SCATS Cornerstone

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SCATS Cornerstone is a software application that allows you to create digital spatial models of the signalised intersections in your road network.

Digital Spatial Model

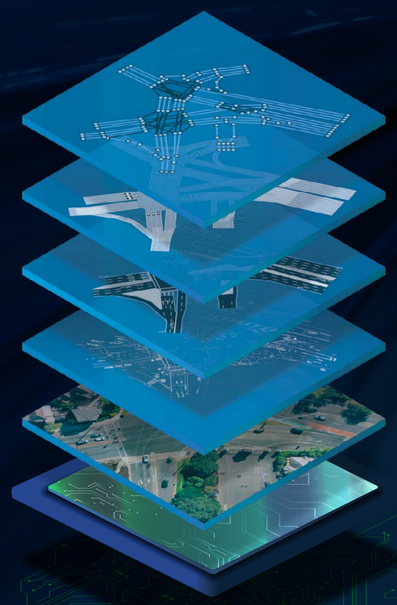
The digital spatial model is a single source of truth that lets you manage your network accurately and efficiently.

It provides accurate site history and status, allowing you to implement site changes throughout the life cycle of the intersection.

Any changes made to an intersection's digital spatial model are available in real-time to dependent SCATS products.

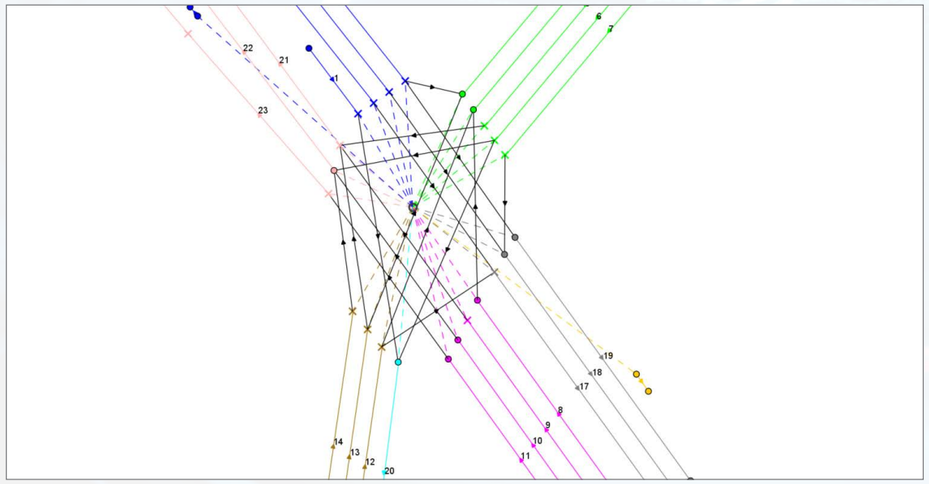
Cornerstone modelling includes:

- Lane boundaries and markings, ingress and egress of roads or lanes, stop lines, spatial coordinates of the intersection, lane markings, permitted vehicle types (car, bus, bicycle, tram etc.), medians, stop lines and pedestrian crossings.
- Detectors
- Lane movements
- Signal groups and phases.



Benefits

- Provides spatial accuracy of an intersection's geometrical layout
- Creates the following industry-standard geospatial message formats using data model outputs
  - GeoJSON
  - MAP message from the Cooperative Intelligent Transport Systems (CIT-S) standard message
- Enables the implementation of designated vehicle priority through signalised intersections via SCATS Priority Engine
- Facilitates Vehicle to Infrastructure (V2I) communications by providing MAP messages to CAVs
- Provides a history of changes to manage the life cycle of an intersection.

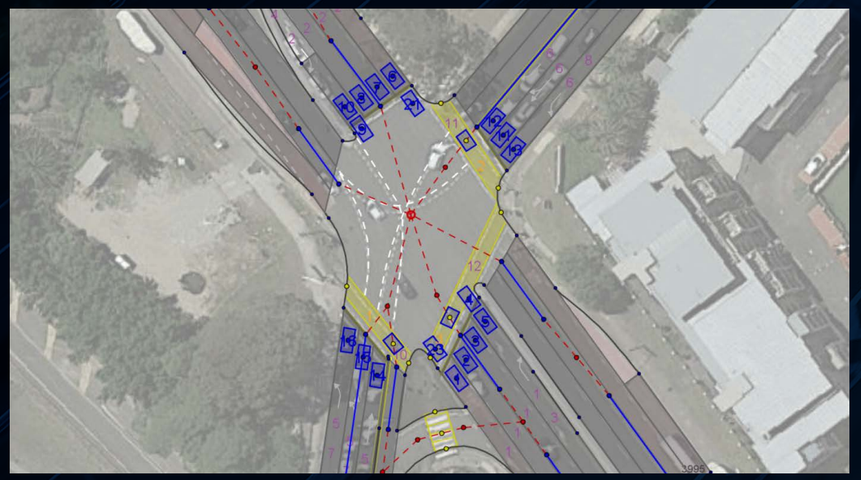


MAP message graphic via C-ITS layer in the Cornerstone interface.

How does SCATS Cornerstone work?

The digital spatial model is created via a graphical interface using an import from SCATS Picture, a CAD intersection design plan or a satellite map image as a source reference. The intersection layout is converted into multiple formats for traffic systems and applications, and the uniform data is available to all connected systems to consume.

The spatial model in Cornerstone can be utilised in other SCATS applications such as SCATS Priority Engine (SPE) for vehicle prioritisation, or for Connected and Automated Vehicles (CAVs) to support vehicular communications.



Spatial model from Cornerstone interface

Capabilities

Intelligent Traffic System (ITS)
Graphical data for intelligent traffic control systems like SCATS

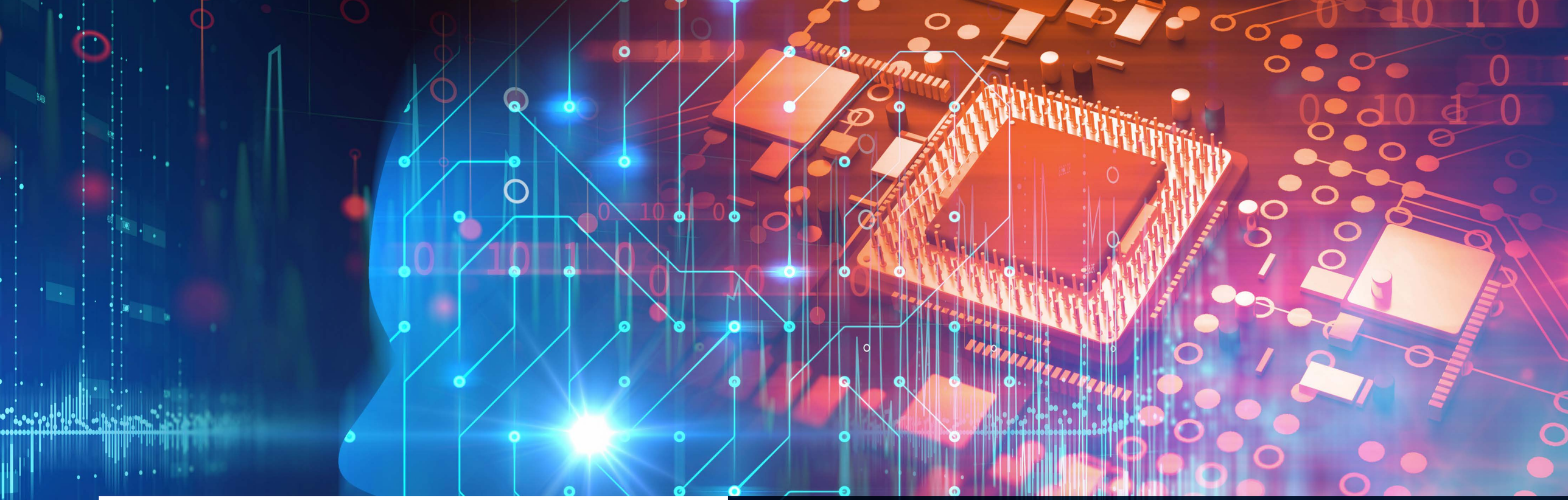
Traffic modelling
Spatial data for Geographic Information System, traffic modelling and simulation systems

Priority system
Graphical data for traffic priority management systems like SCATS Priority Engine (SPE)

Connected and automated vehicles (CAVs)
MAP messages for location intelligence and connected & autonomous vehicles

Network analysis
Historical data for use by traffic network analysis applications

Network management and optimisation
Visual representation of an intersection layout with lane direction and phases



Cornerstone as a Service

Introducing Cornerstone as a Service: your one-stop solution for creating and maintaining Cornerstone intersection spatial models. We understand your team is busy, and that's why our dedicated customer solutions team is ready to assist with upgrading your intersections to Cornerstone. By doing so, you'll gain access to a range of exciting capabilities, including:

- SCATS Priority Engine
- Connected and Automated Vehicle trails
- The upcoming unified SCATS user interface, featuring a modern map-based interface for network control and data insights.

This enables your team to focus on monitoring and optimising your traffic network.

How does Cornerstone as a Service work?

Our dedicated experts will support a seamless migration to Cornerstone. We will work with you to identify intersections to be migrated, create the spatial model, and publish to production.

Unlock the full potential of your road network by partnering with our customer solutions team.

For more information, visit **www.scats.nsw.gov.au** or contact **scatshelp@transport.nsw.gov.au** to learn more about Cornerstone and Cornerstone as a Service today.

scats™

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