

We're embracing the opportunities of smart city technology and innovation to improve liveability and public value across Manningham.

The exploration of smart city opportunities in Manningham is being led by the Liveability, Innovation Technology (LIT) Committee on behalf of Council and the community.

# What is a Smart City?

A smart city leverages digital technology, innovation and data to improve liveability, productivity and sustainability. This concept has taken off globally, with cities like Seoul, New York, Copenhagen and the City of Melbourne leading the way.

Smart cities focus on benefits for the community - collaborating to deliver better service, environmental, economic, accessibility, mobility, and policy outcomes. They embed smart technology to improve efficiencies, strengthen communication and collaboration and enhance decision making.

The Australian Government have helped lead and coordinate smart city activity across Australia with the release of the Smart Cities Plan and grant funding. Manningham Council is a Smart Cities and Suburbs Program grant recipient.



### **A Smart City for our Community**

Smart cities employ digital technology, big data and innovation to deliver local benefits and value - for community, economy and environment.



Manningham has already begun its smart city journey, with a range of initiatives underway. Now, we want to expand on these projects, exploring new opportunities to integrate smart city thinking into our services.

#### **Existing Smart City Initiatives in Manningham**

- Smart sensors in Jackson Court
- Energy data for smart decision making
- · Liveability assessment
- · Better approvals project
- · Co-working Hub
- · Send, Snap and Solve
- Digital Transformation
  Strategy
- Shared footpaths

- Parking sensors
- · Bin sensors
- Geographic Information
  System
- · Streetlight sensors
- 5G connectivity
- · Smart State-of-the-City database
- · Smart irrigation
- Vegetation coverage mapping

# **What our Community Said**

To provide guidance on what new opportunities Manningham should explore, we engaged with our local community.

#### **Key Objectives**

- Improving mobility and transport
- · Improving local services
- Smart technology for sustainability
- · Smarter decision making

#### **High Value Initiatives**

- · Data sharing platforms
- · Smart resource management
- Smart streetlighting
- Smart environmental management and monitoring
- Smart buildings, developments and precincts

#### **Priority Values and Principles**

- Sustainability
- · Citizen centric
- Openness and transparency

#### Challenges

- · Governance and leadership
- Accessibility
- · Cost
- · Security and privacy

# **Smart City Maturity**

Smart City Maturity refers to our capability to design, deliver and implement smart city projects.

We're still at the beginning of our smart city journey in Manningham.

To progress in our maturity, we will ensure we have the appropriate governance, processes and capability in place that supports and drives innovative thinking.

DEVELOPING



LEADING



BEGINNING

EMBEDDING

# **Building a Smart City**

Building a smart city is not just about deploying technology - they also depend on the right systems, processes and policies. This ensures that smart city initiatives are tailored to local conditions and deliver community benefit.

### **Three Pillars of Smart City Progress**

Advancing a successful smart technology agenda needs a strategic approach. We will take a three-pillar approach to ensure our smart city progress is holistic, encompassing the whole of Council and meeting the needs of our community.



### **Smart City Toolkit**

We will gradually build up our internal smart city toolkit to ensure intelligent deployment of smart technology. This toolkit will enable us to understand and apply best practice in Internet of Things (IoT), security, privacy, user experience, co-design, etc. and will be critical to smart city success.

- Strategic Approach
- IT Architecture
- Data Policy
- Privacy and Security Policy
- Ethics Policy
- Training and Development
- IoT Best Practice
- Democracy and Engagement
- User Experience and Interface
- Innovation Framework
- Living Lab
- Smart City Dictionary



# **Smart City Opportunities**

We have identified a broad range of possible smart city opportunities for the future - those that might be delivered by Council, other levels of government, the private sector or community groups.

These initiatives will be further investigated in line with Council and community priorities.



#### **Intelligent irrigation**

Moisture sensors and automatic/remote control to improve irrigation outcomes.



#### **Smart data platform**

The IT architecture and supporting systems/policies to enhance the collection/analysis/use of data.



#### **Smart asset management**

Sensors, networks, data analysis, and remote/automatic control of city assets (e.g. roads, buildings, sporting facilities).



#### **Digital democracy**

Modernisation of democratic processes and institutions, to enhance community participation, deliberation, empowerment and real-time feedback



#### **Smart parking**

Sensors, networks, data analysis, and real-time reporting of car-park availability to make parking easier.



#### Smart city planning

Reform and digitisation of planning processes/systems supported by big data and 3D smart city models (digital twins).



#### **Digital inclusion**

Policies and programs (e.g. training) to ensure everyone benefits from smart technology.



#### Smart street-lighting

Real-time monitoring and remote control of streetlights, with complementary smart networks/sensors placed on the poles.



#### Innovation network/hub

Consolidation of local innovation connections and programs to enhance activity and capacity.



# Smart environmental management

Sensors, networks, big data analysis and remote/ automatic control to improve management of environmental assets



#### **Smart mobility management**

Sensors, networks, data analysis, and real-time reporting to improve city mobility/transport outcomes

### **Next Steps**

To keep the momentum going Council has identified the 'Big Stuff' to provide long term focus and the 'Little Things' to deliver early wins.

### **The Big Stuff**

To embed smart city into the organisation and city, key steps will include:

- · Affirming smart city governance and leadership roles
- · Developing an implementation/action plan
- Building capacity and capability within Council and community
- · Identifying and prioritising smart city projects and reforms
- Building our smart city toolkit (of policies, guidelines, methods and processes)
- · Monitoring progress and recalibrating smart city activity

### From Little Things...

To complement the approach some of the other steps may include:

- Designing and delivering smart city demonstration/concept projects
- Hosting a workshop or webinar with an international smart city expert
- · Circulating regular smart city communications
- Building a relationship with peak bodies, the Australian Smart Communities Association (ASCA), and the Smart Cities Council (SCC)
- · Expanding our smart city webpage
- · Organising and participating in a Manningham data hack event
- · Creating a 'smart sister city' relationship
- Developing digital content to promote smart city activty

#### More information

manningham.vic.gov.au/smart-city

