

10 June 2025

Daran Ponter
Chair
GWRC
WELLINGTON

Dear Daran

Thank you for your letter of 20 May 2025 expressing GWRC's concern over services on the Wairarapa Line.

You raised two major concerns: performance of the locomotive fleet and the network condition coupled with extent/duration of Temporary Speed Restrictions (TSRs). I am aware that this response will be published as part of normal process so I have endeavoured to provide as much information as I can.

Locomotive Performance

I attach a technical summary of the DF fleet undertaken in response to your letter.

To provide context, I must observe that these locomotives are approaching 40 years old and are expected to retire by 2030. It is inevitable that they will be more prone to mechanical failure than newer locomotives. Despite their age, we endeavour to hold them to a high-performance standard, so the Loco Asset team will be undertaking an additional out-of-cycle inspection and asset review to ascertain if there are specific issues or opportunities that will assist in lifting performance.

In terms of actual performance, the Wairarapa locomotive fleet has seen a total of 8 service failures in the last 25 months, with two in the last month bringing the total to 10.

Upon investigation (see document attached) these failures have shown no correlation to one another or to failures associated with the wider DFB asset class in operation by Kiwirail. It is also worth noting that the service has seen two carriage-related services affecting failures in the last month. The carriages are not KiwiRail's assets

Network Performance

I attach a summary of the latest status of TSRs on the Wairarapa Line.

What does the current contract (Wellington Network Access Agreement) allow?

The table below shows the extent of non-compliance with the WNAA

	Up Main (to Masterton)	Down Main (to Wellington)
Allowable TSRs	6:00 min	6:00 min
Reported TSR	9:42 min	7:15 min
(less) TSR on section not used by WL Trains	0:00 min	(1:07) min
Service Impacting TSR	9:42 min	6:08 min



“Potholes in the State Highway”

While statements comparing this to “*potholes in the State Highway*” may be appealing, the comparison is simply wrong. Along with every line in the network, the Wairarapa Line has its “potholes” by way of loose fittings, small geometry errors etc and these are fixed by the maintenance team as a matter of routine on a daily and weekly basis. The public doesn’t see it and they never become TSRs. KiwiRail’s level of inspection and maintenance on the lines is much more intense than that given to the roading network.

The full renewal of the Remutaka Tunnel allowing the uplift to 90kph running now means that primarily TSRs are not an issue with track quality, but with deficiencies of the signalling and level crossing system.

Signalling Issues

The table shows four sections that make up most of the delay. There is some explanation in each which I won’t repeat, but for context I would note that the signalling and crossing issue is funded for replacement in time for the regional trains which is c2029.

Our programme, however, is targeting full replacement by the end of a temporary closure (Block of Line) over the Christmas/New Year period in 2026/27. The work Councils are seeing at present is the civil enabling works for the installation of the control systems on crossings and main line.

We do have to make a trade-off between spending capital to fix now when some of the fixes would be made redundant by the re-signalling.

Of the four big items

- Sutherland Road (1:48min) – the fix here will be permanent and not impacted by the re-signalling.
- Western Lake Road (0:45min) – there is no credible prospect of upgrading this without creating an orphan asset post re-signalling. This TSR has to stay
- Ngaumutawa Road (2:19min) – this is the most complex. The re-signalling will permanently resolve this, however we can provide an interim solution here although most elements of the fix will be redundant with the re-signalling.
- Renall Street (1:37min) – this is less complex. The re-signalling will resolve this TSR. However we can provide an interim solution with some elements remaining post re-signalling

A reasonable challenge to KiwiRail is why has it taken so long to progress the signals design.

The answer, regrettably, is that we simply do not have the in-house capacity or the ability to call in external suppliers to meet the demand.

There are two core reasons for that:

- For historical reasons NZ signalling principles are different from overseas jurisdictions, and indeed almost all overseas jurisdictions have different rules from each other, including the various states in Australia. We cannot simply call someone in from offshore and expect 100% effectiveness from day 1.
- There is a global shortage of signals design resource, and we find ourselves in a perpetual recruitment cycle chasing an in-demand resource

The re-signalling of the Wairarapa Line will materially mitigate the problem as we have a contract with Siemens to deliver, and an ongoing framework agreement with them for technical support. The current signalling assets are a mix of age, supplier and design which exacerbates the problem of dealing with failures.



Conclusions

I could do a summary of investment made into the line over the past 10 years which has pulled it back from the brink but while it's a big number it doesn't deal with the current issues.

What I can assure you, Councillors and travelling public that we are committed to creating a safe and reliable network for all users. -

Regards,



David Gordon
Chief Metro & Capital Programme Officer





Special Performance Report DFB Wairarapa Line

22 May 2025

Author: Jason Lymangrover

Approval: Joe Burling





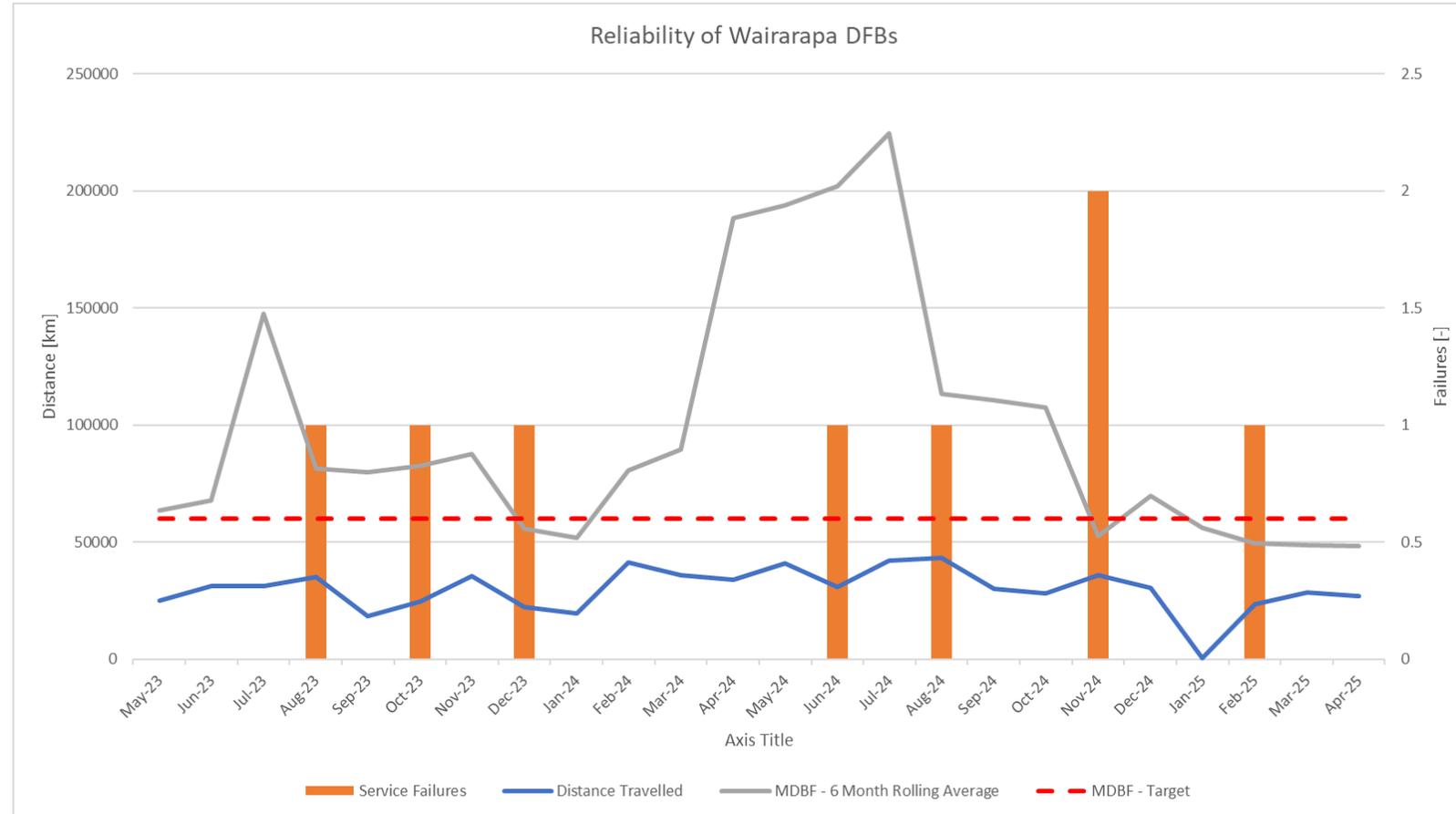
DFB Wairarapa Fleet Performance

Fleet of 5 Low Emissions DFB locos

Historically a strong performing fleet

Recent decrease in Mean Distance Between Failure due to a slight increase in failure rate and large decrease in distance travelled due to block of line in January/February.

Volatility in MDBF due to the small fleet size of 5 locomotives.

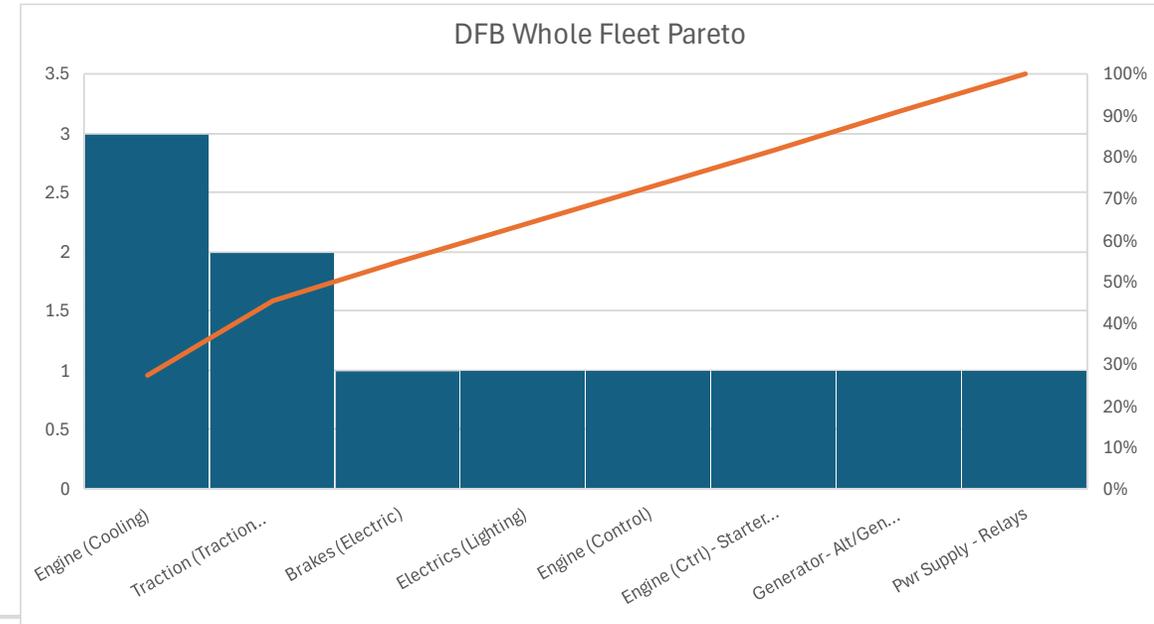
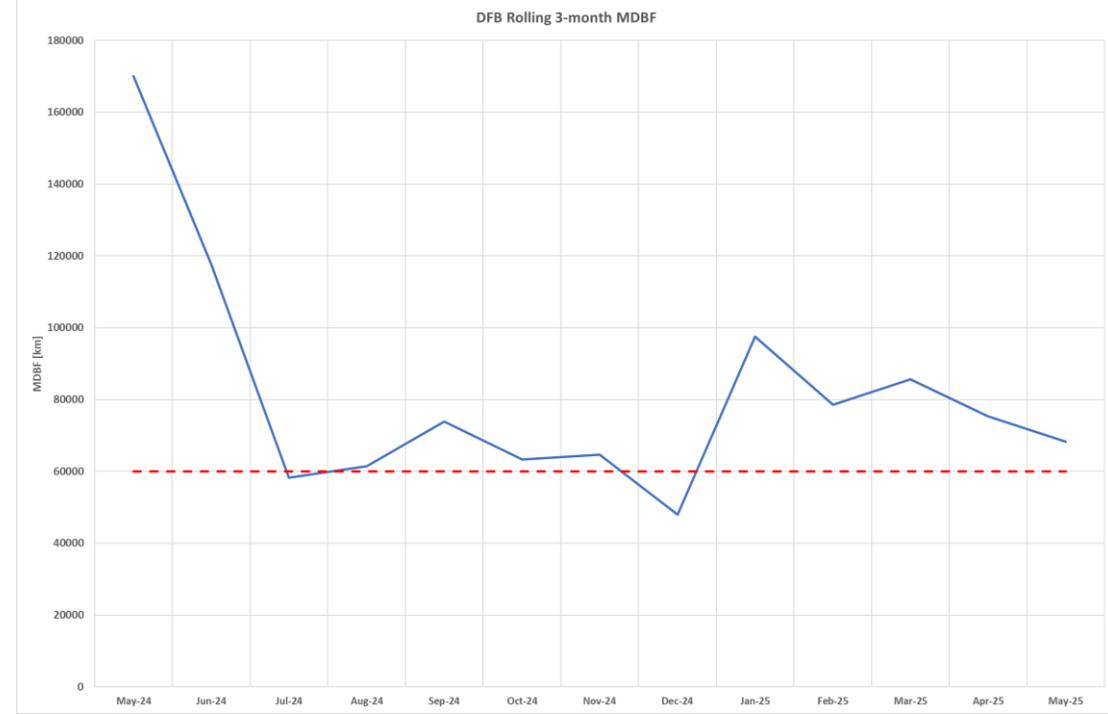




DFB Fleet Performance

Preview of May Performance Report

- Wairarapa fleet should perform similarly to all other DFBs
- Total of 8 locomotive related service failures over the last 2 years.
- May 2025 has seen 2 locomotive service failures bringing the last 25-month total to 10.
- Wairarapa service in May 2025 has also seen 2 non-KiwiRail carriage caused failures.
- Overall DFB fleet has incurred 4 SFs for May, highest in the last 6 months with another week in May to go.
- All SF failure modes are unique. The 2 Gen failures are unrelated failure modes.

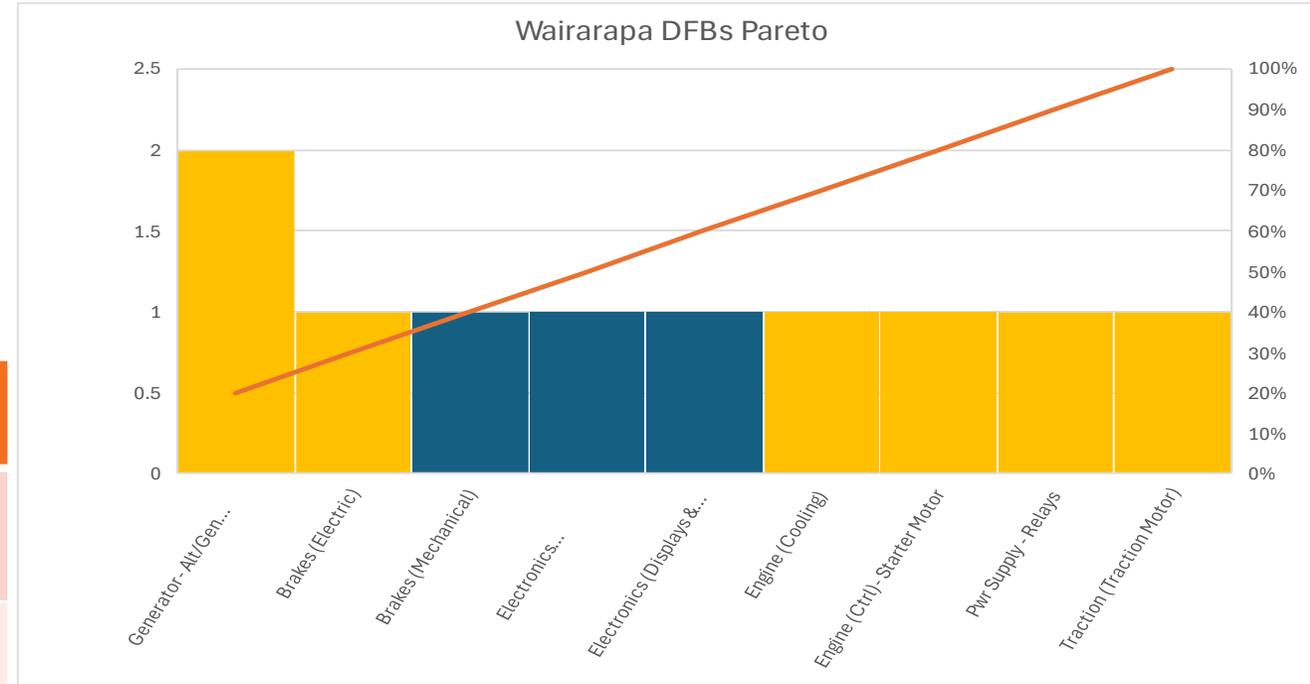




DFB Wairarapa Fleet

- Almost no overlap in failure modes of Wairarapa fleet to other DFB fleets. Most likely due to a combination of application differences (varied stressors) and fleet age (drives multiple failure modes).
- Current initiatives related to Wairarapa fleet failure modes are shown below.

Cause	Initiative / Opportunity	Status / Planned Completion Date
Brakes	1. ECR-2173 DFB Penalty Brake Faults	1. Waiting on drawing and FMI update to roll out through MA – Due 30-06-2025
Engine Starter	1. Life analysis for starter motors 2. Determine if proactive replacement is justified	1. Started / 30-05-2025





Thank you



From KM	To KM	From Locn	To Locn	Speed	Why TSR Applied	Age of TSR (Days)	LTM UM	LTM DM	Why TSR has been in place for so long	Plan in place to lift	Lift Date	Comments
1.8	1.91	WGTN	KWARA	40	EM80 exceedances through Distant Junction (13A/B 27A/B 9A/B 3A/B), which also impact NIMT	623	0:00:15		Awaiting funding for design and renewal (Overdue Renewals)	Overdue Renewals funding now confirmed. Overall delay is modest so planning renewal of 4 x crossovers planned Christmas 26-27.	17/01/2027	This is a major job for 4 turnouts and can only be delivered during a Xmas length BOL. Now we are funded this is the first opportunity
1.8	2.05	WGTN	KWARA	40		828		0:00:19				
12.93	13.42	AVA	WBURN	40	Track fault over Bridge 19 Ava. Rerail & resleeper required. Planned for Easter/Anzac BOL 2025.	709	0:00:28		Initially unfunded. Funding secured as part of FY25 Overdue Renewals. Delivery delayed due to HCC pedestrian walkway issue.	Delivery now planned for Christmas BOL 25/26	15/01/2026	Circumstances around this bridge are well known - works delayed to allow Hutt City to fund pedestrian element
19.9	20.05	WNGATE	TAITA	40	Fault Through 75 points at Taita. Turnout requires replacement	118	0:00:14	0:00:16	Turnout worn beyond code limits, needs renewal. Work was not funded	Overdue renewals funding now confirmed. Renewal planned for Easter 2026	30/04/2026	Now funded - unlikely to be able to bring this forward compared to other priorities
28.32	28.825	HTNGA	TNTHM	40	EM80 fault Requires formation renewal and rerail	38	0:00:21		EM80 faults due to formation failure. Works were not funded	Overdue renewals funding confirmed. Renewal planned Kings Bday 2026	30/06/2026	Now funded - will see if it can be brought forward
28.825	28.935	HTNGA	TNTHM	10	Sutherland Ave Level Crossing - Warning device failure	10	0:01:48		Sutherland Ave Level Crossing - Warning device failure. Loss of Train detection on Up Main approach. Currently with Signals Engineering for a solution.	New TSR. Approach track circuits losing train detection - solution currently under investigation by Signals Engineering	31/10/2025	Design underway. Engineering investigating a prototype axle counter system in conjunction with Siemens. Do not have a confirmed timeframe for design or delivery. Initial estimate for removal is Oct 25 however until we have the design, restoration time remains at risk
32.13	32.6	UPHTT	UPHTT	25	Main line clearance issue between Upper Hutt yard and EMU storage yard fence	1122		0:01:07	Required funding to renew the EMU yard (FY25 Overdue Renewals) Only applies to trains using the Down Main at Upper Hutt - rarely used by Metlink services	Yard renewal in progress, due for completion late June 2025	30/06/2025	This segment of line is rarely used so has almost nil impact on day to day operations hence it has been left until the yard is upgraded (in progress now)
35.1	35.22	UPHTT	MAYM	60	EM80 Line fault through Bridge 36	762	0:00:08	0:00:04	Br36. Line faults following EM80 inspection after project work complete. WMUP III - close out works, more assessment required by Track and Structures.	Survey and design required, further discussions needed with Structures Engineering to address impact of realignment on eccentricity on the bridge.	31/12/2025	Solution for this remains challenging and lost time impact is low so will remain a lesser priority than other items
54.96	55.07	MAYM	FEAT	40	Safety Issue - TSR applied following fatality	838	0:00:45	0:00:58	The crossing will be fitted with flashing lights, bells and barrier arms as part of the WL upgrade for regional trains. We did investigate a stand-alone upgrade or staged signalling commissioning but cannot make this work	Can only be commissioned as part of the signalling upgrade for regional trains	post Xmas 26/27 BOL	Ultimate solution will be part of the signalling for Regional Rail completing post Xmas BOL 26/27 - and there is no interim fix
56.47	56.59	MAYM	FEAT	60	EM80 Fault	18	0:00:09	0:00:12	Unclear why this has occurred as the work done prior was a full dig out	The work also requires road closure which has yet to be agreed with the local authority	TBD	This is a Fault through the pedestrian crossing at Fitzherbert St Featherston. Time yet to be determined - in discussion with SWDC Council
63.74	63.88	FSTON	WODSD	25	Woodside Loop. Risk of Points being damaged by dragging equipment. In place until new signalling system is commissioned. Applies to up trains only	443	0:01:08	0:00:00	Issue with risk of points damage not being detected.	A further evidence pack covering all risk mitigations has been submitted approval	post Xmas 26/27 BOL	Decision from Engineering due soon
84.755	85.463	CLVIB	JUDIB	60	EM80 faults - full renewal required	20	0:00:30	0:00:26	Multiple EM80 faults. Track section requires renewal to resolve. Was descope from WMUP III due to funding constraints.	Overdue Renewals funding now confirmed Add to that scope - timing TBD	10/01/2026	Xmas 25/26 BOL is last date - will look for alternative but would require a shut
86.845	86.955	JNLSD	JUDIB	10	Ngaumutawa Road Level Crossing - Warning Device Failure	520	0:02:19	0:02:19	After initially trying to address the fault locally Signals Engineering concluded a new track circuit design was required.	Work in hand received late last week. Local signals team are currently procuring materials and planning access.	30/07/2025	Delivery will require a weekend closure and a test train which are still TBC - conservative estimate for commissioning is the end of July Ultimate solution will be part of the signalling for Regional Rail completing post Xmas BOL 26/27
87.905	88.305	JUDIB	RNLST	60	Track Geometry Fault	252		0:00:01	Relay completed under WMUP III. EM80 faults due to possibly poor formation.	Tamping will rectify the issue short term. Full digout/formation strengthening may be required for permanent fix. Geotech investigation needed.	30/06/2025	Relatively modest impact in terms of time - but should be dealt with to remove complexity for drivers
89.435	89.545	RNLST	MAST	10	Renal St Level Crossing - Warning Device Failure	478	0:01:37	0:01:33	Delay due to awaiting design solution Work-in-hand received late April 2025	Repairs underway, currently waiting on additional materials (signal relays) from Christchurch	30/07/2025	Delivery will require a weekend closure and a test train which are still TBC - conservative estimate for commissioning is the end of July Ultimate solution will be part of the signalling for Regional Rail completing post Xmas BOL 26/27

Total Time lost

0:09:42 0:07:15

Allowable TSR under Access Agreement Contract

0:06:00 0:06:00