IQ-Roads helps the City of Stonington manage its streets



The City of Stonnington is a local government precinct within the metropolitan area of Melbourne. It comprises of the inner south-eastern suburbs of South Yarra, Prahran, Windsor, Toorak, Armadale, Kooyong, Glen Iris, Malvern and Malvern East all of which are sought after places to live, work and play as they are within 10km of the Centre of Australia's second largest city.

With high levels of population density and commercial activity, traffic monitoring and control is an integral part of Stonnington's city planning and management strategy.

With congested streets interwoven with tram tracks, the city needed an effective way to understand and manage traffic flow.

A Complete Solution from Schreder SCS

Schreder SCS, is the Australian Systems Integration arm of Schreder, a Belgian company, specializing in street lighting amongst other things. SCS was invited to implement a system to understand and improve the traffic situation in the city.

SCS partnered with iOmniscient to implement its IQ-Roads Intelligent Traffic Management system for this purpose. Cameras were mounted on street lighting columns and tram poles. The Artificial Intelligence based video analytics of IQ-Roads was used to analyse interval counts of cyclists, cars and pedestrians passing by, the speed of passing vehicles and the occupancy of street parking spaces. Events such as jaywalking, near misses and graffiti can also be detected and analysed and the system is particularly useful in managing and monitoring crowds during public events.

All data is privacy protected – a unique and patented feature of the IQ-Roads system and its in-built Health Check system ensures that the user is immediately alerted if the camera feeds are negatively affected in any way

A hybrid architecture is used. The core analytics is performed near the camera on Intel Super Edge devices. Resultant counting and event data is sent to a centralized system hosted in the Amazon Web Services cloud where a comprehensive dashboard allows approved users to analyse the available information and use it to improve their management of the traffic

SCS, as the integrator has provided an end-to-end service right from designing the solution and obtaining the necessary approvals to installation and ongoing operations. They continue to perform regular data accuracy tests, data cleansing and optimization of the system

IOmniscient provided its IQ-Roads software as well as its Analytics Ready cameras which have been optimized for this application. It also provided design and calibration support to SCS.

iOmniscient software runs exclusively on Intel computing hardware powered by its OpenVino technology.

Key Customer Outcomes

The City of Stonington now has access to accurate and reliable information about traffic flows on its major roads and can derive good insights for its decision making. This enables them to better plan their road maintenance and their parking regulations and to understand foot traffic data for shops and cafes within their precinct.

And as iOmniscient's systems have been rated the most comprehensive in the industry worldwide the City can continue to grow the system in new directions at minimal cost as their own requirements expand.