



DIGITAL ECONOMY STRATEGY 2012-2024



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Penrith City - Digital Economy Strategy



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“THE NATIONAL BROADBAND NETWORK IS WELL ON ITS WAY AND PENRITH IS IDEALLY POSITIONED TO TAKE ADVANTAGE OF THE NEW HIGH SPEED BROADBAND WITH THIS DIGITAL ECONOMY STRATEGY.”

**ALAN STONEHAM
GENERAL MANAGER
PENRITH CITY COUNCIL**

FOREWARD

Mayor Mark Davies



Penrith is making the most of opportunities that the National Broadband Network will bring.

To be leaders in the use of new technologies, we need to assert control over our digital destiny. All residents and businesses should be able to confidently embrace the NBN. It is time to pool our minds and energy to drive innovation across business, education, health, cultural, social and other sectors.

The Digital Economy Strategy is a critical resource to fuel growth of a digital sector within Penrith's own thriving economy. It is part of the wider initiatives that will help our region to keep pace with a growing population and new development. Building on the NBN's momentum will help us realise our City's priorities: attracting significant business investment, stimulating jobs growth and offering new models of industry, education and healthcare delivery.

I would like to thank Penrith's residents, our business community and Penrith City Council's staff for their invaluable input.

I trust this strategy will motivate you to play your role in the digital advances ahead.



A handwritten signature in black ink, appearing to read 'M. Davies', written on a light-colored background.

Mayor Mark Davies
Penrith City Council

EXECUTIVE SUMMARY

A Platform for Future Growth



Penrith City Council has taken the progressive step of commissioning the development of a Digital Economy Strategy for the City, focusing on the economic and social benefits that can be derived from a Digital Economy.

These benefits will be delivered through a number of exciting digital technologies, such as video conferencing, social media and the mobile internet, and catalysed through the arrival of high-speed broadband in the form of the National Broadband Network (NBN).

As one of the first 40 NBN rollout sites in Australia, Penrith has a unique advantage. For the next two to three years, Penrith has a window of opportunity to capitalise on these digital benefits – a head start compared to some regions and the majority of urban areas in Australia. It is imperative that this opportunity is not wasted.

When completed, the NBN will provide fibre and fixed wireless connections to all Australians, with 93% receiving Fibre to the Premise. Although initial fibre download speeds will be 100Mbps (with upload speeds of 40Mbps), the download speed will undoubtedly rise to 1Gbps within a few years as higher speed network infrastructure becomes more commercially viable. However, the fibre being laid is capable of much more, with 14Tbps been proven to be possible using a single strand of fibre – this is 140,000 times faster than what is currently being rolled out. Consequently, the fibre infrastructure being laid today is truly a digital revolution, comparable to the industrial revolution in terms of its magnitude and potential impact.

The Digital Economy is not synonymous with the NBN. The NBN is simply an important catalyst for the growth of the Digital Economy.

The Digital Economy will continue to grow, despite future changes in governments and Council. In the next 10 years, the Digital Economy is likely to be the largest single contributor to Australia's Gross Domestic Product.

"The NBN is the best thing that's ever happened in Australia. It's very positive for our nation and we should all embrace it."

Penrith Community Care Forum

"Businesses that are flexible and adaptable to change will be successful. Digital Business Strategies are needed to engage with customers in a modern way."

Small Business Owner

The possible benefits of the Digital Economy are limited as much by our imagination and our ability to cope with change as they are by the practical constraints of politics and funding.

Despite being on the cusp of a digital revolution, the majority of businesses and community members have not yet grasped the magnitude of the coming change, let alone begun to harness the opportunities that are being and will be presented.

The Strategy seeks to inspire and to provoke action towards our digital future and to define



ways in which growth of the Digital Economy can be fostered over the next 12 years. It will help to set a vision of the prosperous Digital Economy that the Penrith region could become through digital innovation and collaboration.

The Strategy outlines recommendations and deliverables that support commercial innovation, adaptability and market growth through digital engagement. It aims to provide an opportunity to explore new economic models for new business and diversification models for existing businesses and promises to support economic sustainability, social cohesion, new job opportunities, growth and prosperity.

The Federal and State Governments have released their own Digital Economy Strategies. The National Digital Economy Strategy has been published by the Department of Broadband, Communications and the Digital Economy. The NSW Digital Economy Industry Action Plan has been published by the NSW Digital Economy Industry Taskforce.

The Penrith City Digital Economy Strategy was developed between June and August 2012 through an extensive process of consultations, workshops and surveys across the community, business and organisations. During this period:

- 25 consultation sessions were held with over 50 individuals representing more than 20 organisations;
- 3 public workshops were held, in Penrith and St Marys;

“Distance is an issue for Penrith. More and more we’re trying to reduce the distance through IT. Video conferencing enables you to work all over the world. If we can be IT smart and do our business instead of travelling we will be more efficient. Instead of clients needing to travel to us we could use video conferencing solutions.”

Local Business Owner

- 3 business workshops were in held, in Penrith and St Marys; and
- Over 200 residents and business people responded through the public survey.

Penrith is well positioned to launch itself into the digital future. The key strengths of the region allow Penrith to sell itself as having an attractive lifestyle and quality of life. Coupled with strong messages showing the region as being digitally progressive, this can be used to great advantage.

Key strengths include:

- A regional city which is desirable to live in
- A lower cost of living than much of Sydney
- A new brand as a platform for regional growth
- A passionate and supportive Mayor, Council and Executive
- A strong Education sector
- A strong Health sector
- The recent announcement of plans for a Health and Education precinct
- Broadband penetration that matches the national average, despite lower socio-economic status

There are also a number of challenges that may hinder progress unless they are addressed by and through the Digital Economy Strategy.

Key challenges include:

- Low levels of digital literacy in small business
- A significant level of commuting to the Sydney CBD



- Poor community engagement with Government of all types
- Lack of speed and stability with current broadband connections
- A lack of agility and innovation in small business
- A service and trade economy largely based upon cash
- Government institutions not progressive with regard to digital policy
- Few large businesses and corporates
- The perception of high commercial rents
- Under-developed relationships between Government, Education, Health and the private sector
- A lack of distinction

In addition to these current challenges, there are a number of potential threats which represent future risks for the Penrith region's growing Digital Economy.

The chief threat is that nothing is done to support the establishment of a strong Digital Economy. Research indicates that stimulus and incubation is required to kick-start the Digital Economy. There is significant potential, but no inevitable growth without intervention.

Other key challenges for the region include:

- Increasing national and international competition for retailers through online shopping
- A lack of sustainability of transport links to the City
- Businesses blaming Council for their demise

Despite these challenges and threats, there is tremendous potential for increased economic sustainability, social cohesion, new job opportunities, growth and prosperity.

These opportunities include, but are not limited to:

- Online participation by Australian households
- eGovernment
- Education
- Telehealth
- New digital business opportunities
- Teleworking
- Online engagement by Australian businesses
- Branding
- Online marketing
- Collaboration
- Tax reform
- Video conferencing
- Cloud computing

“Based upon provisional calculations, it is estimated that the potential benefit to the Penrith regional economy (in terms of Gross Regional Product) is \$420m-\$720m (or 7-12%) per year (in 2012 currency) when fully functional”

CONSULTATION RESULTS

Globally Connected



A number of key themes arose throughout the consultation process, regardless of the sector in focus.

- Penrith is a proud community with strong traditions – Residents and business owners are passionate about the Penrith region. People want a strong community and successful businesses.
- Digital literacy is low amongst retailers, but relatively high amongst the public – Many small businesses have neither the capability nor capacity to take advantage of digital technologies or develop new online business models. However, broadband penetration and digital literacy amongst the Penrith region's youthful population appears to be high.
- Digital education on the benefits and opportunities arising from the NBN is required for business – Many businesses expressed a lack of understanding of the opportunities presented by the NBN and other digital technologies. Education is needed to support regional businesses.
- Current broadband connections suffer from poor performance – Many people are unable to get access to ADSL 2+ connections, whilst many with ADSL noted a maximum upload speed of 0.5 Mbps, which is poor by national standards.
- The cost of broadband is inhibiting further adoption – Many people struggle with the cost of current broadband products and are concerned about the anticipated cost of NBN broadband products. In many cases this is actively affecting usage.
- Teleworking is a major opportunity for the Penrith region – Many people desire to see a range of teleworking options to assist in reducing the pressure related to commuting.
- The retail sector is under significant threat – The retail sector is currently experiencing great pressure from new online models of retailing. Local businesses are losing out to national and international competitors.
- Health and Education are the platforms for major growth – There is consensus that the Health and Education sectors represent the key platform for economic growth and development in the region.
- The University and TAFE have a greater role to play – The University and TAFE are great assets for the Penrith region. However, both can develop stronger connections with local government and private sector business, in order to benefit the local economy.
- High-speed broadband has the ability to improve access and equity – The NBN has the ability to help bridge the gap in access and services experienced by the aged, people with disability and chronic conditions and people with limited mobility, through the provision of online services.

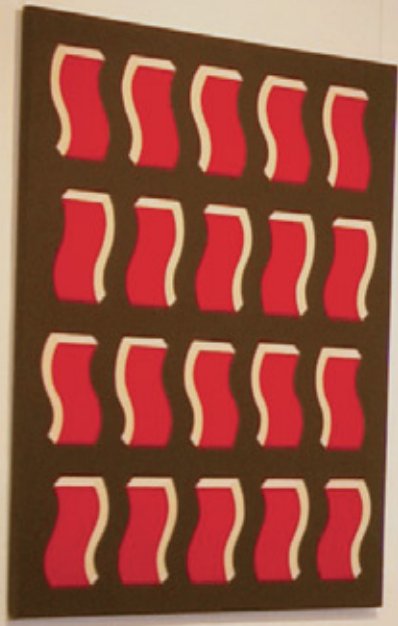
100% of businesses surveyed believe that significant change is required to position the city with the greatest amount of economic diversity.

Community	Government	Education	Health	Business
<ul style="list-style-type: none"> • Community Groups • Religious Groups 	<ul style="list-style-type: none"> • Local Government/ Council • State Government • Federal Government • Tourism 	<ul style="list-style-type: none"> • Primary Education • Secondary Education • Tertiary/Higher Education • Vocational/ TAFE • Community Education 	<ul style="list-style-type: none"> • Primary Health • Hospitals/ Aged Care • Allied Health • Aged Care • Disability 	<ul style="list-style-type: none"> • Not For Profit • Small Business • Medium Business • Corporate • Business Education and Advocacy

KEY THEMES

- 37% of respondents said that cost was a major barrier to getting and maintaining a broadband connection
- 86% of respondents said they currently access either formal or informal educational resources online
- Almost 63% of respondents felt that the best way to improve digital literacy skills was through online information and training

- 62% of respondents indicated that they would be likely to use Telehealth consultations if they were made available.
- 77% of business said that would either definitely engage, or would be likely to engage with Council online using video conferencing.
- 22% of businesses said they would consider selling their products or services to overseas markets as a result of the introduction of the NBN



RECOMMENDATIONS

Of the Digital Economy Strategy



The Digital Economy Strategy presents a series of recommendations. The implementation of these recommendations is key to the successful achievement of economic and social benefits.

Agencies of Change

- Penrith City Council
- Penrith Chamber of Commerce
- Penrith Business Alliance
- Penrith Business Enterprise Centre
- University of Western Sydney
- TAFE Western Sydney Institute
- Digital Economy Working Group
- All Health Agencies
- Penrith / St Marys Town Centre Associations
- State Government
- Federal Government
- Nepean Community College
- Private Enterprise
- Technology Partners

Community or Other Groups

- Penrith Disabilities Action Forum
- Penrith Community Care Forum
- University of the Third Age (U3A)

Governance and Administration

Recommendations and projects that pertain to current and future administrative and governance requirements, typically needing some centrally managed or co-managed elements. Getting governance right is a high priority in achieving the outcomes of the strategy as a whole.

Investments, Revenue and Efficiencies

Change cannot occur without investment in financial and revenue growth or creating a series of efficiencies that the strategy can feed off as a major piece of leverage for change in the social or financial economy.

Knowledge and Skills Development

A fundamental requirement to introduce a new Digital Economy is the development of new skills and knowledge creation and management. Recommendations focus on ensuring that cross sector training and collaboration is required.

Resources and Infrastructure

Building blocks that introduce and manage change/transformation through implementation of new or remodelled infrastructure and new resource requirements. Usually requires the creation of new roles to drive change and awareness of the Digital Economy Strategy.



Recommendation Area	Target / Goal
<p>Governance and Administration – to deliver a series of projects that build a solid foundation for governing and administering the Digital Economy through the next 12+ years, ensuring appropriate involvement from community and business stakeholders, and that no single party has sole responsibility for decision making.</p>	<p>To develop a cross community forum responsible for initiating and driving Digital Economy projects, ensuring key initiatives have input from all stakeholder groups, and that the Penrith brand has been evolved to include a digital component.</p>
<p>Investments, Revenue, and Efficiencies – to target Government and private sector investment to support the development of a Digital Economy, lobby for appropriate tax relief to support digital innovation within the region, and actively support and incubate small digital businesses.</p>	<p>To attract significant (i.e. > \$100m) public and private sector investment in the Penrith region, with appropriate tax relief for digital businesses and a growing reputation as a region that supports and incubates small businesses.</p>
<p>Resources and Infrastructure – to deliver a series of projects that attract and appoint appropriate resources to support the development of the Digital Economy, and to build the infrastructure required to be a true Digital Economy, capable of innovation and supporting agility and change within the local economy.</p>	<p>To deliver the infrastructure for the Digital Economy, achieving recognition amongst the Penrith community that the region is taking active steps to become a leader within the Digital Economy.</p>
<p>Knowledge and Skills Development – to drive a program of education, including digital knowledge and skills development, in order to ensure that local businesses (and community members) are well equipped to meet the challenges and capitalise on the opportunities of the Digital Economy.</p>	<p>To drive knowledge and skills regarding digital technology to the extent to where the Penrith region is recognised as a national leader in the Digital Economy.</p>

The recommendations should be understood in the following context:

- The business and organisational desire for significant change is high, as evidenced by the business survey, workshops and options appraisal conducted during the business workshops;
- The community's desire for and willingness to accept change is high, as evidenced by the public survey and workshops;
- Current state digital maturity has been assessed to be low.

ID	Recommendation	Owner
G1	Create a Digital Economy Governance Model – Establish an overarching Steering Committee and Working Group across all relevant Digital Economy stakeholders and organisations, in order to prioritise, manage, resource and implement Digital Economy projects and initiatives	Penrith City Council
G2	Implement the Digital Economy ‘Change Management, Communications and Community Engagement’ Strategy – Ensure that businesses and the community are supported through these significant changes, and communicated with at all stages, in order to maximise the potential of the Digital Economy	Digital Economy Steering Committee / Working Group
G3	Evolve the Brand to Establish Penrith as a ‘Digital Regional City’ – Build on the platform of the ‘Penrith is here” brand to associate the Penrith region with being digitally enabled and supportive of digital business	Penrith City Council / Community / Business
G4	Create a National Marketing Campaign to Support the Digital Brand – Promote Penrith as a digital Regional City through nationwide marketing from a lifestyle and business perspective and to attract inward investment	Digital Economy Steering Committee / Working Group
G5	Develop a Digital Social Inclusion Policy – Establish a formal policy to ensure that digital technologies are appropriately deployed to bridge the growing ‘digital divide’, ensuring access to the advantages inherent within online internet services	Digital Economy Working Group / Wentworth Community Housing
G6	Develop a Social Media Policy – Develop a formal social media policy which governs Council staff usage of social media, including how social media will be used to interact with the community in the light of changing expectations	Penrith City Council
G7	Create a Digital Business Forum – Establish a digital business forum, achievable quickly and at low cost, to allow businesses to support one another in the creation of digital strategies, innovation using digital technologies and for storytelling and idea swapping	Chamber of Commerce / Business Enterprise Centre

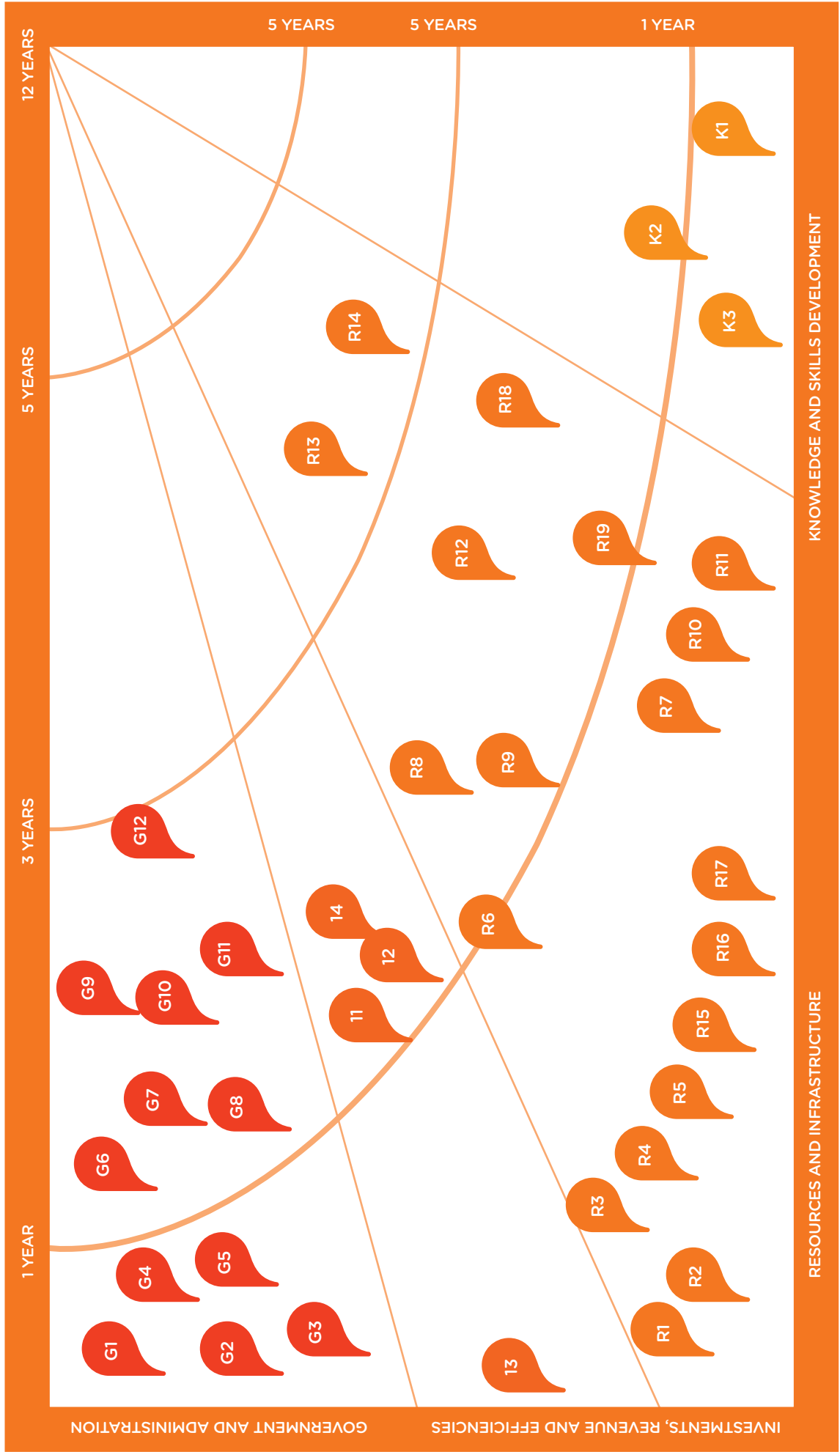
ID	Recommendation	Owner
G8	Reorganise Council's ICT division into an 'eGovernment' Division – Restructure and review the function of Council's ICT services to support the increasing community and business expectations of online service provision	Penrith City Council
G9	Review and Update Council's Existing Teleworking Policy – Update Council's teleworking policy to take advantage of the potential benefits of digital remote working by assessing how new digital technologies will support new models of working in the coming years and how these can be used to increase staff flexibility and productivity	Penrith City Council
G10	Create Staff Teleworking Policy Template for Flexible Working in Business – Develop a template flexible policy for remote digital working to support small businesses	Chamber of Commerce / Business Advisory Centre
G11	Pilot Online Meetings using Video Conferencing – Implement a pilot project to provide meetings online using video conferencing technology	Penrith City Council
G12	Introduce Video Conferencing into the Development Approval Process – Examine how systems and processes may be changed to decrease the time Council takes to process and approve business and community development applications, through the use of video conferencing	Penrith City Council
I2	Target Additional Funding for Digital Training for Enterprise and the Community – Seek external funding to provide more training for local businesses and communities to complement and extend the Digital Enterprise and Digital Hubs initiatives	Penrith City Council / Penrith Business Alliance
I2	Target Additional Funding for Digital Business Incubation – Seek external funding to provide for business incubation (in tandem with tax relief) through the provision of a business incubation centre working across University Research, the Healthcare Industry, TAFE, Penrith Business Alliance, Council and the Chamber of Commerce	Penrith City Council / Chamber of Commerce / Penrith Business Alliance
I3	Lobby for Digital Enterprise Tax Relief – Develop a consolidated approach to lobbying Federal and State Government for tax relief on NBN enabled 'digital cities' to drive more inward investment and compete against a offshore models, particularly South East Asia	Penrith City Council / Chamber of Commerce / Penrith Business Alliance

ID	Recommendation	Owner
I4	Attract Private Sector Investment – Seek external funding for the creation of new digital economies through the introduction of new businesses like green IT data centres, transactional processing centres, etc.	Penrith City Council / Chamber of Commerce / Penrith Business Alliance
R1	Create a ‘Digital Economy Program Manager’ Role – Define, create and fill a Digital Economy Program Manager role (1 FTE) responsible for the leadership, oversight and delivery of the Digital Economy Strategy	Penrith City Council / Penrith Business Alliance
R2	Develop Project Management Office (PMO) Capabilities – Establish a project management framework and structured methodology to deliver successful Digital Economy projects	Penrith City Council
R3	Creation of Digital Economy Project Manager Roles – Define, create and fill Digital Project Manager roles as required, to drive the delivery of key Digital Economy Strategy projects	Penrith City Council / Partners
R4	Appoint Digital Change Champions – Identify and appoint local change champions (in all sectors) to communicate Digital Economy Strategy messages, support projects and provide feedback on progress across the region	Digital Economy Working Group / Penrith City Council
R5	Create a ‘Wireless CBD’ Project – Deliver wireless access in parts of the Penrith CBD, to encourage tourists and locals to stop and access local businesses and to promote the digital branding of the city	Chamber of Commerce / Penrith City Council / Penrith City Centre Association
R6	Create a ‘Digital Access’ Project – Provide free computers and broadband access for marginalised members of community to support increased access to the Digital Economy and attempt to bridge the socioeconomic ‘digital divide’	Digital Economy Working Group / Penrith City Council / Wentworth Community Housing
R7	Develop a Pilot Teleworking Hub – Investigate the use of vacant High Street space for the development of a teleworking pilot, providing a low cost, short term teleworking space and digital business incubation	Penrith City Council / Penrith Business Alliance
R8	Explore Private Sector Investment in Teleworking Hubs – Explore private sector interest in and funding for expanded teleworking facilities on a commercial basis	Penrith Business Alliance / Penrith City Council
R9	Pilot the use of Penrith Library Space for Activity Based Working / Teleworking – Provide activity based working and teleworking facilities in the Penrith library, followed by a small scale teleworking pilot project	Penrith City Council

ID	Recommendation	Owner
R10	Prepare and Host a Digital Expo and National Media Event – Launch the Digital Hubs, Digital Enterprise and Digital Local Government Programs, as well as the Penrith Digital Economy Strategy, at a high profile national media event and digital expo, to drive the “Digital Penrith” brand	Penrith City Council / Chamber of Commerce / Penrith Business Alliance
R11	Campaign for NBN Broadband Product Innovation – Campaign to the NBN and Retail Service Providers to offer more innovative and flexible products for regions which are highly cost sensitive, given the low socioeconomic status of some parts of the Penrith region and the consultation and survey data that points to cost being a major issue in high-speed broadband adoption	Penrith City Council / Chamber of Commerce / Penrith Business Alliance
R12	Develop a Digital Business Showcase Project – Develop a digital showcase to strengthen the digital regional brand, using the regional strengths of Education and Health and the platform provided by the Health and Education Precinct	University of Western Sydney / TAFE Western Sydney Institute / Nepean Hospital / Penrith Business Alliance
R13	Develop a Strategic ICT Vendor Partnership Project – Create alliances and partnerships with key digital technology providers such as Google, Apple, Cisco and Microsoft through the digital business showcase project, to assist in innovation and business incubation	Penrith Business Alliance
R14	Attract a ‘Green Data Centre’ Project – Work to attract an ICT services provider to build a new, green data centre in the City, serving the Australian national market with cloud computing services, by selling the advantages of the Penrith region	Penrith Business Alliance
R15	Deliver the Digital Local Government Program – Develop and deliver the Digital Local Government Program to enhance the online customer service delivery model to include video-conferencing	Penrith City Council
R16	Deliver the Digital Hubs Program – Develop and deliver the Digital Hubs program to assist in training the community on the Digital Economy and the use of digital technologies	Penrith City Council / Nepean Community College
R17	Deliver the Digital Enterprise Program – Develop and deliver the Digital Enterprise program to assist in training businesses and organisations on the Digital Economy and the use of digital technologies	Nepean Community College / Business Advisory Centre

ID	Recommendation	Owner
R18	Create a Rich Media Communication Project within Council – Develop the capabilities required to support rich media communications with the community, including online video, broadcasting and vodcasts	Penrith City Council
R19	Create a Digital Economy Information Portal for Business and Community – Develop a Digital Economy Information Portal to support the Digital Economy Strategy program and to create a new channel for information relating to the Digital Economy	Penrith City Council / Penrith Business Alliance
K1	Increase Exposure to Existing Training Services for Business Support and Employment – Lobby the State Government to provide increased education and visibility into the training services that exist to support business	Penrith City Council / Penrith Business Alliance / Chamber of Commerce
K2	Consider Repurposing University of Western Sydney Space for Teleworking Research –Assess the possibility of using space as a commercial teleworking solution that can also be used for research into teleworking models and practices	University of Western Sydney
K3	Create a Series of Training Courses to Support Development of Digital Technology Knowledge and Skills – Develop and deliver training courses aimed at significantly improving business skills across the Penrith region, given the importance of increasing business skills in utilising and innovating with digital technologies	Chamber of Commerce / Business Advisory Centre

DELIVERY MODEL Roadmap



DELIVERY MODEL

Of the Digital Economy Strategy



The Digital Economy Strategy outlines the governance structures, roadmap, implementation plan and change and communications strategy required to take important steps towards successful delivery of Digital Economy projects.

Governance outlines the structures to be created in order to support the delivery of the Digital Economy program of work. Council must take the lead role in establishing the Digital Economy Working Party, which must provide representation for all sectors of the regional economy. Following its establishment, this group must become independent from Council and given its own resources and decision making authority.

Roadmap shows the delivery of the Strategy's recommendations spread over a 12 year period. The recommendations in the Strategy are not an exhaustive list of everything that needs to take place in the next 12 years. As external factors influence Penrith's economy, as new innovation and invention occurs and as the impact of certain digital technologies becomes clearer, many new (currently unforeseen) initiatives will need to be commenced.

Implementation Plan provides greater detail regarding the activities required to implement recommendations over the next four years.

This plan is not 100% complete, but will need to be owned and updated by the Digital Economy Program Manager and Digital Economy Working Party. It will provide a template to accelerate the implementation of the Digital Economy Strategy.

Change and Communications Strategy is a comprehensive Change Management, Communications and Community Engagement Strategy to raise community awareness of the NBN implementation across the region. It encourages NBN take up by business, education, health and residents across the region and includes a plan for distributing key NBN and Digital Economy messages across Penrith.

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