City of Parramatta Smart City and Innovation Strategy

Engagement Report







Report title: Engagement Report for City of Parramatta Smart

City and Innovation Strategy

Client: City of Parramatta

Version: Final

Date: June 2023

This material is made available by Cred Consulting on the understanding that users exercise their own skill and care with respect to its use. Any representation, statement, opinion or advice expressed or implied in this publication is made in good faith. Cred Consulting is not liable to any person or entity taking or not taking action in respect of any representation, statement, opinion or advice referred to in this document.

Cred Consulting acknowledges the Traditional Owners and Custodians of the lands on which we operate

We pay our respects to the Traditional Owners, Ancestors and Elders past and present.

We recognise the strength, resilience and contributions of First Nations Peoples, and the eternal and spiritual connection held in the lands, skies and waters, through cultural practices and beliefs.

Our team is proud to live, learn and thrive in the place we now call Australia, and recognise sovereignty has never been ceded by First Nations Peoples of this continent.

As embedded in our values, we are committed to building connected, healthy and resilient communities and creating purposeful outcomes that reflect our deep appreciation for the peoples and cultures that make us who we are and shape where we are going — together as one.



Table of contents

Execu	utive summary	4
1.	Introduction	6
Over	all findings	
2.	Key findings overview	8
Findi	ngs by engagement activity	
3.	Council Staff Workshop	24
4.	Expert Panel Session 1	27
5.	Community pop-ups	30
6.	Stakeholder interviews	35
7.	Focus groups	44

Executive summary

City of Parramatta Council (Council) is developing a Smart City and Innovation Strategy to leverage rapidly advancing technology for improved social, environmental, and economic outcomes.

Engagement was undertaken between April and June 2022 to capture diverse community and stakeholder views, learn from existing knowledge, identify Parramatta's smart city strengths and challenges, and generate opportunities leveraging ongoing efforts by Council and other key stakeholders in the area.

This report provides a summary of the community and stakeholder engagement undertaken by Cred Consulting on behalf of City of Parramatta Council, to inform the development of the Smart City and Innovation Strategy.

What took place

We heard from over 330 participants during the engagement period through a range of in-person and online activities including:

- Council Staff internal workshop 20 participants
- Expert Panel workshop 6 participants
- Stakeholder interviews 30 participants (as part of 25 interviews)
- 2 start-up and local business focus group discussions -7 participants
- 3 community pop-ups 80 + participants
- Community survey 82 participants
- Community workshop 6 participants
- 4 high school workshops 100 + participants

What we heard

Key smart city and innovation opportunities that emerged across engagement activities in order of hierarchy include:

Future-ready places that improve liveability

The significance of creating future-ready places that enhance the quality of life for residents and visitors was a prominent theme. It entails designing vibrant and connected spaces that people are naturally drawn to, while enhancing physical and digital connections through smart and innovative ideas.

Improving environmental and sustainability outcomes

Improving environmental and sustainability outcomes emerged as a key theme. There was a strong emphasis on connecting with nature, managing resources efficiently, embracing renewable energy sources, promoting environmental education, and building climate resilience. These priorities reflect the community's commitment to preserving green spaces, adopting sustainable practices, and preparing for the challenges of climate change.

Future focused transport solutions

The development of future-focused transport solutions emerged as a crucial aspect of building a smart city. By embracing innovative transportation options, such as intelligent mobility systems and sustainable modes of transportation, City of Parramatta can improve accessibility and connectivity while simultaneously reducing congestion and carbon emissions.

Celebrating diverse cultures

Celebrating diverse cultures, in particular the First Nations cultures, was recognised as a key opportunity. By leveraging smart tools and initiative to foster inclusivity and promote cultural activities and events, City of Parramatta can create a vibrant city that embraces its multicultural identity.

Promoting Parramatta's advantage and value

Promoting City of Parramatta's advantage and value was identified as a strategic priority. This involves showcasing the City's unique offerings, such as its renowned universities, cultural institutions like Powerhouse Parramatta, and its potential as a hub for innovation and

entrepreneurship. By highlighting these strengths, City of Parramatta can attract talent, businesses, and investment to further propel its growth and development.

Leveraging collaboration and partnership

Leveraging collaboration and partnerships with various stakeholders, including state agencies, universities, and the private sector, was recognised as crucial for the successful implementation of smart city initiatives. By working together, City of Parramatta can tap into collective expertise and resources to achieve common goals and drive innovation.

Building local innovation capability

Building local innovation capability emerged as a priority, emphasising the need for an innovative mindset and a willingness to embrace experimentation and risk-taking. By fostering a culture of innovation and providing training and support to stakeholders, City of Parramatta can harness the power of local talent and creativity to develop and implement cutting-edge solutions.

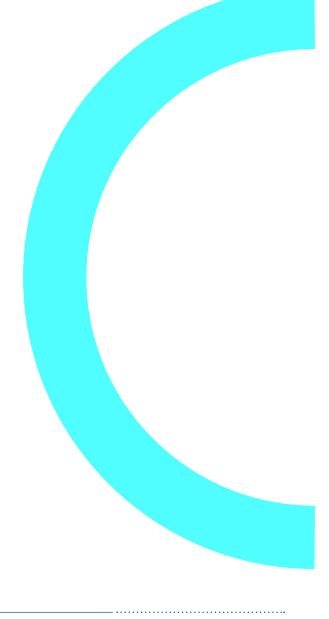
Making places that attract smart city industry

Attracting smart city industries was deemed vital to the City's growth and development. Creating an environment that is conducive to their establishment and expansion involves providing the necessary infrastructure, support systems, and incentives to attract and retain businesses that focus on smart technologies and solutions.

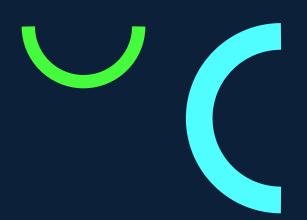
Integrating data and platforms

Lastly, integrating data and platforms emerged as a key enabler for a smart city. By adopting open data protocols, ensuring data security and privacy, and developing user-friendly digital platforms, the City can enhance transparency, accessibility, and the overall user experience for residents, businesses, and visitors.

By addressing these themes and priorities, City of Parramatta can create a sustainable, inclusive, and innovative city that improves the quality of life for its residents and positions itself as a leader in the smart city movement.



Introduction



This report provides a summary of the community and stakeholder engagement undertaken by Cred Consulting on behalf of City of Parramatta Council, to inform the development of the Smart City and Innovation Strategy.

1.1. Introduction

The City of Parramatta is going through unprecedented change and transformation. This presents an opportunity to use rapidly evolving technology to deliver improved social, environmental and economic outcomes.

In 2015, Council developed a Smart City Masterplan. To build on this Smart City Masterplan, Council has commissioned Cred Consulting to collaboratively develop a Smart City Research Paper and Strategy with the aim to make Parramatta a smarter and better place to live, work and study.

This report provides a summary of the engagement outcomes of consultation undertaken between April and July 2022 with community and stakeholders to inform the development of the Parramatta Smart City Research Paper and Strategy.

1.2. Purpose of engagement

Consultation aimed to:

- Capture the views of a diverse range of community and stakeholders
- Learn from, and build on existing knowledge
- Determine what smart cities mean for City of Parramatta, given that, typically the definition of smart cities vary across the world
- Understand City of Parramatta's strengths that can help it become a leading smart city
- Identify City of Parramatta's challenges that being a smart city can help address
- Generate a brain bank of smart city opportunities that leverage ongoing efforts by Council and other key stakeholders in the local government area (LGA).

1.3. Engagement activities overview

A total of over 330 stakeholders were engaged across various activities that were undertaken from April to July 2022. Table 1 below provides a list of activities and the number of attendees.

Table 1 - Overview of engagement activities

Engagement activity	Number of participants
Council Staff internal workshop	20
Expert Panel workshop	6
Stakeholder interviews	30 (as part of 25 interviews)
2 start-up and local business focus group discussions	7
3 community pop-ups	80 +
Community survey*	82
Community workshop*	6
4 high school workshops*	100 +

^{*} Delivered by Council, learnings from Council engagement activities have been integrated into the overview section in this report. Please refer to Council's engagement summary for further detail.

Overall findings

2. Key findings overview

An overview of what we've heard across all engagement activities. The following key themes emerged throughout the community and stakeholder engagement.

2.1. What is a smart city?

Smart cities mean different things to different people, and cities across the world define them in multiple ways to suit their specific needs and what they are trying to achieve. Even the term 'Smart City' is varied with alternate terms such as 'Digital City', 'Intelligent City' and 'Cybercity' being used worldwide.

To establish a clear understanding of a smart city in the context of City of Parramatta, we engaged participants to define its meaning and role.

Common responses across participants were that the Smart and Innovative City of Parramatta:

- Uses technology and thinks innovatively for a more sustainability city.
- Improves liveability for everyone.
- Is physically and digitally connected.
- Is digitally and universally accessible.
- Operates and uses resources efficiently.
- Collaborates with stakeholders and community.

Notably, there was a strong emphasis on the need for smart cities to be responsive to local needs, making a tangible positive impact on the community and its surroundings. Throughout the engagement process, participants used the following words to describe the future Parramatta Smart City:



Figure 1 - What is a smart city overview word cloud

"Smart cities should respond to the demographics and population of the area, their needs and interests."

Business Western Sydney

"It means integration of stuff, feeling like everything is connected. Seeing up to date technology being used to make things run better, smoother, more efficiently"

Council Staff

"Smart city should make the place safer for women, so I can walk without fear at any time. It should also improve visibility of our ancient and very important First Nations culture"

- Community pop-up participant

"A smart city needs to stick to a place and only then can make a real difference."

University of Sydney

"For me it is like the TV show the Jetsons or Singapore and Seoul where they have a massive screen that tracks everything allowing them create transparency to make more informed decisions"

Focus group participant

"A SMART City is one which provides the enabling infrastructure to improve the lived experience of it's workers, residents and visitors and improve the decision making of relevant government bodies."

Council Staff

"It's about how do we use data and tech to make people's lives simpler."

University of New England



2.2. Parramatta has many strengths to enable it to become a leading smart city

Across engagement activities, participants consistently highlighted several strengths and competitive advantages that position the City of Parramatta to thrive as a smart city and achieve enhanced social, environmental, and economic outcomes. Key strengths include:

Higher First Nations population we can learn from
Culturally diverse community who are able to come up with unique solutions
Young, highly educated and skilled community which is a key attractor for future employers
Central location in Greater Sydney and the ability to access a diverse range of people within 20 to 30 minutes
Planned light rail and metro for better transport connectivity
Planned investment in Parramatta including Powerhouse Museum and increasing funding opportunities for the LGA
Existing top universities in close proximity to the CBD
Growing importance of Westmead Health Precinct as southern hemisphere's bio-medical hub
Government sector presence in CBD
Multi-cultural events and activities
Proactive Council with strong community presence
Existing assets including natural resources, public spaces and community infrastructure
The proximity to the new Aerotropolis airport

2.3. Parramatta has some challenges that being a smart city can address

Participants identified both existing and anticipated challenges for the City of Parramatta that pose barriers to creating a successful smart city, as well as challenges that can be addressed through smart city initiatives. These challenges include:

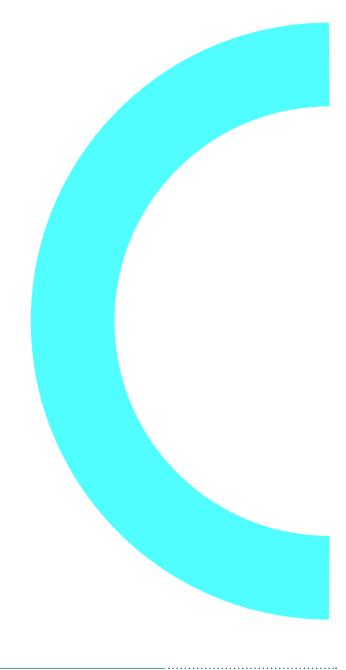
Congestion, public transport, parking, limited transport connectivity within the LGA	Disconnected messaging that does not attract businesses and industry to Parramatta
Limited active transport network (although improving)	Underutilised public assets
Image has not caught up with its potential	Rising health issues in the population
Rising climate change challenges including urban heat	Slow internet connectivity
and flooding, and increasing reliance on electricity	Government's compulsion to be risk averse
Rising unaffordability, in particular housing	Safety challenges, especially at night time
Limited social infrastructure that cannot accommodate significant population growth	Council's limited resources in implementing smart city projects
A high rate of homelessness	Lack of trust with data collection and use
Limited cultural offer that is not responsive to the population's interests	Fragmented user online experience beyond the LGA
Data privacy, security and governance challenges	Implications of new and rising work-from-home culture
Increasing digital and social inequity	High personnel turnover in Council disrupting progress
Disconnected public domain	

2.4. Priority smart city opportunities

Priority opportunities identified across engagement activities to enable City of Parramatta to become a successful smart and innovative city that is responsive to the community's needs in order of hierarchy include:

- Future-ready places that improve liveability.
- Improving environmental and sustainability outcomes.
- Future focused **transport** solutions.
- Celebrating diverse cultures.
- **Promoting** Parramatta's advantage and value.
- Leveraging collaboration and partnership.
- Building local innovation capability.
- Making **places** that attract smart city industry.
- Integrating data and platforms.

The following pages delve into these opportunities, offering in-depth details and valuable insights.



2.4.1. Future-ready places that improve liveability

Participants expressed a strong desire to promote smart city thinking and implement projects that address community priorities, making the City of Parramatta a better place to live for its residents, workers, and visitors. They emphasised the importance of prioritising liveability outcomes as the key factor for creating successful and innovative smart cities, which can also contribute to the local economy and productivity.

In three community pop-up events, the majority of participants voted for 'Liveable' as the preferred outcome for the future of Parramatta Smart City.

Smart infrastructure - A significant number of participants in stakeholder interviews told us it will be paramount for City of Parramatta to deploy and embed 21st century infrastructure in future development that underpins all concepts of smart city projects. Notable examples included early integration of smart plumbing and conduits, fast-speed wifi, smart poles during the development of future development. They told us this can make City of Parramatta ready for the future, and also save money in the long-term, as retrofitting already built infrastructure always costs more money.

"What are we doing to ensure that the people working there have access to appropriate smart infrastructure? It's not a niceto-have; it's actually a requirement if we're trying to position Parramatta in the global space." - Westmead Health and Innovation District.

Community health- Participants expressed a desire for innovating tools to encourage healthier lifestyles in City of Parramatta. This is particularly important due to the high prevalence of diabetes and long-term health conditions in the community. They emphasised the need for smart thinking that utilises data, insights, and information sharing to improve health outcomes and enable people to make informed decisions.

"Innovative data and infrastructure to improve community health outcomes is important for our industry. Open data combined with GIS mapping would be great, providing access to information about parks, services, and infrastructure." - Western Sydney Local Health District.

Affordability - Declining affordability was consistently discussed across consultation. Community pop-up participants emphasised the need for Council to advocate for a diverse range of housing models at various price points. Stakeholder interview participants emphasised that this is crucial not only for improving liveability but also for driving the innovative economy and attracting start-ups and new businesses to Parramatta. The high rate of homelessness was raised as a key concern for Parramatta. Participants urged Council to use smart technology to provide safe and stable access to housing shelters for those sleeping rough.

"There's an opportunity to form a working group involving other landowners, recognising that homelessness is not solely a Council responsibility but a social justice concern. Are there any way for leveraging smart technology to provide welfare services and shelters for the homeless?" - The Scentre Group

Social infrastructure - Population growth was a major topic discussed across consultation. While it presents opportunities for City of Parramatta, careful planning is crucial to maintain a high standard of living. Community pop-up participants voted for 'planning and urban development' as a top priority for a future Parramatta Smart City. They expressed concerns about future growth and the need for smart technology to guide it, ensuring enough social infrastructure for everyone. Participants also mentioned that the Council can use smart tools to understand and improve existing social infrastructure, now and in the future.

"We are really concerned about Parramatta getting overly developed. We get it, growth is gonna happen, but we urge the Council to use technology and data to plan things better. We need social and community infrastructure that can keep up with the rising demand." - Community pop-up participant

Community safety - Improving community safety through smart technology was widely discussed as an opportunity for City of Parramatta, for example, speed warnings, security cameras, night-time lighting, pedestrian safety, and using interactive tools to crowd-source unsafe spots in the LGA.

"How can we make our cities safer using smart technology? It's not just about installing CCTV cameras, but leveraging information and smart devices to support our people. IoT devices and crowd sourcing can play a crucial role in gathering and sharing information."- Transport for NSW

Social equity - All participants highlighted the potential of smart technology in addressing social equity gaps in the City of Parramatta. They specifically mentioned the idea of utilising data to map population vulnerabilities as a means to bridge existing inequities.

Council services - Throughout consultation, participants commended Council for its proactive efforts and acknowledged its strong commitment to serving the community. Council staff identified smart technology as a valuable opportunity to enhance core services. During the pop-up, participants emphasised the importance of transparent communications with the wider community. They also expressed a desire for emerging technology to streamline the process of lodging complaints, making it more accessible, user-friendly, and trackable.

" I want to be able to easily access and understand what's happening in the Council, both through online platforms and printed materials. It would be really helpful if the communication channels were more user-friendly, providing clear and accessible information" - Community pop-up participant

2.4.2. Improving environmental and sustainability outcomes

Using smart technology for furthering environmental outcomes was repeatedly emphasised as a key priority for City of Parramatta. Participants told us that City of Parramatta has the potential to be a world-class exemplar for smart environmental sustainability.

Across three community pop-ups, participants voted for 'Sustainable' as the second top choice when asked what outcome Parramatta Smart City should achieve in the future.

Connection to nature - There was a strong desire to protect natural habitat, particularly as human population pressures will increase over time. Participants told us the natural bushland, green spaces and the Parramatta River were highly valued by the community. They would like to use technology as a means to improve connection with nature. They told us this could be either through awareness and education or providing interactive and immersive experiences.

"How can smart cities reconnect people to the Parramatta River and nature? One idea is to attach QR codes to stretches of the river and trees, providing information and building community awareness" - Macquarie Park Innovation District

"Smart technology can bring us closer to nature by creating new ways to explore and appreciate the environment. It helps us connect with and protect nature, finding a balance between our digital world and the beauty of the natural world." - Community pop-up participant

Resource management - Participants emphasised the importance of utilising data and technology for ongoing environmental monitoring and management of natural resources. They recognised the limitations of natural resources and emphasised the increasing need for local councils to innovate on new ways to efficiently manage them.

A notable examples included smart water sprinkler systems, innovative stormwater and rainwater harvesting systems. Pop-up participants emphasised the need for more informed planning for parks and greenery to respond to population growth.

"Use water sensors to figure out when parks actually need watering, instead of just relying on regular timed sprinklers that go off every day, regardless of whether the ground is dry or not." - Sydney Olympic Park Authority

Renewable energy - Investing in innovative renewable energy emerged as a key priority for the City of Parramatta. Expert panel members spoke about the City's increasing dependence on electricity, both now and in the future, highlighting the importance of generating renewable and sustainable energy. The new Camellia Rosehill Precinct was identified as a potential site for

a solar farm. Additionally, there was an opportunity to integrate a smart electricity grid capable of two-way power flows. Community pop-up participants encouraged Council to explore the provision of community batteries, similar to those recently deployed in North Epping.

"The City of Parramatta is experiencing a substantial increase in its electricity dependence, which is why it is important to consider smart technology that can optimise energy usage, promote renewable energy sources, and monitor consumption." - Expert panel member

Environmental education - Promoting environmental education and capacity building to drive behaviour change and empower individuals to make informed decisions emerged as a key opportunity and responsibility for future smart initiatives. Participants urged Council to make environmental data and information readily accessible, enabling people to make more informed choices regarding the environment.

"Smart cities should play a role in helping people make informed decisions regarding the environment. This includes access to real-time environmental data, educational initiatives, and user-friendly platforms that facilitate sustainable practices." -University of New England

Climate resilience - Addressing the challenges posed by climate change is a major concern for the City of Parramatta. The utilisation of smart tools to combat urban heat and flooding was extensively discussed during the consultation process.

In the community pop-ups, 'climate change' received significant support as the second most important priority for future smart city initiatives. Participants expressed the need for improved data collection, including real-time information on tree coverage and surface temperature.

Participants also highlighted the importance of enhancing the visibility of climate data through on-site gauges for pollution levels, waste generation, littering, and other related factors.

"It would be great to have a better understanding of the Parramatta River and its water quality. It doesn't have to be something flashy, just a simple gadget that can convert data into digitally accessible information." - PAYCE

Climate resilience - Participants highlighted the extensive development expected to occur in City of Parramatta in the upcoming years. They stressed the importance of adhering to international smart sustainability standards that guide the planning, design, and implementation of future developments.

"We need to advocate for implementing controls for recycled water in future developments. We need to make a strong business case for it, as there will definitely be a need and demand for recycled water." - Sydney Water

2.4.3. Future focused transport solutions

With increased population growth there is a need to provide innovative transport solutions to support the growing community in and around City of Parramatta.

Pop-up participants voted 'public transport and mobility' as the most important focus for future smart city initiatives. Additionally, they voted 'connected' as the third top choice when considering the desired outcomes for Parramatta Smart City in the future.

Car independence - Participants emphasised the importance of thinking outside the box when it comes to smart mobility in the City of Parramatta. They urged Council to explore innovative solutions that can help design and operate the City in a manner that reduces the dependence on cars for transportation. This approach is seen as crucial to prevent the growing population from leading to increased traffic congestion.

"Think big and bold - it's not just about installing a few electric vehicle chargers. We need to focus on making it convenient to not rely on cars. Take inspiration from cities like London where driving is not the norm." - UNSW

Micro mobility - Participants stressed the importance of investing in convenient and sustainable transportation options, like walking, cycling, and other micro-mobility solutions.

They urged City of Parramatta to trial these new methods to determine their viability and effectiveness. Stakeholders also called for innovative approaches to optimise road space, such as digital lane markings that can adapt to traffic demand. They highlighted the need for infrastructure like electric vehicle charging stations and designated parking for e-scooters. Additionally, designing future developments with reduced car dependency was seen as a complementary strategy to promote sustainable transportation in Parramatta.

"Transport for NSW is planning trials in the next few months to explore how e-scooters can be integrated into cities. It's crucial to address issues like providing dedicated space for e-scooters and determining parking solutions. It's important for you to start considering these aspects now and proactively re-allocate existing road space to prioritise different modes of transportation." - Transport for NSW

Mobility data - Participants commended Council for its ongoing initiatives in collecting data on pedestrians and cyclists. They encouraged Council to further analyse these flows to support data-driven transport planning.

They suggested making mobility data open source and involving the community, including universities, in generating innovative solutions.

"Mobility presents one of the greatest opportunities for Parramatta to engage the community in finding solutions. It's also an area where the private sector can act swiftly and bring about rapid progress." - Macquarie Park Innovation District Physical and digital connectivity - Participants highlighted the ease of reaching Sydney CBD from Parramatta CBD compared to getting to other areas within the City. They suggested leveraging smart technology to enhance connectivity within the City and emphasised the importance of improving active transport connections between key destinations like the CBD, Westmead, universities, and cultural venues. Enhancing digital transport connectivity through features like digital signage and real-time public transport information was recommended to improve the overall experience.

"I think one way to improve transportation is by making it more affordable outside of peak hours. It would be great to receive a message on my phone saying 'fares are now cheaper' after the peak hours. Additionally, having a train schedule that shows the optimal times to catch the train and save on fares would be really helpful." - Chill IT

Smart parking - Participants emphasised the importance of a comprehensive smart city mobile application that extends beyond the local government area and integrates with the broader region. This example was seen as a practical and effective implementation of smart city technology.

"We're introducing public parking in Parramatta Square using your phone's Bluetooth for access. Tenants can send a link to their visitors, providing access and a map to their parking spot. We're collaborating with innovative startups and sharing successful solutions with Council. Monetising parking and wayfinding is an option, such as through mapped-in services by Omedia, Australia's largest advertiser." - Walker

"I believe we should explore the potential of providing users with real-time insights on parking availability in the CBD. This way, they can plan their driving route more efficiently, avoid unnecessary traffic congestion, and contribute to a smoother flow of vehicles in the city." - Expert panel participant

2.4.4. Celebrating diverse cultures

The rich cultural diversity in City of Parramatta is highly valued and celebrated. Participants prioritise creating an inclusive environment for the diverse residents, workers, and students. In community popups, 'accessible and inclusive' ranked among the top choices for the future goals of Parramatta Smart City.

First Nations culture - For over 60,000 years, City of Parramatta has been home to First Nations People, and they remain a significant part of the population today. Participants stressed the need for Council to actively support and celebrate the ancient culture of the First Nations People through smart initiatives. Suggestions include using technology to share stories about the Female Factory, employing digital and interactive art to strengthen the identity of the Dharug People, and fostering a stronger connection with Country.

"Focus on the structure of how technology can build strong connections with First Nations communities in the LGA. Once you solidify that, everything in the future will fall into place." - The Gaimaragal Group

Multi-culturalism - Participants want smart city initiatives to strengthen City of Parramatta as a preferred destination for diverse cultures. They emphasised the importance of cultural representation in public spaces and promoting multilingual communication. This inclusivity will empower people to navigate both digital and physical realms and access Council services independently. Community popup participants suggest developing programs to better integrate newcomers into the community.

"Smart technology offers opportunities to enhance visibility and representation. We have the choice to prioritise and uplift different segments of our population, promoting multiculturalism and inclusivity." -*University of Sydney*

"Smart technology can make it easier for people who speak different languages to find their way around the city. By using features like multilingual signs, translation apps, and voice-guided directions in various languages, everyone can navigate the city more easily, regardless of the language they speak." - Community pop-up participant

Arts and culture - Arts and culture are a top priority for the City of Parramatta community. Participants highlighted the need for a more diverse and inclusive cultural offer that appeals to young and culturally diverse audiences. They emphasised the role of smart cities in enhancing Parramatta's cultural scene and making it accessible to all. Participants also expressed interest in digital and interactive art experiences in public spaces, as well as easier access to event information and updates.

The cultural events in Parramatta was highly celebrated by the community and many pop-up participants told us it was one of the key reasons they visit the CBD. They would like to see more of it in the future.

"With the Powerhouse, there's so much happening, and it's crucial that we capture it all. The STEM opportunities for high school students will be a huge draw, as it will expose kids to new learning experiences, foster collaboration, and provide interactive engagement." - Powerhouse Parramatta

2.4.5. Promoting Parramatta's advantage and value

The prevailing misconception about City of Parramatta being an underdeveloped area was a topic of extensive discussion in relation to revitalising its economy and boosting productivity.

Participants emphasised that the perception of the CBD and the wider LGA has not kept up with the remarkable transformations that has occurred in recent years, nor has it acknowledged the City's immense potential to become a dynamic and thriving hub at the heart of Greater Sydney.

Value proposition - An important opportunity identified for the City of Parramatta was the need for a comprehensive branding exercise to highlight its competitive advantages. Participants emphasised the necessity of clear, concise, and captivating communication regarding the City of Parramatta's value proposition. It is crucial to articulate what the city offers to different stakeholders and why people should choose Parramatta as their destination.

There was a consistent comparison drawn to Sydney CBD, which has historically been a magnet for businesses and major employers. The development of Tech Central, a prominent precinct in Sydney CBD, has been extensively promoted as the go-to destination for techrelated activities. Participants suggested adopting a similar approach to market Parramatta's distinctive focus and competitive edge. They emphasised the importance of clearly communicating Parramatta's aspiration to become a hub for education, health, and research, as this would play a pivotal role in attracting and retaining talent in the area.

"We need to promote the vibrant social life of Parramatta and actively showcase it in the media. It's essential to be proactive in communicating our ambition to attract major companies and foster significant growth. By focusing on attracting both established and emerging businesses, particularly those in knowledge-based industries, we can generate employment opportunities and drive economic development." - Business Western Sydney

Communicate priorities - Another recurring theme was the crucial need to effectively communicate City of Parramatta's priorities in a way that resonates with other stakeholders. By providing a clear list of key areas that require attention in the upcoming years, Council can enable universities to develop projects aimed at solving these challenges, while also encouraging start-ups to generate innovative ideas that address local issues.

Multi-lingual communication - In addition to highlighting the significance of effective communication, participants placed strong emphasis on the necessity of providing information in multiple languages to meet the needs of City of Parramatta's diverse community. By doing so, City of Parramatta can ensure that it reaches a broader audience and becomes an inclusive and welcoming place for all. This comprehensive approach to communication encompasses various channels, including online platforms, print media, social media, as well as wayfinding and signage, creating a seamless and intuitive experience for people from different backgrounds.

"Parramatta is home to a diverse community with people from various cultural backgrounds, and English may not be their first language. It is crucial to provide information in community languages to make everyone feel included and welcomed. By doing so, we can encourage people from diverse cultural backgrounds to choose Parramatta as their home" - University of Sydney

2.4.6. Leveraging collaboration and partnership

The City of Parramatta is comprised of various key players, including the Council, State Government, Westmead Health Precinct, Universities, TAFE, major employers, local businesses, and the community. Throughout the engagement process, it became evident that leveraging the partnerships among these stakeholders and enhancing collaboration is crucial for achieving successful smart and innovative city outcomes.

There was a widespread recognition that Council has limited resources to independently execute smart city projects. Consequently, participants emphasised the importance of fostering collaboration and forming partnerships to improve the likelihood of project implementation, mitigate risks, and maximise the potential for successful outcomes in future endeavours.

Collaboration spaces - To foster cross-disciplinary interaction, it is crucial to provide a range of diverse physical collaboration spaces, such as co-working spaces, innovation labs, and collision spaces. Participants expressed concerns about the current lack of affordable collaboration spaces for start-ups and new businesses.

They emphasised the potential to repurpose existing spaces within community facilities, universities, and major offices for community collaboration purposes. Furthermore, it was noted that limited access to working spaces before or after meetings in Parramatta CBD discourages people from traveling to the area. By offering easily accessible and convenient working spaces, more people would be encouraged to visit the area.

The new North Parramatta Hub emerged as a significant opportunity to cultivate an innovative culture within the community. It was widely discussed as a key initiative to ensure that the foundation for an innovation-driven environment is established correctly.

"As part of this ecosystem, we need something like the hub on York Street. We need to have a place to come together regularly to network, but also to meet with the business chamber face to face." - Focus group participant

Events and meet-ups - Participants consistently stressed the significance of organising more events and meetups that are open to the public. These gatherings would provide a platform for different stakeholders to engage with one another, exchange knowledge, and identify early opportunities for collaboration. While it was recognised that Council does not have to be the sole organiser of these events, they can play a vital role by partnering with relevant individuals or advocating for their establishment.

Another emerging opportunity was implementing mentorship programs specifically tailored for start-ups and new businesses.

Tertiary education - Parramatta is home to top universities like Western Sydney University, University of Sydney, UNSW, and University of New England. Participants encouraged regular collaborative sessions among the Council, universities, and relevant stakeholders for mutual learning.

They also emphasised the importance of university projects addressing local challenges, offering realworld experience for students and innovative solutions for Council. Student placements within Council were identified as a key opportunity, allowing students to work on priority projects and earn course credits.

To prepare for future jobs, stakeholders proposed clear communication of anticipated job needs to TAFE NSW. This would enable the development of relevant training courses, such as technicians for smart infrastructure or hospital management and health staff for Parramatta.

"There are significant opportunities for collaboration with students. Council can offer paid internships and align them with relevant courses. Regular catch-ups can help us identify the challenges faced by Parramatta and incorporate them into our curriculum, giving Council more incentive to provide internships to students" - University of New England.

Community - Council was commended for their consistent efforts to engage with the community. Innovating on new and equitable opportunities to get the community involved and enable them to be part of the decisionmaking was identified as a key priority for City of Parramatta.

State agencies - Participants emphasised the importance of maintaining the strong relationship between Council and state agencies, as it allows for strategic alignment and access to future funding opportunities. By working together, Council can tap into the expertise and resources of state agencies, advancing the smart city agenda and driving innovation in Parramatta.

"Sydney Olympic Park's 2050 Vision aims to become a Living Laboratory, and this opens up an exciting opportunity for Council to collaborate and harness this strategic partnership for testing and piloting innovative smart city ideas." - Sydney Olympic Park Authority

Private industry - Participants strongly advocated for the establishment of an online discussion platform to facilitate knowledge sharing and mutual learning among local businesses. This platform would serve as a valuable resource for businesses to learn from each other and exchange insights.

Furthermore, they emphasised the importance of close involvement and collaboration with developers in the future development of City of Parramatta. Participants highlighted the potential benefits of increased collaboration, such as the early integration of smart infrastructure and more effective planning to achieve aligned outcomes.

2.4.7. Building local innovation capability

Participants emphasised that embracing an innovation mindset presents a significant challenge for Council, given the inherent hierarchy and bureaucratic structures typically associated with local governments. Due to their responsibility for managing public funds, councils are naturally inclined to be risk-averse.

Therefore, it was stressed that building local innovation capability across diverse stakeholders is a crucial priority for City of Parramatta. This entails overcoming traditional barriers and empowering people and organisations to think creatively, take calculated risks, and drive innovation in the pursuit of smart city initiatives.

Fail fast - Participants stressed the importance of embedding an innovation and experimentation mindset within Council and granting stakeholders the freedom to fail. This approach encourages experimentation and risk-taking. However, prioritising the trial of smallscale solutions and embracing the "fail fast" principle, commonly adopted by startups, was noted to be crucial.

Capacity building - Participants highlighted the risk of technology adoption widening the digital divide, especially for older populations, non-English speakers, and those without access to technology. To address this, stakeholders emphasised the need for innovative approaches, including education and capacity building, to bridge digital access and literacy gaps in the community. They also stressed the importance of educating all stakeholders on smart city tools and their usage.

Additionally, participants highlighted the anticipated need for training programs to upskill the population and prepare them for future employment.

"The digital literacy of our residents is a crucial aspect, and we must ensure that our community keeps up and stays in sync with digital progress." - Cumberland City Council

"We should make sure that smart cities don't forget about elderly people. They might not be familiar with technology, so we need to help them learn and give them easy ways to use smart city features. We should also provide simpler options that don't rely on technology, so they can still benefit from what smart cities offer." - Community pop-up participant

Future jobs - Participants recognised the prevalence of the term "innovation" among local Councils. To establish City of Parramatta's unique identity and distinguish it from other innovation centers, such as Marsden Park, Campbelltown, and Randwick, stakeholders emphasised the importance of defining the specific type of innovation that Council aims to foster. This clarity is vital for attracting the right industries and talent to City of Parramatta, creating high-value and knowledge-based jobs locally instead of relying on imports.

" Innovation has become a buzzword, with many precincts wanting to be innovation districts. However, when we look at it realistically, every nation only has a few genuine innovation precincts, as they require a concentrated pool of talent and significant outcomes. The key question is, which areas are successfully attracting knowledge-based companies and jobs?" -Western Sydney Startup Hub

Knowledge sharing - Sharing insights and knowledge emerged as a readily achievable opportunity for City of Parramatta. This includes sharing success stories on how technology promotes community health, showcasing innovative startups through online platforms, and highlighting the ways technology benefits local businesses. Participants emphasised the importance of ongoing leadership by actively engaging with social media and maintaining a state-of-the-art website to demonstrate Council's commitment to innovation.

"What we have learned throughout our journey is that no one can accomplish it alone, collaboration and sharing knowledge is of utmost importance. The state, local industries, and other organisations must learn from each other, come together and join forces. Additionally, we rely on Council to share knowledge with us about what the community need, so we can ensure that we deliver the improvements the community truly needs." - NSW Smart Places

2.4.8. Making places that attract smart city industry

Across all engagement, participants noted creating an attractive environment where people want to come and work is paramount to attracting smart industries.

Placemaking - Participants stressed the importance of creating connected and vibrant places for the success of smart cities. They emphasised the need to make smart cities appealing destinations where people want to visit, spend time, and feel welcome. This requires establishing attractive environments that are well-connected to facilitate seamless movement between locations.

A consistent opportunity identified by stakeholders is the integration of Westmead and Parramatta CBD, as well as opening up Parramatta Park to improve visibility and create welllit spaces. They emphasised the significance of implementing smart wayfinding and signage systems that enhance the overall experience and provide a unified environment.

Innovative ideas were also discussed, including the installation of large screens in Parramatta CBD, akin to Times Square, to display live data and establish the city's identity as a CBD and hub of innovation.

"Innovation doesn't happen in isolation. Placemaking plays a crucial role in creating the right environment for innovation. We need to encourage spaces where different ideas can collide, like streets that serve as forums for bringing ideas together. It's about intentionally creating opportunities for unexpected connections. Third places, such as pubs and public spaces, are essential for people to come together, interact, and share ideas." - Macquarie Park Innovation District

Activation - Leveraging smart technology and digital placemaking to activate Parramatta emerged as a significant opportunity. Collaborating with cultural venues like the New Powerhouse Museum and Riverside Theatre, as well as community cultural groups, was suggested to facilitate these activations.

An investment in digital platforms that enhance the overall place experience was recommended. For instance, developing an augmented reality app to showcase ongoing events and deals.

"Digital placemaking can make places safer. By using smart technology and data, we can improve security in our communities. Smart lights, cameras, and monitoring systems can help prevent and respond to safety issues quickly. It's about using technology to create safer and more welcoming places for everyone, especially in the CBD where there a lot of places that feel unsafe for women and children, particularly after dark." - Community pop-up participant

Social amenity - Participants emphasised the importance of establishing social amenities that cater to the community and enhance the vibrancy of the area within innovation precincts. They highlighted the need for essential supporting services in the CBD, such as legal services, copiers, printers, and other facilities that can benefit local businesses.

2.4.9. Integrating data and platforms

Data is often at the core of smart city concepts, so ensuring all its systems are streamlined is pivotal to creating a functional smart city.

Transparency - Participants unanimously emphasised the importance of transparent communication regarding data collection and usage. They advocated for moving away from traditional practices of disclaimers that absolve Council from data responsibility and instead encouraged adopting practices that build trust with the community. It was recommended to adopt international standards for data collection and utilisation.

"There needs to be more transparency in how and why the data is collected and how we use it. People get confused and need better clarity for better trust." - Expert panel participant

Open data - Participants recommended adopting open data protocols in line with State and Federal policies. They highlighted the need for internal training programs to overcome knowledge and skills barriers within Council teams.

Creating an open source data portal that presents information in an accessible format was identified as a priority. Stakeholders also emphasised the importance of sharing stories and insights from the data on Council websites and other platforms to foster trust with the community.

"Open data will be a game changer for Parramatta. It can help us share valuable information openly, which can bring many benefits. By making data accessible to everyone, we can foster innovation, transparency, and collaboration. Open data will allow us to work together to solve problems and make our city better. Council can lead by making data easy to access and use." - Focus group participant

Data security - Cyber and data security, technology maintenance, and privacy emerged as one of the top concerns among community survey participants regarding smart city innovations. To address these challenges, stakeholders recommended collaborating with industry experts to gain insights into emerging technologies and develop innovative solutions.

Data sharing - Participants highlighted the need to explore building an integrated data system and establishing governance to enable data sharing among various stakeholders across the LGA. This approach would help avoid data duplication. They also emphasised the importance of forming data partnerships between the public and private sectors to alleviate the burden on Council in collecting all data.

"I believe that data sharing is crucial. In a city like Parramatta, the ability to bring together organisations like the Powerhouse Museum, the universities, and others is truly remarkable. It's a significant undertaking, and we understand that privacy is a top concern. The question is, how do we open up data and share

data in a way that respects personal data rules and regulations, while still making it meaningful for people?" - UNSW

"Governance with open data is an ongoing challenge. We need to address how data is consumed, make it more accessible, and ensure its openness to all. It's important to determine our commitment to sharing data and identify the custodian responsible for ensuring a seamless customer experience." -Transport for NSW

Beyond Parramatta - The online user experience beyond LGA boundaries was a prominent topic of discussion among stakeholders. They emphasised that people experience places seamlessly across boundaries rather than within specific LGAs. However, the existence of separate digital apps for different councils, such as parking apps, creates inconvenience for users who have to switch between platforms when crossing boundaries.

To address this, participants identified an opportunity to collaborate with the State Government and neighbouring councils to pilot an integrated app for the Central River City Region. The success of this pilot could then lead to scaling the app to the wider GPOP area and eventually Western Sydney.

Findings by engagement activity

3. Council Staff Workshop

A Council Staff workshop was conducted on 20th April 2022 to understand Council's priorities for the Smart City and Innovation Strategy, what it can and should achieve.

The online workshop was attended by 20 Council staff members from diverse teams. Cred Consulting facilitated the workshop online via Zoom, using Mentimeter as an interactive tool throughout. The session commenced with a brief presentation describing the project and providing context, followed by a facilitated conversation. Participants were provided the opportunity to share their thoughts and ideas throughout the 1.5 hour session.

feeling like everything is connected. Seeing up to date technology being used to make things run better, smoother, more efficiently"

"It means integration of stuff,

Council Staff

3.1. What we heard

What is a smart city?

Participants were asked to share their thoughts on what being a smart city meant for City of Parramatta, they told us that the future Parramatta smart city should be:

- · A data-led city
- · Green
- · Enable good decision making
- · Integrated and seamless
- · Agile
- · Equitable
- · Connected
- · Transparent and truthful
- Communicative

There was a strong emphasis on shifting away from the traditional perception of smart cities as solely focused on technology and embracing a more intentional approach. Participants highlighted the importance of smart concepts that are strengths-based and aimed at improving the lives of the community, making everyday experiences simpler and more convenient.

Participants suggested that the Smart City Strategy should prioritise a few key areas to ensure meaningful and significant impact. They shared insights from past experiences, cautioning against trying to achieve everything at once, as it often leads to accomplishing nothing substantial.

"A SMART City is one which provides the enabling infrastructure to improve the lived experience of it's workers, residents and visitors and improve the decision making of relevant government bodies."

Council Staff

"A city that is 'live'; collecting metrics and measurement to enable 'experiments' (esp. interrelationships) in enhancing the lived experience of the city."

Council Staff

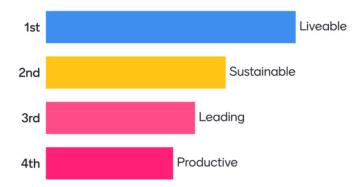


Figure 2 - Council Staff 'what should smart cities focus on' poll results

We also conducted a voting exercise to gather participants' preferences on the Council vision areas outlined in the CSP that should be the focus of future smart cities. A total of 18 votes were collected, and as shown in Figure 2, the majority of participants voted for smart cities to prioritise liveability and sustainability outcomes.

Participants provided additional insights to support their choices, noting that considering emerging technologies and the extent of Council's services and infrastructure, investing more in the sustainability domain would be beneficial. This aligns with the community's environmental priorities and allows Council to effectively contribute to addressing them.

Priorities and opportunities for the future **Parramatta Smart City**

Cred Consulting presented high-level learnings from an international smart city best practice desktop review, and participants were invited to comment on if these best practices were applicable for Parramatta, and share their ideas and opportunities for the future Parramatta Smart City.

The best practices that resonated most with the participants included:

- Getting the basics right
- Creating opportunities for healthier lifestyles
- Mitigating climate change
- Not downplaying digital security
- Complementing with low-tech initiatives, and
- Communicating our smarts.

They commented on the potential of smart cities as an enabler of social equity, bridging the gap in digital literacy and access, and better serving vulnerable communities in the LGA.

Participants highlighted innovative applications of smart city concepts, such as the "Pokemon Go" game, which revolutionised public engagement with technology. They noted that we can learn from such games to creatively apply technology in encouraging people to be more active.

Examples of low-tech initiatives, such as cycle pedals and intuitive on-road signage, were highlighted as effective means to support high-tech initiatives and enhance the overall cycling experience.



Figure 3 - A snapshot of the online Council Staff Workshop

Regarding communications improvement, participants expressed that Council has not effectively communicated its ongoing smart initiatives and emphasised the need for a more integrated marketing and communication approach in the future. This includes sharing information in multiple languages to cater to the diverse population of the LGA.

Enhancing Parramatta's cultural offerings to appeal to the young and culturally diverse population was identified as a key priority. Participants stressed the importance of an integrated and cohesive approach between the Powerhouse Parramatta Museum and Riverside Theatres in terms of their offerings and promotion.

While embracing an experimental mindset was widely discussed, participants recognised that this might require Council to take on a higher level of risk, which may not align with its current practices. They suggested exploring partnerships with other key stakeholders to mitigate risks for Council.

The deployment of open data was acknowledged as an ongoing challenge for Council. Participants discussed additional challenges related to data security and governance, and emphasised the need for Council to mature in this area.

Another important priority identified was the alignment of the Smart City Strategy with other Council strategies, particularly the Community Strategic Plan (CSP), as well as regional and state policies. Participants highlighted the significance of forging stronger partnerships with state agencies for the success of Parramatta Smart City.

Participants also discussed the opportunity to use smart technology to enhance the delivery of Council services, rather than solely focusing on identifying new priorities.

Lastly, participants emphasised the need for a framework to assess future smart city projects based on their social, environmental, and economic benefits. They emphasised the importance of ensuring that future projects deliver multiple benefits and provide the best value for money.

"Might be important to consider that a real smart city would do one or two things well, rather than to push for all the smart city things too"

Council Staff

"Ensure a strong connection with the strategic actions set out by the CSP, make sure we link to State Smart Places Strategy"

Council Staff

"I think a service review approach might daylight some gaps (gaping holes) in existing services and then we can consider smart solutions for these"

Council Staff

"Rather than Powerhouse Parramatta doing things in isolation, they should be done to present opportunities for others to create a network events and programs in the city. "

Council Staff

4. Expert Panel Session 1

Council engaged Cred Consulting to establish an Expert Panel comprising pioneers in Australia. The purpose of this panel is to gather knowledge and receive advice to shape a leading practice Smart City and Innovation Strategy.

The smart city expert panel workshop took place on May 16, 2022, conducted as an online workshop with five panel members in attendance. One expert who was unable to attend was interviewed the following day, and their insights have been incorporated into this chapter.

Cred Consulting facilitated the workshop using Zoom, with the session lasting for 1.5 hours. The workshop began with a brief presentation providing an overview of the project and its context. This was followed by a guided conversation, guided by the following questions:

- What can smart cities help solve?
- What are some of the pit falls to be mindful of?
- What are some early opportunities for Parramatta?
- What are some best practice examples?

As the discussion was free-flowing with responses overlapping many of the above questions, the findings have been reported below in a combined section.

4.1. Who is part of the Expert Panel?

The Expert Panel consists of six people, who have expertise in smart cities, urban resilience, local government and building liveable cities. As shown below, they include:

- Andy Marks
- Beck Dawson
- Chris Pettit
- Elliot Fishman
- Joanna Kraatz, and
- Nathaniel Bavinton



Andy Marks CEO at NUW Alliance Director at Centre for Western Sydney



Beck Dawson Chief Resilience Officer at Resilience Sydney



Chris Pettit Director at City Futures Research Centre, UNSW



Elliot Fishman Director at Institute for Sensible Transport



Joanna Kraatz Future Innovation Officer at Wollondilly Shire Council



Nathaniel Bavinton Innovation and Futures Manager at City of Newcastle

4.2. What we heard

Summarised below are key findings from the Expert Panel Session categorised by theme.

Liveability - Using smart technology as a tool to make Parramatta a more liveable and attraction place for its residents, workers and visitors was widely discussed as the highest priority for Parramatta. Panel members told us older generation smart cities adopted a 'tech-first' approach, therefore, they over-promised and underdelivered. They said to make impactful smart cities, it will be important to focus on the community's needs, aspirations and challenges.

Mobility - Panel members spoke about smart cities having been able to address traffic management, in particular smart parking. They spoke about the possibility of providing users insights into parking availability in the CBD, so they can plan their driving route and avoid contributing to road congestion. However, they noted this requires substantial planning and investment from Council and partnerships with key stakeholders in the LGA.

Waste - Optimising waste management systems was also highlighted as an opportunity areas for smart cities, one that other cities like Newcastle have deployed in recent years. They shared learnings from past experience in this sector, in particular, councils typically install smart bins to understand community behaviour and often find that bins get filled by waste from restaurants and eateries in the area.

Energy - City of Parramatta is becoming increasingly and significantly more electricity dependent, hence panel members reinforced the timely need to consider smart technology that can optimise energy use, make it renewable and monitor usage.

Infrastructure - The deployment of 21st infrastructure that underpin all concepts of smart city projects was noted as a key priority for the LGA. Panel members spoke about the opportunity to develop guidelines that encourage future developments to embed infrastructure such as smart plumbing and conduits. They told us investing the upfront cost in providing these facilities during development is much more cost effective than retrofit built infrastructure at a later stage.

Capacity building -Up-skilling the population, and building their digital literacy capability and improving digital access was noted as more important than having state-of-the-art technologies. They also told us taking down language barriers while sharing information as a crucial consideration for City of Parramatta.

Decision-making - Panel members spoke to smart technology's capability to not just improve decision making for government, but it can also inform and support the personal decision making for the community. For example, providing transparent and accessible information on the amount of money they can save in a year may encourage people to choose public transport.

Collaboration -They encouraged further exploring public and private partnerships in implementing smart city projects. Panel members spoke about examples such as the private sector being far ahead in the mobility space, in particular, providing EV charging stations.

Innovating on new and better processes to collaborate with the community was encouraged as best practice for the planning and implementation of smart projects. Examples mentioned were co-design activities and youthparliament.

They also urged Council to continue collaborating with existing universities and leverage the extensive knowledge they hold to further build smart solutions that are efficient, community and place specific. One of the examples included partnering with the university and using their resources to simulate smart solutions in a metaverse (online city) before investing money in building physical solutions.

Data - The challenges of adopting open data was acknowledged by all panel members. Tell encouraged Council to tell stories and share insights about what the data represents, which could provide a higher sense of trust between the community and the government.

Economy - Panel members noted it is a priority for Council to be a leader in this space and be proactive about defining what 'innovation' means to them and what type of innovation they are seeking to incubate. They told us this is vital in attracting the right kind of talent and fostering an innovation culture, whilst distinguishing Parramatta from the other cities that have an ongoing innovation buzz.

They also noted with significant investment coming into Parramatta, Council is encouraged to support start-up businesses that align with Parramatta's priorities, for example, if mobility is a space Council decides to tackle head-on, they can prioritise attracting micro-mobility businesses who still don't have an anchor base in NSW.

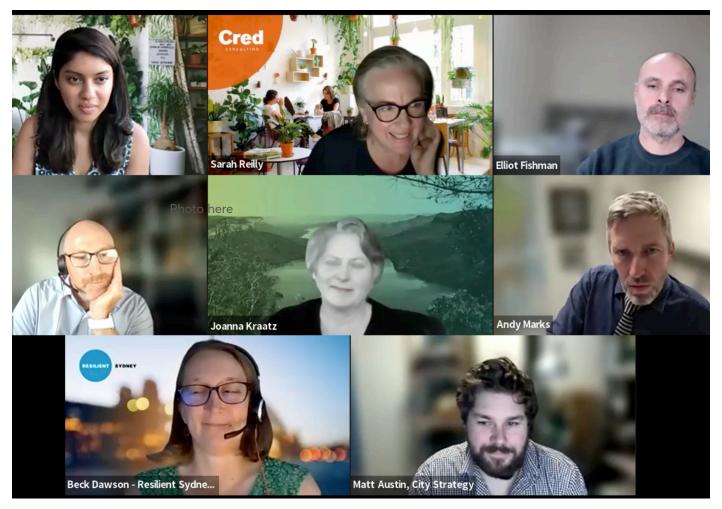


Figure 4 - A snapshot of the online Expert Panel Workshop



Figure 5 - A snapshot of online interview with Chris Pettit

5. Community pop-ups

Three community pop-up sessions were conducted in the City of Parramatta LGA to gather input and feedback from a diverse range of participants, including residents, visitors, and members of the wider Parramatta community who may not typically participate in traditional engagement activities like Have Your Say opportunities. The purpose of these sessions was to ensure that voices from various backgrounds and perspectives were heard and considered in the project.

Pop-ups were held at:

Location	Date and time	Participants (estimate)
1. Epping Town Centre	Thursday 16/06/2022 from 5.30 to 7.30 pm	37
2. Blaxland Riverside Park	Saturday 18/06/2022 from 12.00 to 2.00pm	21
3. Parramatta Farmer's Market This pop-up was delivered by Council and these learnings have been integrated into this chapter.	Wednesday 22/06/2022 from 12.00 to 2.00pm	20

Below is the age split of the participants who attended the first and second pop-up, that was calculated by noting down the approximate age group of the participants on a tally sheet:

- Up to 12 years 10%
- 13-19 years 7%
- 20-30 years 24%
- 31 50 years 47%
- 51 65 years 5%
- 66+ years 7%







Figure 6 - Photos from the community pop-ups

5.1. What we heard

Below is a summary of findings by pop-up activity.

5.1.1. Dotmocracy boards

This dotmocracy activity asked the participants to respond to two key questions to help define the vision and priorities in a smart city. Not everyone who answered one, answered the other.

What are the three most important outcomes the smart city initiatives should achieve for Parramatta?

Participants were asked to choose their top three outcomes that they would like future smart city initiatives to achieve.

A total of 164 votes were received across the three popups. As shown in the graph below, the words that received the top five number of votes are:

- Sustainable (31 votes)
- Liveable (31 votes)
- Connected (19 votes)
- Accessible (17 votes)
- Inclusive (13 votes)





Figure 8 - Photos from the community pop-ups

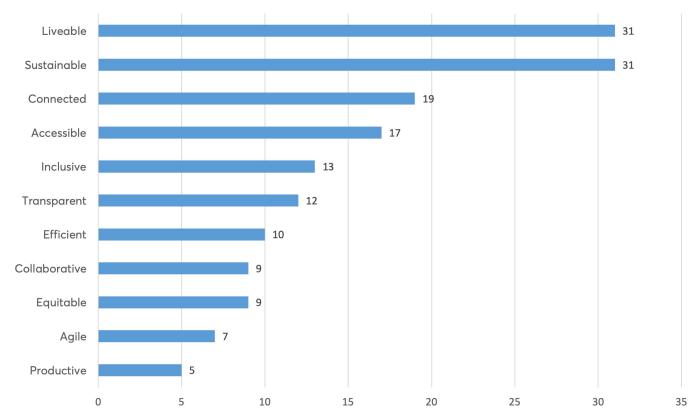


Figure 7 - Graph of number of votes received on 'outcomes' board for smart city initiatives

Previous consultations identified the community's priorities for Parramatta's future. Which of these are the most important for the smart city initiatives?

Participants were given three dots and asked to choose their top three priorities that are important for smart city initiatives from a list of priorities that were identified through previous consultations.

A total of 150 votes were received across the three popups. As shown in the figure below, the priorities that received the top five number of votes are:

- Public transport and mobility (25 votes)
- Climate change (17 votes)
- Housing affordability (17 votes)
- Planning and urban development (16 votes)
- Community engagement (11 votes)





Figure 10 - Photos from the community pop-ups

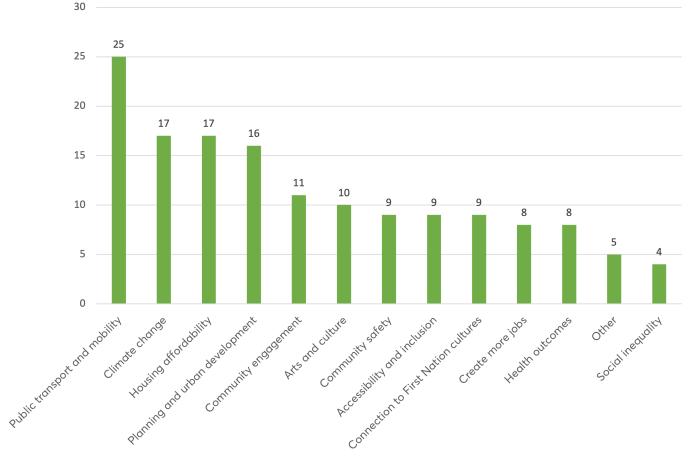


Figure 9 - Graph of number of votes received on 'priorities' board for smart city initiatives

5.1.2. Ideas boards

There were three 'Ideas' boards that had six smart city characteristics listed, and we asked participants to note City of Parramatta's strengths, weakness and ideas to enable it to become a leading smart city, under these six characteristics.

A total of 174 responses were received across the three community pop-ups. Please see below summarised responses by characteristic:

Smart Living (49 ideas)

- A high proportion of participants expressed concerns about Parramatta becoming over developed. While they acknowledged growth is inevitable, they urged Council to leverage technology and data to better plan and deliver social and community infrastructure to meet the growing demand
- Participants noted Parramatta has good community infrastructure, in particular parks, they spoke about using technology to improve maintenance of community infrastructure
- Participants noted housing prices are high in the LGA and new models of housing are required to make the area more liveable
- They spoke about smart technology being an opportunity to improve social inclusion, particularly for culturally diverse, First Nations and elderly population. Ideas included providing information in multiple community languages, celebrating First Nations community through public and digital art, and improving digital literacy of older people
- Participants spoke about addressing homelessness in the LGA. Ideas that were shared to mitigate this challenge included exploring innovative affordable housing options, social programs run by service organisations and matching rough sleepers to shelters through data-driven technology
- The cultural events in Parramatta was spoken about as a key strength. Participants expressed they would like to see more cultural and community events in public spaces, and use it as a way to activate the public domain and improve night time economy
- The diverse cultures living in the LGA was considered as one of the significant strengths of Parramatta. Participants would like to see more of this diversity represented in the public domain, and more ways to make life easier for this diverse population
- Participants noted safety was a concern in Parramatta, in particular, the CBD at night, and told us this is a good smart city opportunity to make Parramatta a safe place to be at all times
- A need for better access to health services was mentioned consistently across all pop-ups as a priority for the community
- Participants spoke about Parramatta having limited

cultural offer including events and shows that appear to largely cater to older and Caucasian audiences. They told us it will be important for Parramatta to diversify its cultural offer including making it responsive to the people who live, work, study and visit the LGA.

Smart mobility (34 ideas)

- A high number of participants told us Parramatta was well-connected to Sydney CBD, however, they expressed connectivity within the LGA needs to be improved. They noted a need for more direct buses to the CBD from other suburbs as a high priority
- They noted congestion continues to be a priority challenge for Parramatta that smart and innovative thinking can help address. Ideas included using data and technology to live monitor traffic flow and subsequently optimise traffic planning
- A number of participants told us smart tech can be used to improve walking and cycling in Parramatta, in particular, for older people, people with a disability, and parents who use a pram
- They expressed smart thinking can be employed to better plan transport infrastructure to respond to population growth, they clarified this does not mean making more way for cars, but planning to not require a car to travel
- They encouraged Council to explore more environmentally sustainable and future models of mobility, including micro-mobility options, e-bikes, autonomous vehicles and electric cars
- They also told us the roads can be better designed to cater to flow of traffic during peak hours
- Participants spoke about using the smart parking app either in Parramatta or other LGAs, and encourgaed Council to develop this further to make parking easier, in particular, at peak hours.

Smart environment (33 ideas)

- A significant proportion of participants expressed Parramatta's natural assets are highly valued by the community. They told us smart city can be used as an opportunity to preserve and strengthen connection to nature, in particular, Parramatta River and the natural bushland
- They also told us it can be a tool to celebrate natural resources, and build awareness through smart education. Participants wanted to learn about local flora and fauna through smart initiatives
- They expressed it is a great opportunity to nudge behaviour change in relation to climate change
- They encouraged more planning for renewable energy and expressed a desire for parks, streets, buildings and open spaces to be powered by solar energy. Ideas shared included exploring the deployment of community batteries that have been used in Epping
- Participants expressed concerns about limited green space in Parramatta, and this would be further

impacted by the planned population growth. They want to see better and more provision of public open spaces, so everyone can access these much needed facilities, everyday and in times of crisis (such as COVID lockdowns)

- They told us future housing and development should be better designed to improved environmental outcomes
- Participants would like Council to continue engaging with the community to hear their voice about the environment and respond to it correspondingly.

Smart government (26 ideas)

- A high proportion of participants expressed a desire for improved and integrated information systems.
 They want to easily access and understand what is happening in Council, this is applicable for both online and print communication. They noted while there is a significant effort to improve online communications, printed information should still be provided, in particular, for older people who may not be digitally
- They commended Council for engaging with the community across several projects, and urged Council to continue these efforts
- A better systems to know who to contact in Council and the need for an improved method to lodge complaints (eg. integrated ticketing systems) was noted as a high priority
- Participants spoke about the importance of Council being transparent regarding the data that is collected what is collected, how it is collected and what it will be used for. They also want to be able to access this data through an open data portal
- While open data was discussed as priority for Council, several participants expressed concerns around digital security and privacy, and the need for Council to work further on it to make a real difference in the smart city sector.

Smart people (18 ideas)

- Participants spoke about using smart tech to further strengthen and celebrate First Nations cultures, history, stories and heritage of Parramatta
- They spoke about the vital importance of providing information in multiple community languages to make Parramatta a welcoming place for all
- They noted Council can innovate on programmes to integrate new arrivals as a way encourage Parramatta as a destination for people migrating into Greater Sydney
- They would like more initiatives to bring the community together through events, both online and in person
- They told us technology can be used to improve outreach services to cater to vulnerable population
- They spoke about creative 'smart community' initiatives such as Council partnering with other players

to create a personalised information data portal that can display data relevant to that person.

Smart economy (14 ideas)

- Participants would like to see more specialty local shops that represent and cater to the diverse cultures in Parramatta
- They would like more eco-friendly and circular manufacturing facilities to be based in the LGA
- They told us to provide more accessible and affordable spaces for new businesses and creatives. City of Newcastle was highlighted as a notable example.

5.1.3. Thriving CBD board

Participants were asked to share their (smart city) ideas on what will enable Parramatta to become a thriving CBD, which is one of Council's identified goals. Over 45 responses were received and they are summarised below. Participants told us Parramatta can become a more activated and thriving CBD through:

- · Provision of more co-working spaces
- Better transport connectivity to the CBD from Western Sydney, and from other parts of the LGA
- · Implementation of the light rail and metro projects
- · Events that can bring people to the CBD
- · A range of housing tenures, types and rental ranges
- · Communications around what the CBD offers
- · Safety improvements
- · Better internet connectivity
- · Improved support services
- A network of community champions for the CBD.

6. Stakeholder interviews

Stakeholders such as state agencies, major employers, universities, private sector, technology experts and other local councils form an integral part of planning for and implementing the future Smart City and Innovation Strategy. A total of 25 interviews were conducted with 30 stakeholders from June to July 2022.

Interviews were conducted via Zoom and facilitated by project team members from Cred Consulting and City of Parramatta Council.

The purpose of the interviews was to:

- Ensure key stakeholders have an opportunity to have their sav
- Identify what a smart city means for City of Parramatta
- Understand stakeholders' perception of City of Parramatta's competitive offer
- Understand Parramatta's priority challenges and how it can addressed through smart and innovative thinking
- Understand key opportunities for the Parramatta **Smart City Strategy**
- Identify partnership opportunities to implement and deliver the Smart City Strategy.

Interview questions and background information were provided to interviewees in advance. This chapter provides an overview of the findings from the stakeholder interviews.

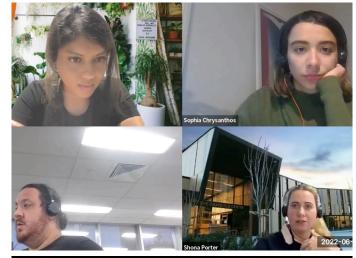






Figure 11 - Snapshots from online stakeholder interviews

_

6.1. Stakeholder interview list

The table below shows interviewees by their organisation.

Organisation name:	Organisation type:	Name of interviewee(s):	Designation:
Cumberland City Council	Local government	Shona Porter Christopher Manoski	Executive Manager City Strategy Senior Coordinator Place and Engagement
University of Sydney	University	Nicole Marchhart	Energy and Waste Manager
Business Western Sydney	Alliance	Chris Taylor Mustafa Agha	Senior Manager, Advocacy Manager, Policy
Parramatta Business Chamber	Alliance	Luke Magee	President, Parramatta Business Chamber
University of New England	University	Robert Field	Director
Department of Planning and Environment	State government	Sandy Burgoyne Rory Brown	Non-executive Director GAICD, Collaborator,Technologist, Smart and Sustainable Places for People Executive Director, Smart Places and Net Zero Cities DPE
Smart Central River City Strategy Group + Sydney Olympic Park Authority	Alliance + State government	Susan Skoudas	Director, Place Management at Sydney Olympic Park Authority
Connect Macquarie Park Innovation District	Not-for-profit	Mark Ames	General Manager
PAYCE	Local business	Dominic Sullivan – PAYCE Talal Ghattas – MPAYCE	Director Strategy Infrastructure Economics Consulting MBA
University of Sydney	University	Tooran Alizadeh, Associate Professor	Associate Professor of Urbanism and Infrastructure Planning, ARC Future Fellow, Co-convener of Smart Urbanism Lab
The Gaimaragal Group's	Community/First Nations stakeholder	Susan Moylan Coombs	Founding Director
Western Sydney Startup Hub (North Parramatta Startup Hub)	Alliance	Davor Jozic Hesh Raslan Daniel	Director, Innovation District Ecosystem Westmead Health & Innovation District FRGS MPIA CMILT

		Name of	
Organisation name:	Organisation type:	interviewee(s):	Designation:
Western Sydney Leadership Dialogue	Alliance	Adam Leto	Executive Director
Walker Corporation	Private	Simon Farrow	Chief information officer
Health NSW / Westmead LHD	State government	Helen Ryan	Coordinator Partnerships and Healthy Places at Western Sydney Local Health District
Transport for NSW	State government	Jullietta Jung	Senior Manager Future Mobility Program
WSU	University	Peter Tow	Executive Director, Strategic Projects and Improvements, Strategic Projects Implementation & Improvement
Greater Sydney Commission	State government	Liza Noonan	Westmead Health & Innovation District / GCC
Scentre Group	Private	Anthony Iannuzzi Con Stavropoulos Lean Tompkins	Development executive Leasing manager Centre manager
Sydney Water	State government	Persephone Rougellis Farhana Rifat	Strategy Manager Senior Strategy Advisor
Western Sydney University - Launch Pad	University	Don Wright	Director, Innovation & Entrepreneurship Office of the Deputy Vice-Chancellor, Research, Enterprise & International
UNSW	University	James Sankar	Lead Project Manager, UNSW IT
Powerhouse Museum MAAS	State government	Simon Walkom	Director, Strategy & Operations
TAFE NSW	Local government	Paul Andersen	Head of planning and development at TAFE NSW
Delloitte	Private	Helen Hamilton- James	Managing Partner, Western Sydney

6.2. What we heard

This section summarises findings that emerged across the stakeholder interviews.

6.2.1. What is the role of a smart city?

Stakeholders were asked what the ideal role and relevance of a smart city is in relation to City of Parramatta, consistently all stakeholders told us the future smart city should be people and place specific to make a real difference. They told us it needs to respond to the community's needs and aspiration to result in long-term successful outcomes.

They told us future smart cities should:

- Be community centric
- Deliver improved liveablility outcomes
- Be sustainable and result in improved environmental outcomes
- Be experimental
- Champion collaborations and partnerships
- Be efficient in how it operates and uses its resources
- Demonstrate innovative leadership
- Be evidence-based, and
- Improve overall productivity.

"A smart city needs to stick to a place and only then can make a real difference."

University of Sydney

"Smart city is more of a process than the product or the data itself, it is about how we can future proof a place by embedding technologies that can evolve and develop over. "

PAYCE

"It's about how do we use data and tech to make people's lives simpler."

University of New England

"Use place-based technology and data for businesses and residents to make a difference and deliver outcomes."

NSW Smart Places

"Smart cities should respond to the demographics and population of the area, their needs and interests."

Business Western Sydney

"One of the advantages of adopting smart thinking approaches is doing things in new ways which save time and effort, and ultimately money. "

Macquarie Park Innovation District

6.2.2. What are City of Parramatta's strengths that can enable it to become a leading smart city?

Stakeholders shared their thoughts on what are City of Parramatta's existing strengths that can further establish it as a smart city and enable it to deliver improved social, environmental and economic benefits. Consistent strengths and competitive advantages that emerged across stakeholder interviews include:

- Parramatta's central location in Greater Sydney. The ability to travel to Sydney CBD in under 30 minutes
- Due to its strategic location, its ability to access a diverse range of people within 20 to 30 minutes, which is a key attractor for local businesses and employers
- The diverse planned investments including the Metro, the Light Rail, the New Powerhouse Parramatta Museum, and the increasing funding opportunities for
- The government sector presence in the CBD and the subsequent opportunities it brings, in particular, attracting more businesses to locate in Parramatta
- The high forecast population growth and the opportunities that come with it including increase in work force, increase opportunities to develop/ redevelop the CBD and the LGA and subsequently deliver more community benefits (often through contributions)
- The diverse and multi-cultural community who live in the area, who contribute to a cosmopolitan feeling, have the ability to attract more people to Parramatta, and can come up with unique smart solutions
- The high proportion of First Nations community to whom Parramatta has been home for centuries, and the ability to learn from them
- The highly educated community with diverse skills which is a key attractor for future employers
- The growing importance of Westmead Health Precinct as the southern hemisphere's bio-medical hub
- Existing assets including natural resources, public spaces and community infrastructure
- Existing top universities in close proximity to the CBD such as Western Sydney University (has been named number one in the world for its social, ecological and economic impact), University of Sydney, UNSW and University of New England
- The variety of events and activities that regular happening the CBD and the wider LGA
- The proximity to the new Aerotropolis airport, and the capability of local businesses and manufacturers to ship out their products more quickly and easily
- Proactive City of Parramatta Council who actively think and plan ahead, and strongly collaborate with other stakeholders to deliver more positive outcomes for the area.

"We need to acknowledge the large scale renewal of Parramatta, there are big ideas around that including the civic link which is really amazing piece of work."

Powerhouse Parramatta

"Geographically Parramatta is the nerve centre of Greater Sydney"

UNSW

"Parramatta has had the most opportunity in the last 5 years than any other city in NSW."

Cumberland City Council

"We have got two major universities, four large hospitals, plenty of space and really great planning to be able to develop commercial office space and manufacturing spaces."

Business Western Sydney

"Governments current and planned investment in transport (light rail and metro), as well as existing heavy rail and bus services is a big strength."

TAFE NSW

6.2.3. What are City of Parramatta's challenges that being a smart city can help address?

Stakeholders spoke about the existing and anticipated challenges for City of Parramatta that are either barriers for creating a successful smart city, or are challenges that being a smart city can help address. These include:

- Lingering misconception of Parramatta being an underdeveloped area. They highlighted that the image of the CBD and the wider LGA has not caught up with how it has evolved over the recent years or its potential to be a thriving and vibrant city that will be the centre of Greater Sydney. Stakeholders told us this is the most crucial challenge for Parramatta now that needs to be addressed through a multi-pronged approach to enable it to meet Council's vision
- The existing and anticipated congestion and parking issues in the LGA. While the implementation of the light rail and metro will remove cars from the road, the forecast population growth will add more pressure to the transport systems
- The significant population growth which is also a challenge in terms of the imminence for data-driven urban planning and development. They also spoke about this adding more pressure on the LGA's social infrastructure
- Rising climate change challenges including urban heat and flooding challenges
- The high level of homelessness in the LGA and how it will be impacted by future growth
- The reducing affordability of Parramatta, in particular, housing choices
- Limited and fragmented cultural offer that largely caters to older and Caucasian demographics
- Slow internet connection
- Disconnected public domain that don't link key destinations in Parramatta, in particular, the lack of connection between Westmead and the CBD
- The limited night time economy
- Th ongoing challenges and concerns of open data sharing and privacy
- Council's compulsion to be risk averse because it spends public money and therefore negatively impacts adopting an experimental and innovative mindset
- Council's limited funding and resources to deliver smart city projects
- High personnel turnover in Council leading to loss of knowledge and connections with stakeholders.

"Congestion is sign of success - it exists because you are where it is happening. If a city does not have any congestion at all, then that's where the real challenge is. No matter, we need new ways to solve it."

Macquarie Park *Innovation District*

> "I've noticed the amount of homeless people through the station. It's your first impression of the city."

NSW Health

"There is a stigma with Western Sydney, re-branding Western Sydney and Parramatta needs to happen. Smart technology can be used as a medium for this."

University of Sydney

"Environmental challenges like urban heat and flooding along the river is a major issue."

NSW Health

6.2.4. Priority smart city opportunities

We asked stakeholders to share priority smart city opportunities for City of Parramatta with a focus on the industry or agency they represented. The extensive responses have been largely themed as follows:

Create liveable, connected and future ready places (88 comments)

Stakeholders emphasised the importance of creating connected and vibrant spaces for successful smart and innovative cities. They highlighted the need to make smart cities attractive destinations where people want to visit, stay, and spend time.

A consistent theme highlighted by stakeholders was the need for improved integration between Westmead and Parramatta CBD, as well as enhancing the accessibility and visibility of Parramatta Park through well-lit and clear sightlines. Additionally, they spoke about the importance of creating human-scale areas.

Utilising smart technologies and digital placemaking also emerged as a key opportunity to activate City of Parramatta. They suggested exploring partnerships with cultural venues like the New Powerhouse Museum and Riverside Theatre, as well as involving community cultural groups to deliver engaging experiences.

To better cater to the diverse demographic, particularly young people and culturally diverse communities, stakeholders recommended improving City of Parramatta's cultural offerings. They also encouraged innovative safety measures during both day and night, specifically targeting the safety of women, children, and culturally diverse groups.

Embedding smart infrastructure in future developments, such as smart plumbing and high-speed Wi-Fi, was widely discussed. Stakeholders emphasised the cost-effectiveness of early integration and highlighted the importance of considering the full life cycle cost. Examples included equipping future roads and buildings with smart conduits and integrating smart irrigation technology into upcoming parks.

Data creation, utilisation, integration and governance (60 comments)

To ensure responsible data management and foster trust, stakeholders emphasised the need to adopt international data standards. These standards establish consistent practices for collecting and using data, promoting transparency and ethical usage.

They also noted clear communication is essential regarding the types of data being collected and how it will be used. By providing transparent information to the public, Council can build trust and accountability.

Integrating systems to share data among stakeholders was emphasised to avoid duplication and promote efficiency. Connected systems facilitate seamless sharing of relevant information, enhancing collaboration and informed decision-making. In addition, to ease the burden on Council and broaden data collection, exploring partnerships with public and private entities was highlighted. Collaborating with external organisations allows for a wider range of data sources and expertise, ensuring meaningful insights without overstretching Council resources.

In addition to data accessibility, stakeholders stressed the importance of presenting data in a transparent and easily understandable manner. User-friendly interfaces and clear communication techniques empower people to engage with data, make informed decisions, and actively participate in shaping their future city.

Lastly, robust data governance across stakeholders was highlighted as a crucial step for the uptake for smart and innovative initiatives. Establishing clear policies and frameworks ensures responsible data management, including data quality, security, and protection of sensitive information.

Communication and branding (48 comments)

To position City of Parramatta as an attractive destination for living, working, and starting a business, stakeholders emphasised the importance of effectively communicating the value proposition City of Parramatta, as well as smart initiatives and the broader concept of smart city thinking.

This involves articulating the benefits for all stakeholders involved, showcasing how smart initiatives improve the quality of life, enhance services, and foster innovation within the City of Parramatta. This exercise aims to communicate why Parramatta is the ideal innovation hub, highlighting the unique opportunities and offerings available to residents, professionals, and entrepreneurs.

Recognising the cultural and linguistic diversity of the community, stakeholders emphasised the importance of effective communication in multiple community languages. This includes implementing online platforms and in-place digital signage that cater to diverse cultural backgrounds, making information and services more intuitive and accessible. By providing multilingual communication channels, Parramatta can create a welcoming and inclusive environment for people from diverse backgrounds, fostering a sense of belonging and ensuring equal access to important information.

By effectively communicating the value proposition, undertaking a branding exercise, and embracing multilingual communications, the City of Parramatta can enhance its reputation as an innovation destination.

Experiment, collaborate and partner (44 comments)

To foster collaboration and innovation, stakeholders highlighted the importance of providing physical spaces for people to come together. This includes offering co-working spaces and opening up existing university and office spaces to the community. By creating these collaborative environments, Parramatta encourages knowledge sharing and cross-sector partnerships.

Supporting entrepreneurship, stakeholders emphasised the need for micro funding opportunities for budding start-ups. This financial support helps nurture innovative ideas and cultivates a vibrant start-up ecosystem within the city.

Clear communication of City of Parramatta's priorities plays a crucial role in eliciting an effective response from stakeholders. For instance, universities can develop projects that address real problems in the City of Parramatta, while start-ups can offer innovative solutions to local challenges. By aligning efforts with these priorities, the City can leverage expertise and drive positive change.

Partnerships with universities are key to fostering innovation and skills development. These collaborations can involve student placements within the Council, joint initiatives to develop location-specific courses and projects, and training programs that prepare individuals for future-ready jobs. By bridging the gap between theory and practice, these partnerships ensure that the workforce is well-equipped to meet the city's needs.

Similarly, partnerships with TAFE institutions help address future job demands. By effectively communicating emerging industries and skills requirements, City of Parramatta enables TAFE to develop relevant training courses. This includes training technicians who can operate and maintain smart infrastructure, ensuring a skilled workforce for the city.

Collaboration with other councils, the State Government, and relevant agencies is instrumental in driving progress in smart solutions. By sharing knowledge and resources, City of Parramatta can continue to demonstrate proof of concept, evolve solutions, and iterate on successful implementations. Furthermore, partnerships with the private sector can facilitate the delivery, operation, and maintenance of smart infrastructure, harnessing expertise and investment.

Stakeholders stressed the importance of ongoing engagement with the local community to ensure that smart initiatives remain inclusive and relevant. By involving residents, businesses, and community groups in decisionmaking processes, City of Parramatta can tailor solutions to meet their specific needs.

Inclusive and community centric (30 comments)

Stakeholders recognised the value of utilising smart thinking and capabilities to identify community challenges and priorities. By harnessing data and community feedback, they emphasised the importance of evidencebased decision-making. This iterative approach ensures that smart city initiatives remain responsive to the evolving needs of the community.

Within this context, stakeholders highlighted the potential of smart solutions to bridge social equity gaps. By utilising data-driven approaches, they emphasised the ability to map population vulnerabilities and implement targeted interventions and support.

Moreover, stakeholders emphasised the transformative power of "smart" in enhancing First Nations visibility and promoting multiculturalism. They stressed the importance of deliberate storytelling choices and the highlighting of diverse cultural narratives. By fostering inclusivity and recognising the contributions of First Nations and multicultural communities, the City of Parramatta can cultivate a strong sense of identity and pride.

Education and capacity building emerged as vital components of a smart city. Stakeholders stressed the significance of bridging the digital literacy gap through comprehensive education programs. Equipping residents with the necessary skills and knowledge to leverage smart city tools and technologies is crucial for fostering digital inclusion across all sectors of the community.

Lastly, they recognised the need to explore new affordable housing models in the City of Parramatta. They highlighted the role of affordability in enabling innovative and creative businesses to thrive, while also providing a mix of housing types to meet the diverse needs of the community.

Environment and sustainability (26 comments)

Stakeholders emphasised the use of technology to support sustainability and environmental outcomes. This includes implementing smart renewable energy solutions and providing tools to help people make informed decisions about the environment.

Innovative approaches were encouraged for harvesting storm and rainwater, as well as addressing rising urban heat. Open data on urban heat can inspire creative ideas to mitigate its impact. Exploring new models like community batteries and utilising roof spaces for solar panels were identified as potential avenues for sustainable energy generation.

The possibility of transforming the Camellia Rosehill Precinct into a solar farm and integrating a smart grid for efficient energy transmission were also highlighted. Stakeholders stressed the importance of sustainability standards for future buildings, such as incorporating solar panels, water-saving techniques, and implementing FOGO (Food Organics, Garden Organics) waste segregation.

Investment in the preservation and enhancement of the Parramatta River was emphasised as a crucial aspect of sustainability. Leveraging technology was seen as a means to strengthen the connection between the community and nature, fostering a greater appreciation for the environment.

By embracing technology and innovative solutions, City of Parramatta can make significant strides towards a sustainable future while preserving and enhancing its natural resources.

The leader in innovation (15 comments)

Stakeholders emphasised the importance of showcasing and celebrating City of Parramatta's innovative and smart accomplishments. By highlighting successful initiatives, the City can inspire others and create a sense of pride within the community.

Sharing insights and knowledge was seen as a valuable way to foster collaboration and learning. Online platforms can be utilised to showcase the achievements of local startups, providing visibility to their innovative approaches. Additionally, these platforms can highlight how technology has positively impacted local businesses, offering valuable insights and lessons learned.

Attracting high-value jobs was identified as a priority, but stakeholders emphasised the need to focus on creating jobs rather than solely relying on importing them. By fostering an environment conducive to innovation, entrepreneurship, and skills development, City of Parramatta can generate employment opportunities that align with the needs and aspirations of the community.

7. Focus groups

Two online focus groups were held to explore priority barriers and ideas on how the Smart City and Innovation Strategy can help support local businesses and foster the start-up ecosystem in City of Parramatta:

- Start-ups Focus Group: Thursday, 21 July 2022, 3.30 to 5.00 pm
- Local Businesses Focus Group: Friday, 23 July 2022, 3.30 to 5.00 pm

To ensure broader community engagement, participation in the focus groups was open to the public. Interested individuals were able to register for free through an Eventbrite registration form, with promotion carried out via Council's webpage and LinkedIn page. Additionally, direct invitations were sent to local businesses and start-up hubs in Parramatta, further extending the opportunity for participation.

The focus groups were attended by a total of seven participants. The majority of attendees were entrepreneurs and business owners from Western Sydney, including those with their own start-ups and smart city-focused ventures, bringing a wealth of knowledge and expertise to the sessions.

7.1. What we heard

Fundamental drivers of innovation

Participants were asked to share their thoughts on what are the fundamental drivers of innovation for start-ups and local businesses. Summarised responses include:

- The most important attribute is customer demand. They further expanded on it saying governments usually issue tenders as a way to reduce corruption, however, they are often won by big companies, because they have dedicated tender teams. They told us it's hard for startups to compete as they don't have comparable resources
- Availability of funding was also widely discussed. Participants spoke about the fundamental lever for a person to start a new businesses is the availability of funding, they spoke to opportunities where Council ca encourage new business creation through rolling our micro-grants

"It is very hard to contact Council as a startup. We bring different values to the table, which are outside of the usual approach. But if they don't talk to us there will never be a tender that reflects that."

Focus group participant

"We have to advertise and educate people what the area offers... Come to us, because if you do it opens this world of opportunities."

Focus group participant

"A lot of people with a tech background are on visas and are stuck in jobs that are very conservative/no startups, just to pay their live. That is why you have more Northshore people in the startup space, as their parents have money and there is less risk."

Focus group participant

- Some participants expressed to embed an innovation mindset, it is crucial to start early, when kids leave school or university, and encourage entrepreneurial an mindset
- Fast internet connectivity was also noted as a key factor for new technology based companies.

Opportunities for Parramatta

Participants were asked to share their thoughts on what are priority opportunities for Parramatta to make it a conducive place for innovation, to make a thriving place for start-ups and local businesses. Summarised responses include:

- Parramatta has a very diverse CALD community and that bring the advantage of coming up with unique solutions, provide these communities an opportunity to work together
- Provide a co-working and collaboration space for start-ups to work in and meet other people, the Western Sydney Startup Hun was acknowledged as a space that could fill this gap
- Dedicate a person within Council as a contact for start-ups and innovative businesses
- In compliance with State and Federal policies, encourage Council to adopt open data policies and practices, make the data actually open and accessible and reduce resistance to sharing data
- Open source data where possible and reduce regulatory barriers. Dedicate a data person within Council who can be contacted to get access to open data as well as to share learnings
- Communicate the value proposition, particularly, what is the benefit for start-ups and local businesses to come to Parramatta. Participants felt this will make one of the biggest differences in changing the perception of Parramatta and attract more industries to it
- Provide supporting amenity such as cafes, activated public spaces, that can make Parramatta an attractive place that people look forward to come to and spend time in. They noted in this age of work-from-culture, if the physical space does not offer significant social and collaboration values, there is no push for people to leave the comfort of their homes and travel to a work place
- Explore public -private partnership in delivering and implementing smart cities
- Share regular insights on how adopting technology has helped local businesses, to help them overcome resistance to using technology
- Be experimental. Participants suggested that Council should clearly communicate their priorities and collaboratively work with start-ups that are addressing relevant local challenges
- For smart city (start-up) or innovation products, they encouraged local and state government to purchase products on the community's behalf as they benefit the whole community
- Endorse start-ups within the LGA and connect them to other businesses and customers
- Provide networking opportunities including events and spaces to foster collaboration

"As part of this ecosystem, we need something like the hub on York Street. We need to have a place to come together regularly to network, but also to meet with the business chamber face to face. "

Focus group participant

"Councils don't necessarily need to be the end-user but need to influence, endorse and connect businesses and users."

Focus group participant

"I think grants might not be the solution – there is an entire financial industry which is geared to startups, but the problem is as a start-up you don't have a 12 or 24-month track records"

Focus group participant

