

Access application for Transport for NSW signal operations data

I am writing on behalf of WalkSydney, NSW's peak walking advocacy organisation, to make an access application under the *Government Information (Public Access) Act 2009 (NSW)*. I would like to access signal operations data held by Transport for NSW.

WalkSydney has written three times to Transport for NSW (TfNSW) requesting access to signal operations data (our correspondence and TfNSW responses are available here: <https://walksydney.org/2025/09/20/why-wont-transport-for-nsw-share-scats-traffic-signal-phasing-data/>). Despite our best efforts, TfNSW has declined these requests.

We are specifically requesting that TfNSW disclose:

1. Some signal operations data relating to pedestrian delay for representative days in one week for all signalised intersections in NSW. The exact details are specified in the following section.
2. Advice provided to Howard Collins or Josh Murray relating to the WalkSydney request for signal phase data between 2025-04-16 and 2025-08-25. Emails, briefing notes, presentations, instant message logs.

Data specification and scope of request

We are requesting the disclosure of signal operations data for all signalised intersections in NSW. There are two ways that Transport for NSW could disclose this information:

1. Disclose SCATS event logs in a file format that is machine readable using open-source tools (e.g. CSV, Parquet, etc.)
2. Disclose summary statistics for each signal (TCS) site, summarised by hour and day:
 - a. Minimum actual cycle time recorded during the hour
 - b. Maximum actual cycle time recorded during the hour
 - c. Time-weighted mean actual cycle time recorded during the hour (this mean must be weighted by the cycle duration in order to provide a view of average pedestrian waiting time, as a simple arithmetic mean is length-biased and will over-represent shorter cycles)
 - d. Time-weighted mean green interval for each pedestrian movement at the intersection
 - e. The percentage of cycles in each hour in which demand is registered for each pedestrian movement at the intersection

Disclosure via either option 1 or 2, or via both options 1 and 2, would satisfy this application. Disclosure via option 1 would achieve the lowest reasonable cost, and Transport for NSW should establish an overriding public interest against option 1 if it only discloses the information via option 2 at a higher cost.

As an example, data disclosed via option 2 may resemble the following two tables:

Signal ID	Date	Hour	Minimum actual cycle duration	Time-weighted mean actual cycle duration	Maximum actual cycle duration
0254	2025-11-06	17	80	85	90
0254	2025-11-06	18	80	84	88
...	...	...	...	...	...

Signal ID	Pedestrian movement ID	Date	Hour	Time-weighted mean actual pedestrian green interval	Percent of cycles in which demand registered
0254	1	2025-11-06	17	6.2	100
0254	2	2025-11-06	17	6.4	100
...	...	...	...	...	...

However, the same data may be provided in alternative machine-readable formats that convey the same information.

In terms of temporal scope, a useful disclosure would include one weekday (either a Tuesday, Wednesday, or Thursday), one Saturday, and one Sunday, none of which are public holidays, and none of which fall within school holidays. Example dates might be:

- Thursday 6 November 2025
- Saturday 8 November 2025
- Sunday 9 November 2025

The actual temporal scope should not affect the processing cost of the application as it only increases compute time, not human labour time. The reasons for this are detailed further below.

In terms of cadence, a useful disclosure would occur annually, as this would promote informed debate of how road space has been allocated over time, and "Provide transparency to enable public scrutiny" (TfNSW Code of Conduct). The original disclosure should be written in a pipeline (either scripted, or with use of commercial software) such that subsequent extracts require trivial, or at any rate, less labour than the initial extract. WA Main Roads achieved this through "a (daily) scheduled process to decode binary files to plain text according to SCATS documentation" and "a (monthly) scheduled process to copy the decoded files to a public OneDrive area" (WA Network Operations Analysis Manager, personal correspondence 2025-06-06).

For clarity, we are *not* requesting disclosure of:

- Traffic volume data
- Interpretations or analysis of the data
- Guarantees of data accuracy
- Algorithmic details or communication protocols
- Technical drawings of physical infrastructure

Precedent for disclosure

WA Main Roads has established a precedent for publishing SCATS signal operation data as open data: the agency releases individual cycle and phase durations for all intersections on a monthly cadence (link to dataset here:

<https://mainroads.maps.arcgis.com/home/item.html?id=327c0f079090426c8e1e64b07972b3ee#overview>). As such, if Transport for NSW believes there is an overriding public interest against disclosure, it must establish why this applies only in NSW and not also in WA. WalkSydney has already made comprehensive rebuttals for any arguments on "cybersecurity", WA Main Roads data being "historical", or intellectual property grounds along with others (as claimed by Brenda Hoang, on behalf of Josh Murray 2025-05-09, OTS25/01450), thoroughly documented on pages 4-6 of our 2025-05-14 letter, which may assist in your evaluation of possible arguments against release:

<https://walksydney.org/wp-content/uploads/2025/09/SCATS03-2025-05-14-Letter-2-Outgoing-Corro-TfNSW-2025-05-14-Reply-SCATS-data-release.pdf>

Public interest considerations in favour of disclosure

While the *Government Information (Public Access) Act 2009 (NSW)* places the onus on Transport for NSW to prove that there is an overriding public interest against disclosure of this information, we present below some considerations in favour of disclosure of this information.

The *Government Information (Public Access) Act 2009 (NSW)* states that there is a public interest consideration in favour of disclosure when disclosure could reasonably be expected to promote open discussion of public affairs, enhance government accountability or contribute to positive and informed debate on issues of public importance.

Signal operations are an issue of public importance because they incorporate decisions about the temporal allocation of public space to different groups of people. As such, signal operations are identified as road user space allocation in Transport for NSW's *Road User Space Allocation Policy* (CP21000.1) and adjustments to signal operations are explicitly identified as a relevant project under Transport for NSW's *Road User Space Allocation Procedure* (CPr21038.1). Publishing data on signal operations would therefore promote informed debate on road user space allocation in NSW and enhance accountability of Transport for NSW in complying with its own policies and procedures. Accountability is particularly important given that Transport for NSW's *Road User Space Allocation Policy Implementation Review Report* (<https://www.transport.nsw.gov.au/projects/current-projects/implementation-review-of-road-user->

space-allocation-policy) found that staff have historically been unaware of Transport for NSW policy, have misunderstood it, have found it challenging to implement, and have implemented it inconsistently. In this review, it was "raised that temporal considerations of road space allocation are rarely discussed in the road space allocation conversation" (pg 21). Public data will contribute to making TfNSW decisions about temporal road space allocation transparent. Unlike with speed zoning, there is no way to know how long people in different urban contexts are waiting to cross roads and streets unless they physically go and stand at the signals and measure the wait times. Understanding how TfNSW allocates time for people to cross streets can improve outcomes for high streets and commercial streets, schools, health precincts and other roads and streets where there is a demand to cross.

Signal operations are also an issue of public importance because they influence road safety outcomes. Transport for NSW's *2026 Road Safety Action Plan* (<https://towardszero.nsw.gov.au/roadsafetyplan>) commits Transport for NSW to a safe systems approach to road safety and aims for zero fatalities by 2050. There is a body of evidence in Australia and abroad that shows that people are more likely to cross during the pedestrian red interval the longer they wait (Martin 2006; City of Sydney 2024; Josef Whitfield 2025; Austroads "Guide to Traffic Management Part 12: Integrated Transport Assessments for Developments" 2020 pg. 47; Transport for NSW 2026 "Walkable NSW Discussion Paper" pg. 22), and pedestrian waiting times are directly linked to signal cycle durations. As such, "Improve signal timing to reduce pedestrian delays" is recommended by Austroads in Austroads research report AP-R730-25 *Keeping People Safe When Walking: Recommended Pedestrian Safety Interventions* to reduce trauma on roads (<https://austroads.gov.au/publications/road-safety/ap-r730-25>). Publishing data on signal operations would therefore promote informed debate on Transport for NSW's implementation of recommended interventions to achieve its stated road safety goals.

Fundamentally, disclosing data on signal operations will enhance accountability of Transport for NSW in adhering to its own Traffic Signal Design standard (TS 02670). Part 2 of the Traffic Signal Design standard directs Transport for NSW staff to "minimise the cycle time" as an objective of traffic signal design, in order to "minimise delay for active transport" as an outcome of traffic signal design. Minimising delay for active transport is the second highest priority (behind promoting road safety) of traffic signal design according to the standard. Without disclosure of cycle times and pedestrian green intervals (from which active transport delay can be estimated), there is no way for the public to hold Transport for NSW accountable to its own signal design standards.

Data is not already available to the applicant

Transport for NSW already advertises "specialist services" provided by Network Operations, including SCATS history files in binary format, and "interpreted" SCATS history files. Access to this information costs [\\$220 per site per day](#) but SCATS history files are, according to our

present knowledge, only readable by commercial software¹. The “interpreted” SCATS history files cost \$440 per site per day, and it is unclear if the interpretation includes pedestrian waiting time, and it is likely that much of the interpretation is irrelevant to our request (for example, phasing or flow of vehicles). Given there are around 4,860 traffic signals in NSW (Nov 2025), accessing the data via these options, if they even contain the information that is sought, would therefore cost between 1-2 million dollars for one weekday, or 3-6 million dollars for all representative days in a week.

As a matter of fairness and justice, we believe that it should not cost millions of dollars just to understand temporal road space allocation in NSW, which is a matter of public policy. Moreover, we believe that this service offering violates object 2(b) of the *Government Information (Public Access) Act 2009 (NSW)*, which stipulates that access to government information is facilitated at the lowest reasonable cost.

In the section below, we outline how the data could be extracted and demonstrate that a few simple lines of computer code can extract the data efficiently at a fraction of the cost TfNSW is currently charging.

Processing time and cost

The SCATS History Viewer software provides a command-line interface (CLI) for accessing historical signal operations data. Using the CLI allows TfNSW staff to programmatically process data for the whole state, and for several days, with one human command: by simply iterating over a list of all SCATS regions in the state and all dates of interest using a loop. As such, it should require just as much human labour to process one site for one day, as it costs to process all sites for several days. An example of such a loop is as follows (the exact code written by TfNSW will ultimately differ in some respects):

```
$RegionList = 'EPP','SIL'; foreach ($i in $RegionList) { &
"C:\Program Files (x86)\SCATS\History
Viewer\ScatsHistoryViewer.exe" -console -offline -region $i -from
"20251106" -sites "all" -s -out
"C:\Users\USERNAME\folder\statistics.csv" -append }
```

To underscore the simplicity of the required extracts, WA Main Roads have told us that “There is nothing particularly tricky happening here” in regards to their own process (WA Network Operations Analysis Manager, personal correspondence 2025-06-06).

¹ There appears to be no public documentation about the *.hst / *.hist SCATS history binary format, let alone an example binary to analyse. The LX format for *defining* timing is somewhat documented on p.15 of TTD 2018/002 (and we note an [unofficial MIT-licensed parser](#)), however we note the superseding TS 05461 removed this public documentation of the LX format. We see no public benefit in obscuring the file format specifications of Government-owned software. **If we were provided a specification**, we'd be happy to write and publish an open source parser for .hst files if this reduced TfNSW labour - meaning running ScatsHistoryViewer.exe isn't even required.

SCATS History Viewer is available to all staff at Transport for NSW, not just Network Operations. We believe that the most efficient processing of this data would be achieved by data science or data engineering teams rather than Network Operations, as these teams specialise in repeatable, low-labour approaches to data extraction. Time estimates from multiple teams within TfNSW should be sought so that the lowest reasonable cost can be achieved.

Cost estimate

Cost estimates should not be inflated due to unnecessary manual data analysis work. WalkSydney counts significant professional software and traffic engineering experience among its (volunteer) members, and if the raw data is shared (as CSV files or Parquet data dumps in line with option 1, similar to WA Main Roads releases), WalkSydney is easily able to undertake further data analysis to communicate it to the public to enable robust public scrutiny and publish the raw data and Creative Commons-licensed code to enable simple replication and verification.

Request special consideration and fee reduction/ waiver

Lastly, whatever cost is calculated we are requesting a 50% discount (s66, special benefit to public) or full waiver (s127).