



Smart City Plan



City of
Norwood
Payneham
& St Peters

Contents

- 4 Welcome to the Smart City Plan
- 6 Introduction
- 8 Smart City Context
- 10 Snapshot of Our City
- 12 Current Smart City Initiatives
- 14 Engagement Insights
- 17 Overview of Plan
- 18 Vision & Principles
- 21 Strategic Themes & Objectives
- 28 Delivering the Plan

Kaurna Acknowledgement

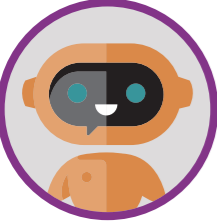
The City of Norwood Payneham & St Peters acknowledges that this land is the traditional land of the Kaurna people and that we respect their spiritual connection with their country. We also acknowledge the Kaurna people as the custodians of the greater Adelaide region and that their cultural and heritage beliefs are still important to the living Kaurna people today.

This Plan was endorsed by the City of Norwood Payneham & St Peters on 7 December 2020

Welcome to the Smart City Plan



There are so many! Here's a few common examples. Free public Wi-Fi. Digital services provided by Council. Smart parking systems giving real-time info about parking availability, and irrigation systems using moisture sensors to optimise watering.



Welcome to the City of Norwood Payneham & St Peters' Smart City Plan!

Hi! ... What exactly is a 'smart city'



Great question! For the City of Norwood Payneham & St Peters, being a 'smart city' means making the most of technology, data and innovation to make our city even better, improving the wellbeing and quality of life for our community!

Great! What do you mean by 'better'?



Better right across the quadruple-bottom-line – social, cultural, environmental and economic! A city that is more liveable. More sustainable. More creative. And a city that has more economic opportunities.

Got it! But what are some specific examples of a 'smart city' in action?



Ok! Where does this 'smart city' concept come from?



Cities have always used technology to improve – sanitation, electricity and mass transit are obvious examples. In the digital age, cities right around the world are now leveraging digital tech, data and innovation to create 'smart cities'.

This all sounds positive. Are there any challenges we'll need to manage?



Excellent question! All technology comes with benefits and challenges. To be a 'smart city' we'll need to ensure digital inclusion, cyber-security, citizen privacy, tech trust, and excellent user-experience. We'll use best practice standards and keep talking to our community to make technology work for us.

How do I stay up to date with smart city progress for Norwood Payneham & St Peters?



Easy! Just google the Council's smart city webpage, www.npsp.sa.gov.au/smartcity. If you'd like to get involved or submit an enquiry, email the Council's smart city team at smartcityplan@npsp.sa.gov.au.

Introduction

The City of Norwood Payneham & St Peters is one of Adelaide’s most desirable places to live, do business and visit.

Our City is well regarded as a progressive, sustainable, socially cohesive community that harbours a strong community spirit.

With distinct tree-lined streets, contemporary community facilities, the River Torrens Linear Park and vibrant ‘The Parade’ retail and commercial precinct, our City embraces its natural beauty and environment. Our ever-changing community and cultural influences make the City of Norwood Payneham & St Peters an exciting hub for innovation, business and growth.

This Smart City Plan is one of the key mechanisms for unlocking greater organisational and community growth in a sustainable, connected and progressive manner. Supported by an engaged and active community, our City is in a strong position to make the most of current and future smart city opportunities.

What is a Smart City?

The unique nature of people means a ‘smart city’ is something different to everyone. Around the world, the term ‘smart city’ typically describes a place where technology is utilised to meet the needs of society.

A smart city leverages new technology, data and innovation to improve liveability, productivity and sustainability outcomes. This includes embedding technology within the city in the form of sensors, Internet of things (IoT)¹ connectivity and other information gathering infrastructure. However, a smart city goes further than just the software, platforms and devices. A smart city is one that is citizen-centric and adjusts to best serve its people.

Citizens of a smart city are both co-designers and users. Online engagement, cooperative data management and collaborative innovation are the foundations of policy reform, and strategy design in a smart city. A smart city does not apply technology aimlessly, it is only ever deployed with direct aims and objectives.

1. A network of interconnected smart devices that are integrated into public infrastructure to collect valuable data and information.

‘Smart city’ describes a place where technology is utilised to meet the needs of society.



Smart City Context

This *Smart City Plan* sits in a broad strategic context.

This context ranges from international best practice such as the ISO Smart City Standards, down to local planning policies such as the Council's Strategic Management Plan *City Plan 2030: Shaping our City*. The Council has designed this Plan to leverage smart city insights and lessons, based on the following policies and initiatives.

Policies & Initiatives



Other Key Council Strategies, Plans and Policies

- » Development Plan and Planning & Design Code
- » City wide Cycling Plan
- » *Connecting People to Places – An Age Friendly Wayfinding Strategy*
- » Recreation & Open Space Infrastructure & Asset Management Plan
- » Youth Development Strategy
- » *Better Living Better Health: Regional Public Health & Wellbeing Plan*
- » Ageing Strategy
- » Economic Development Strategy 2021–2026
- » Kent Town Economic Growth Strategy 2020-2025

Snapshot of Our City

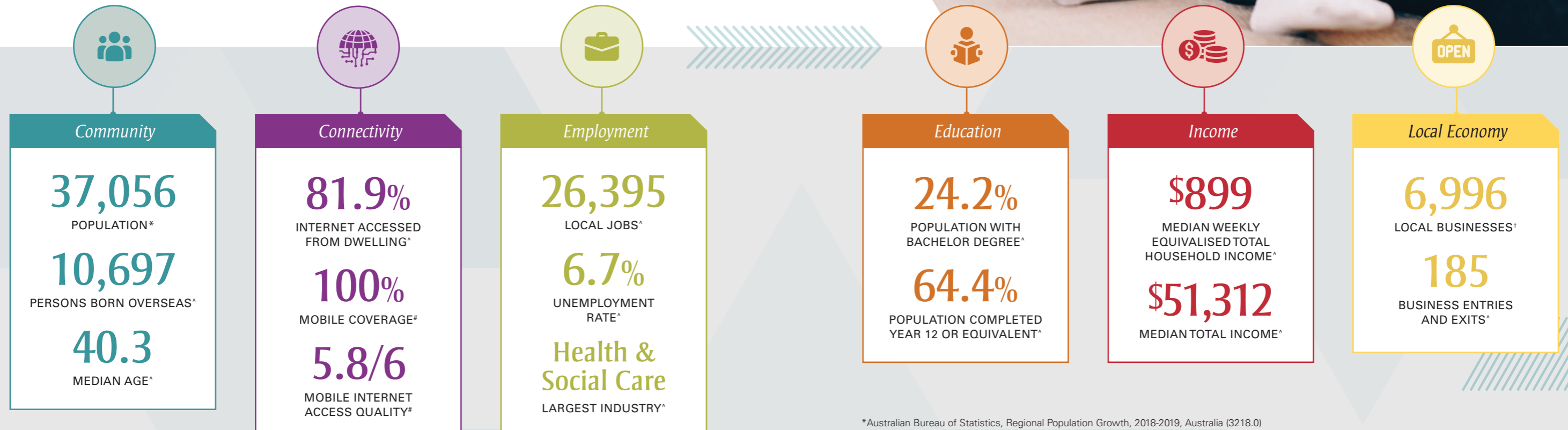
This Smart City Snapshot outlines various strengths, challenges and opportunities for the City of Norwood Payneham & St Peters.

One of the unique aspects of the City of Norwood Payneham & St Peters is our strong focus on the 'fourth pillar' of Community Well-being – Cultural Vitality. You only have to visit our City a few times to understand that our City is a place of immense cultural diversity and embracement of international culture.

The City of Norwood Payneham & St Peters has an ageing community, but that does not inhibit our ability to become a smart city. Senior citizens are often wrongly assumed to have low technical skills and abilities when it comes to using technology and the internet. It is often this demographic that can benefit the most from digital technology, for example, connecting with family through video-chat and smart devices.

Our citizens are part of a community that thrives on inter-personal connection and interaction. Using smart technology to enhance, and not replace, this face-to-face interaction, will be the true measure of a smart City of Norwood Payneham & St Peters.

While not presenting an exhaustive list of smart city indicators and measures, the following snapshot outlines some of the key statistics that make our City unique.



*Australian Bureau of Statistics, Regional Population Growth, 2018-2019, Australia (3218.0)

^Australian Bureau of Statistics, Norwood Payneham St Peters (C) (LGA) (45290)

#Regional Australia Institute, InSight, Norwood Payneham St Peters SA (LGA)

†REMPLAN, March 2020

Current Smart City Initiatives

The City of Norwood Payneham & St Peters has already started its smart city journey. There are a number of smart projects, programs and initiatives already in action across the Council. These initiatives represent the strong smart city foundation that this Smart City Plan will build-upon.

Smart Project Showcase

Low Emission Fleet Transition Plan

In response to a number of emerging trends, most notably climate change, the Council is investigating a more fuel efficient and cost-effective vehicle fleet. The Council will investigate the transition of its entire fleet of passenger and operational vehicles to low or zero emission vehicles as those vehicles come to the end of their lease terms or operational life cycle.

The investigations will also examine the procurement of electric vehicle charging facilities. Smart charging stations have the ability to not only monitor charging but demonstrate the volume and



Spectrum Spatial Analyst (SSA)

Layers of information about the Council's projects and operations are shown spatially on one map, providing at-call information to customer service staff to assist customers and utility providers with enquiries. SSA aerial images, in combination with google street view, are also used by council staff to verify the location of

Energy Reduction

The Council has made a strong commitment to reduce the energy consumption of its buildings/infrastructure. This commitment is translating into a number of tangible actions:

- » Installation of solar photovoltaic panels on buildings
- » Use of thermal blankets at both council owned and operated swimming pools
- » Use of sensor-activated lighting
- » Air-conditioning and refrigeration upgrades
- » Transition to LED street lighting from mercury vapour lights
- » Installation of energy-efficiency appliances



My Local Services App

An application for smart phones, developed by the Local Government Association of South Australia that delivers information on recycling and waste collection, parks, points of interest and more. It also allows you to report local maintenance issues and receive news from participating authorities.



Online Council Services & Information

Dogs and Cats Online

A database of dogs and cats that reside in South Australia. The system allows easy registration renewal and information for pet owners.



E-Planning Portal

An online development application (DA) register to be launched across South Australia in 2021. The Portal will enable the real-time tracking of progress and status for DA's and will be used as an online assessment platform for the Council's DA Assessment team.

Heat Mapping using Aerial Thermal Sensing

Heat mapping identifies the hottest areas across the Council and is used to inform planning, tree planting and greening programs to create cooler more liveable places in our community. For more information, please visit www.resilienteast.com.



Smart Library Services

The Council has a number of smart/innovative library services that allow ease-of-use and increased access to information in libraries across South Australia. These include:

- » SA Libraries One Card Network
- » Libraries SA App
- » Radio Frequency Identification Systems for Libraries

Smart Tablets

Council staff use smartphones/tablets to conduct inspections, investigations and complete audit compliance checklists. This has enabled the up-loading of real-time, accessible data from the field to the Council's record management system, which has unlocked significant coordination and efficiency benefits.

Electric Waste Collection Truck

The Council's waste provider, East Waste, has purchased South Australia's first electric waste vehicle and is installing a 30kw solar system at its depot to provide renewable energy to power the truck. For more information, visit www.eastwaste.com.au/first-electric-powered-collection-truck-for-sa

Connected Cities

A network of gateways and sensors that enables devices to communicate with each other and real time information sharing – a crucial foundational element of a smart city. This low powered network spans metropolitan Adelaide and is being rolled out by a

Engagement Insights

To assist with the development of this Smart City Plan, key stakeholders from the Council and community were engaged through dedicated consultation sessions and online surveys.

Stakeholder groups included the Council's Elected Members, Council staff and members of the community. Results of stakeholder engagement have been distilled into eight key insights that are presented below. These ideas and insights have helped to shape the priorities and themes in this *Smart City Plan*.

Environment & Sustainability

Smart resource management, environmentally sustainable development and effective management of parks and green space are priorities for our City. Outcomes such as enhanced water and electricity monitoring, and smart waste management, can be achieved through the application of smart technologies in our City.

Digital Education & Training

Stakeholder engagement revealed a lack of clarity surrounding the overall smart city message – and concern about the perceived lack of digital literacy in the community. Awareness and buy-in for smart city initiatives can be enhanced through ongoing communication, smart city education programs and digital literacy training.

Smart Mobility

Mobility outcomes such as parking, wayfinding and journey-planning were identified as areas of our City that can be enhanced through smart technology. The availability of real-time data, collected from smart sensors and devices, can be used to enhance a range of smart mobility outcomes in our City.

Smart Infrastructure

Engagement revealed that both the Council and community are excited by smart infrastructure that integrates innovative technologies into physical assets. Applications such as free high-speed public Wi-Fi, electric vehicle (EV) charging stations and smart lighting systems, can actively enhance the amenity of our City.

Smart Policy and Reform

Targeted reform, and dedication to innovative and agile policy, are priorities for our City. To enable change in our City, and implement 'smart cities' into business as usual (BAU), the Council will work to modernise its policies, practices and operational frameworks.

Business Support & Partnerships

Support for local businesses is a priority for our City. To support the local economy, and provide agile smart city outcomes for the community, the Council can establish dedicated smart city partnerships. These partnerships can be with local businesses and key industry such as Telcos, technology vendors, and more.

Innovation Leadership

Strong frameworks for empowering leadership within the Council, and innovation in the community, are priorities for the Council. Strong internal leadership and smart city governance frameworks within the Council, and the empowerment of local champions in the community, will support the long-term success of our smart city.

Data Usage and Sharing

Clarity and visibility of data collection and management is a priority for our City. Well-defined policies for smart city data management, combined with key data management skills and capabilities, will enable our City to enhance decision making and create strong business cases for future smart city investment.

Community Strategic Objectives

- 1 Smart technology for sustainability
- 2 Enhanced community engagement and participation
- 3 Supporting local innovation
- 4 Better usage of public space
- 5 Making the economy more diverse and resilient

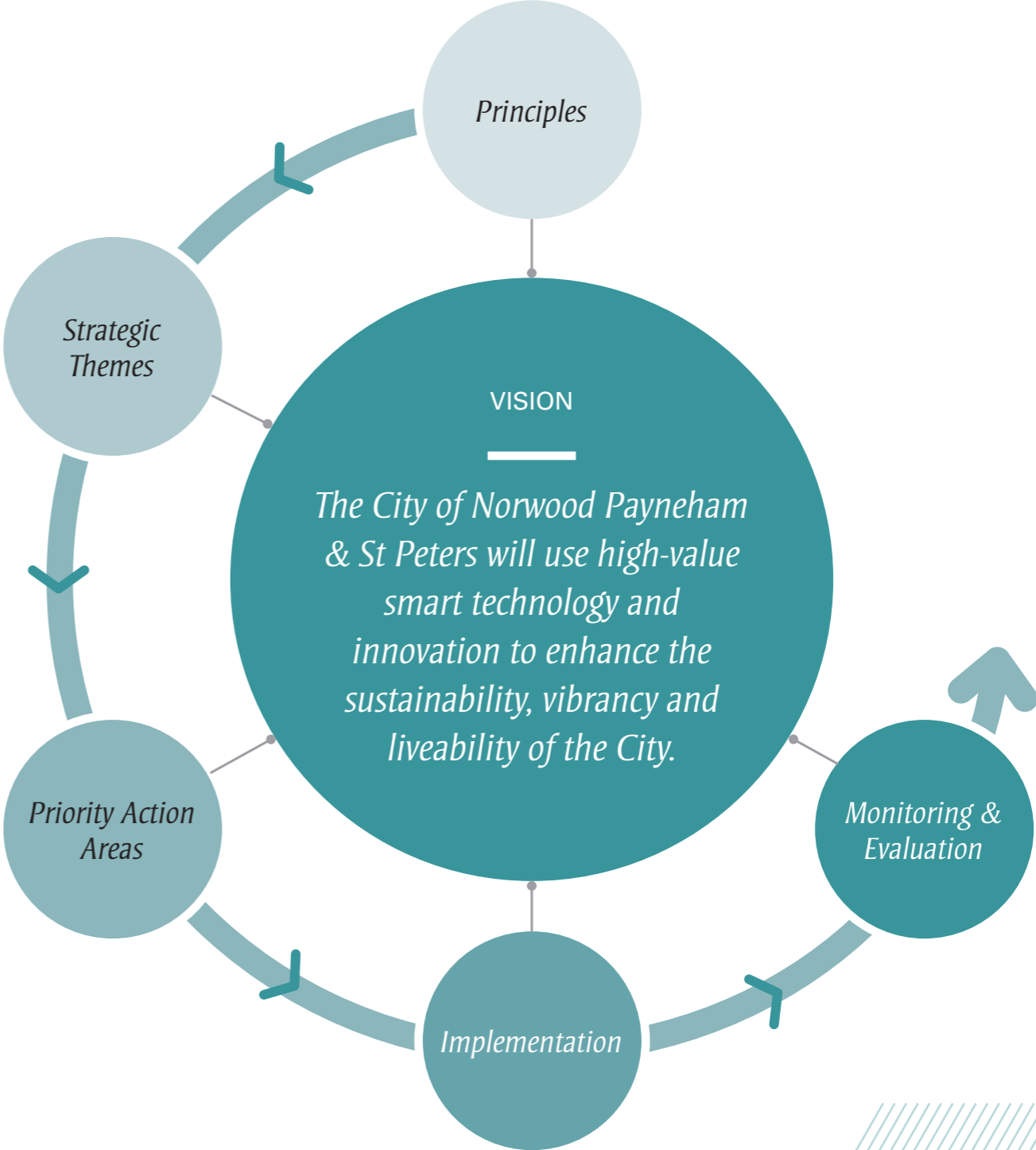
Community Concerns about

- 1 Cyber hacking
 - 2 Costs
 - 3 Loss of Privacy
 - 4 Impact on human interaction
 - 5 Digital literacy
-
- 1 Focussing on better outcomes for the community
 - 2 Communications and promotion
 - 3 Continuous improvement
 - 4 Openness to discussion and new ideas
 - 5 Training and development



Overview of Plan

The *Smart City Plan* sets the long term vision, direction and objectives for our future as a smart city. Key elements of the Plan are summarised in the diagram below.



Vision & Principles

Smart City Vision

The City of Norwood Payneham & St Peters will use high-value smart technology and innovation to enhance the sustainability, vibrancy and liveability of the City.



Innovation

The Council welcomes innovation. We will encourage new ideas and ways of doing things in our City. We will experiment, test and trial new technologies and services. We will build innovation capacity and confidence. Innovation will ensure our City makes the most of new technologies, creating jobs and opportunities into the future.



Sustainability

The Council is committed to sustainability. We will mitigate and adapt to climate change. We will conserve and protect our environment. We will improve the management of our natural resources. We will empower our community to advance sustainability. New technology, data and innovation will be deployed to create a more sustainable and resilient city.



Education & Training

The City will focus on smart city education and training. We will increase the smart city capability and capacity of our citizens. We will empower our community to take part in smart initiatives. We will unlock community potential through co-design of services. Education and training will enable our citizens to play a key role in the development of our smart city.



Collaboration

The Council embraces collaboration. We will place our citizens at the centre of smart planning and development. We will foster a culture of inclusivity and participation. We will encourage all local stakeholders to participate in our smart city journey. Collaboration, inclusivity and participation will ensure our smart city development remains aligned with local priorities in our City.



Security & Transparency

The Council is committed to privacy and security. We will use best practice to manage the risks inherent with smart technology and data collection. We will use robust frameworks to ensure that only high-value data is collected by smart technology. We will foster open and transparent conversation with our community. Security and transparency will help our City to remain a safe and welcoming place.

Guiding Principles

To help realise our smart city vision this Plan will be guided by five core principles. These principles will shape smart city thinking and action, ensure community focus, and allow us to adapt to new opportunities and risks.



Strategic Themes & Objectives

This *Smart City Plan* is built upon five strategic themes, and accompanying objectives and priority action areas.

These themes will ensure that technology and data have a positive impact right across the entire City, and address key local opportunities and challenges.



1. Building a Smart Community

Leveraging technology to assist people and communities is the essence of a smart city; a principle this Plan is founded upon. This Plan commits to digital skills, digital inclusion, digital safety, and digital connectivity for our community. Our intent is to empower people and community, providing more opportunities to participate, collaborate, and connect.

Priority Action Areas will include...	
OBJECTIVES	1.1 Improve digital skills and literacy of the community <ul style="list-style-type: none"> » Promote local options for digital skills training » Investigate opportunities to deliver targeted digital skills training through local libraries
	1.2 Increase community awareness and engagement with smart city projects <ul style="list-style-type: none"> » Develop a smart city communication and engagement plan » Embed points of community problem solving, co-design, and feedback in smart city projects » Investigate opportunities to support open data sharing that makes information more accessible to the community
	1.3 Strengthen democratic processes and participation <ul style="list-style-type: none"> » Investigate international best practice in 'digital democracy' and identify high value options for our City » Develop a roadmap for leveraging digital tech and data to enhance community engagement and participation
	1.4 Advance digital inclusion <ul style="list-style-type: none"> » Investigate and identify key areas of digital exclusion » Develop a digital inclusion framework to promote technology access, equity, and benefit
	1.5 Improve digital safety and security <ul style="list-style-type: none"> » Regularly update the Council's security, privacy and data management policies to reflect international best practice » Work with relevant authorities to enhance community knowledge and practices relating to digital safety/security



2. Strengthening the Digital Economy

Digital and economy are increasingly synonymous. As digital technology, data and innovation create new industries and jobs, every sector of the economy will require digital skills and technology. This Plan commits to building our digital economy, supporting local innovation, and increasing economic diversity and resilience.

Priority Action Areas will include...

OBJECTIVES	Priority Action Areas will include...
2.1 Increase the digital capacity and profile of local businesses	<ul style="list-style-type: none"> » Promote high-value digital skills programs and events for local businesses » Develop a digital transformation 'cheat-sheet' for business
2.2 Enhance local digital networks and infrastructure	<ul style="list-style-type: none"> » Investigate options to increase the coverage and use of local Internet of Things (IoT) and free public Wi-Fi networks in high-value areas such as parks and libraries » Work with the private sector and other governments to ensure high-quality internet and mobile connectivity across the City » Examine options to improve the integration of smart tech into new developments, buildings and precincts
2.3 Accelerate local innovation activity and outcomes	<ul style="list-style-type: none"> » Investigate options to consolidate and advance the local innovation eco-system (e.g. via a dedicated innovation network) » Develop an innovation framework to support local innovation activity (e.g. via innovative procurement, 'living lab'² provisions, etc.)
2.4 Promote City visitation and tourism outcomes	<ul style="list-style-type: none"> » Improve visitation/tourism data collection and analysis to inform planning, investment and promotion » Leverage digital tech to promote and enhance the experience of local events, art installations, nature trails and businesses

2. A people-focused innovation ecosystem aimed at trialling and testing new ideas in the real world.



3. Developing a Smart Council

A smart Council is one that has the internal capacity and skills to design and deliver smart/digital services and infrastructure that are more efficient and effective. To advance this Smart City Plan, the Council is committed to leading by example. We will leverage data to improve city planning and decision-making, and work with the community to promote transparency, engagement, communication and participation.

	Priority Action Areas will include...
3.1 Make it easier to do business and engage with Council	<ul style="list-style-type: none"> » Prepare a roadmap for expanding and enhancing digital services » Develop innovative/digital procurement policies and processes » Investigate digital/smart options for improving community engagement and participation
3.2 Increase data management capabilities of Council	<ul style="list-style-type: none"> » Develop a data management framework for the Council » Explore options to create holistic Council data platform (e.g. https://data.sa.gov.au/) » Design an organisational program of data training and development
3.3 Promote smart city coordination and delivery	<ul style="list-style-type: none"> » Establish the Council's internal smart city leadership, governance, structures and resourcing » Develop a smart city performance and accountability framework
3.4 Position Council for smart city success	<ul style="list-style-type: none"> » Design a program of smart city training and development » Prepare and enact a smart city communications strategy » Develop a Council innovation framework » Explore options for enhancing Council operations to increase fleet management efficiency



4. Securing our Smart & Sustainable Future

A smart city is a sustainable city. A smart city optimises use of precious natural resources. A smart city mitigates and adapts to climate change. A smart city values and protects the natural environment. The City of Norwood Payneham & St Peters is committed to a sustainable future. Smart technology, data and innovative solutions will be integral to realising this vision.

	Priority Action Areas will include...
4.1 Improve resource management	<ul style="list-style-type: none"> » Collaborate with East Waste to investigate options for integrating smart technology/systems into existing waste management services » Explore options for smart lighting systems/infrastructure in our City » Advocate for and promote the use of smart meters (e.g. for energy and water) » Identify opportunities to expand intelligent irrigation
4.2 Enhance smart environmental and sustainability monitoring/management	<ul style="list-style-type: none"> » Assess existing environmental and sustainability data collection and monitoring » Develop a roadmap for smart environmental/sustainability monitoring and management » Identify ways to use smart city data to enable evidence-based decision-making that supports sustainability
4.3 Improve the usage and amenity of public and green spaces	<ul style="list-style-type: none"> » Integrate digital technology into parks and green spaces to improve amenity, sustainability and safety » Leverage smart data collection to improve planning and management of parks and public space » Investigate the usage of smart sensors to enhance the collection and activation of data to improve public asset management
4.4 Promote smart sustainability (policies, practices and partnerships)	<ul style="list-style-type: none"> » Integrate smart city principles/actions into the Council's existing sustainability strategies » Promote Council's involvement in the LGA Circular Procurement Pilot Project » Explore opportunities for smart/sustainable innovations and partnerships



5. Facilitating Accessibility & Mobility

A smart city is founded on connection – the ability of people to move efficiently around the city (and beyond), accessing services and participating in social and economic activity. Smart technology, big data and innovative transport options are transforming movement and mobility for cities around the world. The City of Norwood Payneham & St Peters is committed to making the most of these opportunities, delivering better transport and accessibility outcomes for our community.

Priority Action Areas will include...

OBJECTIVES	
5.1 Improve smart mobility options/outcomes	<ul style="list-style-type: none"> » Explore opportunities to improve city parking with smart technology » Promote local trials of innovative mobility solutions (e.g. autonomous vehicles) » Facilitate smart mobility options (e.g. micro-mobility, active travel, green transport)
5.2 Make streets more pedestrian friendly	<ul style="list-style-type: none"> » Use data, digital signage, real-time information (etc.) to improve pedestrian outcomes » Leverage digital tech and smart design to improve accessibility for pedestrians with a disability » Collaborate with citizens to co-design smarter streets
5.3 Reduce congestion and negative traffic impacts	<ul style="list-style-type: none"> » Improve real-time monitoring and management of local traffic » Facilitate uptake of electric vehicles (EV) and roll-out of EV charging infrastructure
5.4 Enhance public transport options/outcomes	<ul style="list-style-type: none"> » Advocate for smarter public transport policies and services » Work with the LGASA to explore options for integrated smart transport in metropolitan Adelaide

Delivering the Plan

Implementation Strategy

To deliver this Smart City Plan, the Council will also develop a supporting implementation strategy addressing:

- » Leadership
- » Governance
- » Policy and process
- » Budget and resourcing
- » Partnerships
- » Community participation
- » Safety, privacy and security
- » Monitoring and evaluation
- » Communication and promotion
- » Advocacy
- » Ongoing risk management

Critical to this implementation strategy will be a dedicated Smart City Action Plan, identifying priority actions, milestones and accountability. This Action Plan will be reviewed and updated annually, with progress reported online.

Our smart city implementation strategy will take a holistic approach, balancing:

- » Design and delivery of high-priority smart city projects and investments
- » Ongoing community and stakeholder engagement
- » Development of smart city policies, guidelines and standards

As outlined below, securing funding, leveraging partnerships and leading change will be critical drivers of smart city progress.

Smart City Funding

The digital revolution is changing traditional business models, with advertising, big data, and cyber-physical assets offering new modes of funding and financing. Moreover, there will be ongoing opportunities to secure funding from the South Australian and the Australian Governments. The Council is committed to investigating and leveraging a range of funding models to advance our smart city agenda.

Collaboration & Partnerships

To build a smarter city requires the coordinated effort of many people, businesses, governments and organisations. Council is committed to fostering productive smart city partnerships that accelerate investment and deliver better digital projects. We are also committed to ongoing collaboration with our community to identify emerging opportunities and risks, and solve local challenges.

Change Management

Smart technology must work effectively alongside legislation, institutions, processes, culture, human behaviour and social interaction. To harmonise these elements requires a holistic approach, encompassing leadership, reform, policy, dialogue, and communication. The Council will address these interdependencies by integrating a change management framework into the broader smart city implementation strategy.

Future Directions

This Smart City Plan establishes a long-term roadmap for the City of Norwood Payneham & St Peters to make the most of technology, data and innovation. Priority actions within this Plan are the starting point. New priorities and projects will emerge as technology changes, and as we build our smart city. We're committed to the journey – to this first step, and to the many steps ahead.

Future directions may include:

- » Expanding the use of machine learning, automation and artificial intelligence
- » Exploring new modes of 'digital democracy'
- » Enhancing digital security with 'blockchain' and other technologies
- » Increasing the application of drones and robotics



Council Facilities

The Council's Principal Office is located at:

Norwood Town Hall
175 The Parade, Norwood

Additional sites of operation include:

Council Works Depot
Davis Street, Glynde

Norwood Library
110 The Parade, Norwood

St Peters Library
101 Payneham Road, St Peters

Payneham Library & Community Facilities Complex (Tirkandi)
2 Turner Street, Felixstow

Payneham Community Centre
374 Payneham Road, Payneham

Cultural Heritage Centre
101 Payneham Road, St Peters

Norwood Swimming Centre
Phillips Street, Kensington



Payneham Memorial Swimming Centre
OG Road, Felixstow

The Council also operates two unique entities:

St Peters Child Care Centre and Preschool
42-44 Henry Street, Stepney

Norwood Concert Hall
175 The Parade, Norwood

City of Norwood Payneham & St Peters
175 The Parade, Norwood SA 5067

Telephone 8366 4555
Email townhall@npsp.sa.gov.au
Website www.npsp.sa.gov.au
Socials  /cityofnpsp  @cityofnpsp



**City of
Norwood
Payneham
& St Peters**