

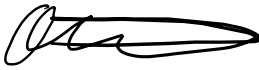






# Joint Performance Strategy

2025-2030

## Document Information

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Submission of this document indicates confirmation that the Route Director and Managing Director are satisfied with the quality, currency, and appropriateness of the content of this document as well as the plans to which it refers.

#### Version Control

Date	Version	Changed by	Comments
Feb 28th	DRAFT	Oliver Cummings/Andy McLarnon	2025-26 Draft issued.
Mar 31 <sup>st</sup>	1.0	Oliver Cummings/Andy McLarnon	2025/26 – 2030 Strategy Issued.

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## 1. Executive Summary

Our joint performance strategy outlines the aims of South Western Railway and Network Rail Wessex route for improving the performance of our network to better serve customers.

We experienced several key performance challenges throughout the year. Services were severely impacted by storms which brought down trees leading to closed lines and damaged trains, and a landslip caused by flooding at a tunnel near Honiton, which needed a major engineering intervention to resolve it. We also had some ongoing points failures at Woking, which had a significant impact on performance.

We now have six class 701 diagrams during weekdays and further services will be introduced this year. However, the training requirements for these new trains impacts our traincrew resilience, and against a backdrop of higher levels of sickness than usual, we have experienced high levels of cancellations, particularly during the autumn and winter months. We have had some challenges with the rollout of the new fleet, and we relied on trains that we were expecting to have retired. This has led to engineering challenges to keep those units in service. The national shortage of engine components has impacted our diesel fleet leading to cancellations and short formations of some services.

Disorder events continue to impact the rail network nationally, as do trespass and fatality events, seeing an increasing trend across our network.

Our joint improvement strategy aligns with the NPB Performance Restoration Framework, along with Whole System Model:

**Operating plan** – Our joint On-Time/Subthreshold workstream feeds into the planning processes for timetable amendments and helps inform future timetable proposals.

**Resourcing (People & Fleet)** – We are continuing to roll out the class 701 fleet and to support that deployment we are optimising crew management to prioritise service delivery and Arterio training. We are increasing driver and guard recruitment to fill or increase establishment where needed. During the rollout, our engineers are working hard to maintain the legacy fleet and introduce the new units. We are also evaluating options for the future replacement of the diesel fleet.

**Infrastructure Reliability** – We are introducing new technology for infrastructure inspections such as drones, FRoOG, and passenger train mounted monitoring equipment. Wessex route has several major projects such as Woking junction renewal, the North Downs crossings & signalling upgrades, and resignalling work from Farncombe to Petersfield and around Havant. We are exploring options for infrastructure upgrades for the West of England area.

**Trespass & Fatality (External)** – there is a reinvigorated tripartite approach to route crime between SWR, Network Rail and BTP, development of the Trespass 5 programme and EDDY usage. We are upgrading CCTV across the network which will enable the use of analytics systems for automatic detection of concerning behaviour.

**Keeping Trains Moving (Recovery)** – Our joint control centre is currently completing a major transformation resulting in a restructuring for better collaborative working, including the appointment of a Joint Head of Control. Our Control Continuous Improvement processes are being refreshed to focus on contingency plan management, person struck by train process revisions, and stranded train processes.

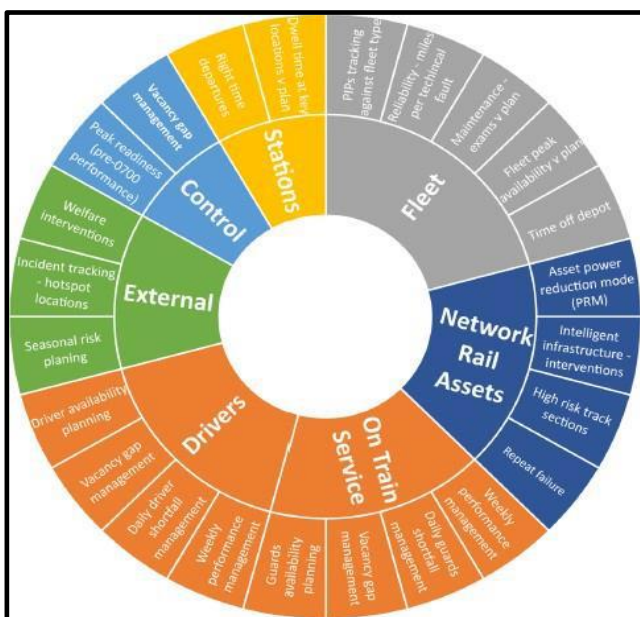
During May 2025, SWR will transfer to government ownership to become part of the DfT Operator group. Part of this change will involve the appointment of a joint leadership role for SWR and Wessex route that will enable better collaborative working and joint objective setting to realise our vision of a 'high performing railway delivered together'.

## 2. Performance Objectives

### 2.1 SWR Contractual Metrics

As at the end of March 2025, negotiations with DfT are still ongoing to agree the targets for 2025-26, which will be added to this section as soon as they have been finalised.

Metric	Description	Type
On Time to 3 (T3)	% of station arrivals within 3 minutes of booked time (excluding cancellations)	Contractual
On time to 15 (T15)	% of station arrivals within 15 minutes of booked time (excluding cancellations)	Contractual
Cancellations (%)	% of trains fully or part cancelled	Contractual
Delay Minutes	Minutes of delay incurred in each incident by the incident train (primary) and affected trains (reactionary)	Supporting
Cancellations (n)	Number of trains fully or part cancelled	Supporting
On time (OT)	% of station arrivals within 1 minute of booked time (excluding cancellations)	Supporting



In addition, SWR track leading indicators at a range of functional forums, including daily tactical calls, weekly visualisation meetings and joint periodic reviews to plan for more resilient service delivery. An example of this is vacancy gap management—data is presented at weekly and periodic meetings to understand the current and forecasted position. In a tactical forum, a joint daily call, we review driver and guard uncovered turns, for 24, 48 and 72 hours, to put mitigations in place. Fleet also monitor several leading indicators, including right time starts from depot, and a dashboard has been created to track this data.

Figure 1. Joint Leading Indicators

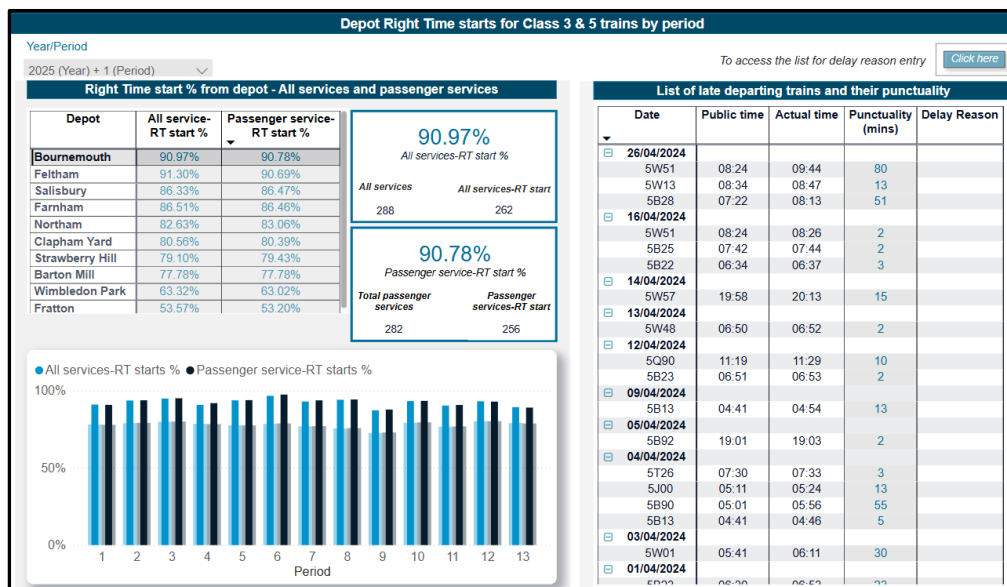


Figure 2. SWR Fleet Right Time Starts Dashboard

## 2.2 NR Scorecard Metrics

We also use annual targets for performance jointly agreed between SWR, NR Wessex, DfT and ORR. These targets are used to generate a cascade of divisional and departmental targets to drive performance improvement. We measure our performance against these targets (lagging indicators) on a daily, weekly, periodic, and annual basis.

Each day a joint performance report is produced which details the previous day's performance in each of these key metrics and tracks against the daily and periodic target.

The report goes into further detail to show the attributed Delay Minutes and Cancellations by SWR function and NR Wessex category, this allows us to understand the causes of delays.

Wessex route Scorecard forms part of our Annual Business plan with key metrics measured on a periodic basis against full year forecast. For Performance these metrics cover punctuality, cancellations and overall delay for the Route and all operators. This scorecard is reviewed by Wessex route and regional exec teams as part of their business review processes. The scorecard elements for performance on Wessex Route are shown in the graphics below.

Metric	Weighting	P11 FYF	Lower Taper	Target	Upper Taper
<b>TRAIN SERVICE DELIVERY</b>					
Time to 3	12.0%	84.0%	84.0%	85.0%	85.8%
Passenger Cancellations (NR Attributable)	4.0%	2.30%	2.30%	2.10%	2.00%
Freight Cancellations	4.0%	1.8%	1.8%	1.7%	1.6%

This Year we have added some Train Performance milestones; these will act as key stage gates that, when delivered, will support success against the targets defined.

Metric	Weighting	P11 FYF	Lower Taper	Target	Upper Taper
<b>SOUTHERN MEASURES</b>					
Train Performance Milestones	8.0%	N/A	70.0%	80.0%	100.0%

## WESSEX

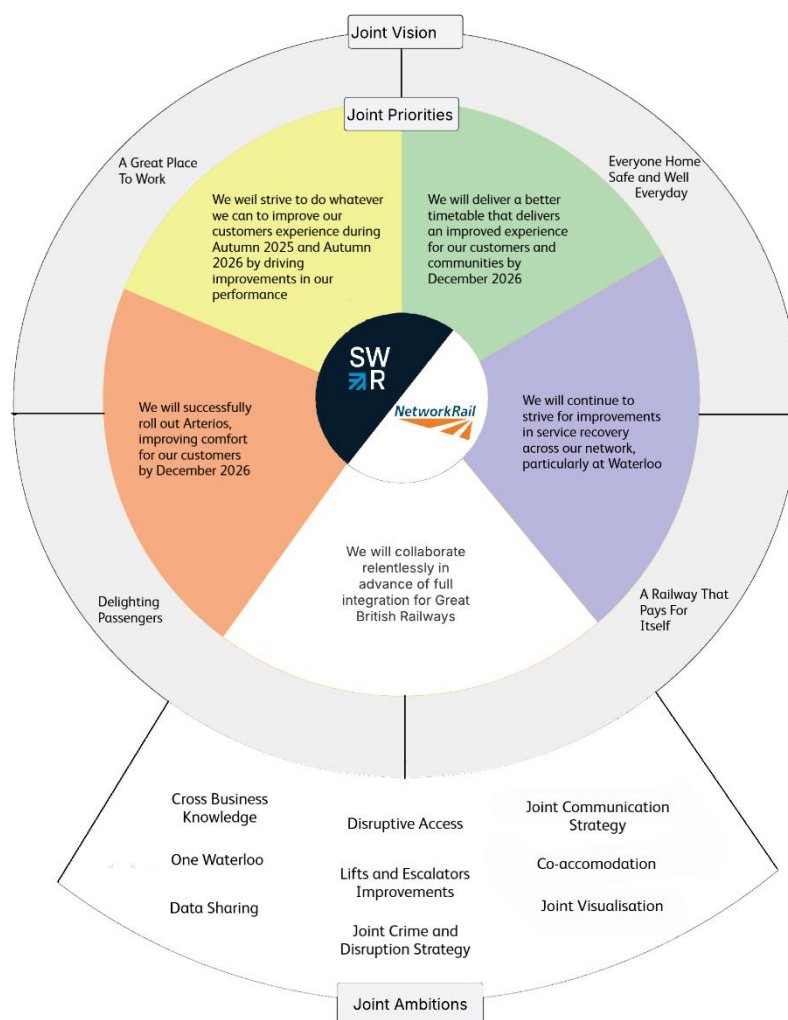
Description	Date
Re-modelling the proposed SWR 2026 re-cast timetable.	P13
CCTV end of platform AI trial at Woking.	P09
Implementation of a new control model for seasonal delivery.	P07
Commissioning of Farncombe to Petersfield re-signalling.	P09
Installation of tranche 1 Schwiag Rollers in Wessex Outer.	P09

Other metrics, such as dwell time compliance, may be used to understand performance problems and measure improvements.

The main metrics are reviewed daily, weekly, and periodically at a number of performance meetings across both organisations supported by Power BI dashboards and a range of performance reports. These meetings happen at a joint executive level down to functional review meetings and visualisation meetings.

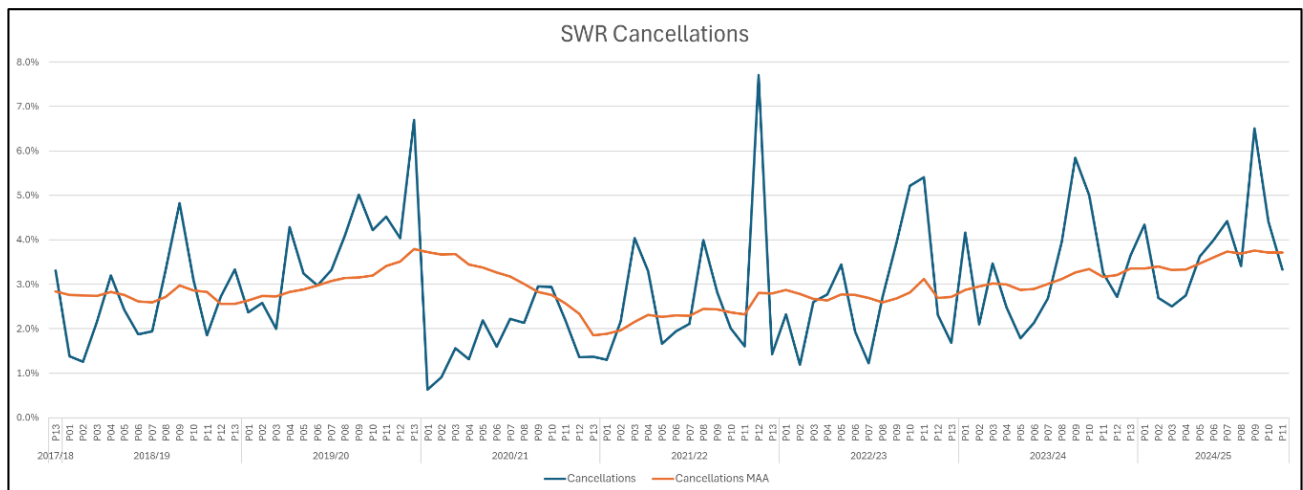
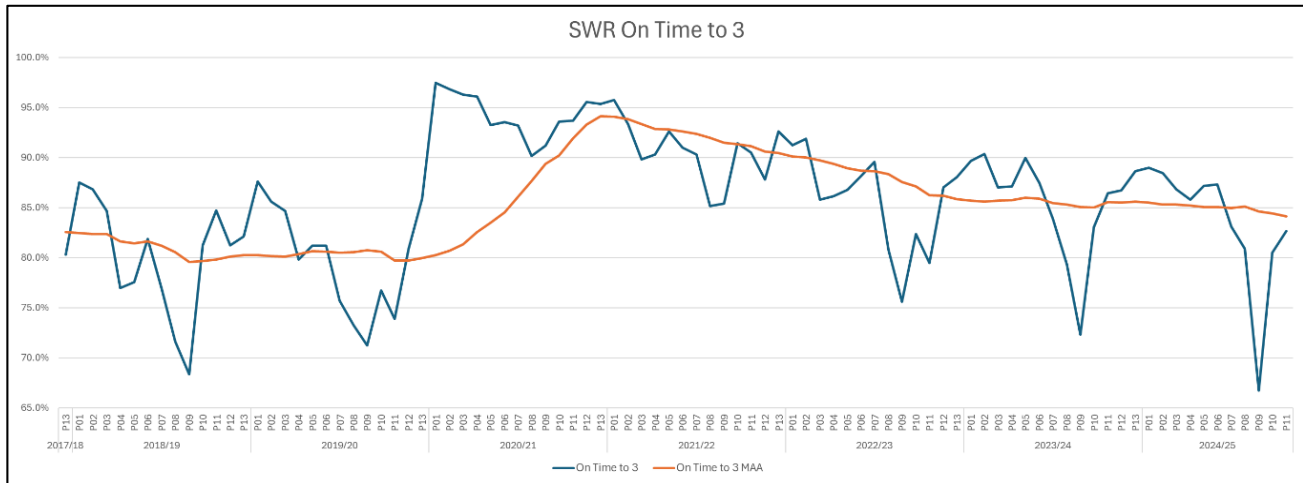
### 2.3 Joint Priorities

SWR and Network Rail have collaboratively defined Joint Visions, Priorities and Ambitions which underpin how the Route is operated, managed, and developed.

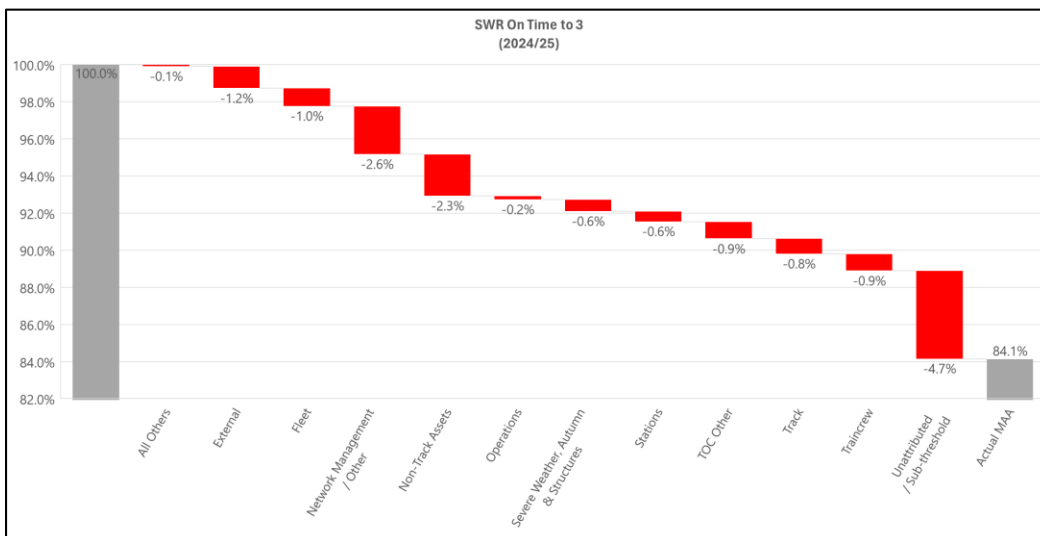


### 3. Analysis of Current Performance

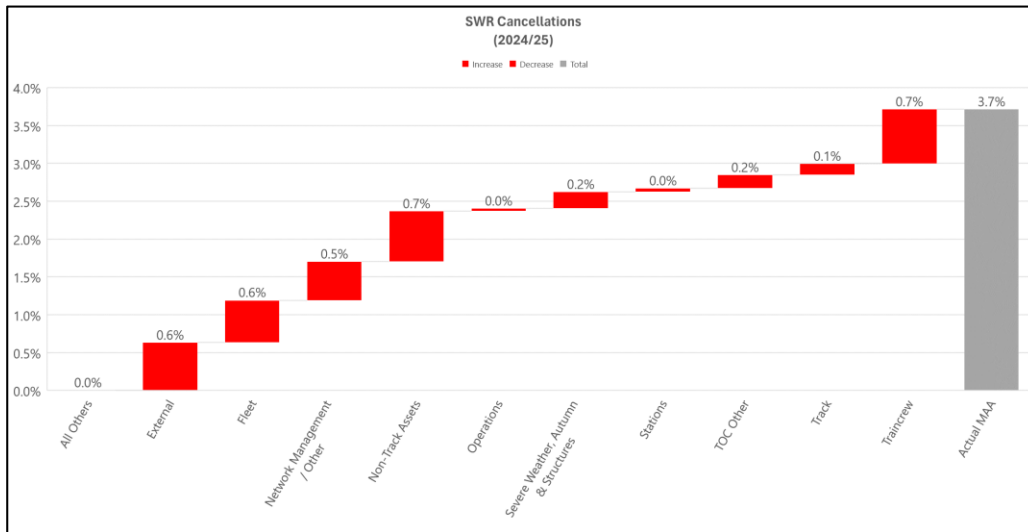
The chart below shows that the On Time to 3 MAA has been declining since reaching its peak at the end of 2019/20, and while this had stabilised across the previous two financial years, 2024/25 has seen a deterioration (1.4% worsenment).



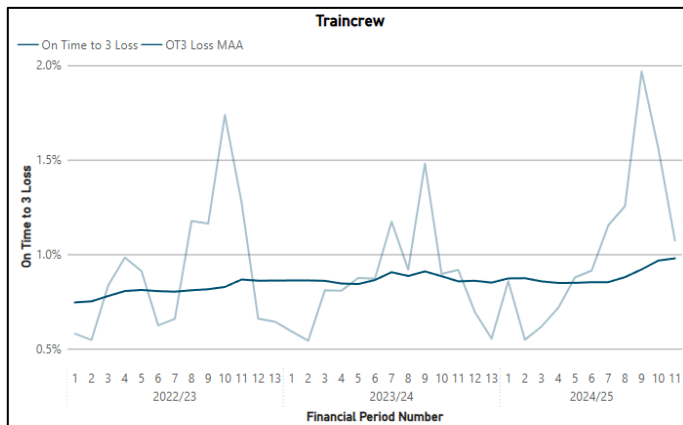
On Time to 3 attrition categorised by core business areas for 2024/25 is shown below:



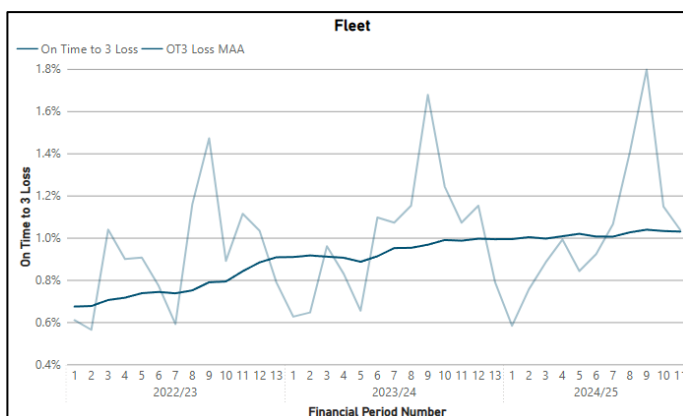
The Cancellation attrition categorised by core business areas for 2024/25 is shown below:



Throughout 2024/25, SWR/Wessex Route T3 MAA has declined from 85.5% to 84.2% and cancellation MAA has increased from 3.2% to 3.7% [UPDATE with p01-p13] because of several challenging factors and significant incidents for both Network Rail and SWR.



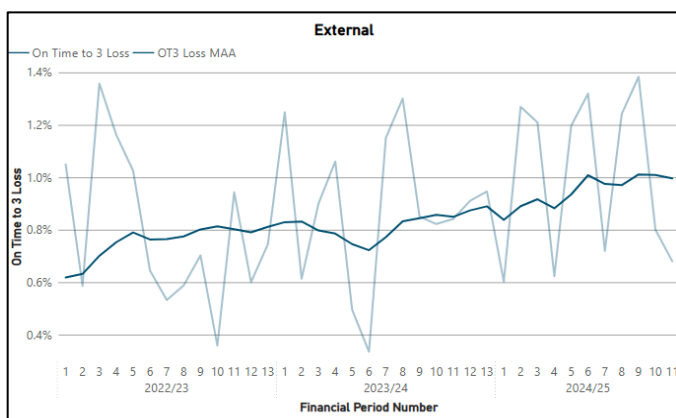
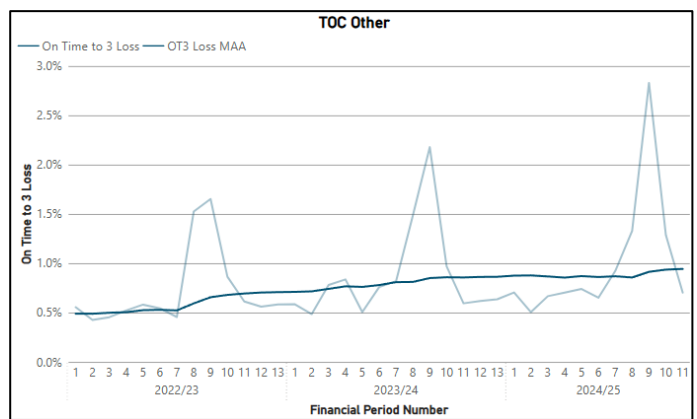
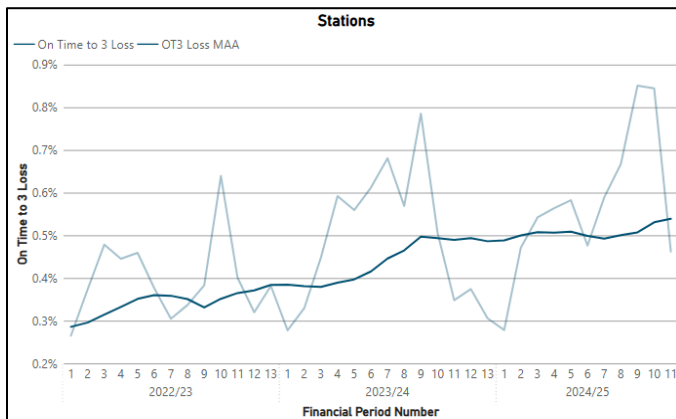
Although deployment of the class 701, Arterio, fleet will ultimately bring benefits in terms of customer experience, fleet reliability, and improved unit performance characteristics, the introduction phase has presented some challenges whilst we train drivers and guards, and this situation will continue over the course of the coming year. The training requirements for the class 701 introduction, alongside release for class 458/4 orientation sessions has led to a reduction in available traincrew impacting operational delivery and service recovery.



Higher than usual levels of traincrew sickness have increased cancellations, especially in periods 8, 9 and 10. This was particularly acute during December when there was an outbreak of influenza at Bournemouth driver depot. Fatality incidents have further contributed to driver resource challenges. Work continues with driver management, resourcing teams and control to limit the impact of resource shortages, including rearranging non-traction training and development, and cross-covering from other depots. We have a daily Teams call which focuses on cancellations and resource lookahead.

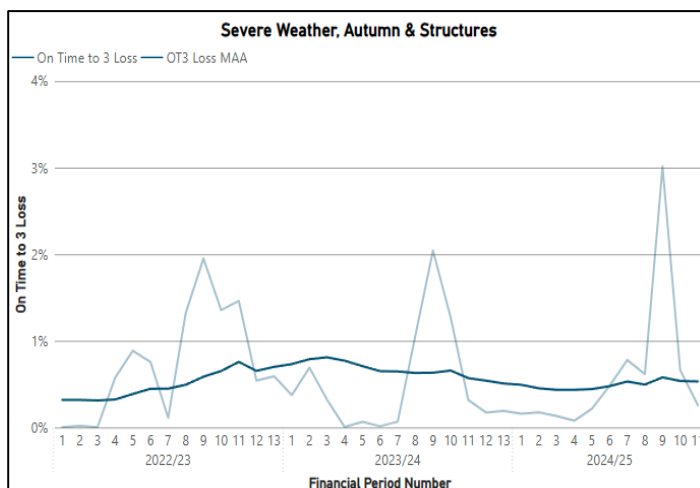
The delays to the class 701 introduction have also led to a prolonged reliance on class 455 units that have increasing reliability issues, particularly corrosion around doors and increasing door fault delays. Our engineering team have been working to mitigate those failures, and as more class 701s are deployed, the reliance on class 455s will decrease, allowing us to select those in the poorest condition to be scrapped and donate spares in order to limit the impact of the aging fleet.

Our Class 158 / 159 diesel fleets have been affected by an ongoing national shortage of engine components, and coupling equipment failures, which have resulted in a lack of available units leading to cancellations or short formations. We have experienced an increase in the numbers of failures affecting brake control units, coupling equipment and door systems in the class 444 & 450 Desiro fleets that have also affected fleet performance.

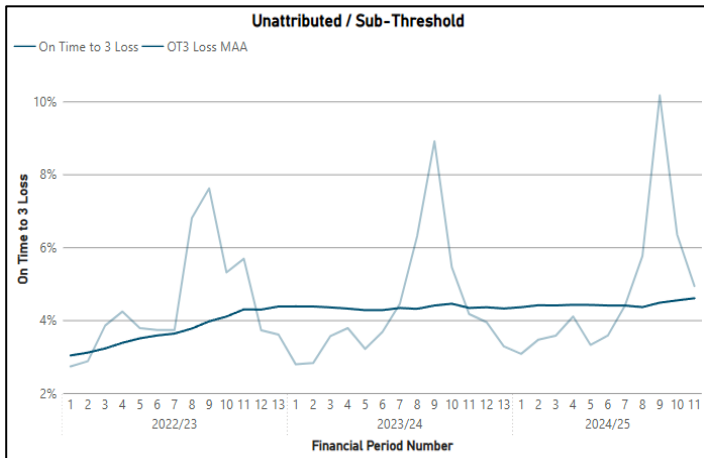


Trespass/fatality and disorder incidents (External and TOC Other) have had major effects on performance, with some very high impacting incidents such as fatalities at New Malden (P03), Surbiton (P05) and Hersham (P09) causing over 5,000 minutes of delay each. At Raynes Park in P02, a suicidal person led to trains in the area being suspended for several hours and totalled over 11,000 delay minute and nearly 400 cancellations. In P07 a major trespass incident occurred when someone being pursued by the police fled onto the tracks at New Malden leading to nearly 13,000 delay

minutes and 400 cancellations. The perpetrator was subsequently sentenced to 8 months in prison, but the incident was estimated to have cost the industry around £1.2 million. Ill passenger incidents impact our delay minutes and cancellations with our staff having to manage some extremely challenging situations. The excellent work that the industry, SWR and Wessex, have done in making the railway more accessible means our guards and stations teams are working hard to deliver the necessary assistance to customers, which has risen from nearly 123,000 in 2022 to over 241,000 requests per year. Our stations teams regularly manage very large events, such as rugby at Twickenham, tennis at Wimbledon and racing at Ascot.



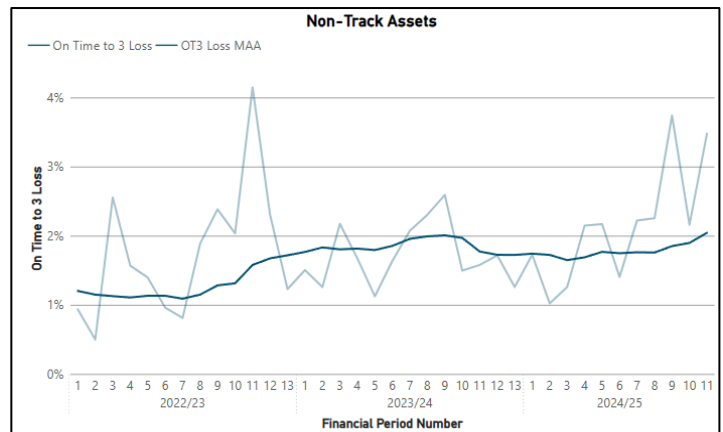
Weather-related events caused significant performance impacts due to multiple flooding incidents and storms that brought trees down onto the network severely affecting performance; a landslide near Honiton led to multiple restrictions to the Exeter route over several days as Network Rail engineers worked to build fortifications to the embankment and tunnel entrance. Points 2236 near Woking proved to be a considerable and recurring problem at one of the key locations on the network, and other notable incidents were signalling problems around Clapham Junction, Wimbledon and Waterloo, and a power failure near Worting Junction.



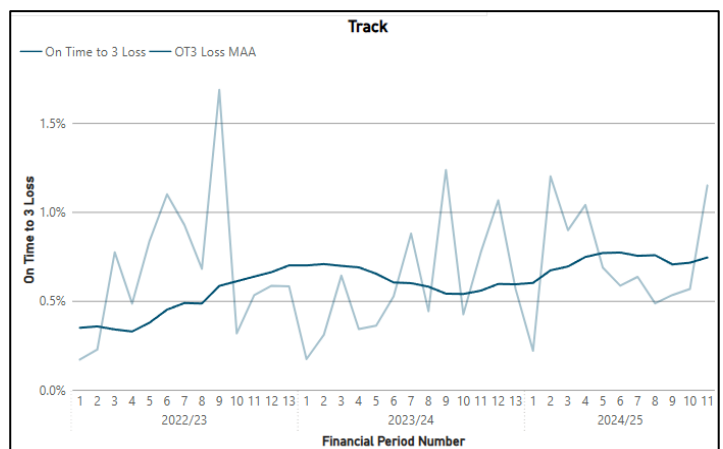
Subthreshold/unattributed delays continue to account for the largest portion of the overall performance loss across Wessex, which has increased over time as passenger numbers have increased and services have been reinstated into the timetable, reflecting on the increasing congestion on the network. Our dedicated joint workstream has been taking a systematic approach to identifying and understand several operational improvement schemes and timetable amendments. This work will continue in the years ahead.

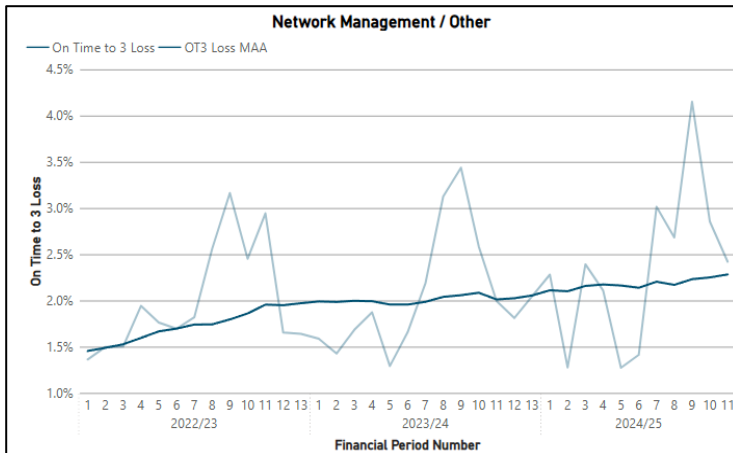
NTA has been our second most impacting JPIP category at 31% of all attributed OT-3 failures. Whilst the percentage was an improvement on last year, in real terms it was an increase of around 30k.

Our management of improvement activity in Infrastructure has been significantly overhauled in the second half of 2024/25 and that is just starting to deliver visible change with milestone plans in place for key asset types and locations.



Plans for the points in the Woking will continue to be delivered (across both S&T and Track), and whilst still highly impacting, there has been an improvement seen year on year. (7,705 OT3F vs 9,967 in the previous year) Eastleigh points too, are critical to improvement efforts but are paired with individual plans for all 'operationally critical' points between Bournemouth and Basingstoke on the outer DU, with all route customers in mind.



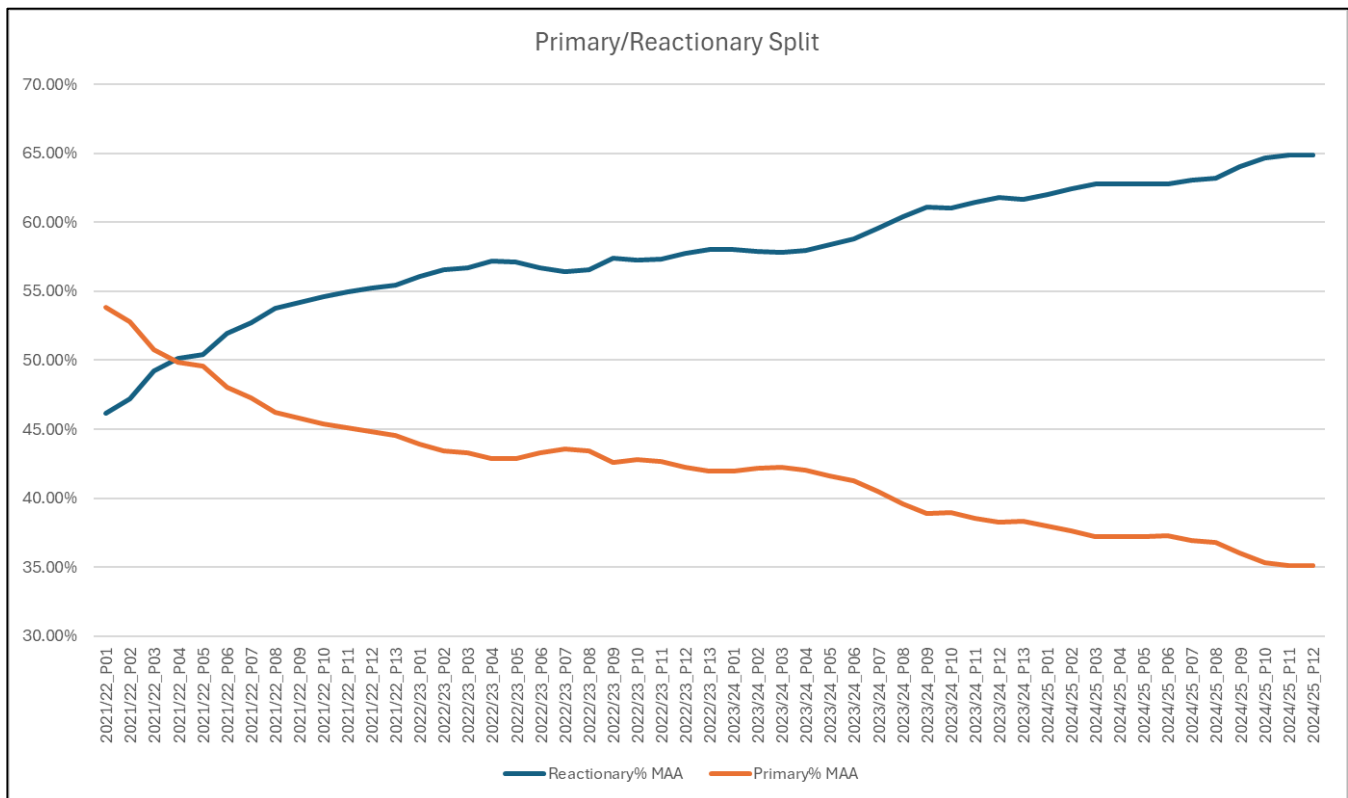


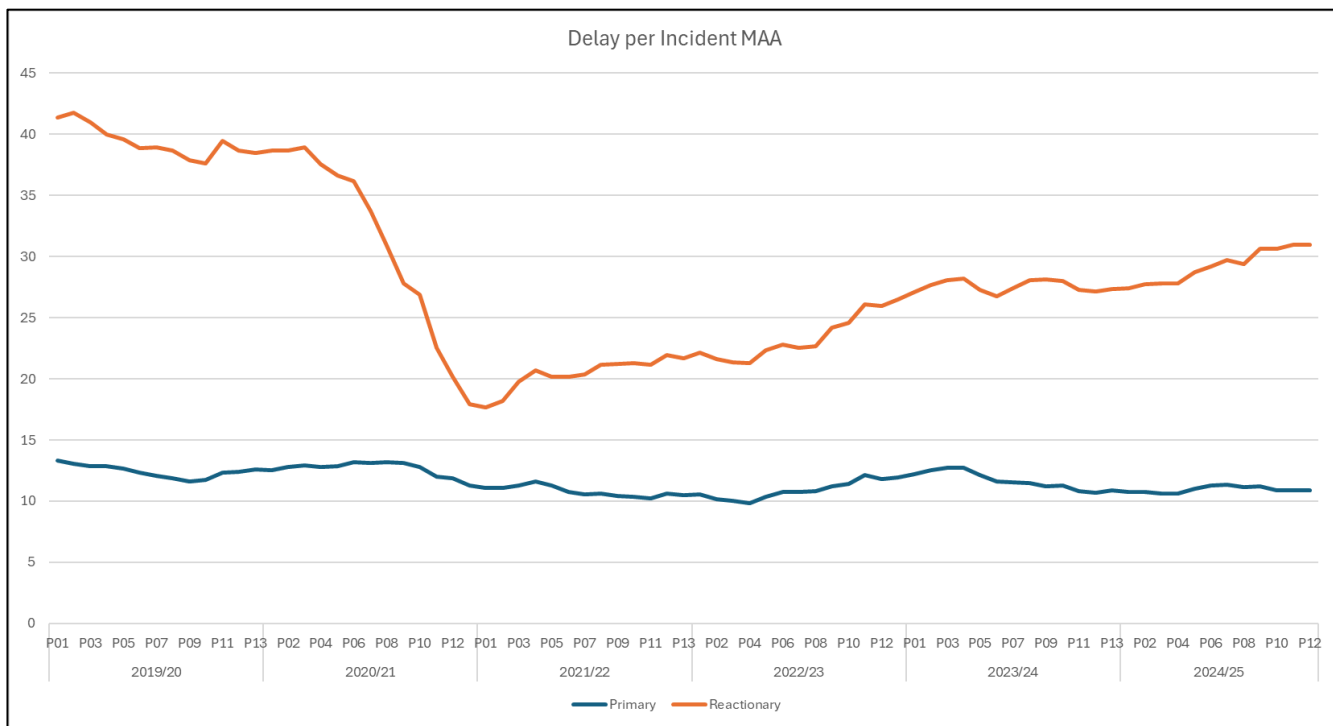
NMO has been the largest attributed cause of OT-3 failures for SWR this year (35.26% as of 17/3/25). The nature of NMO means it has no single 'owner' and the proliferation of unexplained delay (c 35% of all NMO) means that joint working with our operator colleagues and the use of new data sources beyond TRUST are critical in positively impacting the KPI.

The on-time group continues to be the forefront of this work with increased reliance on GPS data to help identify areas where the timetable is undeliverable or where our operational

consistency isn't where we need it to be. In the coming year SORC data will also enable us to have a greater understanding of how we signal trains and look to deliver more consistent, optimum, routing and application of our train regulation policies.

The graphs below show that although primary delay minutes per incident have not changed significantly over time, the reactionary delay minutes per incident has increased, also illustrated by the proportional split shifting towards a higher percentage of reactionary delay. This increase in reactionary delays can be seen since the COVID pandemic, which, initially, was largely due to reinstating services, thereby making the network busier, and increased numbers of passengers. However, this trend has continued beyond the recovery from COVID, indicating there may be other factors relating to resilience that limit service recovery.





## 4. Performance Risks and Key Events

### 4.1 Risk Management Overview

Network Rail and SWR have detailed risk registers and associated management processes. We have collaboratively identified strategic and tactical risks to performance using the Whole System Model.

We have developed our risk management process by working with industry colleagues to learn from good practice in this area and have supported the review of the Industry Performance Risk Framework. We have developed structured risk review, escalation, and risk reporting processes to give clear line of sight throughout both organisations. We are focusing our approach on proactive risk management to ensure we have strategic direction of our processes and systems to better manage and track the impact of our joint risks. Our risk framework ensures we follow five clear steps when approaching risk.

- **Identification**
- **Assessment**
- **Prioritisation and Evaluation**
- **Management response**
- **Review**

Our two organisations have different processes for the management of risk to performance, however through our joint performance governance activities these are managed successfully. More detail on governance is available later in this document.

### 4.2 Weather, SMD and Flooding

Weather and seasonal performance risks have been quantified by understanding the performance impact of the worst year of the past five.

The mitigated risk is then a reduction from this maximum position, based on known mitigations, anticipated reactive activity from lead indicators and a more probable risk level, above and beyond what is assumed from the base level of performance (i.e., at 86.2% On-Time to 3).

The performance impact inputted into the trajectory reduces the On-Time to 3 by 1.61%, with cancellations worsening (increasing) by 0.14%.

It should be noted that the extreme weather category is unseasonal weather. i.e., all extreme heat incidents in the summer periods are only included in Summer, etc to ensure no double counting.

Area	Methodology/Comment	OT3 Max Risk	Cancellations	Mitigated OT3	Mitigated Canx
Winter	Baseline gives level of impact for each component for a standard 85.1% T3 performance year. T3 Max Risk is from these baseline positions to worst of the last 5 years (including Pre-COVID).	-0.28%	0.02%	0.07%	0.02%
Summer		-0.34%	0.01%	-0.06%	0.01%
Autumn		-0.31%	0.02%	-0.12%	0.02%
Earthworks/SMD		-0.28%	0.04%	-0.04%	0.02%
Extreme Weather Events		-0.22%	0.04%	-0.11%	0.02%

#### 4.3 External

A net reduction 0.58% On-Time to 3 for further external risks has been calculated, quantified in the same manner as the weather and seasonal risks, including a saving of 0.15% On-Time to 3 failures from NR PIPs and activity.

For cancellations, there is a decrease by 0.10% for external risk and an improvement of 0.02% for NR PIPs and activity respectively.

Area	Methodology/Comment	OT3 Max Risk	Cancellations	Assumption	Mitigating Actions / Benefits	Mitigated OT3	Mitigated Canx
External (Fatalities, Trespass)	Baseline gives level of impact for each component for a standard 85.1% OT3 performance year. OT3 Max Risk is from these baseline positions to worst of the last 5	-0.73%	0.12%	Max Risk level, Worst of the past 5 years position	Joint Route Crime Strategy, Hotspot locations works, bridge enclosures, blanking ladders, increased EIU efficiency.  Targetting performance that will not get worse than this year following additional mitigation works.	-0.15%	0.02%

#### 4.4 Fleet / Resourcing

##### Class 701 'Arterio' introduction

The full rollout of the class 701 fleet will improve customer experience and operational performance, due to the superior acceleration and braking capability, and faster boarding and alighting compared with the legacy fleets. We intend to harness the higher performance of the units to ensure better run-time and dwell compliance. Nevertheless, there are several substantial risks associated with the rollout:

- Change of working practices for crews and the associated technical infrastructure to support has led to delays to the introduction that are being worked through with unions.
- Delay to entry into service for the class 701 units means prolonged use of the class 455 stock which is around 40 years old and prone to corrosion and failure of life expired components.
- Class 455 units are due to be retired by 31<sup>st</sup> December 2025 leading to a risk that insufficient class 701s will be in service to deliver the service – options are being explored to mitigate this risk.
- Prolonged storage of class 701 units increases the risk of failures on introduction although there is an intensive programme to bring each unit into service to prevent this.
- High levels of training for drivers and guards on class 701s and class 458/4s continues to impact crew availability and increase cancellations, particularly during periods of higher sickness levels or leave, and lower demand for rest-day working.

**Delivery of fleet into service currently underway.**

### Diesel fleet (Class 158/9) – long term strategy

There is an ongoing challenge around maintenance of the diesel fleet due to component shortages, particularly for engines. The fleet is now over 30 years old and therefore the risks to reliability will increase further, and they will become life expired early in the next decade.

We are, therefore, required to find a replacement for this stock to be used on the Waterloo to Exeter services. There has been a reliance on diesels as electrification ends before Salisbury, and to achieve our decarbonisation objectives, replacement with a further diesel fleet is not a strategic aim. Full electrification by extending third rail all the way to Exeter is also not a favourable option.

Despite advances in battery electric multiple unit (BEMU) technologies, the distance that would need to be covered exceeds the range of the current best performing BEMUs in development and in service in other European countries. The long single-track sections mean the impact of a train failure would be substantial.

One approach is using battery EMUs that can also use DC electric power where available, along with a system of discontinuous electrification along the currently non-electrified section that would charge the battery. This option allows battery power to be used where no electric supply is provided.

These proposals are still in their exploratory stages.

## 4.5 Infrastructure Reliability/Assets- Key Works

The Wessex Route is undergoing a series of critical infrastructure renewals over the coming years to replace life-expired assets, enhance reliability, and improve safety across key sections of the network. These investments will deliver significant performance benefits, reducing service-affecting failures, minimising maintenance interventions, and strengthening operational resilience.

### North Downs Line (NDL) Signalling and Level Crossing Upgrades

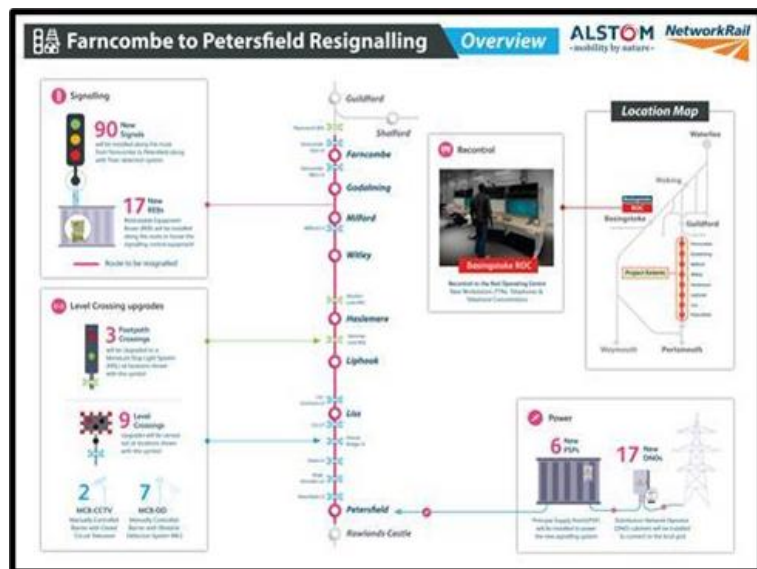
The North Downs Line (NDL) will see a comprehensive renewal of its ageing signalling system and level crossings. This includes replacing Automatic Half Barrier (AHB) crossings with modern CCTV and Obstacle Detection (OD) crossings, alongside an upgrade to axle counter train detection technology.

- **97% risk reduction** at each upgraded level crossing
- Removal of three of the Wessex Route's highest-risk AHB crossings
- Increased signalling resilience, reducing faults and improving maintainability.

### Farncombe to Petersfield (F2P) Re-Signalling – £129M Investment

A major re-signalling programme is set to renew 1970s-era assets between Farncombe and Petersfield, replacing outdated control, power, and telecoms systems with modern equivalents. This will significantly enhance reliability, reducing failures and associated train delays.

- **Fewer service-affecting failures**, leading to improved punctuality.
- **Safety and environmental benefits** from reduced maintenance site visits
- Renewal of **nine level crossings**, including seven upgraded to the latest Obstacle Detection Mk2 technology.



**Planned Commissioning: November 2025**

### Queenstown Road (QTR) Track Renewal – Christmas 2025

A critical renewal of multiple sets of points (607A/B, 608A/B, 609AB, 610, 1790) and 0.8km of plain line is scheduled for Christmas 2025.

- **Significant improvement in asset reliability**, reducing track-related service delays.
- **Removal of multiple recurring faults**, easing maintenance workload.

**Planned Access: 24th Dec 2025 – 5th Jan 2026**



### Havant Re-Lock and Re-Control

A major signalling renewal in the Havant area will replace obsolete control systems, relocate operations to the Basingstoke ROC, and upgrade lineside power and signalling infrastructure. The new system will improve reliability, ease maintenance, and introduce limited operational enhancements for timetable performance.

- **Reduction in recurring signalling failures**, improving service resilience.
- **Driveability enhancements** to support timetable reliability.
- **Planned Commissioning: Easter 2028 (Major Blockade Planned)**

## Woking Switch & Crossing (S&C) Renewal

A targeted renewal of key switches and crossings at Woking will replace ageing assets with modern equivalent layouts, improving track alignment and detection reliability. (Scope: 2235 & 2236)

- **Extended track life (60 years)** through installation of new trackwork
- **Improved performance in extreme weather**, reducing disruption from detection faults.

## 4.6 Nationalisation and transition towards GBR

The transfer of ownership of SWR to the DfT Operator Ltd (DfTO) in May 2025, followed by the remaining TOCs provides an opportunity for a more unified approach to rail delivery. Although the long-term national strategy is still being worked through by policymakers, SWR, Network Rail and DfTO have started working collaboratively towards this approach by creating a joint TOC and route Managing Director position provide joint leadership oversight.

Both organisations will focus on continuing to deliver and improve rail services to passengers and the unification should facilitate that objective. Nevertheless, any major organisational and cultural change carries a degree of risk such as revising contractual arrangements that could jeopardise the ability to deliver services, unsettled staff and a potential misunderstanding of objectives.

SWR, NR, First Group and DfTO colleagues are working closely to ensure a smooth transition, establishing new contracts, and communicating regularly with staff to ensure they are kept up to date with progress and future direction. Through DfTO, operators should be able to provide expert input to government on the running of passenger services.

## 5. Performance Strategy

### 5.1 Infrastructure and Assets / Infrastructure Reliability

#### Track

##### *Remote Void Monitoring Trial*

Responsible Owner: Infrastructure Maintenance Engineer

Accountable Owner: Infrastructure Director

We are embarking on a Remote Void Monitoring Trial to enhance our track maintenance strategy and improve overall asset management. The trial will include the integration of VoidSense alongside SWiX and KONUX technologies, providing comprehensive visibility into asset condition and deterioration. This will enable us to monitor and assess the effectiveness of maintenance activities with precision.

Funding for the trial of VoidSense units has been approved, and the full trial is set to commence in February 2025. A wider rollout is planned from Autumn 2025, allowing us to leverage the insights gained from the trial phase to ensure optimal implementation and performance.

*Drone Inspection Project*

Responsible Owner: Programme Manager (Infrastructure Change)

Accountable Owner: Senior Programme Manager (Infrastructure Change)

On 28th January 2020, while departing Eastleigh, a freight train derailed over a set of points, subsequently identified to be a result of failed fastenings within the points. Further investigation showed that a number of these fastenings had failed prior to the derailment.

Deterioration was identified at Great Western Junction and Hampton Court Junction, necessitating urgent repairs. At Hampton Court, the track was plain lined with standard sleepers interlaced, and refurbishment works were expedited. Additionally, new failures not previously apparent were identified.

Wessex has a significant number of similar points layouts, installed between 2002 and 2006, which have had between 600 and 750 million tonnes across them. To address the need for controlled inspections, a project was created to carry out daytime inspections using drones.

The first flight was a success, and subsequently all P1 sites planned for inspection over the following four weeks. Key takeaways include:

- Boots off Ballast: Eliminates the need for time-consuming line blockages and associated risks.
- Track Access: Does not take limited access away from teams that need to be on track.
- Dynamic Viewing: points can be viewed dynamically.
- Continuous Operations: Trains can continue to run during inspections.
- Efficiency: Only two individuals are needed for the drone inspections.
- Footage Review: Footage can be reviewed in the depot.
- Informed Decisions: The level of detail allows for informed engineering decisions and targeted on-site inspections based on identified risks.

*Freight Resilience of Operational Geometry (FRoOG) Initiative*

Responsible Owner:

Accountable Owner: Infrastructure Director

The FRoOG initiative was developed in response to several high-profile freight derailments across the network and an ORR recommendation for the industry to develop methods for capturing dynamic measurements of sections not covered by Track Recording Vehicles (TRVs).

Following successful trials on the Blaenavon Railway and across the Eastleigh and Salisbury track sections, the unit has received full PA for Twist and Gauge. The data output from FRoOG is comparable to that of the Track Recording Fleet, making it more accurate than static methods used previously. During recent use in the Woking TME area, FRoOG had a larger number of faults recorded compared to the Amber Trolley. This not only enhances our understanding of asset performance dynamically but also improves line safety by rectifying previously unidentified or lower-value faults.

In collaboration with TA, we have started to unlock the remaining recording channels (Top, Alignment, and Cyclic Top). This will further enhance the quality of data and increase our dynamic understanding of locations not previously covered.

Additionally, we will continue to establish baselines for SMD sites approaching and during summer, recovering lost TRV mileage to mitigate compliance concerns and validate works, allowing for more timely removal of speed restrictions. Another avenue being explored is the Rail Profile software, which our machine possesses, though it was not part of the initial trial. The data available from this software will be reviewed by teams in the route.

## Electrification and Plant

### *Thermal Imaging Initiative*

Responsible Owner: Infrastructure Maintenance Engineer

Accountable Owner: Infrastructure Director

To proactively reduce service-affecting conductor rail equipment (CRE) failures, we are using thermal imaging technology to identify faults before they escalate. In collaboration with Angel Trains and One Big Circle, we are trialling a permanent thermal imaging fitment across the SWR fleet, allowing early detection and targeted interventions. Angel Trains is working alongside SWR to develop the necessary engineering documentation for installation, with a trial scheduled to go live in June 2025.

### Non-Track Assets

NTA has been our second most impacting JPIP category at 31% of all attributed OT-3 failures. Whilst as a percentage this is an improvement on last year, in real terms it was an increase of around 30k.

Our management of improvement activity in Infrastructure has been significantly overhauled in the second half of 2024/25 and that is just starting to deliver visible change with milestone plans in place for key asset types and locations.

Plans for the points in the Woking will continue to be delivered (across both S&T and Track), and whilst still highly impacting, there has been an improvement seen year on year. (7705 OT3F vs 9967 last year) Eastleigh points too, are critical to improvement efforts but are paired with individual plans for all 'operationally critical' points between Bournemouth and Basingstoke on the outer DU, with all route customers in mind.

Along with reducing the number of incidents, we are improving our ability to react appropriately when issues do occur. Following a significant incident at Durnsford Road in P9, the interaction of our response teams and control has been changed to ensure that engineers are clearer in making the case for access requests to identify and rectify faults. There is also improved, systemic, support for on the ground colleagues to enable smarter fault finding through our branching U-guides, helping make investigation and cause identification as efficient as possible.

Work is being undertaken on train detection issues for both axle counters and track circuits including upskilling staff, installation of axle counter guards at high-risk locations to prevent litter interference, and cable upgrades. Central to train detection improvement is the delivery of schemes that will address long standing repeat issues: F2P will end the issue of life expired track circuits impacting customers during hot weather and continued resilience work at Sherborne will provide relief to customers on the West of England who have suffered from the effects of unreliable axle counters for the last 2 years.

Increased use of drones, funded by PIF is being utilised to detect cable failures in the Waterloo area.

### *Woking HPSS Reliability Improvement*

Responsible Owner: Infrastructure Maintenance Engineer

Accountable Owner: Infrastructure Director

The Woking High Performance Switch System (HPSS) is an aging asset that has become increasingly unreliable, compounded by a loss of technician knowledge for maintaining the system. To address this, we are working directly with the manufacturer to conduct joint site visits, enabling better scoping of renewals and knowledge-sharing through masterclasses.

Scoping sessions have already identified specific point ends at Woking requiring replacement, and we are developing funded renewal packages. Given the significant service-affecting failures recorded over the past year, this initiative is expected to enhance reliability and resilience at a critical network location.

Initial masterclass sessions were held on 16th-17th October 2024, attended by representatives from Woking, Basingstoke, Eastleigh, Wimbledon, and Headquarters Operations, receiving positive feedback. Further sessions are under discussion, with plans to expand training through the Training and Development (T&D) team. Additionally, engagement with Eastleigh SM(S) is underway to facilitate T&D team attendance at the next annual review of the Shawford HPSS points.

#### *Simis Cable Working Group*

Responsible Owner: Infrastructure Maintenance Engineer

Accountable Owner: Infrastructure Director

The establishment of a dedicated working group focused on SIMIS cable maintenance enables proactive intervention to prevent significant and repeat asset failures. This collaborative approach ensures sustainable, reliable performance while reducing costs and operational downtime.

#### **Key Benefits:**

##### 1. Enhanced Cable Reliability

- Proactive planning enabled rapid response during the Havant Junction cable failure on 6th January 2025.
- Identified and prioritised cable renewals (45 identified cables with diversions already earmarked).
- Established a centralised repository (“Single Version of the Truth”) for consistent and accurate cable details.

##### 2. Efficient Maintenance and Renewal Processes

- Spare cables are pre-run and tested to ensure availability in case of failures.
- Jointing of current cables with diversions optimises resources and reduces installation time.
- Incident Response Plans (IRPs) and pre-prepared test plans ensure faster issue resolution.

##### 3. Proactive Training and Skill Development

- Works Delivery teams receive SIMIS competency training, enabling quicker on-site responses.
- Collaboration between Signal & Telecom (S&T), Works Delivery, and maintenance teams improves coordination.

##### 4. Mitigation of Interlocking Failures

- Focused interventions prevent shutdowns caused by cables exceeding operational parameters.
- Support for “Havant Relock” initiatives to further improve system resilience.

##### 5. Cost and Resource Optimisation

- Reduces reactive maintenance costs through predictive interventions.
- Jointing and reusing viable cables will minimise replacement expenditures.

## Infrastructure Change Team

### *Asset Intelligence Strategy*

Responsible Owner: Programme Manager (Infrastructure Change)

Accountable Owner: Senior Programme Manager (Infrastructure Change)

The Asset Intelligence programme on Wessex Route aims to leverage data-driven insights to enhance asset reliability, optimise maintenance interventions, and proactively mitigate risks to performance. By integrating machine intelligence, targeted asset reviews, and a structured leadership approach, this strategy seeks to deliver improved resilience, efficiency, and operational decision-making.

#### Key Strategic Workstreams:

##### 1. Performance Guardian – Enhancing Operational Resilience

- A live operational tool for Route Control that integrates data from multiple Network Rail systems.
- Uses machine intelligence to scan historical and real-time data for precursor events, identifying potential threats to performance.
- Generates alerts to SNDMs when asset behaviour indicates a credible operational risk, allowing WICC to assess and escalate appropriately.
- Enables proactive decision-making to prevent service-affecting failures.



##### 2. Targeted Asset Review – Data-Led Reliability Improvements

- Focused on high-delay assets, using failure history and maintenance data to drive targeted interventions.
- Dedicated Signalling and Track specialists conduct detailed inspections to identify underlying issues.
- Supports maintenance teams with data-backed recommendations to improve the effectiveness of asset management.



##### 3. Integration – Strengthening Leadership & Accountability

- Introduction of a Head of Asset Intelligence role to provide clear strategic leadership and accountability.
- Embeds a data-led engineering culture within Wessex Infrastructure, ensuring intelligence-led decision-making.
- Oversees the development of current and future workstreams, maximising the benefits of Remote Condition Monitoring (RCM) systems such as II and the forthcoming RADAR platform.



By embedding asset intelligence into operational and maintenance practices, Wessex Route will move towards a more predictive, data-driven approach to asset management. These initiatives will reduce reactive interventions, improve infrastructure reliability, and enhance overall performance resilience.

## 5.2 People and Workforce / Resourcing

### Resourcing

Responsible Owner: Head of Resourcing

Accountable Owner: Train Services Director

#### *Current challenges*

The main challenges for the Resourcing function affect the whole process from rostering train crew at the beginning of the chain, to DRMs covering jobs at the end. These challenges include:

- Issues relating to introduction of 701 stock.
- Crew shortages.
- Last-minute stock changes
- Severe weather plan amendments
- Amended plans that require manual inputs, which can lead to errors when splitting and covering jobs.
- Industrial relations raise the risk of failing to agree on rosters or changes, increasing the need for manual inputs.
- Taxis being late or incorrect bookings with the supplier, which is exacerbated during times of disruption or engineering works.

#### *Improvement activity*

- Introduction of new software, SARMA, to streamline processes and reduce errors.
- Revised procedures are being put in place to cross-check splits, call notes, and other manual work.
- Improved regular meeting process between SWR and taxi supplier to ensure issues are flagged and resolved, briefings are sent out, and important events or disruption are considered to minimise taxi delays.

### Driver Availability

Responsible Owner: Head of Drivers

Accountable Owner: Train Services Director

#### *Current challenges*

The biggest challenges are linked to stock training and establishment.

- Class 701 rollout and Class 458/4 training
- Drivers leaving the business which causes a significant training time deficit (approximately 366 days per driver)
- Long-term and short-term sickness, particularly in smaller depots or those with routes that are difficult to cross cover from other depots.

#### *Improvements*

- Collaborating with Occupational Health to expedite the return of drivers and providing increased direct support.
- Additional training (e.g. driver development days) to ensure maximum availability.
- New attendance management training scheme for driver managers.
- Increasing the numbers of 'flu vaccination days at driver depots.

- Driver training programme with 140 drivers qualified (by year 2)
- Recruitment drive for driver trainee pool (in year 1)

### Driver Operational Incidents & errors

Responsible Owner: Head of Drivers

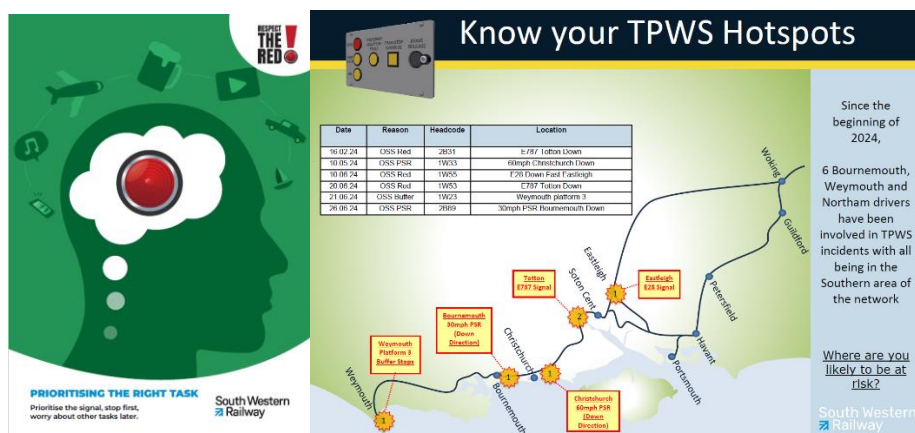
Accountable Owner: Train Services Director

### Main challenges

- Coupling process errors
- Operational errors such as missed AWS alerts, TPWS activations, SPADs, and stop short/overruns.

### Improvement activity

- Regular comms to drivers through briefings, traction traincrew bulletins (TTCB), eye-catching poster campaigns to address issues such as correct attach/detach process, AWS/TPWS hotspot locations in conjunction with Ops Standards
- Work to improve familiarisation of drivers with class 701 stock, particularly as these units have AWS alarms that differ from other units and very different interfaces compared to other stock our drivers work with
- Enhanced training for prep of class 701 units including regular updates to manuals along with driver briefings.



### Ill Passenger Process

Responsible Owners: Head of On Train Services and Head of Stations & Revenue Protection

Accountable Owners: Train Services Director and Service Delivery Director

Ill passenger incidents on trains and at stations cause trains delays and cancellations. We do have a detailed policy for the management of ill passenger incidents that focuses on providing the best care for the customer whilst minimising the impact and risk to other passengers, it is good practice to regularly review and refresh these policies.

Therefore, we will conduct a multifunctional review of the policy and ill passenger incidents that have occurred over the past year, which will include:

- Understanding whether the guidance still aligns with industry best practice.
- What the operational challenges are in implementing the policy during incidents, including input from frontline staff
- Ensuring that the preferred locations to move the train to are still optimal.
- Alignment with Ambulance services to ensure best response times and locations.
- Evaluate on-network paramedics coverage and whether there is scope to increase times or locations, based on data.
- Liaison with other TOCs that use Wessex infrastructure to ensure a shared understanding of ill passenger management with their staff.

### Customer Assistance Improvement Plan

Responsible Owners: Head of On Train Services and Head of Stations & Revenue Protection

Accountable Owners: Train Services Director and Service Delivery Director

Our guards and station staff handled over 240,000 customer assistance requests over 2024-25 for our network to be accessible for customers with a range of assistance needs. Over 104,000 of these were pre-booked by customers and nearly 140,000 were unbooked. The passenger assistance app has been invaluable for managing these requests, with staff being able to input details for customers who have not used the app to communicate with other colleagues. Nevertheless, there are still growing delays caused by these events, so we are seeking ways to better manage assistance whilst improving accessibility.

We are conducting a multifunctional review process to identify challenges and improve the service we offer, such as:

- What are the challenges our staff face with using the app?
- How can we make the app more attractive to customers who do not use it?
- How can we better manage last minute or altered bookings, so the assistance does not fail and deter customers?
- What are the differing needs of the variety of customers who need assistance that we are not yet meeting?
- What improvements on trains and at stations would make giving assistance more efficient?
- New ramp supplier and additional ramp deployment across network

## 5.3 Operating Plan (Timetables & Planning)

### Timetable Planning

Responsible Owner: Project Manager (Change) and Head of Train Planning, SWR

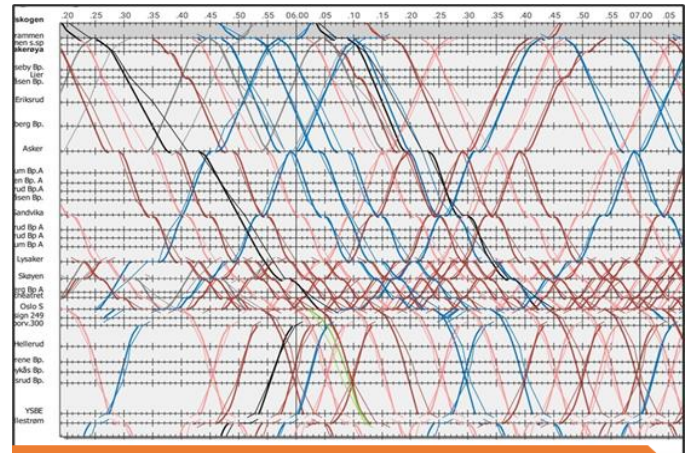
Accountable Owner: Programme Manager (Change) and Director of Performance & Planning, SWR

Timetables changes are an opportunity for a reset of performance delivery and performance improvement, but can also lead to performance worsenment, so processes around build must be robust, challenging, and effective.

TOC & FOC partners must deliver timetables to System Operator within the timeline required by the Network Code. It is best practice for TOCs and FOCs to involve Southern Region within their planning processes, to best understand any risk and mitigations.

The Timetable Strategy governance structure (extract in **figure 1 & 3**) aims to drive performance improvements using bottom-up (incremental) and top-down (recast) approaches. In the Timetable Performance Improvement Group, incremental changes are made via a data-led approach to identify opportunities for performance improvement by either changes to the Train Plan, Timetable Planning Rules, or to timetable delivery. In the Wessex & SWR Timetable Strategy Steering Group, timetable recasts are discussed with Operators on targeted timetable changes to best balance ‘the trilemma’ of performance, revenue, and customer need. (**figure 2**)

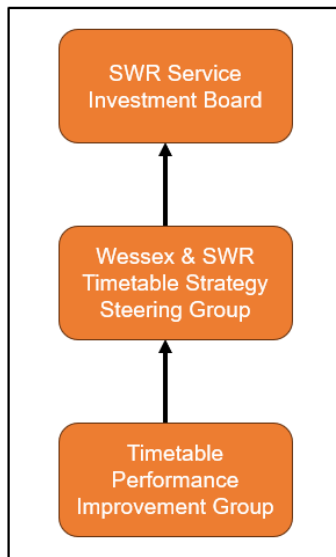
To model the performance impact of proposals TRENTO performance modelling give an output of performance delivery. The Wessex Timetable Performance model was firstly constructed using the Opentrack simulation platform in 2018, covering London Waterloo to Wimbledon only. The model was ported to the newly developed Trenissimo platform in late 2018, and this move enabled several enhancements and expansions. The core model was extended to Woking and then to Reading, and signal interlocking details such as approach controls and swinging overlaps were added during 2019. Separate models of the Southampton and Portsmouth areas were developed in early 2020 and then merged in



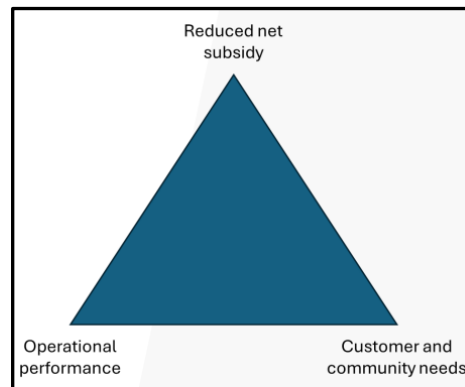
Example Train Graph output from performance simulation

with the London area model to create one integrated Wessex Route model; a West of England extension was added during 2022. Speed enhancements mean that the entire model now runs in a few hours, covering several hundred operating days of stochastic simulations. Further functionality enhancements were added including dynamic dwell time modelling, stochastic modelling of PSR/ESR removals, customisable train regulation, and replication of the RBLS signalling system. The driver model under conventional signalling was also enhanced to better replicate professional driving and variability. Assets within the model can now be linked to AXIOM and SORC data, and most recently functionality was added to include asset information such as mileage and ELR in the model outputs to inform the Safe and Effective Railway Maintenance programme.

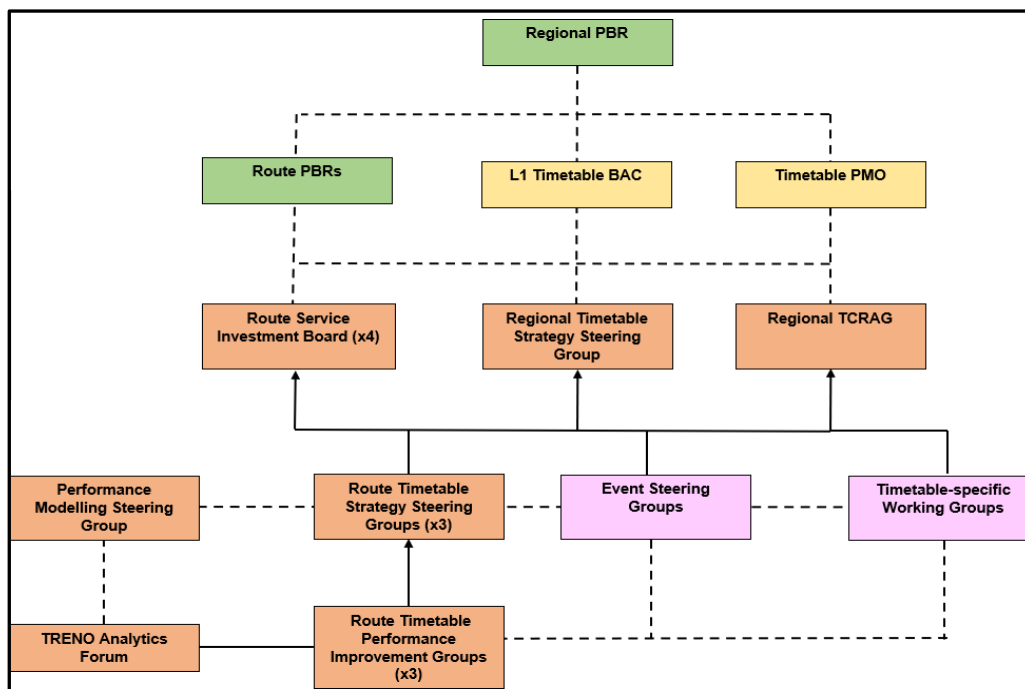
The Service Investment Board acts as the key liaison meeting between the Operator, Network Rail and DfT on all aspects of timetable management.

**Fig 1: Extract of Timetable Strategy Governance Structure**

The Timetable Performance Improvement group in Wessex is known as the Wessex Planning Rules and Development Group. This group meets every two weeks and is a collaboration between Network Rail, SWR Planning and Improvement teams and System Operator. This group focuses on providing incremental timetable improvements, through detailed analysis and interrogation of the timetable. The group have been systematically reviewing the SRT's on Wessex, looking at redistribution of performance time and minor timetable amendments. This group works closely with the On Time Steering group.

**Fig 2: The 'trilemma'****Fig 3: Full Southern Region Timetable Governance Structure**

There are multiple tools and systems that we use to understand underlying issues with the timetable and model or forecast impact of changes (**Table 1**).



Tool / Data	Use Cases	Prerequisites	Strengths & weaknesses	Use on Southern Region	Examples of where we have / are using it
<b><u>Timetable Modelling:</u></b> <b>Trenissimo / Railsys</b>	Testing a hypothetical scenario, under ideal conditions, or the effect of a change	Specific software, skill sets, and baseline geography - contracted to external expert users	+ Hypothetical scenario testing; very transparent; data-rich outputs. - Data hungry, can be time consuming for initial set up / validation; outputs depend on input assumptions	Procurement Framework at February panel for sign off. Will consist of Central Performance & Simulation team and 2 external suppliers	December 2026 Recast for SWR timetable
<b><u>Performance Analysis:</u></b> <b>TRENO Analysis</b>	Reviewing performance influencing timetable-driven factors, sub-threshold delay investigation and propagation	Software licences. Once configured the system is self-updating from NR public Open Data feeds	+ Tracks sub-threshold lateness and delays; visualises interaction between trains. - Requires bespoke software; doesn't differentiate reasons for or attribution of delays	<b>Wessex/SWR:</b> x 2 licenses	- Generation & detailed analysis of autumn timetable performance
<b><u>To the second train moves:</u></b> <b>SORC</b>	How trains are operating at signal level, including signal aspects	User front end being developed but data can be requested from NPAT	+ Currently available for limited parts of Wessex and Kent.	Problem locations or trains identified by TRENO further reviewed with SORC.	(Being tested)
<b><u>Performance Analysis:</u></b> <b>Business Objects / PSS / TRUST</b>	Delays reason analysis above basic level, considering attribution, or recreating industry-standard performance metrics eg T-3 or Delay Minutes	NR login and access to NR Business Objects	+ Industry recognised data; details of reactionary and attributed delays. - Not freely accessible; limited information on subthreshold delays	Full access	- Standard - Variation from planning rules vs operation for SWR.
<b><u>Train Data:</u></b> <b>OTDR / GPS</b>	Investigating time lost in running, or calibrating the simulation model	Access to TOC-specific datasets (some limited availability of GPS data via NR Gateway)	+ High resolution data on individual trains. - Lack of volume; not freely accessible	Access varies across Southern Region Operators	- Variation from planning rules vs on the ground operation for SWR

### Longer term Initiatives

Responsible Owner: Lead Strategic Planner

Accountable Owner: Head of Strategic Planning

#### *Wessex Strategic Planning – Long-Term Focus*

The Wessex Strategic Planning team plays an important role in shaping the long-term future of the railway, ensuring that infrastructure, timetable planning, and operational strategies align with projected demand and performance requirements beyond the immediate CP7 period. Their work is focused on enhancing resilience, optimising capacity, and improving service reliability across key corridors, balancing operational feasibility with passenger growth and strategic ambitions.

Beyond the first two years of CP7, the team will continue to drive data-led performance analysis, business case development, and future service planning. This includes addressing critical infrastructure constraints, such as Salisbury ECS movements, the West of England Line capacity limitations, and the resilience of the Southwest Main Line (SWML) as service levels increase towards pre-COVID levels. Through iterative timetable modelling and simulation work, the team aims to mitigate performance risks, identify efficiency opportunities, and guide investment priorities.

A core focus will be on delivering incremental performance improvements that complement future infrastructure enhancements. For instance, ongoing performance simulation work between Woking and London Waterloo will provide key insights into how service growth can be accommodated while maintaining reliability, helping to inform the case for major interventions such as Woking Junction grade separation. Similarly, work on the West of England Line will determine the best phasing of service enhancements, ensuring that infrastructure upgrades are targeted effectively to unlock capacity without compromising performance.

Through continued collaboration with the Performance and Simulation team, timetable planners, and wider industry stakeholders, the Strategic Planning team will ensure that long-term rail strategy remains adaptive, forward-looking, and aligned with passenger needs and operational realities.

This is showcased in detail in **Appendix D**.

#### *On-Time/Subthreshold workstream*

Responsible Owner: Heads of Performance, SWR & NR Wessex

Accountable Owner: Performance & Planning Director, SWR and Operations Director, NR Wessex  
SWR and Wessex Route developed an On-Time/Subthreshold Workstream for systematic analysis of service performance to identify and resolve sources of persistent subthreshold delays, which account for around 45% of delay on Wessex.

The workstream consists of an On-Time Analysis Group comprising both SWR and Network Rail analyst expertise (with a full-time analyst post to carry out the work), and a working group to further define performance issues and find solutions, working with relevant delivery functions for implementation. The activity is overseen by an executive level steering group.

We employ a range of data sources including GPS and on-train data, which allows investigations such as AWS activation states to see effects of restrictive signals, or door cycle data (OSTRO tool) to analyse the components of dwell times. SORC will be developed and applied in conjunction with this group, which will provide insight factors such as junction regulation.

The outputs from this group are fed either into the Wessex Planning Rules Development Group to evaluate improvements to the base plan, or to functional meetings to identify operational fixes as appropriate.

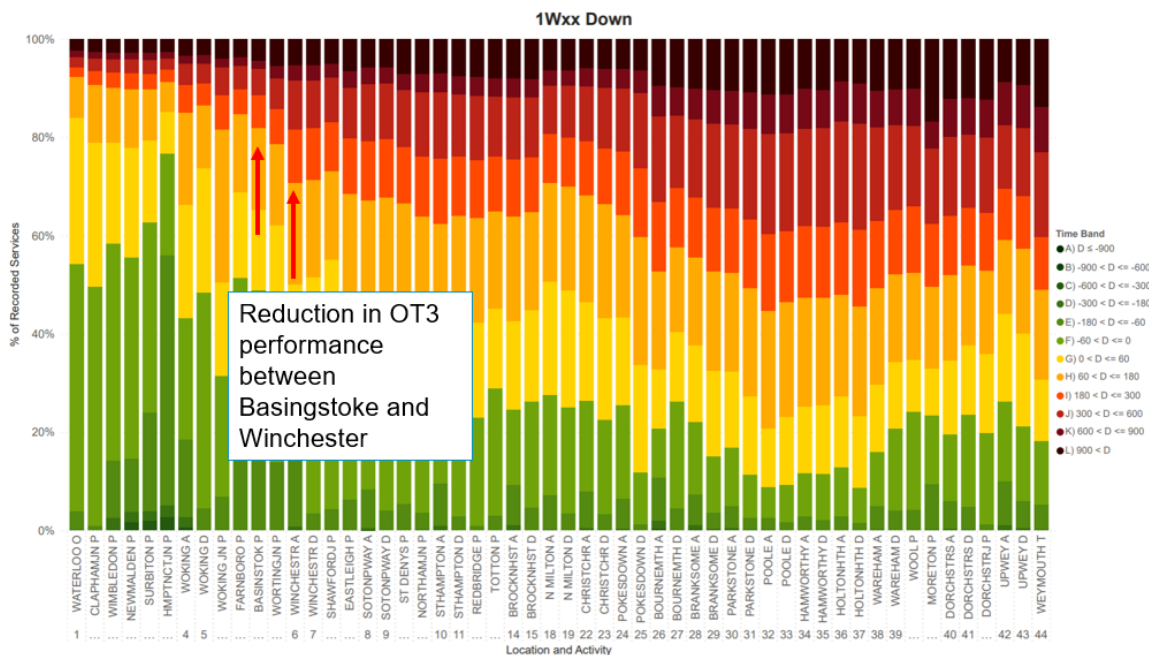
In 2025-26, this group will oversee the creation of local On-Time Railway groups as vehicles to help understand and fix operating challenges and to reintroduce a focus on operational excellence during daily delivery of the service. We are also launching a dwell time improvement project in the Metro area using the OSTRO tool to identify stations and times with persistent dwell challenges.

To improve the flow of trains into Waterloo in the morning peak, we are reintroducing the 'dispatch when ready policy' that enables staff to dispatch trains that are already full, which allows the next train to arrive sooner and enables our customers to get moving sooner. This approach will apply to stations between Raynes Park and Waterloo, which have a 'metro-style countdown display' on the CIS screens. Taking this approach also adds a degree of flexibility to aid service interventions.

Examples of investigations include:

- Time loss between Moreton and Wool – effects of level crossing barrier downtime
- Splitting and attaching at Southampton – change in process to expedite.
- ECS move at Winchester – trains coming out of service to Baltic siding, expedite detrain process.
- ECS move at Bournemouth – trains coming out of service to central siding.
- Comparison of Class 701 performance with legacy stock

## Case study: time loss Basingstoke to Winchester



A couple of great success stories through this workflow include;

- 2S headcode group was the second worst for right time starts from Waterloo. Although TPR compliant, in practice right time starts were often not achieved due to delay in clearing the route following departure of 2C services 2 minutes earlier on adjacent platform. We re-platformed the 2S service to remove the conflict and saw an uplift of 11.5% for right time starts for the 2S services.
- Due to the Timetable structure on Main Suburban, delay to Up 2F services impact on rest of the service group, because of interactions at converging junctions at Hampton Court, New Malden and Raynes Park. The 2Fs were among worst performing late starts across network. The regulation policy was amended to make intervention more explicit to preserve right time starts of 2Fs, which resulted in a 23% reduction in average late start of 2Fs from Woking.

### Freight Strategy

Responsible Owner: Regional Freight Manager

Accountable Owner: Senior Regional Freight Manager

On Wessex we remain committed to supporting our freight customers, in line with the 9-point National Freight Performance Strategy. Developed in line with the industry endorsed PIMS “Whole System Performance Model” it works alongside national performance objectives, aiming to drive focus towards areas of specific interest to freight. The document also acts as a framework for the Route delivery plans and includes initiatives to be delivered in collaboration with Freight Operating Companies (FOCs).

- Timetabling improvement through deep-dives, real-time monitoring of problematic head codes, reviewing Train Planning Rules and conducting major recasts where necessary.
- Rolling out the freight corridor concept, applying it to the freight flows demanding the highest levels of scrutiny and oversight.
- Shifting the perception of rail freight, raising knowledge and awareness so that it is placed at the heart of decision-making.
- Improving the condition of freight-only infrastructure by creating a new register to inform investment decisions, utilising spare track volumes where appropriate.

- Boosting fleet reliability by actively developing improvement plans with our freight customers, continuing the Wagon Condition Programme (WCP) and sponsoring technology-driven solutions.
- Removal of high impact Temporary Speed Restrictions (TSRs) to keep the network flowing.
- Weather resilience through enhanced seasonal preparation and greater consideration of national customers on Extreme Weather Action Team (EWAT) calls.
- Establishing industry-wide service recovery principles to drive consistency, quality, and speed.
- Strengthening incident learning reviews (ILRs) when events impact our freight customers.

## 5.4 Weather and Seasonal Resilience

Responsible Owner: Seasons Delivery Specialist

Accountable Owner: Route Operations Performance and Projects Manager

Our seasonal delivery builds on this latest season for traditional autumn KPIs but looks further at understanding the causes of the sub-threshold delay during autumn that prevents our customers feeling the benefit of that improvement. This will facilitate even better preparation ahead of future seasons, increased responsiveness during the season and an improved data set to further allow us to understand the effectiveness of our mitigating actions and whole system delay causes. Outside of autumn, understanding a reacting to risk in a more efficient way is a priority.

### Seasonal Readiness

To ensure optimal performance during the challenging seasons, we have established a series of comprehensive Seasonal Working Arrangements, which have been signed off by the Operations, Route, and Infrastructure Director. They include the completion and approval of control measures as dictated by the national weather team. We will conduct table-top exercises to simulate season specific incidents, ensuring preparedness for any eventuality.

Additionally, an extensive training programme will be implemented for the Autumn Controller Desk. Based on the Autumn Working Arrangements, we will create specific briefs for Controllers, Signallers, and Mobile Operations Managers (MOMs) to ensure everyone is well-informed and ready to respond effectively to seasonal challenges.

### 2025 Autumn Strategy

A strategic group has been formed with SWR to support and evaluate current strategies, as well as to define aspirations for the coming years. The Business-As-Usual (BAU) programme of works includes hot weather planning, an autumn desk, rail head treatment, and the operation of our MPVs. We also collaborate with other Operators including Freight on Wessex when managing the tricky Autumn period.

### Joint Vegetation Working Groups

Joint Vegetation Working Groups, comprising operations, area services, and maintenance teams, are assessing vegetation and reviewing high-risk sites from leaf fall assessments. The off-track headcount has been increased to proactively manage vegetation and tackle leaf fall more efficiently.



### Weather Contingency Plans/KRS

Weather contingency plans include performance modelling to inform decisions, developing off-the-shelf train plans, and understanding agreed joint approaches with SWR. An assurance process for joint activity for each season is also in place.

### Autumn Desk Resource

For 2025, there are opportunities for SWR staff to be seconded for three months as part of our autumn strategy, which includes six dedicated personnel. Business case has been developed and is under consideration as to whether this resource will be made permanent as of this business year.

### Contamination

A strategy to address contamination includes the application of INTERFLON to remove and reduce the build-up. We have seen good results and continue to target high risk specific areas of the route, utilising the sand rover where MPVs cannot reach, such as the Lymington branch and WOE line.



### Expansion of Successful Innovations from 2024 Season

Successful innovations from the 2024 season will be expanded, such as the use of Automatic Intelligent Variable Resistance (AIVR) on SWR fleets and MPVs. These innovations enable the capture of railhead conditions at line speed, creating a more efficient use of operational staff. By overlaying train onboard recorder data with camera captures, improving performance through Autumn and reducing boots on Ballast.

## 5.5 External Factors / Trespass and Fatalities

Responsible Owner: Route Crime Lead

Accountable Owner: Route Operations Performance and Projects Manager

We are continuing our workstreams to manage Trespass and Fatality Incidents, these workstreams are underpinned by our Tri-Partite Route Crime Strategy.

### Tri-Partite Route Crime Strategy

The Tri-Partite Route Crime Strategy involves Network Rail, SWR, and BTP, holding each party accountable. This strategy underpins governance arrangements surrounding crime, trespass, and fatalities, ensuring a cohesive and effective approach.



### Hard Physical Mitigation Plan

A comprehensive Hard Physical Mitigation Plan has been established, aimed at keeping people out of high-risk areas such as boundaries and platform ends. For the first time ever, a dedicated budget has been defined for this purpose on the Wessex route. This plan involved surveying 203 stations to assess the current situation and identify high-risk locations through a detailed risk assessment.

### Organisation and People

The organisational structure has been revamped to provide a more strategic perspective. This includes filling vacancy gaps and training staff to ensure readiness. A route crime lead has been recruited, bringing this area in line with other business sectors. Additionally, this role will no conduct auditing of response officers, a review of key performance indicators (KPIs), and will collaborate with key stakeholders to enhance overall effectiveness.

### Innovative Deterrent Trials

Innovative deterrent trials include the rollout of new signage, particularly large signs at key stations from Woking Junction to Waterloo. These signs aim to inform the public of the dangers around the station and trackside areas, in multiple varying languages with the aim of reducing incident counts in Trespass and fatalities.



### Harm Reduction Review

In a joint venture between Network Rail (NR) and the British Transport Police (BTP), a Harm Reduction Review is being conducted to oversee individuals with high-risk scores. This initiative includes an embedded mental health nurse and an enhanced police service agreement. BTP has devolved responsibilities, and the scope of services has been clearly defined. We are now funding a disruption tasking and emergency intervention team, equipped with drones to survey areas for trespass and perform proactive tasks.

## Maximising the Use of BTP Resources

British Transport Police (BTP) resources are being maximised with the deployment of the Emergency Intervention Unit (EIU) at Waterloo and Guildford. A review of these areas is currently underway to enhance resource utilisation.



Exercise COMET involves SWR providing a train for large-scale operational exercises, including resilience and assurance through scenarios like power outages and seasonal incidents. This enhances preparedness for significant disruptions.

## Exercise Regimes

Exercise regimes with Category 1 partners, including fire, police, and ambulance services, are hosted by the BROCC. These repeatable exercises demonstrate incident response processes and have been well-received, leading to improved understanding and efficiency during incident responses.



## New Technology

The Mission Control Simulator in BROCC is a new technology that enables repeatable scenarios for training and resilience practice for control responders, enhancing overall preparedness.

## Local Resilience Forums

Local resilience forums, run by local authorities with Category 2 responders, are held across the Wessex route. These forums facilitate de-briefing and improved outcomes through community engagement, allowing us to explain our impact as a business and industry.

## Trespass 5

It has been identified that there are 5 scenarios that largely occur when trespassers access the railway:

- Trespasser accessing the railway to move from point A to B and is aware of dangers posed and is not suicidal.
- Trespasser accessing railway with unknown intentions or has accessed railway and is unaware of dangers.
- Trespasser has accessed railway with intent of causing self-harm.
- Trespasser is in a precarious position but not lineside.
- Trespasser is in a precarious position lineside

These scenarios will be worked upon with a joint team of Train Operators, BTP and Network Rail to assess whether our response is appropriate to each scenario and to understand how each decision is made and how we better control that decision making. This will also include a review of the process by which decision makers are informed of trespassers and whether a real-time assessment can be made of the need to shut off train movements and / or conductor rail power. Once these risk assessments are generated, we will communicate to key decision makers in the industry to better balance safety and train performance and the associated safety risks with stopping train movements in certain conditions.

### SWR Disorder Joint Performance Improvement Plans

Responsible Owners: Head of On Train Services; Head of Stations & Revenue Protection; Head of Security & Safety Assurance

Accountable Owners: Train Services Director; Service Delivery Director; Safety & Security Director

Disorder incidents are top root cause for delay minutes for Stations and On-Train services. These challenges include:

- Drunk and abusive people on stations and trains, which can be particularly acute around popular destinations during warm weather.
- Ticketless travel incidents, where customers become abusive to staff.
- Passengers fighting, thefts and vandalism.
- Staff and customer assaults
- Malicious use of passcomm and egress handles

### Improvement activities

- Deployment of body-worn video cameras (BWC) to guards, station, staff and RCOs. There are a number of schemes to support the increased use of this technology as there are challenges to the widespread adoption of BWC.
  - Improving the technical infrastructure
  - Increasing the numbers of cameras and rolling out to stations that don't currently have them.
  - Campaigns in collaboration with BTP to promote use and effectiveness, including a video, comms campaigns, and guard depot 'roadshows' – these will highlight the use of footage in prosecutions.
  - A customer experience initiative to trial a new high-visibility vest for guards that has equipment pouches including a BWC holder.

- Conflict awareness training for the guard's function is being increased in frequency and will be delivered in-person rather than online.
- Joint Stations and OTS disorder improvement plan meeting overhaul with bespoke data dashboards and a newsletter for staff
- Reinstated joint SWR/NR/BTP meetings with revised governance.
- Joint analysis of data between Performance and Security team to deploy security resource more effectively.
- We are exploring ways to increase security resource through expansion of RCO establishment, increase NRT deployment or funding BTP officers.
- More active management intervention for conflict handling through touchpoint sessions
- Issuing a pocket guide of vital information for guards with guidance on emergency processes, including 3-way call number and security app.
- We are exploring the use of a CCTV focused comms campaign to deter antisocial behaviour, and the potential for deploying mobile CCTV units at hotspots.
- We are upgrading and modernising much of our CCTV equipment to make it more reliable and better quality, and to incorporate analytic functionality. We are seeking to set up some trial locations to evaluate options and liaising with operators such as ScotRail who have more mature analytic capabilities.

## 5.6 Fleet / Resourcing

Responsible Owner: Head of Fleet Performance, Head of Engineering and Head of Fleet Delivery  
Accountable Owner: Engineering & Infrastructure Director

### Fleet Activities

The delays to the class 701 introduction have resulted in our engineering teams maintaining the aging class 455 stock for longer than anticipated, increasing the risk of failure. Our engineering team work hard to keep on top of common age-related problems, such as corrosion affecting doors, but it would not be cost-effective to carry out major preventative work on units that are due to be scrapped at the end of 2025. This leads to a drain in engineering resource which should ease as the units in the worst condition can be used for spare parts before being scrapped. Currently we have 12 class 701 units (covering 6 diagrams pre May 2025 timetable), and are performing above expectations, regularly exceeding the periodic MP701D target at around 9,000 against a target of around 6,300.

Diesel engine components, wheelsets, and door problems on class 444/450/455 fleets have been a particular challenge this year, along with coupling equipment faults and cab leaks.

### Improvement activities

- Class 158/159: Negotiations will continue with the engine manufacturer to improve availability of parts.
- Class 158/159: Coupling equipment maintenance processes are being changed - class 15X units will be moved under cover more regularly to allow more frequent cleaning of electrical components.
- Class 450: TMS fans are being replaced in class 450s ahead of summer to prevent overheating.
- All fleets: A new process is being brought in to better manage levels of sand to prevent the units running out.

- Class 444/450: gateway card failures – working with Siemens, other Desiro operators and University of Southampton to understand failure modes and resolution
- Class 444/450: Repeat failure investigation for BCU failures.
- Class 444/450: DCU changeover programme due to finish August 2025 – working with manufacturer to establish and resolve failures of some new units.
- Class 458 (& others): New sealants are being tested to find one that is more effective at keeping water from the cabs – the best one will be selected and used to reseal cabs.
- Class 458: TMS computers will be changed out in class 458 units – the resealing project will prevent further damage to the TMS systems.
- All fleets: Increased resource at Northam depot for HVAC work ahead of summer
- All fleets: Data-driven proactive changeout of specific components such as relays – working with developers of Data Alchemist software suite used to track performance and maintenance work.
- New 701A delay focus group to tackle non-technical delays.
- ‘Phone-a-friend’ technical support process improvements to manage incidents more efficiently.
- Sirocco software rollout to depots to be completed early 2025/26.
- Class 701: Development of robust process to bring Arterios out of storage when additional units can be deployed.
- Class 455: Working with Train Planning to optimise diagrams for legacy stock.

## 5.7 Service Recovery & Incident Management / Keeping Trains Moving

### Network Management / Other

NMO has been the largest attributed cause of OT-3 failures for SWR this year (35.26% as of 17/3/25). The nature of NMO means it has no single ‘owner’ and the proliferation of unexplained delay (c 35% of all NMO) means that joint working with our operator colleagues and the use of new data sources beyond TRUST are critical in positively impacting the KPI.

The on-time group continues to be the forefront of this work with increased reliance on GPS data to help identify areas where the timetable is undeliverable or where our operational consistency isn’t where we need it to be. In the coming year SORC data will also enable us to have a greater understanding of how we signal trains and look to deliver more consistent, optimum, routing and application of our train regulation policies.

The priorities of this group are reviewed quarterly; however, the current focus is on breaking the ‘HY03 loop’, which sees delay to our WoE services propagate around the route with critical nodes at Basingstoke, Woking, and Waterloo before reaching Portsmouth and being pulled back to Salisbury via Southampton by GWR’s South Wales and Solent services. Work on route-wide dwell compliance and SRT delivery is also under way in conjunction with all operators.

Signaller delay is now well managed with the evidence apparent in data with improvements clearly divided into different owning teams. The ROM team have ownership of continuous improvement through targeted, short term local plans and operational consistency whilst The Operational Strategy team are charged with delivering the bigger ticket items such as improved signalling systems and the operational roll out of re-signalling schemes.

Possession overruns and track patrols have also been a growing issue through the year, this year with a new approach to management or risk and issues being required. A workshop held in early March is expected to lead to wide ranging improvement activity, with immediate action taken to ensure that all passenger affecting overruns are subject to learning reviews and appropriate resulting improvement activity.

Infrastructure causes of delay within NMO are varied and often not systemic. Alongside a comprehensive Vegetation Management plan aimed at improving Autumn delivery, reducing risk from fallen trees and lessening

the impact of SMD through thirsty tree removal, sits a monitoring and improving process for other KPIs as they arise, driven by rigorous Incident Learning Reviews and an assurance process that verifies output delivery.

**The Operations Directorate** continues the good work undertaken in the last year as well as increasing efforts in areas that have not been so effective, in a targeted and managed way, with clear areas of improvement in responsibility for individual areas of the team.

Our signalling function's efforts have become more focussed with four basic priorities:

- Continue to embed a performance culture.
- Deliver localised actions in each LOM area.
- Drive operational excellence - enabled by improved data availability.
- Manage strategic risks, such as the ongoing threat of establishment and competence.

This is possible due to the growth of the Route Operations Strategy Team which owns and delivers major operational projects into BAU, such as the rollout of new systems and re-signalling that allows the Route Operations Team to focus on day-to-day activity.

Finally, a reinvigorated Control CI team will facilitate enhanced learning leading to improve processes and adherence to those procedures, and in our ability to both manage incidents and work with other operational colleagues to improve service recovery.

### [Wessex Integrated Control Centre \(WICC\) – Continuous Improvement Strategy 2025](#)

Responsible owner: Head of Continuous Improvement (Joint NR/SWR)

Accountable owner: Operations Director & Service Delivery Director

The WICC strategy aims to embed a culture of continuous improvement within the WICC, fostering collaboration, data-driven decision-making, and operational resilience. By strengthening relationships within the control team and external stakeholders, WICC aims to drive meaningful performance enhancements that directly improve train service reliability and the customer experience.

#### **Strategic Objectives**

- **Cultural Transformation:** Establish a 'just' culture within the WICC, where learning and improvement are central to daily operations.
- **Stakeholder Engagement:** Strengthen partnerships with Network Rail (NR), South Western Railway (SWR), and external partners to address key operational challenges.
- **Sustainable Continuous Improvement:** Develop and maintain a robust Continuous Improvement (CI) function within the WICC, ensuring long-term impact.
- **Structured Change Delivery:** Implement a 'four pillar' approach to drive measurable improvements in operational performance.
- **Regional Best Practice:** Collaborate with CI teams across the Southern Region (Sussex & Kent) to align and share best practices.

#### **Key Deliverables for 2025**

##### **1. Enhancing Operational Decision-Making**

- **Control Visualisation Sessions:** Reinvigorate post-incident reviews (HOT reviews) to enhance incident learning, ensuring cross-functional participation.

- **Incident Timelines:** Introduce structured data-driven timelines for key incident types, starting with fatalities, to drive improved response times.
- **Sirocco SWRT Integration:** Embed the SWRT (Service Recovery Tool) into Sirocco to provide automated decision-support for service controllers, improving reaction times and service recovery.

## 2. Strengthening Incident Review & Response

- **Incident Review Process Overhaul:** Improve trust and effectiveness of incident review processes to ensure insights drive tangible operational improvements.
- **Stranded Trains Response Improvement:** Work with stakeholders to enhance protocols and customer communication during stranded train events.
- **Person Struck by Train (PST) Process Improvement:** Optimise response strategies to reduce incident resolution time and mitigate disruption.

## 3. Building Resilience through Contingency Planning

- **Contingency Plan Working Group:** Drive continuous refinement of contingency plans through collaborative stakeholder engagement.
- **Bournemouth Traincrew Late Link:** Develop alternative routing strategies to protect last services to the South Coast via Chertsey during mainline disruptions.

## 4. Empowering a Culture of Continuous Improvement

- **Control Improvement Idea Hopper:** Establish a grassroots-led CI framework where frontline staff contribute ideas for operational enhancements.
- **Root Cause Analysis Workshops:** Deliver targeted workshops with NR and SWR SMEs to diagnose and resolve systemic operational issues.
- **Best Practice Workshops:** Conduct shift-based workshops to embed operational excellence and Continuous Improvement methodologies.
- **PR & Communication Strategy:** Enhance engagement between the CI team and WICC to improve awareness and collaboration on improvement initiatives.
- **CI Training & Trust-Building:** Equip control teams with CI tools and methodologies to foster long-term cultural change (Spring 2025).

## 5. Customer-Focused Disruption Management

- **Customer Disruption Plans:** Develop robust, consistent, and customer-centric disruption plans to improve communication and mitigate service impacts.

### Ongoing Workstreams

- **Joint West of England Performance Improvement Group:** Drive targeted interventions to enhance performance on the West of England route.
- **Regional Collaboration:** Align best practices with Sussex and Kent CI teams to maximise impact across the Southern Region.

[West of England Joint Performance group](#)

Responsible owner: Head of Continuous Improvement (Joint NR/SWR)

Accountable owner: Operations Director & Service delivery director

### Strategic Objectives

The West of England Joint Performance Group aims to enhance performance on the West of England Line by 5% over the next five years. This objective is driven by collaborative efforts between SWR, GWR, NR Wessex, and NR Western, focusing on aligning expertise and delivering incremental gains to improve both operational performance and the customer experience.

### Key Initiatives and Successes

- **Customer Assistance:** A detailed review confirmed that existing assisted boarding points are appropriately located. Guards and station staff now distribute information cards to assist customers in booking support services.
- **Salisbury Tunnel Junction Regulation:** The regulation statement has been reviewed to ensure it meets the needs of all route customers, including SWR.
- **Exeter Area Strategic Review:** Performance data has been provided to support the case for extending the Up platform at Pinhoe, improving operational flexibility, and reducing delays.
- **Short Formation Delays:** A new root cause code has been introduced to identify whether short formations are contributing to delays caused by passenger loadings.
- **Exmouth Junction Regulation:** The regulation policy has been reviewed in collaboration with GWR to optimise train flow through the area.

### Ongoing Initiatives

- **Luggage Storage Enhancements:** Supporting the proposal to increase luggage capacity on Class 15x stock as part of the C6 refurbishment, enhancing the passenger experience.
- **Guard Dispatch Procedures:** Guards at Exeter Central have been re-briefed on the correct dispatch locations to improve station operations.
- **Timetable Refinements:** Investigations are underway to assess potential retiming of problem trains between Exeter St Davids and Exeter St Davids New Yard, aiming to reduce delays.
- **Passenger Information:** A new poster board at Exeter Central advises customers traveling to Pinhoe to board the front three coaches, improving boarding efficiency.
- **Stakeholder Engagement:** Collaboration with Exeter College is ongoing to manage student loadings, supporting smoother boarding and reducing dwell times.
- **Route Proving Plan:** Further refinement of a customer-friendly route proving plan is in progress to maintain performance and reliability.

This collaborative and data-driven approach aligns capacity, connectivity, and performance improvements, supporting long-term reliability and enhancing customer satisfaction on the West of England Line.

### Fatality Timeline Milestone Planning

Responsible owner: Head of Continuous Improvement (Joint NR/SWR)

Accountable owner: Operations Director & Service delivery director

As part of efforts to enhance incident management across the South Western Railway (SWR) network and Wessex Route, a new Incident Management Standard is being developed. This aims to deliver a step change in performance, ensuring a more structured, efficient, and consistent approach to managing incidents.

A key element of this work is the introduction of Milestone Planning, starting with fatality incidents—a critical area where timely and effective response has a direct impact on service recovery and passenger experience.

### Purpose & Approach

The **Fatality Timeline Milestone Plan** has been developed using **historical data** from Control Logs (CCIL), analysing incidents over the past six months. By breaking down incidents into their **key milestone actions** and calculating **average response times**, the timeline establishes an informed benchmark for expected incident progression.

This initiative serves **three primary functions**:

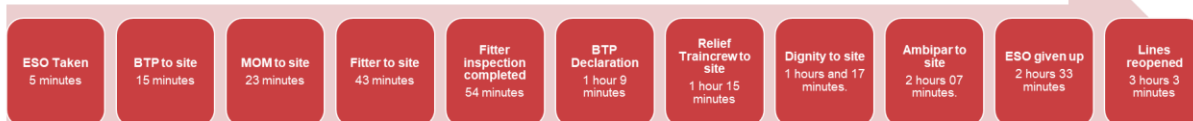
1. **Operational Benchmarking** – Provides a structured timeline to measure and improve incident management performance.
2. **Continuous Improvement Driver** – Enables post-incident reviews to identify trends, reduce inefficiencies, and refine response strategies.
3. **Stakeholder Engagement Tool** – Acts as a clear, data-driven reference for internal and external partners, supporting better coordination and decision-making.

### Implementation & Development

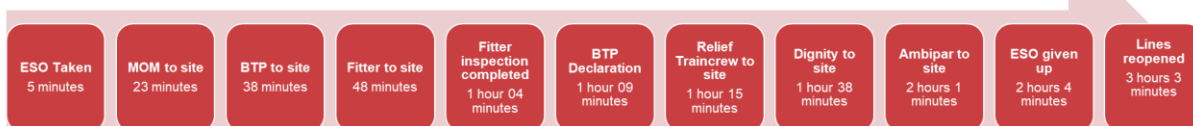
- The fatality timeline will set expectations for response teams by outlining the expected sequence of actions based on both historical data and real-time inputs from frontline staff.
- Following each incident, the timeline will be reviewed and refined, ensuring it evolves in line with operational learning and best practice.
- The framework will be expanded to cover other major incident types, creating a suite of milestone plans that enhance resilience and consistency across the Wessex Route.

By embedding milestone planning into incident response and decision-making, this initiative aims to drive a measurable improvement in performance, ensuring that incident management is data-led, predictable, and continuously improving.

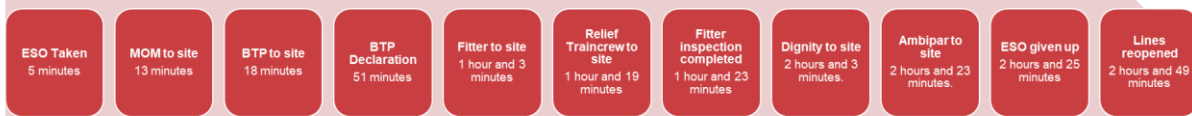
#### Outer (Hook to Bournemouth / Salisbury / Portsmouth Hbr )



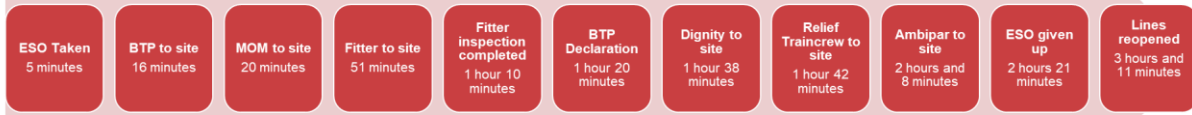
#### Remote/Rural (Tisbury to Exeter / Branksome to Weymouth)



## Critical Corridor (Waterloo to Woking)



## Inner (Woking Junction to Hook &amp; Shalford Jn, Motspur Park and Hinchley Wood to Epsom, Chessington South and Guildford)



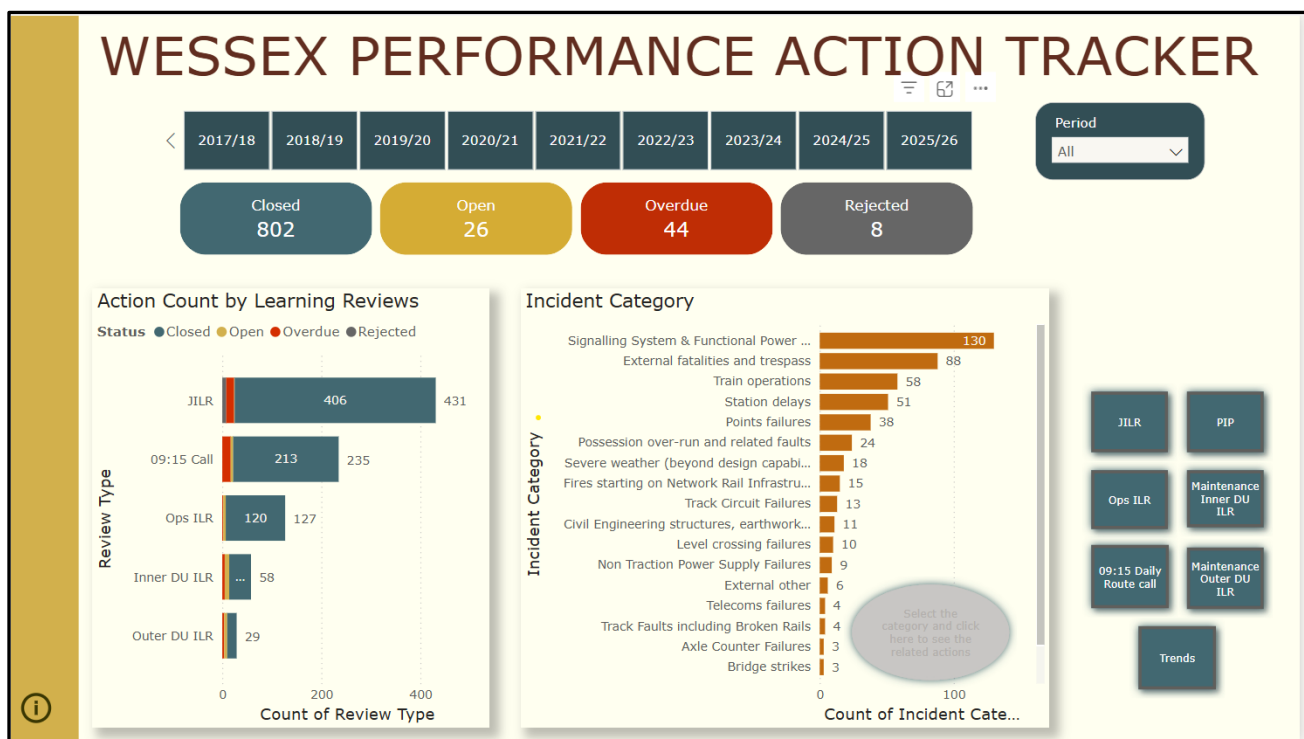
## 5.8 Performance Management

## Network Rail Action Tracking

Responsible owner: Performance Improvement Specialist

Accountable owner: Head of Performance (Network Rail)

The Wessex Performance Action Tracker is a Power BI dashboard being developed by the Performance team to provide visibility of actions arising from Joint Incident Learning Reviews (JILRs), Functional Incident Learning Reviews (FILRs), and Performance Improvement Plans (PIPs). It is a centralised platform for stakeholders to identify and understand key delay causing incidents, track progress of actions and ensure team accountability. By recording and tracking all actions through to closure, the dashboard helps drive continuous improvement and better performance management.

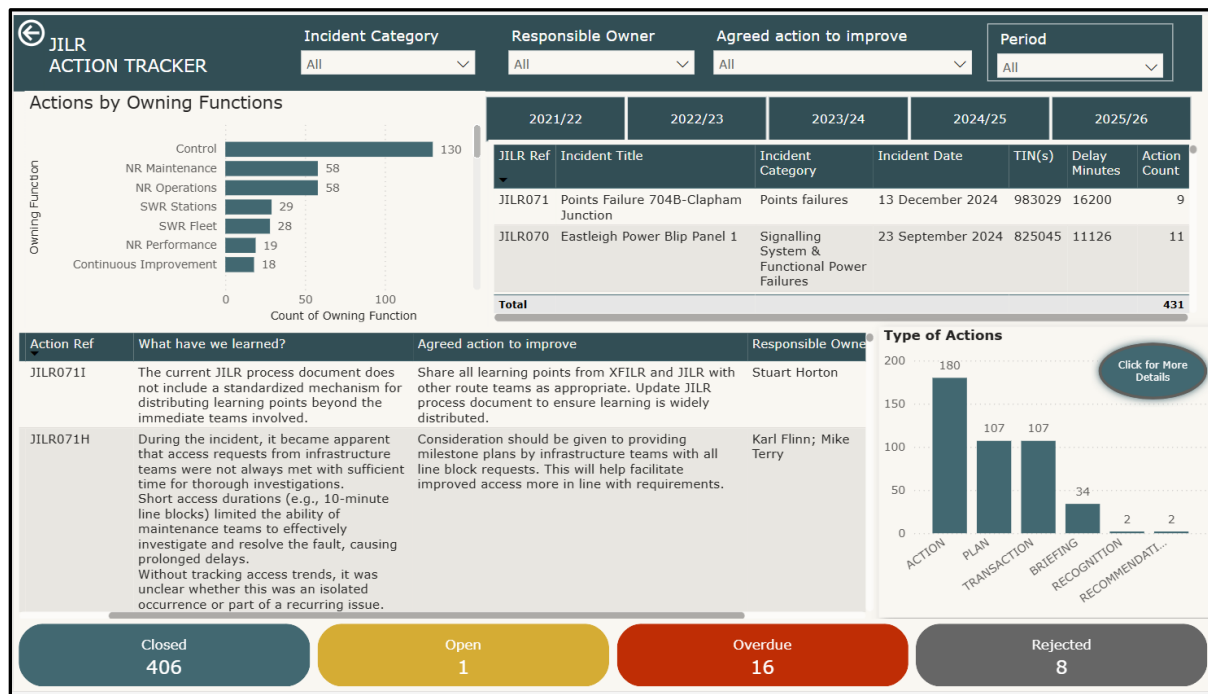


### JILR Action Tracker

Responsible owner: Performance Improvement Specialist

Accountable owner: Head of Performance (Network Rail)

The JILR dashboard is one aspect of the Wessex Performance Action Tracker which is a system designed to track, manage, and report actions arising from Joint Incident Learning Reviews (JILRs). It is an integrated dashboard where all SMART actions and learnings identified during JILRs are consolidated, documented, and tracked to closure. By consolidating all JILR actions in a single platform, the dashboard helps to hold action owners accountable and prevents critical lessons from being overlooked.



SMART actions are recorded in an Excel-based tracker and updated following each JILR by the Performance Improvement Specialist (PIS). Each action is assigned to a responsible owner with clear deadlines and expected outcomes. The data from the Excel tracker is then sourced into the dashboard that provides a real-time visualisation of progress. Users can filter actions by incident category, function, responsible owner, and reporting period, enabling stakeholders to assess overall progress at a glance. This makes it easier to monitor the status of actions, identify trends, and highlight overdue or completed items, making it a valuable tool for reporting during Periodic Business Review meetings. Automated reminder emails are sent via Outlook, to prompt action owners about outstanding tasks.

This system improves on manual tracking that led to delays, miscommunication, and lack of clarity around ownership and progress, by creating a transparent and efficient system for managing actions. It ensures that actions are not only recorded but also actively monitored and completed, reducing the risk of unresolved issues. It supports long-term improvements by helping teams better prepare for similar incidents, ensuring that past mistakes are identified, addressed, and learned from.

### Performance Improvement Plan Management

#### Performance Improvement Plan (PIP) Tracker

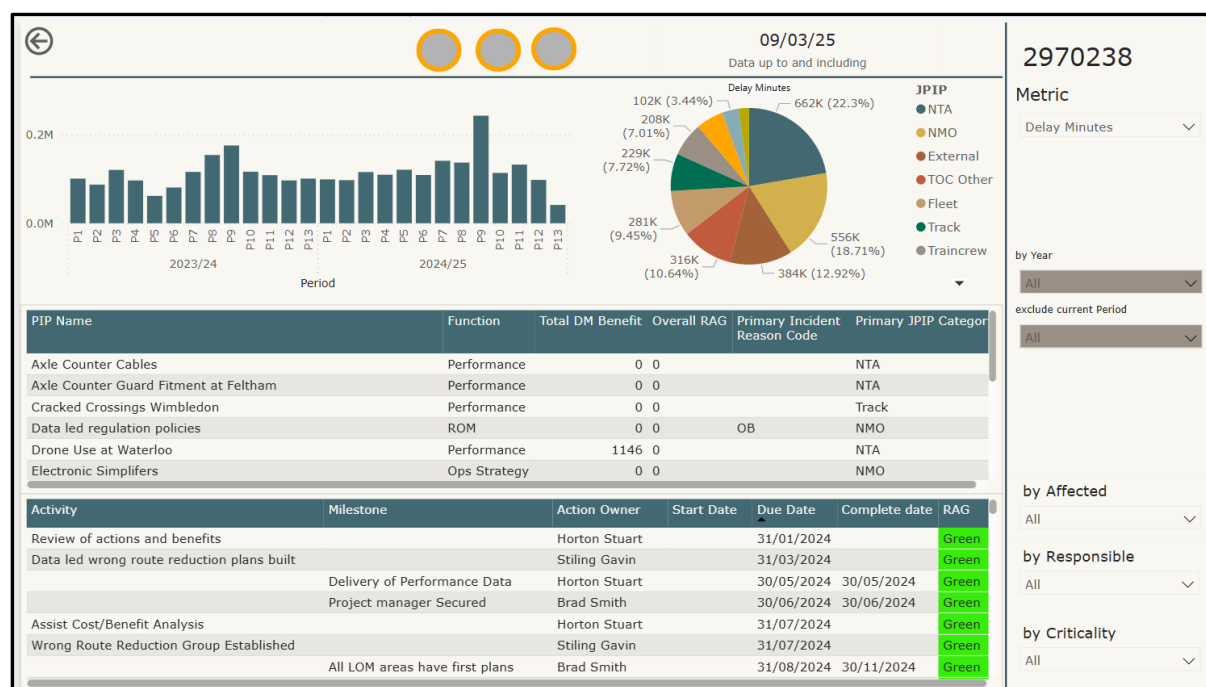
Responsible owner: Performance Improvement Manager

Accountable owner: Head of Performance (Network Rail)

The PIP Tracker is another aspect of the Wessex Performance Action Tracker dashboard that brings together all the Performance Improvement Plans (PIPs) in one place, showing the activities and milestones linked to each PIP.

The tracker pulls data from two MS List based trackers, which are updated by the functional Performance Improvement Coordinators (PICs). This information is then displayed in Power BI through three key reports:

**Overview Page** – Lists all PIPs along with their associated actions and milestones. It includes a bar chart that allows users to filter by reporting periods and a pie chart categorising incident reason codes. This provides visibility over all PIPs, the status of each action, the responsible owner, the associated incident category, and the relevant reporting period.



**PIP info page** – Provides a detailed breakdown of each PIP accessed from the Overview Page. It includes the benefit period, responsible function, overall RAG status, updates on previously agreed plans, and future initiatives.

←

PIP: VoidSense

Performance

Function

Tom McNamee

Sponsor

Infrastructure

Directorate

13

Benefit periods

881

Total DM Benefit

0

Overall RAG

Project Summary

This proposal encompasses a trial of 40 VoidSense devices to monitor the deterioration of track support conditions at crossings on the Route. The project aims to install these monitors at targeted locations that will realise outputs against defined learning criteria, which will inform the viability of a wider rollout. During the trial, the devices will be assessed on the performance of their hardware, rate of data reporting, compatibility, sustainability and accessibility. To ensure these learning outcomes are captured, installation will be targeted at a range of locations across Clapham TME and Feltham TME, representing a variety of asset and traffic types. Installation at the following locations should achieve this breadth:

1. Barnes Junction – slower traffic, high wear crossings
2. Clapham Junction (fast lines) – mixed speed, high frequency traffic
3. Vauxhall Station – mixed speed traffic over a deteriorating asset
4. Wimbledon East and West Junctions – mixed speed traffic at a failure-prone location

Note that switch monitoring is out of the scope of this trial, as VoidSense cannot currently be mounted through the moveable length of the rail.

Last Period (What we did)

Last Period (What we said)

This Period (What we'll do)

Other Links (if applicable)

link

Activity

Milestone

Due Date

RAG

Complete date

Awaiting confirmation of project acceptance.

Agreement by TA panel for project funding

23/01/2025

Red

Creation of Client Remit

Creation of Client Remit

12/02/2025

Green

Installation of 40 devices to be undertaken.

Completed Installation of Devices

31/05/2025

Green

Project Completion - Review of benefits and proposal for wider role out to be developed.

Project Completion - Review of benefits and proposal for wider role out to be developed.

03/03/2026

Green

**Gantt Chart** – Displays the timeline of all PIP activities and milestones, highlighting their RAG status to indicate progress. Users can easily filter by financial period, responsible function, and action owner, making it easier to track responsibilities.

←

Period: All

PIP Name: All

Directorate: All

Function: All

Action Owner: All

RAG: All

PIPs for the Financial Year

Performance Improvement Plans

Legend All

102

Mar 09

Mar 16

Mar 23

Mar 30

Apr 06

Apr 13

Apr 20

Apr 27

May 04

Incident Learning Process

Data led regulation policies

Wrong Route Reduction Plan Process

TRESA at Wimbledon ASC

Local O Code Reduction Plan Process

Strategic Workforce Planning

Section U-Guides

Route Signalling Simulator Strategy

Axle Counter Guard Filment at Feltham

Electronic Simplifiers

Cracked Crossings Wimbledon

Drone Use at Waterloo

S&T skills improvement and mentoring at Basingsto...

Secure Endorsement and Funding

Level Crossing Boom Spares

Axle Counter Cables

VoidSense

RAG

Amber

Green

Red

45

Going forward, action reminders for PIPs will be automated, similar to the JILR tracker, to improve follow-ups and ensure accountability.

The PIP tracker simplifies progress monitoring by ensuring that activities and milestones are well planned and achievable within said time. Bringing all PIPs together in one centralised dashboard offers a comprehensive view of both current and future plans, allowing teams to align their efforts and priorities across the financial year. It is also a key tool in PBR meetings, where teams review ongoing initiatives, discuss challenges, and provide updates.

Automating action reminders will further streamline the process, making it more efficient and ensuring that improvement plans stay on track without the need for constant manual follow-ups.

#### *SWR Improvement Plan management*

The SWR Performance Team has introduced a new tracker for performance improvement plan monitoring enabling better visibility of project milestones, benefit predictions and tracking of actions discussed at review meetings. This tracker will be transferred from Excel (below) to Microsoft Lists progressing to a PowerBI-based dashboard system that integrates performance trend data, the performance risk register and ILR action tracker, which will be used to improve visibility of activities at functional management meetings and through the performance governance system. Using common software solutions integration between SWR and NR systems is a future aspiration.

The PIP process is supported by a Hopper system for ideas for new improvement schemes managed by the Performance Improvement Specialists and is reviewed weekly by the Performance Strategy Team.

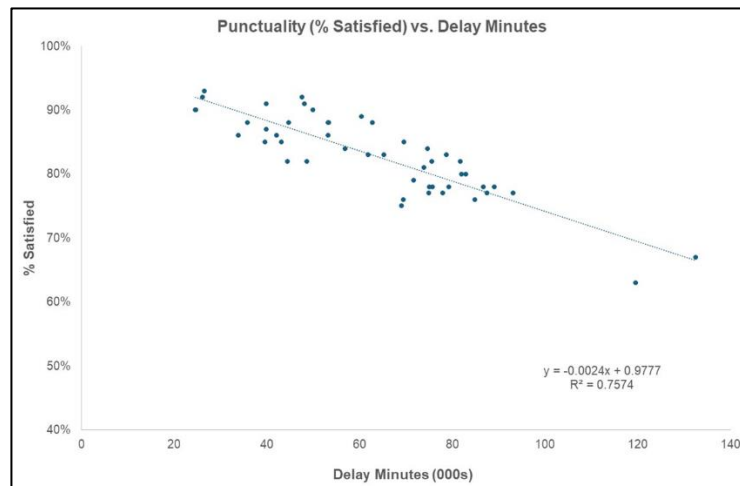
Scheme ID	Title	Aim & Details					Sponsor	Owner	Start	End	Risks to delivery	Benefits	Realisation (phased/on completion)	P0	
EXMPL001	Body Worn Camera rollout	Equip frontline staff with body worn cameras - improves safety and reduces ASB related delays					Head of O	Depot Ma	01/08/2024	01/11/2025	Union concerns / lack of interest			A bu ca	
Phased/on completion)	Milestones													Comments	
	2024-25									2025-26					
	P05	P06	P07	P08	P09	P10	P11	P12	P13	P01	P02	P03	P04		
	Analysis & business case	Procurement 1 (trial)		Delivery	Training	Trial start		Trial review & analysis	Procurement 2 (rollout)		Delivery	Rollout & training		Review in P9	
Benefit monitoring															
Scheme ID	Title	Aim & Details				Start	End	Benefits	Realisation (phased/on	Benefit assumptions	Number of incidents	Delay minutes	Cancellations	codes affected	Secondary metric(s)
EXMPL001	Body Worn Camera rollout	Equip frontline staff with body worn cameras - improves safety and reduces ASB related delays				01/08/2024	01/11/2025	1600	Phased	Prevents 20% delay m	200	8000	400		Days lost

#### *Improvements in data analytics and dashboards (Power BI)*

The Performance Intelligence team at SWR has considerable expertise in developing PowerBI dashboards and work closely with Mistral to integrate a variety of data systems, and develop in house capabilities to provide meaningful insights with novel data sets such as GPS data, on-train system data, and mobile phone signal data through the Mobile Network Data Project at Network Rail. Assisting the Performance Strategy team to develop tools to improve performance risk and improvement plan tracking (see above 'SWR Improvement Plan Management' section).

We are developing tailored PowerBI dashboards that focus on information to support PIP development in focus areas, including Customer Assistance and Disorder delays. The Strategy team is working with other departments

such as the Security team to bolster performance data with relevant non-delay focussed data (such as assault reports), and the Customer Experience team to incorporate Voice of the Customer data. This will allow an enriched, comprehensive overview; for example, disorder hotspots can be linked with assault and crime locations, and customer safety concerns to make a stronger case for change. There is a clear link between performance and customer satisfaction scores.



We are working closely with Mistral developers, alongside colleagues from Avanti West Coast to create a performance-focused toolkit that harnesses key features of existing tools to enable easier visualisation of both the current day performance and historic data. The data we can access through existing tools has evolved rapidly in recent years and we are particularly keen to make better use of aggregated historic data to understand and solve performance challenges without extensive reanalysis of multiple data sets. This approach will also have benefits in understanding the sources and extent of subthreshold delays.

Wessex Route is investing the further development and application of the State of the Route Compiler (SORC) system, and over the coming year will be increasing the availability of the network in the system. We are developing several areas of investigation using SORC that will further improve our capability to tackle subthreshold delays.

We have been working with Mistral on a tool that enables quick viewing of door cycle data, from a single train or for multiple time periods, locations, head codes, or service groups. The system shows time for wheel stop to wheel start, including total dwell, and TRTS data, increasing our opportunity to analyse dwell delay.

### Insights from RM3P assessments

In previous years, large numbers of RM3P assessments have been carried out routinely across SWR and although they have generated some useful activity, this approach is very resource heavy that outweighs the benefits. As such, the RM3P toolkit will be deployed to assess and build capability where data indicates there are performance challenges or where it is particularly important to maintain focus on capability.

### Data Quality

#### *Performance Measurement Team Strategy 2025 and beyond*

Responsible Owner: Head of Performance (Regions)

Accountable Owner: Programme Director (Regions)

The Performance Measurement team strategy will deliver on two core objectives, which are: -

- To deliver accurate performance data in a more efficient way; and
- To inspire wider confidence in the performance data provided to the Southern Region.

To achieve the two key objectives above, the team strategy is divided into two key areas: -

- 1) Do Today: -
  - Improvements to delay investigation and data capture (effectively the 'day job')
  - Improvements to Internal and External Relationships and associated Processes
- 2) Prepare for Tomorrow: -
  - Wider considerations (processes, technology and challenging the status quo)

## **1 - 'Do Today'**

### **1a - Improvements to Delay Investigation and Data Capture**

Improving the team's core deliverables is critical as it not only reduces overall workload, it enhances the team robustness and flexibility and will also generate greater confidence in our data.

**Real-Time Data Capture** (Attribution) and will include: -

- Improved engagement with TDA teams
- Back to Basics philosophy in daily data capture (cause and responsibility).
- Re-briefing, re-training, mentoring where identified (our people plan).
- Wednesday briefing turns enhanced and expanded (content and guests).
- Performance Improvement Plans where required.
- Improved feedback to TDA (audits, feedback tracker, automated reports).

**Data Enhancement and Validation** (Resolution and Data Quality) the focus will include: -

- Re-briefing, re-training, and new task training to ensure team are multi-functional.
- Mentoring using the experience and knowledge of longer standing personnel.
- Involvement in and attendance on Wednesday TDA briefing turns.
- Data Quality Specialists to have specific areas of focus / responsibility.
- Resolution IAMs aligned to and manage the accounts/relationships and the team focussing on enhancement of data.

Improvements required in the provision and availability of relevant information. Primarily this will be delivered by: -

- Improving on the day comms to / from TDA (Control and Signallers).
- Improving subsequent info availability / sharing (internal parties).
- Improving subsequent info availability / sharing (TOCs – particularly post Alliance).
- Review and challenge to current ZS (Unexplained) Attribution principles and process.
- Considering technological improvements and system capability (TMV, JEDI, TISS, DataSys).

### **1b - Improvements to Internal and External Relationships and associated Processes**

Improve relationships and make process Improvements with Operators and NR internal parties to improve data accuracy, efficiency, wider engagement, and confidence.

For Passenger Operator relationships the key focus areas are: -

- Having a common focus and remit (working as one team even if two parties)
- Engagement and understanding workshops (same page ethos)
- Take advantage of all Alliancing opportunities (joint working, efficiency in process)
- Improvement in info provision / sharing (real time and post event) of Operator data (better opportunity with Alliancing).

For Freight Operator relationships the key focus areas are: -

- Engagement and understanding workshops with Freight Performance Team.
- Engagement and understanding workshops with Freight Operators

NR Internal parties would be as above but with the addition of: -

- Attending Route / Functional Performance Meetings (with joint Performance team colleagues) to improve engagement and share knowledge.
- Improved team engagement and visibility
- DA Principle Understanding briefing sessions (inc. Joint Performance colleagues, analysts as well as Ops and Maintenance)
- Team leads (Band 3) will align with each functional team or business area (to provide a contact/focus)
- All level engagement within functions (top-down approach).

## **2 - 'Prepare for Tomorrow'**

### **Wider Considerations and Workstreams**

Thought needs to be provided to the medium-term activities, strategies or 'game changers' that challenges the status quo. Consideration should therefore be given to: -

- GBR / Alliancing opportunities in improving processes and data flows (this will include looking at team structure and roles to best fit the future business requirement)
- Challenging the Status Quo of what is currently undertaken and delivered – can it change, should it change and how can we change it.

Technology advancements looking at how to undertake automation of current activities (full or part) releasing resource to focus on other key initiatives.

The SWR Performance Team is reinforcing processes to monitor for incidents with no root cause codes, incorrect codes, or reports not received, and work with the functional departments to improve reporting and coding.

### **Comms Strategy**

The SWR Performance Strategy team has developed a new Performance Comms and Engagement project to promote performance improvement, increase engagement from both frontline and non-operational members of staff. The programme includes harnessing a variety of channels such as Viva Engage and the weekly company magazine, 'Staying on Track', to share articles about performance challenges and successes, and educational articles that promote a strong performance culture across the business. We will use these channels to share similar information relating to Network Rail and seek to enhance that information delivery to functions whose roles are particularly affected by Network Rail improvements, such as our drivers and guards.

We will also hold joint engagement events at various locations across the network, including stations, driver/guard/fleet depots, signalling centres, and maintenance depots. At these events we will promote operational excellence, and gather information on performance challenges from staff, which we will investigate and respond to in order to build trust and effective dialogue with colleagues.

Joint Performance Strategy will be shared within Network Rail on Various regional and route calls with staff across the business in attendance. There are also plans to make the contents of this Strategy more digestible by creating some small form media.

### Interfaces

The SWR Performance team actively participates in the PIMS practitioner group, and several members of the Performance Strategy team have volunteered as peer review panel members. This has led to ongoing knowledge sharing; for example, visiting ScotRail and the Paisley CCTV centre to understand more about their CCTV analytics that is informing a SWR trial, and an ongoing link with our performance teams will allow more knowledge sharing, especially around shared challenges such as managing disorder and operating single track sections.

SWR Performance team also regularly attends the Wessex Freight Performance Improvement Group to improve interactions between freight and passenger trains.

The Heads of Performance for all routes and TOCs within the region meet every two weeks and these joint meetings feed into the Southern Region Performance Board.

We have also established an inter-TOC collaborative group between SWR, GWR and CrossCountry. We are sharing data to gain a comprehensive understanding of the interactions between our services in order to take a collaborative approach to cutting delays, particularly where trains call at each other's stations. We will hold regular meetings to resolve conflicts, improve services, and share knowledge and good practice in managing challenges that we share such as disorder and customer assistance.

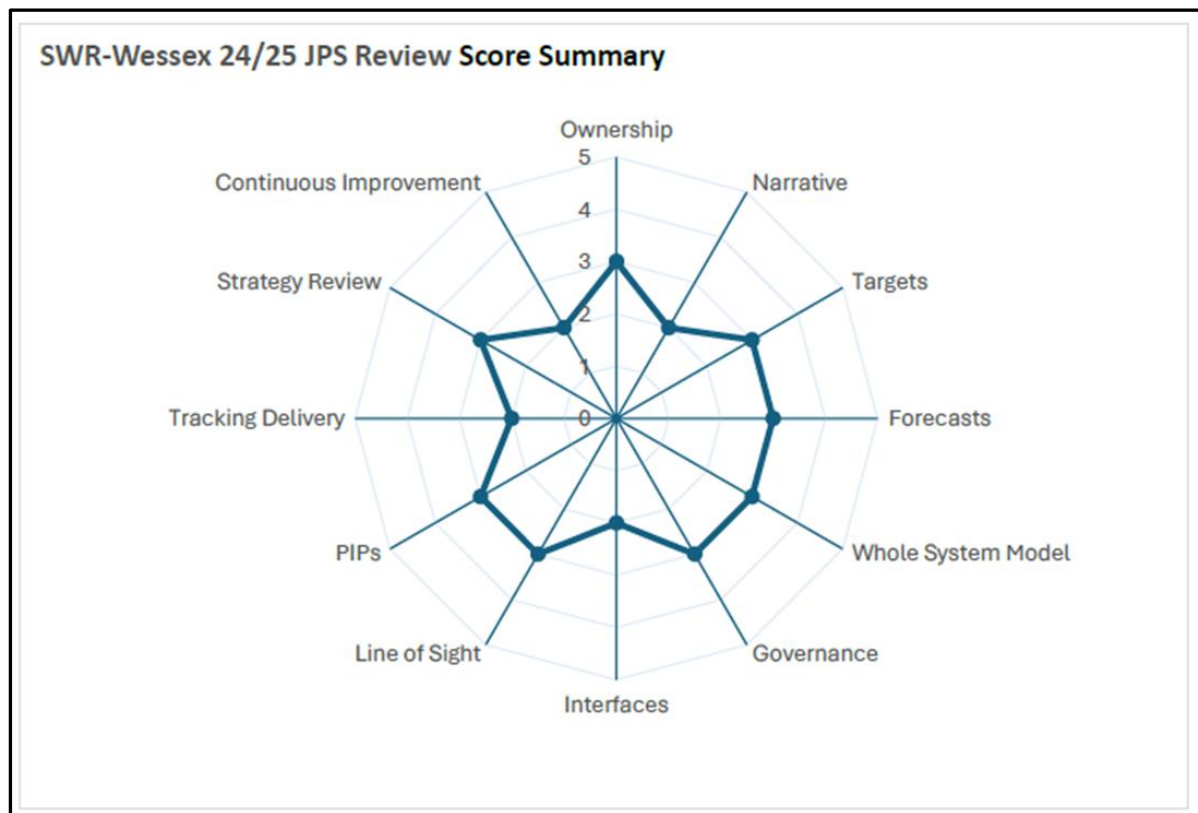
### ILR Process revision

SWR have embarked on a process of ILR reform to refine the processes around arranging, conducting, and tracking ILRs. Improvements to the ILR process have already been introduced to better evaluate whether an ILR required, ensure better attendance and provision of relevant reports. Members of the Performance Teams have been involved in an RSSB research project to improve the effectiveness of ILRs ([Improving the effectiveness of incident learning reviews \(T1336\)](#)) and findings from that project will inform our ILR process.

Some of the key improvements, building on the changes we have already made include:

- Changing existing single-function ILRs to a more streamlined mini-review process
- Tailoring the ILR document and meeting template to have more specific questions for the functions involved.
- Use of causal factor analysis (a review system used by other industries to review underlying factors) to better understand incidents.
- Providing training for meeting chairpersons
- Post-meeting evaluation
- SMART actions and a more robust tracking and governance system
- Identification and publication of key learning points using a variety of comms channels.

### Peer review 2024-25



We have developed a **narrative** to look ahead to the bigger risks and opportunities, recognising the challenges of aging fleets, infrastructure maintenance capabilities and freight growth across the region. We highlight the opportunities of the Havant and Salisbury Resignalling programmes, the deployment of new Class 701 trains, and the planned full timetable recast. We have worked to develop **interfaces** between SWR and other TOCs through a new regular meeting with GWR and CrossCountry, and regular participation in the Wessex Freight Performance Improvement Group. Our PIP **delivery tracking** processes are being reinforced in both SWR and NR Wessex by refreshing the PIPs and milestone plans and developing the use of Microsoft Lists and PowerBI to create trend/PIP/risk dashboards. Our joint Control **Continuous Improvement** team is undergoing a refresh, with reinforced focuses on visualisation, service recovery and review, contingency planning, and disruption information management.

## VA Rail report findings

Strengths	Suggestions/risks
<ul style="list-style-type: none"> <li>• Timetable &amp; subthreshold work</li> <li>• Amended TT for weather, crew shortage, and Autumn</li> <li>• Paramedic provision</li> <li>• Resourcing – good focus on SWR and reduced vacancy gap for NR</li> <li>• Arterios – focus on performance improvement rather than reducing journey times</li> <li>• Improved control protocols</li> <li>• Good joint working at HoP level</li> <li>• Employee engagement and communication – helping staff understand the role they play in delivering good performance</li> <li>• Scaled back and targeted use of RM3P is a sensible approach – more effective and prevents overwhelming</li> </ul>	<ul style="list-style-type: none"> <li>• Attrition modelling by service group</li> <li>• TPR non-compliance monitoring</li> <li>• Resourcing/crew – noted that improvement activities are BAU processes</li> <li>• Resourcing/crew – risk around pay deal</li> <li>• Fleet – diesel fleet strategy needed, risk of part supply shortages for Desiros</li> <li>• Infrastructure - risk around funding and lack of clarity on doing more for less</li> <li>• Trespass – analysis of EDDY effectiveness</li> <li>• Control – no traffic management system planned</li> <li>• Leading indicator dashboard</li> <li>• Performance Teams spends too much time in meetings, doing admin and multiple reports</li> </ul>

Our joint On-Time/Subthreshold workstream has carried out line of route analyses that have showed the performance loss. We have also had detailed analyses of the whole network timetable from within Network Rail and from a consultancy that show performance attrition. The On Time group works to further investigate the causes and identify potential operational solutions or problems with the timetable. The On-Time/Subthreshold work feeds directly into the Wessex Planning Rules Development Group to address TPR non-compliances.

The biggest impact that we can have for crew resourcing is to fill vacant positions and support candidates through to qualification. To manage increased sickness levels, training is being delivered to driver managers around attendance management and we will be increasing the number of 'flu vaccination days across all traincrew depots.

A potential option for the replacement of our Class 158/159 diesel fleet with is outlined in this document (section 4.4) and involves EMUs with battery capability being used over sections that would have discontinuous electrification. We will continue to work with suppliers to ensure a robust supply of spare parts for the Desiro fleet, which is maintained by Siemens, and for the diesel fleets. Details of fleet improvement activity is shown in section 5.6.

Leading indicators are monitored through visualisation meetings which are updated from a variety of data sources in each function. We are working towards a more streamlined approach to delivering this in the future.

The performance team is revising working practices to focus on improvement plan development and delivery, and more effective ILRs.

## 6. Analysis of Future Performance

### 6.1 Overview

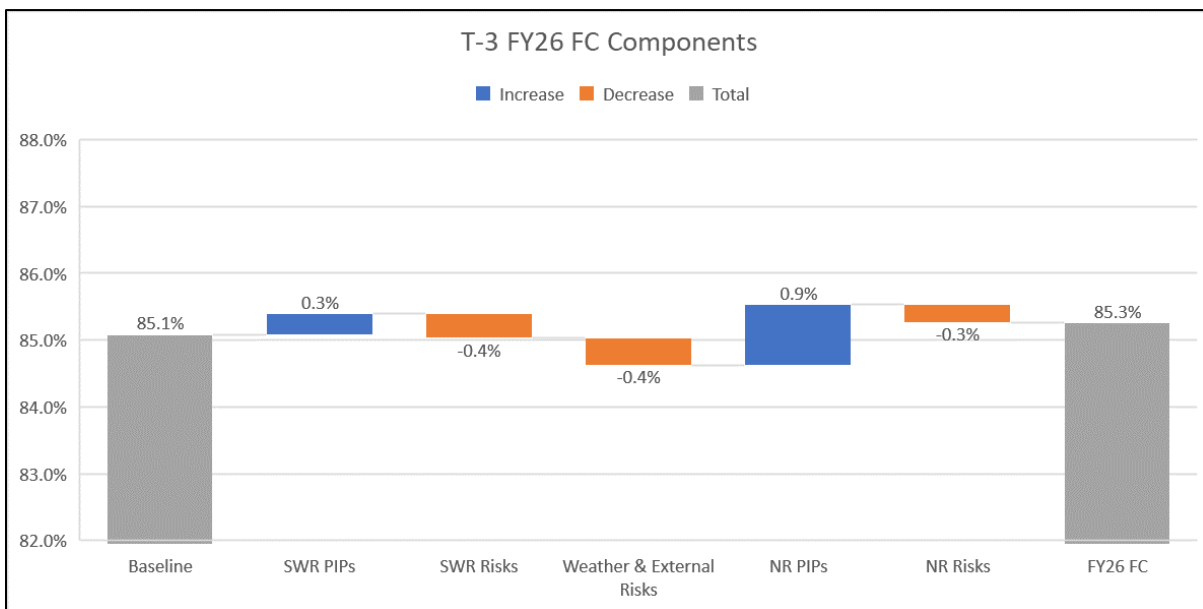
For 2025/26 we have continued to build on the successful collaborative forecasting methodology we developed following the Covid; this approach continues to be supported by the Department for Transport. The model output for punctuality prediction is in On Time to 3 (%), to align with the regulatory metrics for the operator and route. The key factors from the regression analyses are train service volumes, passenger numbers with the addition of a congestion factor determined by these two inputs.

Our methodology for forecasting performance for 2025/26 is:

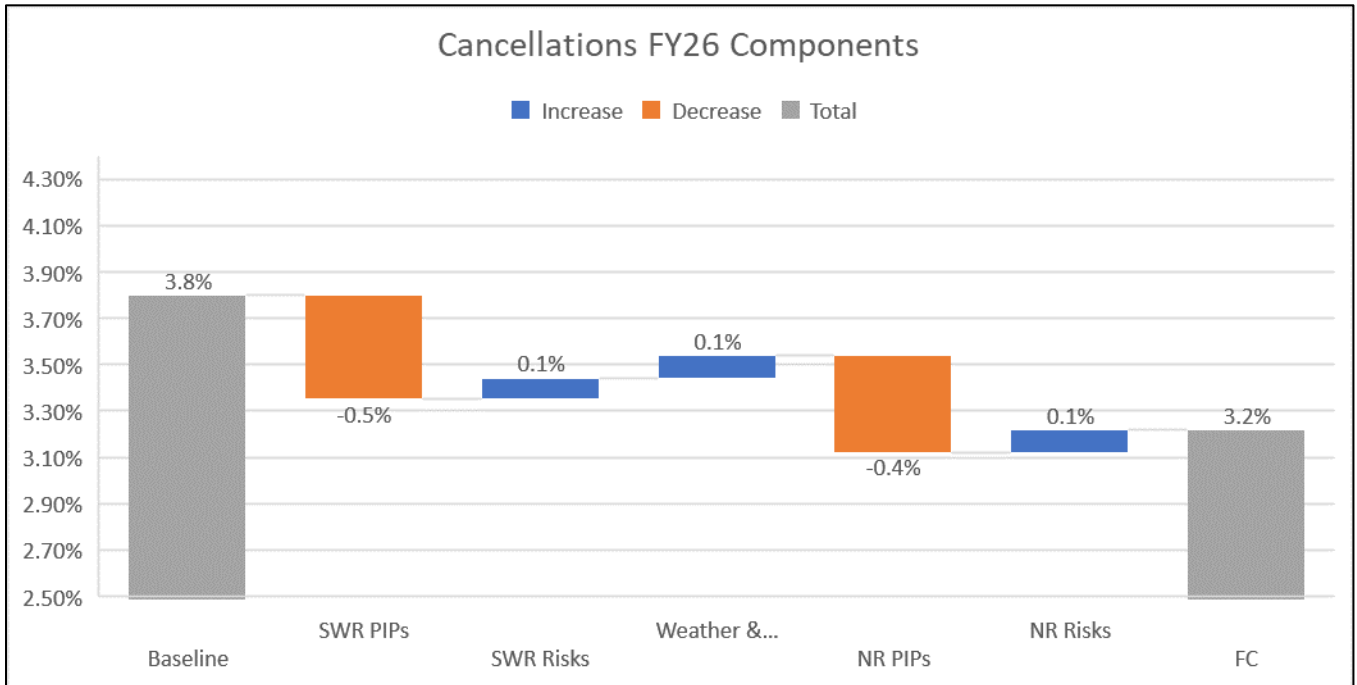
- Forecast the baseline On Time to 3 and Cancellation MAA based upon historic and recent performance trends and passenger forecasts [What is the time period for the data used? 5 years or more? Was it weighted towards recent years?].
- The predicted impact on cancellations and On Time to 3 from planned initiatives and anticipated risks was estimated, including:
  - Network Rail Performance Improvement Plans (PIPs)
  - SWR PIPs
  - SWR performance risks
  - Network Rail performance risks.
  - External performance risks (weather, trespass, etc)
- The benefits and risk estimations were overlaid on the baseline to give an adjusted forecast. Where the forecast change had been estimated in delay minutes or incident count, the values were translated into On Time to 3 and Cancellations.

## 6.2 Forecast

The below chart shows a forecast for On Time to 3 in 2025/26 split by expected plan benefits and risks, resulting in an output of 85.3%. This result represents an improvement of 1.1% against the 2024/25 year end position.

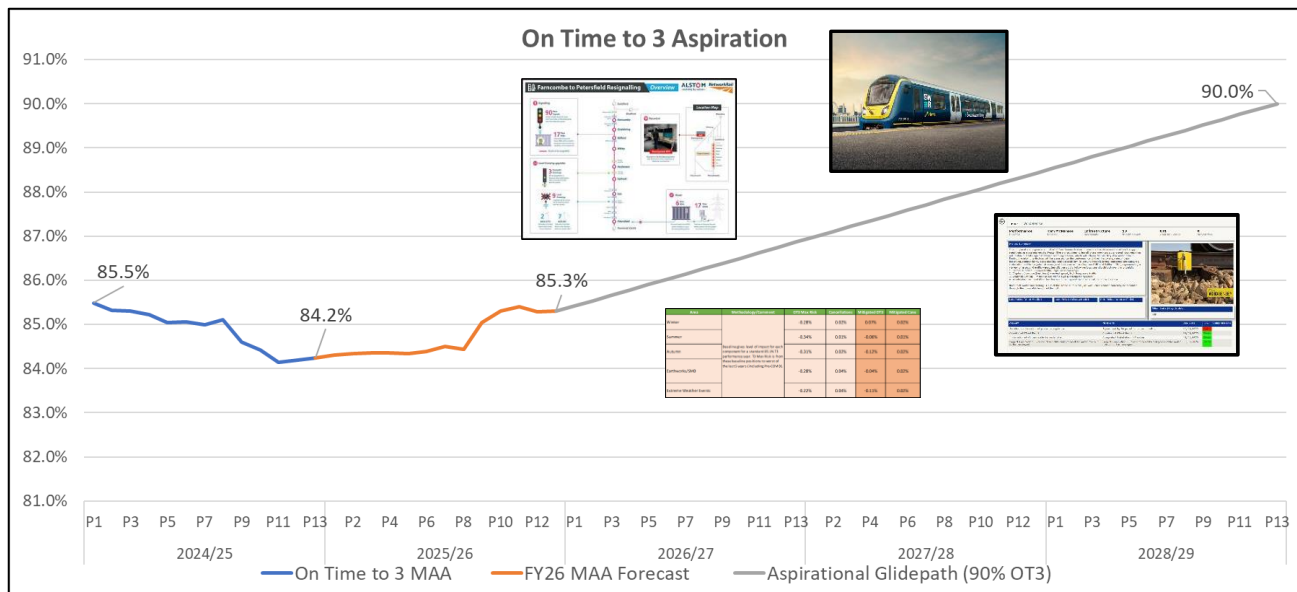


The below chart shows a forecast for Cancellations in 2025/26 split by expected plan benefits and risks, resulting in an output of 3.2%.



### 6.3 Aspirational Performance Trajectory

Beyond the immediate and incoming year and associated performance targets there is a long-term aspiration on Wessex Route to achieve SWR On time to 3 of 90.0%. This will be dependant on us delivering the work streams currently identified and future proposed works.



### Uncertainty Commentary

While this strategy has been developed using data-driven insights, operational, engineering and planning expertise, we acknowledge that uncertainty remains an inherent factor in railway performance. Despite our best efforts to anticipate risks and mitigate challenges, unforeseen events—ranging from extreme weather and

infrastructure failures to external disruptions and evolving industry dynamics—may impact our ability to fully achieve our objectives. We remain committed to continuous improvement, adapting our decision-making, and collaboration to respond to emerging challenges to improve performance in line with our aspirations.

#### 6.4 “2+3 Reset” – Ongoing Review of ORR Targets for CP7

As part of the ongoing performance planning process, we are undertaking a review of the Southern Region’s ORR targets for Years 3, 4, and 5 of Control Period 7 (CP7). This exercise, known as the “**2+3 Reset**,” provides an opportunity to reassess our forecasted trajectory now that Year 1 has concluded, and Year 2 targets are fixed.

The review process is already underway, with initial discussions and assessments completed. A revised forecast, underpinned by key infrastructure and operational schemes across each route, has now been formalised and will be submitted to the ORR for determination in **mid-May 2025**. The ORR will review and evaluate the proposed trajectory, with a final decision expected by **September 2025**.

This process will have a direct impact on our strategy, shaping our performance commitments for the remainder of CP7. Once the ORR’s determination is received, the outcomes will be reflected in future iterations of this Strategy document.

## 7. Governance Process

### 7.1 Performance Governance

Performance governance on the Wessex Route is structured around three interconnected levels—operational, tactical, and strategic—to ensure clarity and accountability across the operation.

At the **operational level**, day-to-day performance is monitored in real time. This includes overseeing train movements, passenger services, and immediate responses to disruptions or incidents. Operational teams collect and analyse data on punctuality, safety, and other key performance indicators. Their insights, managed via our various daily call mechanisms, along with any urgent issues requiring escalation, feed into the higher levels of governance, enabling swift corrective actions and continuous improvement. For example, we have a daily review call led by Control that reviews incidents from the previous day and provides a lookahead for anticipated risks, such a reduced coverage for maintenance response, traincrew or fleet. SWR also has an internal daily call to review the top SWR incidents from the previous day and establish the need for an ILR.

The **tactical level** guides and informs the strategic level by reviewing operational insights, establishing, and refining processes, and driving accountability for actions. Tactical forums, such as PIP review meetings, consolidate feedback from the front line, identify emerging trends or potential risks, and recommend improvements. Through these activities, they ensure that high-level strategies remain grounded in operational realities while proactively addressing performance gaps.

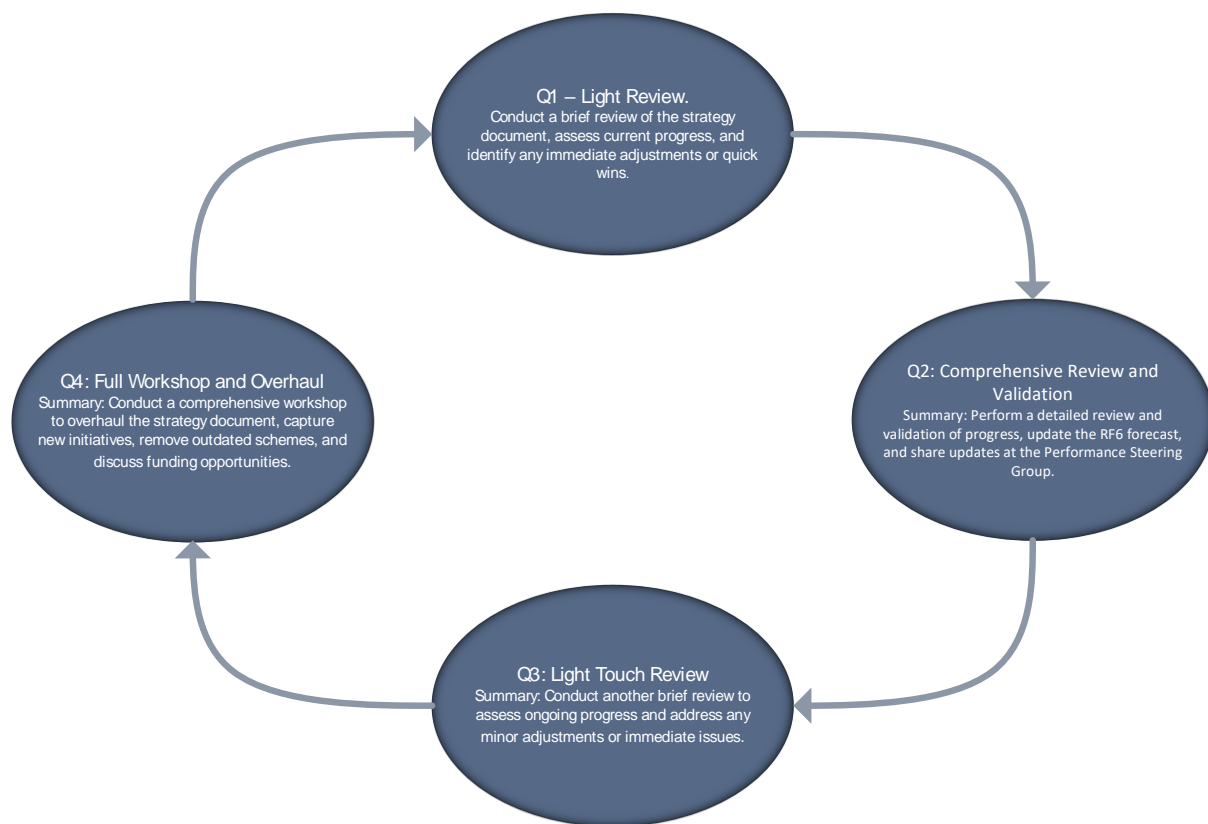
At the **strategic level**, overarching direction is set jointly for the Wessex Route through the Joint Performance Steering Group. This tier interprets information from the tactical and operational levels to shape long-term objectives, allocate resources, and communicate key messages to the wider business. The highest point of escalation is Alliance Governance Board, for risks and critical decisions, ensuring that any significant challenges are addressed promptly.

The full governance system for Performance on Wessex can be visualised in [Appendix C](#).

### 7.2 Strategy Delivery

Our Joint Performance Strategy will be reviewed, updated, and published on an annual basis. Reviews will take place regularly, planned for each quarter. The intention being to respond to new risks and opportunities as they

emerge. Our Joint Performance Strategy aims to bring together our vision for performance improvement looking at the longer-term risks and opportunities and treating from a whole system perspective.



### 7.3 Monitoring & Tracking PIPs:

All Performance improvement plans for Network Rail will be housed within a newly developed tracking system with Power BI Dashboard visualisation, which centralises and standardises the information included. SWR improvement plan tracking, and performance risk management will be through a system under development that uses the same technology platform, which will enable compatibility for interaction when IT system barriers are overcome.

## Appendices

### Appendix A: Performance Improvement Plans (PIPs)

- **Details of NR PIP's are now visible within our Wessex Performance Power Bi - [Wessex Performance Actions tracker - Power BI](#).** Each PIP contains the following information:
  - Scheme Title, Description, Owner
  - Milestones, Success Metrics and Delay Minute Benefit
  - Key Risks and Mitigation Plans

PIP: Drone Use at Waterloo

Performance

Function

Tom McNamee

Sponsor

Infrastructure

Directorate

13

Benefit periods

1146

Total DM Benefit

0

Overall RAG

Project Summary

The project looks to trial the use of drones in identifying/managing infrastructure failures and mitigate delay caused by trespassing members of public. This will be achieved through the use of detailed camera views including thermal and infra-red. The drone cameras will help us identify areas of concern based on the level of heat that the asset is producing. This will reduce the number of power, cable and track circuit failures that occur by highlighting areas of concern before they manifest into a passenger effecting incident. The drones can also be deployed in response to trespass types of incidents. This will provide better understanding of the situation within a shorter time frame.

Last Period (What we did)

Paper submitted to Technical Authority.

Last Period (What we said)

Submission of paper to IP1F successful. Initial test flights undertaken.

This Period (What we'll do)

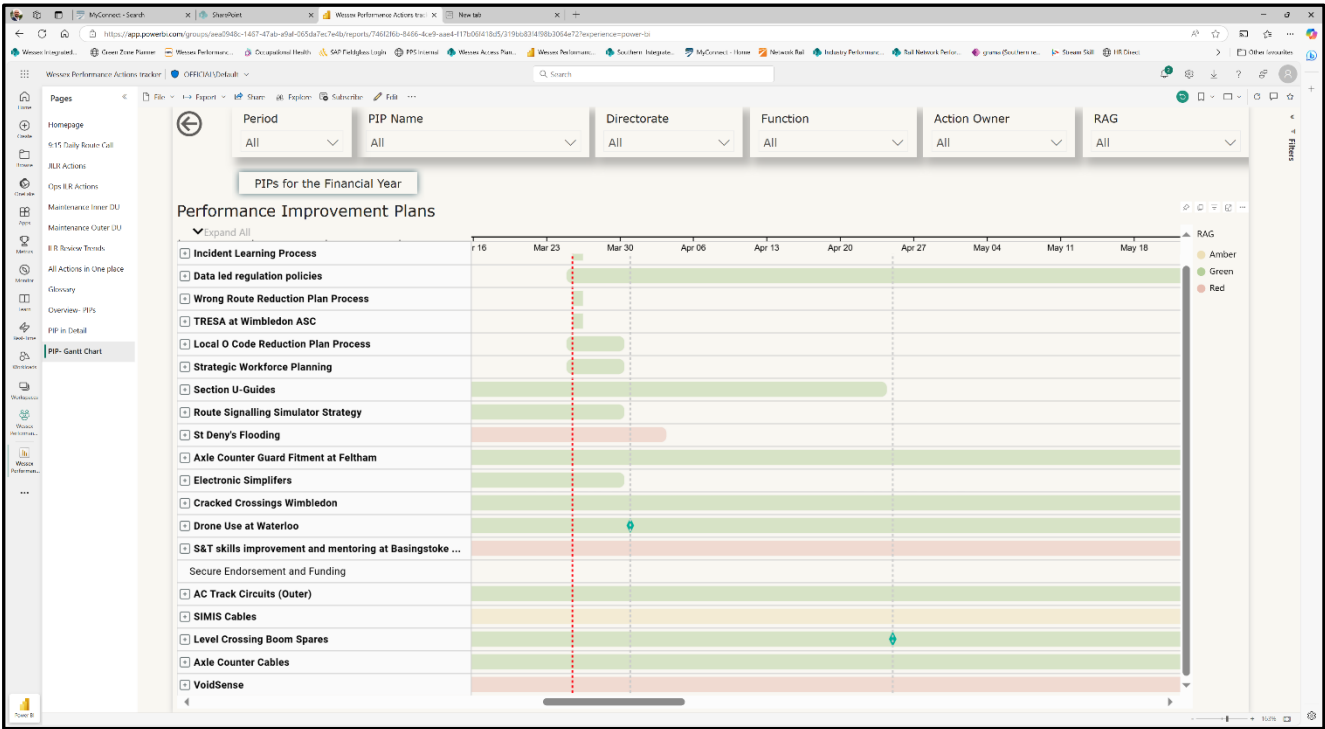
Awaiting agreement from Technical Authority to commence project.

Other Links (if applicable)

link

Activity	Milestone	Due Date	RAG	Complete date
Areas identified in the first stages of the project to be visited. Feasibility of locations to be understood and decision made on the location of the drone base.	Site visit to be undertaken within the Waterloo area.	04/12/2024	Green	04/12/2024
Go live date	Go live with scheduled flights and response flights	31/03/2025	Green	
Initial test flights to be carried out confirming location identified.	Test flights to be undertaken	02/12/2024	Green	02/12/2024
Installation of drone base unit and charging point.	SkvBound installation of drone hub	10/03/2025	Green	

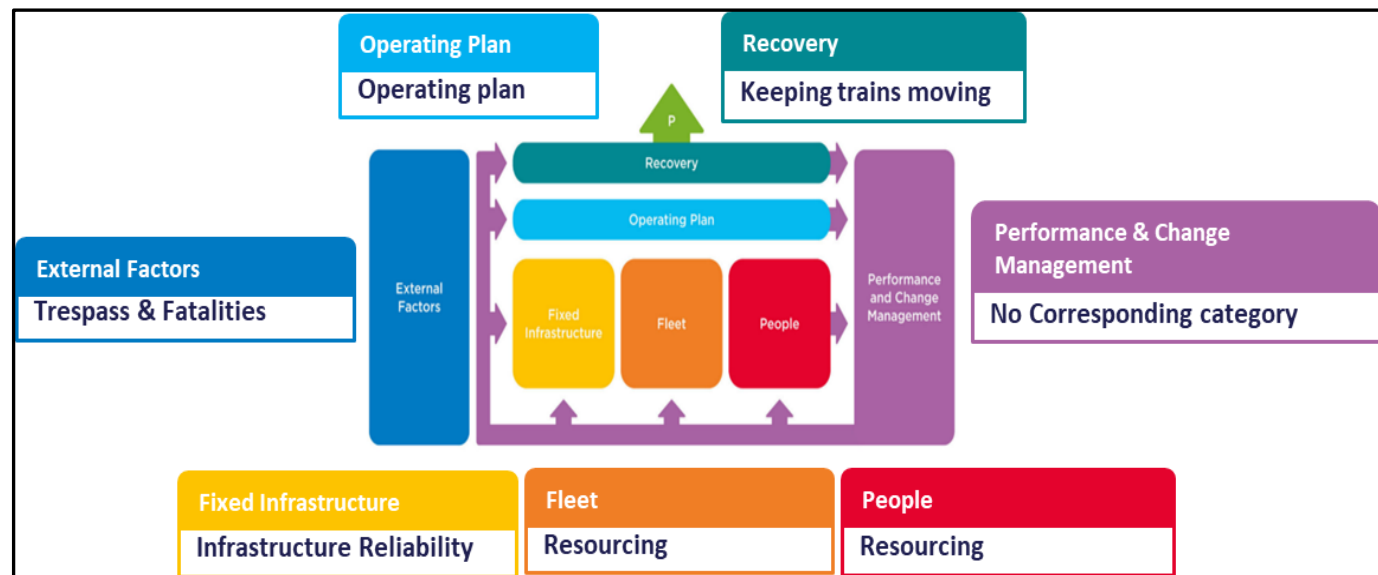
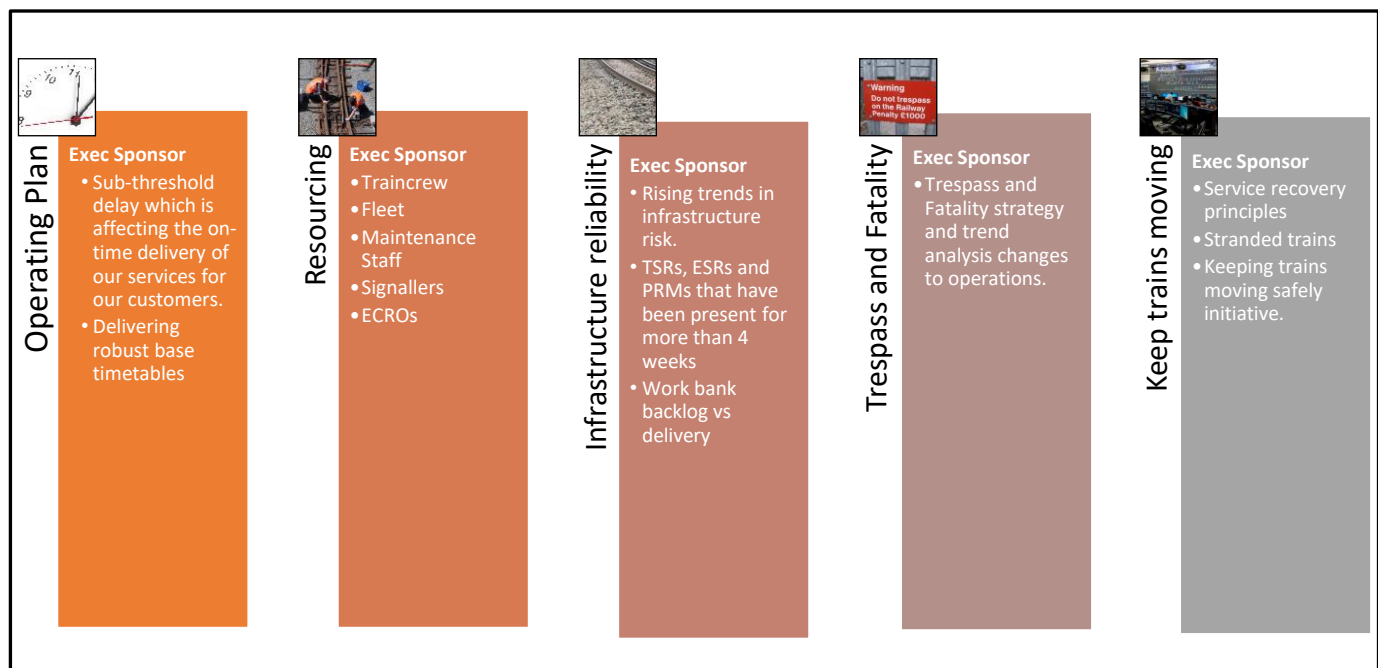
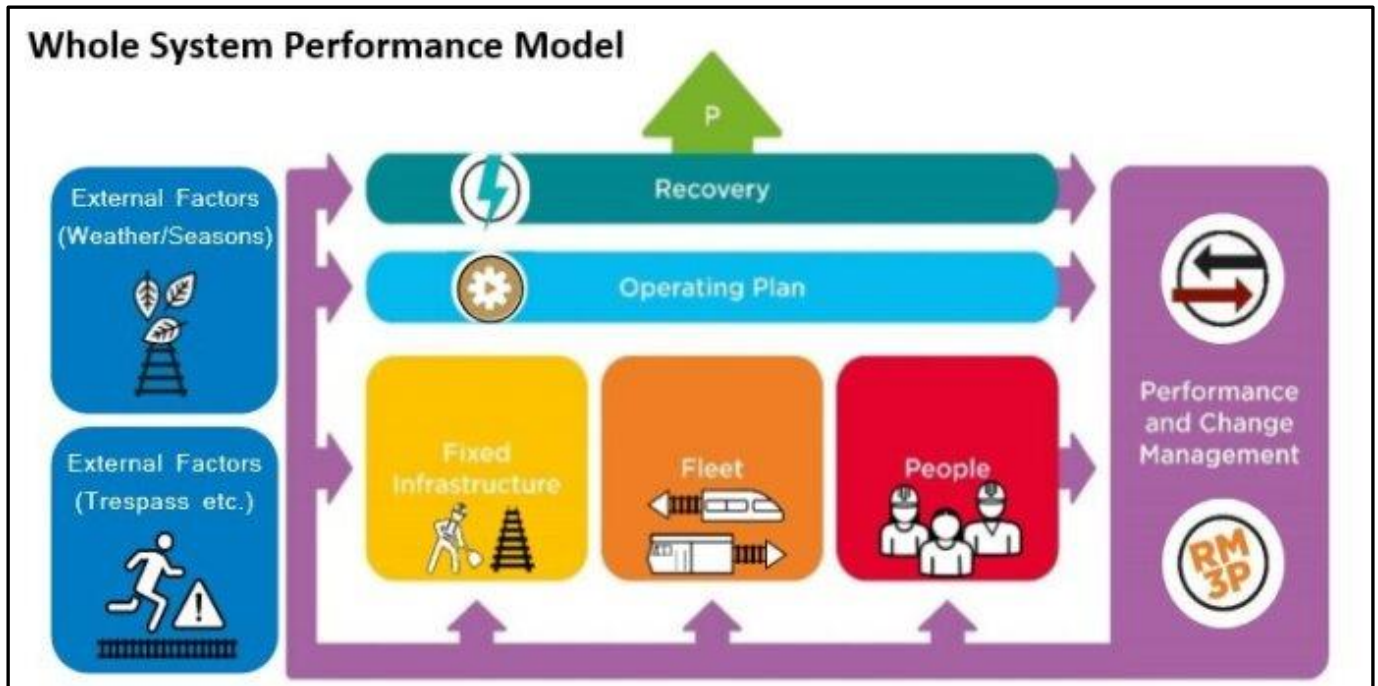
- Gantt Charts exist within the Power Bi to track milestones for each one:



Appendix B: Whole System Performance Model & NPB Priorities

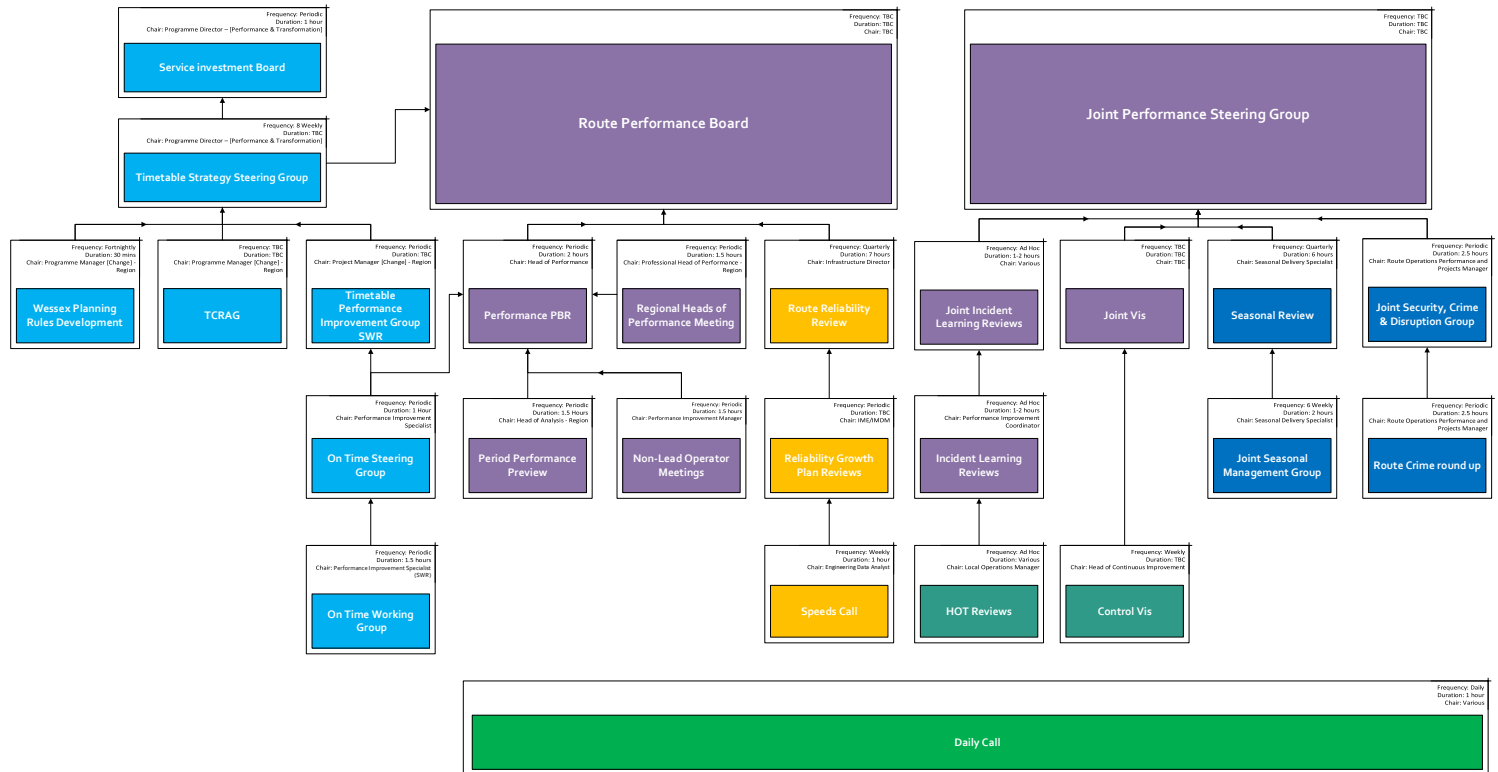
Our Strategy has been structured by aligning the whole system model and the NPB Priorities.

## Whole System Performance Model



The diagram above demonstrates the two “models” align with each other.

## Appendix C: Governance



## Appendix D: Strategic Planning

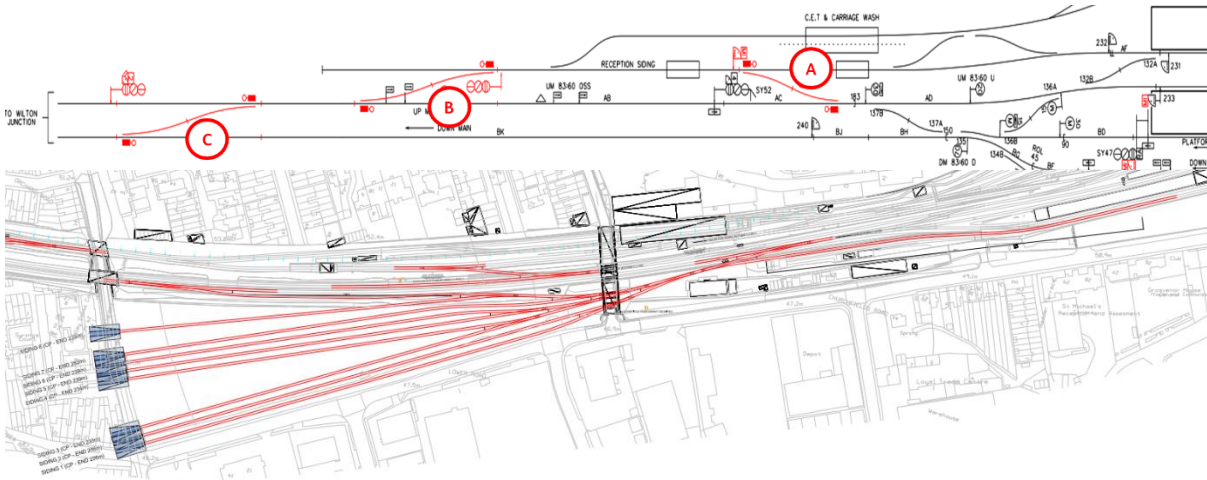
### Salisbury & West of England Performance Improvements

#### Salisbury

Performance at Salisbury station is affected by the movement of Empty Coaching Stock (ECS) trains, which can currently only access Salisbury Train Maintenance Depot (TMD) via Platform 1. This process involves shunting moves that consume capacity and limit platform availability, increasing the risk of delays. Addressing these constraints could enhance train planning, improve throughput, and reduce operational disruptions.

The Salisbury Area Strategic Study (SASS) identified ECS movements as a key factor limiting capacity. Three infrastructure options were assessed to optimise ECS flows and support future service growth:

- **Option 1:** Introduce three new crossovers west of Salisbury station to enable ECS trains to enter and exit the depot directly from the mainline in both directions, as well as from platforms 1-5. This would remove the need to use Platform 1 for ECS moves, freeing it up for passenger services.

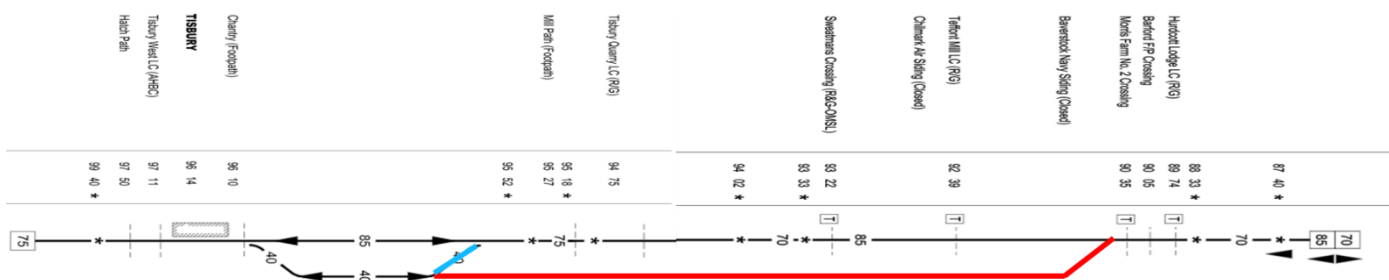


- **Option 2:** Relocate the depot to the Ex-Engine Shed Site southwest of the station. This site could provide up to eight stabling roads and direct mainline access, reducing shunting moves and improving operational flexibility.
- **Option 3 (Hybrid):** Maintain vehicle maintenance at the existing TMD site while using the Ex-Engine Shed Site for additional stabling. This combined approach would require infrastructure enhancements from both Options 1 and 2.

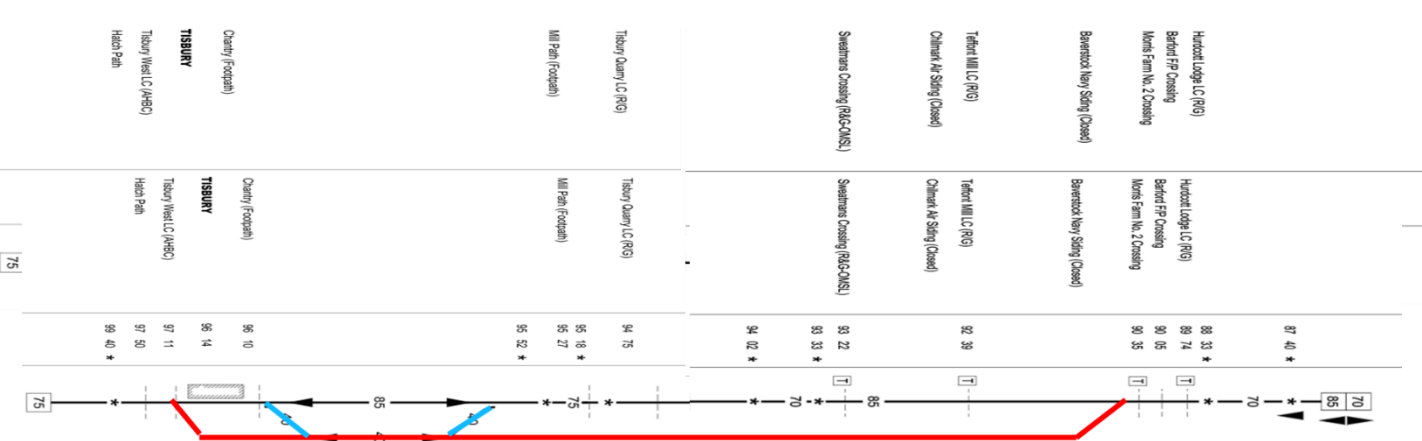
### West of England Line

Performance issues on the West of England Line often arise from delays at Tisbury Loop and limited recovery opportunities enroute to Exeter. The Wessex Strategic Planning team is developing two Strategic Outline Business Cases (SOBCs) to address these challenges:

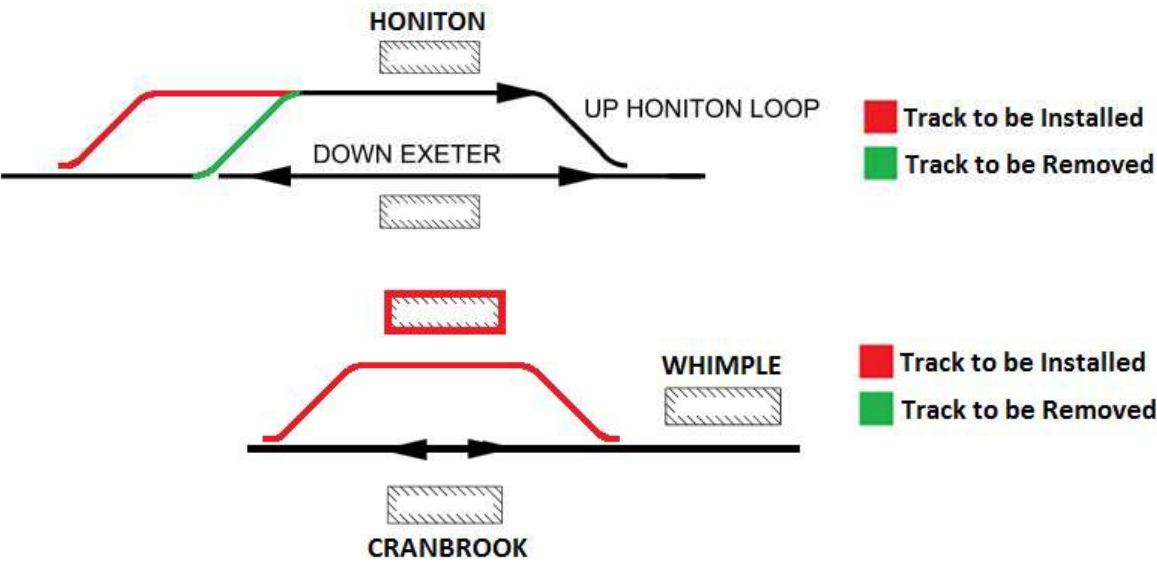
- **Tisbury Loop SOBC:** Three infrastructure options are being considered to reduce knock-on delays and improve service reliability:
  - Extend the loop eastwards (~6 miles) to enable an additional hourly stopping service between Salisbury and Yeovil Junction.



- Extend the loop westwards and add a new platform at Tisbury Station, reducing Down train schedules by ~4.5 minutes and minimising delays from late running Up trains.



- Combine both extensions for increased service frequency and enhanced performance benefits.
- **Devon Metro SOBC:** While focused on service enhancements, this business case also aims to prevent performance degradation from additional services. Options include:
  - Extending Barnstaple/Okehampton services to Axminster, requiring new loops and platform upgrades.





Pinhoe, minimising disruption across the network. This integrated approach aligns capacity, connectivity, and performance improvements, supporting long-term reliability and passenger satisfaction.

#### *Wessex Main Lines – Performance Study*

The [Wessex Main Lines Strategic Study](#), published on the Network Rail website in 2023 consolidated new work looking at Woking outwards with the previously published [SWML Strategic Study](#) which focussed on the Woking to London Waterloo corridor.

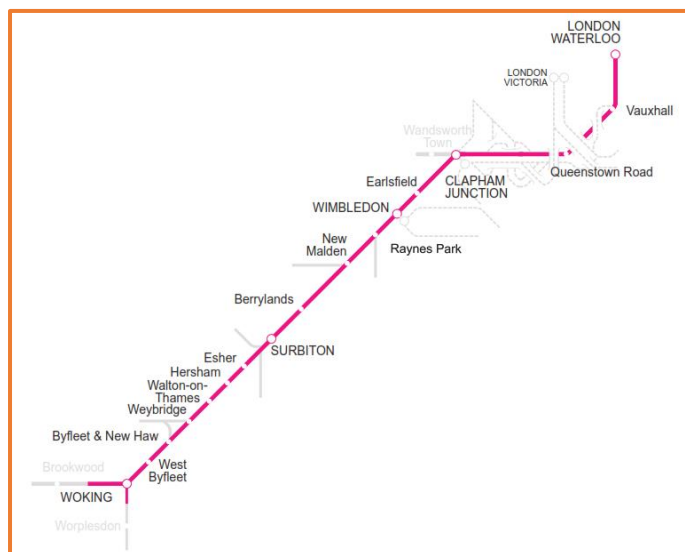
This study recognised that the pre-COVID quantum of services operated in the high peak hour (08:00 to 08:59 arrivals at London Waterloo) could not be operated robustly or resiliently even if there were no issues. This was owing to the volume of trains that were “squeezed” into the timetable (25tph).

The study also included an understanding of future demand and the need to provide the level of service required to meet passenger numbers to 2050. This re-iterated the need for infrastructure interventions such as Woking Jn grade separation.

It is clear that as the quantum of services operated in the high peak hour increases towards 25tph there is the potential that the same performance issues identified pre-COVID could re-emerge and that going beyond this quantum will require large scale infrastructure interventions.

The ‘Wessex Main Lines’ study recommended that performance analysis should be undertaken to understand how the structure of the timetable impacted the inability to operate the Dec-2019 timetable robustly.

The Wessex Strategic Planning team have engaged the Performance and Simulation team in Milton Keynes to progress this workstream. A first phase is to look at the timetable between Woking and London Waterloo.



In broad terms the aim of this first phase of the performance analysis workstream is to understand the:

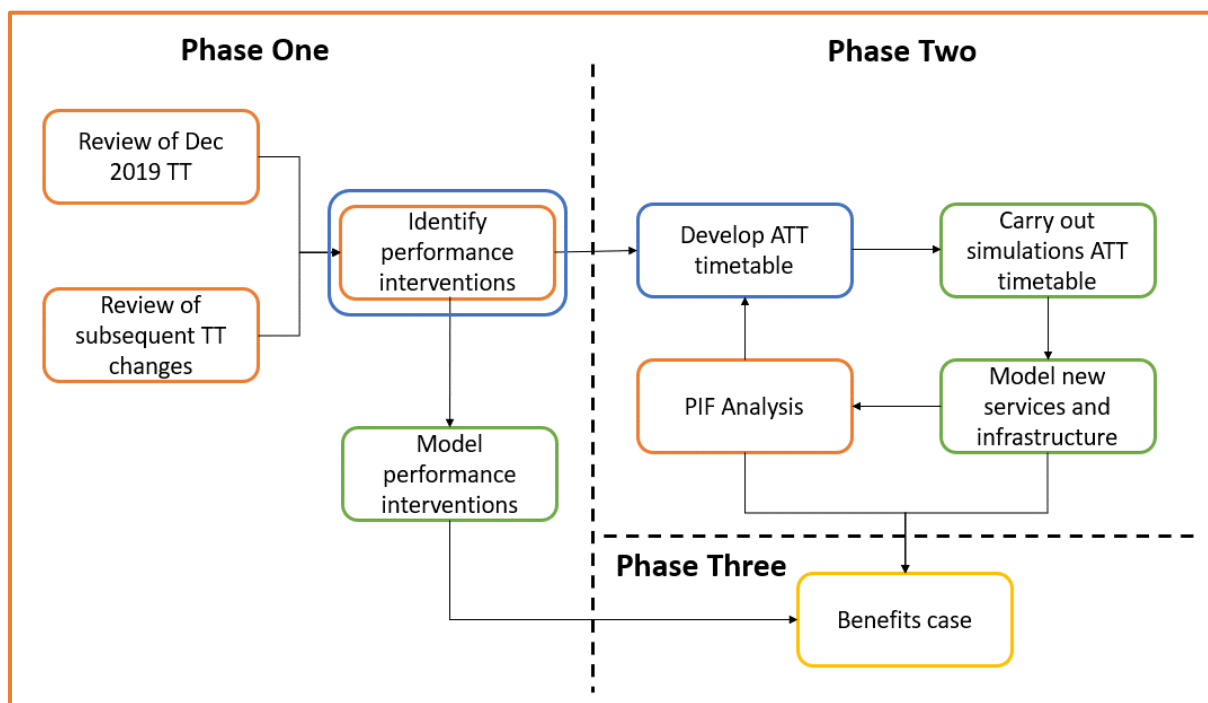
- Historic timetable performance issues that have affected the SWML in previous timetables since and including December 2019.

- Timetable performance issues that may manifest as a result of service change proposals as identified in the Wessex Main Lines Strategic Study.
- Potential for performance and timetable interventions that can either delay the need for large infrastructure interventions or supplement them to enable a high level of performance resilience.

The overall scope of the study is:

1. Review the December 2019 timetable, over the defined geographic scope, to identify:
  - a. Where the timetable structure caused inherent service delay
  - b. Where infrastructure constraints caused inherent service delay
2. Undertake analysis to understand how robust and resilient subsequent timetable changes have been, including June 2024
3. Based on the review of previous timetables, identify interventions or timetable solutions that could be implemented to mitigate against timetable performance issues
4. Model the June 2024 timetable with the inclusion of the identified interventions or timetable solutions to see how much they could improve performance and prove the concept.
5. Using the Woking to London Waterloo section as the geographic focus:
  - a. Model the incremental addition of services to the June 2024 timetable, up to the quantum operated pre-Covid, to understand the impact on timetable, performance and identify any performance mitigations that could enable the quantum of trains per hour to be operated robustly.
  - b. Model the timetable and performance impact of grade separation at Woking Junction, the implementation of a centre turnback on the Portsmouth Direct Line, the use of Platform 3 for peak non-stop shuttles between Woking and London Waterloo, and the associated increase in trains per hour, as described in the Wessex Main Lines Strategic Study
  - c. Model the timetable and performance impact of the Weybridge crossovers and the associated increase in trains per hour, as described in the Wessex Main Lines Strategic Study
  - d. Model the timetable performance impact of implementing changes at Queenstown Road to enable the efficient transfer of Empty Coaching Stock (ECS) from London Waterloo platforms to Clapham Yard in the peak.

It is important that this work is undertaken iteratively, this means that there should be review points as the analysis progresses, which enable decisions or changes to be made to the scope of the next phase or the analysis. The flowchart below also shows, in 'Phase Two', an iterative process where ATT and the Performance Simulation team work together to test the incremental addition of new services and the infrastructure required to enable those services.

**KEY****Lead Team**

Performance Analysis



Timetable Simulation



Advanced Timetable Team



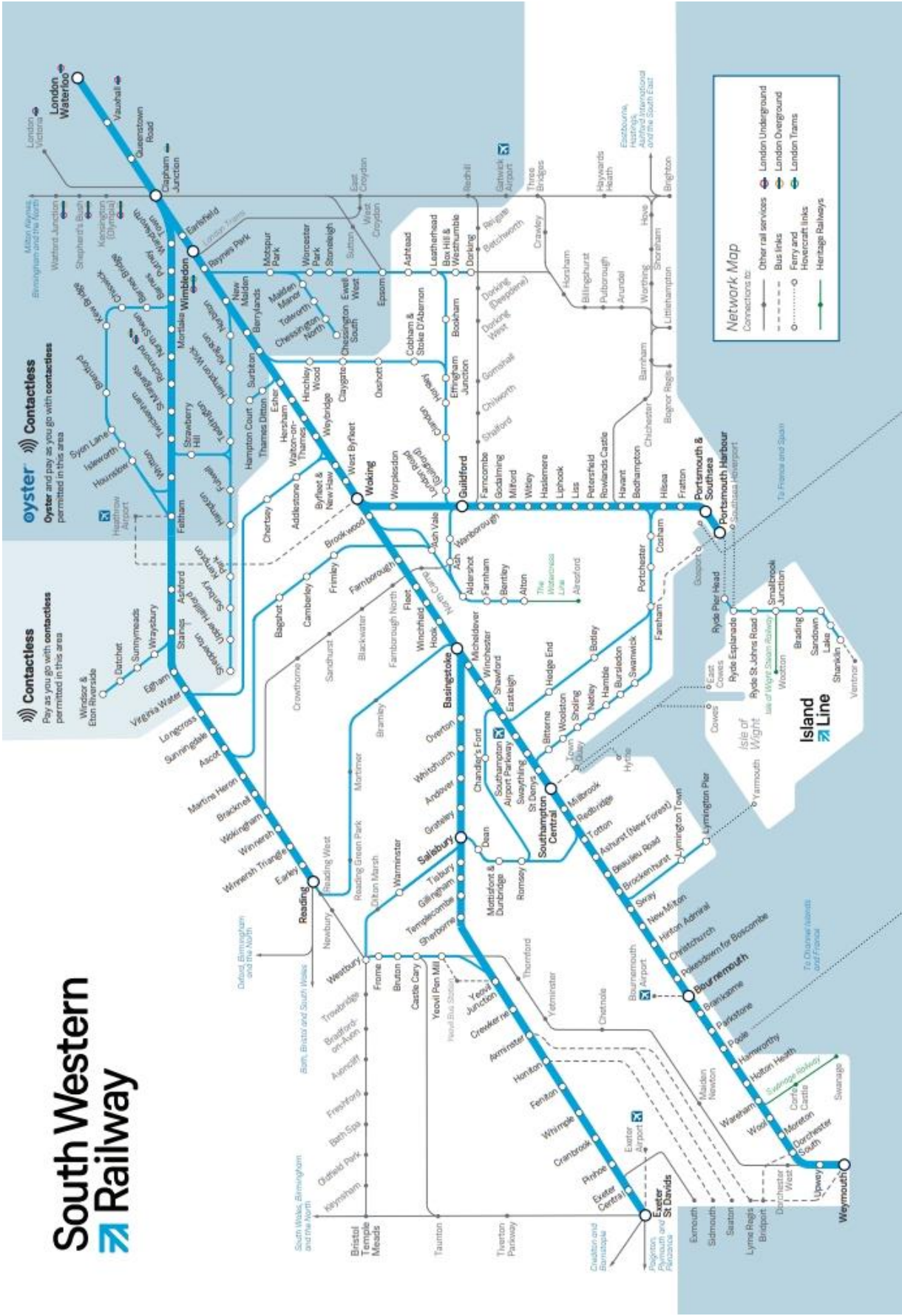
Wessex Strategic Planning

Completing this study will:

- Identify timetable changes, such a re-ordering of services, to reduce performance impacts based on the June 2024 timetable.
- Identify any trade-offs between performance benefits and journey times or capacity, for instance: adding in “firebreaks” that provide a performance buffer but extend journey times.
- Potentially influence the decision making of signallers, but identifying if there are any “rules” that can be learned from the analysis.
- Identify small scale infrastructure interventions that could enable performance improvements and potentially put off the need to invest in large scale infrastructure interventions as additional services are added to the timetable.
- Identify when large scale infrastructure interventions are required to unlock future capacity and what their impact on performance might be.
- At a high-level, understand the economic benefits case of any proposed timetable or infrastructure changes.

Work on this phase is expected to complete Spring/Summer 2025.

Appendix E: Wessex Route Map



## Appendix F: The 9-point Freight strategy aligned to PIMS.

Focus area	PIMS category						
	FI	FT	OP	EX	RE	PE	PCM
Timetabling improvement							
Freight corridors							
Shifting the perception of rail freight							
Improving the condition of freight-only infrastructure							
Boosting fleet reliability							
Removal of high impact TSRs							
Weather resilience							
Establishing industry-wide service recovery principles							
Strengthening incident learning reviews							

## Key

<b>FI</b>	Fixed Infrastructure
<b>FT</b>	Fleet
<b>OP</b>	Operating Plan
<b>EX</b>	External
<b>RE</b>	Recovery
<b>PE</b>	People
<b>PCM</b>	Performance & Change Management