7 December 2017

Digital Economy Strategy Team
Department of Industry, Innovation and Science
Canberra ACT 2601

Subject: **Submission - Lake Macquarie City Council - National Digital Economy Strategy Consultation Paper**

Lake Macquarie City Council welcomes the opportunity to comment on the Department of Industry's National Digital Economy Strategy Consultation Paper*, The Digital Economy Opening Up The Conversation.* We look forward to further opportunities to help shape the forthcoming draft *Strategy.*

A City of 205,000, Lake Macquarie is the most populous local government area in the Hunter Region of NSW and part of the NSW Government's envisioned Greater Newcastle "Global Gateway".[1] The *NSW Hunter Regional Plan 2036* projects an additional 24,450 residents in Lake Macquarie over the next 20 years, contributing to NSW's fastest growing corridor, from the edge of northern Sydney to Newcastle.

Release of the *National Digital Economy Strategy Consultation Paper* is timely, as Council is implementing a customer service transformation agenda and refreshing the City's long-term land use strategies to accommodate expected population growth. Meanwhile, we continue to advance the *Lake Mac Smart City, Smart Council - Digital Economy Strategy 2016-20*, developed following extensive community engagement. Notably, implementation of this strategy includes the local application of an expanded Technology for Urban Liveability Project (TULIP) in partnership with the University of Technology, Sydney, supported by the Federal Smart Cities and Suburbs program.[2]

We have tailored this submission in response to prompt questions listed in the *Consultation Paper* relevant to Council's adopted Strategies. Our submission focuses on <u>our role and needs</u> (in partnership with State and Federal government, the community and the private sector) to address the Department of Industry's three themes identified in the *Consultation Paper*. Appendix 1 provides a concise summary of current digital economy priorities for Lake Macquarie City from our perspective relevant to the consultation paper themes. Further details are provided below.

---

[1] Transport for NSW, 2017, *Draft Future Transport Strategy 2056*.
[2] https://lakemac.com.au/smart-city

Our Ref: F2014/01589/06/04   Your Ref:

What is your vision for an Australia that thrives in a digital economy? Where would you like to see Australia in five, 10 and 20 years' time? What efforts are you or your organisation making to respond to digital transformation?

The *Lake Mac Smart City, Smart Council Digital Economy Strategy* was adopted by Council in 2016. During consultation, local people expressed a desire for a more flexible, transparent, efficient and mobile-friendly government, envisioning a future where:

- it is easy to connect with people in new ways in a variety of places and exchange new ideas;
- there is a culture of collaboration and experimentation; and
- people can more easily go about their daily lives and enjoy a high quality of life with the aid of new digital technologies.

The ambitions of Council and the community are captured in our vision statement for the digital economy:

> *"Lake Macquarie embraces growth as a Smart City in which people are empowered by access to internet enabled technologies, smart city services, technology-focused industries and a collaborative culture to participate, experiment and enjoy inspired and connected lives."*

Five strategic outcomes underpin this vision:

- inviting online government services and active participation in community building;
- connected communities and smarter city services;
- a culture of innovation that attracts investment in creative, technology-focused industries;
- people can connect and learn about new digital technologies; and
- great places to meet and connect.

The notion of the "Smart City" invites us to think more broadly about the true reach of the digital economy: all things digital and online now underpin almost every aspect of daily life, bringing opportunities but also challenges. Further, it recognises liveability and sustainability are implicit to economic prosperity.

The Smart City is supported by the Smart Council. Council relies on effective information technology and information management to support its operational activities and to deliver services to customers. Council has a substantial investment in this infrastructure including corporate information systems, websites, data centres, data and voice networks, and desktop and mobile computers. This infrastructure will play an increasingly important role in local government service delivery. In parallel, Council is using techniques such as customer journey mapping and working closely with Service NSW to create more streamlined, convenient services driven by customer demand.

The Smart City, Smart Council concept aligns with the Department of Industry's definition of the digital economy, which is said to impact "all industries and business types, and influences the way we interact with each other every day".[3]

The City's overarching Vision and Values provide further direction for Council. These are the foundation of Council's *Community Strategic Plan* prepared under the NSW local government integrated planning and reporting framework, to meet the immediate and future

---

[3] Department of Industry, 2017, The Digital Economy: Opening Up The Conversation, National Digital Economy Strategy Consultation Paper

needs of the community.[4]

What is the role of government in achieving that vision?

In implementing our Strategy, we are guided by four key principles. We consider these principles are equally applicable to the Federal Government:

Lead

Becoming a Smart City requires vision and leadership, and that is the task not only for local, State and Federal governments but also residents, business and industry.

Partner

The Strategy must be delivered in partnership. Community involvement and cross-sector collaboration is central to the development of the Smart City and the digital economy due to the ways in which new digital technologies now underpin all aspects of city management, business and life.

Entities such as the Australian Smart Communities Association (ASCA) and support from the Federal Government through initiatives such as the National Innovation and Science Agenda, and the Smart Cities and Suburbs program will be paramount to the success of improved local government service delivery and economic development.

Build

Council and partner government and industry stakeholders will facilitate the upgrade of information technology infrastructure and systems (to the extent possible).

Federal support for enterprise-grade high-speed broadband in regional growth and employment-generating precincts would complement the national broadband network and assist global competitiveness.

Activate

Activating the Smart City and empowering the community requires a certain degree of flexibility and experimentation, which government policy can facilitate.

Local government requires assistance with understanding when and how to engage with emerging industries and technologies.

What key disruptive technologies or business models do you see? What do you predict is on the horizon in five, 10, 20 years' time?

Blockchain may play an increasingly important role in data management, while artificial intelligence could be harnessed for content development (e.g. data retrieval and populating reporting templates), optimising customer service through task automation, self-service functions and improving backend workflows. Council is trialling the use of drones for asset inspections. Currently the cost of owning and operating a drone is prohibitive under aviation regulations. Local government concessions could be of benefit. Ultimately, we would benefit from further guidance on these emerging technologies and its cost effectiveness in improving service delivery.

Autonomous vehicles are very likely to change the way local Councils support and deliver

---

[4] https://lakemac.com.au/our-future-in-detail

transport solutions. This will be particularly evident in their roles as a roads authority and land use planning agency. Apart from the accepted certainty that autonomous vehicles will soon be the new normal, there is significant conjecture about how it will change the way roads are used, the demand for parking and recharging facilities and whether accessibility will improve affordability.

What communication services, and underlying data, platforms and protocols, does Australia need to maximise the opportunities of the digital economy?

We envision a mix of communication technologies, including fibre, fixed wireless, LPWAN, and 5G, will play a role in local government service delivery and be sought by the private sector.

Data mining and analytics, spatial data services and open data all offer new opportunities for innovation and economic development. These will be increasingly important for cross-agency integrated planning and collaboration between tiers of government, industry and the community. Data quality and integrity is paramount. Methodologies for generating data must also be transparent and clear for data to have value. This requires reducing manual handling of data wherever possible and adopting systems and protocols that enable automated workflows.

Local government manages a wealth of data of benefit to State and Federal Government, industry, academia and the wider community. Council has published 47 dynamic and/or static datasets, utilising data.gov.au and the National Map. The initiative is still in the pilot phase and further data will be published. Early conversations with the Federal Government's Public Data Branch were crucial in providing guidance and reassurance. The online toolkit was useful; however, the user experience could be improved.[5] Staff drew on a variety of additional sources early on, including information published by the Open Council Data portal[6] and the Open Data Institute.

We encourage the Federal Government to continue and expand resourcing its open data initiatives. Local government would benefit from the release of additional spatial data at lower geographic scales, and non-government generated data. For example, we are aware Telco providers are offering highly granular big data services useful for strategy development and operations. As these services are currently cost-prohibitive for local government, we would welcome Federal procurement and data-sharing initiatives to test the application of such data and integration with local government planning processes.

Also welcome would be Federal assistance for local government to develop data standards, improve inter-governmental information management to drive data-driven decision-making, and initiatives to foster a culture of generating, using, probing and questioning data and assumptions.

What roles should government, business and individuals play in protecting the community in a digital economy?

Local government can play an advisory and education role to help consumers and staff take precautions online. As an organisation, we need to ensure our systems are up to date and secure. We envision the Federal Government will continue to play its role in protecting the community, including regulation of the private sector to ensure personal data is safe and secure while upholding transparency of consumer rights.

---

[5] https://toolkit.data.gov.au/index.php?title=Publishing_your_data
[6] https://opencouncildata.org/about/

What is holding Australian businesses back in terms of benefiting from digital technologies? What opportunities do we have to accelerate the development of technologies that will underpin Australia's digital economy?

Economic indicators from the Hunter Research Foundation mirror the national picture of slow take up of digital tools by small to medium enterprises.

Anecdotally, local start-ups and existing businesses report they would benefit from changes to government and industry procurement, they require up-skilling, and opportunities to work with government and industry to problem-solve and prototype solutions. Digital literacy cold be substantially improved. To help address this, Council and the Lake Macquarie Economic Development Company, Dantia, are working with a cohort of regional stakeholders to create prototyping and commercialisation support pathways for start-ups and existing businesses. This initiative will ultimately target funding under the National Science and Innovation Agenda. Continued Federal Government support in this area is critical for regional areas where investment can be more difficult to court.

What opportunities do we have to bridge the 'digital divide' and make the most of the benefits that digital technologies present for social inclusion?

The National Broadband Network (NBN) will improve internet access for many households throughout the City. However, barriers to online participation remain. Some people are not confident with using computers and the Internet, or may lack access or experience poor connectivity. As the community accesses more services online, helping people understand the prospects and potential pitfalls of new digital technologies and the Internet is important to maintaining an inclusive, resilient and empowered community. This is particularly relevant for disadvantaged minorities. The City's libraries will play a crucial role in this regard. Given Australia's geography, high-speed Internet hubs will be crucial in augmenting the NBN.

Seventeen per cent of Lake Macquarie's population is aged 65 years and over. By 2022, this will expand to 25 per cent, mirroring a national trend. This demographic presents a significant market for new online services, but also a wealth of knowledge and experience. When empowered with new technologies, these people can make a powerful contribution to city problem-solving and building community.

What opportunities do we have to ensure digital technology has a positive impact on the cultural practices and social relationships of Australians?

A Smart City is one where it is easy to connect both online and in person. This combination drives innovation, builds a sense of community and makes cities fun and interesting. Smart cities offer high quality urban spaces that invite people to interact and occupy, and a mix of transport options to get there. The congregation of people maximises opportunities for the exchange of information and ideas fundamental to innovation and creativity.

Examples of great places to meet and connect include co-working spaces, libraries, cafes, bars, parks, sidewalks and playgrounds. Great places add to quality of life and attract visitors and new investment.

With the aid of Federal funding under the Smart Cities and Suburbs program, Council is currently leveraging the upgrade of a public mall to embed technology that can provide smarter city services and create opportunities for community-driven innovation. We would welcome the opportunity to expand this partnership.

Thank you once again for the opportunity to comment on the consultation paper. Should you require further information, please contact Council's Strategic Landuse Planner, Tom Boyle, on 02 4921 0470, or me on 02 4921 0250.

Yours faithfully

Tony Farrell
Director City Strategy

Appendix 1: Summary of local priorities relevant to consultation paper themes

Consultation paper theme	Local priorities (evolving)
Enable and support the digital economy (through digital infrastructure, standards and regulation, and trust, confidence, and security)	• Investigate enterprise-grade broadband to retain and attract high-bandwidth businesses • Investigate low power wide area network (LPWAN) technology for asset management, strategic planning and smarter city services (includes Smart Cities & Suburbs Federal Funding for 'Charlestown Innovation Precinct' inclusive of TULIP) • Embed new technology when upgrading public space or facilities, where applicable, to meet our strategic objectives • Improve organisational maturity in how data are generated, securely managed, used and shared • Reduce complexity and improve customer experiences with the aid of new technologies • Review current Development Control Plan and supporting Guidelines and develop new clauses and guidelines that facilitate and encourage the adoption of emerging technologies and smart infrastructure that meets the community's vision and values
Build on our areas of competitive strength to drive productivity and raise digital business capability	• Leverage key assets to facilitate community innovators, including the *Dantia Smart Hub* (DaSH) at Charlestown and the *Business Growth Centre* incubator at Gateshead • Find synergies between Council's customer-oriented business transformation agenda and opportunities to support local digital economic development • Support regional economic development initiatives, such as the Hunter Regional Virtual Incubator Network, with key stakeholders including the University of Newcastle, CSIRO, Hunter Founders Forum, Regional Development Australia Hunter • Adopt Smart City performance indicators to guide priority initiatives and investment
Empower people through digital skills and inclusion	• Improve high-speed Internet access via public hubs (libraries, co-working spaces, mobile library) • Continue to investigate and deliver digital inclusion initiatives such as Tech Savvy Seniors delivered through our libraries in partnership with Workers Education Association (WEA) Hunter