

2025-05-14

Transport for NSW 231 Elizabeth Street Sydney NSW 2000

brenda.hoang@transport.nsw.gov.au

cc.

Josh Murray (josh.murray@transport.nsw.gov.au)

Roy Brown (roy.brown@transport.nsw.gov.au)

#### Re: Public Access to SCATS Traffic Signal Phasing Data

Dear Brenda Hoang,

Thank you for your considered response.

I appreciate your open invitation of further correspondence and for myself, WalkSydney, and other interested parties to meet with your Sydney Coordinated Adaptive Traffic System (SCATS) team.

I have a strong appreciation of the challenging work undertaken by the TfNSW Network Operations team in designing, operating and managing the complex trade-offs required to serve the diverse stakeholders of signal timing (which I have previously stated <u>publicly</u>).

However, we are disappointed to learn that "Transport also does not plan to establish a scheme or arrangement for the publication of that data for the NSW road network and signalised intersections.", and we request a reconsideration of this position.

#### 1. What We Are Requesting

We are requesting that Transport for NSW (TfNSW) begin regularly publishing historical signal phasing data - for example, on a monthly basis - for signalised intersections across NSW.

Specifically, we seek the cycle time of each intersection, for each cycle that runs, and the time allocated to each signal phase.

We do not request:

• Traffic volume data



- Interpretations or analysis of the data
- Guarantees of data accuracy
- Internal decision-making rationale
- Algorithmic details or communication protocols
- Technical drawings of physical infrastructure

This is about transparency, not intellectual property or cybersecurity. The data we request consists of outcomes, not inputs or methods.

#### 2. Why you should release this information

Transparency and accountability are cornerstones of good governance. The public has already paid for the infrastructure and expertise that generates this data. The information belongs to the people of NSW. There is a strong public interest in understanding how traffic signals affect mobility and safety – there have been several recent media articles, including from the <u>Sydney Morning Herald</u> and <u>ABC</u>.

People walking and using other active modes often face long and unpredictable waits at intersections. Improvement in priority for pedestrians is an action 7 of a focus area 5.1 of the current TfNSW Active Transport Strategy:

Improve priority for walking trips in centres, towns and villages, such as reallocating road space to widen footpaths and providing more frequent and longer duration pedestrian crossing phases at traffic signals.

Action 7, of focus area 5.1 "Enable 15-minute neighbourhoods", <u>TfNSW Active Transport Strategy (pg 14)</u>

The updated <u>TfNSW Road User Space Allocation Policy</u> states it must be followed when allocating *temporal* road user space:

This policy sets out the mandatory principles and requirements Transport staff must follow when allocating physical and **temporal** road user space safely and equitably to support the movement of people and goods and place objectives. **(emphasis mine)** 

Transport must allocate road user space based on the following principles:

...

- allocate road user space based on the network vision and road functions, considering all road users in order of:
  - 1. walking (including equitable access for people of all abilities)
  - 2. cycling (including legal micro-mobility devices)



- 3. public transport
- 4. freight and servicing
- 5. point to point transport
- 6. general traffic and on-street parking for private motorised vehicles.

Signals are explicitly defined as in scope for temporal allocation:

Temporal allocation: Optimising how space is allocated throughout the day, week or year. This includes the dynamic control of space, access, level of priority, speed and kerbside use through signage, **signals**, and other technology

(7. Definitions, pg. 6. TfNSW RUSAP. Emphasis mine.)

We are grateful that, as you stated TfNSW "...remain committed to our purpose to make NSW a better place to live, work and visit by delivering a safe, reliable and sustainable transport network".

It is currently the National Road Safety Week. We note that <u>data recently presented to the TfNSW Active Transport Community of Practice (2024-06-20)</u> documented higher rates of unsafe crossing in the City of Sydney due to dangerously long waits at signals, aligning with international evidence (<u>Martin, A. (2006. Factors influencing pedestrian safety: a literature review (No. PPR241). Wokingham, Berks: TRL (Transport for London), Baass K G (1989). Review of European and North American practice of pedestrian signal timing. Prepared for RTAC Annual Conference Calgary, Alberta.)</u>

<u>50 people</u> are killed on NSW roads and streets every year, this figure is <u>trending up</u> - and many of these people are killed waiting at signals or taking risks to cross streets because signal wait times are too long.

We believe releasing such signal timing data is in the public interest of transparency, better planning, and inclusive transport outcomes which could reduce harm and assist the shift to sustainable modes.

Understanding signal timing is crucial for the public to evaluate progress toward action 7 of focus area 5.1 of the TfNSW Active Transport Strategy, and assess compliance with the *mandatory* Road User Space Allocation Policy. Without access to data, the public cannot assess whether outcomes are improving.



### 3. Factual errors and misrepresentations

TfNSW statement in 2025-05-09 letter	Correction
"We also note that the last published set of 'signals data' from WA Main Roads, a customer of SCATS, is from October 2023. As such, it is historical and not maintained as a real-time or near real-time data set."	This is factually incorrect.  In the third paragraph of my 2025-04-16 letter I include a hyperlink, which points to a page titled "Historic Traffic Data at Signalised derived by SCATS":  https://mainroads.maps.arcgis.com/home/item.html?id=327c0f 079090426c8e1e64b07972b3ee#overview. This site clearly states "Item updated: 28 Apr 2025". Following the "Open" button on this page shows several folders of traffic data, clearly labelled from 2024-11 to 2025-04.  This could not have changed between our correspondence; the Internet Archive captured the April 2025 update on April 7th - nine days before I sent my prior letter.  I am unable to find a 'signals data' dataset dated October 2023 on <a href="https://catalogue.data.wa.gov.au/">https://catalogue.data.wa.gov.au/</a> or <a href="https://catalogue.data.wa.gov.au/">https://catalogue.data.wa.gov.au/</a> or <a href="https://catalogue.data.wa.gov.au/">https://catalogue.data.wa.gov.au/</a> or
"Data on traffic volumes is available for a cost-recovery fee from Transport."	We did not request traffic volume data. This is a misrepresentation.  In my prior letter I "request that Transport for NSW make SCATS traffic signal phasing data publicly accessible"  While we would welcome such data to be made open, we understand sensitivities around the accuracy, commercial value and possibility of misinterpretation of sensor derived vehicle volumes.
"If you are interested in a traffic signal report, data or service, please complete the relevant form, by following the link below.  You can also view the schedule of fees for	The process you describe to request traffic signal data by completing the linked form states a cost no less than \$200 for a single intersection (TCS site). None of the form options offer non-interpreted (raw) SCATS history file, or options for networkwide signal timing data.  Your letter describes WA Main Roads as a "customer" of SCATS. It is difficult to believe that a customer agency is capable of exporting signal timing data in a machine-readable GeoParquet



specialist services provided by the Network Operations on the form page." format under a Creative Commons license (free and open source), yet the agency that develops and maintains SCATS cannot. We find it implausible that TfNSW lacks the technical capability to release similar data.

The public has *already paid for* the infrastructure and expertise that generates this data. The information belongs to the people of NSW. SCATS is owned by the state of NSW.

"As such, the optimisation algorithm and related information form part of the intellectual property at the core of the SCATS product and is considered commercially sensitive information."

We did not request the optimisation algorithm or any information that may be considered intellectual property, or any commercially sensitive information. This is a misrepresentation.

We do not consider signal cycle time or time spent on each phase commercially sensitive, as we do not request the input information used to determine such outputs. If it was, the described WA Main Roads data would be releasing commercially sensitive information and core SCATS intellectual property. Please let us know (and WA Main Roads) if this is the case.

Additionally, the <u>director of TfNSW Network Operations</u> *himself* stated in the Q&A of a public <u>AITPM</u> talk:

"...Do we have any real objection to providing that data as operators, to providing that data openly? No, I don't think so. But exactly what the government and transport at a senior executive level wants to do, obviously that hasn't been determined yet."

(2025-02-06) (Link to full quote)

"Additionally, for cybersecurity reasons, SCATS cannot provide detailed information on how the algorithm-driven optimisation messages are communicated to the physical infrastructure. That information is kept confidential to protect the safety critical systems

We did not request "detailed information on how the algorithm-driven optimisation messages are communicated to the physical infrastructure", or any related internal architecture, or any technical drawings of physical infrastructure. This is a misrepresentation.

In my prior letter I "...request that Transport for NSW make SCATS traffic signal phasing data publicly accessible.."

We do not request information on *how* messages are communicated to the physical infrastructure, only the resultant



that control the signal phases and timing in NSW intersections from cyberattacks."

cycle time and temporal allocation made for each phase as reported back to the operator.

While we would welcome such data being made open, we do not request engineering diagrams of physical infrastructure installations. We do note that WA Main Roads publishes digital copies of pavement & signage engineering drawings and signal arrangement drawings for every signal, and VicRoads publishes Traffic Signal Configuration Data Sheets ("Op Sheets").

### 4. Further context of Australian precedent of releasing open signal data

WA Main Roads previously published a <u>real-time websocket feed</u> of signal timing. I understand that in December 2024 they were undertaking a significant upgrade of their IT infrastructure and systems. To continue to support the SCATS Open Data Feed, an upgrade and migration of all its components would be necessary. Such a solution was deemed to be time-consuming, costly, require a complete re-write of the underlying solution and result in ongoing overhead.

I proposed that WA Main Roads consider providing regular monthly exports of the previously streamed real-time signal data. This approach offers lower ongoing maintenance than a live feed while preserving the public benefits of transparency and improved planning.

By 2025-01-21, the WA Main Roads Open Data Governance Committee had decided to pursue this suggestion, initially through monthly data dumps, with the potential for automated weekly updates in future. By 2025-04-07 they had <u>published over 8GB of GeoParquet data</u> - an impressive 76 days later. I greatly appreciate their leadership in open data governance and technical excellence.

I look forward to your response.

Kind Regards,

Jake Coppinger

on behalf of WalkSydney

### Jointly signed by

- Tegan Mitchell, President of WalkSydney
- Sara Stace, President of Better Streets

*WalkSydney* is the peak body advocating for walking in the Greater Sydney Region.



WalkSydney's vision is for walking to be the first choice for short trips around Sydney.

WalkSydney has three key asks:

- 30 km/hr urban default speed
- streets that are safe and easy to cross
- pedestrian priority over cars

WalkSydney is a member of the *Better Streets* coalition, an collection of hundreds of community organisations advocating for better streets in Australia