

### DOCUMENT ON EXHIBITION

### Smart Community Strategy

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### SMART COMMUNITY STRATEGY 2024-2027 mid-western regional council

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## INTRODUCTION

### Smart Cities and Communities

A **Smart City** utilises data and technology to create efficiencies, improve sustainability, creates economic development, and enhances quality of life factors for people living and working in the city.

For the purposes of the Mid-Western Region, we have adopted the language of Smart Community to encapsulate the unique geographical and economic basis of the region.

A Smart Community Strategy provides direction for Council and the community to ensure focus on relevant initiatives that provide the most appropriate benefits to the community both now and into the future. This Strategy establishes the roadmap to guide and accelerate smart community action in the Mid-Western Region. The Smart Community Strategy describes a portfolio of services that can be implemented to transform and improve the way residents, visitors, businesses and governments interact with their environment in the course of their lives. Smart Communities utilise information and communications technology to connect people, processes, data and things in ways that make the community more liveable, workable and sustainable.



### Community Plan

This Strategy has been designed to align with the five themes of the Community Plan:



### **5 THEMES** MID-WESTERN REGIONAL COUNCIL COMMUNITY PLAN

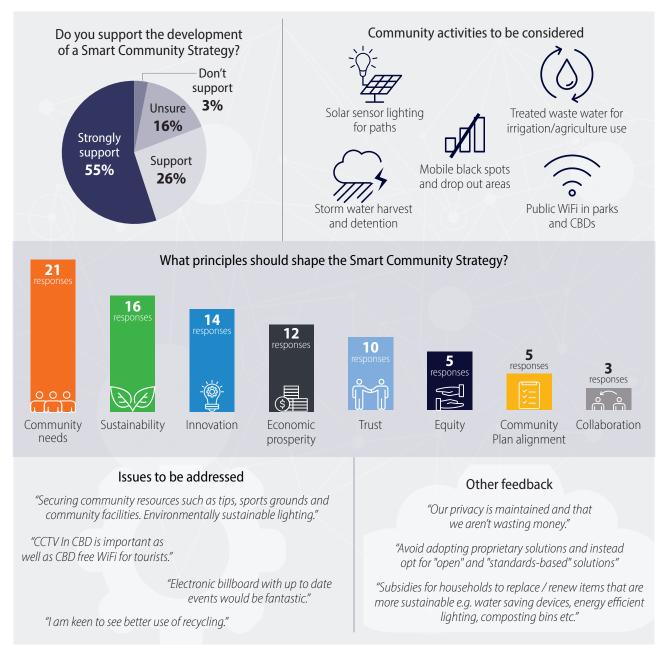
The Smart Community Strategy has been developed as a 10-year plan to provide long-term strategic guidance. To ensure currency and relevance, this Strategy is to be reviewed every four years.

### COMMUNITY ENGAGEMENT

To formulate the Smart Community Strategy, Council dedicated resources to engage with the community. The emphasis was on comprehending the needs, wants, and preferences of residents in the Mid-Western Region regarding smart technologies and determining the optimal ways to apply them for community benefit. Utilising the YourSay platform on the Mid-Western Regional Council website, an online feedback forum facilitated a widespread and inclusive engagement

approach, ensuring diverse community segments had the opportunity to share their perspectives. This consultation process empowered individuals, businesses, and organisations to explore and contribute insights regarding the potential efficiencies and advantages of smart technologies. Importantly, this consultation process served to embed community needs and expectations at the core of the Smart Community Strategy.

#### Our community says



The Objective of the Smart Community Strategy is:

To create a community that is economically, environmentally and technologically efficient supporting Council's vision to develop a prosperous and progressive community that we are proud to call home.

The following **principles** will be used to guide Council's decision making and investment in smart community projects to achieve the smart community vision.

### Principals of the Smart Community Vision



#### INNOVATION

Proposed initiatives should consider best practice and future-proofed solutions to problems.

#### **COMMUNITY NEEDS**

All smart community solutions should be focused on delivering community needs either today or into the future.



Smart Community Projects

#### COLLABORATION



Council looks for opportunities to work with other organisations for mutually beneficial outcomes.

#### TRUST

Data is gathered and used responsibly, stored securely and released appropriately, and used to further transparency.



### MID-WESTERN REGIONAL COUNCIL SMART COMMUNITY STRATEGY ON A PAGE

Strategy:

To invest and support initiatives that utilise data and technology to inform Council decision-making resulting in economic, environmental and technological benefits to the region that make it a better place to live, work, invest and visit.



#### Smart water meters

Benefits:

- Reduced water wastage due to leak detection
- Reduced water usage due to better informed community
- Reduced water costs, increasing economic productivity



### LED street lighting

Benefits:

- Improved energy efficiency
- Longer asset life resulting in reduced maintenance costs
- Reduced operating costs
- Reduced environmental footprint



## Drones for weeds monitoring

- Reduced man-hours on site for weed reporting, reducing cost of managing weeds
- Improved access to difficult properties
- Improved safety for staff to avoid physical injury on site









#### Smart economic analytics tools

#### Benefits:

- Enables data-driven policy decisions by providing comprehensive insights into local spending patterns and trends
- Aids in effective tourism planning by understanding spending behaviour, thereby allowing for the development of strategies to attract more visitors and enhance the local economy
- Facilitates strategic infrastructure development by identifying areas where there is a high concentration of spending, guiding decisions for the development of necessary amenities



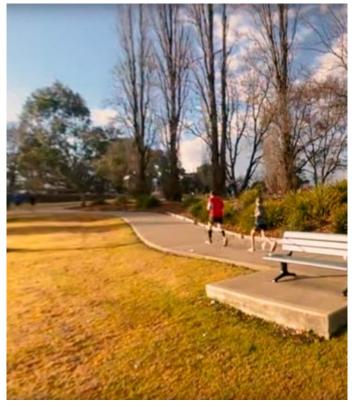


#### Virtual reality (VR) marketing videos



- The immersive experience can evoke a strong emotional connection, making people more likely to consider the region for investment or relocation
- VR enables a detailed and realistic visualization of the region, showcasing its key features, infrastructure, natural beauty, and other attractions
- VR marketing videos can be accessed globally, allowing potential investors and residents from anywhere in the world to explore and understand the region without the need for physical travel



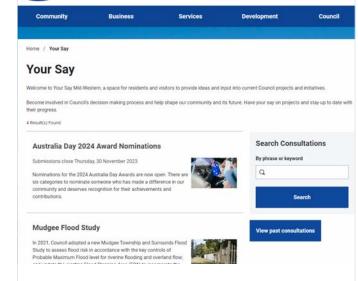


### midwestern.nsw.gov.au/Your-Say

#### Benefits:

- Supported decision making and enhanced community engagement
- Increased engagement leads to building stronger relationships with the community
- Ease of access to Council for the community to provide feedback on projects and issues affecting them





Mid-Western

How can we help?

C

# Digital transformation tools

- Online payment platforms provide convenient, fast, and secure transactions with the convenience of being able to pay any time, any where and automated recordkeeping
- Smart water meters offering accurate, real-time monitoring of water usage, enabling leak detection and efficient resource management
- Online work requests enabling streamlined submission and tracking of service requests, improving efficiency and transparency





DATA ANALYSIS

## Drones for compliance



#### Benefits:

- Drones used to access hazardous or inaccessible areas
- Improved safety for staff preventing physical injury
- Drones can perform tasks much faster than humans, which can lead to increased efficiency and productivity in mapping and inspections



# Electric vehicle charging stations

Benefits:

- Attraction of EV driving tourism
- Cater for an increasing number of NSW EV drivers
- Contributes to the reduction of greenhouse gas emissions



### Mt Misery live feed

Benefits:

CONNECTING OUR REGION

- Real-time information about weather conditions can help make informed decisions to promote improved safety, especially regarding sudden changes such as thunderstorms or high winds
- Locals and tourists can check real-time conditions to plan activities such as hiking, birdwatching, or mountain biking







## SHORT TERM INITIATIVES

### Digitising heritage assets

#### Benefits:

- Create long-term archive of region's heritage
- Improved access to information for community
- Faster access to information for Council staff
- Improved education regarding heritage assets
- Tourism asset development through heritage walk development





### Mid-Western Regional Council Solar Energy Farm

- Reduce energy costs to Council
- Reduce energy costs to community
- Reduce reliance on third-parties power production
- Reduce region's carbon footprint





## SHORT TERM INITIATIVES

#### Smart warning systems

#### Benefits:

- Smart warning systems provide early alerts about potential threats, giving individuals and communities valuable time to take preventive actions or evacuate if necessary. This can be critical in situations such as natural disasters
- Smart warning systems can facilitate automated coordination of response efforts. Emergency services can be alerted automatically, and resources can be deployed more efficiently to the affected areas
- Smart warning systems help reduce response time for emergency services and individuals. This can be crucial in situations where a rapid response is necessary to mitigate the impact of a hazard





### Public mapping

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- Public mapping enhances community planning by providing accurate geographic information for effective community development
- Public mapping enables efficient management of utilities, waste, and environmental sustainability initiatives
- Supports emergency preparedness and response while empowering residents with accessible community information and involvement in governance
- Attracts businesses and investors through transparent and comprehensive community data





# Smart sensors for passive and active parks lighting

#### Benefits:

- Energy efficiency leading to cost savings
- Reduced light pollution, minimising the impact on the environment and wildlife
- Improved safety in parks for residents during the night





### Free CBD WiFi

- Access to free WiFi in CBDs can attract more businesses, leading to increased foot traffic and economic activity
- Free WiFi availability in CBDs can attract more tourists, who rely on constant connectivity to navigate, explore, and share their experiences online
- Provides an opportunity for planners and businesses to collect data and gain insights into user behaviour and preferences, enabling informed decision-making for future urban development





### Smart benches and seats

#### Benefits:

- Improved accessibility for individuals who may not have access to these amenities otherwise
- Enhanced convenience in public spaces for residents and tourists to enjoy the outdoors while staying connected





# Smart irrigation solutions for parks and gardens

- Water use efficiency and environmental benefits
- The experience for residents and park visitors, with a cool refuge during hot summers and a smart park they can enjoy all year round
- Operational benefits, with reduced risk of asset failures and streamlined maintenance processes





### Smart lighting in restrooms

#### Benefits:

- Energy efficiency and cost savings through automated control and optimisation of lighting usage
- Enhanced user experience with improved convenience and safety in public facilities
- Improved accessibility for all users including people with visual impairments or disabilities





#### Pedestrian sensor movements

- Reduced accidents and improved pedestrian safety through the implementation of intelligent crosswalks and traffic control systems
- Promoting pedestrian-friendly spaces encourages walking and supports a more active and healthy lifestyle for residents
- Access to pedestrian movement data enables Council to make informed decisions regarding urban planning and infrastructure development





# Smart digital town signage



#### Benefits:

- Allows for real-time updates and information dissemination to residents and visitors
- Enables instant notification of emergency alerts and critical information during disasters or accidents
- Provides a platform for local businesses to advertise their products and services, boosting the local economy
- Offers visitors valuable information about local attractions, events, and historical sites, improving their overall experience





#### Cameras on fleet vehicles



- Smart cameras can identify road hazards such as potholes, debris, or obstructions in real-time. This information can be relayed to authorities for timely intervention, reducing the risk of accidents and damage to vehicles
- By continuously monitoring road conditions, maintenance can be prioritised more effectively. Smart cameras can detect wear and tear, enabling proactive repairs before minor issues escalate into major infrastructure problems
- By monitoring road conditions and promptly addressing hazards, overall public safety is increased, reducing the likelihood of accidents, injuries, and fatalities on the road
- Proactively addressing road maintenance needs can lead to cost savings in the long run





## Automation and efficiency using artificial intelligence (AI)

- Al can automate routine administrative tasks, such as data entry, document processing, and record keeping, to free up staff time for more strategic activities. This automation reduces administrative burdens, minimises errors, and accelerates workflow processes
- By optimising resource allocation, automating repetitive tasks, and improving operational efficiency, Al can help achieve cost savings and budget efficiencies. These savings can be reinvested in priority areas such as infrastructure development, social services, and community programs
- Al can analyse vast amounts of data from various sources, including sensors, social media, and community feedback, to provide insights that inform policy decisions and strategic planning. This datadriven approach enables evidence-based decision making that address the needs and priorities of the community

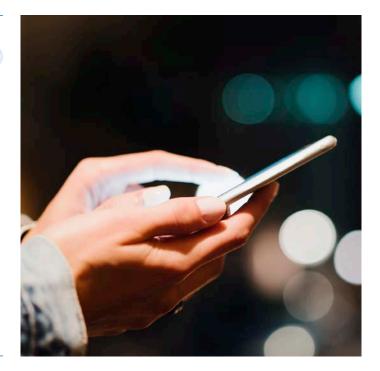




# Mobile request system

- Mobile request systems enable residents to submit requests anytime and anywhere, improving communication with Council
- Streamlines request submission and management, leading to faster response and resolution times
- Provides real-time updates on request statuses, fostering accountability and trust
- Centralises data on community issues, helping to identify trends and allocate resources more effectively





# Introduce electric vehicles to Council fleet



- Reduced carbon emissions, promoting sustainability and a healthier environment
- Lower operational costs over the long term compared to traditional fuel-powered vehicles
- Promoting the use of renewable energy sources and contributing to the Region's overall energy independence and sustainability goals







### CCTV in CBD



#### Benefits:

- Deterrence of criminal activities and improved surveillance leading to a safer environment for residents and visitors
- Video footage serves as valuable evidence for investigations, aiding law enforcement in solving crimes more efficiently
- Increased trust and confidence in the town's security measures among residents, businesses, and tourists
- CCTV cameras can help in monitoring and managing traffic flow, reducing congestion and improving overall transportation efficiency





# Digital arts expansion in cultural centre

- Increased access to diverse cultural content and artistic experiences for the community, fostering cultural awareness and appreciation
- Attraction of tourists and visitors, leading to the growth of the local economy through increased cultural tourism and related business activities
- Support for local artists and creative professionals, contributing to the growth and development of the Region's creative sector
- Provision of learning opportunities and workshops that promote artistic skills and cultural education for residents





### Smart waste bins

Benefits:

- Optimised waste collection schedules based on real-time data, leading to cost savings and improved resource allocation
- Reduction in overflowing bins and litter, leading to a cleaner and more hygienic environment for residents and visitors
- Analysis of waste generation patterns provides valuable insights for Council to implement targeted waste reduction and recycling programs





### Smart street lighting

- These systems improve public safety by providing better illumination and responsive lighting that adjusts to real-time conditions. Motion sensors and integrated surveillance can deter crime and improve visibility for pedestrians and drivers. They can also link to emergency services for immediate lighting in case of incidents
- Smart street lighting reduces carbon footprints by lowering energy usage and using environmentally friendly LED lights. This contributes to sustainability goals by decreasing greenhouse gas emissions and light pollution. Better maintenance schedules reduce the need for frequent replacements, minimising waste





## Soil moisture live reporting for agriculture

#### Benefits:

- Optimised irrigation practices based on real-time soil moisture data, leading to reduced water usage and preservation of water resources
- Early detection of soil moisture fluctuations helps farmers to pro actively manage risks associated with droughts and excessive rainfall
- Access to live soil moisture data enables farmers to make informed decisions about planting, harvesting, and irrigation scheduling, leading to improved agricultural productivity and profitability



## LOCAL ECONOMY

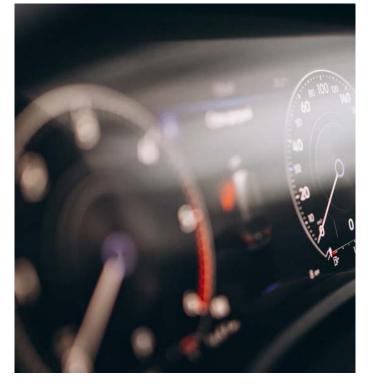
Automated vehicles

BUILDING A STRONG



- Implementation of advanced driver-assistance systems reduces the risk of accidents and enhances overall road safety
- Automated vehicles are often electric or hybrid, leading to reduced emissions and contributing to a cleaner and more sustainable environment
- Increased accessibility for individuals with limited mobility or disabilities, promoting inclusivity and equal opportunities for transportation





#### Smart parking sensor solutions

Benefits:

- Real-time parking availability information helps drivers find parking spots more efficiently, reducing traffic congestion in busy areas
- Enhanced convenience for residents and visitors through the availability of real-time parking information and smoother parking experiences
- Parking data analysis enables Council to make informed decisions about parking infrastructure expansion and optimisation, leading to better planning and resource allocation





### Ride-share solutions



- Encouragement of ride-sharing reduces the number of vehicles on the road, leading to decreased traffic congestion and improved traffic flow
- Economical transportation options for residents contribute to cost savings for daily commuters and promote financial affordability
- Reduction in the number of vehicles results in decreased carbon emissions, contributing to improved air quality and environmental conservation

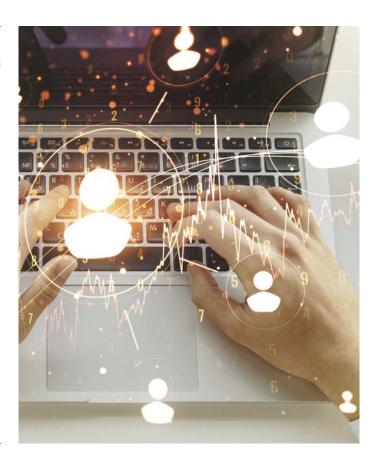




## Smart community digital platforms

#### Benefits:

- Streamlines access to services, improves resource management, enhances decision-making, boosts community engagement, and reduces operational costs by integrating various functions into a single platform
- Smart community platforms can improve customer experiences with Council allowing more tailored interactions based on individual preferences
- Enhanced communication through data sharing in real time





### Utilise data to optimise facility hire

- Streamlined booking processes and optimised facility management ensure a seamless and satisfactory experience for users and event organisers
- Data utilisation helps in evaluating the success of events and facility usage, providing valuable insights for future planning and decision-making
- Data-driven insights facilitate the efficient allocation of resources and the optimization of facility usage, leading to cost savings and improved operational efficiency

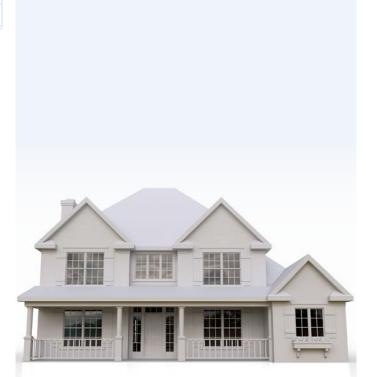




### 3D modelling of urban planning

- 3D modelling provides a more comprehensive and detailed view of urban development projects, enabling stakeholders to better understand proposed changes and developments
- Simulation of various scenarios through 3D modelling helps in identifying potential challenges and risks associated with urban development, allowing for proactive risk management and mitigation strategies
- 3D models enhance communication and collaboration between stakeholders, including residents, businesses, and Council, fostering greater community involvement in the planning process







### **WORKING TOGETHER** TO BUILD A SMART COMMUNITY

In the collaborative effort to build a smart community Mid-Western Regional Council acknowledges that the journey towards modernisation and innovation cannot be undertaken in isolation. It necessitates the collective commitment of all stakeholders. All members of our community have the ability to see the success of this strategy in their homes, schools and businesses. Witnessing the success of this strategy is within the grasp of every community member. Interested in being part of this transformative endeavour? Here's how:

### Community

- Investigate how technology can enhance the efficiency and liveability of your home and share your insights
- Challenge and enhance inefficient systems and processes, while remaining receptive to more resource-efficient practices
- Advocate for new technological innovations to elevate our status as a modern, smart region
- Support lifelong learning by participating in digital training to bridge the digital exclusion gap



### Researchers and educators

- Harness the full potential of data to enhance social, environmental, economic, and liveability outcomes
- Integrate smart technology, governance, policy, creativity, and innovation training into education and learning programs
- Cultivate an innovative culture aimed at addressing societal and environmental challenges
- Encourage organisations, students, and researchers to actively participate and collaborate in the development and transformation of the region



### **WORKING TOGETHER** TO BUILD A SMART COMMUNITY

#### Businesses

- Explore new business models and synergies through circular economy initiatives, leveraging government data, and staying informed about upcoming tenders driving innovation
- Contribute thought leadership at council think tanks and forums within your expertise
- Continue digitisation reforms within your business, not just to combat obsolescence but to contribute to the sustainable improvement of our region's liveability
- Foster digital literacy across your teams and networks
- Encourage and support innovative ideas and processes, collaborating with other innovators to bring ideas to fruition, and subsequently sharing your learnings



### Council

- Lead and champion the promotion of our smart community journey
- Continuously engage with residents and local stakeholders
- Enhance the use, access, and understanding of realtime information and its functions
- Foster and support innovation internally, with partners, and within the community
- Promote the Mid-Western Region to attract investment, innovation, employment, and skills both locally and globally



### IMPLEMENTATION

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The Economic Development team of Council will coordinate the implementation of the Smart Community Strategy in collaboration with all relevant departments. Council will monitor, measure, and report progress against the strategy's objectives and actions. It will communicate, promote, and advocate for projects within the strategy, collaborating with individuals, businesses, and community groups to generate creative, innovative ideas.



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