Report to General Manager

Attachments:
1. Submissions Summary
2. Final North Sydney Smart City Strategy
3. Final North Sydney Smart City Action Plan

SUBJECT: North Sydney Smart City Strategy - Post Exhibition

AUTHOR: James Marshall, Economic Development Coordinator

ENDORSED BY: Joseph Hill, Director City Strategy

EXECUTIVE SUMMARY:

The *North Sydney Smart City Strategy* sets out the vision, principles and priorities which will guide Council's digital transformation journey from the outset. It is supported by a three-year Action Plan, which includes various actions and performance measures, along with the responsible Council Departments. The Draft Strategy and Action Plan were developed in two stages:

- Stage 1 - preliminary feedback undertaken from December 2018 to February 2019; and
- Stage 2 - preparation of the Draft Strategy and Action Plan and public exhibition, which was exhibited from 25 July 2019 to 21 August 2019.

Eight submissions were received during the exhibition period. In response to the submissions, minor amendments to the Strategy are recommended. There are no changes to the Action Plan.

FINANCIAL IMPLICATIONS:

As previously reported, the initiatives proposed in the Action Plan align to existing work plans/budget i.e. the remaining two years of the current Delivery Program. It is intended that the Action Plan be reviewed/updated annually in conjunction with preparation of each Operational Plan and Budget; and that the Strategy be reviewed in conjunction with preparation of the next Delivery Program and Financial Estimates.

Comment by Responsible Accounting Officer:
As previously reported, Current funding for the project is appropriate. As the current adopted Delivery Program expires in 2020/21, funding for Year 3 of the Action Plan must be considered as part of preparation of the new Delivery Program.

RECOMMENDATION:
1. THAT Council notes the submissions received.
2. THAT Council adopts the North Sydney Smart City Strategy and Action Plan.

LINK TO COMMUNITY STRATEGIC PLAN

The relationship with the Community Strategic Plan is as follows:

  Direction: 3. Our Future Planning

  Outcome: 3.3 North Sydney is smart and innovative

BACKGROUND

Embracing innovation and growing the local ecosystem of entrepreneurs and start-ups was identified as a new priority area within the *North Sydney Community Strategic Plan 2018-2028* (adopted June 2018), as identified through stakeholder engagement.

This translated into the inclusion of the following smart city/innovation related 'strategies' in the *North Sydney Community Strategic Plan 2018-2028*, under Outcome 3.3, 'Our Future Planning':

- 3.3.1 - Develop North Sydney as a knowledge centre in Australia;
- 3.3.2 - Attract and support start-up businesses;
- 3.3.3 - Promote the uptake of broadband, Wi-Fi and digital technologies;
- 3.3.4 - Identify and develop innovations that will establish a competitive advantage for North Sydney;
- 3.3.5 - Celebrate and promote innovation.

The *North Sydney Council Delivery Program 2018/19-2020/21* included project 3.3.1.1 - Develop a Smart City Strategy.

The *North Sydney Smart City Strategy* sets out the vision, principles and priorities which will guide Council's digital transformation journey from the outset. It is supported by a three-year Action Plan, which includes various actions and performance measures, along with the responsible Council Departments.

The Strategy and Action Plan are based on the following interrelated themes:

1. Smart Travel;
2. Smart Infrastructure;
3. Smart Economy;
4. Smart Leadership;
5. Smart Sustainability; and
6. Smart Community.

At its meeting on 22 July 2019, Council resolved (Min. No. 192):

1. THAT the Draft North Sydney Smart City Strategy and Action Plan be endorsed for public exhibition;
2. THAT the Draft North Sydney Smart City Strategy and Action Plan be placed on public exhibition for a minimum of 28 days in accordance with the Engagement Strategy; and
3. THAT following exhibition, a report be prepared detailing the outcomes of the exhibition and any recommended amendments.

CONSULTATION REQUIREMENTS

Community engagement is not required.

SUSTAINABILITY STATEMENT

The sustainability implications were considered and reported on during the initiation phase of this project.

DETAIL

The Draft Strategy and Action Plan were developed in two stages. Stage 1 (preliminary feedback) was undertaken from December 2018 to February 2019; and Stage 2 (preparation of the Draft Strategy and Action Plan) involved public exhibition of the Draft Strategy which occurred from 25 July 2019 to 21 August 2019.

Stage 2 promotion/engagement included the following channels:

- an advert in the Mosman Daily (1 August 2019);
- social media, including:
  - Facebook - People Reached: 3,578; Reactions, Comments & Shares: 90; Post Clicks: 142;
  - Instagram - Impressions: 1,000; Reach: 682; Hearts: 21; and
  - Twitter - Impressions: 1,377; Total Engagements: 12.
- the Your Say North Sydney website - Total Visits: 328; Aware Visitors (visited the project page only): 207; Informed Visitors (viewed or downloaded a document): 109; Engaged Visitors: 5 (made a submission online);
- the North Sydney Council website - Clicked a Link: 51;
- an e-newsletter to stakeholders who participated in Stage 1 consultation (Unique Opens: 114; Clicked a Link: 22).

Eight submissions were received during the exhibition period, as summarised in Attachment 1. Overall, the submissions were very positive. The majority of comments related to actions already in the Draft Strategy and Action Plan or to examples of national and international best practice. In some cases, the comments were beyond the scope of the documents.

Regarding Submission No. 2, the comments identify two issues that were not included in the Draft Strategy and Action Plan, namely drones and autonomous vehicles. Advice from Council's consultants, who helped prepare the Strategy, is that these issues represent potential long-term actions for Council, and that they should not be the included in the final Strategy and Action Plan. It is noted that Council is in the embryonic stage of becoming a smart city, and that these issues should be parked and can be considered in the next iteration - it is intended that the Strategy be reviewed in conjunction with preparation of the next Delivery Program and Financial Estimates.

As such, it is recommended that the following paragraph is amended under the "Future Proofing" section under "Delivering our Strategy" on page 23 of the Strategy:

> *Technology, innovation and ideas move at a rapid pace. The role of Council will be to ensure that North Sydney is always ready for the future. Council will monitor the adoption of new and emerging technologies such as drones and automated vehicles, and will devise and continually update frameworks, guidelines and standards to reflect international best practice.*

There are no changes to the Action Plan.

Once adopted, all stakeholders (and submitters) will be notified of the final Strategy and Action Plan and will undertake regular monitoring and evaluation of smart city progress. Periodic updates will be provided, for example in the Annual Report and End of Term Report.

North Sydney Smart City Strategy - Stage 2
Summary of submissions received during public exhibition period

Prepared August 2019

The following criteria are used to analyse all submissions received, and to determine whether or not the plan would be amended:

1.   The plan **would be** amended if the point:

      a   provided additional information of relevance.
      b   indicated or clarified a change in government legislation, Council's commitment or management policy.
      c   proposed strategies that would better achieve or assist with Council's objectives.
      d   was an alternate viewpoint received on the topic and is considered a better option than that proposed in the Draft Plan or;
      e   indicated omissions, inaccuracies or a lack of clarity.

2.   The plan **would not be** amended if the point:

      a   addressed issues beyond the scope of the Plan.
      b   was already in the plan or will be considered during the development of a subordinate plan (prepared by Council).
      c   offered an open statement, or no change was sought.
      d   clearly supported the draft proposals.
      e   was an alternate viewpoint received on the topic but the recommendation of the draft plan was still considered the best option.
      f   was based on incorrect information.
      g   contributed options that are not possible (generally due to some aspect of existing legislation or government policy) or; involved details that are not appropriate or necessary for inclusion in a document aimed at providing a strategic community direction over the long term.

IT IS RECOMMENDED THAT COUNCILLORS REFER TO THE COMPLETE SUBMISSIONS MADE AVAILABLE TO THEM, AND TO THE REPORT TO COUNCIL, WHICH EXPANDS ON THE ISSUES RAISED IN THE SUBMISSIONS.

No.	Key Points Raised	Response	Recommend Plan be Amended Y or N	Criteria Code	Plan Page Number

1	The comments can be summarised as follows:
	
	• emergence of mobile personal devices and Low Power Wide Area Networks (LPWANs)
	• popularity of LoRaWAN, as a specific type of LPWAN technology
	• free-to-air network provided by The Things Network (TTN)
	• e.g. of the Digital Catapult Initiative, the innovation arm of the UK Government, deploying 400 LoRaWANs
	• Meshed Internet of Things (IoT) partnership with TTN on the Community IoT Network Initiative
	• Meshed IoT's vision to assist councils to build their own IoT innovation platform using open standards and data sharing models, and support new skills and jobs
	• recommend Council build own Community IoT Network, including safe and secure real-time smart monitoring for smart cities, people counting, water, energy and environmental monitoring
	• benefits include:
	  o a range of uses, e.g. smart cities, environmental monitoring, asset management and operations
	  o low cost to build and maintain
	  o low barriers for innovation
	  o Council to be at the forefront of digital transformation
	• smart infrastructure:
	  o e.g. University of Wollongong - Wollongong Digital Living Lab
	  o e.g. City of Melbourne - 5G and IoT Test Lab
	• smart environment:
		The submitter is a private business that delivers IoT services.
		
		The submission outlines examples of services and projects, which generally speaking are already included in the Draft Strategy.
		
		Smart Travel, Smart Infrastructure and Smart Sustainability include actions relating to IoT. Smart Leadership also includes an action to prepare a Data Sharing Policy.
		
		More specifically, the submission makes a recommendation about air-quality testing at St Leonards Park. This is the subject of a separate tender process, the criteria for which excluded the use of smart sensor technology.
		
		No amendments required.
			N	2b	N/A

No.	Key Points Raised	Response	Recommend Plan be Amended Y or N	Criteria Code	Plan Page Number
	o recommend Council deploy a public access IoT network to build a holistic baseline assessment of energy, environment and water attributes o real-time data will show areas of vulnerability as well as data gaps o e.g. air quality monitoring with UTS and QUT o e.g. smart water bubblers with Sydney Water • smart economy: o benefits include skills in the digital economy, new jobs in IoT, automation and robotics, local manufacturing and local grown smart city solutions o partners would be engaged to assist with data visualisation and modelling from the data generated • data sharing: o e.g. South Australia – Connected Cities, including smart bins, BBQs, people counters, weather stations, etc • smart water: o e.g. Sydney Water incident management systems • smart waste: o e.g. Sydney Fish Markets smart bins • air quality and urban heat: • e.g. UTS air quality network with City of Sydney and Lake Macquarie • smart public places: o e.g. Liverpool City Council public access IoT data network to support traffic management, people counting and air quality sensors • smart green bus shelters:				

No.	Key Points Raised	Response	Recommend Plan be Amended Y or N	Criteria Code	Plan Page Number
	o e.g. City of Ryde Smart Green Bus Shelter project including digital connection and vertical gardens				

2	The comments can be summarised as follows:
	
	• background to the Strategy
	• the principles in the Strategy
	• alternative definitions of smart cities
	• the role of technology, data and innovation
	• examples of technology include drones, IoT and public Wi-Fi
	• the seven NSIN priorities:
	  o the need for free, publicly accessible and good quality public Wi-Fi
	  o the integration of IoT into public infrastructure to create smart cities
	  o open data across community services and utilities
	  o the creation of local collaboration areas or shared workspaces
	  o preparing for the inclusion of drones in our community
	  o preparing for the inclusion of autonomous vehicles in our communities
	  o high-quality science, technology, engineering and mathematics (STEM) education
	• Smart Travel:
	  o increased co-working spaces
	  o e.g. Tel Aviv IoT, including sensors, cameras, blue tooth
	• Smart Economy:
	  o e.g. Toronto affordable housing project
	• Smart Infrastructure and Leadership:
		The submitter advocates for technology and innovation policy that improves the inclusivity, sustainability and liveability of the lower North Shore.
		
		The submission makes various recommendations about the Strategy, in-line with NSIN's seven priorities, which generally speaking are already included in the Strategy.
		
		Reference should be made in the Strategy regarding potential future work regarding drones and autonomous vehicles, (advice from Council's consultants Delos Delta suggests that these are more long-term actions). The Strategy could include a note to this effect, e.g. under Future Proofing or Updating the Strategy in the Next Steps section.
		
		More specifically, the submission makes recommendations about:
		
		• co-working spaces (the Strategy already includes an action regarding the co-working space at 100 Christie Street)
		• car sharing and bike sharing (the Strategy already outlines Council's achievements regarding car-sharing,
			Y	1e	23

4

No.	Key Points Raised	Response	Recommend Plan be Amended Y or N	Criteria Code	Plan Page Number

	• e.g. Toronto IoT, including energy consumption, building use, and traffic patterns
	• e.g. Tel Aviv open data
	• privacy and security
	• Smart Sustainability:
	  ○ smart energy
	  ○ e.g. Tel Aviv smart energy and water program
	  ○ e.g. Belfast CivicDollars community reward program
	• Smart Community:
	  ○ e.g. Tel Aviv community gardens
	  ○ e.g. Toronto IDEA district, including digital leasing
	  ○ e.g. Tel Aviv Night Lines late night transport service
	  ○ e.g. Tel Aviv MiniDigi card for children to access services and We've Got Space – Access to Event Space
	• Case study Tel Aviv:
	  ○ e.g. co-working spaces
	  ○ e.g. hackathons
	  ○ e.g. open data portal
	  ○ e.g. DigiTel citizen engagement
	  ○ e.g. digital currency
	  ○ e.g. partnership with Waze including information on street closures
	  ○ e.g. Auto-Tel ride sharing
	  ○ lessons to be learned: fostering internal collaboration, benefiting from personalisation, facilitating dialogues decision making and digital innovation (reporting issues), measuring and tracking actions and results, turning physical into digital (mapping), not discounting the importance of physical space
		limited bike paths in North Sydney are restrictive to bike-sharing)
		• affordable housing (Council has developed the Draft North Sydney Housing Strategy, which includes recommendations for affordable housing)
		• smart energy (the Strategy already includes an action to continue the roll out of photovoltaics)
		• community gardens (Council already has several established community gardens)
		• digital leasing system for community facilities (Council has already piloted this approach)
		• late night transport (a State responsibility)
		• a digital portal for children (not raised as a priority in the consultation)
		
		As can been seen from the above, some recommendations are beyond the scope of the Strategy.
		
		No further amendments required.			

No.	Key Points Raised	Response	Recommend Plan be Amended Y or N	Criteria Code	Plan Page Number
3	The comments can be summarised as follows: • include a reference in Smart Sustainability to water harvesting, processing and use, particularly for recreational space • adopt processes which avoid barriers to realising/enabling innovative service proposals which do not draw on Council's budget • processes should facilitate the implementation of innovative trials, particularly where these opportunities can be pursued independently of and do not disrupt other initiatives, e.g. infrastructure platforms	The submitter is a private business providing smart infrastructure services. The submission outlines examples of services and projects, which generally speaking are already included in the Draft Strategy. Smart Sustainability includes a reference to Council's achievements regarding centralised control irrigation and optimised water use and lighting for all sports fields and selected parks. Delivering our strategy includes reference to ways to create digital assets and generate revenue streams from them. No amendments required.	N	2b	N/A
4	The comments can be summarised as follows: • Smart Travel and Smart Infrastructure: ○ need for more precise data, including from share transportation data (make it a condition for operation), and smart parking (combine sensor data with number plate recognition)	The submitter is the world's largest educational and scientific computer society, delivering resources that advance computing as a science and a profession. While the Draft Strategy does not specifically mention these types of data, it includes a more generic action to monitor and analyse data to inform future transport planning and pricing. No amendments required.	N	2b	N/A
5	The comments can be summarised as follows: • Smart Sustainability:	Smart Sustainability includes an action to continue roll out of solar photovoltaics,	N	2b	N/A

No.	Key Points Raised	Response	Recommend Plan be Amended Y or N	Criteria Code	Plan Page Number
	o maximum utilisation of solar panels for street and public place lighting • general comments: o prioritise public transport over car use	including a car port system at Holtermann Street Car Park. No amendments required.			
6	The comments can be summarised as follows: • Smart Travel: o supportive of open access to live parking data o EV charging stations for street parking as well as car parks o incentives to encourage the switch to EVs o promote sustainable transport, e.g. apps for wayfinding • Smart Infrastructure: o planning policies to promote bike racks, EV charging stations, reduce parking in new developments o shared spaces to encourage cycling and walking • Smart Economy: o supportive of co-working spaces o supportive of hackathons o an innovation fund with funding from large corporations in North Sydney • Smart Leadership: o do not over-commit, e.g. to large infrastructure reviews o partner with other Councils • Smart Sustainability: o smart bins and online services for the community • Smart Community: • supports engagement tools, e.g. http://www.hellolamppost.co.uk/	The submitter is a private business providing smart parking services. The submission outlines examples of services and projects, which generally speaking are already included in the Draft Strategy. The Draft Strategy already includes actions to prepare an EV Policy and to explore options to install EV charging stations in Council owned car parks and other infrastructure. With regard to sustainable transport, the action to support the development/delivery of on-line journey planning tools and apps by sharing relevant data, is supposed to promote this. The recommendations about planning policies for new developments and shared spaces are beyond the scope of the Strategy. Smart Leadership already includes an action regarding hackathons. It may be too early for Council to coordinate an innovation fund. No amendments required.	N	2a and 2b	N/A

No.	Key Points Raised	Response	Recommend Plan be Amended Y or N	Criteria Code	Plan Page Number

7	The comments can be summarised as follows:
	
	• Smart Infrastructure:
	  o smart street lighting
	  o EV charging stations
	  o photovoltaics
	• potential datasets for the Data Sharing Policy:
	  o electricity consumption relating to street lighting
	  o GIS data for street lights
	  o EV charging stations currently available
		The submission outlines examples of services and projects, which generally speaking are already included in the Draft Strategy.
		
		Smart Infrastructure includes reference to Council's achievements regarding street lighting. There are also actions regarding EV charging stations and photovoltaics in Smart Travel and Smart Sustainability (respectively).
			N	2b	N/A

8	The comments can be summarised as follows:
	
	• Smart Community:
	  o build engagement and to have back up systems
	  o kiosks and centres to be established to keep building residents, workers and visitor awareness and participation
	• general comments:
	  o create a major Aboriginal and Cultural Heritage Centre
	• potential datasets for the Data Sharing Policy:
	  o data collection should have a purpose, provide protection and integrate with overall planning and strategies
		Most of the comments relate to the overall approach to delivering the Strategy, which is already included in the Principles and Delivering our Strategy.
		
		The Aboriginal and Cultural Heritage Centre is beyond the scope of the project.
			N	2a and 2b	N/A

North Sydney Smart City
Strategy 2019-2022

SEPTEMBER 2019

"North Sydney is Smart and Innovative – Outcome 3.3"

– North Sydney Community Strategic Plan 2018-2028

Contents

What is a smart city?

Embracing new technology will help us improve the way we do things in North Sydney and will be a powerful tool for solving the challenges we face and future-proofing existing systems. Other key aspects of a Smart City involve the collection of data and supporting innovation, which will improve our decision-making and deliver better outcomes for the community.

North Sydney Council has a longstanding reputation for open government, community engagement and being innovative. We will now leverage technology, data and innovation to improve people's experience of North Sydney as a great place to live, work, study and visit.

This Smart City Strategy will ensure we can continue to meet our community's demand for high-quality services which are valued, efficient and cost-effective.

Developed through consultation with community and Council, the Strategy sets out the vision, principles and priorities which will guide the local government area's (LGA) digital transformation, from Cremorne to Wollstonecraft, and from St Leonards to McMahons Point.

The Strategy brings together the work Council has already achieved to date, such as introducing parking sensors, remote-controlled lights and online forms. It also details the steps we must take to be ready for future challenges, including population growth and the changing environment.

The Strategy is supported by a three-year Action Plan, which presents actions and performance measures. The Action Plan acknowledges that North Sydney is in the infancy of its journey to becoming a smart city. In accordance with the Maturity Assessment detailed within the Strategy, implementation of these actions is intended to move us from the 'Beginning' phase to the 'Developing' phase over the next few years.

STRATEGIC CONTEXT

This Strategy will operate within a broader strategic and policy context, which will shape our direction and growth as a smart city. Key documents and policies are noted below:

	DOCUMENT	OVERVIEW
International		Cities world-wide – both metropolitan and regional – are joining the smart city movement, modernising and leveraging technology and innovation to deal with their unique problems, such as pollution, congestion, environmentally wasteful practices, and ineffective and unsustainable processes and services.
National	*Digital Transformation Strategy* (2018)	The Digital Transformation Agency's direction for digital transformation across Australia, with three strategic priorities: Government that is easy to deal with, informed by the community, and fit for the digital age.
National	*Smart Cities Plan* (2016)	The Australian Government's vision for smart cities and foundations for structural reform is based on the pillars of Smart Investment, Smart Policy and Smart Technology.
State	*NSW Innovation Strategy (2016)*	The NSW Government's strategy to strengthen entrepreneurship and develop NSW as the innovation capital of Australia. Includes the creation of a Ministerial Innovation Committee to oversee implementation across four key areas of action: Government as an Innovation Leader; Fostering and Leveraging Research and Development; Skills for the Future; A Home for Entrepreneurs.
State	*A Metropolis of Three Cities – Greater Sydney Region Plan (2018).*	The Greater Sydney Commission's plan to rebalance growth and deliver its benefits more equally and equitably to residents across Greater Sydney. The plan aligns land use, transport and infrastructure planning to reshape Greater Sydney as three unique but connected cities.
Regional	*North District Plan* (2018)	20-year plan to manage growth and implement the Greater Sydney Commission's *A Metropolis of Three Cities* - Grow economic development in the North Sydney CBD - Provide a variety of high quality civic and public spaces befitting a globally-orientated CBD, utilised for a range of cultural and entertainment activities - Provide a regulatory environment that enables economic opportunities created by changing technologies
Regional	*North Sydney Innovation Network* (2018)	The North Sydney Innovation Network advocates for technology and innovation policy that improves the inclusivity, sustainability and liveability of the lower North Shore.
Local	*North Sydney Council Community Strategic Plan (2018-2028)*	North Sydney's highest-level plan identifies the community's main priorities and aspirations for its future and details strategies for achieving them. Outcome 3.3, 'Our Future Planning', is a smart and innovative North Sydney: - 3.3.1 Develop North Sydney as a knowledge centre in Australia - 3.3.2 Attract and support start-up businesses - 3.3.3 Promote the uptake of broadband, Wi-Fi and digital technologies - 3.3.4 Identify and develop innovations that will establish a competitive advantage for North Sydney - 3.3.5 Celebrate and promote innovation.

Related Council strategies, plans and policies include:

Arts and Cultural Strategic Plan 2019-2022

External Communications Strategy 2019-2021

Greenhouse Action and Water Management Plan 2015-2020

North Sydney CBD Public Domain Strategy Stage 1 (2019)

North Sydney Community Engagement Protocol (2013)

North Sydney Delivery Program 2018/19-2020/21

North Sydney DIAP 2016-2019

North Sydney Economic Development Strategy (2016)

North Sydney Integrated Cycling Strategy (2014)

North Sydney Local Strategic Planning Statement (2019)

North Sydney Library and Historical Services Strategic Plan 2016-2021

North Sydney Transport Strategy (2017)

Public Domain Style Manual and Design Codes 2019

Ward Street Masterplan (2019)

Community Engagement Policy

Open Government Policy

Telecommunications and Electrical Network Infrastructure Policy

North Sydney profile

HOME TO INNOVATION

12

of the largest computer and telecommunications businesses in Australia
(IBISWorld)

7

Co-working spaces

12 Primary schools

10 Secondary schools

2 Tertiary institutions
including the Australian Catholic University

SMART PEOPLE

74,172
Population (ABS ERP 2018)

53.5%
of people aged 15+ have a
TERTIARY QUALIFICATION (ABS 2016)

RANKED IN THE TOP 10% ACROSS AUSTRALIA FOR: (RAI 2017)

→ Innovation Readiness

→ Technological Readiness

→ Business Sophistication

→ Economic Fundamentals

→ Human Capital

→ Labour Market Efficiency

TOP INDUSTRIES (NIEIR 2018)

Industry	%
Professional, Scientific and Technical Services	29.9%
Financial and Insurance Services	10.8
Construction	7.1%
Information Media and Telecommunications	6.8%
Education and Training	6.5%
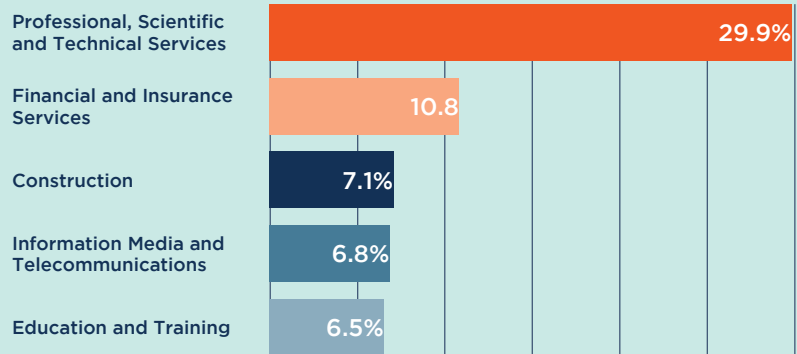
RIGHT PLACE

92,312
Jobs (NIEIR 2018)

15,775
Local businesses (ABS 2018)

62,112
Non-residential workers (NIEIR 2018)

19,296
Students (NSC 2015)

4ᵀᴴ
largest economy in NSW

$18.53b
Gross Regional Product (NIEIR 2017/18)

VALUE ADDED BY INDUSTRY SECTORS (NIEIR 2017/18)

$4,322m
Professional, Scientific and Technical Services

$3,380m
Financial and Insurance Services

$1,698m
Information Media and Telecommunications

Engagement summary

North Sydney's Smart City engagement program built upon the Innovation-Smart City Focus Group, held in March 2018 as part of the review of the North Sydney Community Strategic Plan.

The Focus Group brought together key stakeholders to develop the aspirational vision for the LGA and encourage industry sector interest and support for the development of North Sydney's Smart City Strategy.

This Strategy has been informed by a two-stage engagement program. The first stage involved a series of stakeholder workshops and online surveys to inform a draft Strategy. Engagement included residents, businesses, educational institutions, local innovators, tech companies, consultants and Council staff. The draft Strategy was publicly exhibited, and feedback invited in the second stage.

KEY ENGAGEMENT THEMES

Smart, Sustainable Mobility

- Improving transport intelligence, integration and sustainability

- Making parking more efficient

- Promoting active and innovative transport options

Environment and Sustainability

- Leveraging technology and data to improve resource management

- Improving the monitoring of environmental assets

- Making the most of our green spaces

Smart Leadership

- Encouraging smart city leadership across the community

- Building smart city capacity and skills

- Council leading by example

Public Space Activation

- Increasing our understanding of how space is (and could be) used
- Improving monitoring and management of public space
- Supporting our 'night-time economy'

Partnerships and Resourcing

- Leveraging our local innovation and technology ecosystem
- Encouraging smart city collaboration and partnerships
- Supporting research, co-design, testing, and learning

Data Creation and Utilisation

- Increasing data collection, analysis and sharing
- Improving planning and decsion-making with better data
- Promoting cyber-security and privacy

What people said

‘Focus on people and local challenges, not technology for the sake of technology.’

‘Smart city developments will drive the growth of future community hotspots and inform how we use community spaces.’

‘We should make technology more accessible for everyone.’

‘Council can lead by example, driving digital transformation and building a culture of innovation.’

‘Rather
we shou
cutting-ed
specific nee

COMMUNITY SURVEY RESULTS
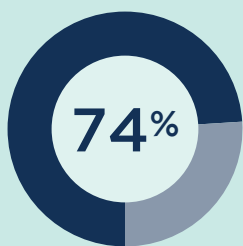
74% said they were **HIGHLY ENGAGED** or **MOSTLY ENGAGED** with smart city and digital technology

Top strategic priorities	Top services to be improved	Top community concerns
1 Smart tech for sustainability	1 Transport and parking	1 Loss of privacy
2 Maximising the use of public space	2 Planning and development	2 Cyber hacking
3 Building our innovation eco-system – supporting innovation in local business	3 Energy management	3 Good user experience

'Let's change our
ewpoint, from why
ve can't do things
o how we can do
things.'

'The new Strategy will
provide a shared vision
for how we use smart
technology to make North
Sydney even better.'

'Let's explore
emerging
technologies and
innovative options to
improve transport
mobility.'

r than be a follower,
uld be innovative and
dge, aiming to meet the
eds of the North Sydney
community.'

'We must
think about and
support community
members who
find technology
daunting.'

'We can be
smarter about
engaging with
risk to encourage
innovation.'

'How can we use
smart technology
and innovation to help
activate our CBD, both
day and night?'

'Smart tech for better
resource management is a
really exciting opportunity
for North Sydney.'

'The Smart City
Strategy can help us
improve sustainability
and liveability, and
build our digital
economy.'

**External stakeholders
identified North
Sydney's strengths as:**

Good team in Council

Ability to attract
investment

High number of tech
businesses in North
Sydney

Local universities and
education institutions

Green spaces

Smart city maturity framework

Smart city development is a long-term process, requiring ongoing focus, effort and persistence. Moreover, the optimal projects and investments are dependent on relative progress and maturity as a smart city.

To help measure and track our progress, and better target our action program, Council has adopted a comprehensive Smart City Maturity Framework. We will continue to review progress against this Framework, and recalibrate our smart city agenda accordingly, to leverage strengths and address weaknesses. At present, North Sydney is at the "Beginning" stage for each category. The implementation of the actions in the Strategy and Action Plan is intended to move us towards the "Developing" stage over the next three years.

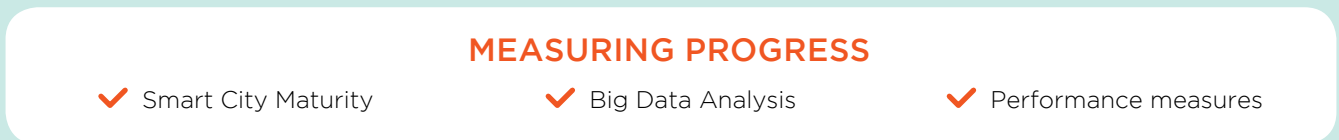|	BEGINNING	DEVELOPING
Leadership and Governance	Ad hoc leadership and basic governance.	Clear smart city leadership and formal governance in place.
Strategy and Policy	Basic smart city plan in place, with limited supporting policies.	Public strategy in place with action plan, and a range of supporting policies.
Smart Regulation and Business Process	Regulation and business processes have minimal consideration for innovation and smart technologies.	Improved regulation and business processes allow for some innovation and smart technologies.
Budgeting and Finance	Budgeting and finance processes do not make use of existing resources.	Budgeting and finance processes coordinate and optimise existing resources
Skills, Culture and Innovation	Limited awareness and responsiveness to digital transformation. Limited smart city skills and experience.	Growing awareness and increased receptiveness to digital transformation. Developing smart city skills and experience, in both depth and breadth.
Community Engagement andCo-Design	Community engagement is minimal and largely unresponsive.	Community engagement is developing, and a broad range of engagement mediums are being employed.
Collaboration and Partnerships (external)	Limited partnerships or collaboration between communities, or between public and private organisations.	Increasing number of councils, firms and industries working together.
Collaboration and Communication (within Council)	Cross-department collaboration and communication is minimal and largely not innovative.	Cross-department collaboration is developing, and the idea of innovation is increasing.
Data Management, Cyber Security and Privacy	Mainly closed data, with limited collection and analysis of data, as well as poor integration with performance management.	Data analysis is increasing, and some data is available, with a data governance framework emerging based on privacy principles and cyber security factors.
Smart Services	Limited availability and low standards of smart services.	Growing availability of smart services and improvements to quality.
Smart Infrastructure	Smart and innovative opportunities are sometimes considered and are applied haphazardly.	Increased consideration and planning of smart and innovative opportunities in infrastructure.

EMBEDDING	LEADING
Active and recognised leadership, with an effective governance framework in place.	Renowned for multi-sector leadership, with agile and innovative governance models in place.
Strategic planning includes robust co-design and prioritisation, with a wide suite of supporting policies.	Strategy and policy are fully integrated into planning and operations, and are recognised as benchmarks.
Regulation and business processes support smart technologies and innovation.	Regulation and business processes encourage smart technologies and innovation.
Budgeting and finance processes support smart technology and innovation. Revenue generating streams are explored.	Budgeting and finance processes encourage smart technology and innovation, as well as revenue generating streams.
Digital transformation is welcomed, and processes are changing to encourage innovation. Broad skills and experience, with a number of identified smart city experts.	Innovative culture, encouraged through frameworks, policies and processes is practiced. Deep smart tech capability on hand, with best practice training systems and programs in place.
Community engagement is broad and well received by the community. The community is interacting with Council digitally and participating in programs and opportunities.	Digital technology is entrenched equitably in community engagement. The community welcomes and actively engages with Council in decision making.
Collaboration is at the centre of innovation in the community and there are numerous partnerships underway.	Universally recognised partnerships between various parties, helping to deliver innovative and creative solutions to community problems.
Cross-department collaboration and communication is broad and considers innovative ideas to solve solutions.	Council-wide collaboration and communication between various departments, assisting in the delivery of innovative solutions.
Most data sets are available and data analysis is common. A solid data governance framework is established on privacy principles and cyber security factors.	Advanced data management and processes, with analytics used to help make decisions, drive innovation and improve outcomes for the community.
Smart services are readily available, frequently used and are of a high quality.	Smart services are state-of-the-art and well-integrated into the community
Smart and innovative opportunities in infrastructure are coordinated and planned with increasing coverage.	Smart and innovative infrastructure is ubiquitous, accessible and extensible.

Strategy overview

North Sydney Council will leverage data, technology and innovation, and develop new partnerships, to improve North Sydney as a healthy, active and vibrant place for its community and visitors.

OUR VISION

STRATEGIC PRIORITIES

SMART TRAVEL
SUPPORTING SMARTER TRAVEL CHOICES

SMART INFRASTRUCTURE
CREATING VIBRANT AND LIVEABLE PLACES

SMART ECONOMY
DRIVING OPPORTUNITY AND PRODUCTIVITY

SMART LEADERSHIP
BUILDING DIGITAL MATURITY

SMART SUSTAINABILITY
SAFEGUARDING OUR FUTURE

SMART COMMUNITY
INCLUSIVE, CONNECTED AND ENGAGED

SMART CITY IMPLEMENTATION

- Annual action plan
- Promotion and awareness
- Finance and budgeting
- Evaluating and reporting on performance
- Community engagement
- Collaboration and Partnerships
- Future-proofing
- Data management
- Smart policy and regulation

SMART CITY PRINCIPLES

- Collaboration
- Security and Privacy
- Innovation
- Sustainability
- Inclusive and Accessible

MEASURING PROGRESS

✓ Smart City Maturity   ✓ Big Data Analysis   ✓ Performance measures

Smart city vision and principles

North Sydney Council's smart city vision is one of a dynamic and lively place where residents, workers, students and visitors thrive.

People will be at the centre of all decisions, and innovation and technology will be used to improve North Sydney as a place to live, work, study and visit. We will use data to improve decision-making and will develop new partnerships to provide a healthy and sustainable environment.

The following principles will underpin all decisions, actions and partnerships in a smart North Sydney:

Collaboration

Council will encourage participation and collaboration with the community, businesses, investors and other levels of government to maximise service transformation and smart tech opportunities and outcomes.

Security and Privacy

Council will ensure the safety and security of people and assets and maintain high standards of privacy in leveraging the value of data.

Innovation

Council will support and encourage local innovation, which will strengthen our local economy, create new digital assets and generate new revenue streams to benefit the people of North Sydney.

Sustainability

Council will harness technology and data to promote sustainability. We will strive towards economic, environmental, governance and social outcomes.

Inclusive and Accessible

Council will provide user-friendly solutions and build the community's digital capacity so that everyone can share the benefits of smart technology and innovation.

Strategic themes and priority actions

Six strategic themes have been identified to guide our smart city development. Each strategic theme identifies a number of objectives and actions in alignment with our vision and principles.

SMART TRAVEL

SUPPORTING SMARTER TRAVEL CHOICES

North Sydney will use technology, data and innovation to promote the community's vision for transport: *"Transport will play a positive role in supporting a happy, healthy and prosperous North Sydney community."* (North Sydney Transport Strategy 2017).

Key challenges and opportunities

- Significant numbers of private motor vehicles
- High demand for on-street parking
- Sydney Metro will connect Sydney's north-western suburbs to the Bankstown Line via Chatswood, Crows Nest, North Sydney and the Sydney CBD

Achievements to date

Car sharing: provision of 120+ on-street spaces

Parking management: parking sensors which detect vehicle presence and report data to on-street parking meters

Ticketless parking: automatic reading of vehicle registration plates in carparks to create greater efficiency at payment

Parkmobile: app for processing on-street parking payments

Ernest Street cycleway: permanent counter installed to capture each trip made by bike

OBJECTIVES	ACTIONS
Improve the experience and efficiency of travel in North Sydney	- Install dynamic parking signs at Council owned carparks, reporting live parking availability - Provide open access to live parking data, and explore options for apps - Support the development/delivery of on-line journey planning tools and apps by sharing relevant data
Increase up-take of low emission transport options	- Prepare an Electric Vehicle (EV) Policy to coordinate Council action (accounting for planning, promotion, infrastructure, services, etc.) - Explore options to install EV charging stations in Council owned car parks and other infrastructure
Improve our understanding of transport in North Sydney	- Expand use of counters on cycleways - Monitor and analyse transport data to inform future transport planning and pricing

SMART INFRASTRUCTURE

CREATING VIBRANT AND LIVEABLE PLACES

North Sydney will leverage smart technology to develop vibrant spaces, to promote social inclusion and to enhance connectivity within the community.

Key challenges and opportunities

- Growing and changing population
- Ageing infrastructure
- Growing community expectations regarding the use of technology

Achievements to date

Electronic lodgement of development applications: software options explored to reduce the level of paper surrounding the assessment process and deliver determinations electronically

Multi-Function Poles: Remote operation and control of public lighting network by Council, including automated reports of lighting problems

North Sydney CBD Public Domain Strategy Stage 1: identifies the need for wayfinding information pylons, including public transport updates, mapping and emergency services

OBJECTIVES	ACTIONS
Modernise planning and building compliance processes and tools to better leverage digital technology	- Review planning policies and standard conditions of development consent to promote the incorporation of smart city initiatives - Implement electronic lodgement system for development applications - Review current planning and building compliance processes/systems, identifying the top digital reforms e.g. 3D modelling for CBD based development, and aerial mapping
Enhance our public places with smart technology	- Seek expressions of interest for the provision of smart street infrastructure, e.g. wayfinding information pylons, community noticeboards, and free public Wi-Fi - Install smart street infrastructure, e.g. wayfinding information pylons, community noticeboards, and free public Wi-Fi - Explore options to better manage and maintain infrastructure
Improve our understanding of the use of public places in North Sydney	- Explore options to install sensors to measure people movement and use of public places - Monitor and analyse public place data to inform future infrastructure planning

SMART ECONOMY

DRIVING OPPORTUNITY AND PRODUCTIVITY

North Sydney will continue to develop its smart economy to provide new opportunities for local business, generate new revenue, and increase economic prosperity.

Key challenges and opportunities

- North Sydney CBD is a thriving office market but has lost some competitiveness to Macquarie Park

- St Leonards is a health and education precinct and Planned Precinct

- Sydney Metro will connect North Sydney with new markets and lead to new over-station development in the North Sydney CBD and Crows Nest

Achievements to date

100 Christie Street, St Leonards: Council has negotiated a voluntary planning agreement (VPA) for the provision of two floors of commercial space for a co-working space within a future building on the site

Ward Street Masterplan: includes a proposal for a 4,750m^2 Council-owned multifunctional cultural hub with Wi-Fi, tech-enabled meeting rooms, performance spaces, screening rooms, space for using tech and innovation for talks and workshops

Data Buzz: annual business event, held in conjunction with Small Business Month and Spark Fest, to showcase the North Sydney innovation sector and encourage innovation in small businesses

OBJECTIVES	ACTIONS
Increase local innovation capacity and activity	- Undertake an audit of local start-ups and co-working spaces - Support local start-ups and co-working spaces - Implement the outcomes of the VPA at 100 Christie Street for a co-working space - Progress the cultural hub as part of the Ward Street Masterplan
Build our digital/ knowledge economy	- Prepare North Sydney Smart City Profile Plan to guide promotion, positioning and partnerships into the future
Develop our night time and visitor economies	- Prepare Smart City Night Time Economy Discussion Paper, to explore challenges and smart tech options for enhancing the night time economy - Test and trial Smart City Night Time Economy options e.g. digital activations - Investigate digital options to promote North Sydney LGA to key visitor markets

SMART LEADERSHIP

BUILDING DIGITAL MATURITY

Council will design and develop a better city for our community by setting an example and spearheading digital transformation internally. We will improve our capacity to deliver better services, promote innovation and build upon our strengths to drive smart city outcomes.

Key challenges and opportunities

- Growing community expectations regarding the use of technology

- Changing legislation and regulations, including the Payment Card Industry Data Security Standard

- Opportunities to share data to address a range of challenges

Achievements to date

Council Meetings Webcast: live, on-demand video and audio of Council meetings

Online Forms: secure payment and submission of forms online

Information Asset Register: register developed to identify and manage risks to Council's information assets

OBJECTIVES	ACTIONS
Increase the capacity of Council to deliver smart city projects	- Deliver smart city awareness and training for staff - Integrate smart city and innovation opportunities and projects into Council's Workforce Management Strategy (part of Resourcing Strategy)
Improve innovation capability and outcomes	- Review the Information Communication and Technology Strategy - Migrate Council's data centre - Explore open platform options for Council's website - Ongoing review of Council's Information Security Architecture to enhance cyber security provisions - Prepare a Data Sharing Policy to improve data collection, sharing, analysis and decision making across Council - Collaborate with universities and other industry and government stakeholders to provide open data for local hackathon and app building events/programs
Use smart technology to improve Council services	- Continue the roll out of online forms - Increase use of online tools and digital media e.g. info graphics, animations, video, audio and interactive webpages for exploring plans/reports on Council's website and social media posts

SMART SUSTAINABILITY

SAFEGUARDING OUR FUTURE

North Sydney is committed to safeguarding our environment and our future. We will leverage technology to help us better understand and improve our waste, water and energy management practices.

Key challenges and opportunities

- Potential impact of changes to our climate
- Increasing demand for resources, especially water and energy, and diminishing capacity to send waste to landfill sites
- Opportunities to collaborate with partners to address environmental challenges

Achievements to date

Coal Loader Centre for Sustainability: encompassing the Platform, includes free public Wi-Fi, people counters, mobile phone charging stations, sensors monitoring use of water, gas and electricity, solar photovoltaic electricity generation, app-controlled lighting

Breathing wall: Mitchell St Plaza, St Leonards is the world's first application of technology which filters polluted air from vehicle exhaust and other pollutants, with ongoing air quality testing and data collection by UTS

Remote Controlled Irrigation and Lighting in Parks: centralised control irrigation and optimised water use and lighting for all sports fields and selected parks

Smart Building Management System: controls air conditioning and can control electricity use at the Council Chambers, Stanton Library and North Sydney Olympic Pool

Solar Photovoltaics: solar panels generate free electricity at various Council sites

OBJECTIVES	ACTIONS
Improve our understanding of environmental management and sustainability	- Identify opportunities for accelerating smart technology solutions for better energy/environmental management in the LGA - Prepare Sustainability Action Plan, including smart technology solutions - Enhance open spaces with smart technology, including the Coal Loader Centre for Sustainability - Monitor and analyse environmental data to inform future planning
Improve energy and water management in North Sydney	- Collaborate with utilities to promote smart metering for North Sydney - Continue roll out of solar photovoltaics, including a car port system at Holtermann Street Car Park
Improve waste management in North Sydney	- Prepare smart waste options paper for Council's consideration - Explore options to facilitate the re-use, recycling and repair of products and materials within the community - Deliver priority smart waste projects

SMART COMMUNITY

INCLUSIVE, CONNECTED AND ENGAGED

North Sydney will develop our community's digital skills and foster innovation throughout the community. We will develop a culture of collaboration and empower our community to participate.

Key challenges and opportunities

- Growing and changing population
- Engaging with the community regarding the future delivery of Council services
- Opportunities for the community to connect with each other and pursue healthier lifestyles

Achievements to date

Online engagement: Council's dedicated 'yoursay' website has increased participation by use of a range of tools allowing different levels of engagement

Stanton Library: electronic self-checkouts and returns, free public Wi-Fi, eResources

Public Art Trail App: digital walking tour for public art in North Sydney

617-621 Pacific Highway: Council has negotiated a VPA for the dedication to Council of two fitted-out floors for a contemporary Arts Centre, within a future building on the site, featuring digital art

OBJECTIVES	ACTIONS
Use smart technology to engage the community in Council's decision making	- Explore emerging smart engagement tools as opportunities arise (per project specific engagement needs) - Recommence online engagement panels program (VoiceBox)
Improve the community's digital literacy	- Continue to promote awareness of Stanton Library's technology based services, including free Wi-Fi, databases, e-resources and digital collection access - Stanton Library to deliver digital inclusion program to provide technology training and assistance to seniors
Encourage participation in community programs	- Develop Stanton Library Mobile App to allow members to search the catalogue, renew items, and other functions - Develop public programs for all ages that support lifelong learning in STEAM and promote ideas and innovation e.g. Shorelink mobile makerspace, Live Science Engagement Talks, coding/robotics workshops, digital content creation and creative programs - Implement the outcomes of the VPA at 617-621 Pacific Highway for a contemporary arts centre

Delivering our strategy

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North Sydney is on its way to becoming a leading smart city. This Smart City Strategy sets the direction for North Sydney's growth as a smart city, providing a clear vision for North Sydney's future and how it intends to get there.

IMPLEMENTATION

Delivery of the actions within this Strategy requires a cross-Council approach. Some actions will be quick wins and others are small steps as part of broader initiatives. To drive successful outcomes and lead North Sydney into the future, Council's approach to smart city delivery will involve the following components related to internal operational and organisational processes, governance and culture.

Promotion and Awareness

Council will promote the Strategy both internally and externally. We will provide progress updates to the Council and to the community, including through North Sydney News (community newsletter), e-newsletters and social media.

Finance and Budgeting

Council will develop strong business cases and innovative financing models. To ensure that smart city projects are financially sustainable and provide economic benefit to the North Sydney community, Council will look for ways to create digital assets and generate revenue streams from them.

Evaluating and Reporting on Performance

Council will undertake regular monitoring and evaluation of smart city progress in accordance with the actions and performance measures articulated in the Action Plan, to be updated annually. Progress will be periodically tracked, assessed and reported, for example in the Annual Report and End of Term Report.

Community Engagement

Council will build on its community engagement achievements and will empower the community to engage in the decision-making process. Council will leverage digital technology and online tools, and will host co-design and collaborative events to ensure community input.

Collaboration and Partnerships

Although Council is responsible for delivering the majority of the actions in the Strategy, some actions will be delivered in partnership with other stakeholders. Council will work closely with the community, local businesses, innovators, researchers and developers to realise North Sydney's ambition and potential in the smart city sphere. We will coordinate collaboration so that together we can put this Strategy into action and drive smart city progress.

Future-Proofing

Technology, innovation and ideas move at a rapid pace. The role of Council will be to ensure that North Sydney is always ready for the future. Council will monitor the adoption of new and emerging technologies such as drones and automated vehicles, and will devise and continually update frameworks, guidelines and standards to reflect international best practice.

Data Management

The effective collection and utilisation of data are fundamental components of the smart city. Data helps us gain new insights and better understand practices so that we can develop innovative solutions to our challenges and improve the way we do things. Council will establish clear and dynamic data management frameworks to ensure that the value of data is used to benefit the community, while upholding high standards of privacy, confidentiality and security.

Smart Policy and Regulation

Smart policy and modern regulation will be the backbone of smart city progress in North Sydney. Organisational reform, smart city guidelines and frameworks, and red tape reduction will drive action by accelerating the deployment of technology and transformation of services and by catalysing new opportunities for partnership, investment and innovation.

MEASURING MATURITY

Council will continue to track our maturity against our Smart City Maturity Framework, to confirm we have the structures and capacity to successfully deliver North Sydney's smart city vision.

UPDATING THE STRATEGY

Our Strategy will remain flexible and dynamic. Council will monitor local sustainability indicators, including economic, environmental, governance and social data. We will continue to learn from the successes and mistakes of cities worldwide. We will update and adapt this Strategy and our aligned Action Plan to ensure we are delivering successful outcomes for our community.

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North Sydney
Smart City Action Plan

Contents

Introduction

The North Sydney Smart City Strategy outlines key objectives and pathways for North Sydney to leverage smart technology, data and innovation to become an even better Local Government Area (LGA).

The Strategy is supported by this Smart City Action Plan, which presents actions and performance measures. The Action Plan acknowledges that North Sydney is in the infancy of its journey to becoming a smart city. In accordance with the Maturity Assessment detailed within the Strategy, implementation of these actions is intended to move us from the 'Beginning' phase to the 'Developing' phase. The Action Plan focuses on the next three years (2019/20 to 2021/22). Council will review and update this Action Plan annually as part of the broader planning and budget process.

Monitoring reports will be prepared biannually to track implementation, including traffic light reporting against the actions and indicator measurement.

Governance Structure

The Governance structure for North Sydney's Smart City Strategy is shown in the diagram below.

Council
Executive
Smart City Project Control Group (PCG)

External Partners	Departments (within Council)

Roles and responsibilities within this governance framework include:

▶ Council
- Leadership, direction setting, overall budget allocation, oversight

▶ Executive (Senior Management or MANEX)
- Strategy director/coordinator, leadership/culture, policy, and reporting

▶ Smart City PCG
- Coordination, oversight, partnerships, business case development, communications, collaboration across Council, and advice to Executive and staff

▶ Departments (within Council)
- Implementation, reporting, evaluation

▶ External partners (e.g. vendors, researchers, other governments):
- Delivery, opportunity assessments, knowledge-sharing and local eco-system growth

Schedule of Action

Key actions and performance measures for the forthcoming the period 2019/20 to 2021/22 are presented in the schedule below. Actions are aligned with the Strategic Themes and Priority Action Areas within the Smart City Strategy.

Strategic Theme	Objectives	Actions	Performance Measures	Responsible Department	Year
Smart Travel	Improve the experience and efficiency of travel in North Sydney	Install dynamic parking signs at Council owned carparks, reporting live parking availability	▸ Number of Council carparks with dynamic parking signs	▸ Works Engineering	▸ 2019/20
Smart Travel	Improve the experience and efficiency of travel in North Sydney	Provide open access to live parking data, and explore options for app(s)	▸ Live data access provided ▸ Number of parking apps developed ▸ Number of parking data users	▸ Traffic & Transport Operations/Works Engineering	▸ 2021/22
Smart Travel	Improve the experience and efficiency of travel in North Sydney	Support the development/delivery of on-line journey planning tools and apps by sharing relevant data	▸ Number of transport datasets published ▸ Number of transport data users	▸ Strategic Planning/Traffic & Transport Operations	▸ 2021/22
Smart Travel	Increase up-take of low emission transport options	Prepare an Electric Vehicle (EV) Policy to coordinate Council action (accounting for planning, promotion, infrastructure, services, etc.)	▸ EV Policy adopted	▸ Strategic Planning/Traffic & Transport Operations/ Works Engineering	▸ 2019/20
Smart Travel	Increase up-take of low emission transport options	Explore options to install EV charging stations in Council owned car parks and other infrastructure	▸ Number of EV charging stations installed ▸ Number of people using the supplied EV charging stations	▸ Traffic & Transport Operations/Works Engineering	▸ 2019/20

Strategic Theme	Objectives	Actions	Performance Measures	Responsible Department	Year
Smart Travel	Improve our understanding of transport in North Sydney	Expand use of cycleways counters	▶ Number of cycleways with counters installed ▶ Number of cycleway datasets published	▶ Traffic & Transport Operations	▶ 2021/22
Smart Travel	Improve our understanding of transport in North Sydney	Monitor and analyse transport data to inform future transport planning and pricing	▶ Number of Council strategies and plans incorporating transport data	▶ Strategic Planning/Traffic & Transport Operations	▶ 2019/20 ▶ 2020/21 ▶ 2021/22
Smart Infrastructure	Modernise planning and building compliance processes and tools to better leverage digital technology	Review planning policies and standard conditions of development consent to promote the incorporation of smart city initiatives	▶ Revised planning policies and/or standard conditions of development consent incorporating smart city initiatives adopted	▶ Development Services/Strategic Planning	▶ 2019/20
Smart Infrastructure	Modernise planning and building compliance processes and tools to better leverage digital technology	Implement electronic lodgement system for development applications	▶ Electronic lodgement system for development applications implemented	▶ Administration Services/Development Services/Information Technology	▶ 2019/20
Smart Infrastructure	Modernise planning and building compliance processes and tools to better leverage digital technology	Review current planning and building compliance processes/systems, identifying the top digital reforms e.g. 3D modelling for CBD based development, aerial mapping, etc.	▶ Number of smart planning and building compliance tools adopted	▶ Development Services/Environment & Building Compliance/Strategic Planning	▶ 2020/21 ▶ 2021/22
Smart Infrastructure	Enhance our public places with smart technology	Seek expressions of interest for the provision of smart street infrastructure, e.g. wayfinding information pylons, community noticeboards, and free public Wi-Fi	▶ Number of expressions of interest received	▶ Engineering Infrastructure/Landscape Planning & Design/Strategic Planning	▶ 2019/20

Strategic Theme	Objectives	Actions	Performance Measures	Responsible Department	Year
Smart Infrastructure	Enhance our public places with smart technology	Install smart street infrastructure, e.g. wayfinding information pylons, community noticeboards, and free public Wi-Fi	▶ Contract for the provision of smart street infrastructure completed	▶ Engineering Infrastructure/ Environmental Services/ Landscape Planning & Design/Strategic Planning	▶ 2020/21 ▶ 2021/22
Smart Infrastructure	Enhance our public places with smart technology	Explore options to better manage and maintain infrastructure	▶ Recommended approach to smart infrastructure monitoring tools adopted	▶ Engineering Infrastructure/ Environmental Services/ Landscape Planning & Design	▶ 2021/22
Smart Infrastructure	Improve our understanding of the use of public places in North Sydney	Explore options to install sensors to measure people movement and use of public places	▶ Recommended approach to provision of people sensors adopted	▶ Engineering Infrastructure/ Environmental Services/ Landscape Planning & Design/Strategic Planning	▶ 2021/22
Smart Infrastructure	Improve our understanding of the use of public places in North Sydney	Monitor and analyse public place data to inform future infrastructure planning	▶ Number of Council strategies and plans incorporating public place data	▶ Engineering Infrastructure/ Environmental Services/ Landscape Planning & Design/Strategic Planning	▶ 2019/20 ▶ 2020/21 ▶ 2021/22
Smart Economy	Increase local innovation capacity and activity	Undertake audit of local start-ups and co-working spaces	▶ Audit of local start-ups completed with recommendations for future action (if any)	▶ Integrated Planning & Special Projects	▶ 2019/20
Smart Economy	Increase local innovation capacity and activity	Support local start-ups and co-working spaces	▶ Joint project undertaken with NSW Government to support local start-ups and co-working spaces	▶ Integrated Planning & Special Projects	▶ 2020/21 ▶ 2021/22
Smart Economy	Increase local innovation capacity and activity	Implement the outcomes of the VPA at 100 Christie Street for a co-working space	▶ VPA at 100 Christie Street approved ▶ Approval granted for the construction of the co-working space	▶ Development Services/ Strategic Planning	▶ 2019/20 ▶ 2020/21 ▶ 2021/22

Strategic Theme	Objectives	Actions	Performance Measures	Responsible Department	Year
Smart Economy	Increase local innovation capacity and activity	Progress the cultural hub as part of the Ward Street Masterplan	▶ Proposal for cultural hub at Ward Street approved	▶ Strategic Planning	▶ 2019/20 ▶ 2020/21 ▶ 2021/22
Smart Economy	Build our digital/knowledge economy	Prepare *North Sydney Smart City Profile Plan* to guide promotion, positioning and partnerships into the future	▶ Smart City Profile Plan prepared	▶ Communications & Events/ Integrated Planning & Special Projects	▶ 2020/21
Smart Economy	Develop our night time and visitor economies	Prepare *Smart City Night Time Economy Discussion Paper*, to explore challenges and smart tech options for enhancing the night time economy	▶ *Smart City Night Time Economy Discussion Paper* prepared with recommendations for future action (if any)	▶ Communications & Events/Community Development/Integrated Planning & Special Projects/ Strategic Planning	▶ 2020/21
Smart Economy	Develop our night time and visitor economies	Test and trial *Smart City Night Time Economy* options e.g. digital activations	▶ Number of *Smart City Night Time Economy options* trialled	▶ Communications & Events/Community Development/Integrated Planning & Special Projects/Strategic Planning	▶ 2021/22
Smart Economy	Develop our night time and visitor economies	Investigate digital options to promote North Sydney LGA to key visitor markets	▶ Number of digital options promoting tourism	▶ Communications & Events/Integrated Planning & Special Projects	▶ 2020/21 ▶ 2021/22
Smart Leadership	Increase the capacity of Council to deliver smart city projects	Undertake smart city awareness and training for staff	▶ Smart city training programs/ options paper prepared	▶ Integrated Planning & Special Projects/Workforce Planning	▶ 2019/20 ▶ 2020/21 ▶ 2021/22
Smart Leadership	Increase the capacity of Council to deliver smart city projects	Integrate smart city and innovation opportunities and projects into Council's Workforce Management Strategy (part of Resourcing Strategy)	▶ Smart City Workforce Planning Options Report submitted to Council	▶ Integrated Planning & Special Projects/Workforce Planning	▶ 2021/22
Smart Leadership	Improve innovation capability and outcomes	Review the Information Communication and Technology Strategy	▶ Information Communication and Technology Strategy adopted	▶ Information Technology	▶ 2019/20

Strategic Theme	Objectives	Actions	Performance Measures	Responsible Department	Year
Smart Leadership	Improve innovation capability and outcomes	Migrate Council's data centre	▶ New data centre operational	▶ Information Technology	▶ 2019/20
Smart Leadership	Improve innovation capability and outcomes	Explore open platform options for Council's website	▶ Brief for new website prepared	▶ Information Technology	▶ 2019/20
Smart Leadership	Improve innovation capability and outcomes	Ongoing review of Council's Information Security Architecture to enhance cyber security provisions	▶ Alignment with Council's business objectives	▶ Risk	▶ 2019/20 ▶ 2020/21 ▶ 2021/22
Smart Leadership	Improve innovation capability and outcomes	Prepare a Data Sharing Policy to improve data collection, sharing, analysis and decision making across Council	▶ Data Sharing Policy adopted ▶ Data Sharing Program developed (to guide Policy implementation)	▶ Document Management Services/Information Technology/Integrated Planning & Special Projects	▶ 2019/20
Smart Leadership	Improve innovation capability and outcomes	Collaborate with universities and other industry and government stakeholders to provide open data for local hackathon and app building events/programs	▶ Number of events/programs participated in	▶ Information Technology/ Integrated Planning & Special Projects	▶ 2020/21 ▶ 2021/22
Smart Leadership	Use smart technology to improve Council services	Continue the roll out of online forms	▶ Number of online forms developed	▶ Customer Services/ Information Technology	▶ 2019/20 ▶ 2020/21 ▶ 2021/22
Smart Leadership	Use smart technology to improve Council services	Increase use of online tools and digital media e.g. info graphics, animations, video, audio and interactive webpages for exploring plans/reports on Council's website and social media posts	▶ Number of new tools utilised	▶ Communications & Events/ Integrated Planning & Special Projects	▶ 2019/20 ▶ 2020/21 ▶ 2021/22

Strategic Theme	Objectives	Actions	Performance Measures	Responsible Department	Year
Smart Sustainability	Improve our understanding of environmental management and sustainability	Identify opportunities for accelerating smart technology solutions for better energy/environmental management in the LGA	▶ Smart Sustainability Report submitted to Council with key insights and recommendations	▶ Environmental Services	▶ 2019/20
Smart Sustainability	Improve our understanding of environmental management and sustainability	Prepare Sustainability Action Plan, including smart technology solutions	▶ Sustainability Action Plan completed	▶ Environmental Services	▶ 2019/20
Smart Sustainability	Improve our understanding of environmental management and sustainability	Enhance open spaces with smart technology, including the Coal Loader Centre for Sustainability	▶ Number of recommendations from *Coal Loader Living Lab Workshop Report* implemented	▶ Environmental Services/Landscape Planning & Design	▶ 2019/20 ▶ 2020/21 ▶ 2021/22
Smart Sustainability	Improve our understanding of environmental management and sustainability	Monitor and analyse environmental data to inform future planning	▶ Number of Council strategies and plans incorporating environmental data	▶ Environmental Services/Landscape Planning & Design	▶ 2019/20 ▶ 2020/21 ▶ 2021/22
Smart Sustainability	Improve energy and water management in North Sydney	Collaborate with utilities to promote smart metering for North Sydney	▶ Utilities Smart Metering Communications Plan completed	▶ Environmental Services	▶ 2021/22
Smart Sustainability	Improve energy and water management in North Sydney	Continue roll out of solar photovoltaics, including a car port system at Holtermann Street Car Park	▶ Number of Council facilities with solar photovoltaics installed	▶ Environmental Services/Landscape Planning & Design	▶ 2019/20 ▶ 2020/21 ▶ 2021/22
Smart Sustainability	Improve waste management in North Sydney	Prepare *Smart Waste Options Paper* for Council's consideration	▶ Smart Waste Options Paper prepared	▶ Environmental Services	▶ 2020/21

Strategic Theme	Objectives	Actions	Performance Measures	Responsible Department	Year
Smart Sustainability	Improve waste management in North Sydney	Explore options to facilitate the re-use, recycling and repair of products and materials with the community	Circular Economy Plan prepared	▶ Environmental Services	▶ 2020/21
Smart Sustainability	Improve waste management in North Sydney	Deliver priority smart waste projects	▶ Number of smart waste projects delivered	▶ Environmental Services	▶ 2021/22
Smart Community	Use smart technology to engage the community in Council's decision making	Explore emerging smart engagement tools as opportunities arise (per project specific engagement needs)	▶ Number of new tools utilised for engagements	▶ Integrated Planning & Special Projects	▶ 2019/20 ▶ 2020/21 ▶ 2021/22
Smart Community	Use smart technology to engage the community in Council's decision making	Recommence online engagement panels program (VoiceBox)	▶ Number of members per panel	▶ Integrated Planning & Special Projects	▶ 2021/22
Smart Community	Improve the community's digital literacy	Continue to promote awareness of Stanton Library's technology based services, including free Wi-Fi, databases, e-resources and digital collection access	▶ Stanton Library's technology based services promoted via Council's website e-newsletters	▶ Library Services	▶ 2019/20 ▶ 2020/21 ▶ 2021/22
Smart Community	Improve the community's digital literacy	Stanton Library to deliver digital inclusion program to provide technology training and assistance to seniors	▶ Number of residents participating in digital inclusion program	▶ Library Services	▶ 2019/20 ▶ 2020/21 ▶ 2021/22
Smart Community	Encourage participation in community programs	Develop Stanton Library Mobile App to allow members to search the catalogue, renew items, and other functions	▶ Stanton Library Mobile App developed ▶ Number of Stanton Library Mobile App users	▶ Library Services	▶ 2019/20

Strategic Theme	Objectives	Actions	Performance Measures	Responsible Department	Year
Smart Community	Encourage participation in community programs	Develop public programs for all ages that support lifelong learning in STEAM and promote ideas and innovation e.g. Shorelink mobile makerspace, Live Science Engagement Talks, coding/robotics workshops, digital content creation and creative programs	▶ Number of programs delivered ▶ Number of participants	▶ Library Services	▶ 2019/20 ▶ 2020/21 ▶ 2021/22
Smart Community	Encourage participation in community programs	Implement the outcomes of the VPA at 617-621 Pacific Highway for a contemporary arts centre	▶ Approval granted for the construction of the contemporary arts centre	▶ Community Development/Development Services/Strategic Planning	▶ 2019/20 ▶ 2020/21 ▶ 2021/22