



City of Logan: Home of Civic Innovation

# City Futures Strategy



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# The City of Logan – our Future City

**Innovation powerhouse. A city of creativity, collaboration, and leadership. An exemplar of sustainability and livability. A city renowned for excellence in design, technology, entrepreneurship and vibrancy.**

## **Home of civic innovation.**

That's our vision. A vision we've championed, a vision shared by our community, and a vision affirmed and enacted by this *City Futures Strategy*.



**Like all cities around the world, the City of Logan faces a host of emerging challenges and opportunities: climate change, population growth, congestion, environmental pressure, new technologies and global markets.**

We're up for the challenge, and we're ready for the opportunity!

The City of Logan says yes! We say yes to innovation. Yes to collaboration. Yes to new industry, new jobs and new ideas. Yes to trial and experimentation. Yes to learning. Yes to leveraging technology for community benefit. Yes to co-creating our future city.

We are on the front foot, proactive and positive, positioning ourselves to take advantage of emerging technology, the digital revolution, and innovative solutions. The future will not just happen to our city, we will take the initiative and shape our future, with confidence and purpose.

The City of Logan welcomes all partners who want to help design and build our future city. Community, investors, governments, innovators, researchers – local, national and international: we welcome your contribution to our city.

The City of Logan, a city of innovation, opportunity, diversity and action.

# Acting CEO's message

**We live in exciting times: times of new technologies, commerce, social relations, governance, and connection.**

Logan City Council is a Council of our times. We are dynamic and forward-looking, ready, willing and able to take new circumstance in our stride, and turn change and challenge into innovation and community benefit.

The *City Futures Strategy* is our commitment to promoting innovation, leveraging new technology, and welcoming collaboration to help build our future city.



**Council will lead by example.**

**We will modernise our services, infrastructure, and community engagement.**

**We will build our own innovation culture, capability and connections.**

We will act as city advocate, working with other levels of government to enhance policy outcomes and investment for our city. And we will champion the efforts and initiatives of others to accelerate positive change for the City of Logan.

Above all, Council will ensure this strategy delivers benefits for people; for our community. People are the reason, the focus, and the purpose of this City Futures Strategy. Technology, innovation and infrastructure are simply the enablers.

Council will work with the community to design and deliver our future city. And we will work for our community, striving always to improve livability, inclusion, sustainability, and opportunity.

I am proud indeed to release this strategy for the City of Logan, and excited by the future for our great city, which we will shape and enjoy together.

**Acting CEO Silvio Trinca**  
City of Logan

# City Futures – Introduction

**Imagine a well-planned, sustainable city that has local and global reach, where resources are used responsibly, and where connections between people and places are convenient.**

**The City of Logan is poised to become an economic and innovation powerhouse in South East Queensland, with influence extending nationally and internationally.**

**We will be the home of civic innovation.**

Our location between Brisbane and the Gold Coast, combined with our connectivity and our diverse, skilled population, gives us a platform on which we can fulfil our potential as an innovative, dynamic city of the future.

With more than 313,000 people calling Logan home, we are one of the fastest growing cities in Australia. Our communities comprise around 217 nationalities and cultures, and our population is expected to increase to more than 490,000 people by 2036.

Our city has urban, semi-rural and rural communities linked by the four Key Activity Centres of Beenleigh, Meadowbrook, Logan Central and Springwood. These centres are our emerging economic hubs, along with major centres and rapidly growing urban communities in the south-west. The Queensland Government's Priority Development Areas of Yarrabilba and Greater Flagstone will accommodate a significant proportion of our projected residential growth.

The City of Logan has already become a flourishing base for a range of sectors including health and aged care, transport and logistics, manufacturing and education. We are home to several centres of excellence (including the Logan Teacher Education Centre of Excellence), and we are well positioned to become a focal point for more such centres, as well as start-up incubators and innovation hubs.

Local challenges reinforce our innovation imperative. Our current city is highly car dependent. The majority of our community (60 per cent) travels outside of our city for work, with commute times well above the average for Brisbane and the rest of Queensland. Our education, income, and employment statistics are below the Queensland average.

To overcome these challenges, we must embrace innovation, technology and collaboration.

We take an inclusive view of innovation, to mean doing things differently to make our city, and our lives, better. (For more definitions of terms used in this Strategy, please see the Glossary on page 27.)

Our emphasis on innovation will drive our planning in creating a second CBD for our region in the City of Logan, which in turn will create new jobs and increase employment self-containment.

We have a young, dynamic population - our median age is 34 years and 22.6 per cent of the population is under 15 years - and we have the energy and drive to lift the City of Logan to new heights.

In the coming years, our city will be renowned for its smart city connectivity and place-making; our integrated transport systems and open data access; our improved energy efficiency and increased renewable energy; and the smart ways in which we engage with our community, mobilise new generations, and foster social inclusivity.

Our world is changing and we must not simply adapt and change with it; we must think ahead and anticipate where the next opportunities for our community will emerge.

To become an innovative, dynamic city of the future, we need to harness our economic, geographic and community assets, and we need a clear vision and a detailed strategy: a map for success.

The City Futures Strategy provides that map.

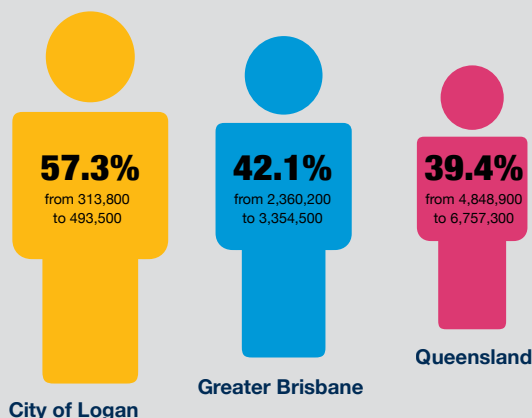
*This City Futures Strategy reflects the Logan City Council Corporate Plan 2017-2022, and is supported by the City of Logan Advocacy Strategy 2017-2019 and the Economic Development Strategy 2016-2021.*

The City Futures Strategy has a 5-year horizon, from 2018 to 2022, but it will be reviewed regularly to keep pace with change.



# The future: challenges and opportunities, key stats

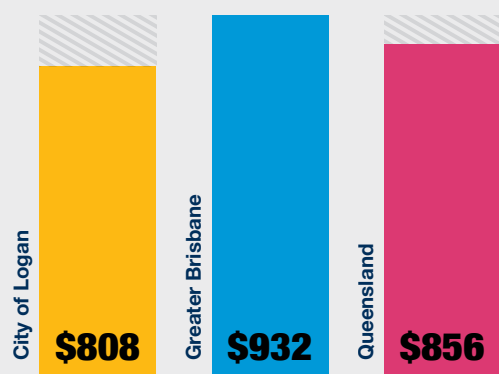
## Population – Projected growth (2016 to 2036)



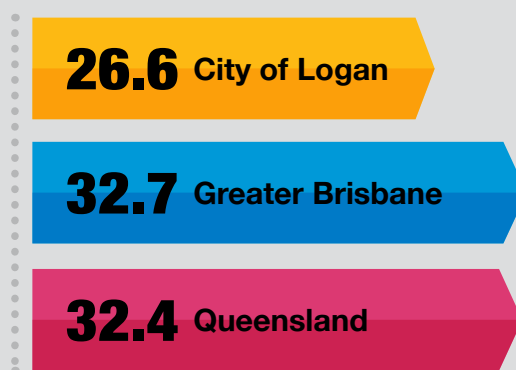
## Journey to work – Location (2016)



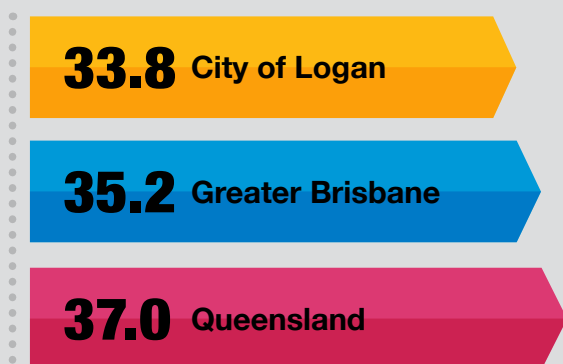
## Income – Median Weekly Household Income (2016)



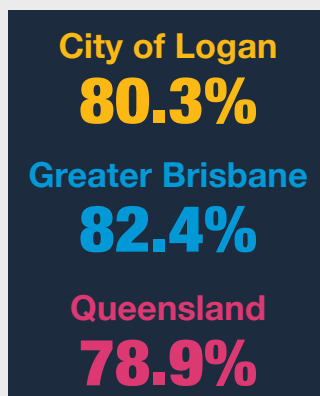
## Income equality – Income share of top 10% of earners (2015)



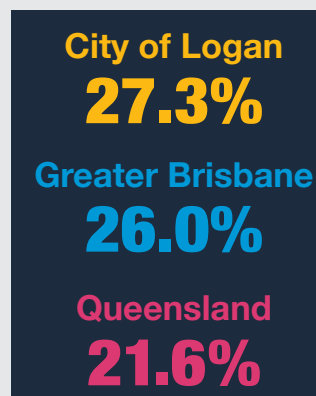
## Age – Median age (2016)



## Internet – Dwellings with Internet access (2016)



## Diversity – Population born overseas (2016)

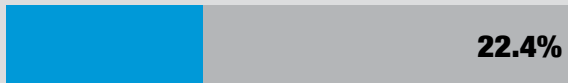


### Commuting – Lengthy commutes (greater than 45 minutes) 2016

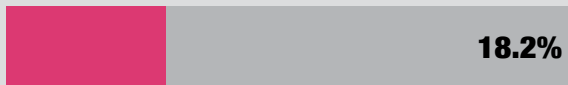
#### City of Logan



#### Greater Brisbane



#### Queensland



### Education

Completed Year 12  
(or equivalent) 2016

#### City of Logan

**46.8%**

#### Greater Brisbane

**56.9%**

#### Queensland

**50.5%**

### Employment

Participation rate (2017)

#### City of Logan

**62.1%**

#### Greater Brisbane

**66.9%**

#### Queensland

**64.7%**

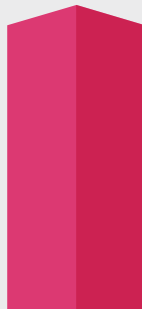
### Employment – Unemployment Rate (2017) as at September 2017



**6.6%**  
City of Logan

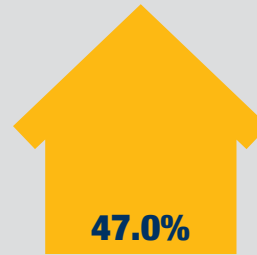


**6.1%**  
Greater Brisbane

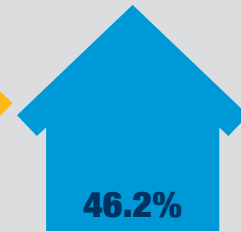


**6.2%**  
Queensland

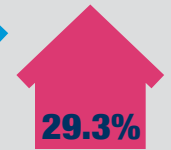
### Construction – Growth in annual dwellings constructed (2014-2016)



**City of Logan**  
(1,774 to 2,608)



**Greater Brisbane**  
(21,220 to 31,023)

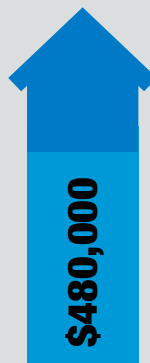


**Queensland**  
(39,271 to 50,775)

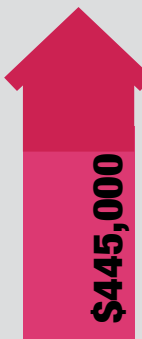
### Housing – Median Sale Price (2015)



City of Logan



Greater Brisbane



Queensland

### Journey to Work – Mode (2016)

Public Transport



Car



Active Travel



#### City of Logan

**3.9%**

**75.4%**

**1.3%**

#### Greater Brisbane

**8.5%**

**66.2%**

**4.0%**

#### Queensland

**5.2%**

**69.3%**

**4.3%**

# Our city, our future – What the community said

## What benefits should the City of Logan target by leveraging innovation and technology?

- 1 Increased job and economic opportunities
- 2 Better local services
- 3 Better social and environmental outcomes
- 4 Attracting investment
- 5 Enhanced community consultation

## What local services would you most like to see improved by innovation and technology?

- 1 Transport
- 2 Planning and development
- 3 Parks and amenities
- 4 Smart working facilities/hubs
- 5 Council's online services

## What are the greatest innovation opportunities for the City of Logan?

- 1 Education
- 2 Unlocking community creativity
- 3 Attracting new talent, ideas and investment
- 4 Establishing innovation hubs
- 5 Promoting the city's innovation community

## How can we promote innovation in the business sector?

- 1 Education and skills development
- 2 Enhancing communication and promotion
- 3 Encouraging connection and collaboration
- 4 Innovation programs

## What are our innovation strengths?

- 1 Diversity
- 2 Creativity
- 3 Collaboration

## How can businesses help build our innovation ecosystem?

- 1 Better digital connectivity
- 2 Collaboration programs
- 3 Access to new technology
- 4 Innovation events

# Our future city – your ideas

Empower the community and develop an innovation culture.

Improve transport frequency and connectivity.

Implement innovation spaces, innovation groups and local innovation communities of interest.

Continue to support local businesses.

Take care of the environment – our future depends on it.

We are a multicultural city – embrace all cultures.

Involve youth and school students in decision-making.

Reduce red tape.

Encourage more business growth for more job opportunities.

Create collaborative community projects that enhance Logan as the new liveable city.

Improve internet connections and speeds.

Provide free wi-fi and internet connectivity in public places, shopping centres and on public transport.

Leverage the power of open data. Use it to empower local businesses, inform the population and foster collaboration.

Create a centre for the youth of Logan with access to the latest technology to help their futures.

Promote co-working places and business hubs.

The youth of our city are the future - work and communicate with them for a brighter future.

Get as many people involved as possible.

Promote thinking outside the box.

# City Futures vision

**The City of Logan will be an innovation powerhouse, recognised and respected for leadership in sustainability, technology, inclusion, collaboration and entrepreneurship.**

**People will love living in our city. Businesses and investors will see opportunity here. We will set new standards of creativity, innovation and liveability.**

## Principles



### Empowering community

Our future city will be created with our community, and for our community.

We will work to encourage and increase participation, harness the knowledge and creativity of our community, and design services that are people-centric.

The City of Logan will embrace inclusion, accessibility and diversity, working to increase opportunities for everyone.



### Open to innovation

The City of Logan welcomes innovation. We will leverage change and 'disruption' to create new opportunities, employment and growth.

Our city will be a 'living-lab', where we pilot new ideas and new technologies, apply innovation, learn from trial and error and aim for improvement.

We will encourage local innovation and embrace the best innovations from around the globe, building a dynamic ecosystem that makes the City of Logan an innovation powerhouse.



### Confidence

The City of Logan is a city of confidence. We are proud of our history, and look forward to our future with excitement and optimism.

Our city will be confident in our strengths and our unique identity, and confident as we embark on new paths of opportunity and innovation.

We will promote our city as an ideal place for investment, entrepreneurship and innovation, and showcase our success with pride.



### Collaboration and partnership

Our future city will be exceptional, founded on the best people, technologies, and ideas; identified, mixed and distilled through collaboration.

Partnership will be embedded in our city, a symbol of, and catalyst for, innovation.

We will work with local, national and international partners; bringing community, industry, academia, government and innovators together to create our future city.



## Objectives and progress indicators

Key objective	Progress indicators
To enhance the profile of our city as a great place to invest, innovate, collaborate and live	<ul style="list-style-type: none"><li>› Media monitoring</li><li>› Investment rates</li><li>› Community sentiment</li><li>› International delegations (inbound)</li></ul>
To increase innovation capability, activity and outputs in the City of Logan	<ul style="list-style-type: none"><li>› Employment participation rate</li><li>› New business entrants</li><li>› Patent applications</li><li>› Labour productivity</li><li>› Business confidence</li><li>› Knowledge worker ratios</li><li>› Participation in innovation hubs, programs and training</li><li>› Jobs creation in emerging sectors</li><li>› Growth in professional and innovation networks</li></ul>
To increase the quality and coverage of digital connectivity	<ul style="list-style-type: none"><li>› Broadband connections and average speeds</li><li>› Wi-fi coverage, speed and usage</li><li>› Mobile phone network coverage and quality</li><li>› Coverage, quality and usage of other networks</li></ul>



Key objective	Progress indicators
<b>To improve transport mobility options and outcomes for our community</b>	<ul style="list-style-type: none"> <li>› Jobs within 30 minutes</li> <li>› Rate of flexible working</li> <li>› Congestion rates</li> <li>› Active travel share</li> <li>› Coverage and use of public transport</li> <li>› Commute times</li> <li>› Transport satisfaction rates</li> </ul>
<b>To enhance the sustainability of our city</b>	<ul style="list-style-type: none"> <li>› Greenhouse gas emissions per capita</li> <li>› Access to urban green space</li> <li>› Renewable energy production/consumption</li> <li>› Air and water quality</li> </ul>
<b>To increase city vibrancy, visitation and activation</b>	<ul style="list-style-type: none"> <li>› Tourism numbers and feedback</li> <li>› Number of city events and attendance</li> <li>› Urban renewal projects and outcomes</li> <li>› Safety perceptions and outcomes</li> </ul>
<b>To improve community inclusion and participation</b>	<ul style="list-style-type: none"> <li>› Socio-economic indexes for areas</li> <li>› Education rates</li> <li>› Participation in community engagement</li> <li>› Digital technology access and literacy</li> <li>› Participation in innovation training, programs and hubs</li> <li>› Community perceptions of inclusion and opportunity</li> </ul>
<b>To modernise Council services, improving convenience and satisfaction</b>	<ul style="list-style-type: none"> <li>› Coverage and usage of digital services</li> <li>› Community/customer satisfaction with services</li> <li>› Innovation capability and outcomes within Council</li> <li>› Efficiency of Council service delivery</li> <li>› Council sustainability outcomes</li> </ul>
<b>To improve liveability and wellbeing outcomes for the City of Logan</b>	<ul style="list-style-type: none"> <li>› Housing affordability</li> <li>› Community connection and participation</li> <li>› Economic output per capita</li> <li>› Health outcomes</li> <li>› Social outcomes</li> <li>› Community confidence</li> </ul>



**FUTURE INNOVATION  
& PROSPERITY**



**FUTURE  
CONNECTIVITY**



**FUTURE  
COUNCIL**



**FUTURE  
COMMUNITY**



**FUTURE  
PLACE**

**Priority actions**



## *Future innovation & prosperity*

**The City of Logan will be an innovation powerhouse, a place of collaboration, opportunity, new jobs, and economic prosperity.**

**We are committed to:**

**1 Innovation & Co-Working Hubs**

We will work with community, innovators and industry to develop a network of innovation/co-working hubs across the City of Logan.

**2 Partnerships for Innovation**

We will foster research, innovation and collaborative partnerships to drive economic diversity, growth and resilience

**3 Procurement Reform**

We will modernise Council's procurement processes and methods to drive local innovation, deliver outcomes, and make it easier to do business with Council.

**4 Innovation Skills Development**

We will promote programs to build innovation skills and pathways to accelerate innovation activity.

**5 Logan Living Lab**

We will establish the City of Logan as an urban innovation living lab – a place to trial, test, experiment, create, learn and to improve.

**6 Smart Working**

We will work with employers and the community to encourage modern working options (e.g. co-working, remote work, flexible employment).

**7 Internet of Things, Open Data & Big Data**

We will enhance our open data program and leverage the Internet of Things and big data to build a more efficient, innovative and dynamic city.

**8 Innovation Brand**

We will promote the innovation credentials of our city as a great place to invest, do business, innovate, collaborate, work and grow.

**9 Unpacking Innovation Program**

We will continue the Unpacking Innovation Program to build local excitement, connections, capacity, collaboration and action.

**10 Logan and Redlands Advancing Regional Innovation Program's (ARIP)**

We will work in partnership with QLD State Government, Redlands City Council and Griffith University to coordinate and support the Logan and Redlands Advancing Regional Innovation Program (ARIP).



## **Future connectivity – mobility & communications**

**The foundation of our future city will be connectivity – to high speed internet, to communications networks (both fixed and wireless), and to real-time information and data.**

**Our future city will be mobile and connected, served by transport options that are convenient, affordable, sustainable, reliable and efficient.**

**We are committed to:**

### **1 Future Communications Connectivity**

We will work with government, industry and community to deliver high-quality, high-capacity communication networks for our city – fixed and wireless, narrow and broadband, cellular and emerging technology.

### **2 Free Public Wifi**

We will expand the free public wi-fi network for the City of Logan, with priority coverage zones to be discussed with the community.

### **3 Smart City Platform**

We will work with industry and innovators, leveraging existing infrastructure, such as streetlights, to create a smart city connectivity platform.

### **4 Integrated Transport**

We will develop and implement *Way2Go - Connecting Logan*, a detailed Integrated Local Transport Plan for the City of Logan.

### **5 Future Transport**

We will work with the Queensland Government to progress transport outcomes for the City of Logan, including better public transport and mass transit solutions, new infrastructure, innovative transport policies and autonomous vehicles.

### **6 Transport Innovation**

We will collaborate with industry and innovators to enhance rideshare, car-pool, car-share, energy efficient (e.g. electric vehicles), and on-demand transport options.

### **7 Transport Efficiency**

We will work to reduce transport congestion and improve efficiency, through active travel, low emissions transport, remote working options (to decrease unnecessary trips), new technology to monitor traffic, and improved real-time information.

### **8 Smart Parking**

We will continue parking improvements, using technology and collaboration with developers to increase convenience, city vibrancy, and efficiency.



## **Future Council** – future local services

**Council will lead this strategy by example, working to modernise our organisation and our services.**

**Local services in the City of Logan will be customer-focused and convenient, designed to make the most of technology and deliver value to our community.**

**We are committed to:**

- 1 Innovative Council**  
We will develop a Council Innovation Framework to enhance innovation culture and capability.
- 2 Digital Council**  
We will develop a Digital Strategy for Logan City Council to drive efficiency and innovation.
- 3 Smart Working**  
We will promote smart working by Council staff, and enhance technology for staff to work efficiently in the field, in the office, or remotely.

### **4 Future Regulation, Future Processes**

We will review and reform regulation and business processes to reduce 'red tape' and improve the customer experience.

### **5 Smart Decision Making**

We will develop our analytics capability and decision-making processes to leverage our data.

### **6 Digital Services**

We will expand and enhance our mobile services, improve our digital service channels, and continue to develop the City of Logan app.

### **7 Smart Design**

We will modernise our service design processes, allowing greater community participation, and creating people-centric services.

### **8 Future Health and Social Services**

We will collaborate and promote innovation to enhance local education, health and social services.



## **Future** community

**The City of Logan will build strong, safe, inclusive communities; where everyone is empowered to participate, create and collaborate.**

**We are committed to:**

**1 Future Engagement, Future Democracy**

We will modernise city governance and community engagement, especially through digital technology, to strengthen participation and innovation.

**2 Celebrating Diversity**

We will showcase and leverage our creative and cultural diversity, through events, media, art and collaboration.

**3 Innovation Opportunity**

We will work with industry to promote innovation programs and pathways for the community.

**4 Community Co-Design**

We will increase opportunities for collaborative input and co-design of local services.

**5 Future Work**

We will promote smart working to increase employment options, reduce unnecessary time away from home and family, and strengthen our local communities.

**6 Digital Inclusion**

We will support the development of digital literacy to increase participation in the digital economy.

**7 Discussing Digital Technology**

We will promote community dialogue about digital and economic disruption (e.g. privacy, security, automation, the future of work) to proactively address emerging risks and opportunities.

**8 City Studio Program**

We will establish Logan's City Studio Innovation Hub where students and community members co-create experimental projects that will contribute to making Logan a more sustainable, liveable, and prosperous city.



## ***Future place*** – sustainable, liveable, vibrant

**Our future city will be planned, designed and built to enhance livability, safety, social inclusion, vibrancy and sustainability.**

**The City of Logan will be an exemplar of sustainable progress, applying technology and innovation to conserve our natural environment.**

**We are committed to:**

### **1 Future City Collaboration**

We will work with the Queensland Government and surrounding councils to shape regional plans that help deliver our future city.

### **2 Smart City Development**

We will work with industry to produce guidelines for integrating smart technology into new developments.

### **3 Future Activity Centres**

We will progress the endorsed implementation plans for key activity centres, to encourage city activation, safety and vibrancy.

### **4 Digital Planning**

We will leverage digital technology, such as 3D planning models, to improve planning processes, consultation and outcomes.

### **5 Urban Renewal**

We will position Invest Logan as a catalyst and showcase of urban renewal, and work with developers to drive renewal outcomes.

### **6 City Activation**

We will promote innovation that enhances tourism, city activation and local experience (for residents and visitors).

### **7 Sustainable City**

We will deliver Council's sustainability commitments, and work with industry and governments to promote sustainability outcomes for the City of Logan.

### **8 Smart Resource Management**

We will work with industry and the community to expand the use of smart technology (such as smart meters) to improve resource efficiency and affordability.

### **9 Future Environmental Management**

We will leverage new technology (e.g. sensors, networks, and data analytics) to enhance the monitoring and management of our environment.

# Case studies



## Future skills for future schools

Students at Mabel Park State High School will be among the first in Queensland to gain a qualification in drone piloting skills.

The course is being taught by an experienced former pilot and, on completion, students will also receive six points toward their Queensland Certificate of Education.

Mabel Park State High is offering this course to make sure students have better employment prospects in emerging industries. The school has a reputation as a pioneer in vocational education and training and delivers a diverse range of courses from hospitality and tourism to digital media and engineering to more than 200 students.

Mabel Park State High decided to pilot the new qualification to give students a pathway to school-based traineeships, as well as future employment and tertiary education opportunities. This aligns with Council's City Futures Strategy by showcasing innovation programs and pathways for the community. The City of Logan is building a strong, safe, inclusive community, where everyone is empowered to participate, create and collaborate.

This qualification will help to prepare students for the jobs of tomorrow in a range of industries from workplace health and safety, ambulance services, mapping and exploration to parcel and pizza delivery.



## Off grid energy for a sustainable future

The first water treatment plant in Australia to be powered entirely by an off-grid, commercial-sized Tesla battery is right here in Logan.

Our new water reservoir at Round Mountain was constructed so far from the nearest power grid that it needed its own power source to be economically viable. The Tesla battery has saved ratepayers \$1.9 million in power connection costs and allows the reservoir to chlorinate water 'off-grid'.

Powering the plant this way has meant a sealed road to the facility did not have to be built because it can operate by itself. The massive 95kWh Tesla PowerPack battery is the first to be installed in Australia, and comes amid a wave of support for solar-powered batteries among Australian households.

Three hundred and twenty-three solar panels have been installed on the roof of the reservoir to collect sunlight to be stored in the battery. The technology will allow the reservoir to provide safe drinking water to residents south of Logan 24 hours a day and is expected to service 200,000 people when the region is fully developed.



## Demand Responsive Transport

Demand Responsive Transport (DRT) is a new type of shared transport that provides an alternative to taxis when buses and trains aren't available. The service adapts to changes in demand by adjusting the number of vehicles to suit the number of passengers who request a ride. DRT is different from traditional forms of public transport because it does not run to a schedule or along a set route. It is flexible and responds to customer needs.

Unlike a traditional bus that runs along a set route, DRT sends out smaller vehicles, like sedans or mini vans, to pick up passengers wherever they are. This would mean each trip is different and follows a tailored route based on the location of the passengers it needs to pick up.

DRT is a flexible transport option that adapts to customer demand. It is designed to offer an alternative travel option for people living in areas that don't have access to frequent public transport, providing short trips to public transport and community hubs.

The City of Logan is an ideal location based on its geography, population density, recent urban growth, and existing level of public transport services. This aligns with the *City Futures Strategy Future Connectivity* priority, ensuring that Logan will be mobile and connected, served by transport options that are convenient, affordable, reliable and efficient.



## Logan Entrepreneurs Power Homes in Indonesia

The City of Logan has a thriving innovation eco-system driving local and global benefits. PowerWells, an innovative energy solution developed by a group of Logan entrepreneurs, is a great example of this economic dynamism.

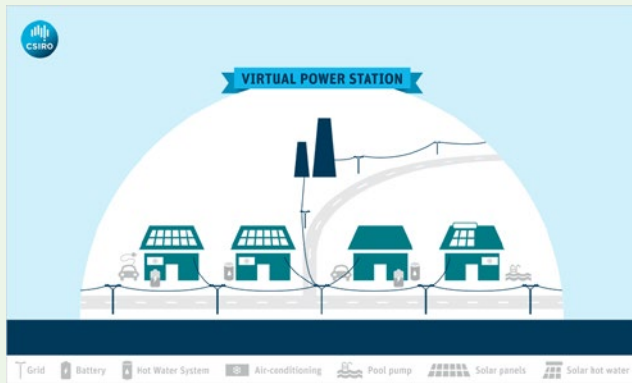
Drawing on the resources of the Substation33 e-waste recycling plant in Logan, PowerWells are giving rural and remote people free electricity. The solution is simple but effective - combining 25 lithium-ion laptop batteries to create one big battery, then connecting it to a solar panel.

Hundreds of communities in West Papua and Indonesia do not have access to electricity, and rely heavily on mobile phones for their flashlight feature. As a result, people often walk for hours to the nearest town just to charge their phones, so they can have a light at night. The only other source of light – kerosene lanterns – is expensive and polluting.

The PowerWell designed by Logan innovators can charge up to 50 iPhones at once, as well as charging LED lights that can be used to illuminate a village at night.

PowerWell has been successfully tested in a remote village in central Java. This local innovation, from right here in the City of Logan, will help provide power to the nearly one billion people around the world who don't have reliable electricity.

# Case studies



## The virtual power station

The virtual power station (VPS) is a collection of solar panels, batteries and electrical appliances in a neighbourhood, which are intelligently managed to maintain the stability of the power supply.

Thanks to funding from the Australian Renewable Energy Agency (ARENA), CSIRO are conducting a virtual power station trial (VPS2) in Yarrabilba in collaboration with Energy Queensland, LendLease, inverter manufacturers SMA and Selectronic, and electric vehicle charger manufacturer Tritium.

The trial is testing supply-demand management algorithms in 67 households with intelligent air conditioners, batteries and home solar systems. It's objective is to achieve household savings of hundreds of dollars, the installation of significantly more solar energy systems, and fewer blackouts into the future.

Early results of the trial have shown that significant power bill savings for residents (up to 60 per cent) and the network are achievable using demand management systems.



## Substation33

Substation33 is a Youth and Family Services social enterprise based in the City of Logan. Established in 2013 as an electronic waste recycling centre, Substation33 provides a workplace where volunteers and employees gain skills in sustainability, technology and innovation.

More recently, Substation33 started an Innovation Lab and has designed and developed a number of products for commercial, social and educational purposes. These included Flooded Road Smart Warning Signs, Electric 'e-bikes', 3D printers, a vertical garden monitoring system, to name just a few.

Substation33 developed the Flooded Road Smart Warning System in partnership with Logan City Council. The technology has been installed in 35 locations around Logan and is now being delivered to other councils.

The system provides an immediate warning to road users in the event of road flooding via bright, flashing LED signs, as well as sending alerts to council via email and SMS for monitoring and maintenance purposes.

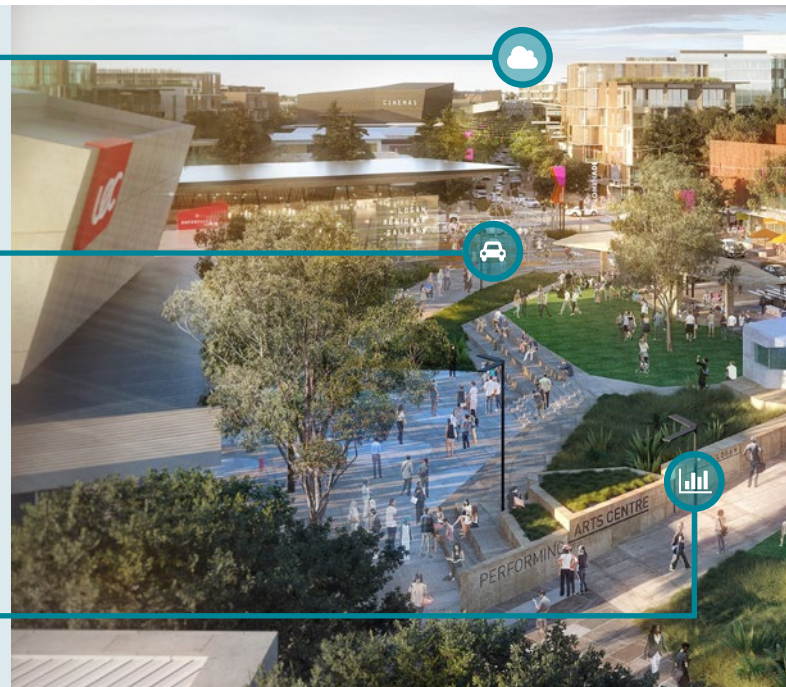


# Future City Streetscape

**Open data** for innovation.  
Big data analytics for better  
city design and experience

**Smart parking** for convenience  
and efficiency

**Smart streetlights** for energy  
efficiency, safety and smart city  
platform



**Wireless networks and IoT**  
for connectivity, innovation  
and modern services

Design and technology for  
**enhanced city activation**,  
vibrancy and safety

**Innovation hubs**  
and co-working spaces



**Renewable energy,**  
smart utility meters and  
innovation for sustainability

**Modern Council** for innovation,  
better local services, community  
participation and reform

**Reduced congestion** through  
smart technology, smart  
working, and transport

Smart technology for  
**enhanced environmental  
monitoring and management**



**Active travel**  
options

**Free Public  
WIFI**

**Improved mobility options,**  
integration and transport innovation  
(e.g. car-share, ride-share, AV, on-demand)

# Building our future

## Implementation and next steps



**Our future city is imagined and planned in this strategy.**

**It will be created by leadership and action; through the effort and initiative of our entire community and partners.**

**The essence of this strategy is to empower business, innovators and communities to imagine, collaborate and create our future city.**

**The City Futures Strategy has a 5-year horizon, from 2018 to 2022. However, as innovation is a living concept, so too will be this Strategy. It will be reviewed regularly to ensure we remain innovation and technology leaders.**

Everyone has a role to play, and everyone is invited to help build the future City of Logan.

Council itself will take a lead role, as coordinator, advocate and actor. In particular, Council will:

- lead by example, transforming our organisation and services to be more innovative, modern and agile
- monitor, measure and report progress against the strategy, both actions delivered and results achieved
- develop a detailed implementation plan for Council to ensure focus and accountability
- coordinate communication, promotion and advocacy to elevate this strategy, encourage action and publicise our city's achievements
- champion the efforts of individuals, businesses, and communities who are taking the initiative and building our future city
- evaluate this strategy and reset objectives and plans in consultation with the community as new opportunities and challenges emerge.



# Future city glossary

## — **Big data**

The use of technology (especially sensors and networks) to collect, manage, analyse and utilise large volumes of data.

## — **Business accelerator**

An intensive program designed to accelerate business growth through advisory services, access to investors, and focused strategic and operational planning.

## — **Business incubator**

A program or organisation that supports early-stage business establishment and development, by providing office space, mentoring, support services and training.

## — **Civic Innovation**

A new idea, technology or methodology that challenges and improves upon existing processes and systems, thereby improving the lives of citizens or the function of the city.

## — **Co-creation**

Working with clients, customers and community to design and create services/solutions that align with user expectations and meet user needs.

## — **Connectivity**

The breadth, depth and quality of telecommunications and internet infrastructure, networks and services.

## — **Co-working**

Emerging mode of working where a mix of individuals, innovators and organisations work in the same physical location, sharing space, ideas, technology, and motivation.

## — **Digital democracy**

The use of digital technology to modernise democratic processes and institutions, and facilitate participation in debate and decision-making.

## — **Entrepreneur**

A person who creates, innovates, invests and takes on risk aiming for commercial profit.

## — **Hackathon**

A collaborative event where participants solve problems, use big data, design products/services, and develop new software-based solutions.

## — **Innovation**

Doing something different with the aim of improving process and outcomes.

## — **Innovation ecosystem**

The network of people, institutions, programs, regulations, culture and resources that work to promote innovation.

## — **Innovation hub**

Spaces, either physical or virtual, dedicated to supporting innovation.

## — **Internet of Things (IoT)**

The network of devices, objects and infrastructure that can connect to the internet and each other, allowing improvements in functionality and efficiency (including remote control, real time data and automation).

## — **Open data**

Making data (especially government data) more accessible and useable, to enhance transparency, innovation and community outcomes.

## — **Open government**

Efforts to improve the transparency of government process, information, operations and decision-making.

## — **Red tape**

Inefficient legislation, regulation or business process that places undue cost on the economy.

## — **Smart city (smart community)**

Cities and communities that apply digital technology, big data, community empowerment, and innovative thinking to improve livability, sustainability and productivity.

## — **Urban living lab**

The use of city space to test and evaluate new technology, services and ideas 'on the street' to promote innovation, dialogue and better outcomes.

*Source: Delos Delta*



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