Traffic Signal locations display a 7 day snapshot of detector volumes and signal data. The following fact sheet will cover the different artefacts supplied and their contents.

Main Roads is committed to work with industry to improve the self-service capability of trafficmap with an aim of making data easily available.

trafficmap refreshes detector volumes and signal data every three months in March, June, September and December. The data displayed is sourced from the third full week of the previous month. This ensures that a full 7 days’ worth of data is available i.e. there are no public or school holidays.

All traffic signal data is sourced from the Mainroads’ Sydney Coordinated Adaptive Traffic System (SCATS).

Where the information provided on trafficmap does not meet your information requirements (e.g. For Intersection Diagnostic Monitor information, Strategic Monitoring and specific history date ranges) requests can still be submitted via the online forms.

Detector Volume Data

Provides data on the number of vehicles detected at a set of traffic signals in a downloadable spreadsheet format. The information presented is the equivalent of submitting a standard SCATS Traffic Volume request for 15 minute (quarter hourly) or 60 minute (Hourly) intervals recorded over the course of seven days where no public or school holidays have occurred.

The detector volume data is provided as a downloadable spreadsheet. Containing the following tabs.

Site Details

Location details are provided along with the site graphic. The graphic supplied displays the configuration of detectors and the approaches at the time the SCATS data was extracted.

Quarter Hourly and Hourly Volumes

Volumes are presented per detector.

Hourly Intervals

<table>
<thead>
<tr>
<th>Traffic Signal Vehicle Counts</th>
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<tbody>
<tr>
<td>Traffic Signal</td>
</tr>
<tr>
<td>From 19/02/2023</td>
</tr>
<tr>
<td>Day</td>
</tr>
<tr>
<td>Thursday 19/02/2023</td>
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Quarter Hourly Intervals

Data Validation

As you see in the picture above, several intervals show no data. It is not appropriate to display data where a detector is sending a fault signal or the detector is “chattering” i.e. logging vehicles incorrectly.

To provide the best picture of what is occurring at the traffic signal intersection the data is passed through a set of validation rules and the erroneous data is excluded from publication for both the affected quarter hour and hour interval.

Peaks

Peak Times are the times of time where the highest volume of vehicles was detected. AM and PM daily peak times have been provided for each detector. Displayed peak times are the start of the peak period e.g. An hourly peak of 08:15am denotes the peak hour occurred between 08:15am and 09:14:59 am. A quarterly hourly peak of 08:15 denotes the peak quarter hour occurred between 08:15 to 08:29:59am.

Detector Peaks

Signal Data

The signal data provided includes phase sequences, timings, drawings, link and offset plans and a historical 7-day phase log. The information presented is the equivalent of submitting a standard SCATS Signal Data request for a seven day period where no public holidays/school holidays have occurred.

The following artefacts are available for downloading.

Signal Drawings

LMA - Traffic Signal Arrange drawings and the LMB - Pavement and Signage drawings are available in PDF format, providing the arrangements of traffic signal to identify lane configuration, permitted movements and signal configurations.

Signal Phase Sequence Charts

Phase sequence charts provide information on the phase sequences of a signalised intersection, including green phases, overlaps and durations of red and off arrow durations.

Signal Data

The Signal data is a formatted downloadable spreadsheet containing the following data sets.

Site Details

Location details are provided along with the site graphic. The graphic displays the configuration of detectors, the approaches at the time the data was extracted and the related link subsystem (SS).
Time Settings

Displays the current time settings for signalised intersection of:

- **Phase times** to identify late starts, minimum green, early cut-off green, yellow, all-red and maximum green.

- **Walk times** to identify delay and walk time, clearance 1 and clearance 2 times.

- **Special times** to identify where pedestrian protection times exist.

Link and Offset Plans

Provides the information needed to understand how SCATS operates in regards to the coordination between two or more adjacent intersections.

The extract provides an intersection’s

- Offset plans or Coordinated Phases (PP)
- Sub System
- Link Plans (LP)
- Offset Length (PS)

SCAT Phase History

SCATS Phase History is a log containing phase sequences and phase times at a traffic signal intersection. The log will contain the same 7 days as provided by the detector volume counts.
General Information

How is the data collected?
All traffic signal data is sourced from the Sydney Coordinated Adaptive Traffic System (SCATS).

Volumes are captured by an activation of a vehicle detector. Detectors are devices installed at each approach to a set of traffic Signals. As a vehicle approaches, the detector registers a presence and increases the volume count.

Signal data is collected from the specifications used to program the traffic signal intersections and the real time log files.

SCATS Disclaimer
Please note that SCATS traffic counts are subject to below:

SCATS traffic count data should really be considered as vehicle detector activations rather than explicit traffic volumes. Accordingly, there is usually some discrepancy between manual counts undertaken and vehicle activation counts. Typically SCATS under counts vehicle volumes. This is generally due to the closer spacing of vehicles at start of green and the length of the vehicle detection SCATS loop.

Vehicle detector activations will provide some indication of traffic volumes that pass through a signalised intersection during the provided green period. However, it must be noted that the traffic counts will not provide any information in regards to traffic that has not passed through an intersection. This may be caused by normal intersection capacity constraints.

Any SCATS traffic count data could be influenced by the condition of the vehicle detection systems.