

By email

26 March 2020

File Ref: OIAP-7-14125

Michael Brown
fyi-request-12336-37b3fcf4@requests.fyi.org.nz

Shed 39, 2 Fryatt Quay
Pipitea, Wellington 6011
PO Box 11646
Manners Street
Wellington 6142
T 04 384 5708
F 04 385 6960
www.gw.govt.nz

Dear Mr Brown

Request for information 2020-036

I refer to your request for information dated 1 March 2020, which was received by Greater Wellington Regional Council (GWRC) on 1 March 2020. You have requested the following information:

"Metlink currently provides information about punctuality on the train network in this form on its website : "The rail punctuality measure records the percentage of services arriving at key interchange stations and final destination within five minutes of the scheduled time" (<https://www.metlink.org.nz/our-metlink-bus-journey/performance-of-our-network/#DataAndReports>).

However, recording the percentage of services which are punctual - and by implication, late - gives an ambiguous picture on how lateness is actually impacting upon the passenger base. A better way of measuring this impact would be to weight the punctuality data using the number of passengers on particular services. Thus, if a train is late during an off-peak trip, when passenger numbers are likely to be low, the impact is relatively small. But if a train is late on a peak service, then the impact is much greater. If such a weighted analysis was made of all late services, then a clearer overall picture of the impact of lateness would emerge than what is suggested by the information currently provided to the public (e.g. 88.4% of services were on time on HVL during November 2019).

Here are my requests for information:

- 1. Does the WRC/Metlink already perform any weighted analyses of train punctuality in the way - more or less - described above?*
- 2. If so, please provide a summary of what information and reports it holds.*
- 3. If not, can you please advise if you would be able to undertake this analysis using the data you already hold (i.e. for every service, both passenger numbers and punctuality data) for the*



purpose of this OIA. As I realise this might take some time, only a sample experiment would be necessary: services on the Hutt Valley Line for November 2019.

4. If you do hold the data, but are unable to accommodate my request, could you please supply the raw data for all services on the Hutt Valley Line for November 2019, as well as information on how the data is gathered. It would be most useful if the data was in the form of an Excel spreadsheet.”

GWRC's response follows

Weighting of rail Punctuality data by passenger loadings on particular services

While GWRC does not measure or quantify the ‘passenger impact’ of late-running services by cross-referencing overall service performance data with passenger loadings per trip as you describe. We do collect rail peak performance statistics for select services.

The analyses are weighted in the sense that we only focus on the busiest morning and afternoon services. In the morning peak period we focus on the busiest inbound services carrying commuters south (excluding the northbound trips that carry significantly fewer passengers). The same principle applies for the afternoon peak period, where we focus on the busiest outbound services returning commuters home but exclude the southbound services.

Peak performance for punctuality and reliability is reported on daily, weekly and monthly. This alongside overall performance figures are used to monitor ongoing performance of all rail services. These statistics form the basis for measuring performance improvement over time.

Please note that the general Metlink definition of ‘peak’ refers to a non-contiguous time period in effect before 9am, and again between 3pm and 6:30pm, on weekdays ('off-peak' times are in effect at all other times, including weekends). However, as it pertains to rail service performance measurement, we have a separate usage of the term **Peak** as follows:

Peak Service	means a Scheduled Service which:
	<ul style="list-style-type: none"> (a) in the case of a Train travelling towards Wellington Station, is scheduled in the Rail Unit Timetable to arrive at its Destination between 06:30 and 09:30 on a Business Day; and
	<ul style="list-style-type: none"> (b) in the case of a Train travelling away from Wellington Station, is scheduled in the Rail Unit Timetable to depart Wellington Station between 15:30 and 18:30 on a Business Day.

By these measures, for the month of January 2020 overall rail punctuality was 91% but peak punctuality was 83.4%.

We also collect rail patronage data, which for reporting purposes is aggregated per rail line and across all rail lines. On-board rail staff record a service high count to capture the maximum amount of passengers on board each service. Generally this occurs outside Wellington Station. As part of formal patronage reporting, a multiplier is applied to the passenger high count to account for passengers who get on and off services during the journey. As counts are collected manually by on-board rail staff, and do not take place at every station, they are subject to an operational margin of error.

Data availability

The following rail patronage data and overall rail performance statistics are available: on the Metlink website.

- Annual patronage across all rail lines, differentiated by peak and off-peak periods (note the service performance definition of **Peak** as noted above), can be found in the ‘Network patronage for bus, rail & ferry’ section of: <https://www.metlink.org.nz/our-metlink-bus-journey/performance-of-our-network/#DataAndReports> .
- Monthly peak patronage per rail line is also available in the ‘Metlink Monthly Performance Reports’ section of the same page.
- Overall rail performance statistics (for all services) are available on the Metlink website at: <https://www.metlink.org.nz/our-metlink-bus-journey/performance-of-our-network> see data and reports.

Punctuality and passenger loadings data for Hutt Valley line services, November 2019

Please also find attached (Attachment 1), performance commentary and patronage data for all Hutt Valley line services that operated over the month of November 2019, as suggested in your request at point “4”. Please note the following:

- Values in the **Journey ID** column represent the unique identifying code of each HVL trip.
- Both peak and off-peak trips have been included in the data; however, you may use the filter to display only **Peak** trips if you wish. As earlier, the service performance definition of **Peak** pertains.
- **Inbound** services are heading southbound towards Wellington; **Outbound** services are heading northbound towards Waterloo or Upper Hutt. For weighting purposes, this would make Inbound the relevant direction for morning peak trips and Outbound the relevant direction for afternoon peak trips.
- Values in the **Comment** section indicate the Punctuality of each service, in the time groupings used for general reporting purposes:
 - On-Time (indicates departure between 1 minute earlier than to 5 minutes later than the scheduled departure time from origin station);

- 5 to 7 minutes late;
 - 7 to 15 minutes late;
 - 15+ minutes late;
 - Bus replaced;
 - Cancelled.
- Values in the **Patronage** column represent passenger numbers on that service, subject to the modifier accounting for mid-journey boardings and alightings as described above.

I hope that you will find this information useful.

If you have any concerns with the decision(s) referred to in this letter, you have the right to request an investigation and review by the Ombudsman under section 27(3) of the Local Government Official Information and Meetings Act 1987.

Yours sincerely



Scott Gallacher
General Manager, Public Transport