



MOUNT BARKER  
DISTRICT COUNCIL



# SMART COMMUNITY STRATEGY

our road map to a smarter future

A woman with dark hair, wearing a brown fur cloak, is shown from the chest up. She is holding a long, smooth, light-colored wooden staff with both hands, extending it across the frame. She is looking upwards and to the right with a thoughtful expression. The background is a vast, open landscape at sunset or sunrise, with silhouettes of trees and hills under a warm, golden sky. The lighting is soft and directional, coming from the upper left. There are decorative dotted lines in the upper right and middle right areas of the page.

We acknowledge that the district is part of the traditional ancestral land of the Peramangk People. We acknowledge the deep feelings of attachment and relationship of the Peramangk people to this land and their ongoing custodianship.

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# FOREWORD

The Mount Barker District Council offers an enviable lifestyle with outstanding facilities, housing choice, education, shops and services nestled amongst the beautiful Mt Lofty Ranges. Perfectly located, the district is both accessible and liveable, located only 20 minutes' drive from inner metropolitan Adelaide.

With a current population of approximately 37,481 people, the district is one of the fastest growing regions in the state bringing with it both opportunities for our community and challenges. To make the most of the opportunities whilst solving the challenges, a smart, well connected community driven by innovation and creativity, enabled through technology will play a crucial role in driving and enabling community prosperity, sustainability and wellbeing.

To achieve this, our community must have access to fast and reliable internet particularly for our education and business sectors. Other technologies such as the Internet of things (IoT) will improve the quality and management of public facilities, and support innovative "smart" services such as transport on demand, smart car parking, lighting and public way finding.



The innovative use of technology and data will underpin the prosperity of local business and attract new industries creating job opportunities and investment essential for a growing community.

Taking a leading role driven by the needs of our community, council is committed to establishing a smart and connected community. Through this Smart Community Strategy and its guiding principles and programs council is providing the direction needed to deliver a smart, safe and vibrant community, benefiting from the highest standards of sustainable living and wellbeing.

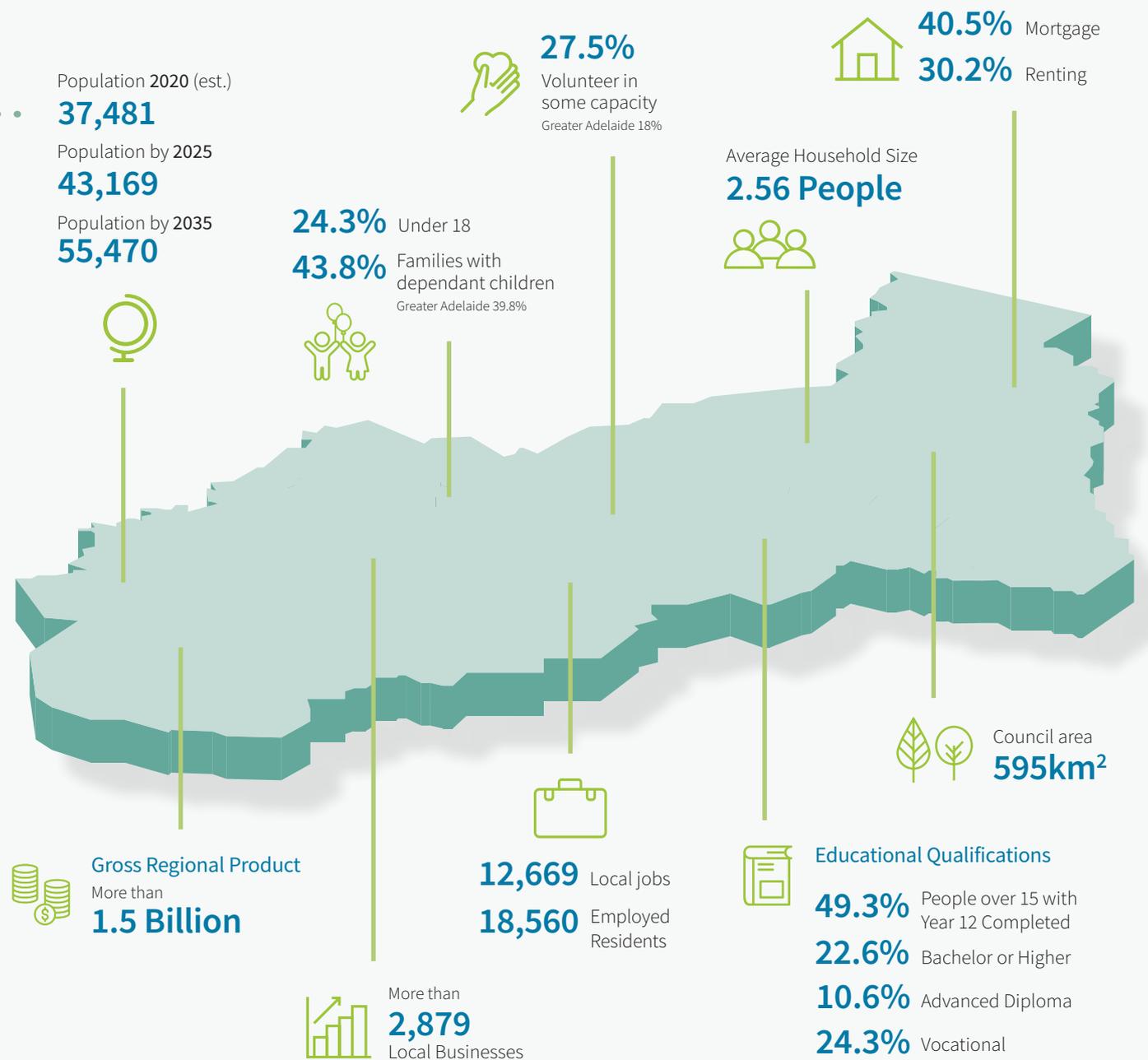
**Ann Ferguson,**  
Mayor

September 2020



# OUR DISTRICT COMMUNITY OVERVIEW

The Mount Barker district is one of the fastest growing regions in South Australia, with higher than state average median incomes, low unemployment and a low disadvantage index making the district one of the most attractive areas to live, work and play.



Growing at a rate of nearly 3% per annum, the Mt Barker district is proving to be very attractive for young families making up 43% of the population, and importantly over 50% of the overall adult population hold either vocational or tertiary education qualifications.



## THE ROLE OF COUNCIL IN DEVELOPING A SMART COMMUNITY

As the reliance on technology increases throughout our daily lives, council has recognised the need to take a leading role in enabling the positive impact technology can have on community wellbeing, economic prosperity and ecological sustainability. In response to this, council has been steadily planning and establishing its smart community credentials.

Council has been building its “smart” capacity and capabilities for some time, all aimed at meeting the immediate and future needs of the community. These include the introduction of online electronic forms and payment services, deployment of digital process automation, cloud based administrative enterprise and governance systems and mobile workplace technologies.

Looking into the future, there are numerous smart technology opportunities that exist across all areas of council business. These opportunities extend into waste water management, project and asset management, financial services, governance, public safety and strategic planning, and when realised will deliver a significant uplift in council efficiency and effectiveness.



## COMMUNITY FOCUSSED

With an abundance of “smart” opportunities on the horizon, council now considers it necessary to develop an integrated Smart Community Strategy aimed at providing a clear road map forward aligned with the vision identified in council’s overarching Community Plan and is highlighted as a strategic guideline striving towards –

**“A community that is smart, culturally rich, prosperous, safe connected and sustainable”.**

Developing a smart community is a key priority direction for council and in collaboration with its community, the strategic aim is to identify and capture key drivers and opportunities. Then through the application of smart technology, innovation and creativity, improve council performance, solve problems and improve the quality of life for all members of the community.

Demographic indicators point to a significant proportion of the Mt Barker population being comprised of young families. Assumingly this demographic is already competent in both the use of mobile technology and high consumers of online digital services. However, it is important to ensure the disadvantaged and those less technically literate are equally engaged and benefit from the development of our smart community.

In direct consultation with both internal council business areas and external stakeholders, council’s Smart Community Strategy will serve to capture what a ‘Smart and Connected Community’ means to all those living and working in the district. Then responding to these insights, build upon the community’s digital literacy, sophistication and accessibility to smart technologies.





# WHAT MAKES A COMMUNITY SMART?

A Smart Community is one that uses data and technology coupled with human endeavour to solve problems and capitalise on opportunities to improve community well-being. Every community is different with its own unique needs, ever evolving challenges and opportunities. Going smart places, the community on the fast track to greater resilience, sustainability, and competitive advantage.

To achieve this, council's Smart Community Strategy must remain agile and adaptive to meet the dynamic needs of the community and responsive to the pace of technological change.

Through the analytical insights gained from data, and baselining what needs to be improved, a framework can be established to deliver a sustainable model for improvement. Then applying technology where appropriate, driven by innovation and creativity a smart community can overcome many previously unresolved challenges.

Developing a smart community is a long term commitment to a continuous journey of improvement with creativity and innovation at its core. With council's overarching Community Plan identifying a Smart Community as –

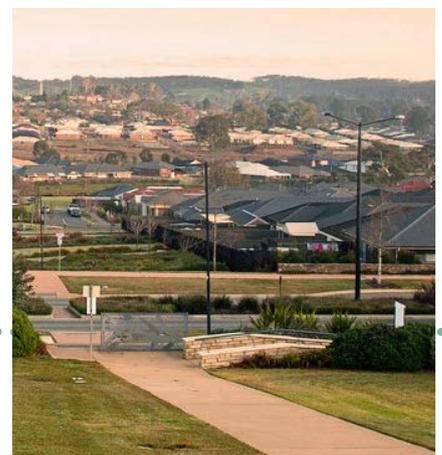
**“one that uses available wisdom, knowledge, tools and technologies to better itself and work towards a more equal and harmonious society and sustainable future”**

Whilst there are many contributing factors, there are three fundamental components that must exist and work together to establish a successful and sustainable smart community, and Mt Barker is no exception.

These three components are;

- 1. Technology** - As the enabler, it is the accessibility to technology such as the internet and reliable interoperability and connectivity.
- 2. Applications** - The applications and tools associated with technology including programs, data collection and analytics, informing the decisions made arising from the insights this data and associated programs provide.
- 3. Adoption** - The most crucial component is the adoption and user experience including subsequent benefits realised from combining the two previous components. Including more accessible, efficient and targeted use of council assets and services, ease of information sharing and improved communication.

In an effort to successfully combine these key components of a smart community, the collaboration of council, residents, business and educational establishments alike is essential. The Smart Community Strategy is therefore not determined or driven by technology, but instead technology is seen as the enabler driven by innovation and creativity to advance prosperity, liveability and sustainability.





# SMART COMMUNITY STRATEGY SCHEMATIC



## SMART COMMUNITY STRATEGIC PURPOSE

To develop a smart and inclusive community founded upon shared values, fairness and equity, thriving within a liveable, safe and sustainable urban and regional environment. Where council and the community use technology, innovation and data to connect, collaborate and work together to add value and vitality to the lives of all members of our community.





# GUIDING PRINCIPLES

Mount Barker District Council smart community outcomes will be guided by the following principles:

## 1. Strategic Intent

Smart Community initiatives will be guided by this strategy, driven by innovation and enabled through technology to achieve scale and realise the benefits to improve community wellbeing, economic prosperity and environmental sustainability.

## 2. Connectivity

Digital connectivity and interoperability will be a key part in achieving a smart community. A fundamental tenet of all smart initiatives will be to securely and conveniently serve the community through freely accessible digital services wherever they are needed and through any device.

## 3. Security & Resilience

All smart initiatives and associated technologies deployed will be established using best practice and incorporate the highest possible standards of data security. This will serve to protect the privacy and interests of the community and effectively maintain the continuity of all smart council services.

## 4. Community Collaboration

This Smart Community Strategy will foster a community wide culture of inclusiveness, creativity and innovation. Achieved through the cross collaboration of all stakeholders including universities, schools, businesses, community groups and governmental agencies.

## 5. The Value of Data

Underpinning a smart community is the recognition that data obtained through smart community initiatives when transformed into meaningful information and insights holds significant strategic and economic value. Through this strategy, data will be owned and valued by council as an essential asset, and used for the public benefit to support externally driven, community-led innovation through open data access wherever possible.

## 6. Scalable Results

The performance of smart community initiatives arising from this strategy will be measured and regularly reviewed to ensure appropriate returns on investment are achieved and ensure the strategy remains relevant.

## 7. Measurable Outcomes

Council will use community vitality as a key indicator to evaluate the progress of its smart community initiatives by capturing, converting and combining qualitative and quantitative data to establish an objective community vitality diagnostic model. This model will evaluate the vitality of our community using a range of metrics derived from public safety, health, convenience, connectivity, employment, affordability, civic participation, inclusiveness and sustainability.

## 8. Governance and Accountability

The governance of this strategy will be aligned and integrated with other existing council governance frameworks and priorities to provide continuity of purpose, accountability and the opportunity to apply a digital first approach to all council initiatives within existing budgets.





# INTEGRATED PLANNING APPROACH

Council's overarching Community Plan with its three themes comprising the triple bottom line of Economic Prosperity, Community Wellbeing and Ecological Sustainability provides the strategic direction for all work undertaken by Council. This includes establishing a smart community which is a key priority and strategic guideline of the Community Plan.





# SMART COMMUNITY FRAMEWORK

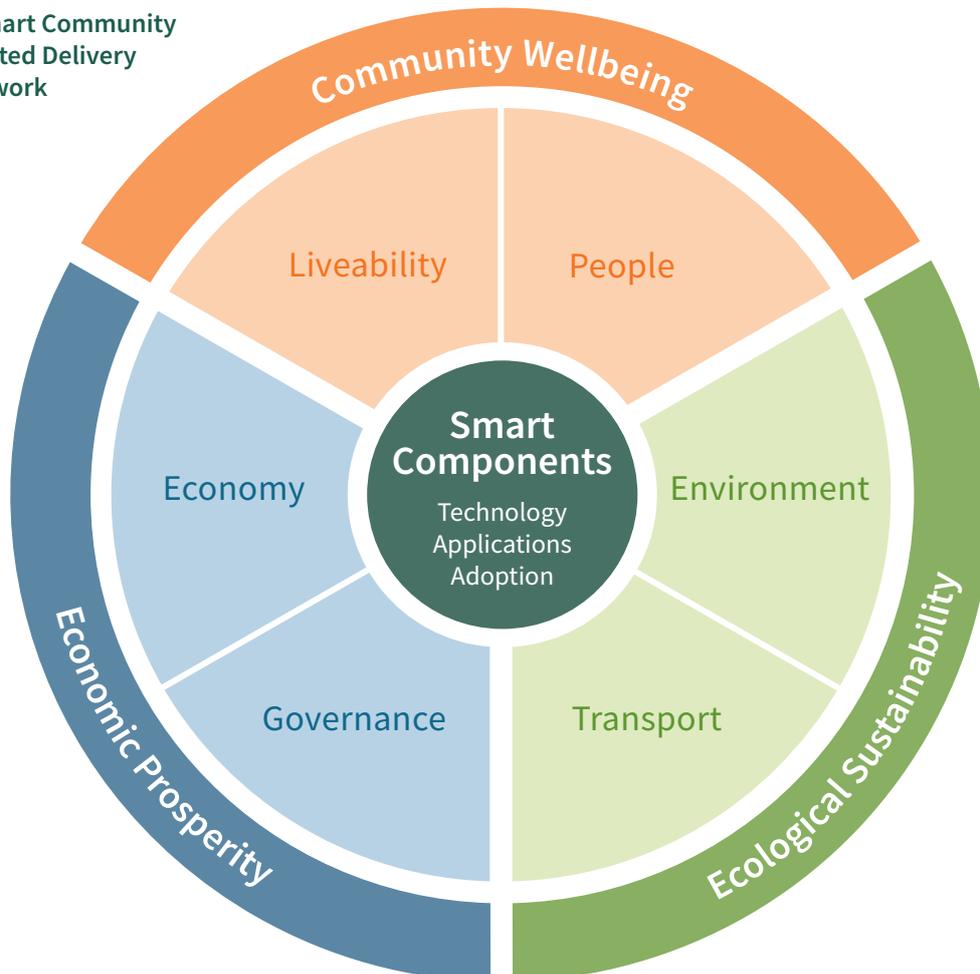
Leading on from council’s Community Plan triple bottom line, the Smart Community Strategy builds upon this through six key interrelated community focus areas.

The “smart” objectives identified within these community focus areas form the essential elements to an integrated Smart Community Delivery Framework. These elements provide the strategic direction needed to drive the components of technology, applications and adoption recognised as the three fundamental underpinnings of a successful smart community.

## The Smart Community Delivery Framework – Key Focus Areas

- 1. Smart Economy:** Entrepreneurial, industrious, advanced, opportunistic, growing and prosperous.
- 2. Smart Liveability:** Safe, healthy, culturally vibrant, cohesive, inclusive and connected communities.
- 3. Smart People:** Innovative, collaborative, educated, motivated, open data driven and creative.
- 4. A Smart Environment:** Green urban planning and design, energy efficient buildings, climate change mitigation, sustainable use of natural resource and renewables.
- 5. Smart Transport:** Integrated multimodal transport systems and infrastructure, permeable, accessible, convenient and timely.
- 6. Smart Governance:** Consultative, facilitative and transparent, digital first efficient and effective service delivery, enabling, skilled and resourceful.

The Smart Community Integrated Delivery Framework





# COMMUNITY CONSULTATION

In consultation with both community and internal stakeholders a range of high level community needs and opportunities have been identified and reviewed to inform focus area objectives. Through ongoing community consultation these objectives will be further developed into a Smart Community - Action Plan.

Ensuring all six focus areas are equally represented, the Smart Community - Action Plan will be structured to provide a dynamic and achievable program of measurable, prioritised, turnkey end to end transformational smart community initiatives.





## COUNCIL LED COMMUNITY DRIVEN

The Smart Community Strategy provides the leadership, purpose and high level strategic intent to develop a course of action to live smart and more sustainably.

In developing this course of action council will look to collaborate with local industry and community stakeholders, both in the provision of smart community networks and the sharing of data to drive economic development and community wellbeing.

Establishing an affordable and scalable Smart Community - Action Plan requires stakeholders both inside and outside of Council to be both engaged and supportive. Delivering on the strategy cannot be successful without meaningful collaboration across a broad group of industry and community stakeholders.

Through collaboration and partnership between council and the community, the use of data and technology where appropriate, will deliver responsive, scalable, smart community driven outcomes improving all facets of life across all sectors of the community.





## INFORMATION MANAGEMENT AND DATA SECURITY

Council already relies heavily upon the collection and dissemination of data to provide a diverse range of essential services. Taking this further, a smart community is underpinned by the collection and analysis of data with the Internet of Things (IoT) and use of low power, low bandwidth sensors playing a pivotal role.

The increasing use of the IoT provides the insights into asset usage and consumer patterns needed to innovate and create solutions to everyday challenges faced by our community.

To protect the integrity of data collected and community privacy, council already has in place a comprehensive Information and Technology Security Framework. Council remains committed to data security and will extend and enhance this existing framework wherever necessary to maintain the ownership, availability, confidentiality and integrity of data.



## INTEROPERABILITY AND STANDARDISATION OF DATA AND SYSTEMS

In response to the increasing diversity of technology, systems and devices, integration and interoperability of data and technology is becoming ever more complex and costly to achieve and maintain. To mitigate these complexities and increasing costs, council will aim from the outset to achieve horizontal interoperability between different devices and systems. Council will also develop and implement a data warehousing and intelligence strategy seen as critical in support of a smart community.

As part of this data warehousing and intelligence strategy, council will investigate the creation of a “Data Hub” aimed at solving the challenge of integrating disparate data sets from varying sources. Combining relevant proprietary data with public data sets into a single open platform with appropriate security, privacy and access controls, will provide significant community benefits through open data sharing.





# SMART COMMUNITY FOCUS AREAS

The six focus areas are the essential components of the Smart Delivery Framework. Each focus area is expressed in terms of a contextual overview, an objective, and list of potential opportunities. These have been identified through both internal and external consultation with key stakeholders. The opportunities identified will help to inform a future Smart Community - Action Plan.



# 1

## Focus area 1 ECONOMY

### Overview

The Mt Barker district has a rapidly increasing population, and in order to meet the future needs of this growing community it is essential the local economy is supported and empowered through smart initiatives and services to keep pace. Attracting new and innovative businesses and industries to the district, whilst supporting the retention and growth of existing enterprise will help develop and retain a skilled workforce and drive our local economy.

### Objective

To establish a local business environment driven by innovation and creativity that seizes the opportunities to develop existing business and attract new and emerging industries, human capital and investment to the district. Providing local jobs, career pathways and advancement that enriches the wealth and prosperity of our community.

### Opportunities

- Improve digital connectivity and reliable fast internet connection district wide
- Foster an innovation ecosystem for local start-ups and small businesses
- Provide sensing and data analytic support to tourism precincts and business
- Develop effective and scalable smart open access IoT capabilities
- Expand council's e-service platforms to better connect with customers
- Establish and support a community innovation hub to harness emerging technologies and attract new industries to the district
- Create a council data analytics hub to provide and use open data to provide insights for economic development and strategic planning
- Develop strategic partnerships and networks with smart community influencers and emerging technology and industry leaders.



## 2 Focus area 2 LIVEABILITY

### Overview

The Mt Barker community benefits from a safe, healthy, attractive and accessible peri-urban environment. The district offers outstanding levels of amenity with an abundance of natural open space, excellent shops and services, housing choice and education facilities. Retaining its rural character and high standards of liveability, whilst planning for and accommodating rapid urbanisation presents many challenges. With these challenges comes opportunity, and leveraging smart technology and innovative solutions will play a significant role in enabling Mt Barker to grow sustainably whilst providing its community an outstanding place to live and work.



### Objective

Use data and technology to inform and enable innovative urban and environmental design and management outcomes to ensure a safe, healthy, cohesive and inclusive community, modelled upon social connectedness, civic participation, accessibility, equity and amenity.

### Opportunities

- Establish free public Wi-Fi within government buildings and public spaces
- Work with SAPOL and technology providers to establish a crime prevention strategy through Crime Prevention Through Environmental Design (CPTED)
- Install interactive smart street furniture in public precincts
- Develop 3-D modelling and Augmented Reality capabilities to assist in city planning and deliver positive community outcomes
- Deploy sensors across the district using IoT technology to capture data aimed at improving asset management and maintenance of community facilities
- Leverage smart technology and data to improve disability access and connectivity to services and social networks
- Support and promote digital literacy initiatives across all sectors of the community.

# 3

## Focus area 3 PEOPLE

### Overview

The most important component to a smart community is how people adopt and use technology and its applications underpinned by easy access to open data. Supported by initiatives to educate and build digital literacy throughout the community to ensure everyone benefits, the innovation, creativity and collaboration of people is what makes a smart community a reality. Technology and data alone does not advance community wellbeing, it is the people within a smart community enabled by technology, data and its applications, that delivers the positive outcomes.

### Objective

Through the capture and open access to data, collaborate, facilitate and partner with universities, schools, businesses, community groups and governmental agencies. Increasing digital literacy to become a regional centre of excellence in the areas of education, training and innovation. Attracting the best of academia and entrepreneurial enterprise to advance community outcomes, where local job opportunities are abundant for an increasingly skilled workforce employed by local high value service providers and high tech driven industries.

### Opportunities

- Develop a living lab program with open access to council and community data sets for business, academia and the public sector to collaborate and utilise
- Support and facilitate training and education programs to improve digital literacy and capability
- Promote and increase community awareness of and access to, emerging and existing smart technology and data
- Provide additional ways for community to collect and feedback data to council
- Promote creativity and innovation through supporting and hosting youth hackathons, tech clubs and IoT workshops increasing the opportunities for the community to learn about and participate in smart community initiatives and education.



## 4 Focus area 4 ENVIRONMENT

### Overview

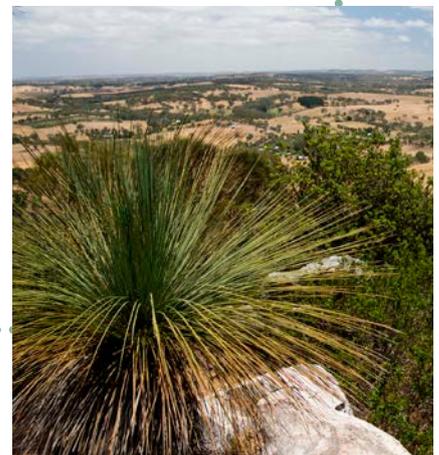
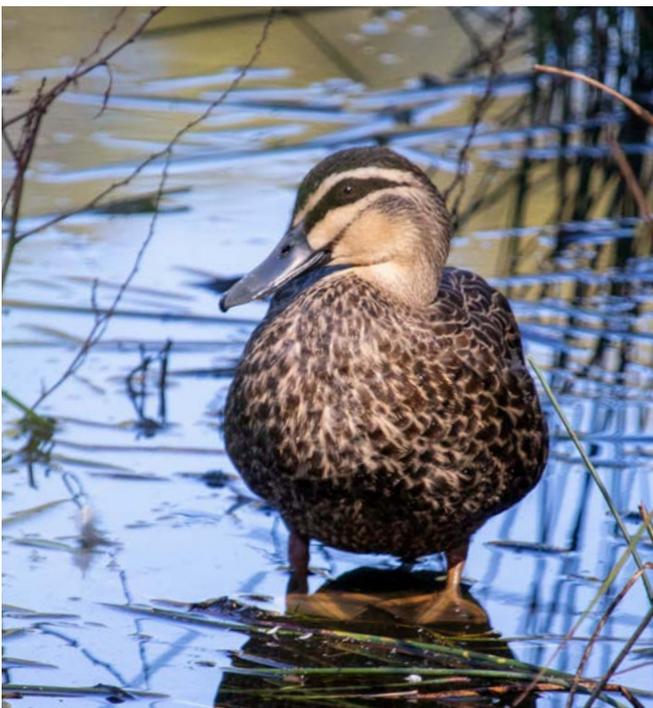
The challenge in finding an equitable and sustainable balance between the often competing elements of economic growth, community wellbeing and ecological sustainability is both complex, as it is necessary. Adding another level of complexity is climate change and the need to develop resilience and strategies to adapt to increasingly unpredictable and damaging climatic conditions. Using technology and data to gain a better understanding of these complex environmental systems and the application of “smart” solutions through more informed decisions will be critical to achieving a sustainable future.

### Objective

Utilise data and technology to provide the insights needed to make informed decisions and provide innovative solutions to district wide environmental challenges. Including mitigating and sustainably managing adverse human impacts on our biodiversity and water catchments, use of natural resources and the effects of climate change.

### Opportunities

- Deploy Smart-Community energy use optimisation technologies to monitor electricity, gas and water usage and waste management
- Promote the use of energy saving applications and detection devices across the district in government, commercial and residential buildings and facilities
- Collect data on climatic and environmental conditions including water and air quality and make this available to the community to raise awareness and drive environmental sustainability
- Deploy sensors in major waterways and catchments to obtain real-time pollution in flows and flood behaviour
- Deploy district wide smart, efficient public lighting
- Investigate digital waste management services for residents
- Leverage smart technology and data to support the establishment of a local circular economy.



# 5

## Focus area 5 TRANSPORT

### Overview

The Mt Barker district comprises a fast developing regional urban centre, six smaller townships and several rural villages located across all corners of the district. This poses both contemporary urban and rural related transport and mobility challenges. Whilst the need for a multimodal connected, convenient and permeable transport system extends district wide, the context and community settings are as diverse, as they are dispersed. This gives rise to very different transport and mobility demands for rural residents compared to residents in close proximity to Mt Barker’s regional urban centre.

### Objective

Establish an integrated multimodal transport system supported by real time commutation information systems and infrastructure. Encouraging walking, cycling and public transport as alternate modes of transport, whilst providing “smart” accessible, convenient transport and mobility options for both urban and remote communities improving connectivity, permeability, and equity of service.

### Opportunities

- Collect data on traffic movement and parking behaviour to inform future traffic management planning
- Investigate smart parking management options to reduce congestion and help local business
- Support the expansion of public transport on demand
- Deploy sensors on council vehicles to get real-time road and footpath condition data.
- Promote the deployment and use of ride-hailing, car and bike-sharing applications
- Model pedestrian movement and analyse against local transport infrastructure design and services to improve connectivity, permeability and reduce reliance of private motor vehicles.



## 6 Focus area 6 GOVERNANCE

### Overview

A Smart Community doesn't just happen. To deliver the benefits technology and data can provide, a community requires collaborative, coordinated and consultative leadership and strategic vision. Representing the local community and provider of essential services, local government is best placed to provide this leadership, and with it the vision, policy direction, planning, governance and accountability. Focussed and committed to servicing the needs of its community, local councils are uniquely capable of bringing together the key components required to successfully establish a smart community and realise benefits through more efficient and effective service provision.

### Objective

Provide coordinated leadership and accountability to collaborate across governments and the community to efficiently and effectively facilitate, support and implement where practical the infrastructure, technology, skills and resources needed to develop a smart community.

### Opportunities

- Establish a council open data and analytics platform
- Expand online e-service options for customers
- Increase the use of business process and robotic automation technologies to increase customer service efficiency and effectiveness.
- Further develop remote working capabilities to improve business continuity and resilience
- Investigate smart technologies to improve stakeholder engagement, collaboration and communication
- Facilitate and support smart community initiatives by providing easy access to public buildings, facilities, technology and data
- Encourage networking and collaboration amongst key technology providers, business and education leaders and heads of government
- Investigate the use of virtual customer response and conversational interfaces to improve customer service and response times
- Investigate the use of digital technologies for public reporting, policy formulation and strategic procurement.





## FUNDING THE PROGRAM

To deliver a smart community program requires the close collaborative partnership between the public and private sectors, academia and the community from conception to implementation and completion.

Beyond the strategic intent of a smart community, the research, development, conceptualisation and proof of concept through to the district-wide implementation of projects requires tangible investment and buy in from both government and private enterprise.

In addition to funding smart community programs through council's business as usual budget allocations, Public-Private Partnership Funding (PPPF) is also seen as an important implementation model. Depending on the initiative, council will be seeking to work with the private sector and gain financial support to deliver a district wide smart community, led through this Smart Community Strategy.





## MEASURES OF SUCCESS

As an actionable outcome of this Smart Community Strategy council will collaborate with key stakeholders to develop and deploy an endorsed Smart Community - Action Plan within 3 months of this strategy being published. This will include among other things, priorities, timelines and key performance measures.

More broadly, the overall success of this Smart Community Strategy will be measured against intended improvements in Community Vitality.

Community Vitality as a measure of community wellbeing is widely recognised internationally and described as –

**“The ability of a community to sustain itself into the future as well as provide opportunities for its residents to pursue their own life goals and the ability of residents to experience positive life outcomes.”** (State University of Oregon)

To do this, council will establish a Community Vitality diagnostics model within 12 months of the Smart Community - Action Plan being endorsed, using a variety of key qualitative and quantitative measures derived from;

- Public safety and crime data
- Public health outcomes
- Volunteering numbers
- Civic Participation
- Organised Sport Participation
- Public Transport Usage
- Commuting times
- Water and air quality
- Public facility, amenities and walking trail usage
- Economic and employment data
- Education
- Housing and construction activity
- Community satisfaction.





## **MOUNT BARKER DISTRICT SMART COMMUNITY STRATEGY**

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