



Ararat Rural City Council
Envisioning a Smart Rural City





A Smart City is a city that uses technology and data to improve the quality of life for its citizens.

What is a Smart City?

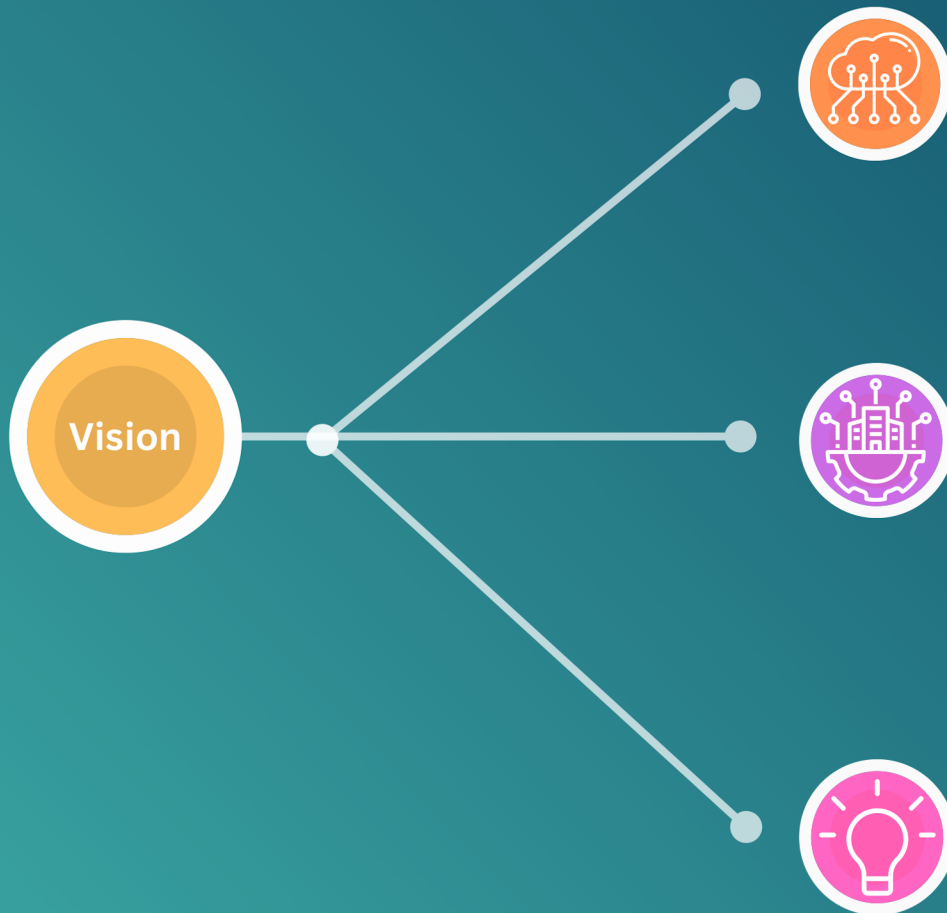


Smart Cities use a variety of technologies such as sensors, cameras, and data analytics to collect and analyse data about the city to assist in smart decision making.



By using technology in collaboration with the community, smart cities can improve public safety, transportation and efficiency, making the city a better place to live.

Vision: For our community to be the leading 'Smart Rural Community' in Victoria, using shared data for better decision making.



Community Data Sharing

- Population of community data into Ararat Data Lake
- Sharing of data in useful ways (i.e. weather)

Digital Capability for Businesses

- Development of the Technology demo/fab lab for local businesses to better understand what technology is available
- Support businesses via education and participation in digital innovation programs.

Smart Planning

- Council is leading by example, with Smart Cities sensor technology already improving services and finding efficiencies in internal processes.
- Smart city data (Eg LiDAR data) can help Council planners digitally map the community and simulate different scenarios before making planning decisions.

To ensure our Smart City program remains focused on the overall objectives of our community, our plan employs the following principles:



Community centred



Future ready



Outcome/Solution focused



Shared action and leadership



Sustainability



The journey so far: Current State

Council have endorsed Telstra Pty Ltd as our 'Innovation Partner' specific to the execution of council projects that require the procurement and implementation of IoT technology and connectivity. This collaboration allows unique access to skills, labour, resources and experience that a company such as Telstra can provide.



Smart Bins

18 high use bins in CBD with sensors installed for monitoring waste levels



Traffic analytics

Cameras at a key intersection providing traffic analytics



Demonstration Lab

A hands-on lab run by Council demonstrating cutting edge IoT technology



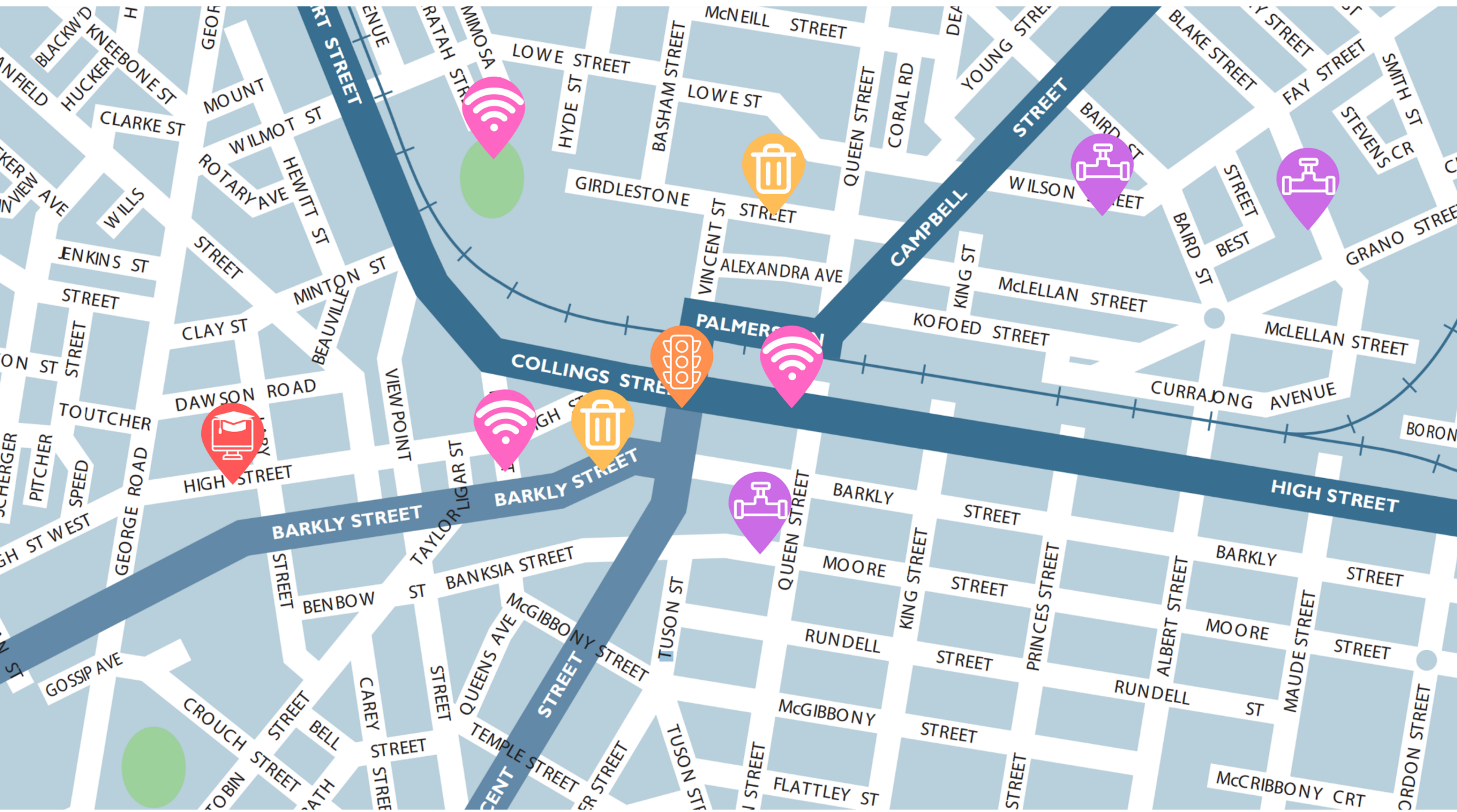
Public WiFi

49 access points broadcasting free public Wi-Fi across Ararat and Lake Bolac



Drain monitoring

Sensors installed on three drains for early detection of flooding

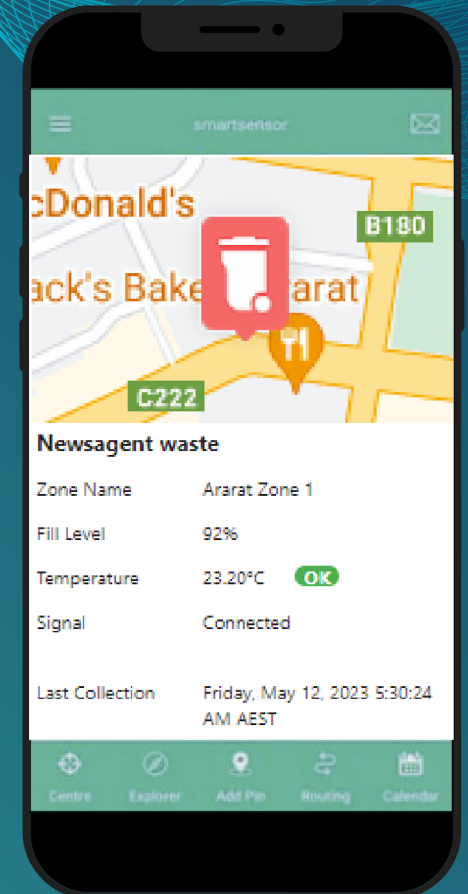


Case Study - Barkly Street Smart Bin Sensors



18 Smart Bin sensors have been installed throughout Barkly Street.

When a bin reaches capacity, the sensors will alert Council via an app which notifies that specific bin requires collection.



Fire Detection

Key weather stations will contain thermal imaging sensors to assist in early identification of fire activity



Stock Tracking

On-farm sensors to monitor tank and trough levels



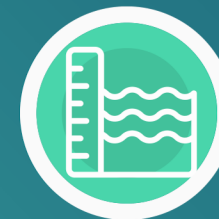
Parking

Sensors to monitor overstay in Council parking bays



Water Level Monitoring

On-farm sensors to monitor tank and trough levels



Flood Monitoring

Sensors on key bridges measuring depth and flow rate to assist in early detection of flood activity



Weather Stations

Local weather network established and providing accurate and live local weather data



Bridge Monitoring

Sensors on key bridges collecting vibration and movement data to assist with bridge health monitoring



The journey to come: Future Plan



For more information on our
Smart Rural City Program, please contact
Chief Executive Officer, Dr Tim Harrison on tharrison@ararat.vic.gov.au
or the Organisational Transformation Team on 5355 0215
or email mroberts@ararat.vic.gov.au or gcarman@ararat.vic.gov.au.



Ararat Rural City