

Example smart city projects, by Smart Cities and Suburbs Program priority area

Note: This list provides examples of smart technology, its potential applications and existing projects. It is indicative only of the types of initiatives that may be eligible for funding under round one of the Smart Cities and Suburbs Program. Submission of an application with a technology or project similar to those on this list does not guarantee grant funding. All applications will be assessed against the eligibility and merit criteria detailed in the program guidelines.

Smart Infrastructure

Aim: Improving the efficiency, reliability, delivery and maintenance of infrastructure and essential services.

Solutions that improve:

- infrastructure-related services such as traffic management, emergency response, waste management, communications and water supply
- landscape and green infrastructure assets
- infrastructure management and maintenance and transportation infrastructure issues including accessibility and mobility.

Example technologies:

- Smart street lighting control systems that sense and respond to individuals and vehicles.

[San Diego](#) can remotely tune lights so they provide light as needed without blinding sensitive areas. Energy savings will realise more than US\$250,000 a year. Sensors and computer-vision software can pull parking and other data for real-time analysis.

- Remote detection of when infrastructure maintenance is required and automatic dispatch of repair crews.
- Integration of sensors, vision systems, and wireless and network controls to increase security or share mass communication about traffic and environmental conditions.

[Dublin](#) is integrating geospatial data with data from a citywide network of sensors to monitor and manage traffic and keep residents moving.

- Automated systems addressing travel demand or congestion management.
- Connected cars and vehicle-to-x (V2X) communications systems.
- Trials of new battery and fuel technologies on public transport and council fleet vehicles.

Smart Precincts

Aim: Making community precincts more liveable, productive, sustainable and safe.

Solutions that improve the comfort, amenity, security and management of public facilities, assets and spaces. Solutions may include integrated and intelligent systems which provide automated responses to real-time environmental and usage data.

Example technologies:

- Systems that automate precinct and building management and improve resource use-efficiency.

[Bremen](#) has unified more than 1,200 municipal properties under a single, open building management system to optimise heating systems and reduce energy consumption. Alerts can be sent to individual workstations for corrective measures, and energy consumption is down 15%.

- Smart electric vehicle charging management systems.
- Power management systems that support grid reliability and reduce emissions.
- Integrated systems that allow precinct or building owners to identify, analyse cost-benefit, compare and finance improvements that increase resource-use efficiency.
- Intelligent systems that improve precinct or building comfort or amenity, including through mitigation of urban heat and other weather extremes.
- Integration of security, parking, external lighting, cameras, and communication and connectivity with precinct or building tenants, employees, facility management staff, and local authorities.

Eindhoven's [City Pulse](#) project uses microphone arrays installed in light poles along footpaths to predict and prevent altercations before they happen. The system listens to and analyses speech modulation to identify aggressive speech, without listening to the content of conversations.

- Wearable technologies integrated with precinct or building systems, mobility systems, and broader urban systems.

Aim: Delivering community focussed local government services.

Solutions that:

- increase community engagement
- involve the community in service design and delivery
- empower customers to make decisions through greater access to information
- improve access to council services
- support real-time availability of council information and data.

Example technologies:

- Augmented reality concepts that support or enhance city services.

[Fort Lauderdale](#) provides an app which uses augmented reality to help people plan trips. Travellers can get information on something by pointing their phone at it.

- Public signage that uses interactive, real-time data analytics.
- Communication systems integration that supports public services and provides interactive information for the community.

Tel Aviv's city app, [DigiTel](#), allows the municipality to push tailored, location-specific information to residents based on the information they provide when subscribing to the app.

- Websites, apps or online services that help residents, businesses and researchers access public information, make better decisions or communicate more effectively with councils, for example real-time access to building approval information.

Chicago's [Array of Things](#) comprises 500 sensor boxes that allow the city and public to instantly obtain block-by-block data on air quality, noise levels and traffic.

- Platforms that aggregate and report on real-time local air quality data, potentially incorporating personal respiratory data from wearable sensors.
- Real-time data on parking availability, and electronic reservation systems.

Aim: Building adaptable and resilient cities through improved land use, strategic planning and governance.

Solutions that provide more sophisticated information to support decision making and improve governance at local, state and national level, including through

- automatic integration of data from sensor networks
- planning systems that predict development impacts
- smart planning tools that analyse data from myriad sources to improve land use and planning.

Example technologies:

- Systems that display proposed developments or land use changes in context to inform community evaluation and comment.

[Sheffield](#) uses a 3D Model to advise on urban design and conservation issues on major planning applications and regeneration schemes. The models are particularly useful where it is important to demonstrate how a scheme fits into its context.

- Integration or automatic analysis of multiple data sources to inform better decision making and improved community outcomes, including through planning and associated processes.

The [New York](#) Mayor's Office for Data Analytics uses technology to automatically combine and analyse multiple data sets. For example, 60 risk factors are analysed to predict which buildings are most likely to have a fire.