

13 October 2023

[REDACTED]

REF: OIA-13527

Dear [REDACTED]

### **Request made under the Official Information Act 1982**

Thank you for your email of 2 September 2023 requesting information regarding average speed (point-to-point) safety cameras under the Official Information Act 1982 (the Act).

Prior to responding to your request, I can advise that Waka Kotahi NZ Transport Agency is committed to meeting its Road to Zero targets. Investment in installing and operating safety cameras is part of meeting that commitment where no one in Aotearoa New Zealand is killed or seriously injured on our roads.

I will respond to each aspect of your request in turn below.

#### **1 Details on the use of point-to-point speed cameras**

*1.a: A comprehensive explanation of how point-to-point speed cameras operate, including their purpose and technology*

The following document falls within the scope of your request and is enclosed:

- Attachment 1: *OIA-13527 Point to Point Safety Camera Systems - The hardware and process, September 2023.*

The above document contains material relevant to the operation of average speed (point-to-point) safety cameras.

A simplified overview of how average speed (point-to-point) cameras operate is available on the following link: <https://www.nzta.govt.nz/safety/partners/speed-and-infrastructure/safety-cameras/safety-camera-rollout/>

In terms of a more comprehensive explanation, the time taken for a vehicle to travel between the two cameras is measured, and the average speed calculated (distance divided by time). The camera takes an image of a vehicle as it enters the measurement zone and records the time that image is taken. A second image is taken at another average speed (point-to-point) camera as the vehicle leaves the measurement zone. Both images are processed by Automatic Number Plate Recognition (ANPR) software to capture the vehicle registration number which is used as the unique identifier for each vehicle. The two images containing the identified vehicle are then matched. The difference

between the entry and exit time is calculated to give the total time taken for the vehicle to travel the known distance between the two cameras.

The vehicle's average speed between the two cameras is calculated using the equation specified in section 146A of the Land Transport Act 1988. The average speed of a vehicle between two detection points on a road is calculated using the following formula (and expressed in kilometres per hour rounded down to the next whole number):

$$(d \times 3.6) \div t$$

Where d is the surveyed distance (expressed in metres and rounded down to the next whole number) and t is the period (expressed in seconds) between the time when the vehicle passes the first detection point and the time when it passes the second detection point.

The distance between cameras is measured by registered surveyors, and the time on each camera is sourced from New Zealand's official timekeeper (the Measurements Standards Laboratory of New Zealand) via internet Network Time Protocol.

If this calculated average speed is above the speed limit that applies for the measurement zone, then an offence has been committed and enforcement action may follow.

*1.b: Documentation or guidelines that outline the legal and operational framework governing the use of point-to-point speed cameras in New Zealand*

I am refusing your request for information on documentation that outlines the legal and operational framework governing the use of average speed (point-to-point) safety cameras in New Zealand under section 18(d) because the information requested is publicly available in the Land Transport Act 1998, as amended by the Land Transport (Road Safety) Amendment Act 2023 (i.e., sections 4 and 30), and in Land Transport (Approved Vehicle Surveillance Equipment) Notices.

Please see the below links for each piece of legislation:

<https://www.legislation.govt.nz/act/public/2023/0062/latest/LMS812596.html>

<https://www.legislation.govt.nz/regulation/public/2021/0390/latest/LMS599886.html>

*1.c: Statistics and data on the effectiveness of point-to-point speed cameras in improving road safety and reducing accidents, if available*

I am refusing your request for information on statistics and data on the effectiveness of average speed (point-to-point) safety cameras in improving road safety and reducing accidents under section 18(d) of the Act as the information requested is publicly available.

International evidence shows that average speed (point-to-point) safety cameras can be more than three times as effective at reducing deaths and serious injuries than static speed safety cameras. Average speed (point-to-point) safety cameras can reduce the number of people who are killed or seriously injured on roads by up to 56 percent. This information can be found, for example, at:

- <http://a9road.info/safety-statistics/safety-cameras/> which provides information on the first average speed camera installed in Scotland in 2005. The latest three-year figures to July 2015 show a 77 percent reduction in fatalities and a 74 percent reduction in those seriously injured compared with the 2005 baseline;
- <https://www.rosipa.com/media/documents/road-safety/speed-cameras-factsheet.pdf> which reports that, on average, the permanent average speed camera sites analysed saw a reduction in injury collisions, particularly those of a higher severity:
  - fatal and serious injury collisions fell by 25-46 percent
  - personal injury collisions fell by 9-22 percent.

This document also includes the result of a survey of public opinion conducted by the Royal Automobile Club of Great Britain (RAC) <https://media.rac.co.uk/#/pressreleases/average-speed-cameras-more-effective-at-slowing-vehicles-down-than-traditional-single-location-fixed-ones-2562126> where:

- 79 percent of 2,172 motorists surveyed said average speed cameras are better at slowing down vehicles compared to just 9 percent who felt that single location cameras were more effective.
- 81 percent of the motorists surveyed believed that average speed cameras were fairer than fixed cameras and promoted a smoother driving style and more consistent driving speeds compared to drivers braking to briefly conform to the speed limit when driving past a fixed camera.
- <https://www.sciencedirect.com/science/article/pii/S0001457514002577> where Høye identified four studies examining the effects of average speed (point-to-point) safety cameras. Using a meta-analysis approach (that is, a statistical combination of the results of these four studies), Høye found that average speed (point-to-point) safety cameras were more effective at reducing crashes, deaths and serious injuries than fixed speed cameras.
- Benefits of mobile point-to-point safety cameras in rural South Australia (2021) SJ Raftery <https://casr.adelaide.edu.au/publications/list/?id=1942>
- Investigation into the use of average speed cameras (December 2011) M Lynch, M White and R Napier AECOM NZ Ltd <https://www.nzta.govt.nz/assets/resources/research/reports/465/docs/465.pdf>.

## **2 Proposed locations of point-to-point speed cameras**

*2.a: A list of all proposed locations for the deployment of point-to-point speed cameras within New Zealand*

Waka Kotahi is preparing to install and test 12 average speed (point-to-point) safety cameras across six average speed corridors in Tāmaki Makaurau Auckland. I am refusing your request for information on proposed locations of point-to-point safety cameras under section 18(d) of the Act as the information requested is publicly available at: <https://www.nzta.govt.nz/safety/partners/speed-and-infrastructure/safety-cameras/safety-camera-rollout/>.

*2.b: Any feasibility studies or assessments conducted regarding the selection of these proposed locations*

The following document falls within the scope of your request and is enclosed:

- Attachment 2: [OIA-13527 TM P2P Site Reports, September 2023](#). This document contains information on feasibility studies or assessments regarding the selection of these proposed locations.

*2.c: Information on the criteria and considerations used in determining these locations, such as accident rates, traffic flow, and safety concerns*

Attachment 2 contains information on the criteria and considerations in determining these locations.

Safety camera locations will be in places where they can deliver the most safety benefits alongside other measures, including safety infrastructure and speed limit reductions. To verify safety camera locations, Waka Kotahi is taking a more proactive approach in defining high safety benefit locations that involves considering average speeds, the function and volumes on the road as well as crash trends.

More general information on safety camera locations can be found on the Waka Kotahi website:

- Information on selecting safety camera locations and prioritising site decisions based on a balance of criteria -<https://www.nzta.govt.nz/safety/partners/speed-and-infrastructure/safety-cameras/safety-camera-rollout/>
- Crash Analysis System (CAS) data on where, when, and how road crashes occur - <https://www.nzta.govt.nz/safety/partners/crash-analysis-system/>
- Tackling Unsafe Speeds Programme Business Case which establishes the case for the proposed investment in safety cameras as part of the new government policy on safety cameras – <https://www.nzta.govt.nz/safety/partners/speed-and-infrastructure/safety-cameras/relevant-documents/tackling-unsafe-speeds-programme-business-case/>
- Safety Camera System Indicative Business Case provides due diligence of the NZ Police operations and how the safety cameras would be integrated into Waka Kotahi - <https://www.nzta.govt.nz/assets/About-us/docs/oia-2022/oia-10452-attachment-4.pdf>
- Safety Camera System Detailed Business Case (DBC) outlines the role and contribution of speed to safety – <https://www.nzta.govt.nz/safety/partners/speed-and-infrastructure/safety-cameras/relevant-documents/safety-camera-system-programme-detailed-business-case/>.  
The DBC proposes that investment in the safety camera system will contribute 4 percent of the targeted 40 percent reduction in deaths and serious injuries by 2023. The DBC was informed by international research and evidence from other jurisdictions that demonstrate that road safety benefits can be achieved by implementing safety cameras in line with best practice. This includes taking a mixed 'highly visible' approach for certain camera types as appropriate, and an unsigned 'anytime anywhere' approach for other camera types including mobile cameras at selected sites.

*2.d: Any public consultation or stakeholder engagement that has taken place or is planned concerning these proposed locations.*

Waka Kotahi is consistently engaging with Māori on developments related to the safety camera system programme, including the proposed Tāmaki Makaurau Auckland average speed (point-to-point) safety camera corridors. This engagement extends to collaboration on the selection and establishment of average speed (point-to-point) safety camera corridors or locations. To ensure transparency and ongoing communication, Waka Kotahi provides fortnightly updates to keep Māori stakeholders informed of the latest progress and developments. We value the insights and feedback from this process and will continue to prioritise such engagements in our planning and decision-making processes for the rollout of average speed (point-to-point) safety cameras.

Waka Kotahi and Auckland Transport (AT) share the responsibility for delivering community level engagement and communications regarding the site selection and installation of the average speed (point-to-point) safety cameras. As the Road Controlling Authority for local roads in Tāmaki Makaurau Auckland, AT manages the relationship and leads the engagement with local boards and Auckland Council. Waka Kotahi holds weekly meetings with AT to discuss the installation of the average speed (point-to-point) safety camera corridors in Tāmaki Makaurau Auckland and to confirm the location of a further corridor.

Waka Kotahi first engaged with the NZ Police (the District Commander Waitemata, and the Road Policing Manager and Team) in April 2023 to discuss a proposed average speed (point-to-point) safety camera testing corridor in the Waitemata region of Auckland. Waka Kotahi regularly liaise with NZ Police to understand the level of risk of installing a safety camera site package (site and camera). After discussions that took place approximately early September 2023, the decision was made to move the testing corridor from East Coast Road to Matakana Road.



At this point, public consultation and stakeholder engagement with people residing close to average speed (point-to-point) camera locations in the six average speed corridors in Tāmaki Makaurau Auckland has not yet taken place. Stakeholder engagement planned for people residing close to the locations of each average-speed (point to point) safety camera site in these six average speed corridors includes making people aware of the upcoming construction and notifying when the poles, camera housing and camera installation, testing, and operating any safety cameras begins.

Planned communications are:

- An email from Waka Kotahi to key national stakeholders and an email to key regional stakeholders three weeks prior to construction work commencing;
- Memos from AT, Franklin, Hibiscus Bays and Rodney Local Boards three weeks prior to construction work commencing;
- Letters from AT to residents within a catchment of 500m to 1km radius of each site two weeks prior to construction work commencing;
- Brochures from AT and Waka Kotahi outlining upcoming works and the importance of safety cameras;
- Updated content on the Waka Kotahi website outlining the locations of the six average speed corridors (12 safety camera sites) and other relevant average speed (point-to-point) safety camera information the same day as a media release;
- Letters from AT and Waka Kotahi to residents prior to poles, camera housing and cameras being installed at the safety camera sites.

### **3 Operational and technical information**

*3.a: Technical specifications and details of the point-to-point speed cameras that NZTA intends to use*

The following document falls within the scope of your request for information on the technical specifications and details of the point-to-point speed cameras that Waka Kotahi intends to use and is enclosed:

- Attachment 1: *OIA-13527 Point to Point Safety Camera Systems - The hardware and process, September 2023*

You will find further information on the specifications of the average speed (point-to-point) safety cameras supplied by Verra Mobility (formerly Redflex) in this link: <https://redflex.com/solution/halo/>.

*3.b: Information on how data collected by these cameras will be stored, managed, and protected to ensure privacy and data security*

[General privacy protections](#) used by Waka Kotahi apply to our use of safety cameras. However, Waka Kotahi is also working through additional privacy considerations that might be needed when average speed (point-to-point) safety cameras are rolled out.

Waka Kotahi is currently consulting with the Office of the Privacy Commissioner on the development of privacy protections. This includes updating the Waka Kotahi Privacy Impact Assessment at every stage of the safety camera rollout, including testing, trialling and introducing new types of safety cameras or functionalities. Privacy protections are found in annexes to the Privacy Impact Assessment. The annex for average speed (point-to-point) safety cameras has not been completed but will be finalised when the enabling legislation for average speed (point-to-point) safety camera operations comes into force on 1 March 2024.

Current Waka Kotahi safety camera Privacy Impact Assessment(s) can be found at [Privacy impact assessment: NZ Rooding Network – CCTV, Automated Compliance and General Management System \[PDF, 914 KB\]](#).

#### **4 Timeline for implementation**

*4.a. Any timeline or schedule for the implementation of point-to-point speed cameras at the proposed locations*

Implementation of average speed (point-to-point) safety cameras is scheduled from 1 March 2024 when the legislation giving Waka Kotahi the legal authority to operate and enforce average speed (point-to-point) safety cameras comes into effect.

Under section 28 of the Act, you have the right to ask the Ombudsman to review my decision to refuse parts of your request. The contact details for the Ombudsman can be located at [www.ombudsman.parliament.nz](http://www.ombudsman.parliament.nz).

In line with Waka Kotahi policy, this response will soon be published on our website, with personal information removed.

If you would like to discuss this reply with Waka Kotahi, please contact the Safety Camera Programme team at [safetycameras@nzta.govt.nz](mailto:safetycameras@nzta.govt.nz).

Yours sincerely



**Tara Macmillan**  
Head of Regulatory and Strategy Programmes