

# UHD RADAR AS INDUCTIVE LOOP REPLACEMENT

JUNE 2020

## Advantages of Smart Radar detection over loops any other technology.

UHD Smart Micro Radar devices are a superior alternative to in pavement Inductive loop vehicle detectors.

Inductive loop detectors have proven to be very, expensive to install and maintain over the life cycle of the intersection and are a point of premature failure of pavement by way of saw cuts in the pavement.

Entirely removing the requirement for saw cutting into the pavement to install wire and sealant will greatly enhance the longevity of pavement in particular at stop lines where SCATS loops are the regular point of failure for pavement.

Smart micro UHD radar has effectively demonstrated it can replace a conventional SCATS loop in terms of operational performance.

## Environmentally responsible

Loop cutting is a dirty resource intense business, The end to end process of saw cutting and sealing asphaltic pavement creates unwelcome noise , dust and concrete slurry which is required to be disposed of carefully.

Over an intersections operational life this cycle of unnecessary waste is continually repeated numerous times.



Pavement failure and unsightly saw cuts in kerb faces are eliminated

## Smarter

- Operating and maintenance costs virtually NIL
- No damage to Krebs and Pavement
- Proven reliability
- Resource waste eliminated
- Export of traffic Statistics and data



## A true dual purpose sensor

Cycle counting has emerged a region of interest for all road authority's.

A smart micro sensor in addition to intersection control will count and classify traffic and cyclists.

Additional virtual detection zones are easily placed without any additional infrastructure

Bus Priority is another application that can be implemented using a smart micro sensor.

## Network Resilience

Roadworks create real challenges for network operators.

One significant benefit of virtual detection is that detection zones can be moved to accommodate temporary lane required changes, projects can deliver SCATS functionality long before final seal is laid.

Minor seal repairs or civil projects often damage inductive loops unintentionally creating additional drain on TMC resources to implement fixes.

There is no detection downtime waiting for TMP approvals or pavement repairs, radar continues to function at 100% regardless of the pavement condition.

## Improved safety for field technicians

To accurately diagnose a in pavement loop failure field technicians are required to access a Kerb side termination box.

This can be in an entirely dangerous location that may require expensive temporary traffic management, Network owners benefit by removing risk to contractors and employees alike.

## Reliable in all conditions

Radar unlike other technology is not affected by poor weather ,sun strike or vehicle illumination.

A radar sensor will continue to operate correctly without regular cleaning unlike a lens based solution.



## Contact Us

Please call for email us for more information about our services and products

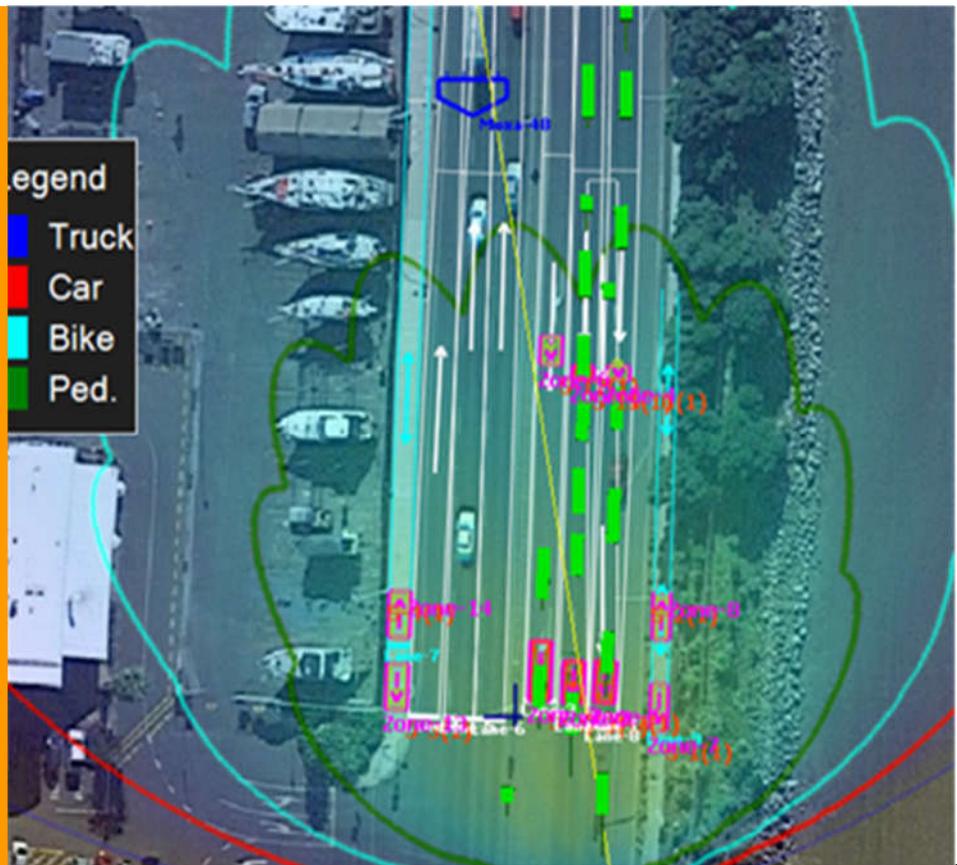
**Traffic Systems limited**  
681E Rosebank Road  
Avondale

+64 09 829 2680

info@tslgroup.co.nz

Visit us on the web at

<http://trafficsys.co.nz/>



9005 Bridge Marina

## Tauranga City Trial site

The Intersection of Bridge Marina in Tauranga was proposed as candidate for an initial trial of Radar for intersection control.

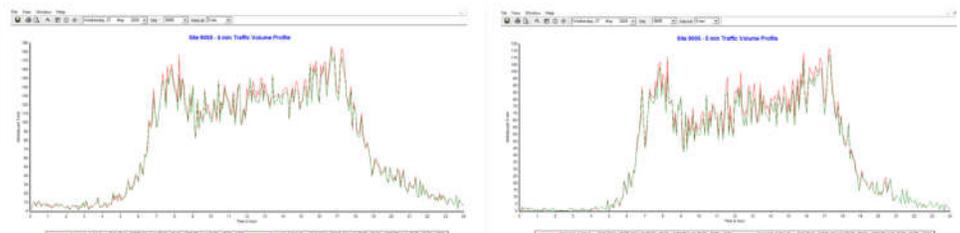
It is a very busy site adjacent the port with a significant number of truck moments and high daily volumes.

Existing loop detectors are located on the limit lines and advance on the approach at 35 Meters.

The Intersection personality was re written to enable an easy SCATS change between existing loop detectors operating on internal detectors or the new Radar inputs duplicated virtually over the physical loop,

This approach has been operating under radar control since 11 March 2020, No non detects or locked detection have been reported.

Traffic reporter data randomly sampled shows radar detection profile to mimic loops almost identically



TSL : Exclusive New Zealand

distributor of Smartmicro products

