SMART CITY STRATEGY

2019-2024

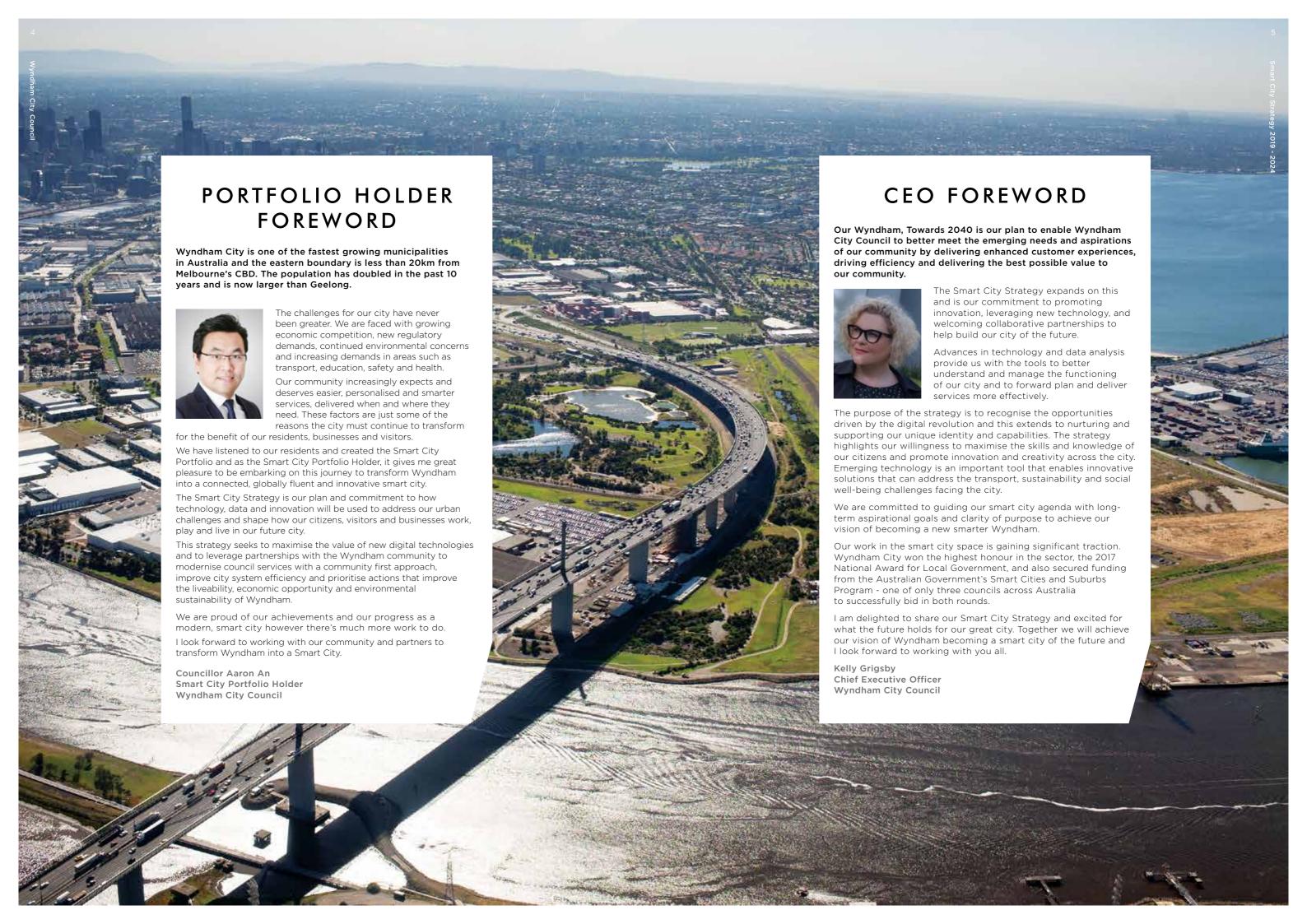




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INTRODUCTION

Wyndham City is an industrious community that brings together the best of city, coast and country.

Located in the outer western suburbs of metropolitan Melbourne, Wyndham has huge potential to maximise the benefits associated with using technology, data and driving innovation.

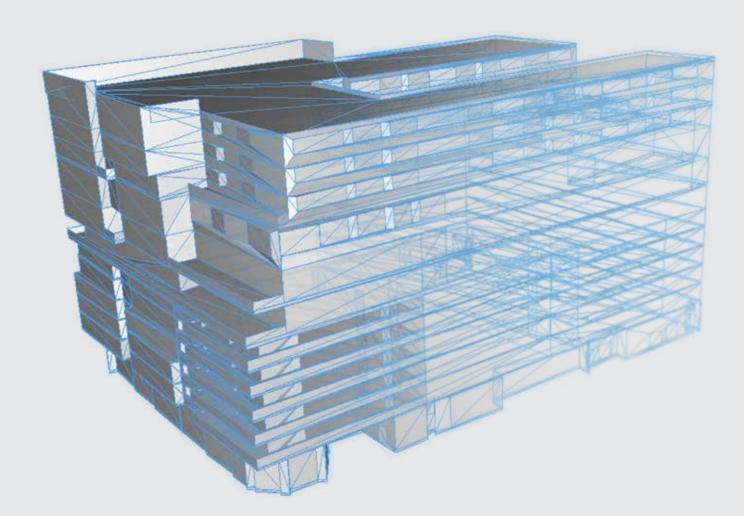
Our population is increasing steadily, and the community has strongly indicated that they are engaged with technology and ready to undertake a targeted and planned transformation to a smart city. The growing needs and issues our community face make it imperative that Wyndham becomes a solutions-oriented city that leverages technology and data to increase liveability, make the city safer, more sustainable, operationally efficient and able to prosper through future years.

Wyndham City has already shown commitment to its smart city vision, through our various strategic documents, embodied by the Wyndham 2040 Community Plan. This Smart City Strategy builds on the foundations and vision set by Wyndham 2040, expanding to more closely show how smart technology, data and innovation will be planned and deployed and how our city will respond to market and consumer led change.

The Smart City Strategy will outline approaches and prioritisations to city-based problems and local challenges, including issues surrounding transport and congestion, the environment and more broadly, how the city functions and operates.

The city will be renowned for its bold and courageous leadership to transform urban transport, data-driven decision making and transparency, co-design with the community, leadership in sustainability and management of the environment and its inclusiveness, participation and community spirit.





VISION

Wyndham will set a new standard for cities. Our future will be marked by innovation, opportunity, inclusion, creativity and sustainability. We will harness technology, data and innovation, aiming for new frontiers of liveability and prosperity. Wyndham will create new possibilities and take its place amongst the leading global smart cities.

- Our City feels a sense of opportunity and optimism over our future and approaches it with boldness;
- Our City will make data-driven decisions with confidence and transparency;
- Our City will be digitally inclusive to support all citizens;
- Our City will take a multi-disciplinary approach to implementing change, thinking outside the box and collaborating with a wide range of stakeholders and partners;
- Our City supports local living and the creation of 20-minute neighbourhoods, engages in active and smart travel, and seeks innovative solutions to transport challenges;
- Our City will bring a sense of pride to our residents and delight to our visitors.

ENGAGEMENT & CONSULTATION SUMMARY

To tap into the knowledge, expertise and experience of the broad Wyndham community, a multifaceted engagement approach throughout October and November 2018 was designed and delivered.

THE PROCESS

- Community (504 responses) and staff (153 responses) surveys;
- Two public consultation sessions;
- Councillor and Smart City Portfolio Committee briefing/workshops;
- A Future City Summit with participants from across multiple key sectors;
- Executive Leadership Team briefing;
- 14 staff sessions (general staff and managers from key functional areas).

This engagement process demonstrated widespread support for the smart city agenda and the outcomes of this engagement process have informed the creation of this strategy.

LEVERAGE POINTS

- Harnessing our strategic location including city, coast, and country;
- Drawing upon diverse, young and skilled population;
- Activating local spaces through events, technology integration and improved safety for residents and visitors:
- Strong motivation for action and appetite for testing and trials;
- Fostering smart partnerships with universities, businesses and other governments;
- Leveraging the skills and creativity to co-design with our diverse and multicultural community.

FOCUS AREAS

- An enhanced reputation as an innovative, modern city;
- The importance of innovation for smart waste and environmental solutions;
- Engaging local sectors in Wyndham to collaborate, codesign and innovate;
- Making our assets, built environment, natural environment and spaces smarter, then using intelligence for better outcomes;
- Building our smart technology capability through education and training;
- Working to strengthen our innovation eco-system;
- Promoting smart/remote/coworking options;
- Including smart technology in new buildings, precincts and suburbs;
- Using data to inform decision making and catalyse innovation.

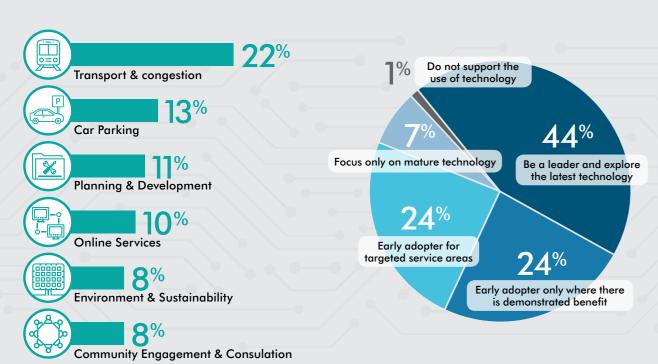


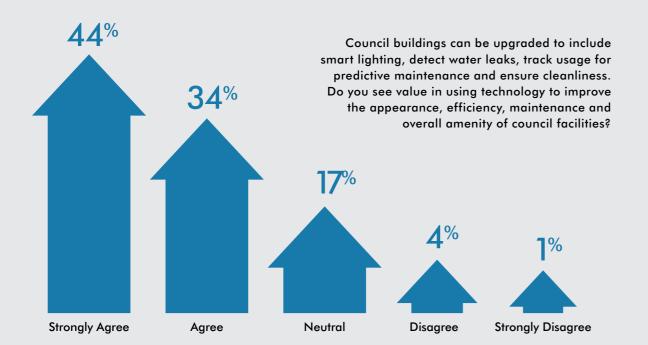
OUR COMMUNITY SAYS

We thank all those involved in the engagement and consultation for their thought leadership, ideas and expertise. The engagement and consultation reached more than 800 city stakeholders and demonstrated a balanced, informing process. Here is a selection of what we heard from our community survey results.

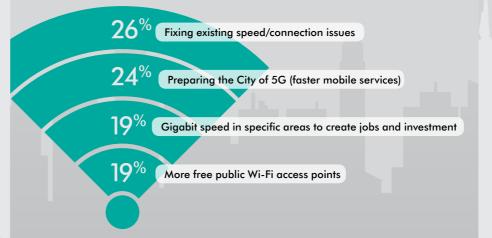
What aspect of Wyndham can be most improved by technology?

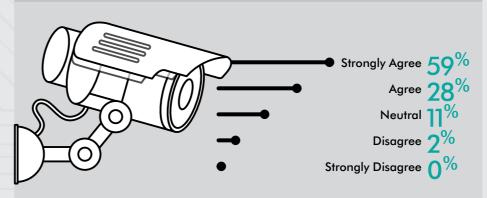
Should Council be an early adopter of new technology or wait until it has matured?





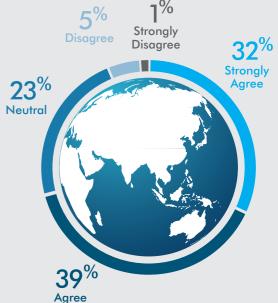
Internet connectivity plays an important role in enabling smart cities. We know that different internet users have different access and speed requirements. Which of the following do you rank as most important?



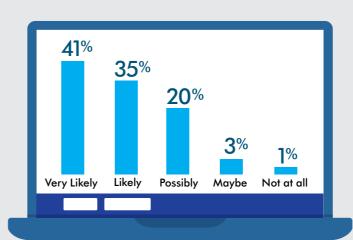


Camera technology is rapidly improving with new systems capable of monitoring and alerting unruly behaviour. Do you support the use of CCTV cameras across key public spaces?

Citizens across the world are taking a more active role in the amenity of their local area. For example, volunteers are alerted when a nearby tree needs watering or a drain cleared. With the assistance of technology would you be interested in this approach?



New technologies can enable citizens to vote on which council projects are being funded. If available, how likely are you to use digital technology to participate in community budgeting for public services?



The skills required by the future workforce are continually evolving. Which of the following statements best reflect how you feel about the future workforce in Wyndham?



STRATEGY SCHEMATIC

GUIDED BY

- Partnerships, collaboration & empowerment
- Building our Smart City
 profile
- Lead change & innovation
- Liveability & bring delight
- Safety and integrity

OUR VISION

Wyndham will set a new standard for cities. Our future will be marked by innovation, opportunity, inclusion, creativity and sustainability.

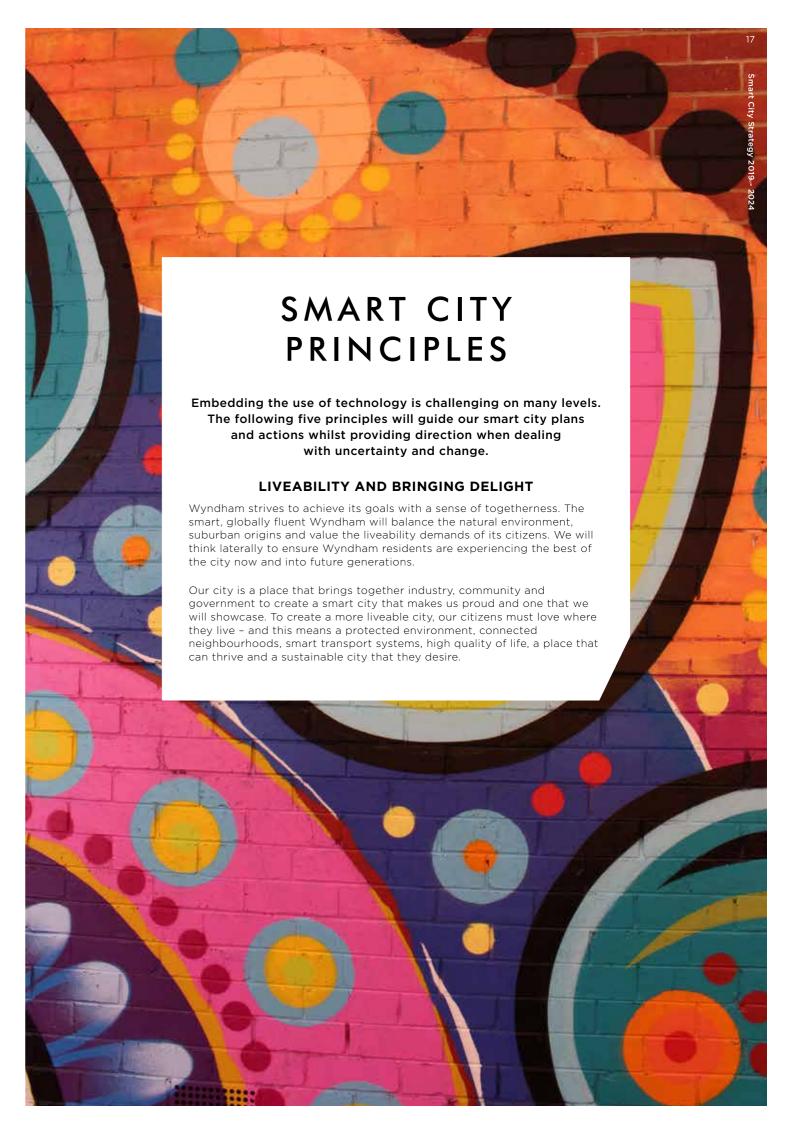
We will harness technology, data and innovation aiming for new frontiers of liveability and prosperity. Wyndham will create new possibilities and take its place amongst global smart cities.

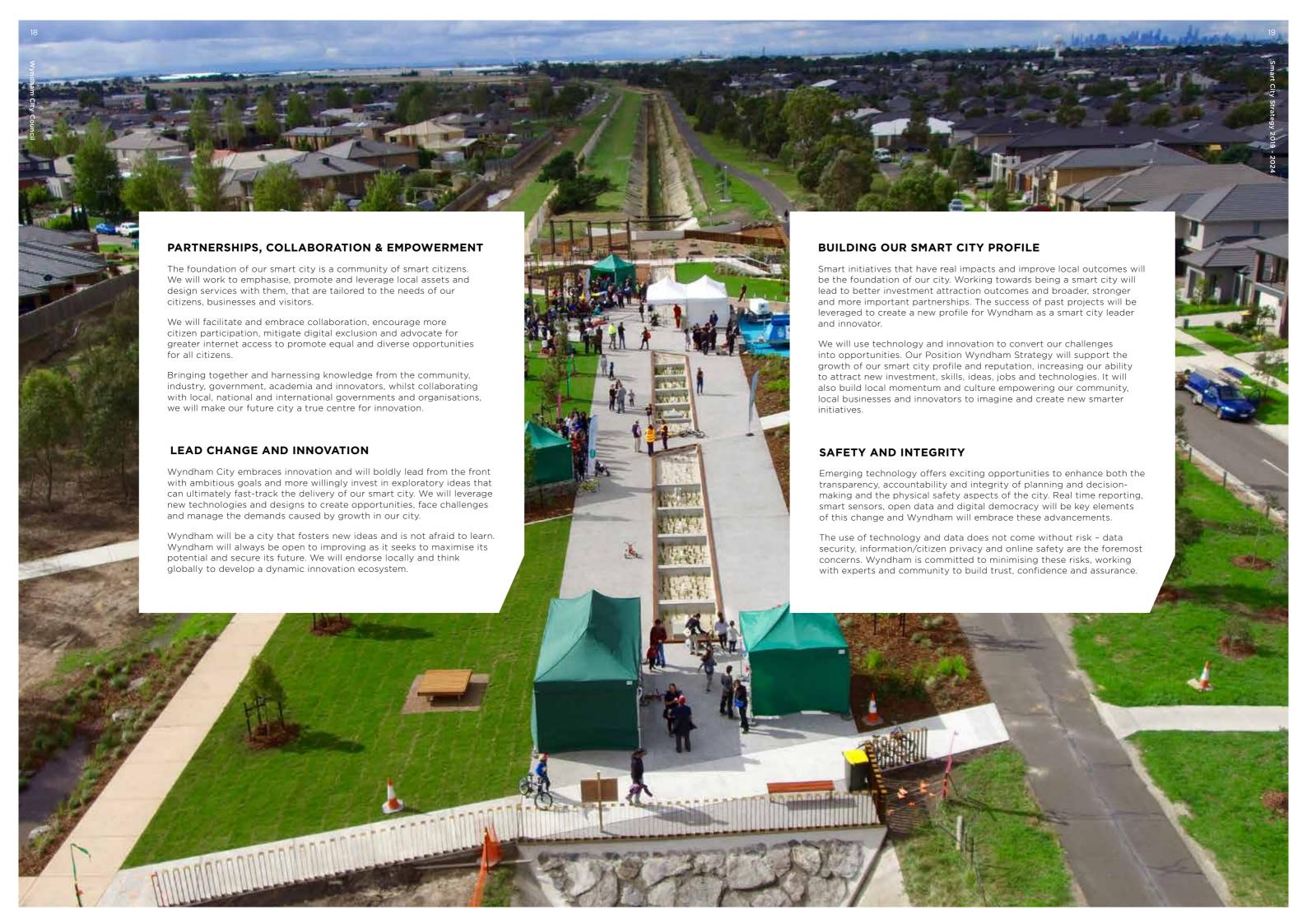
OUR FOCUS

- Transport For Citizens & Visitors
- Environment and Sustainability
 Securing our Smart City
- Data Driven Information for Innovation
- Partnership and Collaboration
 Unlocking Potential
- Innovation Driving our Smart City
- Citizen-centric Maintaining Local Focus

DELIVERED BY

- Community
- Businesses
- Researchers & educators
- Council
- Innovators & investors
- Solution vendors





STRATEGIC THEMES

In consultation with the community, key stakeholders, elected officials and staff, six strategic themes, supported by priority actions, have been identified to guide our commitment to driving smart city needs.



TRANSPORT - FOR CITIZENS AND VISITORS

Transport and mobility are key elements impacting our residents' experience. Wyndham will utilise smart technology and data to improve transport outcomes and innovatively support convenient, affordable and sustainable transport options for our citizens.

Our priorities include:

- Leveraging existing transport infrastructure to facilitate the integration of new smart systems;
- Working with industry to progress transport innovation including access to public transport;
- · Tackling road congestion through utilisation of new technology, data analytics and traffic management systems;
- Continuing to make improvements to parking infrastructure through utilisation of smart technology;
- Encouraging residents employed at large CBD-based organisations to work from home or through innovative co-working
- Building connected neighbourhoods which provide easy access to local services using active travel, intelligent public transport and innovative mobility solutions.



ENVIRONMENT AND SUSTAINABILITY -SECURING OUR SMART CITY

Bringing together the city, coast and country, our natural environment is a unique asset that can be enhanced through smarter environmental management. Collaborating with industry and government, we will make much needed sustainability commitments, with focus on better use of resources and enhanced environmental and sustainability outcomes.

Our priorities include:

- · Promoting, developing and implementing innovative initiatives and outcomes that increase recycling and reuse of waste;
- · Leveraging smart technology to enhance the monitoring, promotion and evaluation of natural assets as well as managing them more efficiently and affordably;
- Embedding innovation and smart city principles into long term tenders and contracts (e.g. waste collection services, asset maintenance, tree watering, etc);
- · Building and leveraging on the sustainability capability of the Wyndham

- Refuse Disposal Facility (RDF) and the Western Treatment Plant (WTP) to encourage continued innovation towards a circular economy;
- Seeking to implement international best practice in smart waste management systems and technology;
- Using technology in new and upgraded buildings to target environmentally friendly outcomes;
- Encouraging and supporting the community to use smart technology by embedding sustainable practices at the micro level.

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DATA DRIVEN - INFORMATION FOR INNOVATION

Leveraging data and sharing knowledge will enable Wyndham to become smart city leaders. City leadership will continue to prepare for and be empowered by harnessing data collected using emerging technology and utilising data analysis to improve services and liveability for citizens.

Our priorities include:

- Seeking, leading and implementing realtime data and information sharing networks with commercial and government partners;
- Embedding data-centric tools such as operational dashboards, digital twins and geospatial models to drive data leadership within the organisation and across the sector;
- Pursuing new technology with respect to data analytics, machine learning and artificial intelligence to interrogate, model and predict outcomes and issues before they happen;
- Ensuring our infrastructure delivery, maintenance and management processes enable, enhance and use data;
- Using data and smart technology to inform advocacy, citizen engagement and policy making;
- Using data sourced from and about public places and spaces to positively influence and bring delight to the existing and future citizen experience;
- Facilitating community dialogue about both data and digital security and privacy.



PARTNERSHIP AND COLLABORATION - UNLOCKING POTENTIAL

Wyndham City will be a hub for innovation, collaboration and co-creation. New jobs, economic prosperity and opportunity will arise from facilitated partnerships between council and the community, industry, investors, governments, academia and innovators.

Our priorities include:

- Creating a partnership network that facilitates co-creation and collaboration by pursuing new approaches to tackling wicked problems, and investigating nontraditional arrangements and new forms of win-win opportunities;
- Working with partners to provide highspeed, high-capacity communications networks to further enhance internet access;
- Fostering strong research and innovation partnerships with local and international universities and research institutes to identify and bring to fruition untapped collaboration opportunities;
- Promoting regulatory reform, for example regarding the sharing of data, green technologies and greater transparency,

- to remove red tape and help support the sharing of knowledge;
- Establishing contract mechanisms that future-proof innovation efforts and support the growth of Wyndham as a smart city;
- Coordinating shared infrastructure development and works planning and actively promoting the use of appropriate innovation with partners;
- Modernising and embedding engagement technologies to better facilitate citizen engagement, co-creation and participation;
- Leveraging key city assets and events to support innovation and drive the city profile through socio-technological systems that support bottom-up initiatives and empower citizens.



INNOVATION - DRIVING OUR SMART CITY

Establishing a stable, collaborative and ongoing yet dynamic and flexible innovation ecosystem in Wyndham will create new opportunities that will evolve from vertical models to one that drives new business cases and services. Utilisation of emerging technology and ideas will help transform Wyndham into a smart city with an innovative landscape.

Our priorities include:

- Increasing the quality of council innovation frameworks to strengthen the foundation for smart initiatives;
- Developing smart policies (e.g. spaces, networks, challenges, training) that implement international best practice in standards, frameworks, resource management and service delivery and supports an open ecosystem to foster and enable innovation;
- Supporting the creation of smarter neighbourhoods by promoting the use of technology and innovation across new development sites with forward-looking developers and investors;
- Enabling beyond-the-curve initiatives by establishing Wyndham as a testbed for emerging innovation;

- Endorsing the use of smart technology to promote experiences across city shaping projects, such as the Western Melbourne A-League soccer expansion and the East Werribee precinct;
- Promoting digital literacy programs and key innovation skills to increase opportunities for staff, local businesses and residents;
- Attracting, nurturing and leveraging local talent to drive growth in the knowledge economy by encouraging entrepreneurship and improving employability, with an emphasis on bottom-up innovation;
- Promoting the innovative credentials of Wyndham that anticipate the economic opportunities of changing industries.



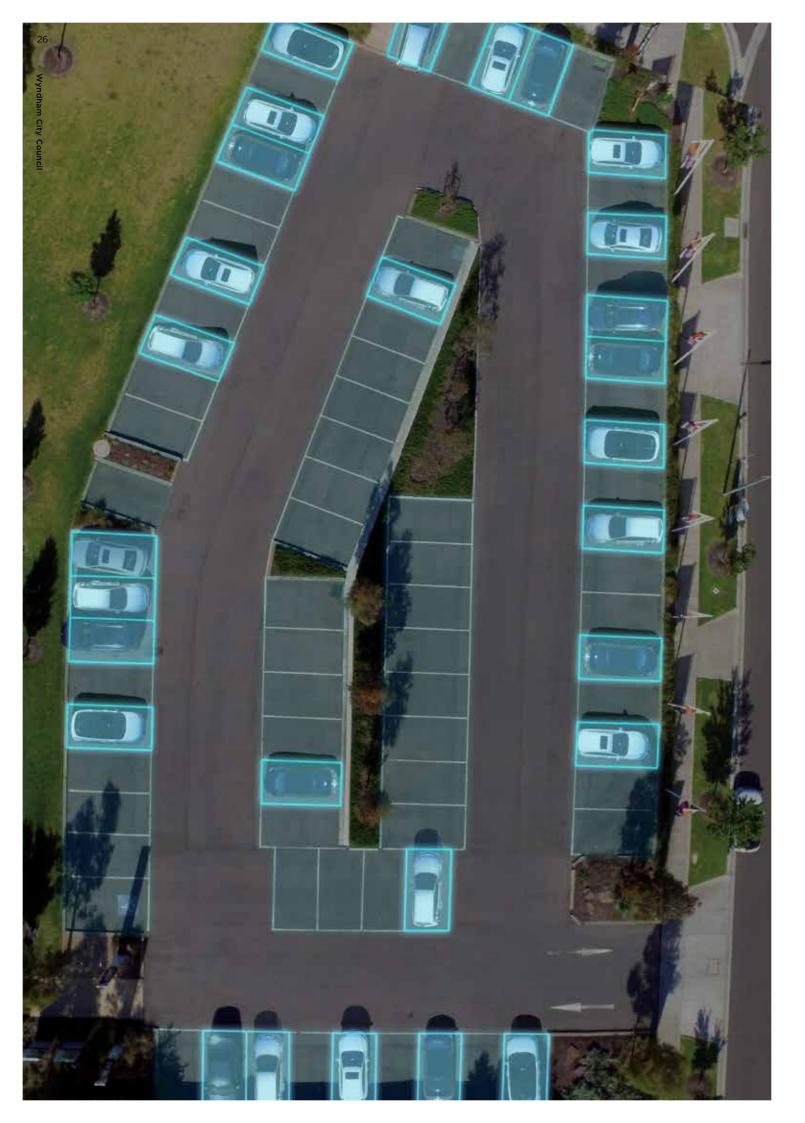
CITIZEN-CENTRIC - MAINTAINING LOCAL FOCUS

Wyndham City is committed to ensuring an ongoing citizen focus. We know our citizens are incredibly open to the utilisation of smart technology. This receptiveness to innovative change can be leveraged to facilitate the delivery of targeted initiatives that give the most value to the community. Council will work to modernise our organisation and services and make the most of technology to deliver better community outcomes.

Our priorities include:

- Increasing the quality of online services provided by council;
- Utilising new and innovative smart technology to modernize local services (e.g. parking, public safety, libraries, public lighting etc.);
- Adapting to our multilingual and cultural diversity by using technology to better enable digital inclusion and improve social well-being and cross-community participation;
- Empowering and educating the community to build digital capacity and drive their own innovation;

- Promoting community dialogue about digital, economic and smart city innovations, to proactively address emerging risks and opportunities;
- Encouraging participation and creativity within the community through events, media and art;
- Developing skills and harnessing the data flowing from social media to understand connectedness, the city voice, community wellbeing and better understanding citizen concerns to identify opportunities and urgent social issues;
- Using ongoing and targeted evaluation frameworks to ensure the focus remains on community needs.



SMART CITY CASE STUDIES

Wyndham has already taken key steps on its smart city journey. Embracing technology and innovation, many exciting and innovative projects have been implemented and a strong international reputation developed.

Below are some of the many smart city case studies, previously completed, currently being undertaken or important to the future of Wyndham:

- Smart Parking Information about parking bay availability makes it easier for citizens to find parking when and where they need it, assists with infrastructure planning and can also reduce air pollution by minimising time spent looking for free spaces.
- Smart Sensors The use of sensors and data analytics are being deployed for a broad range of purposes, such as optimising service delivery in waste collection, predicting drain maintenance requirements and optimising watering schedules for tree management.
- Smart Co-working Hubs Technology is making our world smaller and cities are increasingly required to be globally fluent to attract capital, people and trade. Dedicated shared spaces for remote working and innovation can help to retain and increase employment options.
- Open Data Smart cities are fuelled by access to government data, which encourages the creation of new and innovative services for the community. Opening up data supports innovation, participation, research and transparency.
- Digital Literacy and Inclusion Digital literacy and inclusion is critical to maximising and sharing the benefits of the digital revolution and to support economic and social inclusion. Free public Wi-Fi, digital training sessions and courses in online safety help educate the community and build the digital skills and capacities necessary to stimulate further innovation.
- Virtual Assistants Multilingual virtual assistants have the potential to bridge the language gaps in council offered services. This technology can understand and speak different languages making the city much less monolingual.

Given the speed at which technology and innovation is moving, there is much scope for Wyndham to continue to do more. Wyndham is looking to the future and preparing to harness innovation to cement its transformation into a smart city. The horizon may include:

- Urban ('Living') Labs Promote testing of innovative technology and services on the streets of the city itself. Local innovators, technologists, researchers, developers and entrepreneurs can trial and evaluate new solutions and ideas to help understand the impacts, test policies, drive economic growth and achieve better city outcomes.
- Smart Traffic Lights Reduce congestion by regulating traffic flow in response to real-time demand and intelligence. The data collected through smart traffic technology provides new knowledge about traffic and journeys and can be used to improve response to traffic incidents.
- Social Media Analytics Most of our citizens use social media it's our city's voice. Data and analytics can increase understanding and improve communication channels. Council can use social media much more effectively to listen better, gain citizen insights, improve two-way dialogue, understand citizen opinions and to respond to issues raised.
- Geospatial Artificial Intelligence –
 The field of geospatial and sound artificial intelligence is evolving rapidly to address many time and space problems. Feature recognition, data analysis and understanding temporal change are being revolutionised and are helping cities measure policy impacts (e.g. urban tree canopy coverage) and improve city management (e.g. extracting swimming pool data).

BE PART OF THE JOURNEY

A city government cannot build a modern, smart city by going it alone - all stakeholders need to work together. Our community is engaged, vibrant and excited to experience the benefits innovation and digital technology can bring. All members of our community have the ability to see the success of this strategy in their homes, schools and businesses but, most importantly, all can lead and assist in the creation of a smarter Wyndham.

Want to be involved? Here's how.

COMMUNITY

- Explore how technology can make your home more efficient and more liveable, then share your learnings;
- Challenge and improve inefficient systems and processes, whilst being open to more efficient use of resources;
- Participate in co-creation opportunities and/or provide user feedback on smart services and technology;
- Help promote new technological innovation to grow our profile as a modern smart city;
- Support life-long learning by participating in digital training to assist in closing the digital exclusion gap.

BUSINESSES

- Seek new business models and synergies using circular economy initiatives, accessing government data and keeping abreast of upcoming tenders that can drive urban innovation;
- Provide thought leadership at councilled summits and forums in your specific knowledge areas;
- Continue digitisation reforms within your organisation to not just fight obsolescence but to assist in the sustainable improvement of our city's liveability;
- Build digital literacy across your teams and networks by sharing a compelling vision of the future, then act as catalysers and drive change;
- Encourage and support innovative ideas and processes, work with other innovators to bring ideas to reality, then promote and share your learnings.

RESEARCHERS AND EDUCATORS

- Leverage the full potential of city data to improve social, environment, economic and liveability outcomes;
- Promote Wyndham as a learning and research destination and seek valuecreating partnerships;
- Integrate smart technology, governance, policy, creativity and innovation training into education and learning programs;
- Promote an innovative culture that seeks to tackle societal and environmental challenges;
- Encourage organisations, students and researchers to participate and collaborate in the development and transformation of the city.

COUNCIL

- Lead and champion the promotion of our smart city journey;
- Work continuously to involve and co-design with residents and local stakeholders:
- Improve use, access and understanding of real-time information about the city and its functions;
- Encourage and support innovation internally, with partners and by the community;
- Promote Wyndham to attract investment, innovation, employment and skills both locally and globally;
- Enhance availability of open data sets to community, innovators and vendors to unleash new opportunities and enable entrepreneurial activity.



IMPLEMENTATION

Our smart city vision is ambitious and demanding and will require commitment and collaboration. This strategy is not a list of potential projects and actions, but the first step towards building a collective mindset that will allow the boundaries of what our future looks like to expand in parallel with technology.

COUNCIL LEADERSHIP

Council will be the steward of Wyndham as a smart city and will seek to be a leader in urban innovation. Leading by example, council will situate itself at the forefront of digital transformation and organisational innovation. Internally, we will commit to removing information silos, supporting a healthy appetite for risk and increasing internal digitisation. To drive outcomes, council will embrace innovative partnerships and foster collaboration across the broader city.

SMART POLICY & MODERN REGULATION

Wyndham City Council will take a holistic approach to smart city development, driving forward with key projects, while also creating a smarter eco-system which facilitates a pipeline of innovation, technology deployment and service transformation.

Smart policy and regulatory modernisation will be foundations of this eco-system, expanding possibilities for all participants. Red tape reduction, new smart city guidelines and frameworks and organisational/governance reform have and will all play a part in encouraging smart city investment and action.

STANDARDS OF EXCELLENCE

Council will apply best practice standards in all its smart city projects and deployments by ensuring interoperability, extensibility, privacy and security. Wyndham will also consider and apply relevant ISO standards for its smart city plans. It will engage with and work closely with industry associations such as Australian Smart Communities Association (ASCA), Smart Cities Council Australia New Zealand (SSCANZ) and the IoT Alliance Australia (IoTAA) to share knowledge with other cities, promote cooperation and enhance global fluency.

IMPLEMENTATION PLAN & ACCOUNTABILITY

Council will put in place a three-year dedicated and precise implementation plan to provide functional direction for staff and partners that will be subject to the biennial review cycle and annual progress reports. Full details are available in the Smart City Implementation plan. The implementation plan draws directly upon the strategy to prioritise projects, funding opportunities, data needs and partnerships. Formal reporting of the progress of the Smart City Strategy will be published on the council website and shared through multiple channels including social media platforms. The Smart City Office website will also contain more information regarding the priority action items.

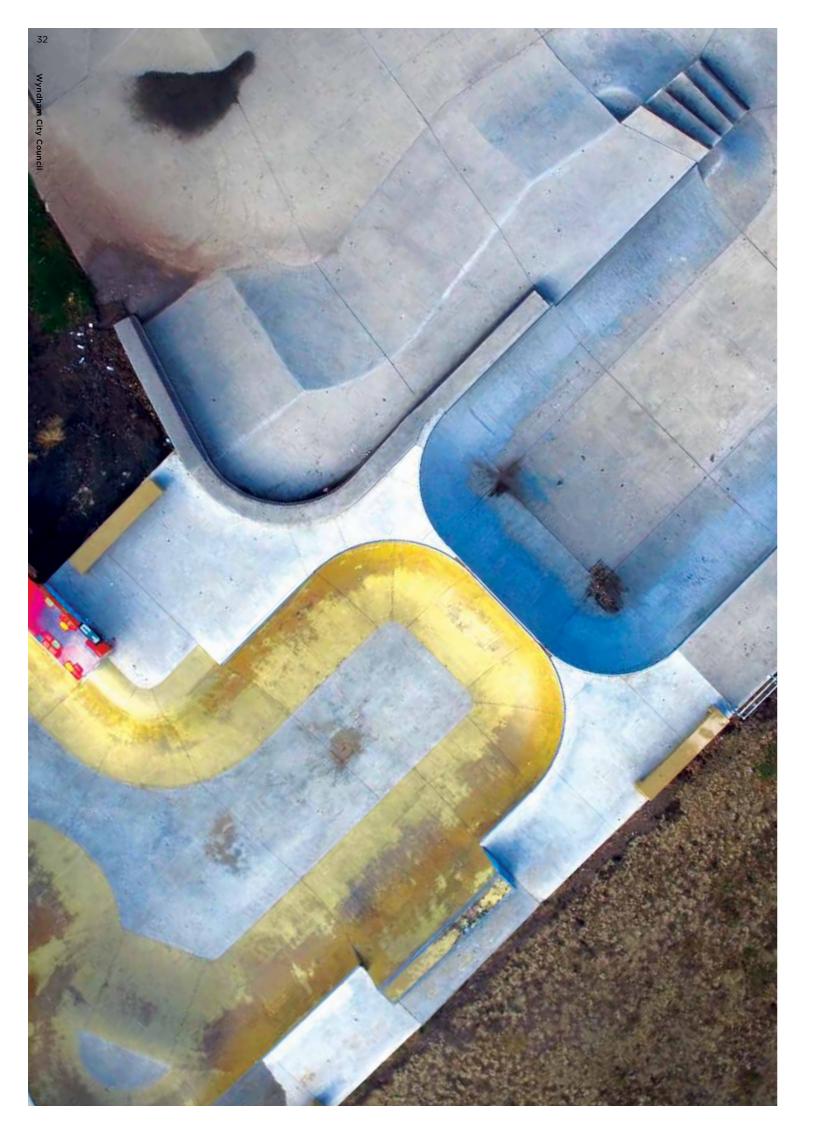


COMMUNICATION & SMART CITY PROFILE

A comprehensive communications and marketing plan will guide the city profile as a place for innovation and opportunity. The plan will complement the existing Positioning Wyndham Strategy which will promote Wyndham's status, nationally and internationally, as an innovative and entrepreneurial city that builds its own success. The fully integrated communications and marketing plan will harness digital technology to reach and inform residents and promote outcomes from the Smart City Strategy that improve Wyndham's liveability.

This local dialogue will continue, as we:

- · provide regular updates on progress;
- seek feedback on key initiatives;
- co-design smart services;
- · make better use of digital technology to empower community creativity and participation.



MEASURING PROGRESS

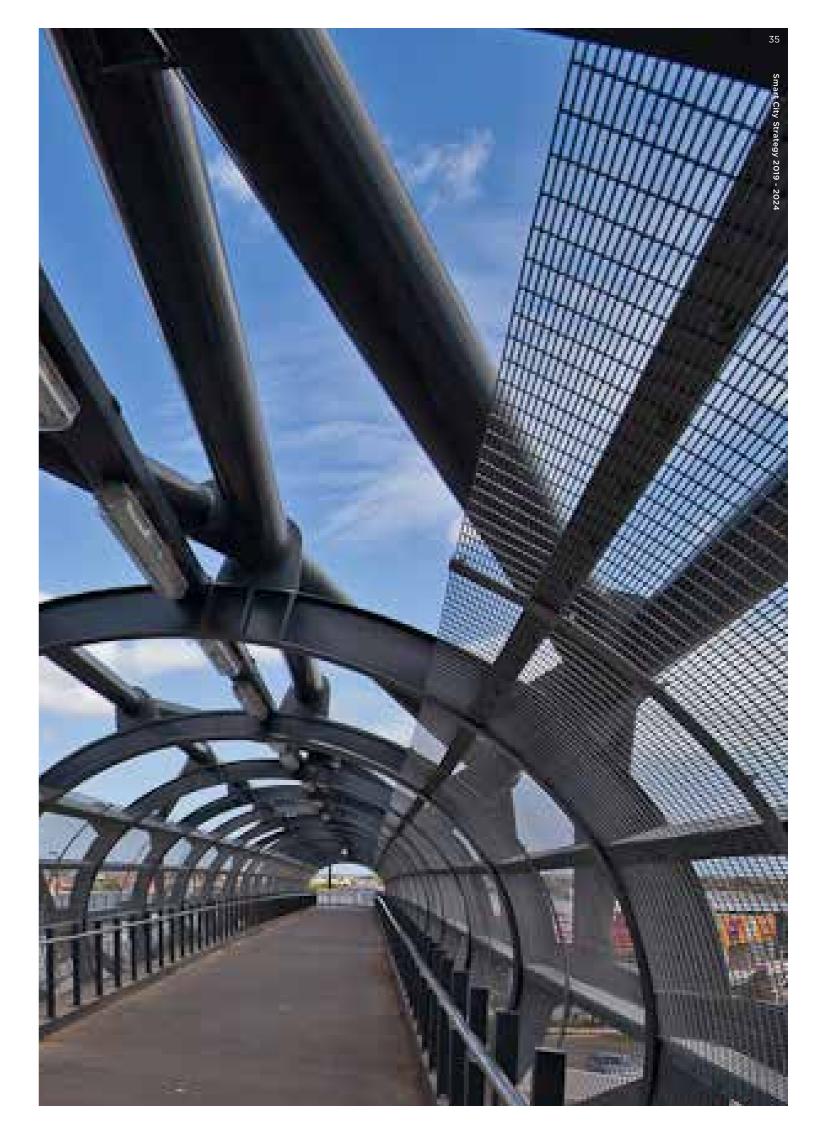
Wyndham City will monitor and assess smart city progress using a range of performance indicators and periodic evaluations. A summary of key objectives and indicators is presented in the performance hierarchy below.

Category	Objectives	Select Indicators
City/Population Outcomes	 Improve liveability Promote sustainability Develop our local economy Living Locally - the "20-min neighbourhood" Improve digital literacy/inclusion 	 Social and demographic indicators Environmental indicators Various economic indicators Mobility and accessibility indicators Digital inclusion index
Impacts	 Increase awareness, use and satisfaction of the smart city services/initiatives Increase council's Smart City Maturity Improve data-driven planning and decisions Enhance Wyndham's smart city profile Improve the efficiency of local service delivery 	 Community awareness, use and satisfaction with smart city services/initiatives (via surveys) Smart City Maturity Index Data accessibility and usage statistics Savings delivered by smart city projects Peer and industry awareness/recognition of Wyndham's smart city achievements (via survey, media scans, awards, etc.)
Projects/Programs	 Increase the quantity of smart city projects Improve the coverage of smart city initiatives (by sector and population served) Ensure interoperability, extensibility, security and privacy of smart city projects 	 Number of smart city projects Sectors covered by smart city reform and population cohorts serviced by smart city initiatives Application of appropriate smart technology standards
Inputs	 Increase investment in smart city initiatives Efficient project delivery Enhance smart city skills and capacity Attract and maintain partners Strengthen smart city policy foundations 	 Investment figures Project/financial management statistics Number of council staff with smart city skills Number of smart city partners and contributors Delivery/adoption of smart city policies, standards, guidelines and frameworks

SMART CITY GLOSSARY

Artificial Intelligence	The use of machines and systems to complete tasks normally requiring human intelligence such as learning, reasoning and speech.
Big Data	Large volumes of data either structured or unstructured.
Co-Creation/ Co-Design	Process of working with clients, customers and community to design and create services/ solutions.
Co-Working/ Remote Working	Emerging mode of working where a mix of individuals, innovators and organisations work in the same physical location, sharing space, ideas, technology and motivation.
Dashboard	An online interface which reports key city data and provides visualisation, interactivity and data access functionality.
Data Analytics	A computer process that examines data for patterns, extracting meaning and drawing conclusions.
Data-Driven	A process or system activity that uses data and analysis to drive planning and decision making.
Digital Art	Modern art that uses digital technology as part of the presentation medium.
Digital Democracy	The use of digital technology to modernise democratic processes and facilitate participation in debate and decision-making.
Digital Literacy	The skills and capabilities to effectively use digital technology.

Digital Transformation	The use of digital technology to modernise and improve services, organisations, business models, culture and products.	
Innovation Ecosystem	The network of people, institutions, programs, regulations, culture and resources that work to promote innovation.	
Internet of Things (IoT)	A device that can connect to the internet and other devices, allowing improvements in functionality and efficiency.	
Interoperability	The ability for technology and systems to work in conjunction with each other.	
Living Lab	The use of city space to test and evaluate new technology, services and ideas to promote innovation, dialogue and better outcomes.	
Open Data	Data that is freely available to the public.	
Smart City	City that applies digital technology, data and innovative thinking to improve livability, sustainability and productivity.	
Smart Sensors	Technology that monitors, measures and reports defined parameters of the physical environment to support real time analysis and decision making.	
Smart Technology	Digital networks, sensors and systems that support delivery of smart services and assets	
Smart Traffic Monitoring	An intelligent system that makes use of sensors, analysis, control and communication technologies to improve efficiency, reduce congestion and increase convenience.	





wyndhamcity

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