



## *Planning a Smart City*

### *Learning applications*

In partnership with the Townsville City Council (TCC) and James Cook University (JCU), Altoview will give local students a first look into the widespread applications the new Internet of Things (IoT) platform can provide.

The Townsville Smart City Project is one of the first in Australia to use Low Power Wide Area Network (LPWAN) wireless technology to send data from multiple measurement nodes to the cloud where it is stored using Altoview software. Altoview provides an open-access platform that can be used by the community to develop and test innovative IoT ideas.

### *What will they learn?*

Students will work through real world examples that could be used to help the Townsville City Council plan a smarter city. The activity involves looking at one of the key areas of interest which include monitoring occupancy, activity, electricity, and water in urban areas. Using an activity tracking example, students will be shown how to develop a LoRa node using an Arduino-based development kit to count pedestrian traffic in specific areas of interest. Data will be measured and transmitted wirelessly to the cloud,

where it can be accessed by the Altoview web portal.

With the ultimate aim to encourage innovation, this workshop will provide the necessary tools and knowledge to take advantage of the open-access Altoview platform. This student learning exercise has been developed to provide a real world experience for students and technology enthusiasts in the wider Townsville community.

There has been global interest in the Altoview technology which has the potential for use in agribusiness, hospitality, energy providers, universities, governments, environmental groups and more.

With the IoT community expanding in Townsville and internationally, Altoview presents an innovative end-to-end solution.

