipswich City Council has launched the InfoCity Plan

- Development of Digital Economy initiatives for Ipswich and the Western Corridor region
 - Establishing Springfield as a test site for next generation applications and services over the NBN
 - Continue the work to establish next generation broadband infrastructure throughout Ipswich and the region in partnership with NBN Co and others
 - Increased knowledge sector investment
 - Position Ipswich and the region as a leading Australian Digital Innovation Community
-
- **ONGOING CHALLENGE** – Community & Business Education around the benefits of the NBN / Digital Economy



International Digital Economy recognition

Ipswich City – A Vital Part of South East Queensland - AUSTRALIA



- Ipswich was selected as a Smart 21 Worldwide Intelligent Community of 2011 by the Intelligent Communities Forum (ICF) on October 22 2010 and was the only Australian city selected as a Smart 21 for 2011.
- On May 18 2011, Ipswich named as a recipient of the 2011 ICF Founders Award for Springfield and its Health City initiative – First Australian City recognised by this type of award
- Ipswich was selected as a Smart 21 Worldwide Intelligent Community of 2012 by the Intelligent Communities Forum (ICF) on October 21 2011 for the second year running.



Recommendations

Ipswich City – A Vital Part of South East Queensland - AUSTRALIA

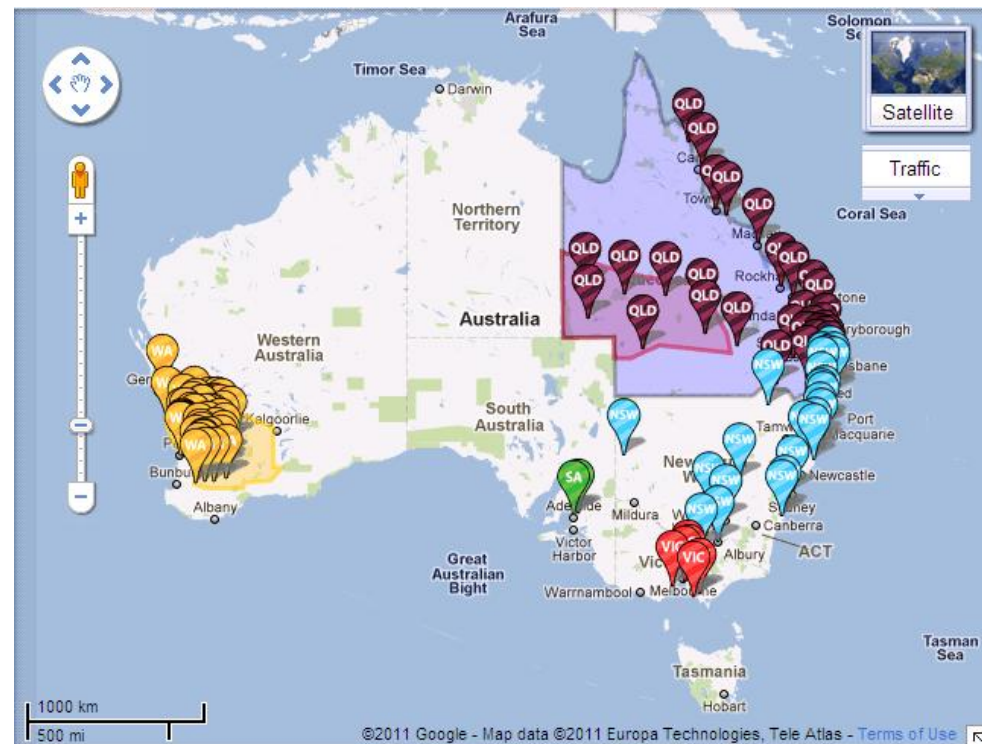
- Local Leadership
- Develop a Digital Economy Strategy aligned to Corporate Plans and with realistic KPIs
- Segment the Strategy based on the ICF indicators
 - Broadband Connectivity
 - Not just NBN, also 3G / 4G Mobile Network development
 - Knowledge Workforce
 - Work with local Unis, TAFEs, Schools on joint initiatives
 - Digital Inclusion
 - Develop programs via Libraries?
 - Innovation
 - Facilitate & support local innovation – not just innovation in Council service delivery
 - Marketing & Advocacy
 - Strong leadership and partnerships
- Fund resources & expertise to action the strategy
- Prepare for long term ROI –10 years plus
- Nominate via the ICF annual process – opportunity for international benchmarkng

Broadband Today Alliance

Ipswich City – A Vital Part of South East Queensland - AUSTRALIA

BROADBAND today : alliance

- A collaboration of 120+ local governments.
- 28 Queensland & 16 New South Wales Councils - Victorian, SA and WA Councils.
- Today 6 million or 1 in 3.75 Australians
- Officer level organisation relating to two key priorities:
- 1 - World class high-speed broadband infrastructure assets and access regimes
 - National Broadband Network (NBN)
 - Wireless 3G and 4G(Long Term Evolution) or WiMax and WiFi
 - Examine local practical and technical issues with the NBN rollout
 - Respond to technical, regulatory and policy issues
- 2 - Digital or broadband economy
 - Value add and drive uptake
 - www.broadbandtoday.com.au.
 - Use showcase demonstrations
 - communicate broadband and ICT innovations





Thank You

Ipswich City – A Vital Part of South East Queensland - AUSTRALIA



For further information:

Matthew Schultz

Regional Digital Economy Coordinator

Co-Chair Broadband Today Alliance

Ipswich City Council

mschultz@ipswich.qld.gov.au

http://www.ipswich.qld.gov.au/business/business_in_ipswich/