

A woman with blonde hair is shown in profile, looking at a digital screen. The screen displays various icons representing smart city concepts: a circular arrow, a lightbulb, a smartphone, a bridge, a lightbulb, a parking 'P' sign, a computer monitor, a gear with the text 'working towards sustainable communities', a Wi-Fi symbol, and a cloud with rain. The background is a blurred city street at night with colorful bokeh lights.

# Smart CoM Strategic Plan

# Smart CoM Introduction



At the City of Marion, our Innovative Community Vision is  
*“By 2040 our city will be a leader in embracing and developing new ideas and technology to create a vibrant community with opportunities for all.”*

The City of Marion acknowledges the social, economic and environmental implications of technology, and how they are and will continue to shape our community.

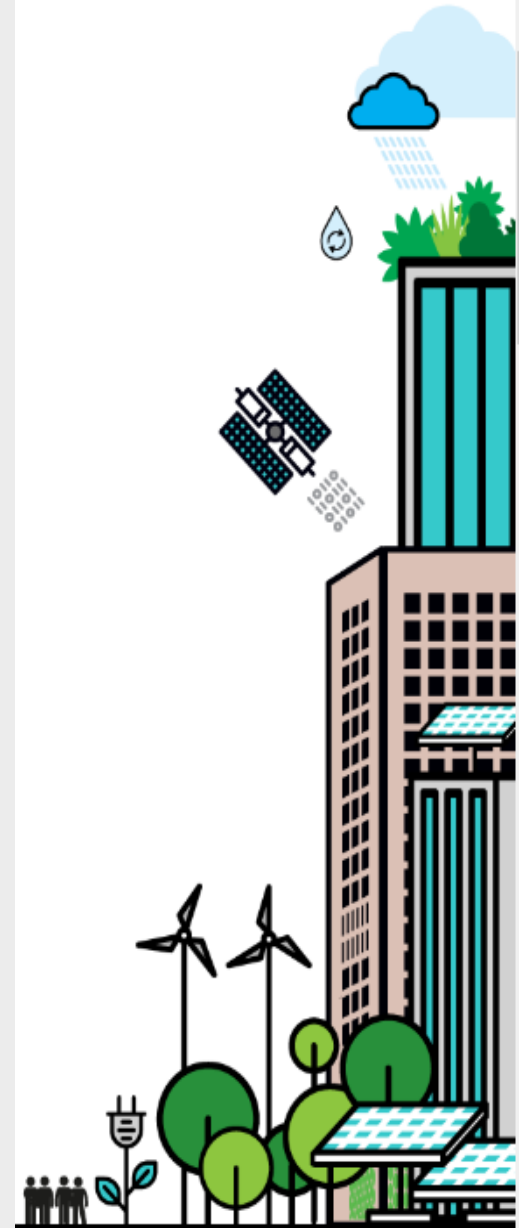
## **Our strategic context**

- Projected population growth of 15% over the next 15 years
- An aging population and increased diversity within the community
- Static job growth and decline within large historic sectors e.g. retail
- Community expectations increasing, requiring more services for lower rates
- Importance of climate change and the urgent response required to address the impact of human activity to protect our environment
- Need to be adaptive, well-planned and flexible, empowering smarter, data-driven decisions
- Technology changing rapidly, requiring a higher level of digital literacy amongst the workforce, high demand across the labour market for these skills

The Smart CoM Strategic Plan sets the agenda for the City of Marion for the next three years. It outlines a set of initiatives, aligned to the 3 key goals, and foundational principles aimed to accelerate transformation to achieve our Innovative Community Vision.

# Our Smart Community

A smart community uses technology and data to drive economic activity, accelerate innovation and better manage energy, resources and services. Most importantly, a smart community is people-focused.

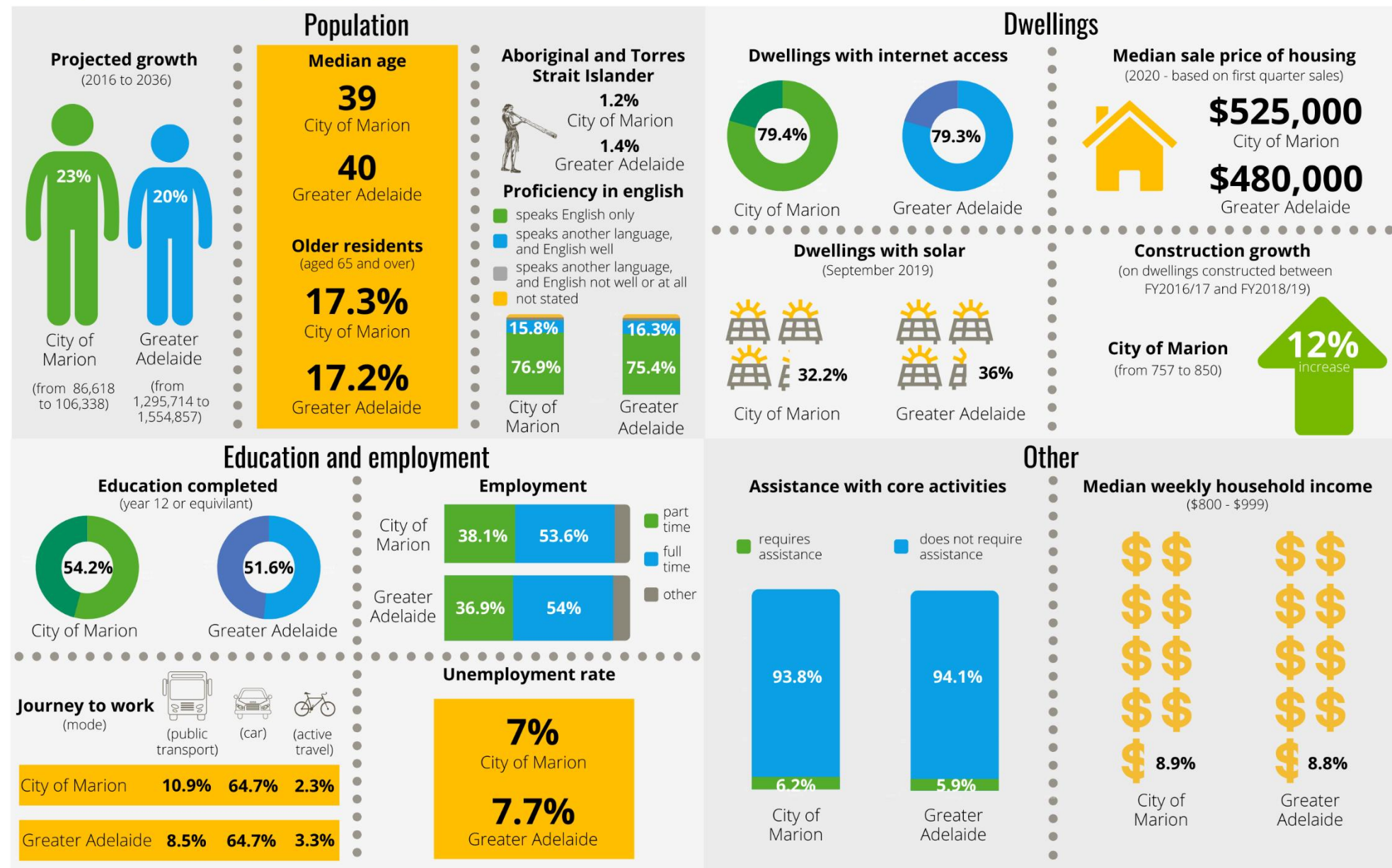




# The future:

challenges, opportunities and key statistics

## CITY OF MARION



# Smart Principles

**People** | We have a people-focused approach to being smart. This ensures we remain focused on improving our residents' and visitors' quality of life.

**Problems** | We advance innovation and sustainability with a problem-centred lens, addressing real community issues and opportunities that we see and hear about from our community.

**Fast followers** | To maximize value for money, where possible and appropriate we will experiment, learn and scale following others who gone before.

**Collaborate** | We are wise with more minds, through experience, sharing of resources, and funding. We value partnerships with government, businesses, community and researchers to collaboratively solve problems and identify opportunities.

# Smart Principles

**Inclusive** | We seek to bridge the digital divide in our community, to provide options and support for interacting with us as an organisation.

**Meaningful** | With the growing availability of data and information, we will ensure we use this important asset in a meaningful way to improve services and inform decision making.

**Privacy, Security and Integrity** | Technology offers exciting opportunities to enhance transparency and accountability. Working with experts we will maintain the security and integrity of the information and privacy of our community.

# Smart Principles + Goals

**People | Problems | Fast followers**  
**Collaborate | Inclusive**  
**Meaningful | Privacy, Security and Integrity**

These principles provide the foundation to achieve the following goals:



# Smart Community

Our Smart Community is informed and engaged. To ensure our community are at the centre of using technology, digital skills and tools must be accessible to all to progress our six themes of being liveable, connected, engaged, prosperous, innovative and valuing nature.





# Smart Places



Smart Places are the neighbourhoods we live, work and learn in, parks and facilities we gather in and places we recreate in. They harness information, technology and infrastructure to support our community to flourish.

# Smart Organisation

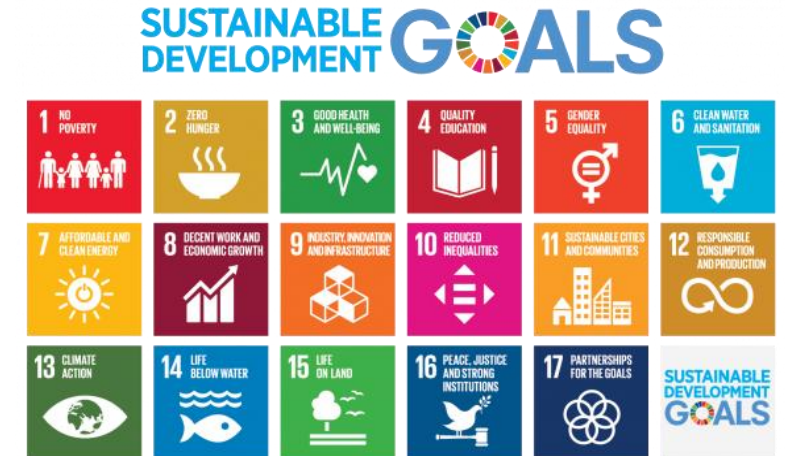
Being a Smart Organisation ensures we put our customers first. We use technology to create inclusive ways for people to interact with us and continuously look for innovative ways to provide services to our community.



# Measuring Success

The UN Sustainable Development Goals provide a global framework to measure our success for our Smart CoM Strategic Plan.

Mature Smart Cities are seeing examples of triple bottom line returns contributing to the social economic and environmental wellbeing of communities.



Aligning measuring our success to the UN Sustainable Development Goals and a triple bottom line approach ensures we remain outcomes focused, and data driven.

A suite of success measures will be progressively introduced and monitored to assess performance and outcomes focused on the smart goals and actions within this Plan.

# Triple Bottom Line

\*definitions from the Smart Cities Council  
'Smart Infrastructure Unlocks Equity and Prosperity  
for Our Cities and Towns Report'

## **Social**

Improving the quality of life; lowering the cost of living; conquering the digital divide enabling upward mobility for disadvantaged populations; ensuring safer streets and neighbourhoods; providing greater access to healthcare and education; creating better paying jobs in growth industries; reducing food and water insecurity.

## **Economic**

Operational efficiencies lower costs for cities, businesses and citizens; cities with a reliable electric grid and state of the art telecommunications and mobility attract business and industry, lower crime rates lower the cost of doing business in a city; cities that promote smart mobility, smart payments, Wi-Fi, etc. appeal to tourists.

## **Environmental**

Ability to monitor and control energy and water use to encourage conservation; smart devices help ensure cleaner water and air; smart mobility and energy efficient buildings reduce carbon emissions, recycling and upcycling lessen need for landfills; integration of more renewal energy into the energy mix.

# Smart Community Priority Areas

## Digital Inclusion

- A city that promotes and supports business growth and offers increased local employment and skills development opportunities
- A city that supports equitable access to diverse information sources and reliable digital technologies

Affordability, Digital Accessibility, Digital Ability

## Channel of choice

- A city that supports equitable access to diverse information sources and reliable digital technologies

Develop an online one-stop-shop for customers to enable easy access to information and transactions for council services, rates, registrations and events

## Providing Open data

- A city that supports equitable access to diverse information sources and reliable digital technologies

Empowered to inform businesses, researchers and innovators.

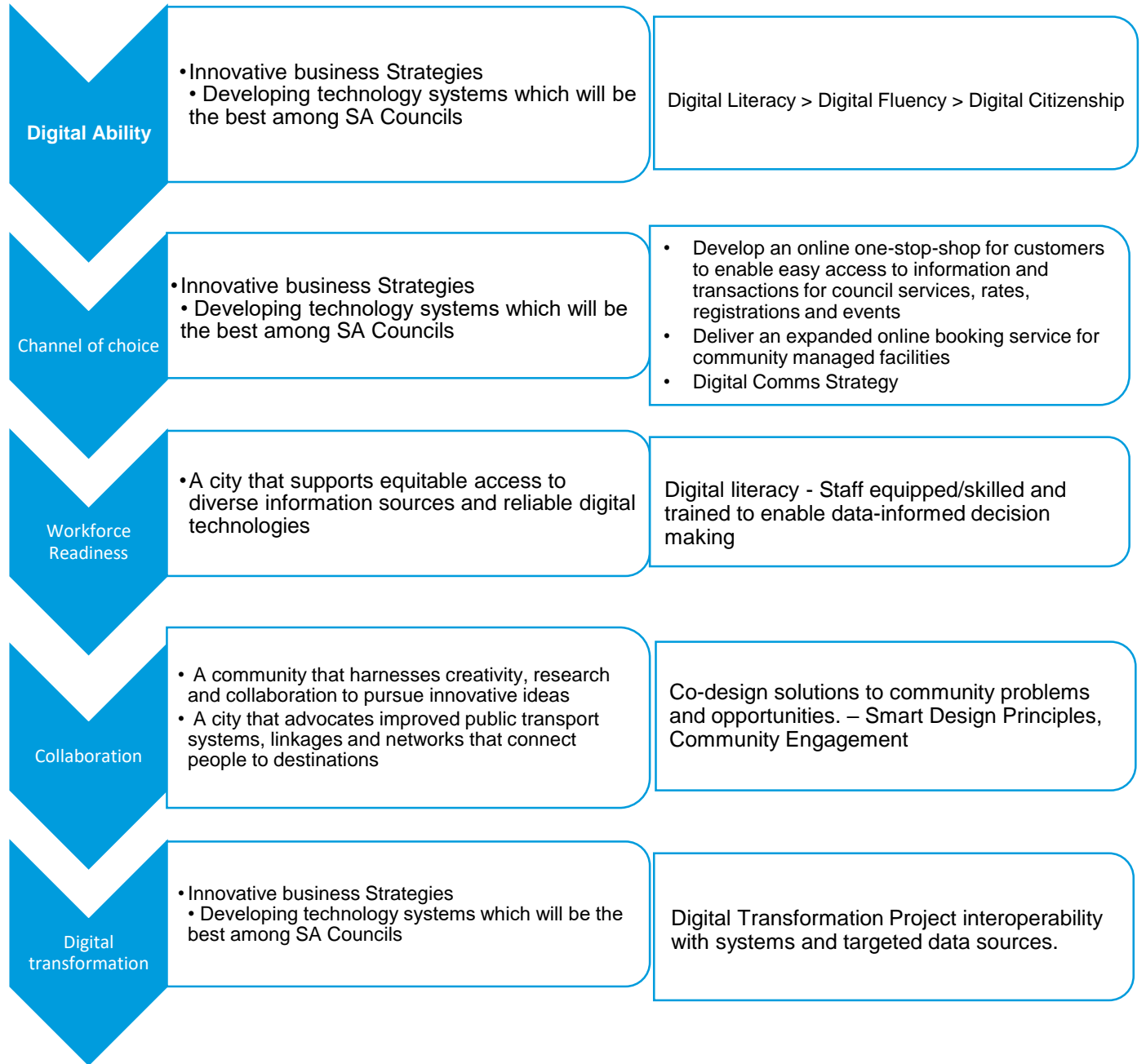
## Collaboration

- A community that harnesses creativity, research and collaboration to pursue innovative ideas
- A city that advocates improved public transport systems, linkages and networks that connect people to destinations

Co-design solutions to community problems and opportunities.



# Smart Organisation Priority Areas



# Smart Places Priority Areas



# Priority Scoring System

## Smart Cities Priority Scoring System










NB: All projects should deliver good value by achieving the maximum amount of increased amenity for residents through improved service delivery opportunities.

Priority Scoring System Criteria		Scoring / Weighting		Comments
1.	<b>Benefit to customer experience or business performance</b>		Score	
	Consider: <ul style="list-style-type: none"> <li>How many people are likely to experience an increased level of mobility, health &amp; wellbeing as a result of the project occurring?</li> <li>Will the project greatly improve neighbourhood accessibility and amenity?</li> <li>What level of potential economic benefit does the project have?</li> <li>Is there connection to Infrastructure Investment in surrounding area?</li> <li>Will the project lead to greater patronage of the targeted precinct?</li> <li>Does the project promote regulatory reform?</li> </ul>	0	7	A higher score is given to projects able to demonstrate <ul style="list-style-type: none"> <li>Direct community benefits</li> <li>Defined Economic Benefit</li> <li>Improved patronage within the City</li> </ul>
2.	<b>Strategic Alignment</b>			
	Connection to: <ul style="list-style-type: none"> <li>City of Marion Community Vision, Towards 2040</li> <li>City of Marion Strategic Plan 2017-2027</li> <li>City of Marion Business Plan 2016-2019</li> <li>South Australia's Strategic Plan</li> <li>The 30-Year Plan for Greater Adelaide</li> <li>Southern Adelaide Economic Development Board Strategic Plan</li> </ul>	0	7	A higher score is given to projects that can demonstrate external strategic alignment. i.e.: with priorities of SRWRA, Resilient South, etc.
3.	<b>Value</b>			
	Consider: <ul style="list-style-type: none"> <li>Is there an opportunity for the proposed project to be carried out in conjunction with necessary, or otherwise budgeted, works?</li> <li>Will service delivery improvements be possible as a direct benefit creating opportunities for savings in the medium to longer term?</li> <li>Will the project be eligible for external funding including grant opportunities?</li> <li>Will this project lead to increased cost efficiencies or commerciality for council/partners</li> <li>Number of other regional initiatives the project aligns with?</li> <li>Are there opportunities to develop external partnerships?</li> <li>Are the resources available within existing capacity?</li> <li>Is there an opportunity to leverage capacity through partnerships?</li> </ul>	0	7	A higher score is given to projects that can demonstrate <ul style="list-style-type: none"> <li>grant funding opportunities</li> <li>Collaborative Partnerships including linkages to other funded projects</li> <li>Connection to Federal and State Government Infrastructure Investment</li> <li>cost efficiencies, savings and service delivery improvements</li> </ul>
4.	<b>Environmental Benefits</b>			
	Consider: <ul style="list-style-type: none"> <li>What level of opportunity exists for the project to contribute to minimising waste and pollution by avoiding, reducing, reusing and recycling?</li> <li>Does the project present opportunities to actively monitor the benefits of climate change mitigation &amp; adaptation initiatives, for example: reduced urban heat, increased urban greening and tree canopy cover, or reduced energy/water consumption?</li> <li>To what extent can the project assist in climate change mitigation &amp; adaptation?</li> </ul>	0	4	A higher score is allocated to projects than demonstrate a quantitative environmental outcomes, e.g. <ul style="list-style-type: none"> <li>Reduce tonnes of waste</li> <li>Reduce greenhouse gas emissions</li> <li>Reduce litres of mains water</li> <li>Increase % canopy cover</li> </ul>
<b>TOTAL</b>				<b>/ 25</b>

# Identified Technology Solutions Approach

The following technology solutions have been chosen to trial within the precinct, which may be scaled and replicated across the City.

Solution	Problem/Opportunity	Benefits
 <p><b>Smart Lighting</b></p>	<p>Lack of ability to reduce energy consumption through the dimming of lighting and proactively attend to maintenance issues before they impact or are reported by the community.</p>	<p>Through the installation of a central management system and NEMA PE Cells along the shared use path the following benefits will be achieved:</p> <ul style="list-style-type: none"> <li>• reduction of energy and maintenance cost</li> <li>• increased public safety from improved lighting</li> <li>• proactive maintenance/hazards</li> <li>• measurable environmental impact due to reduced energy consumption</li> </ul>
 <p><b>Smart Parking</b></p>	<p>A long standing problem in the area for our community is parking.</p> <p>Being able to communicate availability of commuter parking through wayfinding to reduce impact on residential streets and gather data on utilisation within the on-street parks surrounding the reserve will enable the data-driven decisions around service delivery.</p>	<p>Through the installation of technology including a parking management system commuters will be aware of best location to park and reduce congestions in surrounding streets.</p> <p>Utilisation data provides information around the visitors to the precinct and identify potential commercial opportunities into future eg coffee van or events.</p>
 <p><b>Traffic Sensors</b></p>	<p>Through the Smart South Consortium grant funding the data collected around parking flows will inform future planning around traffic in the precinct.</p>	<p>The consortium model enables a key object of the Precinct objectives to "develop a collaborative approach between Council, businesses and educational/research institutions to share expertise and anonymous datasets and information to make informed decisions on community services and outcomes."</p>
 <p><b>Sensor Play Equipment</b></p>	<p>Sensor based play equipment is an extension of sensory play that has many benefits for children, through including sensor play equipment we believe we will be enhancing the children's experience in the reserve.</p>	<p>Reasons sensory play is beneficial for children include:</p> <ul style="list-style-type: none"> <li>• It helps to build nerve connections in the brain</li> <li>• It encourages the development of motor skills</li> <li>• It encourages 'scientific thinking' and problem solving</li> </ul>
 <p><b>Digital Interactive Kiosk</b></p>	<p>The ability in a new innovative way to communicate to the community and the inclusion of a digital interactive kiosk that will provide wayfinding and relevant information will increase the awareness of local amenity within the area.</p>	<p>The Digital Interactive Kiosk will enable the ability to communicate local information on programs, shops and events.</p>
 <p><b>LoRAWAN network and sensors</b></p>	<p>Low Range Radio Frequency transmission of data without the need for 4G connections are a cost effective way to collect data to improve service delivery.</p> <p>Sensors being included:</p> <ul style="list-style-type: none"> <li>• Smart BBQ</li> <li>• Soil moisture probes</li> <li>• Smart water valve</li> <li>• Weather station</li> <li>• People movement sensors</li> <li>• Solar shelters with device charging ability</li> </ul>	<p>Low cost sensors enabling the trial of improving service delivery in new and innovative ways.</p> <p>By including sensors on these assets such as soil moisture probes, it will help with maintenance scheduling for the water truck.</p> <p>Smart BBQ enables data of use, faults and can schedule cleaning.</p> <p>People movement data helps to understand asset utilisation and peak times in the precinct which in the future could inform business hour trading, event planning and café popups.</p> <p>We will be trialing environmental and efficiency based solar products, such as picnic furniture &amp; shelters. These products have the potential to power reserve services through solar such as BBQ use, provide device charging and reduce the need to trench power supply in the public realm into the future.</p>
 <p><b>Data Analytics</b></p>	<p>Leveraging on the existing data analytics project being run by Performance and Innovation team, the grant has enabled the extension of data models and a Proof of concept for Internet of things (IoT) data integration.</p>	<p>Data analysis from technology will enable improvements to the community experience continuously, smartly and efficiently.</p>