Auckland Transport
An Auckland Council Organisation

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28 March 2014

Louis Mayo
fyi-request-1502-b84c7f44@requests.fyi.org.nz

Dear Louis Mayo,

Local Government Official Information and Meetings Act 1987
Re: CAS-211404-Y1D4N3

I refer to your email dated 3 March 2014, which we received on the same day, requesting a list of all signalised intersections in Auckland that have a form of bus priority system in place.

The Auckland bus priority system currently in use is called Real Time Advanced Priority and Information Delivery (RAPID). RAPID was first installed in Auckland City in 2003 and rolled out to other City Councils prior to the formation of the Auckland Council and Auckland Transport in 2011. RAPID tracks buses running scheduled services via Global Positioning System (GPS) and Global Positioning Radio Packet Service (GPRS). When the buses approach or depart waypoints (including intersections) a message is sent to the RAPID system to check against current timetables.

When a bus approaches an intersection configured for priority it will contact the Traffic Signal System, SCATS (Sydney Coordinated Adaptive Traffic System) to request data for that intersection. RAPID will not request data or priority for a bus which is more than 60 seconds ahead of schedule. This threshold was decided by Auckland Regional Transport Authority (ARTA) as a compromise between not putting undue pressure on the intersections while still improving bus services rather than just trying to keep them on schedule. SCATS then responds with the time the current phase will end. If there is benefit in adjusting the timing of the phase change, SCATS will change the Signal phase to be 10 seconds earlier or later. If the signals are red, the green phase can be brought forward by 10 seconds, if the signals are green but about to turn red, the green phase can be extended by up to 10 seconds. If the signals are green, SCATS will ensure that the signals do not change on the bus that currently has a green light for the next 10 seconds. When the bus is through the intersection a message will be sent to RAPID, and if there is an outstanding priority request with SCATS it will be removed.
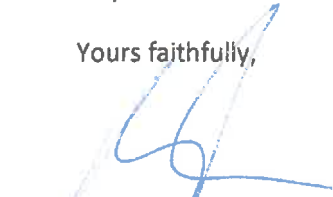
Prior to the RAPID system there was a priority system in place that used a component of another system called BLISS (Brisbane Linked Intersection Signal System). This was installed mainly in the central CBD area and Great North Road. This active bus priority system was developed by Brisbane City Council, and was based around its own Urban Traffic and Control system BLISS. When RAPID was installed the intersections controlled by BLISS were transferred to RAPID.

Due to the number of changes that have occurred to RAPID and the number of people that have worked on the system since it was installed it is not possible to be certain that there have not been other intersections previously included that are no longer included. It is our understanding that the list of intersections has only been increased, rather than having intersections removed. The attached list of intersections to this email is a complete list of intersections that have this system installed. Only those intersections that have bus traffic require this system to be installed. Not all intersections that have bus traffic have this system installed.

You have the right in accordance with section 27(3) of the Local Government Official Information and Meetings Act 1987 (LGOIMA) to make a complaint to the Office of the Ombudsmen if you are not satisfied with our response.

Yours faithfully,

Andrew Allen
Group Manager Services

Enc: Bus Priority Intersections