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THE DIGITAL BENEFIT DISTRICT PROVIDES
BEST IN CLASS CONNECTIVITY,
GENERATES DISTRICT SCALE INSIGHTS,
COMMUNICATES ITS PERFORMANCE,
BUILDS DIGITAL AND DATA LITERACY AND
OFFERS THE BEST EXPERIENCE.

BECAUSE OF THIS, THE DIGITAL BENEFIT DISTRICT IS MORE RESILIENT.

BECAUSE OF THIS, THE DIGITAL BENEFIT DISTRICT WILL THRIVE AND PROSPER.

## **FORWARD**

The idea of the Digital Benefit District was a result of deep engagement during peak COVID-19 lockdown, when it became clear that small business was struggling to survive, work from home resulted in higher than normal neighbourhood activity and local council's at times struggled to understand what and where the greatest impacts were, and how to respond.

The Smart Cities Council was curious, and started asking the question - "what would a more resilient neighbourhood look like, and could greater digital enablement and data insights play a role?"

Combined with observations from abroad on district scale community building - such as Business Improvement Districts, EcoDistricts, Innovation Districts and Community Benefit Districts - the SCC felt a new model of partnership driven smart neighbourhood development, with collaborative governance arrangements, could be an accelerator for economic recovery.

And so, having already led the industry in defining smart communities (refer the Code for Smart Communities), the Digital Benefit District concept emerged.



## PURPOSE OF THIS PLAYBOOK

This Playbook offers a blueprint for upgrading district or neighbourhood centres in a way that enhances sustainability, prosperity and resilience through digital enablement and data literacy.

The Playbook presents a series of outcomes, metrics and possible solutions to achieve this. This content is geography and scale neutral, meaning it could be applied anywhere within a city, town or region.









Our neighbourhoods, precincts and villages are the building blocks of our cities. Shaping our cities to be smarter and more sustainable starts at these levels.

The Digital Benefit District builds on this approach to city shaping, by building from the neighbourhood up.

## PATHWAYS TO A DIGITAL BENEFIT DISTRICT

Opportunities to 'build' a Digital Benefit District may come in various forms, including:

- The development of a new community, such as a significant urban renewal precinct or greenfield development
- The redevelopment of an existing neighbourhood centre, high street or shopping village
- The renewal of industrial or employment zones
- By auditing and amending an existing precinct plan, neighbourhood plan or priority development area

# THE SIX CORE STRATEGIES OF THE DIGITAL BENEFIT DISTRICT

District Connectivity | District Insights | District Literacy | District Resilience | District Impact | District Governance.



# OUTCOMES, METRICS AND STRATEGIES

The Digital Benefit District is defined by a series of outcomes, metrics and strategies. Each is defined as:

#### **OUTCOMES**

This is the experience or performance we are seeking from the district.

#### **METRICS**

This is how experience and performance can be measured.

#### **POSSIBLE STRATEGIES**

These are recommended solutions that can support achievement of the outcomes, as measured by the metrics.



## THE SMART CITIES COUNCIL WAS CURIOUS, AND STARTED ASKING THE QUESTION -

...WHAT WOULD A MORE RESILIENT NEIGHBOURHOOD LOOK LIKE, NOW THE WE HAVE EXPERIENCED A GLOBAL HEALTH PANDEMIC?

...AND COULD GREATER DIGITAL ENABLEMENT AND DATA LITERACY PLAY A ROLE IN BUILDING THAT RESILIENCE?

## DISTRICT CONNECTIVITY

The Digital Benefit District offers best in class and ubiquitous connectivity, for all people and all things.

#### OUTCOMES

#### **METRICS**

## The district offers connectivity for all people

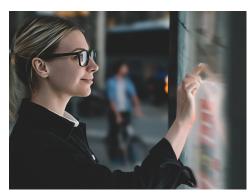
- No. internet connections per premises, the type of connection and its speed
- Percentage area of the district with free WiFi
- Percentage of local residential areas with internet connections supporiting work from home

## The district offers connectivity for all things

- No. of networks available to connect devices for free and transmit data
- No. of assets connected across the district

#### STRATEGIES AND TASKS

- Each business in the district has a broadband connection at a speed appropriate for the appplication
- Business areas and main streets have free WiFi coverage
- Audit of home-based internet connectivity and speed to determine suitability to support work from home and school from home
- Cellular and non-cellular IoT connectivity is provided throughout the district
- Provide at least an NBIOT and LPWAN network throughout the district, to enable a range of sensors and other devices to gather data about what'd happening (see District Insights for minimum data sets)
- Businesses are 'Bluetooth enabled' to allow data to be sent to mobile devices









A core function of the smart city is to collect, communicate and crunch data, allowing better and more timely decisions and investments to be made.

Connectivity allows data to flow, and is therefore a critical enabler of prosperity for the Digital Benefit District.

## DISTRICT INSIGHTS

The Digital Benefit District invests in the collection, integration, analytics and communication of data insights.

#### OUTCOMES

## The district collects the best data

#### **METRICS**

 No. and type of data sets collected across the district

The district generates and shares the best insights and stories

- No. and type of data sets made available on a public dashboard
- No. of insights generated:
  - for consumption by local businesses
  - for consumption by the council
  - for consumption by the community

#### STRATEGIES AND TASKS

- Audit existing data sets across the district and identify:
  - those that could be opened and shared to help generate insights
  - where there are gaps in the core data sets
- Collect a minimum of five data sets across the entire district from the list of 'Data Insights' on page 16
- Ensure the five Data Leadership Vitals are embraced in all data collection and management activities (See Appendix A)
- Provide a district-level dashboard that displays data, insights and stories
- Analyse data sets:
  - to generate insights for better decision making
  - to generate stories to share with the community to attract patronage, and attract investment
  - using enabling tools such as those in Appendix C

## **DISTRICT INSIGHTS**

The Digital Benefit District invests in the collection, integration, analytics and communication of data insights.

#### OUTCOMES

## The district uses data and insights to engage the community

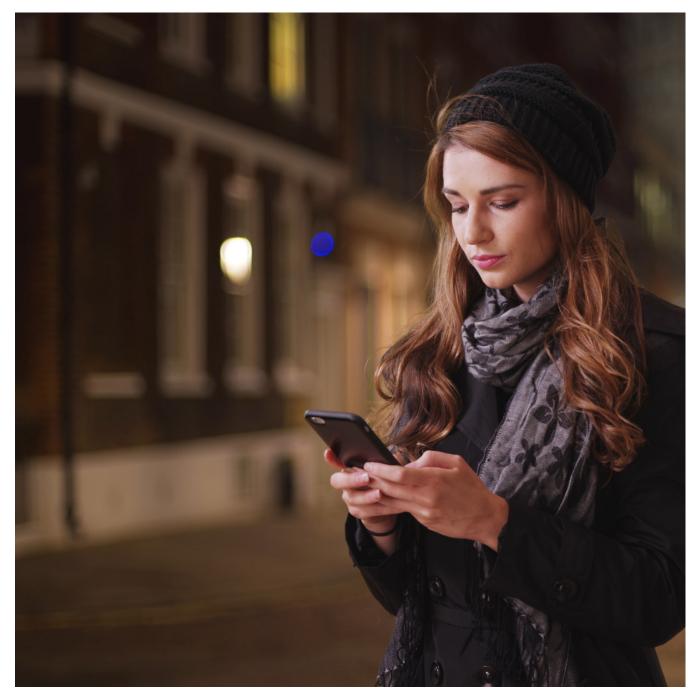
#### **METRICS**

 No. of platforms that connect business, community and the local council

- The district makes insight-driven decisions and investments
- Availability of insights, generated from the data sets collected
- No. of investments driven by data/insights and directly aligned with outcomes

#### STRATEGIES AND TASKS

- Utilise a platform (application, website, other) that supports engagement between whats happening in the district, and customers and the community
- Governance structure/functions that can support business activity and engagement with the community
- Availability of information and resources to enable community interaction with businesses
- Local Council to facilitate participatory budgeting or grant processes that support catalysing investment in the district
- Planning controls and infrastructure plans support insights from the district
- Annual budgeting, business cases, zoning decisions, land use and planning permissions aligned with districts insights and outcomes



# DATA INSIGHTS FOR DIGITAL BENEFIT DISTRICTS

The Digital Benefit District seeks to be generate insights, so it can make the best decisions and prosper. Insights may include those below, and those contained in Appendix B:

#### GENERAL

- Type and number of businesses within the district
- Number of businesses with an online presence
- Number of businesses with business information available on Google
- Level of local and external patronage to businesses within the district
- Understanding and benchmarking of current mix of people, businesses and economic activity

#### **ECONOMIC**

- Amount of consumer spending within the district
- Count of local vs external visitors coming into the district
- Understanding local trends and variations in economic activity between businesses

#### **MOBILITY**

- Parking occupancy rates
- Pedestrian levels (dwell time) within the district
- Bicycle movements around the district
- Public transport routes servicing the district

#### **OTHER**

- Social media analytics on what the community values within the district
- Participation rates by the community in local business promotions
- Placemaking strategies to increase dwell times and activity

## DISTRICT LITERACY

Businesses within the Digital Benefit District have the awareness and capability to fully participate and thrive in the internet economy.

#### OUTCOMES

#### The district has an enhanced level of digital and data literacy

#### **METRICS**

- No. of new websites (digital presence) established in the district
- No. of businesses in the district completing the minimum digital literacy training
- Level of efficiency gains from digital transformation of businesses within the district

#### STRATEGIES AND TASKS

- Provision of training to all businesses within the district, including as a minimum:
  - Maintaining a web presence
  - E-commerce essentials
  - Cloud computing
  - Digital transformation of core 'back office' functions such as payroll, CRM, supply chain information sharing
- Identify and nurture disadvantaged and vulnerable business owners, such as women, minority ethnic communities, people with a disability and older business owners
- Build and facilitate networking opportunities to motivate businesses in their use of digital and data transformation opportunities
- Offer a 'Digital Innovation Incubator' for the district, to attract and encourage digital entreprenueurship



The rapid expansion of technological capital in industries such as Advanced Manufacturing, Health Care and the Resources sector to name a few, is leading a disruption in digital readiness skills of small business in Queensland. Findings from the annual CCIQ Digital Readiness Survey (Digital Survey) in 2018 reported that 90% of businesses believed that they should become more digitally savvy.

## DISTRICT LITERACY

Businesses within the Digital Benefit District have the awareness and capability to fully participate and thrive in the internet economy.

#### OUTCOMES

The district has a strong digital relationship between citizens, businesses and the local Council

#### **METRICS**

- No. of local residents connected with local businesses on social media
- No. businesses with a digital engagement platform (not social media, eg. App)
- No. customers engaging with local business through engagement platforms
- No. businesses the City is digitally connected to

#### STRATEGIES AND TASKS

- Build and launch an engagement app or similar platform to facilitate the exchange of opportunities and data between businesses, the community and the local Council
- Interactive kiosks and digital way finding is available, and responsive to the needs of all businesses and citizens
- Community of interest network / "High pages" style platform for Local Council
- Embed digital interaction into master planning processes, exploring the ways virtual and augmented reality can enhance the physical experience of place
- Any technology and data solutions should provide for ease of use, have great user experience and be 'lasting'



## DISTRICT RESILIENCE

The Digital Benefit District embraces digital enablement and data insights to strengthen its qualities of resilience.

#### OUTCOMES

#### **METRICS**

#### STRATEGIES AND TASKS

The district can continue to trade, regardless of shock or stress

- No. of businesses who can trade instore and online
- No. of critical services available in the district
- No. of systems with known cyber vulnerabilities
- A business continuity plan is in place for each of the districts tenants, covering issues including connectivity redundancy, data back-up and other systems and process resiliency
- Working with the local Council, a retail futures strategy is developed to trial new technologies to help elevate store-based retail and create immersive/ digitally augmented customer experiences
- Build opportunities that ensure a seamless transition from work to home
- A strategy to ensure local schools can partner in rapid engagement in volunteer/other non-financial support opportunities
- Digital kiosks, website and other platforms to allows businesses to articulate their needs, interests, and opportunities

The district is agile and can fully participate in support programs

 Convert principles from Appendix D into metrics









Resilience is as much about our mindsets, behaviours and approaches, as it is the physical make up of our built assets and how cities are planned and designed.

COVID-19 has tested the resilience of our people, economy and planet. One thing that is certain, is that digital and data enablement strengthened our capacity to maintain continuity, and therefore opportunity.

We believe our economic recovery and future resilience can be accelerated if we #builtitbackdigital.

## **DISTRICT IMPACT**

The Digital Benefit District is transparent, accountable and measures and reports on its impact.

#### OUTCOMES

#### **METRICS**

#### STRATEGIES AND TASKS

The district reports its performance

- No. of metrics the district reports against
- No. of new partners and collaborators the district recruits
- No. of milestones achieved

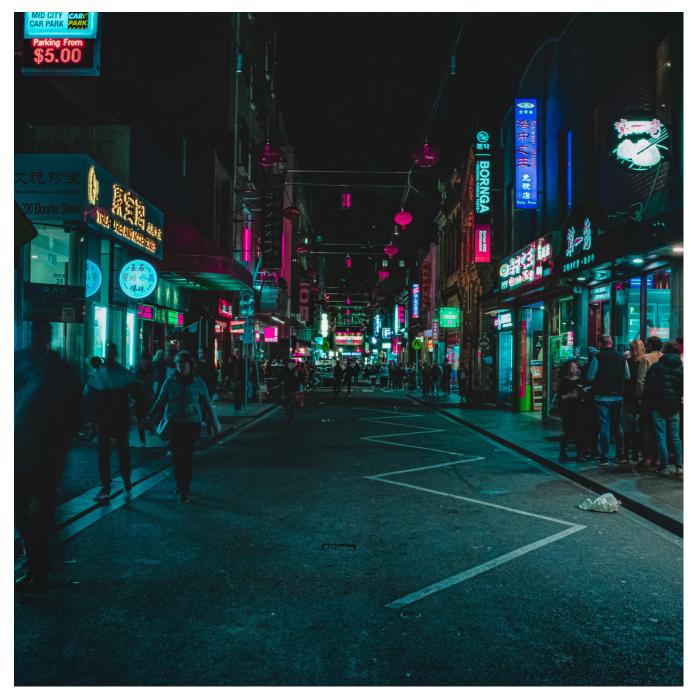
 A District Impact Report is published annually reporting against the outcomes and metrics it has set

The district builds trust with its community, and thus customer loyalty

The district gives back to the

community

- No. of returning customers
- Level of feedback received
- Amount (\$) donated and hours of volunteer time provided by district businesses to the local community
- Implement a deliberate campaign to build customer loyalty through greater transparency and trust on the value the district is contributing to the community
- Build and facilitate a district impact task force that can lead in creating opportunities for district businesses to contribute to the local community
- Record contributions in the District Impact Report



## DISTRICT GOVERNANCE

The Digital Benefit District creates the conditions for a commitment to change and therefore action.

#### OUTCOMES

#### **METRICS**

#### POSSIBLE STRATEGIES

The district uses collaborative governance as a vehicle for action and investment

 District governance structure instituted

Funding and financing of district investments are accelerated

- No. of new revenue streams for district-scale investment
- Value of annual investment made

- A District Governance strategy is developed and implemented that includes:
  - Community-based asset mapping
  - Assessment of collaborative governance readiness
  - Engagement and formation
  - Supporting organisations
  - Statement of commitment
  - Define powers and financing arrangements
  - Identify preferred governance structure
- The district governance entity work with key stakeholders to identify new mechanisms for funding and financing investments to accelerate district prosperity, including consideration to:
  - o PPP's
  - New grants
  - Tax Increment Financing mechanisms



Collaborative governance is a set of processes and structures for communities to address public problems that can't be easily solved by one organisation or sector alone.

## YOUR NEXT THREE MOVES

## 1. REVIEW NEIGHBOURHOODS WITHIN THE CITY TO IDENTIFY KEY OPPORTUNITY AREAS FOR DIGITAL BENEFIT DISTRICTS

#### Ask yourself:

- Which were hardest hit by COVID?
- Which displays the most promise in bouncing back and providing jobs/opportunities?
- Which show high community/local business support/energy? where could collaborative governance models be established?
- Which ones may attract co-funding/investment?
- Which ones have existing real estate/infrastructure work planned/funded?
- Where are existing economic development priorities lying?
- Can you review for opportunities regularly to align with budget cycles etc?
- Can you leverage new market factors what will new development/business/supply chain conditions look like?
- Could retail precincts be a potential priority?
- What can you build back swiftly?
- Are there new hybrid models you can test/promote bricks & mortar vs clicks & mortar?

## YOUR NEXT THREE MOVES

## 2. AUDIT EXISTING CAPACITY FOR DIGITAL BENEFIT DISTRICT CAPABILITY

#### Ask yourself:

- How do your existing districts compare to the outcomes articulated in this Playbook?
- Can you prioritise the neighbourhoods that show promise By ease? Most need? Most capacity?
- Are there existing district plans that show a strong level of alignment with existing investments, actions of the Digital Benefit District?
- Can potential Digital Benefit District investments/planning leverage existing planning processes?
- Do you have a preference to augment/align, rather than create a new layer/type of 'plan'?

## **YOUR NEXT THREE MOVES**

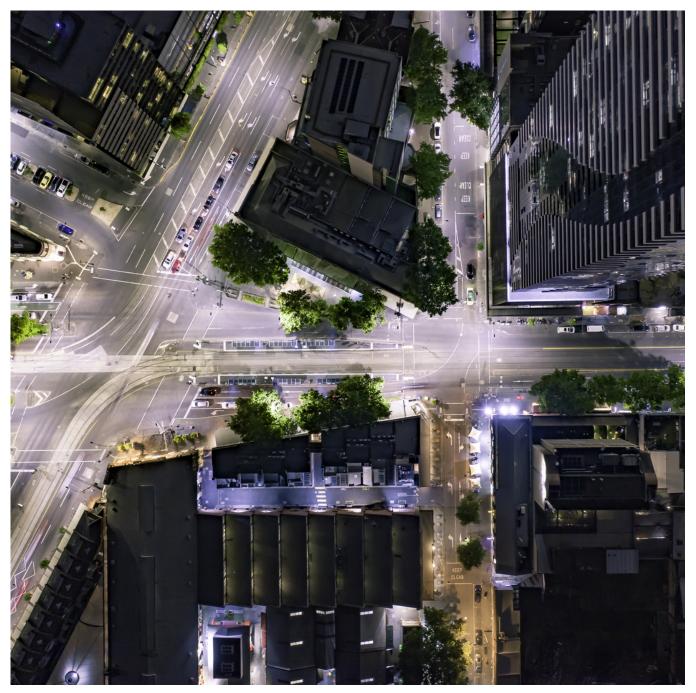
## 3. CREATE A PLAN FOR THREE NEIGHBOURHOODS TO UNDERTAKE EARLY ENGAGEMENT/MOBILISATION

Here's your checklist to mobilise:

- · Map community-based assets
- · Identify early investors
- Engage key support organisations
- · Assemble core stakeholder group of the most invested

## **SOME FINAL NOTES:**

THESE STRATEGIES ARE NOT UNIQUE TO ACTIVITY CENTRES, THEY CAN BE APPLIED TO OTHER PRECINCT **TYPES. THESE STRATEGIES NEED TO BUILD ON GOOD URBAN DESIGN (SEE** APPENDIX E), DON'T TREAT THEM AS **TECHNO-BLING. SEEK OUT OPPORTUNITIES TO UPGRADE** EXISTING PLANS OR PROJECTS, OR WHERE THE MOST ENERGY IS. THEN LOOK FOR NEW DEVELOPMENT **OPPORTUNITIES.** KEEP AN EYE ON THE HORIZON FOR THE COMING DISRUPTIONS AND EMBRACE THEM (SEE APPENDIX F). THINK BIG, START **SMALL, MOVE FAST.** 



## **APPENDICES**

- Data Leadership Vitals
- Data Insights Index
- Enabling Tools for Generating District Insights
- Principles of District Resilience
- Placemaking Fundamentals for District Performance
- District Disruptions to Watch

# APPENDIX A:: DATA LEADERSHIP VITALS

Data Purpose
Data Privacy
Data Security
Data Ethics
Data Governance

Source: The Data Leadership Vitals | Centre for Data Leadership

# APPENDIX B:: DATA INSIGHTS INDEX

#### WHAT INSIGHTS DO WE NEED FOR OUR NEIGHBOURHOODS?

Community profile and demographics

levels of deprivation

Type of businesses

Women's habits and needs

Vulnerable people in the community

Breakdown of community, by gender, age, etc

Understanding of climate and local environmental conditions

Levels of connectivity

Sentiment level

That people are healthy before getting on transport

languages spoken

**Current facilities** 

health and well-being indicators

proximity to community services

Homeless numbers

Levels of interaction to avoid isolation

Local business opportunities for selling

Visitor numbers and related services

Liveability index

#### WHAT DATA SETS WOULD HELP GENERATE THOSE INSIGHTS?

unemployment rate
business open/closed
movement around neighbourhood
number of people and businesses who are digitally connected and/or
digitally competent.
demographics (age, gender, ethnicity etc)
people movement
social media volume relating to the community.
health status

### WHAT ENABLING TECHNOLOGIES/TOOLS NEED TO BE DEPLOYED?

vacancy audits
people counting sensor e.g. wifi sniffer
people and journey counters
analytics pedestrian counters
applied Intelligence
temperature Monitoring
vision systems with machine learning
climate or weather sensors
wayfinding communications
community building outcome indicator analysis

## APPENDIX C:: ENABLING TOOLS FOR GENERATING DISTRICT INSIGHTS

vacancy audits People counting sensor e.g. wifi sniffer People and journey counters **Analytics** pedestrian counters Applied Intelligence **Temperature Monitoring** Vision Systems with Machine Learning People counting software Climate or weather sensors Wayfinding communications Community building outcome indicator analysis Ubiquitous broadband coverage - both mobile and terrestrial Google maps **Digital Twin** Intelligent Transport Hubs Formalised local business networks Artificial intelligence engine across social media platforms IoT connectivity to support sensors Free connectivity for residents eg, wifi

# APPENDIX D:: PRINCIPLES OF DISTRICT RESILIENCE

minimum human vulnerability
diverse livelihood and employment
effective safeguards to human health and life
collective identity and community support
comprehensive security and rule of law
sustainable economy
reduced exposure and fragility
effective provision of critical services
reliable mobility and communications
effective leadership and management
empowered stakeholders
integrated development planning

Source: City Resilience Framework | The Rockefeller Foundation and Arup

## For each of the City Resilience Principles, are a set of detailed indicators:

#### **INDICATORS**

1.1 Safe and affordable housing
1.2 Adequate affordable energy supply
1.3 Inclusive access to safe drinking water
1.4 Effective sanitation
1.5 Sufficient affordable food supply
2.1 Inclusive labour policies
2.2 Relevant skills & training
2.3 Local business development and innovation
2.4 Supportive financing mechanisms
2.5 Diverse <b>protection of livelihoods</b> following a shock
3.1 Robust public health systems
3.2 Adequate access to quality healthcare
3.3 Emergency medical care
3.4 Effective emergency response services
4.1 Local community support
4.2 Cohesive communities
4.3 Strong city-wide identity & culture
4.4 Actively engaged citizens
5.1 Effective systems to deter crime
5.2 Proactive corruption prevention
5.3 Competent <b>policing</b>
5.4 Accessible criminal and civil justice
6.1 Well-managed public finances
6.2 Comprehensive business continuity planning
6.3 Diverse economic base
6.4 Attractive business environment
6.5 Strong integration with regional & global economies

7.1 Comprehensive hazard and exposure mapping
7.2 Appropriate codes, standards & enforcement
7.3 Effectively managed protective ecosystems
7.4 Robust protective infrastructure
8.1 Effective stewardship of ecosystems
8.2 Flexible infrastructure services
8.3. Retained spare capacity
8.4 Diligent maintenance & continuity
8.5 Adequate continuity for critical assets
& services
9.1 Diverse and affordable transport networks
9.2 Effective transport operation & maintenance
9.3 Reliable communications technology
9.4 Secure technology networks
10.1 Appropriate government decision-making
10.2 Effective co-ordination with other government bodies
10.3 Proactive multi-stakeholder collaboration
10.4 Comprehensive hazard monitoring and risk assessment
10.5 Comprehensive government
emergency management
11.1 Adequate education for all
11.2 Widespread community awareness & preparedness
11.3 Effective mechanisms for communities
to engage with government
12.1 Comprehensive city monitoring &
data management
12.2 Consultative planning process
12.3 Appropriate land use and zoning
12.4 Robust planning approval process

Source: City Resilience Framework | The Rockefeller Foundation and Arup

# APPENDIX E:: PLACEMAKING FUNDAMENTALS FOR DISTRICT PERFORMANCE

Aim Creates productive, sustainable + liveable places for people through leadership + the integration of design excellence		What is being achiev Productivity Enhances economic productivity + living affordability	ed (outcome) Sustainability Fosters environmental responsibility	Liveability Cultivates healthy, cohesive + inclusive communities	Leadership Demonstrates visionary leadership + governance	Design Integrates design excellence
Design principles about place: pro	oductiv	rity + sustainability				
Enhancing Enhances local economy, environment + community	+	✓	1	✓		✓
Connected Connects physically + socially	Ж	✓	¥	4		✓
Diverse Diversity of options + experiences	* 102	✓	<b>V</b>	✓		✓
Sustainable, enduring + resilient	$\infty$	✓	✓			✓
Design principles about people: It	veabilit	ly				
Comfortable Comfortable + welcoming	竹竹			✓		✓
Vibrant Vibrant, with people around	1	<b>V</b>		✓		✓
Safe Feels safe	稌			✓		✓
Walkable Enjoyable + easy to walk + bicycle around	•		<b>✓</b>	✓		✓
Principles about leadership and g	overna	ince				
Context Works within the planning, physical + social context	0				<b>~</b>	✓
Engagement Engages with relevant stakeholders	"			V	<b>~</b>	✓
Excellence Excellence, innovation + leadership	✓	<b>✓</b>			✓	✓
Custodianship Considers custodianship + maintenance over time	J		✓		~	✓

Source: <u>Australian Urban Design Protocol</u> | Australian Government

# APPENDIX F:: DISTRICT DISRUPTIONS TO WATCH

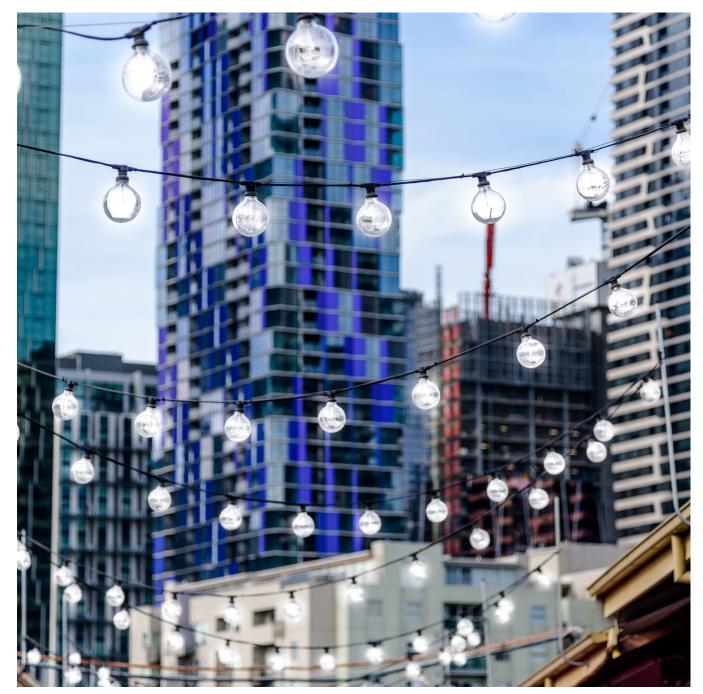
It is important that district stakeholders and the City monitor advances in and the potential impacts and opportunities associated with:

Autonomous and electric vehicle uptake
Food delivery services, and the pick up and set down needs
E-commerce, and the associated delivery requirements (such as kerb space)
Micromobility - from e-scooters to micro freight
Ridesharing, and other sharing economy platforms
Mobility as a service, and how it supports business trade

These disruptions will have implications for building design, land use, real estate, transportation and urban design.

# APPENDIX G:: ACKNOWLEDGEMENTS

Telstra
City of Sydney
Meshed
Lendlease
Frankston City Council
Lake Macquarie City Council
Brisbane Clty Council
Neighbourlytics
Auckand City Council
SAGE Automation
Christchurch City Council
WSP





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