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EXECUTIVE SUMMARY

High speed broadband has been identified as a key stimulant for future economic growth. Across the Port Macquarie Hastings region, availability, access to and use of high speed broadband varies greatly - from the National Broadband Network in some new residential areas via fixed line or wireless, to private sector high speed broadband infrastructure use by some local industry, to no access (or very poor access) in small parts of the region.

Mobile coverage and quality has also long been identified as an issue of concern when considering the region’s future telecommunications capacity. There are currently limited providers and varying levels of service across the region.

This digital strategy aims to ensure that the opportunities of high speed broadband and mobile technologies are realised by local business and industry. In particular, we aim to support and facilitate uptake of existing and new technology and, work with industry champions to raise awareness and promote the benefits of digital engagement. It is this high level of engagement from our local business and industry that will be key to attracting more investment in and providers of the latest digital technology. A second focus of the Strategy involves Council and local business leaders working with regional, state and federal bodies to identify and work with providers of digital technologies that are currently operating or looking to expand their operations in our region.

VISION

High speed broadband infrastructure contributes to Port Macquarie-Hastings as a great place to do business. Our businesses are actively engaged in maximising the benefit from this.

The targeted outcomes of this strategy are:

> An engaged business community and digital industry;
> Excellent infrastructure;
> Vibrant public spaces for our community and visitors;
> Digital leadership and innovation hub
> A central point of information and knowledge on the current digital landscape.

Action to support these outcomes will be undertaken by Council in collaboration with local industry, business networks and education providers. A key opportunity exists for high speed broadband/mobile technology providers operating or looking to operate in our local government area.
DEVELOPMENT OF THE STRATEGY

Port Macquarie-Hastings Council has worked closely with industry and key stakeholders to develop a digital strategy.
INTRODUCTION

The future of how we communicate and do business is transforming. Improved access to high speed broadband provides great opportunities for business and the local economy. Port Macquarie-Hastings Council, working with local business representatives, has developed this digital strategy to acknowledge the significance of high speed broadband technology and to engage the business community to take advantage of it.

The Federal Government's commitment to the National Broadband Network (NBN) has stimulated a rapidly growing digital economy through investment in high speed broadband infrastructure. Access to high speed broadband will become a key enabler of business growth. Opportunities associated with high speed broadband include increased productivity, greater economic capacity, and the creation of vibrant spaces.

As part of its adopted Economic Development Strategy 2013-2016, Port Macquarie-Hastings Council is committed to developing a region that embraces opportunities and attracts investment to create additional jobs and increase the wealth of the region and its residents.

This digital strategy addresses action 21 of the Economic Development Strategy to:

1. Expand the opportunities to access high speed broadband; and
2. Support business and industry to maximise the benefit of high speed broadband and other digital technology

Building community capability and digital engagement through education, training and raising awareness of the benefits of technology, plays a key role in the ability to advocate for greater investment in infrastructure.

Purpose - Why do we need a digital strategy?

High speed broadband will enhance the ability of businesses to offer their goods and services across Australia as well as globally. It will also make our region a more competitive place to do business nationally and internationally. World class broadband also increases the opportunity for new industries to emerge, economic development opportunities to arise and local expertise niche areas to be nurtured in key local industries such as education, health and creative industries.

For the Port Macquarie-Hastings business community to benefit from high speed broadband, there is a need for greater digital investment and engagement.

Small businesses with higher digital engagement have better business outcomes than those with lower engagement. A Deloitte Access Economics research report Connected Small Business (2013) found that 63% of small businesses with high levels of digital engagement reported growth compared to 28% of small businesses with very low digital engagement.

Anecdotally, businesses in our region have relatively low levels of digital engagement. This is thought to be due to both gaps in the supply of high speed broadband technology, the high cost of some existing services and also awareness of how to maximise benefits from technology in their business. Our commercial and industrial precincts are vital for the future economic growth of our region and will require advocacy for greater access to high speed broadband. For example, businesses in the manufacturing and construction industry often require greater broadband capacity for the exchange of large files and other items which may be critical to their day to day operations and competitive advantage.

Council’s 2014 Infrastructure Gap Analysis identified transport and telecommunications gaps that may constrain economic growth in our region. The analysis highlighted the need for a digital strategy that addresses current issues. The priorities identified in the report were:

1. The creation of a central source of information and knowledge on the current digital landscape;
2. The facilitation of a forum for the engagement of stakeholders, service providers and other levels of government;
3. Engagement with other levels of government; and
4. The identification of a specific case study (business/industry) area with specific issues that could be surveyed, analysed and resolved. It is considered that such a case study would provide a valuable learning and scoping for Council in the area of telecommunications.

Council aims to work with business and industry to implement actions that address the recommendations. This digital strategy has been developed in collaboration with local business and industry to help establish a business community that is ‘future-ready’ to make a smooth transition to the digital economy.
Who can play a role in achieving the vision?

Council recognises that the key drivers that will achieve the vision are business and industry. Local stakeholders (including representatives from the local business networks, private providers and telecommunications experts) will play a big role in supporting, promoting and driving the actions within the strategy.

The role of local government

Local government is identified in the national digital economy strategy as playing a key role in the facilitation and support of initiatives that contribute to the overall goals of the NBN. Port Macquarie-Hastings council has set out in its Economic Development Strategy 2013-16 to work with local business/industry to develop and implement a digital strategy to maximise current technologies and future opportunities.

The local context

High speed broadband is acknowledged as a great opportunity for regional economic development and growth. The Mid North Coast Regional Digital Strategy developed by Regional Development Australia Mid North Coast, highlights the importance of filling the gaps in supply and demand for high speed broadband.

Supply and Demand

The supply gap relates to the availability of high speed broadband enabling infrastructure to meet the current and future demands for more advanced technology. The demand gap refers to businesses that have little understanding or awareness of how high speed broadband can improve their operations or have a low level of willingness to engage with the new technology. The under-utilisation of current local services illustrates a low level of demand for high speed broadband.

Port Macquarie-Hastings region is well positioned to become an innovation hub with new residential developments having access to the NBN and private providers installing alternative high speed broadband infrastructure for some businesses, primarily in the Port Macquarie CBD. Clearly, there is much more that can be done to encourage greater investment in infrastructure and use of digital technology across our diverse industry base. There are also reviews underway for the Port Macquarie Base Hospital to have access to high speed broadband with new infrastructure in planning. The education precincts that house tertiary institutions Charles Sturt University, the University of New South Wales, University of Newcastle and North Coast TAFE also have access to high speed broadband through national education and research network provider, AARNet.

National Digital Economy Strategy

The Federal Government’s NBN initiative aims to drive Australia’s digital productivity. The National Digital Economy Strategy highlights eight performance goals for Australia to become a leading digital economy that maintains global competitiveness and social wellbeing:

1. Online participation by Australian Households;
2. Online engagement by Australian Businesses and NFP organisations;
3. Smart management of our environment and infrastructure;
4. Improved health and aged care;
5. Expanded online education;
6. Increased teleworking;
7. Improved online government service delivery and engagement;

The NBN is a commitment by the Federal government to build the enabling infrastructure for the digital economy. It is currently being rolled out across the country with anticipated completion of the project by 2020.

Due to the uncertainty of the roll-out plans, Port Macquarie-Hastings Council has developed this digital strategy to ensure a greater awareness of currently available high speed broadband options as alternatives to the NBN. Furthermore, this strategy outlines an action plan to support investment in digital infrastructure and engage business and industry to achieve greater digital awareness, leadership and innovation.

Situation and Gap Analysis

Within the Port Macquarie-Hastings Local Government area, 70% of the population have access to a broadband internet connection and 18% have no internet connection at all (according to the 2011 census). These figures are just below state averages which are 74.5% broadband connection and 13% without internet connection at all. Compared to previous years, there is significant growth in the demand for broadband.

The Local Chambers Business Confidence Survey Results (October 2011) gathered some information on business uptake and views on high speed broadband. The results showed that 68% of business owners do not believe they are using the internet to its full potential in their business. Internet speed and lack of knowledge/understanding of the internet were listed as by far, the top two barriers of using the internet in business.

44% of respondents indicated that they were not willing to pay more for high speed internet while just over 25% of respondents were. The remaining 30% of respondents were undecided.

Respondents also said that a reduction in the cost of internet would help their business attain better value from the internet/high speed broadband as well as a greater awareness/knowledge of the opportunities for business.
NBN roll-out in Port Macquarie-Hastings

New developments with more than 100 residential lots are automatically eligible for the roll out of fixed line NBN services. Some of these have already been connected within the Port Macquarie-Hastings region as can be seen below in figures 1 and 2. As at December 2014, there were 354 premises connected to fixed line NBN and an additional 457 premises where building had commenced.

Areas that currently have access to the NBN fixed wireless services include parts of Kendall and surrounds; Comboyne and surrounds, Sancrox, Rawdon Island and Telegraph Point. Building has been finalised and is in progress for some fixed wireless services in surrounding areas of Wauchope but not covering the Wauchope CBD.

In late 2014, the Camden Haven region was announced as a new destination on the NBN fixed line roll-out plan. Services are expected to be available in 2016.
Other High speed broadband Options

Education - AARNet

AARNet (Australia’s Academic and Research Network) is a national network that builds world-class network infrastructure specifically for research and education. AARNet connects Australian universities and research organisations such as CSIRO. Currently, tertiary education institutions in Port Macquarie-Hastings including Charles Sturt University, University of New South Wales, Newcastle University and TAFE have access to AARNet.

Health

The Port Macquarie-Base hospital runs on its own state-wide network via a single internet pipe from Lismore. This infrastructure is currently under review to be replaced by up to three 10GB pipes that will come out of Sydney and be installed along the coast. This internet connection is exclusively for NSW health facilities and operates as a secure, internal network that cannot be accessed or bought into by other providers.

Private high speed broadband providers

There are currently a small number of high speed broadband providers locally offering speeds equivalent to NBN and using a range of technology including fixed wireless, 3G/4G and fibre optics. Figure 3 below left shows the fixed wireless coverage area offered by one local private provider. Informal research suggests the profile of some of these providers locally is quite low and work could be done to raise awareness of their services and capability locally.

Technology, Capacity and Demand

Currently, there are limitations in the capacity of broadband access across the Port Macquarie-Hastings region. The growth in demand from households means that current broadband infrastructure in some areas is either at or nearing capacity. Symptoms of these issues are experienced particularly in peak tourist seasons when the influx of visitors to the region slows internet speeds over 3G and 4G connections. This issue has especially been noted for the Camden Haven area.

In some areas, including Wauchope and parts of Port Macquarie, businesses have difficulties accessing reliable broadband connections. Some areas are reported to have no more available connections for new or moving businesses or those moving to new premises.

Without the broader roll-out of the NBN in our region, there is a need to develop interim or alternative solutions in order to remain competitive at a state and regional level. This may require attracting additional infrastructure to fill the gaps and promote more options to businesses in these areas.

Figure 3: c2a High Speed Wireless internet coverage area
The Gaps

Town Centre Wi-Fi Hotspots

Visitors increasingly expect Wi-Fi hotspots in town centres. A limited number of tourism and hospitality businesses offer free Wi-Fi and it is expected public Wi-Fi would add to the town centre vibrancy. Further, the expected rise in student population with the construction of the new Charles Sturt University campus is also a consideration that will add to the growing demand for Wi-Fi hotspots or a mesh network in our Town Centres.

Hastings River Drive Businesses

Some businesses that operate on Hastings River drive have raised the issue that this is a particularly difficult area to access broadband. While there have been a couple of innovative solutions provided by small businesses, it is a potential case study area to investigate and pilot projects to improve access to broadband.

Mobile Coverage and Quality

There are significant and repeating issues across the local government area with mobile coverage. Particularly in high tourist season or during major events, the quality of mobile coverage is diminished due to increased use by visitors. Further to this, there are parts of the local government area including Wauchope and the Camden Haven that have little or no access to high-speed broadband or a reliable internet connection. This gap would require mapping and quantifying to address.

A majority of the mobile black spot areas have been listed on the database for the Federal Government’s Mobile Black Spot Programme. This program is an initiative to extend mobile coverage in regional Australia through investment in telecommunications network infrastructure. The database was shared to mobile network operators and infrastructure providers to assist in the preparation of funding proposals for the Programme. The government has committed $100 million over four years to improve coverage and quality of mobile voice and wireless broadband services.

Commercial and Industrial Precincts

The new industrial precinct at Sancrox as well as existing industrial areas will also require further development and improvement of broadband access to remain competitive. Promotion of the industrial land across the local government area would benefit from including messaging about access to high-speed broadband to demonstrate that it is a good place to relocate or establish a business.

Information & Knowledge

The difficulty of identifying the presence and nature of gaps in telecommunications means that there is no accurate or quantifiable information to prioritise. Currently information circulated relies on subjective, anecdotal examples.

Gaps in high-speed broadband and even regular broadband are not mapped across the region. Research and collection of information to a centralised point for all stakeholders may be a possible solution for this. Further research may also outline gaps that have not already been identified in this strategy.

Need for stakeholder engagement and partnerships

As a whole of town and region network, there are currently no established partnerships to address gaps in the telecommunications network. There is an opportunity for increased engagement between stakeholders to voice and address network challenges in our townships.

Home-based businesses, teleworking and smart work hub

Improved internet coverage across our local government area will allow for greater capacity for growth of home-based businesses and teleworkers in our workforce. The 2011 census indicated that 1466 (about 6%) of our workforce work from home.

Regional Development Australia Mid North Coast have developed and conducted a survey in collaboration with the Port Macquarie Chamber of Commerce to capture response to the proposal of a Smart Work Hub in the Port Macquarie CBD. Preliminary results from the survey indicate that 92% of those surveyed were interested in the idea of a smart work hub. Just over a third of respondents (36%) believe it would help them to engage in more paid work or more productive paid work.

Greater availability of new digital technology and access to high-speed broadband may nurture opportunities for such smart work hubs that could create a business environment conducive to digital engagement and innovation.
OUTCOMES AND ACTIONS

This digital strategy aims to:

1) Expand the opportunities to access high speed broadband; and

2) Support business and industry to maximise the benefit of high speed broadband.

Council’s Economic Development Strategy defines that Council’s role will be to facilitate, advocate for and undertake initiatives that help achieve the outcomes listed below. These outcomes have been developed in consultation with a group of representative stakeholders within the business community who will work with Council as the key drivers of the strategy outcomes and actions.

Outcomes and Actions Table

<table>
<thead>
<tr>
<th>Outcome</th>
<th>Actions</th>
<th>Who</th>
<th>Timeframe</th>
<th>KPI</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>An engaged business community and digital industry</strong></td>
<td>Promote and support education opportunities and information sharing</td>
<td>Local business networks &amp; education sector</td>
<td>Ongoing</td>
<td>- Promoted information about digital education and support</td>
</tr>
<tr>
<td><strong>Advocate and facilitate development of programs and collaborative models for digital education, training and capability building.</strong></td>
<td>Advocate and facilitate development of programs and collaborative models for digital education, training and capability building.</td>
<td>Council, local business networks &amp; education sector</td>
<td>June 2015 - June 2016</td>
<td>- Funding secured and delivery of at least 3 capability building workshops</td>
</tr>
<tr>
<td><strong>Facilitate development of IT mentoring &amp; business collaboration</strong></td>
<td>Facilitate development of IT mentoring &amp; business collaboration</td>
<td>Industry</td>
<td>June 2016</td>
<td>- Identify, develop and promote IT mentoring programs</td>
</tr>
<tr>
<td><strong>Research and collaboration to develop expertise, networks and work on small projects (e.g. market observations of products &amp; software for best business solutions)</strong></td>
<td>Research and collaboration to develop expertise, networks and work on small projects (e.g. market observations of products &amp; software for best business solutions)</td>
<td>Industry</td>
<td>Ongoing</td>
<td>- Facilitated collaboration among business for digital engagement</td>
</tr>
<tr>
<td><strong>Promote business models that integrate effective digital strategies</strong></td>
<td>Promote business models that integrate effective digital strategies</td>
<td>Industry</td>
<td>Ongoing</td>
<td>- Promoted business models that integrate digital strategies</td>
</tr>
<tr>
<td>Outcome</td>
<td>Actions</td>
<td>Who</td>
<td>Timeframe</td>
<td>KPI</td>
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<tr>
<td><strong>Excellent Infrastructure</strong></td>
<td>Identify and map current gaps, existing technologies and clusters of opportunities e.g. Town Centre wi-fi, Hastings River Drive business precinct, regional industrial and commercial centres</td>
<td>Council</td>
<td>February 2016</td>
<td>- Developed map of current gaps and existing technologies</td>
</tr>
<tr>
<td></td>
<td>Determine what private providers need and build a business case to attract their investment in infrastructure in our region</td>
<td>Council + Industry</td>
<td>June 2016</td>
<td>- Completed business case to attract provider investment in infrastructure</td>
</tr>
<tr>
<td></td>
<td>Engage actively with private providers</td>
<td>Council</td>
<td>Ongoing</td>
<td>- Planned approach to advocacy</td>
</tr>
<tr>
<td></td>
<td>Advocate for higher speed broadband infrastructure</td>
<td>Council</td>
<td>Ongoing</td>
<td>- Present a business case to Federal Government for high speed broadband and telecommunications infrastructure; garner support from other relevant government stakeholders</td>
</tr>
<tr>
<td></td>
<td>Advocate to providers to develop a Mobile Black Spot Programme proposal</td>
<td>Council</td>
<td>April 2015</td>
<td></td>
</tr>
<tr>
<td><strong>Vibrant public spaces for our community and visitors</strong></td>
<td>Assess cost and benefits of a wireless mesh for town centres</td>
<td>Council</td>
<td>December 2015</td>
<td>- Business case for wireless mesh and increased wi-fi hotspots</td>
</tr>
<tr>
<td></td>
<td>Assess cost and benefits of increased wi-fi hotspots for all townships</td>
<td>Council + local business networks</td>
<td>June 2016</td>
<td>- Wi-fi hotspot map expanded and promoted</td>
</tr>
<tr>
<td></td>
<td>Encourage free wi-fi in hospitality and tourism-related businesses</td>
<td>Council + Greater Port Macquarie Tourism Association</td>
<td>Ongoing</td>
<td>- Engaged tourism businesses to raise awareness of free wifi benefits</td>
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</tbody>
</table>
### Outcomes and Actions Table cont.

<table>
<thead>
<tr>
<th>Outcome</th>
<th>Actions</th>
<th>Who</th>
<th>Timeframe</th>
<th>KPI</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Approach Telstra about becoming part of the trial for payphone hotspots</td>
<td>Council</td>
<td>February 2015</td>
<td>- Implementation of trial payphone hotspots</td>
</tr>
<tr>
<td></td>
<td>Incorporate digital technology in Council supported place making activities</td>
<td>Council</td>
<td>Ongoing</td>
<td>- Digital technology elements included in Cultural Plan 2015</td>
</tr>
<tr>
<td>Digital leadership and innovation hub</td>
<td>Develop case studies that promote the benefits/advantages of high speed broadband to local business and builds innovation</td>
<td>Council and local business networks</td>
<td>June 2016</td>
<td>- Case studies published in publication or online</td>
</tr>
<tr>
<td></td>
<td>Support IT events that drive awareness and education</td>
<td>Industry/local business networks/education sector</td>
<td>Ongoing</td>
<td>- Events run in partnership with industry</td>
</tr>
<tr>
<td></td>
<td>Identify industry sectors/businesses that benefit most from use of technology/access to high speed broadband and encourage greater uptake</td>
<td>Council + Industry/local business networks</td>
<td>June 2016</td>
<td>- Identify people engaged in digital economy and impact on their business</td>
</tr>
<tr>
<td>Central point of information and knowledge</td>
<td>Develop a central source of information and knowledge on our digital economy including a directory of supplier options for local business</td>
<td>Council + local business networks</td>
<td>June 2016</td>
<td>- Directory of high speed broadband supplier options for local business.</td>
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<td></td>
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<td></td>
<td></td>
<td>- Portal of information for businesses to access</td>
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<td></td>
<td></td>
<td></td>
<td>- Digital directory of services for business</td>
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</tbody>
</table>
CONCLUSION

The digital strategy highlights the importance of increasing digital engagement in our local economy for future growth and prosperity. Community capability and demand is essential to attracting the provision of infrastructure for more widely available high speed broadband and other digital technologies. Collaboration with industry as the drivers of economic growth and leaders in innovation will therefore be essential to the success of the strategy.

If you would like to contribute to the key actions and outcomes of the strategy, please contact the Port Macquarie-Hastings Council's Economic Development team on 02 6581 8111 or economic@pmhc.nsw.gov.au.