Western Route

NetworkRail

Wiltshire Rail Investment Programme - summary of recent analysis

May 2026

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Introduction and Glossary

Network Rail has recently competed two significant pieces of analysis to progress our understanding of the feasibility of bringing Platform 0 at Westbury back into operational use, to support the introduction of new hourly services between Paddington and Westbury, Swindon and Salisbury and Bristol and Yeovil.

This briefing note summarises the key findings from these two pieces of work. Comprehensive reports are also available.

Glossary

AB/Absolute Block	A more restrictive form of signalling arrangement where the headway is calculated from the transit time of the first of each pair of trains running between two timing points. A value "x" is added to the transit time to allow for the signaller's actions, including the time taken to reset the route, clear the signal on entry to the section and sight the signal.
B&H	Berks & Hants route – the line from Reading to Taunton via Westbury
Down	Trains in the direction away from a major location on the network (often, but not always, London).
Headway	The shortest time interval between two following trains, so that the second train can run at its normal operating speed without being restricted by caution/stop signals. The headway value is usually limited by the type of signalling that is in place.
Margins	The amount of time between train movements at a point where two trains interact, e.g. at a junction.
Path	A slot in the timetable for a train service
SRT	Sectional Running Time – the time taken for a particular type of train to cover a given section of the network.
TPH	Trains Per Hour
Up	Trains in the direction towards a major location on the network (often, but not always, London).
WoE	West of England – the line from Basingstoke to Exeter via Salisbury
WTT	Working Time Table – the current national rail timetable, including freight and ancillary movements.
Y path	A freight train path which splits at a point along its journey, allowing the train to follow one of two different routes depending on commercial requirements

Timetable study

Overview

The objective of this analysis was to refine the previous Indicative Train Service Specification (ITSS) based on the outputs of the Wiltshire Rail Strategic Study from 2024, test service options in peak hours and confirm the operational benefits provided by the proposed new infrastructure. To achieve this, the December 2025 timetable was used as a base, with the following changed made to reflect the recommendations of the Wiltshire study:

- An hourly Paddington - Westbury service (reinstated Paddington – Bedwyn service extended to Westbury), with stops at all stations between Newbury and Westbury, including the new station of Devizes Gateway.
- An hourly service between Swindon and Salisbury via Westbury (TransWilts service)
- An hourly Bristol – Oxford service, with calls at Corsham
- The removal of intermediate calls in semi-fast Exeter services between Newbury and Westbury (but looking at how these can be retained in peak hours)
- The removal of the Bedwyn shuttle
- The addition of an hourly Heart of Wessex path
- Existing Class 7 (slow freight) Mendip quarry services to be accelerated to Class 6 (60mph) timings as per Mendip recast data and all freight paths to be standardised
- Providing two freight paths an hour along the Berks & Hants (B+H) route.

The analysis assumed an additional platform at Westbury (Platform 0) as part of the baseline when commencing analysis, as per the previously identified preferred layout. Analysis sought to confirm the Melksham single line interventions that would best suit the train plan developed and that would offer the most flexibility.

The analysis identified:

- That peak hour semi-fast calls can be included at Pewsey (Exeter to Paddington Semi-Fast services).
- A preferred infrastructure option for the Melksham single line to allow an hourly passenger service and regular freight paths.
- Options for resolving capacity constraints between Westbury and Taunton/Yeovil.

Phases for testing

Priority	Service		Calling Pattern (in and close geographic scope)	Additional Information
	Origin	Destination		
1	Paddington	Westbury	Theale, Thatcham, Newbury, Kintbury, Hungerford, Bedwyn, Pewsey, Devizes Gateway, Westbury	Hourly Paddington - Westbury (Picking up intermediate calls removed in semi-fast)
1	Bristol Temple Meads	Oxford	Bath Spa, Corsham, Chippenham, Swindon	Hourly service
1	Swindon	Salisbury (via Westbury)	Chippenham, Melksham, Trowbridge, Westbury, Dilton Marsh, Warminster, Salisbury	Make existing TransWilts service hourly on a regular pattern.
2	Taunton	London	Westbury	Two return freight paths required each hour (can be inclusive of any freights already in the base). Path can be split at Westbury if required, or run straight through. Only consider loaded in the Up direction. If path not available for a Class 6, record barriers and test whether a Class 4 is viable.
2	Bristol Temple Meads	Weymouth	Bath Spa, Bradford-on-Avon, Trowbridge, Westbury, Frome, Castle Cary	Extension of one of the existing Bristol -Westbury services, giving an hourly service towards Weymouth
3	Paddington	Exeter	Newbury, (Pewsey in Peak hours), Westbury, Castle Cary, Taunton	Making existing 0.5tph semi-fast an houly service.with intermediate stops removed (but need to test retaining Pewsey call for peak hours).
3	Westbury	Bristol	N/A	One return path required every 2 hours, so 2 return paths within 07:00 - 12:00 window (can be inclusive of any freights already in the base).

3	Westbury	Swindon	N/A	Freight growth requires one return path required every 2 hours. For analytical purposes, test an hourly path (can be inclusive of any freights already in the base).
4	Westbury	Salisbury	N/A	One return path required every 2 hours, so 2 return paths within 07:00 - 12:00 window (can be inclusive of any freights already in the base). If path not available for a Class 6, record barriers and test whether a Class 4 is viable.
4	Salisbury	Yeovil Pen Mill	Salisbury - Yeovil Pen Mill	Requirement for a path every 2 hours for a diverted WoE services between Yeovil and Salisbury via Westbury.

Findings

Phase 1

Timetable testing demonstrates that the core Phase 1 passenger enhancements are deliverable, subject to key infrastructure interventions.

Paddington – Westbury (1tph extension)
The hourly extension is deliverable and can maintain a compliant turnaround at Westbury. However, delivery is dependent on Platform 0 at Westbury.

Swindon – Salisbury (TransWilts uplift to 1tph)
The uplift can be accommodated but is sensitive to freight and junction margins at Thingley and Bradford Junction. The Melksham single line remains a constraint, limiting future flexibility.

Bristol – Oxford (including Corsham)
The proposed service pattern is deliverable with minor timetable adjustments.

Recommendations

- Progress delivery of Platform 0 at Westbury as an intervention. Platform 0 at Westbury is critical to providing sufficient capacity and resilience.
- Continue development work on Melksham corridor to support future services. While Phase 1 proposals are deliverable without interventions, the Melksham single line remains constrained and cannot accommodate freight growth without interventions. It is not recommended that services are increased without interventions to provide extra capacity and resilience.

Phase 2

Findings

Freight

All 10 of the Up-direction services were validated, 9/10 were existing WTT paths flexed to meet 2tph. All tested paths were compliant with the heavy Double-headed 4,200tn timing load.

Headway limitations exist between Cogload Jn – East Somerset Jn, where long Absolute Block sections combined with slow SRTs result in freight being caught by fast West of England passenger services.

In the Down direction all services were compliant to Westbury, though the earliest paths struggled to reach the quarries within their timing window due to tight margins at Clink Road Junction and Blatchbridge Junction.

Bristol–Weymouth

The uplifted service encounters constraints on the single-line sections south of Westbury.

To operate 1 tph without intervention, services would require long dwell times (up to 10 minutes) at Yeovil Pen Mill and Maiden Newton, pushing them out of slot north of Westbury.

Inclusion of additional SWR diverted services removes any remaining timetable flexibility.

Recommendations

Deliver new passing loop between Taunton and Castle Cary

A strategically located passing loop would allow fast passenger services to overtake heavy freight, protecting both the 1 tph Taunton extensions and future WoE uplifts.

Reduce Absolute Block section headways (Cogload Jn – East Somerset Jn)

Shorter block sections or new signalling would significantly improve operational flexibility for 4,200tn flows and enhance timetable reliability.

Targeted improvements south of Westbury

To deliver a consistent hourly Bristol–Weymouth service:

- Introduce a double-track section between Castle Cary – Yeovil Pen Mill (as per recommendations for the Heart of Wessex line SOBC led by Network Rail Wessex route).
- Rebalance calls at Frome and ensure pathing consistency. These are essential for long-term passenger uplift feasibility.

Phase 3

Increasing the existing 0.5 tph Paddington–Exeter semi-fast service to 1 tph, retaining only Semi-

Findings

Paddington to Exeter Semi-Fast Service

- Most down and up services can operate hourly with compliant paths, except two:
- One Down passenger train (1C73) conflicts with a Phase 2 freight (6Z06) in the East Somerset Jn – Cogload Jn AB block section.
- One Up passenger train (1J74) sits outside the regular Taunton departure pattern due to a 14-minute dwell for the passage of a fast train (1A73), causing it to catch the Phase 1 Westbury–Paddington service.

Removal of freight service 6Z06 would allow full validation of all Phase 3 hourly services in the Down direction.

Up direction services are broadly workable but require retiming of 1A73.

Freight: Westbury to Bristol

All proposed freight paths can be validated, only one additional path required to meet the desired quantum.

Some services operate on tight margins due to heavy passenger flows between Bath and Bristol, but remain workable.

Freight: Westbury to Swindon

- Significant constraints arise from the Melksham Single Line, where capacity is limited by opposing-direction flows from Salisbury to Swindon services (Phase 1).
- Only one WTT freight path (6M50) was feasible; all additional paths failed due to conflicts north of Thingley and insufficient access to the single line.
- Paddington to Bristol passenger services frequently use the capacity needed by freight arriving from Swindon, preventing reliable pathing into Thingley Junction.

Recommendations

Paddington to Exeter Semi-Fast Service

- Removal of potential freight service 6Z06 would allow Phase 3 semi-fast services to operate fully hourly.
- Retiming of 1A73 is recommended to better facilitate Up-direction flighting and maintain consistent Taunton departures.

Freight: Westbury to Bristol

- Proceed with the uplift; infrastructure is sufficient for an additional return path every two hours.

Freight: Westbury to Swindon

- Implement Thingley Junction Loop to allow regulating of freight and enable suitable pathing windows.

- Split the long AB block between Bradford Jn–Melksham–Thingley to support more flexible single-line operations.

These interventions are essential to unlock additional freight capacity.

Phase 4

Findings

Freight: Westbury to Salisbury

All proposed freight services were validated in both directions.

- Two existing WTT paths Westbury to Salisbury worked at Class 66, 2200-tonne timing loads.
- Two new Salisbury to Westbury paths also validated.

Capacity remains highly sensitive to AB headways on the Warminster line.

Salisbury to Yeovil Pen Mill

Existing WTT services remain compliant, but new diversionary paths cannot be fully validated:

- Conflicts occur at Clink Junction and Blatchbridge Jn due to interaction with the Frome single line.
- The Castle Cary–Yeovil single line creates clashes with Phase 2 Weymouth–Gloucester services.
- Only one diverted path per direction can be accommodated without major change, and these paths already exist in the base timetable. New services cannot be validated.

Warminster Line Capacity

- Absolute Block sections on the Warminster Line limit capacity for both freight and diverted WoE paths.
- Long freight sectional running times further constrain the achievable headway.

Recommendations

- Remove the Frome stop on diverted services to reduce the number of conflicts crossing moves at Clink Jn. Stops can be maintained via the uplifted Bristol–Weymouth pattern.
- Reduce AB headways on the Warminster line to unlock additional Yeovil–Salisbury capacity, enabling future potential uplift of both Phase 4 and Phase 2 Swindon–Salisbury services.
- Review Yeovil Pen Mill capacity, particularly regarding interactions with existing Weymouth–Gloucester services on the single line.

The need for diversionary paths can be reviewed in light of coming organisational changes (introduction of GBR) and future rolling stock changes (a potential common fleet across GWR and SWR operations).

Conclusion

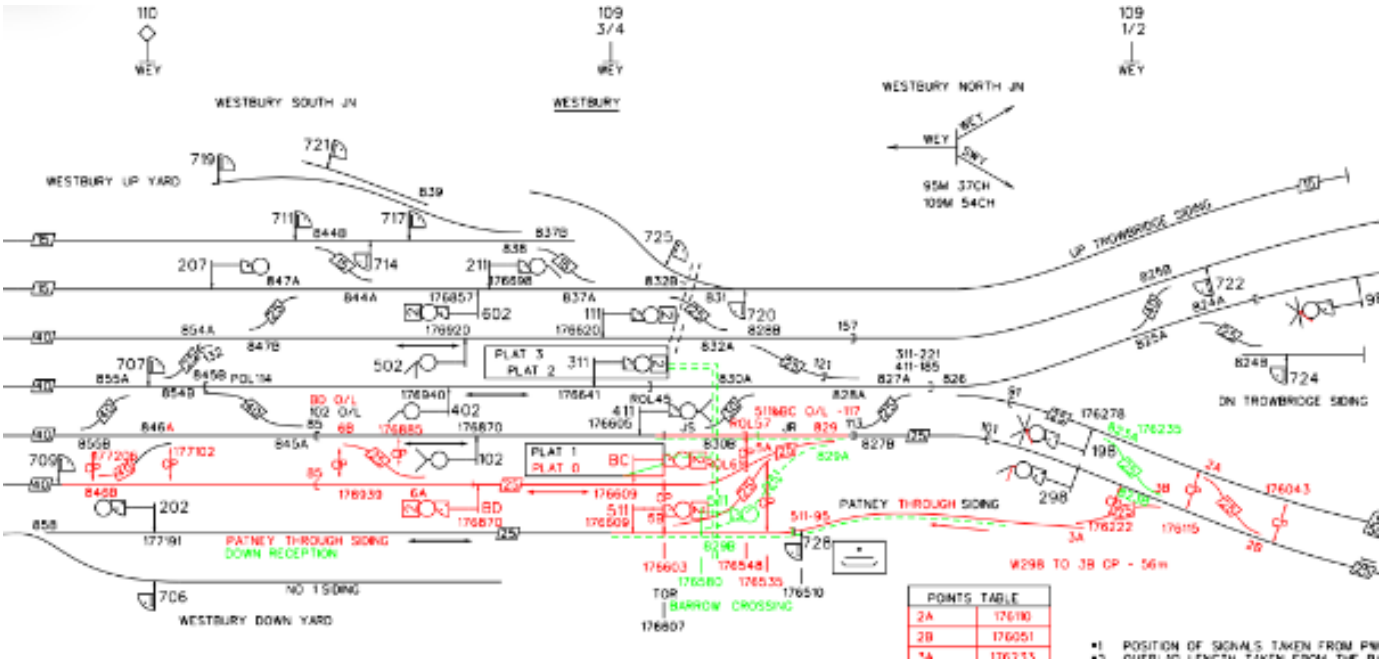
In summary, the proposed train service changes can generally be accommodated in the timetable, subject to the provision of Platform 0 and a new passing loop and intermediate signals on the Melksham single line. The study also shows that, peripherally to the main focus on Wiltshire, capacity enhancements (re-signalling and freight loops) will be necessary to the west of Castle Cary on B&H to permit additional freight and passenger services in the future, and a loop on the single line to Yeovil to allow and hourly Heart of Wessex service.

Engineering Feasibility for Westbury Additional Platform

Overview

The Devizes Gateway Interim Feasibility Study (IFS), published by Network Rail in March 2023, identified a fourth platform at Westbury would be required to enable the introduction of consistent hourly calls at Devizes Gateway, within a Paddington-Westbury service. The obvious choice was to recommission the extant, but unused, platform on the opposite side of the island to Platform 1, termed “Platform 0”.

The IFS considered four options for platform 0, drafting a track and signalling layout for each. Option 3 (below) has been considered for this study, as it offers the benefits of parallel moves for freight traffic along the Patney Through Siding whilst passenger services use Platform 0, but avoids the challenging switch & crossing (S&C) maintainability of alternative options. Mitigations will be developed to reduce the overrun risk identified in the IFS to an acceptable level.



Key findings

In 2025 Network Rail's Engineering Services Design Delivery (ESDD) undertook an Engineering Stage 2 (ES2) study to identify the necessary changes to Buildings, Civil Engineering and Architecture for Platform 0, option 3.

Key Findings and Recommendations

Platform Structure and Surface:

- The surface of Platform 0 is in poor condition, with uneven surfacing and cracked paving slabs. It is recommended to resurface the platform entirely to meet current standards.
- The platform currently slopes towards the track, which is non-compliant with modern standards. This issue should be addressed to ensure safety and compliance.
- Recommendations are made for platform widening and accommodating a new cross fall.

Passenger and Staff Facilities:

- The existing lift and stair provisions are deemed sufficient for the projected requirements.
- No changes are recommended for ticketing facilities, refreshment facilities, or canopies.
- Additional seating and supplementary shelters are recommended to accommodate increased passenger demand.

Cycle Parking and Luggage Trolleys:

- Relocation of cycle parking facilities on Platform 0 is necessary to avoid obstruction and improve inclusivity.
- Consideration should be given to relocating luggage trolley storage to prevent potential pinch points.

Customer Information and Wayfinding:

- Installation of two Next Train Indicators (NTIs) and public address (PA) coverage on Platform 0 is required.
- Updating wayfinding signage to include Platform 0 throughout the station is essential.

Security and Fire Strategy:

- A full review of the station's CCTV system is recommended for potential enhancement, but this would require a greater review of need beyond that specifically required for Platform 0.
- Early involvement of a Fire Safety Engineer is crucial to develop an integrated fire strategy, considering the increased platform length and the proposed closure of the barrow crossing at the eastern end of the station.

The report also recommends the suitability of the subway support structure and composition of Platform 0/1 are assessed to ensure their suitability for additional rail, pedestrian and maintenance vehicle loads.

Next steps

Surveys & Assessments

- Topographical surveys are to be updated / completed for the current layout, including adequate levels on Platform 0.
- Using the survey information, Track and Civils are to optimise the track alignment to link into the Down Main line whilst trying to achieve a compliant backfall to Platform 0. A vertical alignment design for the track is to be completed.
- Any widening to Platform 0 should be optimised based upon intended rolling stock use, train stopping points and location of the starting signal.
- Fire strategy/ evacuation. A full review of the fire strategy is essential to inform the solution established at the next design stage.
- An Inspection for Assessment (IfA) and a Level 1 Assessment is required for the subway supporting the tracks as previous record information available is from 2002.
- An Inspection for Assessment (IfA) and a Level 1 Assessment / incorporating the necessary strengthening to the jack aches i.e. replacement of loose fill above jack arches with concrete. However, depending upon inspection and assessment outcome, if similar output to Platform 1, a project decision to manage the risk for undercapacity may be chosen.
- A PAS 128 accurate utility survey is to be completed, including drainage of the platform.
- Lux surveys are required to allow any lighting update and should include Platform 1.
- Construction works area – Compound area and plant access regions to be determined at the next stage as this impacts construction planning.
- Landfill and mining Stage 1 referral (as the station partly falls within both referral layers).
- Diversity Impact Assessment
- Signalling and Electricity & Plant surveys
  - Point types agreed for point and signalling load
  - DNO capacity and equipment survey
  - Cable management strategy
- Agree compound area to ascertain if any equipment needs to be moved that is not part of actual design.
- Consultation to ensure the operational requirements for freight preparation and despatch along the Down Reception are identified.

Order of Magnitude Cost Advice

Composition	Low Estimate	High Estimate
Signalling & Telecoms	£20.0m	£29.5m
Permanent Way	£7.6m	£7.8m
Buildings & Civils	£0.50m	£0.54m
Other	£0.10m	£0.12m
Total	**£28.40m**	**£37.90m**

Alterations Included at This Stage		
Point heating	Whole-station induction loop update	Platform lighting upgrade
E&P asset relocation	Telecom asset relocation	-

Alterations Excluded at This Stage		
Gate line	Canopy	Slews of existing track
Fire & evacuation	Subway lighting & surface reflections	-

Next steps for programme

Recommended next steps for moving the project forwards are:

- Completing an economic appraisal for the proposed new services and infrastructure (subject to funding).
- Carry out performance modelling of the Westbury area to quantify the benefits derived from the introduction of Platform 0.

The items above will support development of a Strategic Outline Business Case for the scheme.

- Carry out early design and development work on Melksham single line loop and signalling (subject to funding).