

**Wednesday, 29 April 2020**

Sydney Australia:

**Pedestrian Counting Data gleaned from LoRaWAN based people counters is assisting major University Research into the social, economic and mobility impacts of COVID19 on communities.**

Meshed IoT is partnering with the Australian based University of Wollongong to undertake research into the social and economic impacts of the global COVID19 pandemic on community mobility using aggregated data from approximately 180 locations in 5 states sourced from the Meshed LoRaWAN based nCounter pedestrian counting solution.

Meshed is the largest provider of public and private LoRaWANs for the Government and Infrastructure Sectors in Australia and New Zealand. In partnership with Liverpool City Council in NSW, Meshed designed and built the highly successful and widely adopted **nCounter Wi-fi Device Counting** solution which is now being used by 26 local government authorities to monitor pedestrian movement and numbers in locations such as CBDs and transport hubs, public spaces and precincts, community facilities, sporting grounds, walking trails, parks, beaches and patronage at major festivals and events.

The Meshed COVID19 Pedestrian Index Data demonstrates the critical role smart cities and IoT can play in building more resilient communities and the people counting data will be accompanied by other mobility and activity data to build a model to visualise the crisis impact at the grass roots community level.

The data is being collected using Meshed nCounter devices that recognise wi-fi signals from mobile devices, and send the anonymised counts over encrypted LoRaWAN connections to [The Things Network](#) at 10 minute intervals. The range of the devices can be remotely tuned by sending "downlinks" over the LoRaWAN to change nCounter parameters.

The Index has already shown the effectiveness of the Federal and State Governments health response regulations of social distancing and mandatory quarantining which came into effect around 18<sup>th</sup> March, with pedestrian traffic falling to 60% below the January and February averages across the entire aggregated data set.

This pattern coincides with significant job losses in the food, entertainment, beauty and services sectors which heavily rely on passing trade for business. With this data, the local authority can automatically see the areas that are most affected by the crisis in order to assist in recovery and targeted stimulus.

The local authorities are hoping to use this information to achieve operational efficiencies in critical resource management and to support community health and wellbeing services. It is also hoped that foot traffic information will help in monitoring the effectiveness of targeted local relief packages to support local businesses, retailers, cafes and restaurants, entertainment, cultural, tourism and education organisations.

At a holistic level, the pedestrian counting data will also help to monitor the effectiveness of Federal and State Government economic stimulus and wage relief packages in light of the economic and mobility impacts of the crisis.

Meshed has deployed LoRaWAN networks for **48 Local Government Authority (LGAs) and has been the Technology Partner for 10 Federal Government Funded Smart Cities and Suburbs Program Projects**, making it the **largest provider of smart cities solutions** based on the LoRaWAN standard in Australia. The company's success has been attributed to the company's open eco-system approach and significant uptake by municipalities of the **Meshed Smart Cities Starter Kit** which is an out of the box LoRaWAN solution with gateways(s), devices, data visualisation, technical support and managed network services.

Meshed is the **largest provider of LoRaWAN for the university and research sector** in Australia providing smart campus, smart cities, environment monitoring, agricultural and economic development solutions for the University of Technology Sydney, University of NSW, University of Wollongong, University of Melbourne, Federation University, University of Adelaide, Queensland University of Technology, Charles Sturt University, AARNET, NSW Department of Primary Industries, and the CSIRO.

**About Meshed – [www.meshed.com.au](http://www.meshed.com.au)**

Meshed is Australia's premier provider of LoRaWAN based Internet of Things (IoT) expertise and services for the smart cities, built environment, water, energy agriculture and asset maintenance sectors. Our mission is to enable the adoption of IoT to as many communities, cities, education institutions and corporations as possible through the deployment of affordable, secure and scalable public access and private IoT networks. Meshed is a proud partner of The Things Network, The Things Industries and a Member of the Smart Cities Council ANZ, the IoT Alliance Australia, the Open Cities Alliance and an Adopter Member of the LoRa Alliance.

**About The Things Network - <https://www.thethingsnetwork.org/>**

Founded in September 2015 in Amsterdam, The Things Network (TTN) is the largest global, crowdsourced, open, free and decentralized internet of things network. The network allows for things to connect to the internet using little power and little data using the global LoRaWAN connectivity standard. TTN currently has over 107091 participating members, 11,220 gateways operating on the network across 150 countries.

**About University of Wollongong Smart Infrastructure Facility - <https://www.uow.edu.au/smart/>**

SMART Infrastructure Facility is located in Wollongong, NSW Australia and is one of the largest research institutions in the world dedicated to helping governments and businesses better plan for the future. SMART's work is augmented by collaborations with experts across the University of Wollongong's (UOW) Faculties in infrastructure-related fields such as energy generation and storage, water sustainability, environmental engineering, spatial geotechnics and social planning.