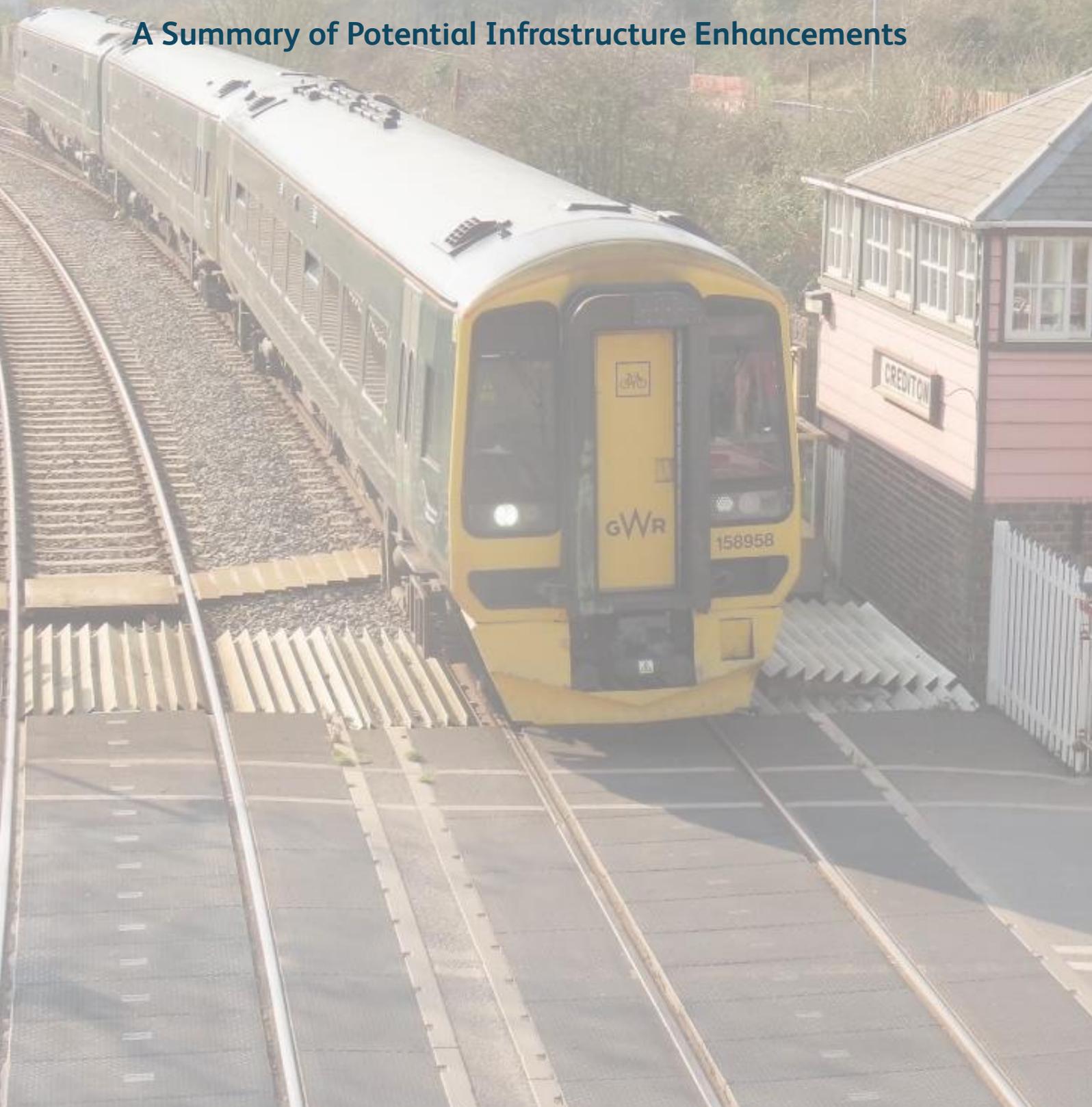


Transforming the North Devon Line

A Summary of Potential Infrastructure Enhancements



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Image Cover Credit: Bill Dalton

Abbreviations

ATT	Network Rail Advance Timetable Team
DAC	Okehampton Line Engineers' Line Reference
ELR	Engineers' Line Reference
ESDD	Engineering Services Design Delivery
ETCS	European Train Control System (Digital in-cab signalling)
MSL	Miniature Stop Light Level Crossing
NDL	North Devon Line
NDN	Barnstaple Line Engineers' Line Reference
SOBC	Strategic Outline Business Case
TPH	Trains Per Hour

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Executive Summary

The North Devon Line (NDL) is experiencing significant passenger growth year-on-year, which is forecast to continue, given the increasing population associated with committed housing developments in parts of North Devon, including Barnstaple, as well as in the greater Exeter area. This growth in passenger numbers on the NDL has already culminated in the successful reopening of the Okehampton branch, and the ongoing construction of Okehampton Interchange station to improve connectivity. On the Barnstaple branch however, growth is increasingly resulting in overcrowding on its peak services, with passengers being left behind. This is unacceptable, particularly given the limited alternatives and lengthier journey times to and from Exeter by road. This situation is therefore limiting connectivity growth in North Devon and the Exeter city area, with hourly services providing passengers with limited flexibility.

Whilst there have been service improvements to address rising demand on the NDL over the past ~20 years, with a more consistent hourly frequency established, the predominantly single-track layout on the line, with its limited passing places, prevents the implementation of any further service frequency increases. An increase to two trains per hour between Exeter and Barnstaple is key in addressing the line's overcrowding whilst unlocking further capacity to support longer-term growth. Providing the infrastructure to support a two trains per hour service would also create journey time savings, improving connectivity between Exeter and Barnstaple, and contributing to the wider "Devon Metro" vision, which calls for enhancements to several local lines feeding into Exeter, as outlined in Devon and Torbay combined county authority's local transport plan 2025-2040¹.

Existing work to date to establish the infrastructure requirements to enable two trains per hour between Exeter and Barnstaple has included initial engineering and timetabling studies by Network Rail and GWR, which informed the completion of a more detailed Network Rail engineering design report conducted at the PACE A level* in 2025. This high-level feasibility report outlined all possible infrastructure interventions which could be delivered at various locations on the North Devon Line to enable two trains per hour between Barnstaple and Exeter Central, subject to further, more detailed assessments.

This paper summarises the recommendations of the PACE A engineering report, considering the specific infrastructure changes that the report has identified as potential enablers for a two trains per hour service to operate between Barnstaple and Exeter Central.

Based on these infrastructure recommendations, this paper then summarises the next steps that are required to progress to the next stage of infrastructure and timetabling feasibility assessment around the aspired service frequency uplift.

What is a PACE A Report?

PACE = Product Acceleration in a Controlled Environment

A = an initial report; at the lowest complexity level.

This report is governed by the management framework for Network Rail infrastructure projects, which is designed to improve the speed at which they can progress, by allowing project teams to make decisions locally and with autonomy and without bureaucracy. This type of report gives an initial indication of the technical detail behind the infrastructure work required for a project, acting as a basis for assessments of costs, whilst also helping to provide an informed view when building a subsequent case for investment.

¹ [Local Transport Plan 4 2025 to 2040 - Devon and Torbay County Combined Authority](#)

Introduction

Background

The North Devon Line (NDL) diverges from the Devon Mainline to the east of Exeter St. Davids at Cowley Bridge Junction, heading north-west. The line is single track from Cowley Bridge Junction, via Newton St. Cyres, to Single Line junction, on the approach to Crediton station, where there is a turnout to form a separate Down line into Crediton station (figure 1). Immediately to the west of Crediton station is Crediton Junction, where the track layout separates into distinct bi-directional tracks, with the “Up” line (NDN) used by Barnstaple services, and the “Down” line (DAC) being used by Okehampton services. The line to Okehampton and Meldon Quarry spurs off to the west, while the line to Barnstaple continues northwards, serving several villages in North Devon, with one passing loop at Eggesford Station.

The NDL has experienced significant growth in recent years ([appendices](#)) with an additional 0.6 million passengers using its stations between 2018/2019 and 2023/2024, exceeding pre-Covid levels. This growth has been accelerated by the restoration of regular daily services to Okehampton in 2021, which saw 228,000 journeys in its first full year of operation, and a further 38 % growth into 2023/2024.

In particular, growth on the Barnstaple to Exeter line has culminated in significant overcrowding during peak hours. Specifically, morning peak Exeter-bound services are increasingly observed to be operating as full and standing from Barnstaple on weekdays, leaving passengers behind. This is in some cases compounded by unit shortages, which can lead to cancellations or short-formed trains consisting of as little as two carriages. This situation is unsustainable, given the negative effects it has on the passenger experience, and acts as a deterrent towards further modal shift, constraining future passenger growth associated with housing and employment developments, particularly around Exeter and Barnstaple.

This future passenger growth cannot be accommodated without interventions to improve the frequency and capacity of services on the line, which are currently limited to 1 train per hour (tph) due to the sections of single track and limited passing places, which results in lengthy end-to-end journey times of over an hour. This arrangement has existed since rationalisation of the line in the early 1970s. A 1tph frequency and lengthy journey times are a constraint to productivity, considering the growing number of commuters and college students travelling into Exeter, with limited bus services, and congested roads, which contributed to 46 work hours being lost on average per person over the course of the year 2023-2024.

Previous Work

A September 2021 report, compiled by the Network Rail Capacity Analysis team, investigated the feasibility of providing journey time improvements, and developed a concept for a standard hourly service between Barnstaple and Exeter Central, supplemented by additional services to create a 2tph pattern, but only in the AM (06:30 to 08:30) and PM (16:00 – 18:00) peaks. The report’s key finding was that not all additional services could be accommodated by means of linespeed improvements alone, with a passing loop at Portsmouth Arms identified as a potential infrastructural intervention, necessary to accommodate a 2tph peak frequency. In addition, this loop was highlighted as an enabler for uniform departures from Barnstaple station.

The 2021 study also found that journey time improvements of between 2.58 (all stations stopper) and 6.83 minutes (non-stop Exeter to Barnstaple) could be achieved, if line speed increases to 80mph were adopted between Yeoford and Lapford, and 85mph between Eggesford and Barnstaple. However, it is important to note that linespeed increases above 75mph would warrant alterations to track geometry, as well as gauging and strengthening work at multiple overbridges that would be affected, to maintain safety compliance. As a result, better value may be achieved through investment in modernising signalling and operations, with more limited speed enhancements, where these can be efficiently and usefully carried out, as an alternative way of improving journey times and service frequency on the NDL.

Following the 2021 study, further route analysis was undertaken to investigate how the NDL could accommodate future growth by increasing frequency throughout the day, building on the peak-hours only uplift appraised in the aforementioned study. High-level timetable work was undertaken by the Advance Timetable Team (ATT), to assess the feasibility of accommodating an all-day 2tph frequency for Barnstaple services. Infrastructure interventions identified included multiple passing loops/redoubling, resignalling and linespeed increases. There are currently no proposals to increase the frequency on the Okehampton line above its existing 1tph.

ESDD PACE A Report Purpose

Based on the identified infrastructure interventions, the Engineering Services Design & Delivery Team (ESDD) were remitted to appraise (at a high level) the feasibility of their implementation as enablers for increasing Barnstaple branch services to 2tph throughout the day and reducing journey times. The outcomes of these high-level appraisals were detailed in a PACE A Report (2025), and this paper summarises the report's key findings and recommendations.

The report presents the interventions as possible enhancement options, however further, more detailed analysis is required to progress NDL investment proposals to SOBC or OBC stage. This strategic case development work may also unlock development opportunities for reopening the line between Barnstaple and Bideford, as referenced in recent campaign work by Railfuture's Northern Devon Railway Development Alliance (NRDA). These aspirations are also referenced in the Devon and Torbay Local Transport Plan 4² (July 2025), and the Peninsula Transport Strategic Implementation Plan 2025 – 2050³. However, the ESDD PACE A report is solely concerned with the upgrades needed to the existing line to improve the existing service to Barnstaple.

Detail around the feasibility of the interventions appraised in the ESDD Pace A (V2) report will be used to inform a more detailed ATT appraisal ([see Next Steps](#)), to identify what can materially be achieved in terms of service uplifts. This work, which will require funding, will also help to identify any underlying issues that may have been overlooked. It may be more economically viable for these enhancements to be delivered in a phased, incremental approach, which may allow initial benefits to be realised sooner. This approach will be considered as part of the proposed ATT analysis.

² [Devon and Torbay Local Transport Plan 4, 2025-2040 - Roads and transport](#)

³ [Peninsula Transport Strategic Implementation Plan 2025/2050 | Peninsula Transport](#)

Proposed Interventions

Intervention 1: Twin-track Extension: Newton St. Cyres to Coleford Junction

Currently, the North Devon line is single track between Cowley Bridge Junction and Single Line Junction, just east (low mileage) of Crediton Station, however this alignment was previously double track. At Single Line Junction, there is a turnout to provide a separate down line leading into Crediton Station.

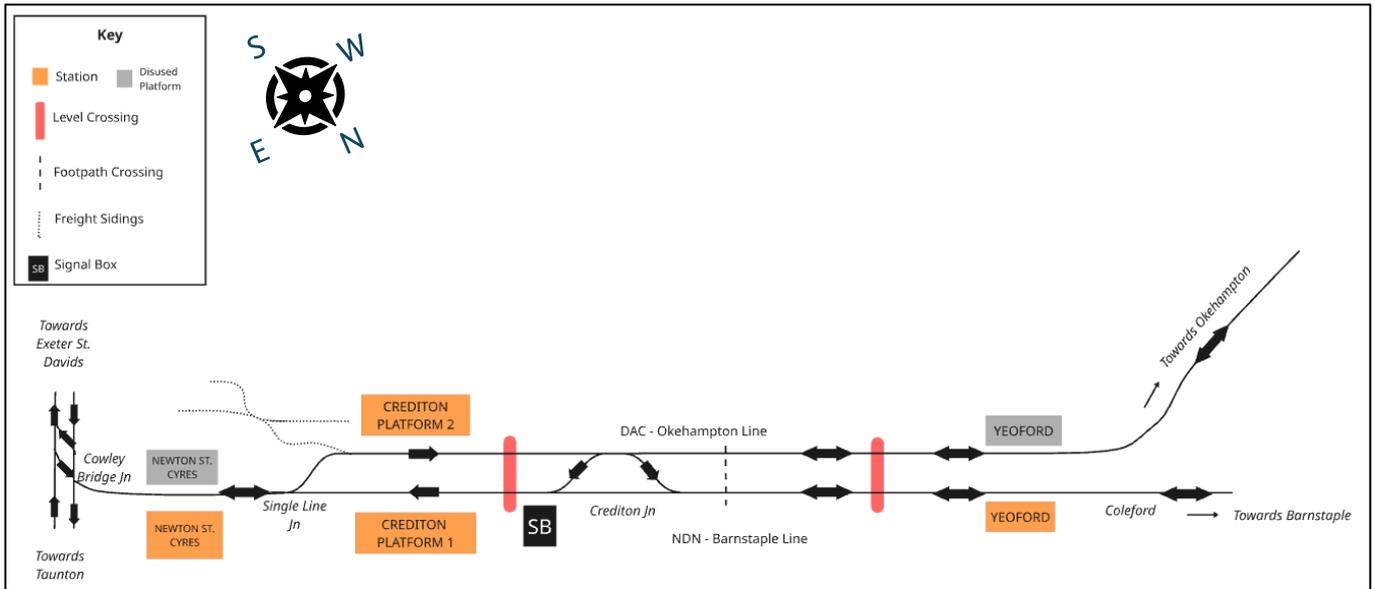


Figure 1: Simplified Existing North Devon Line Layout between Cowley Bridge Junction and Coleford. (Not to scale).

Immediately to the west of Crediton station, Crediton Junction is the point where the twin-tracks separate into two distinct bi-directional lines, separating Barnstaple and Okehampton services, which limits capacity. These are former unidirectional Up and Down lines, prior to the removal and plain-lining of Coleford Junction. The section of the Okehampton line between Crediton and Coleford (the former Down line) is currently limited to 40mph due to the older jointed track, which extends journey times.

To address this, the ESDD report proposes the following work:

- **Re-lay a second track, beginning from a new turnout to the east of Newton St. Cyres station (176mi 51ch).**
 - This would provide continuous up and down lines between Newton St. Cyres and Coleford Junction, where the Okehampton line diverges away from the Barnstaple line.
 - This would replace the current bi-directional arrangement between Crediton Junction and Coleford.
 - The junction turnout would be designed for 70mph, however a 40mph speed will need to remain in place as far as Crediton station, due to the geometry of the station. This would have a negligible effect on journey time, as all services would be scheduled to stop at Crediton.

- To the east of CREDITON, the linespeed on the existing track alignment could be increased to 75mph without the need for any significant realignment or recanting work.
- Additionally, replacement of the jointed track between CREDITON and Coleford on the Down line (DAC) would also enable an increase to 75mph, if Salmon Pool Automatic Open Level Crossing is also upgraded to improve the level of protection.
- Double tracking through Newton St. Cyres station would require reinstatement of the station’s disused second platform, as referenced in section 6.

A potential variation on this intervention that is not considered in the PACE report could be to retain the existing single-track layout through Newton St. Cyres station and locate the turnout further to the north-west (high mileage) of Newton St. Cyres station, to reduce costs by avoiding the need to reinstate the second platform. A second platform may be difficult to justify given the station’s lower passenger numbers, relative to other more major stations on the line such as CREDITON and Barnstaple.

Advance timetable analysis would be required to understand whether positioning the turnout to the north-west of Newton St. Cyres would impact the ability to cater for an increased train frequency, based on train passing points under new timetable assumptions. This information would be subject to further consideration in later PACE stages, as turnout placement also depends on geotechnical factors.

- Remove signals fouling the location of the new Down line and replace them with new signals to control train movements to and from the single line to the east of Newton St. Cyres.
- Re-signal the twin-track lines, with options including ETCS, or colour light signals with train detection by means of axle counters.
- Plain-line the existing CREDITON Junction (subject to agreement with train operators and maintenance teams that this is no longer required).

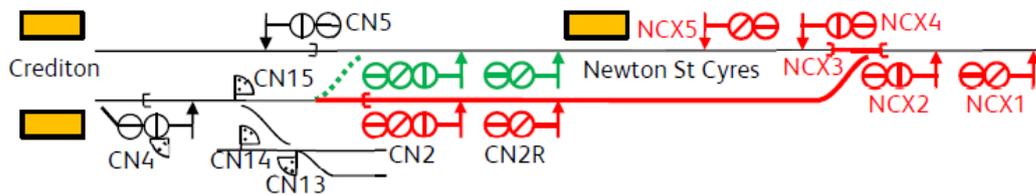


Figure 2: (From ESDD PACE A Report) Track diagram showing proposed starting point for the twin track section, to the east of Newton St. Cyres in the Exeter direction. This also shows the suggested signalling arrangements.

Intervention 2: Reinstating Coleford Junction

The point where the Barnstaple and Okehampton lines diverge is currently separate, with no crossover linking the two, following the 1970s rationalisation. The ESDD report proposed to reinstate this junction, which would enable a twin-track arrangement to be implemented through to Newton St. Cyres, replacing the current separate bi-directional operation.

Three options have been proposed for the design of this junction:

1) Pair of high-speed crossovers:

- The preferred option.
- Easiest to maintain.
- Up Direction towards Exeter: Okehampton line (DAC) to Barnstaple Line (NDN) 40mph crossover.
- Potential to increase the linespeed of the DAC north of Coleford Junction from 40mph to 50mph, if strike ins for the operation of Penston level crossing could be adjusted.
- Down direction towards Barnstaple: Okehampton line (DAC) to Barnstaple Line (NDN) 70mph crossover.
- Existing linespeeds are therefore unaffected, with no negative impact on journey times.

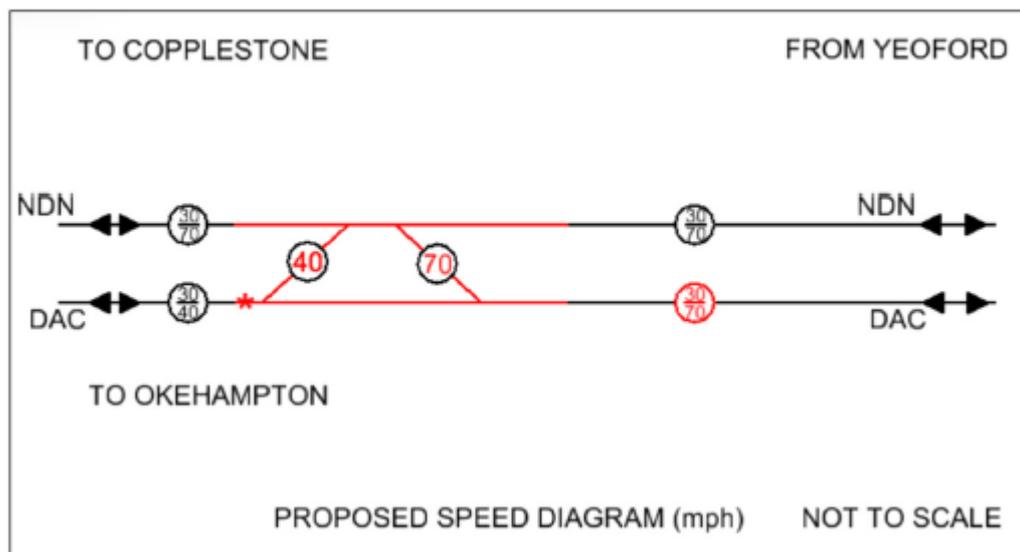


Figure 3: (From ESDD PACE A Report) Track diagram showing the proposed linespeed arrangement assuming the installation of a new pair of high-speed crossovers, culminating in the reinstatement of Coleford Junction.

2) Remodelling as a double junction

- Constrained to a maximum speed of 40mph.
- Significant earthworks required; option deemed unfeasible.

3) Scissors Crossover

- Maximum speed: 25 mph.
- Slower linespeed relative to the other options, which would increase journey times, so option deemed sub-optimal.

Intervention 3: Passing Loops and Twin Tracking

To enable service increases to 2tph on the North Devon Line, previous timetable analysis showed that three passing loops are required.

For each passing loop area proposed, the PACE study aimed to identify where there would be potential challenges to installing a second track, which might impact feasibility and/or cost, including impacts on level crossings, signalling, track geometry and earthworks. For each passing loop location, further consideration is needed on whether the stations they pass through would require an operational second platform.

Additionally, track renewals would be required for realignment, as well as regrading and clearing of embankments and slopes, and drainage improvements. Various structural interventions to affected retaining walls, culverts, overbridges, and underline structures would also be necessary. Level crossings within the passing loop or twin track location will also require risk assessment to determine whether upgrades are required to ensure they remain safe, such as miniature stop lights. Feedback from the relevant Level Crossing Manager suggests an upper-end cost of circa £6.5 million required for improvements to user worked crossings.

Table 1 (below) details the locations which were considered, with constraints raised. For completeness, the twin track section between Newton St. Cyres and Coleford Junction (intervention 1) is also referenced.

Whilst the recommended placement mileages are detailed below, further appraisal of optimal loop length will take place in future PACE stages. The current assumptions on positioning are based on current Class 158 timings, so this may be affected in part by currently unknown factors around the acceleration and braking performance of the prospective new GWR train fleet that will replace existing diesel multiple units.

Proposed Loop/Twin Track Location	Mileage Assessed	Recommendation	Reasoning	Level Crossings Impacted
Newton St Cyres (East) to Coleford Junction	176mi 51ch to 179mi 20ch	Place between 176mi 51ch to 179mi 20ch	<p>Replicates previous (pre 1970s) double track alignment.</p> <p>Allows extended double track section to be operated as separate Up and Down lines.</p>	<p>Norton Farm 1 (175mi 64ch)</p> <p>Norton Farm 2 (176mi 21ch)</p> <p>Hookway (178mi 42ch)</p> <p>Well Park Farm (178mi 72ch)</p> <p>Crediton (179mi 26ch)</p>
PL 1. Morchard Road Station to Lapford Station	187mi 38c to 189mi 65c (+ 2 miles either side)	Place between 187mi 15ch and 190mi 15ch.	<p>Allows both turnouts on straight track, optimising linespeed.</p> <p>Loop to terminate at the high mileage end before reaching a timber bridge with missing Down side components.</p>	<p>Station Hill (189m 71ch)</p>
PL 2. Kings Nympton Station to Portsmouth Arms Station	197mi 51ch to 200mi 38ch (+ 2 miles either side)	Place between 196mi 77ch and 201mi 50ch	<p>Ensures both turnouts are on straight track, optimising linespeed.</p> <p>Access point creation opportunity given proximity of low mileage turnout to overbridge at 196mi 75ch.</p>	<p>Newnham Barton Farm (198mi 01ch)</p> <p>Higher Doomsford (198mi 59ch)</p> <p>Braggamarsh 1 (199mi 15ch)</p> <p>Braggamarsh 2 (199mi 42ch)</p> <p>Portsmouth Arms 1 (200mi 38ch)</p> <p>Scoop 1 (200mi 47ch)</p> <p>Portsmouth Arms 2 (200mi 51ch)</p>

PL 3. Chapelton to Barnstaple Station	209mi to 211mi 25ch (2 miles from Barnstaple)	Place new 60mph right-hand turnout at 209mi 09ch. Track to extend to Barnstaple terminus, with potential for use either for stabling, and/or as an operational second platform.	Ensures the turnout is on a straight alignment, supporting a 60mph linespeed. Potential to modify the level crossing on the approach to the turnout (209mi 07ch) to create a new access point if required.	Court Farm 3 (209mi 55ch) Court Farm 4 (210mi 23ch)
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Table 1: List of specific location recommendations for the placement twin-track and passing loop proposals.

Signalling Options

Removal of Token Working

Retaining the existing token working system with new token working machines for each passing loop is deemed impractical for the operation of the line, given how this outdated method of signalling adds to journey time and creates inefficiency.

Therefore, a tokenless block enhancement is recommended. Options for this include either replacement with fixed colour light signals and axle counters, or ETCS implementation. The latter is not formally assessed in the ESDD PACE A report, but could be subject to subsequent appraisal if appropriate. The introduction of a GWR train fleet in the 2030s may offer opportunities to introduce this in a more efficient manner than retrofitting the existing DMU fleet.

Alternatively, whilst there is a fleet of 24 ETCS-fitted Class 158s that are soon to be released from Transport for Wales, high C6 maintenance examination costs which are soon due for this fleet may present a barrier to GWR taking them on-lease, unless offered by the leasing company at a competitive cost.

Resignalling Implications

Okehampton Branch

Currently, the Okehampton branch is signalled using one token machine at Crediton Signal Box. If token working is to be eliminated on the North Devon Line, this would require train detection to be installed along the branch to Okehampton. Given its length, axle counters are deemed the most appropriate form of detection.

Changing the operation of the line to train detection would also have implications for the potential reinstatement of freight services on the line beyond Okehampton to Meldon Quarry, pending further discussions with the site owner. Containing Okehampton station itself within its own detection section could improve operational flexibility and resilience, particularly once the new Okehampton Interchange station has opened.

New Passing Loops

Assuming the fixed colour light signals and axle counters approach, the Morchard Road to Lapford, and Kings Nympton to Portsmouth Arms passing loops would each require eight new signals, as shown on the example below. These provide the necessary level of protection for train movements to and from the single line on either side of the loop, and the facility to hold a train in either track within the loop to allow another train from the opposite direction to pass safely.

Point machines would also be required at each end of the loop, as shown by LPX3 and LPX8.

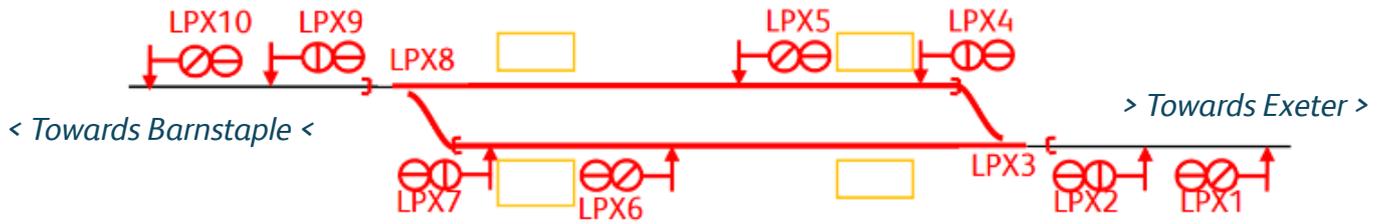


Figure 4: (From ESDD PACE A report) Proposed passing loop arrangement for Morchard Road to Lapford and Kings Nympton to Portsmouth Arms, with signalling.

Eggesford Station Loop

This is an existing loop, within which the Eggesford station platforms are situated. The four token machines would be replaced by six signals, controlling the approaches to (and exits from) this loop, as below. Eggesford loop currently consists of two outdated train-operated point mechanisms, which are trailing and spring-loaded. These are non-standard nationally and would also be replaced with conventional modern point machines. These would require the installation of a new control system from Crediton signal box.



Figure 5: (From ESDD PACE A Report) Eggesford Station Passing Loop Proposed Signalling Layout

Chapelton to Barnstaple

All pointwork at Barnstaple would need to be motorised, and the ground frame recovered. Signalling will be required to protect access to the single line from Chapelton eastwards towards Eggesford. A new crossover would be required to allow movements from a reinstated stabling line or platform 2 at Barnstaple onto the Up line. There is currently an Up siding, this could be repurposed as the new Up line, and a new Up siding created in the place of the locomotive run-round. New signalling would be required to protect this pointwork. Train detection by means of axle counters would be required between the Eggesford passing loop and Barnstaple station.

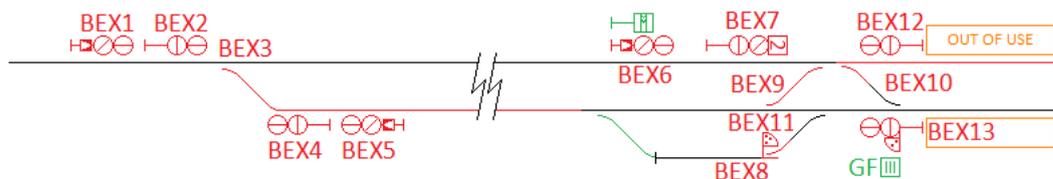


Figure 6: (From ESDD PACE A Report) Barnstaple to Chapelton Twin-tracking, with track interventions in red.

Signalling Control Point

The Western Route Strategy preference is to retain the Signal Box at Crediton as the signalling control point for the line in the medium term, with longer term aspirations to transfer control to Exeter Panel Signal Box. However, current space for additional control areas at Exeter is limited.

If tokenless block signalling were to be adopted, the existing control panel at Crediton Signal Box would need to be replaced, potentially by the installation of a new signalling workstation at the box. However, the size of the signal box, and the ability to maintain operations during conversion works, are possible constraints that would warrant further consideration.

Transferring control to an alternative location, such as Exeter Panel Signal Box, would require the upgrade of Crediton level crossing as this crossing is controlled by the signaller at Crediton Signal Box.

Level Crossings

Localised level crossing mitigations will be necessary, for example to limit the overall risk increase associated with a higher train service frequency, and allow higher approach speeds, thus helping to reduce journey times. Crossings affected by track redoubling for passing loops (as identified in section 3) may need to be upgraded or removed/replaced by footbridges, subject to further assessment.

Level Crossing Improvement Recommendations

The remit for the PACE A report specified a high-level investigation on options to upgrade Eggesford and Salmon Pool level crossings, recommendations are outlined below. Further work is required to assess options for other crossings, including Umberleigh Automatic Open Crossing (204mi 32ch).

Level Crossing Name	Rationale for Improvement	Recommendation	Benefits
Hookway (178mi 42ch)	Located within proposed Newton St. Cyres East to Crediton redoubling section. This work will affect crossing risk score.	Amend crossing furniture to make compatible with double track and upgrade to Miniature Stop Light (MSL)	Crossing closure avoided and higher level of protection provided.
Park 2 (179mi 54ch)	Linespeed increase between Crediton (west) and Coleford.	Upgrade to MSL	Higher level of protection provided to accommodate faster trains.
Salmon Pool (180mi 09ch)	Currently automatic barrier crossing locally monitored, requiring trains to slow on approach.	Upgrade to Manually Controlled Barriers (CCTV or Obstacle Detection)	Removes need for trains to slow to crossing speed, and higher level of protection. CCTV preferable as space for obstacle detection equipment is limited.

Penston (184mi 0ch)	Sluing of rail for the high-speed crossover at Coleford would affect position of crossing furniture, needing it to be relocated. Crossing safety also impacted by linespeed increase.	Crossing already fitted with highest level of protection for its type. Closure and replacement with a footbridge if raising linespeed increases the crossing risk score.	Footbridge provides improved crossing safety.
Eggesford (193mi 57ch)	Currently traincrew operated; inefficient	Upgrade to Manually Controlled (Obstacle Detection)	High level of protection and removes workload from traincrew, increasing operational efficiency.

Table 2: Level Crossing Improvement Recommendations/Requirements and Benefits

Structures

Disused Platform Reinstatements

Twin-tracking from east (low-mileage) of Newton St. Cyres to Coleford Junction ([intervention 1](#)) provides scope to reintroduce disused second platforms at Newton St. Cyres and Yeoford stations. Given the length of time since last use, the structural integrity of these platforms is uncertain, and would require further investigation at the PACE 1 stage.

Footbridges or step-free walking routes would need to be integrated into the carriageway to allow safe passenger access and transfer between these platforms, and an engineering solution (e.g. Harrington Humps) would also be required to reduce the step between the train and the platform. Further work would be required to confirm the feasibility of these platform access options, including possible carriageway assessments and interventions, and land purchase, which may also be required.

Existing Platform Extensions

The report references an aspired minimum operational platform length to accommodate longer trains in future. However, selective door operation (SDO) is intended for the future local train fleet, which may remove the need for platform extensions.

In the event that platform lengthening is required, for example to accommodate longer trains prior to an SDO-fitted fleet being introduced, initial “preferred” extension options have been identified at this high-level design stage as outlined below, with attention paid to factors including land purchase, fire engineering risk assessment, and station equipment.

Station	Total Extension Required (metres)	Preferred platform end to extended (subject to further, more detailed assessments)
Newton St. Cyres	5.5	Exeter end
Copplestone	37	Both ends
Morchard Road	34.5	Barnstaple end
Lapford	46.5	Barnstaple end
Eggesford Platform 2	62.0	Barnstaple end
Eggesford Platform 1	70.0	Barnstaple end (40m), Exeter end (30m)
Kings Nympton	36.0	Barnstaple end
Portsmouth Arms	53.0	Barnstaple end
Chapelton	27.5	Exeter end

Table 3: Platform extension lengths required to meet the aspirational 124m minimum length

Longitudinal Timber Bridges

The ESDD analysis identified several longitudinal timber bridges which would be affected by increasing line speeds or introducing twin-track/passing loops. These bridges may require interventions, such as strengthening and gauging checks to make them compliant. Appraisal of specific bridge interventions would take place at a subsequent PACE stage.

ELR	Mileage	Bridge Name	Impacted by Line Speed Increase	Impacted by Twin Tracking or Passing Loop Provision
DAC	177mi 21ch	Newton St. Cyres Flood Openings		✓
DAC	178mi 61ch	Yeo River 549/Crediton Golf Course		✓
DAC	180mi 16ch	<u>Beare Mill Stream</u> Crediton	✓	
DAC	180mi 19ch	Yeo River Crediton 554	✓	
DAC	181mi 60ch	Yeo River 560	✓	
DAC	181mi 61.5ch	<u>Mill Leat</u>	✓	
DAC	182mi 38ch	Hill Barton Farm	✓	
DAC	182mi 71ch	Yeo River/Yeoford Station 568	✓	
DAC	183mi 13ch	<u>Trowney River</u>	✓	
NDN	189mi 54ch	Yeo River 26		✓
NDN	210mi 29ch	Pill		✓

Table 4: List of all timber bridges that would be affected by linespeed increases, twin tracking or passing loop implementation.

CP7 Structures Renewals of Relevance

The below table details all renewals and interventions that are currently planned for Control Period 7 which are located in the areas where enhancement interventions have been proposed.

CP7 Work	Work	CP7 Year
Creedy River Underbridge 177mi	Scour protection	3
Crediton Level Crossing 179mi	Renewal	5
Copplestone Station 185mi	Gauge clearance, drainage, track renewal and platform	3
East Brake Bridge 188mi	Gauge clearance, masonry repairs, new parapets	3
Nymet Overbridge 190mi	Gauge clearance checks	2

Table 5: List of CP7 structures renewals in areas where enhancements interventions have been proposed.

Environmental Considerations

The North Devon Line is outside of any mining or landfill areas, and the land is not covered by any environmental designations. There are also no abandoned bombs, and the line is not on any contaminated land.

Geotechnical and Topographical Considerations

Key features for consideration are identified below:

Flood Risk:

- The NDL follows the valleys of the rivers Taw, Yeo and Creedy, with substantial portions in areas classified as at high long-term flood risk. This has led to significant disruption to services on the line resulting from flood-related scour damage in 2026.
- The risk of infrastructural damage to the line is lower between Crediton and Newton St. Cyres station due to it being elevated on embankments.
- Between Newton St. Cyres and Exeter, flood risk to the line remains high.

Earthworks:

- Annual inspections determine where remedial earthworks are required.
- Following a preliminary assessment, specific interventions are anticipated in several locations, in connection with the proposed twin-tracking, passing loop and junction enhancements, as outlined in the table below. These would require more detailed appraisal in future PACE stages.

Possible Earthworks Interventions Required (subject to more detailed investigation)	Twin Track Extension: Newton St. Cyres to Coleford Jn	Coleford Junction Enhancement	Passing Loop: Lapford to Morchard Road	Passing Loop: Portsmouth Arms to Kings Nympton	Twin Track: Chapelton to Barnstaple
Rock or soil scaling of loose material from slope and soil nailing/rock bolting with mesh.	✓		✓		
Earthworks regrade or retaining wall to support the cess.		✓	✓		
Earthworks regrade with rabbit protection netting on slope		✓			
Drainage work/assessment			✓	✓	✓
Slope regrade			✓	✓	
De-vegetation work			✓		

Table 6: Possible Earthworks interventions at areas where enhancement interventions would take place.

Next Steps

The Strategic Planning and Development team suggest that it would be important to identify a way in which the NDL enhancements can be delivered incrementally, as this may be more viable to fund, as it would divide the cost of upgrading the line over a series of distinct phases, rather than a one large whole cost of delivering the enhancements as a combined package of work. This approach would also ensure that the infrastructure improvement increments which deliver the greatest overall improvement to passengers are prioritised, such that their benefits would be realised at the earliest opportunity.

We therefore propose to work with GWR to agree on this potential phased approach, based on the options and recommendations outlined in the ESDD PACE A Report.

Subsequently, we propose to commission timetable analysis to consider the proposed infrastructure improvement phases, and to provide feedback on the degree of journey time reductions and/or train service frequency increases that would be achieved as a result of delivering each phase. The outcome of this analysis would be a conclusive assessment of the true scope and optimal phasing of infrastructure interventions that would be required to deliver the necessary journey time and frequency improvements to passengers on the NDL. Completing this process would then support the development of a more accurate and compelling SOBC for investment.

Lastly, it is important to clarify that funding commitment for business case development through to delivery of enhancements to the NDL is contingent on securing a funder, which has not yet happened at the time of publication of this paper.

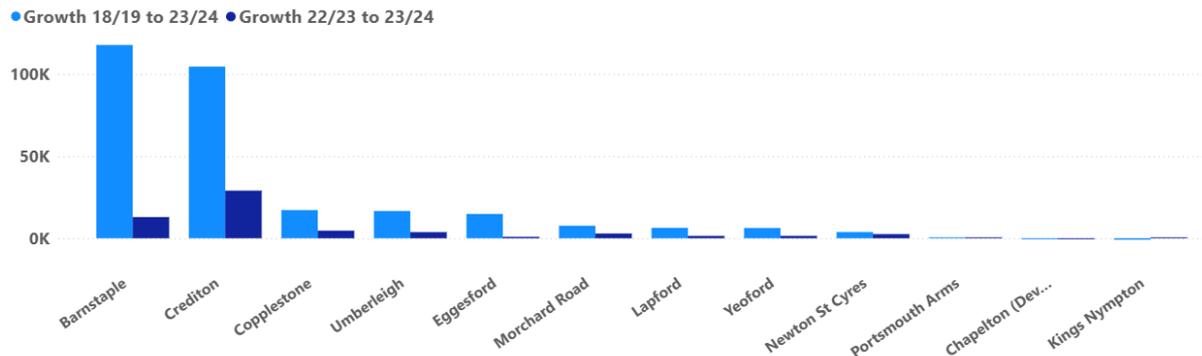
Appendices

North Devon Line Growth Volumes (ORR)



North Devon Line Station Usage Data (ORR)

Passenger Growth 18/19 to 23/24 and 22/23 to 23/24 by Station



% Change in Station Usage 18/19 to 23/24 and 22/23 to 23/24

