

City of Marion Innovation Review



Project: Playground Data Collection

Date: April 2019

Project Description

In the delivery of the playground works program Elected Members asked for data in relation to playground usage. A report was endorsed by council to enable the collection of data in playgrounds to inform future development and upgrades of playgrounds.

Objectives

- To collect data that will inform playground and open space works into the future
- To collect data to inform usage of other open space in the City of Marion (CoM)

Playground Data Collection Trial Locations

Biba playgrounds

- Appleby Road Reserve
- Roy Lander Reserve
- Barton Terrace Reserve

Connected Parks

- Oakvale Way Reserve
- Cowra Crescent Reserve
- Hendrie Street Reserve

SAGE Automation (SAGE)

- Jervois Street Reserve

Timeframe

The trial will be undertaken for twelve months commencing the 1st January and concluding on the 1st of February 2020. The length of trial will enable a long term view of data collection that allows for data sets across a range of seasons and holidays to capture comprehensive data collection on playground usage.

Cost

A budget of \$48 000 was allocated to collect data across a range of playgrounds. After reviewing a number of data collection devices and companies, it was decided to trial a range of products and devices to identify which data collection best suits CoM needs into the future.

The following companies and devices have been selected

- SAGE – battery sensors to monitor Jervois Street Reserve
- Connected Parks
 - Oakvale Way Reserve – Wi-Fi sensors to monitor use of open space and play equipment
 - Cowra Crescent Reserve – gate counters
 - Hendrie Street Reserve – gate counters
- Biba – Augmented reality markers fitted to playgrounds to enable games to be played on devices with and around play equipment.

All three technologies are costing a total of \$45 781 to trial. The technology will belong to the CoM after the trial ends, ongoing costs will be for data collection and analysis.

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Assessment

Biba games have been installed at three playgrounds since February 2019. Reports are received quarterly as per sample report (Attachment 2). Data insights are assessed against similar playgrounds within the CoM and worldwide.

Connected Parks have installed and tested sensors at Oakvale Way Reserve and data collection was started April 2019. The data will be collected to a dashboard housed by Connected Parks. This is currently being tested and will be available to CoM in May.

Data collected includes

- Equipment preference
- Peak usage days and times
- Temperature
- Length of session

Sensors at Jervois Street Reserve have been in place since March 2019 and data is collected and analyzed in a dashboard housed by SAGE, which can be visualised in a variety of ways. This type of technology and monitoring is new to SAGE and they continue to develop the sensors to ensure the best data collection is achieved.

The following graphs summarize a sample of usage data from Jervois Street Reserve.

