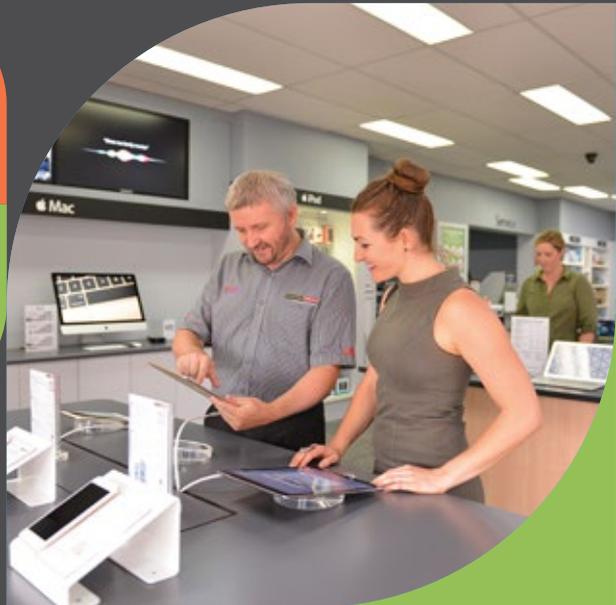


Smart Region Strategy

Smart Region, Smart Council

September 2022





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Acknowledgement of Country

Dubbo Regional Council wish to acknowledge the Wiradjuri People who are the Traditional Custodians of the Land. Council pay respect to the Elders both past, present, and emerging of the Wiradjuri Nation and extend that respect to other Aboriginal peoples from other nations who are present.

Foreword

Mayor's Foreword

Our Region is gearing up for the future of liveability; prosperity; mobility; sustainability; resilience and community connection.

We know there are changes in population, climate and industry coming our way and will make the most of new technologies and approaches to respond and thrive.

This Smart Region Strategy will guide us through the integration of digital technology, data and innovation to build on our strengths and transform our challenges.

We welcome opportunities to drive forward this agenda for the benefit of our Region now and in to the future.

Councillor Mathew Dickerson

Mayor of Dubbo Regional Council



CEO's Foreword

Innovation and adoption of new technology has been a part of our community's success in the past and will be into the future. We have many innovative and smart projects transforming business and delivering real benefits to our community.

This Smart Region Strategy is preparing us as we take advantage of new technologies and innovative approaches. It provides us with the framework to deliver projects that are aligned to and further our community's aspirations.

Acknowledging the work and leadership of the NSW Government Smart Place program we are proud to be progressing the Regions' uptake of future technologies and to continue to work with our community to grow and mature as a smart region.

Murray Wood

Chief Executive Officer



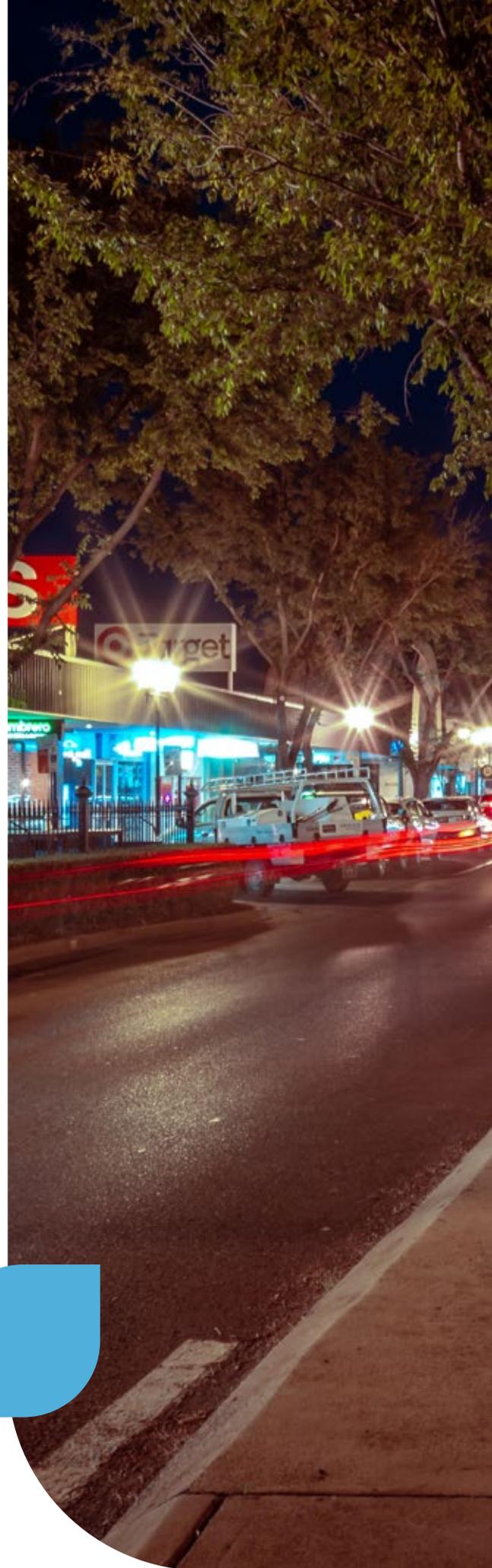
Smart Dubbo, Smart Region

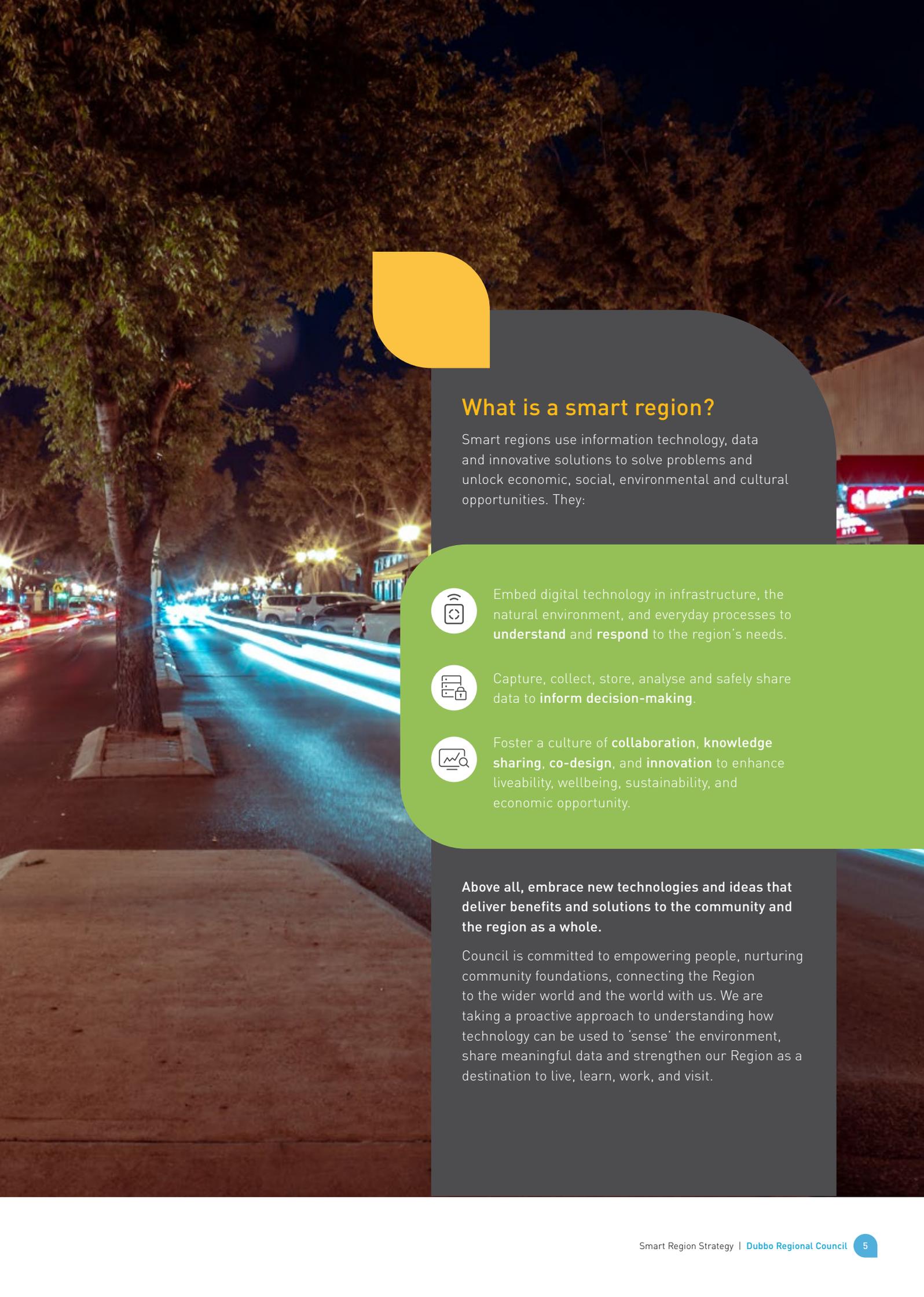
A region of opportunity driven by innovation. Where data is harnessed to improve decision-making. Where technology is leveraged to tackle local challenges.

A community closely connected to each other and the world. A future in which our environment and way of life are preserved.

Dubbo Regional Council (DRC) have developed this *Smart Region Strategy* (Strategy) to guide the adoption of technology, data, and innovation as the Dubbo Region (the Region) pursues greater prosperity, connection, wellbeing, and sustainability.

For Dubbo, Wellington, and the villages of Geurie, Wongarbon, Stuart Town, Mumbil, Ballimore, Elong Elong and Eumungerie – the opportunities are endless.



A nighttime photograph of a city street with light trails from cars and streetlights. A large tree is on the left, and a building is on the right. The image is used as a background for the text overlays.

What is a smart region?

Smart regions use information technology, data and innovative solutions to solve problems and unlock economic, social, environmental and cultural opportunities. They:



Embed digital technology in infrastructure, the natural environment, and everyday processes to **understand** and **respond** to the region's needs.



Capture, collect, store, analyse and safely share data to **inform decision-making**.



Foster a culture of **collaboration**, **knowledge sharing**, **co-design**, and **innovation** to enhance liveability, wellbeing, sustainability, and economic opportunity.

Above all, embrace new technologies and ideas that deliver benefits and solutions to the community and the region as a whole.

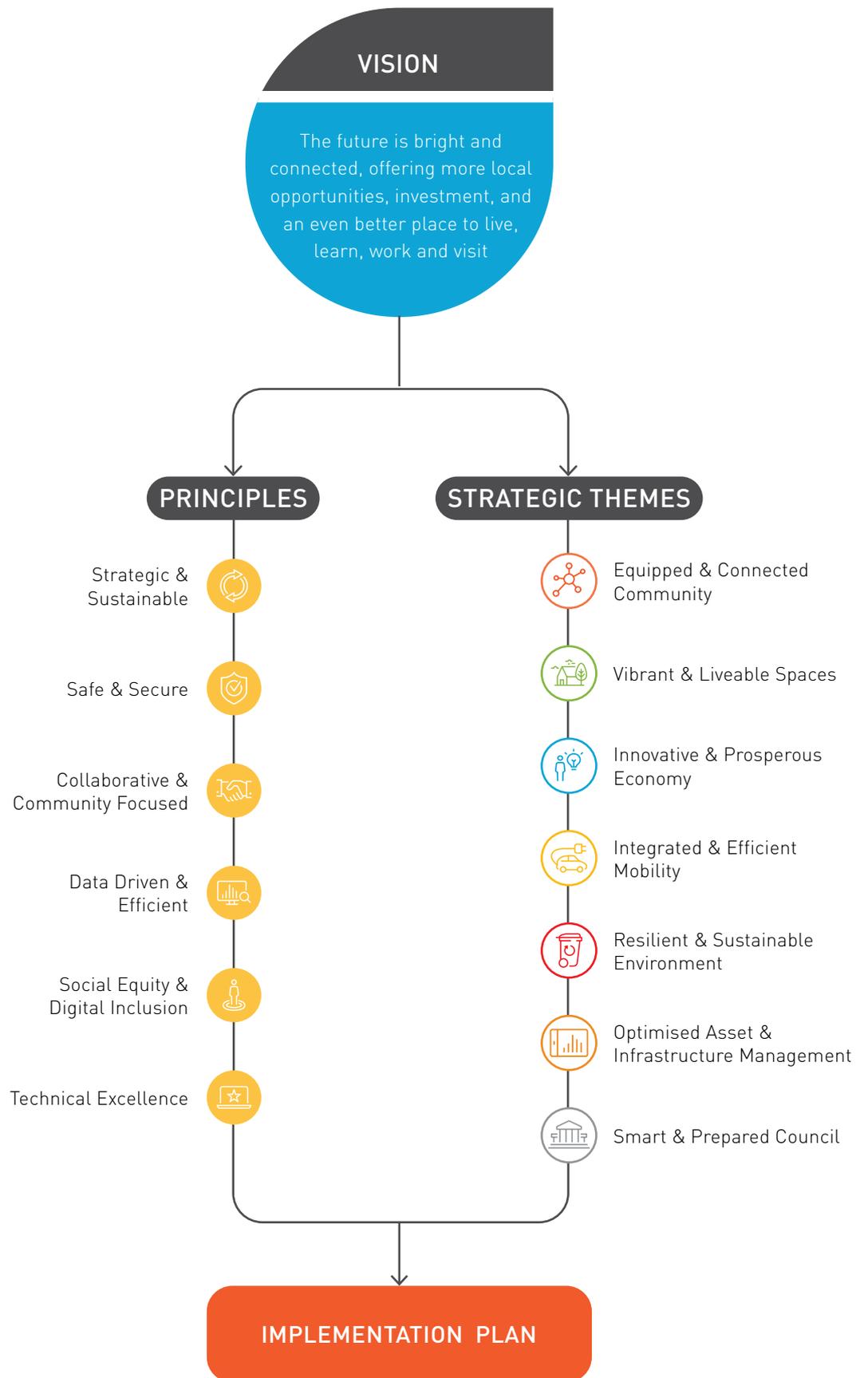
Council is committed to empowering people, nurturing community foundations, connecting the Region to the wider world and the world with us. We are taking a proactive approach to understanding how technology can be used to 'sense' the environment, share meaningful data and strengthen our Region as a destination to live, learn, work, and visit.

Vision

The future is bright and connected, offering more local opportunities, investment, and an even better place to live, learn, work and visit.

Harnessing data, technology, and collaboration we will create economic opportunity, support environmental sustainability, and promote wellbeing and safety. We will be a recognised leader of regional and rural smart solutions.





Council's Role

Council's role is to lead and facilitate the uptake of digital technology across the Region.

- » As a leader Council will look to design and deliver smart services and initiatives as directed by community need and priority.
- » As a facilitator Council will support individuals, community groups, business and stakeholders to drive smart region activity by sharing information and data, encouraging collaboration, and removing barriers to innovation.

To support our smart region aspirations Council is taking steps to transform and further enhance its internal digital operations, systems, and processes. We are focussed on improving customer experience, streamlining internal processes, and encouraging innovation during procurement, contracting and investment.





Why is Council working towards building a Smart Region?

Council is committed to enhancing the way we deliver services, infrastructure, and facilities to our community. Over the last decade digital technology has changed the way we engage and interact with the economy, the environment, services, and each other. We recognise this change means Council along with the broader Region must leverage digital technology and data to meet community expectations and support a higher quality of life in Dubbo. This Strategy and the accompanying *Smart Council Strategy* are a critical step forward.

Our Smart Council Strategy

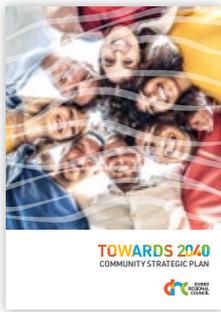
As technology transforms all aspects of our lives, Council recognises that residents expect service improvements and a seamless experience when interacting with Council. To exceed these expectations, Council is driving organisational reform and building capability through a *Smart Council Strategy*. The *Smart Council Strategy* works in parallel with this *Smart Region Strategy* to address current and future opportunities that digital technologies present. The *Smart Council Strategy* establishes a clearly aligned and planned approach to smart region activity through the deployment of Information and Communication Technology (ICT).

Strategic Context

Success for the Region will come from the strength of its existing partnerships and ability to form new ones.

To promote partnerships with our neighbours, the NSW Government, and the Australian Government, we have closely considered their smart aspirations, policies, and strategies. Future strategies for the Region will ensure strategic alignment with these stakeholders, to combine resources and share knowledge that delivers more integrated solutions with broader impact for our communities

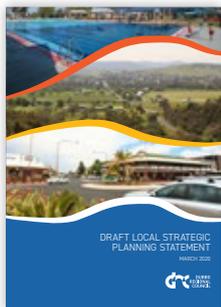




Towards 2040 Community Strategic Plan

The *Towards 2040 Community Strategic Plan* (CSP) is centred around housing, infrastructure, economic development, leadership, liveability, and environmental sustainability. This Strategy delivers on key commitments of the CSP related to:

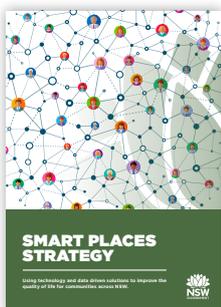
- » Urban salinity monitoring
- » Road monitoring and maintenance
- » Agricultural technology and connectivity
- » Investment and opportunity attraction
- » Digital skill-building
- » Urban heat management and climate change
- » Waste management practices



Dubbo Local Strategic Planning Statement

The *Dubbo Local Strategic Planning Statement* (LSPS) sets the economic, social and environmental land use priorities of the community over the next 20 years. It identifies the following as a short-term action:

- » *Prepare a Smart Cities Strategy to identify Dubbo's smart direction which includes digital infrastructure requirements.*

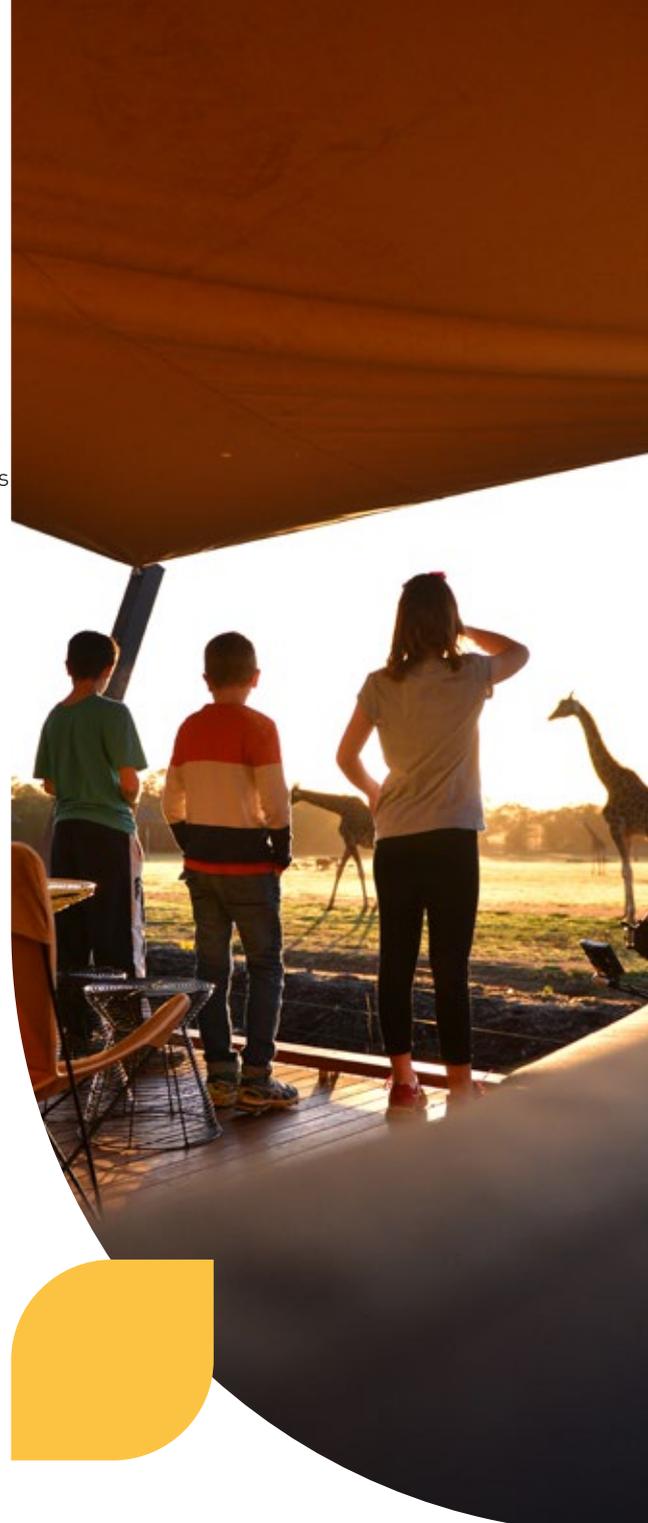


NSW – Smart Places

The NSW Government has a leading smart technology and digital transformation agenda. The *Smart Places* program supports quality of life in NSW by using technology and information to solve problems and open economic, social, and cultural opportunities for people in communities, towns, and cities. Council is aligning their efforts with the NSW Government, leveraging their expertise to accelerate progress in the Region.

The NSW Government is:

- » setting legislation, policies and guidelines to consistently rollout smart initiatives;
- » creating partnership structures and governance models across all level of government and the private sector to maximise investment in smart initiatives; and
- » directing investment to support market acceleration and to address market failure so that no one is left behind.



Accelerating Smart Technology in NSW

NSW Government have developed a range of policies, program, and tools to support the acceleration of smart technologies across NSW. Key activities and guiding documents include:

ACTION	SIGNIFICANCE TO THE REGION
NSW SMART PLACES STRATEGY The Smart Places Strategy will enhance existing economic and technological strategies by streamlining policy and plans across all levels of Government in NSW	Council has aligned its smart region policies to those set out in the <i>Smart Places Strategy</i> to leverage NSW expertise, build synergies and set up future collaboration opportunities.
SMART PLACES CUSTOMER CHARTER This Charter provides principles to ensure smart places investment is delivered in a way that meets our customers' needs.	Council agrees to the principles of the <i>Charter</i> , demonstrating our understanding and agreement to meet customer expectations.
POLICIES AND GUIDELINES The NSW Government has developed a range of tools to help place owners deliver smart places in NSW.	Council is committed to leveraging these policies and guidelines to support the consistent, efficient, safe, secure, and valuable roll-out of smart technologies across the Region.
NSW SMART PLACES ACCELERATION PROGRAM A \$45 million fund for the NSW Government to partner with stakeholders across metropolitan and regional NSW to accelerate smart technologies and capabilities.	The <i>Acceleration Program</i> is one avenue through which Council is seeking investment and expertise. We are also looking to collaborate with local stakeholders and neighbouring Councils.
REGIONAL DIGITAL CONNECTIVITY PROGRAM The NSW Government has committed over \$400 million to bring a faster and more reliable digital network to regional NSW. The program is focused on the following three priority areas: Mobile Coverage, Gig State and Farms of the Future.	Council is working to leverage the <i>Regional Digital Connectivity Program</i> to help our community run and expand their businesses, access online services and stay in touch with friends and family.

Building Momentum

Through strategic partnerships and collaboration with the NSW Government, Council has been at the forefront of some catalyst projects across the Region. Council will draw on knowledge, lessons, and best practice approaches in its pursuit to becoming a smart region. The tangible benefits of these projects, listed here, have created momentum for the implementation of this Strategy.

NBN rollout

As early as 2016 the NBN™ network became available to residents and businesses in Dubbo, Wellington, and surrounding areas. Connectivity will be further enhanced by the NSW Gig State project, which is a \$100 million investment to improve connectivity prices, quality of service and choice for regional businesses and communities.

LED street lighting

In 2019 Dubbo made the switch to LED street lighting – a more energy efficient, reliable, and effective technology option. The project has estimated savings of \$700,000 per year from reduced energy usage.

Street lighting is a foundation smart infrastructure investment. Lighting assets can integrate with CCTV, Wi-Fi, and various additional devices to facilitate real-time data collection. Real-time monitoring opportunities include smart traffic and parking systems, weather and early detection systems, and public realm safety.



Smart water meters

From 2020 to 2022, smart water meter technology is being rolled out across the Region to 2,300 non-residential and 17,700 residential properties. Smart water meters save money and reduce water consumption by helping to detect leaks early, manage water use through real time data, improve billing accuracy, and reduce asset maintenance costs.

Renewable Energy Zones (REZs)

The NSW Government plans to deliver five Renewable Energy Zones (REZs) with one of the first to be piloted in the Central-West Orana (CW&O). The REZs will play a vital role in delivering affordable, reliable energy generation to help replace the State's existing power stations as they come to their scheduled end of operational life. The CW&O REZ will unlock a significant pipeline of large-scale renewable energy and storage projects, while supporting private sector investment and construction jobs across the Region.

Power Partnerships Program

DRC is now a member of the Cities Power Partnership (CPP) program, joining forces with over 125 councils across the country. The CPP is an effort to accelerate Australia's transition to a renewable energy future, and ultimately slash greenhouse gas pollution and tackle the impacts of climate change. Replacing street lights, installing solar panels, and introducing hybrid vehicles are all initiatives Council have undertaken in an effort to achieve 50% renewable energy consumption by 2025. Efficiencies and savings realised from these investments will flow back to the community: for example, the installation of solar panels on Council facilities is helping save up to \$70,000 per year on energy costs.



Electric Vehicle Charging

The future of transport is electric cars with Dubbo at the heart of the electric vehicle fast charging routes. Local charging stations have been deployed near the Western Plains Cultural Centre connecting Adelaide to Brisbane and inland NSW with coastal NSW.

DRC & ME online portal

The DRC & ME platform provides the community with easy access to Council services through a friendly online interface. Now customers can interact with Council services online 24/7, submit, and track the progress of their requests.

CCTV infrastructure

Dubbo and Wellington residents can feel safer when walking down the street with 167 cameras installed or upgraded across the Region. These have the ability to monitor public safety, read number plates and discern features of suspects in an effort to make our streets safer. These systems operate under strict Codes of Practice and the *Privacy and Personal Information Act 1998 (NSW)*.

The Driverless Ute and Kangaroo Detection Avoidance Trial

Transport for NSW has partnered with leading industry, researchers, local governments, and businesses to develop and deliver a world first Automated Ride Share trial in Dubbo. The trial will operate in real world environments and help the project partners develop scalable transport solutions that improve safety and mobility outcomes in regional Australia. In line with the NSW Government's Future Transport 2056 Strategy the trial focuses on understanding how automated vehicles will operate as part of the integrated transport network, including the physical and digital infrastructure required to support their operation and the role of government in enabling customer focused commercial operations into the future.



What the Community said

For the community, by the community. A smart region is smart because it addresses local concerns and leverages local opportunities.

This Strategy is shaped by community consultation. It is Council's priority and the responsibility of our partners to increase community participation throughout the planning, design and implementation of smart projects.

In 2021 Council engaged with the regional community and a range of stakeholders to identify priorities and gauge community understanding of the benefits of smart regions.

The engagement process included:

- > ONLINE COMMUNITY SURVEYS
- > ONLINE STAFF SURVEYS
- > IN-PERSON WORKSHOPS
- > DIGITAL WORKSHOPS



"The Smart Region Strategy should be citizen-centric; it should solve local issues and meet local priorities, and increase the reliability and efficiency of Council services."

"Smart Dubbo should empower choice in our community, with appropriate levels of infrastructure and technology to support an innovative community."

"Dubbo could be an ag tech business hub and host annual ag tech workshops and field days."

"Take the lead! Take some risks! Use digital to really contribute to a better triple bottom line."



Key insights from engagement



ENSURE SAFETY AND SECURITY

We should use smart solutions to support community safety and to increase regional resilience



BE COMMUNITY FOCUSED

The Strategy should be developed with the Regions residents as its core focus – not technology for its own sake.



BE SUSTAINABLE

We should use modern solutions to address Climate Change at a local level and support community adaptation.



ENHANCE CONNECTIVITY

Increase regional connectivity and connection between people, places and data.



BE PROACTIVE

Council and the community need to be active participants in the smart region, towns and cities movements. Investing time and energy into increasing liveability, prosperity and connection across the Region.

Building our Smart Region Together

Smart regions are built on collaboration and partnerships – a strong ecosystem of players working together to deliver improved outcomes for the Region.

To facilitate smart region growth, we are building a culture that rewards innovative behaviours and practices; attracts, upskills, and promotes the required capabilities to perform new roles and responsibilities; and connects local ideas to global know-how and investment.

Council welcomes contributions from all sectors of the community. Here is how you may be able to translate your energy, ideas, and skills into building a smarter Region.



COMMUNITY

- » How can digital technology help us engage and communicate with Council?
- » How can we hack local challenges using digital technology and data?



LOCAL BUSINESSES

- » How can we engage in the digital economy?
- » How can we leverage data to optimise sales and customer interactions?



EDUCATION SECTOR

- » How can we share our expertise, information, and data to help build capacity, new skills, and innovative solutions?
- » How can we integrate digital technology and data in our teaching and learning outcomes?



AGRICULTURE & INDUSTRY

- » How can we use digital technologies to drive operational efficiencies?
- » How can we use data to better understand our consumers?



LOGISTICS & TRANSPORT

- » How can data analytics optimise transport routes?
- » How can we work with partners to better manage and maintain transport routes?



Welcoming, supporting and initiating partnerships

Smart regions and cities are built on networks that connect ideas, data, and people. It is through such a network, that data can be shared and used by local groups to identify new opportunities and address localised challenges.

The first step in supporting these networks is preparing for partnerships with individuals, community groups, businesses and other government.

How Council is doing this?

» Point of Contact

We have set up a single point of contact for all government, community, and private sector partnerships.

» Shared Benefit

Council's ongoing imperative for partnerships is creating and sharing value. We are working to ensure that Council and our partners have an incentive to pursue and continue joint initiatives.

» Tangible Impact

We are designing a partnership framework that helps us assess and plan ventures that create a positive impact for the community and our partners.



VISITOR ATTRACTION

- » How can we make the most of digital technologies to interact and communicate with visitors?
- » How can digital technology help use promote Dubbo as a destination?



HEALTH & SOCIAL SERVICES SECTOR

- » How can digital technology help us deliver services to the Region?
- » How can we leverage data to better understand the needs of the Region?



PLANNERS & DEVELOPERS

- » How can we embed digital assets in new developments and buildings?
- » How can digital technology help us engage with communities about planned developments



Want to get involved?

Get in touch

E: council@dubbo.nsw.gov.au

P: (02) 6801 4000

www.dubbo.nsw.gov.au

Smart Region Opportunities

The Dubbo Region is uniquely placed to leverage opportunities afforded by digital technology, data, and innovation.

The Region is set apart from Australia's capital cities, offering a lower cost of living, strong sense of local community, a vibrant atmosphere with the lifestyle benefits of a regional centre. Council has identified a range of opportunities and actions to progress our smart region journey and connect the Region with Australia and the world.

The Region is strategically located

The Region is a valuable link between Melbourne and Brisbane and between Sydney and Adelaide. It also connects the western catchment area and provides access to the eastern seaboard markets.

Existing infrastructure connecting the Region is a distinct advantage. The Region is accessible by road, rail, and air and is digitally connected through the NBN.

ACTION

Council has the capacity to leverage competitive advantages to become a thriving intermodal logistics hub.

- » Council is looking for partners to address gaps in our digital infrastructure that act as a barrier to becoming a logistics hub.
- » Council is exploring how to create networks of producers and importers and establish platforms and processes to help coordinate industry activity.

The Region is a knowledge centre

The Region has strong industry clusters, with advanced skills in manufacturing, healthcare and agriculture; and emerging specialisations in mining, warehousing, postal and freight.

The Region is also home to critical research and government institutions, including Charles Sturt University, TAFE Western, Dubbo Local Aboriginal Land Council, NSW Department of Premier and Cabinet, NSW Farmers Association, NSW Minerals Council, and more.

ACTION

Greater connection within the region and with the wider world will empower businesses to expand into global markets and the community to share resources and knowledge.

- » Council is exploring how to support employment through digital technology in our region, including the capacity to work remotely.
- » Council is looking to leverage the existing skills base to support further skill development, education, and training opportunities.
- » Council is looking to partner with business and the NSW Government to improve digital connectivity to support initiatives such as telehealth, attract technology businesses and continue to deliver world class education.

The Region has a rich tapestry of people and cultures

The continued presence of the Wiradjuri, Gamilaraay and other First Nations people is felt throughout the Region. The Wiradjuri Garden, Dubbo Local Aboriginal Land Council, and Wellington Local Aboriginal Land Council are a few of many significant First Nation's programs, places and institutions.

Western Plains Cultural Centre, Royal Flying Doctor Visitor Experience, and First Lesson Cultural Tours are just a snapshot of the many the diverse cultural offerings of the Region.

ACTION

Digital connectivity and collaboration can support knowledge sharing and artistic expression throughout our Region, drawing people into our community and help share local stories.

- » Council is looking to partner with Elders and knowledge custodians to explore how digital and virtual technologies can provide new opportunities for appropriately documenting and sharing culturally and historically significant information.
- » Council is working with community organisations and artists to support cultural and artistic expression, events and performance using digital technology.



The Region is being impacted by climate change

In 2019, the Region was addressing challenges of water scarcity, farmers left fields unplanted and sold off stock, tourist numbers dwindled, and parks and gardens turned brown.

Renewable energy generation in the Region is accelerating. Rooftop solar and large solar and wind farms are expanding. In 2022 NSW Government investment will unlock up to 3000 megawatts of new electricity capacity, enough to power an additional 1.4 million homes.

ACTION

By embracing digital technology and cultivating a dynamic innovation ecosystem, the Region will become a destination for piloting the latest technology and emerge as a renewable energy powerhouse.

- » Council is installing solar panels, saving up to \$70,000 and achieving 50% renewable electricity consumption from renewables by 2025.
- » Council is exploring how digital technology can help to combat and mitigate the effects of climate change.
- » Through the Central-West Orana Renewable Energy Zone pilot, Council is exploring how we can attract and support renewable energy innovators and entrepreneurs in the region.

The Region is home to an Australian Strategic Materials (ASM) Project

The site represents globally significant quantities of zirconium and rare earth materials, as well as contribute to the niobium and emerging hafnium industries.

The project is estimated to provide critical supplies for the defence, renewable energy, aerospace, electric vehicle, and electronics industries.

ACTION

These materials are in high demand for a range of technologies, in particular clean energy, and transportation, where they are used in high volumes.

- » Council is exploring how digital technologies and data can help plan for and sustainably manage migratory workforces associated with mining.
- » Council recognises that this project beyond other smart initiatives in this strategy will economically link the Region to global markets.



Principles

There are many challenges and opportunities when embedding and upgrading technology, prioritising smart projects, and gathering and analysing data.

Through community and stakeholder consultation Council has developed the following guiding principles which will shape and direct community focused planning and action.



STRATEGIC & SUSTAINABLE

Council is committed to the long-term success and implementation of smart region initiatives. We take a whole-of-Region approach that considers and aligns to the broader region, national and global context and balances strategic, budgetary and resourcing requirements.



SAFE & SECURE

Council is committed to building community resilience, protecting privacy and strengthening community trust and cohesion. We aim to empower our community to engage safely and confidently across both physical and digital environments.

ACTION HAS STARTED!

Council is adopting and implementing the NSW Government Cyber Security Framework.



COLLABORATIVE & COMMUNITY FOCUSED

Council will operate by our community for our community. Council aims to deliver outcomes through partnerships, collaboration and community empowerment. We will facilitate knowledge-sharing, codesign of local policy and trust between residents, business, researchers and government.





DATA DRIVEN & EFFICIENT

Council will securely gather, store and share information and analyse data to build a more productive region. Council and our partners will leverage data to deliver better outcomes, more efficient and effective services, and greater prosperity.



SOCIAL EQUITY & DIGITAL INCLUSION

Council and our partners will focus on initiatives addressing issues of digital equity. Initiatives will address the overarching objective of integrating technology and digital access across the Region in a fair and more equitable way.



TECHNICAL EXCELLENCE

Council has also developed a set of technical principles, to ensure sustainable, long-term success of our smart region program. Guided by international best practice, they are the procedural and practical guardrails that help guarantee success of each project:

- » Interoperability
- » Privacy & Cyber-security
- » Connectivity
- » Scalability
- » Data & Information

Smart Region Objectives



EQUIPPED & CONNECTED COMMUNITY

- » Increase digital inclusion and equity – promote lifelong learning and skill development through ‘learned experiences’ not purely formal education pathways.
- » Enhance community engagement to support community participation and connection across the Region.
- » Increase high-end digital capability to improve access to economic opportunities and grow regional innovation potential.



VIBRANT & LIVEABLE SPACES

- » Grow tourism and night-time economies.
- » Enrich the ‘sense of place’ and urban amenity.
- » Increase the efficiency and effectiveness of place management.



INNOVATIVE & PROSPEROUS ECONOMY

- » Attract investment and support business growth across the Region.
- » Increase local employment opportunities – including remote working and skilled workforce.
- » Strengthen and investigate opportunities to develop a data sharing platform.



INTEGRATED & EFFICIENT MOBILITY

- » Increase Council and community understanding of environmental challenges with a focus on how relevant circularly economy approaches are for regional communities.
- » Reduce waste and resource consumption across the Region.
- » Support industry in the adopting technology to realise operational efficiencies and meet ‘green’ regulations.



RESILIENT & SUSTAINABLE ENVIRONMENT

- » Improve the experience and efficiency of travel within the region.
- » Increase options for active, public and sustainable transport.
- » Ensure transport and mobility is improved for all members of our community through the development of smart systems and options.



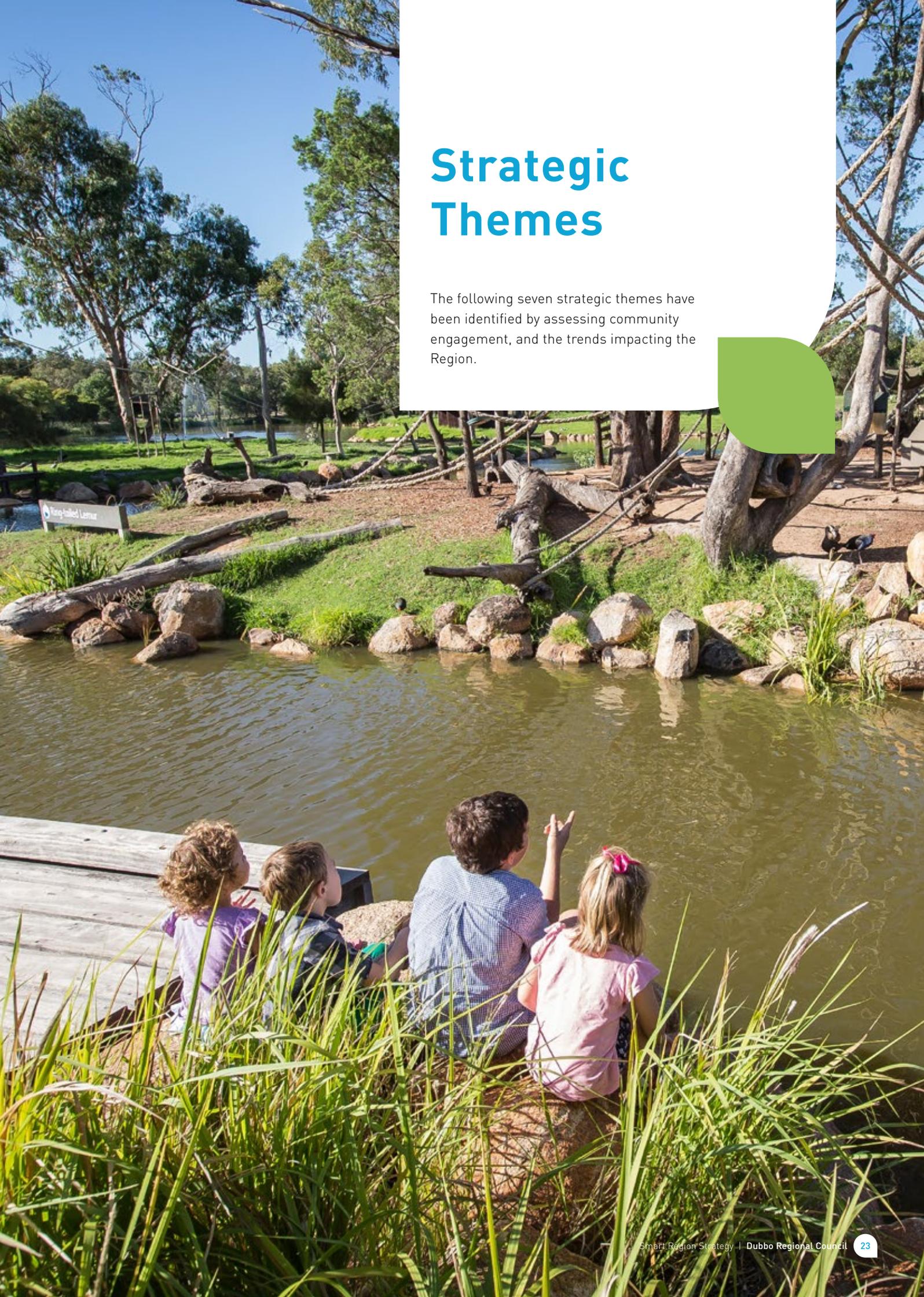
OPTIMISED ASSET & INFRASTRUCTURE MANAGEMENT

- » Improve the efficiency and effectiveness of asset management, leveraging data and technology.
- » Optimise resource, waste and emergency management using modern processes and innovative solutions.
- » Ensure the long-term financial and resource sustainability, leveraging data and digital solutions for enhanced efficiencies.



SMART & PREPARED COUNCIL

- » Deliver seamless, simple and codesigned community experiences and services.
- » Empower decision-makers through data and stakeholder consultation.
- » Drive collaboration and productivity through digitally integrated processes.



Strategic Themes

The following seven strategic themes have been identified by assessing community engagement, and the trends impacting the Region.



Equipped & Connected Community

A key focus of the *Smart Region Strategy* is to not only support our diverse and dispersed community to engage and participate, but to have the skills and capability to stay connected both locally and globally.

Community consultation priorities	Strategic Community Plan 2040	NSW Smart Places
Regional connection, digital literacy, public understanding of digital technology and innovation pathways and supporting cultural expression.	  <small>ECONOMY LIVABILITY</small>	 

PRIORITY ACTION AREAS

- » Investigate barriers and solutions to digital inclusion and equity across the Region.

- » Work with other local training providers, education institutions and NSW Government’s Smart Places Masterclass to develop a digital education program to support personal development and lifelong learning.

- » Establish a platform to communicate smart city projects, news, progress, collaboration opportunities and other key information.

- » Investigate innovative, interactive platforms to share and celebrate local culture, heritage and creativity.

- » Develop key policies and leverage tools such as the NSW Government Tools to Deliver Smart Places to coordinate the community’s adoption of smart technologies.

Australian Seniors Computer Clubs Association (ASCCA)

ASCCA is a national peak body promoting access to information technology by older people. ASCCA is represented across Australia and exists to support seniors enjoy information technology and become computer literate at their own pace, in a non-threatening environment and to have fun whilst doing so.

Tools to Deliver Smart Place

The NSW Government has developed a range of tools to help place owners deliver smart places in NSW. These policies and guidelines are referred to as “foundations” in the Smart Places Strategy and will help make sure we roll out smart solutions in a consistent and efficient way.



Vibrant & Liveable Spaces

A key focus of the *Smart Region Strategy* is creating liveable, well-planned, safe places and spaces that leverage digital technology to inform decision-making & facilitate vibrancy.

Community consultation priorities	Strategic Community Plan 2040	NSW Smart Places
Digital and data for liveability - supporting tourism, the night-time economy, and vibrant public spaces.		

PRIORITY ACTION AREAS

- » Leverage smart technologies and innovative planning to increase public safety across the Regions places and spaces.

- » Explore opportunities to increase accessibility and flexibility of public spaces using smart technologies.

- » Expand movement counting project to high-priority areas to better understand how public spaces are being used and to optimise planning and asset management.

- » Partner with developers, the community, NSW Government and other key stakeholders to develop a guideline to coordinate the delivery of smart places and developments in the Region.

- » Expand smart lighting project to high-priority areas to support safety, smart city connectivity and the night-time economy.

- » Investigate digital place activation initiatives to increased visitor activity, interaction with local businesses and connect the Regions past and present through digital way-finding.

A public plaza is being planned in front of the Old Dubbo Gaol, in the heart of Dubbo’s Central Business District. Council will explore appropriate smart infrastructure opportunities which aim to enhance the capacity, amenity and diversified activation of the public open space. An activated plaza with greater public participation will strengthen community connections, improve passive safety and support local businesses.



Innovative & Prosperous Economy

A key focus of the *Smart Region Strategy* is shaping and supporting an economy that is powered by data, innovation, collaboration and creativity to drive local employment and education opportunities.

Community consultation priorities	Strategic Community Plan 2040	NSW Smart Places
Data, technology and education to drive research, innovation, employment and business growth.	  <small>ECONOMY ENVIRONMENTAL SUSTAINABILITY</small>	

PRIORITY ACTION AREAS

- » Develop an innovation prospectus to build the Regions reputation as a hub of digital technology and innovation, attracting talent and investment.

- » Facilitate remote/co-working hubs, facilitating local employment and entrepreneurship opportunities.

- » Establish a *Smart Region Community of Practice*.

- » Integrate digital technologies and innovation into the Dubbo Health, Education and Wellbeing Precinct supporting local health and education outcomes.

- » Explore REZ opportunities including new jobs, industry training, programs, pathways, and co-located industries (e.g. hydrogen generation)

A Community of Practice is a group of people with a shared interest. They work together to share ideas, information and lessons, and solve challenges. The Dubbo Region and regional Australia more broadly face diverse and unique challenges including issues of connectivity, skills and economic opportunity. Establishing a Smart Region Community of Practice will strengthen partnerships, build local knowledge and develop global solutions.

Dubbo, a Place for Innovation

DRC’s CEO Murray Wood described the Driverless Ute Trial as “an exciting development”... (and) “will be globally significant. Stakeholders are excited to pilot their technology in regional Australia and how technology adapts to wildlife, especially kangaroos. “For Dubbo, it builds our reputation as a place to do innovation. While the report is about parking, the overall project is very exciting.”



Integrated & Efficient Mobility

A key focus of the *Smart Region Strategy* is increasing accessibility and connectivity within the broader region, Australia and the world through advances in planning, transport and logistics

Community consultation priorities	Strategic Community Plan 2040	NSW Smart Places
Access to transport, improved road and traffic management, green mobility and mobility planning.		

PRIORITY ACTION AREAS

- » Collect, analyse and share real-time data on traffic, parking and congestion and optimise mobility planning.
- » Develop a sustainable mobility roadmap addressing green transport; EV charging; and CO₂ reduction.
- » Explore the feasibility of expanding smart parking to high priority areas.
- » Explore projects to support climate change adaptation, active mobility and green infrastructure.

Mobility will transform over the coming decades as clean energy, 5G, AI and big data, alter the way that transport outcomes can be delivered. Better planned, more accessible, less polluting and more efficient mobility has the potential to improve health and economic outcomes across the Region. Smart mobility tackles the challenges around planning for active transport, flexible scheduling, shared vehicles and decentralised transportation.

A Logistics Hub in Dubbo

Council will explore many options to support Dubbo's growth as an intermodal logistics hub servicing the western catchment area, and providing access to markets on the eastern seaboard. One option we are investigating is gathering, collating and sharing data on transport and logistics through a central platform – with potential funding opportunities through the NSW Smart Places Acceleration Program and the Australian Government.



Resilient & Sustainable Environment

A key focus of the *Smart Region Strategy* is proactively protecting our natural environment, leveraging technology we can monitor human impacts on the environment, improve resource efficiencies, and tackle climate change.

Community consultation priorities	Strategic Community Plan 2040	NSW Smart Places
Modern solutions to resource, waste & environmental management.		

PRIORITY ACTION AREAS

- » Research circular economy performance benchmarking and tracking.
- » Collect environmental data to monitor impacts and support informed data driven decisions.
- » Work with local agricultural industry and NSW Farms of the Future Program to deliver connectivity.
- » Assist farmers in the adoption of ag tech to boost productivity and improve resource management.
- » Leverage NSW's first REZ as the catalyst to a renewable energy industry for the Region.
- » Identify opportunities to implement smart irrigation to better manage green spaces and water resources.
- » Support more efficient energy, waste and water management through the adoption of smart technologies.

In 2020 the City of Canterbury-Bankstown trialed the use of AI and machine learning to spot, analyse and geo-tag contaminated waste. Using data captured from waste trucks' GPS and cameras, what once took 5 years now takes 14 days. Previously, only 1.4% of contamination was detected, now 68% of contaminated waste is detected. This information is being used to change waste behaviour, supply chains and improve sustainability.

Farms of the Future
 The Farms of the Future program will deliver on-farm connectivity and encourage farmers to adopt AgTech to boost productivity and improve resource management. The program is part of the NSW Future Ready Regions strategy, to support and work with regional communities. A grants program will be launched in 2022 to assist farmers with the purchase of AgTech devices and applications. Additionally, a training and support program will build industry capacity via a 'Train the Trainer' model to increase supplier and farmer digital capability and technology confidence.



Optimised Asset & Infrastructure Management

A key focus of the *Smart Region Strategy* is developing world class asset and resource management processes. Leveraging AI and machine learning for predictive maintenance, crowd sourcing, problem identification and data driven asset management planning

Community consultation priorities	Strategic Community Plan 2040	NSW Smart Places
Better data for better planning, optimisation and management.		

PRIORITY ACTION AREAS

- » Explore opportunities to improve regional connectivity through the NSW Gig State initiative.
- » Explore opportunities to develop a local IoT network to encourage innovation and smart city participation.
- » Develop a data governance framework to aid better planning asset management and service delivery.
- » Identify asset utilisation challenges and predictive maintenance opportunities.
- » Develop a framework to guide the integration of digital technologies in Council assets during development and maintenance to future-proof Council investment.

In 2019 Moreton Bay Regional Council began using Artificial Intelligence to maintain its \$2 billion road network. Machine learning algorithms used daily footage from cameras fitted to garbage trucks to identify potholes, cracking, line markings and more. Road defect records are created in near real time within Council’s asset management system. Data for potholes includes location, severity, and whether it is new, existing or repaired. After the initial 12-month pilot Council is now rolling out the AI solution across its entire fleet generating significant savings for rate payers and an improved street network.

Smart Asset Management
 Building information modelling is a powerful ICT tool that can achieve efficiencies in construction. Council is investigating how technology and data can assist commission, operation and maintenance through the infrastructure/asset whole of life management model.¹

1. The Smart ICT Report on the inquiry into the role of smart ICT in the design and planning of infrastructure (Commonwealth of Australia 2016)



Smart & Prepared Council

This *Smart Region Strategy* is a decisive step towards a more prosperous and liveable Region. It is accompanied by the Smart Council Strategy, and provides the strategic backbone of the Regions smart transformation for Council.

Community consultation priorities	Strategic Community Plan 2040	NSW Smart Places
Better data for better planning, optimisation and management.		

PRIORITY ACTION AREAS

- » Partnering with the community to deliver a Smart Region

- » Designing and redesigning towards a Customer Centric Experience

- » Integrating and coordinating Systems and Processes

- » Informing and empowering through Information Governance

- » Advocate relevant and fit for purpose Technology

The *Smart Council Strategy* will ensure Council is empowered by data and technology to improve customer-focused outcomes. It supports privacy protections and stronger cyber-security to safeguard against current and future challenges. Throughout its digital transformation, Council will guarantee high-quality outputs by embedding the following principles:

- » Strong cyber security and privacy protections
- » High levels of digital capability
- » Meaningful and relevant user experiences by design

Smart Places

Both the *Smart Council Strategy* and this Strategy align closely with work being done by the NSW Government and the Australian Government. As a place manager, Council is excited to partner with the NSW Government to accelerate smart technologies and capabilities through the Smart Places Acceleration Program which has a mandate to co-invest in smart place initiatives and solutions across metropolitan and regional NSW.

Implementation

Implementation is a deliberate and cyclical process.

This Strategy and its sibling document, the *Smart Council Strategy*, has developed its first annual *Smart Action Plan*. This action plan will work alongside and in conjunction with initiatives by other stakeholders.

Throughout individual projects, data and evaluation will occur, which will culminate in yearly reviews that will focus on the economic, environmental, social and cultural impacts of the program. This will inform holistic review, which will strengthen future strategic planning.



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