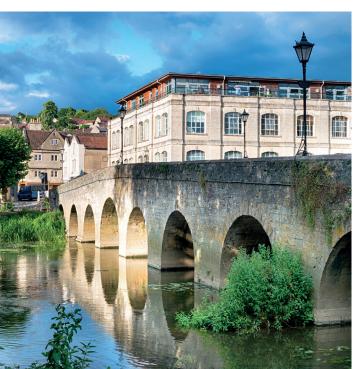


The Bath & Wiltshire Metro

How low-cost, high-impact rail upgrades can unlock new homes, local economic growth and reduce congestion for the Bath and Wiltshire area









Amey ConnectedCities



Low-cost, high-impact rail upgrades can unlock new homes, local economic growth and reduce congestion for the Bath and Wiltshire area

Wiltshire, rich in heritage and natural beauty, is constrained by poor public transport, rising road congestion and high housing targets. But with much of its historic rail infrastructure still intact, Wiltshire has a rare opportunity: to deliver a low-cost, high-impact 'metro' service that can better connect its towns, support new homes and revitalise the local economy whilst protecting its countryside.

A consortium of engineering specialists Amey, urban design and housing specialists Create Streets and Connected Cities and the campaign group Transport for New Homes have combined to bring forward this proposal.

The Bath and Wiltshire Metro is a series of modular infrastructure interventions, which can be made independently, to increase local rail services from six trains per day to two trains per hour. This would form the spine to connect existing towns and homes and accommodate 50,000 homes across the region

at greater densities using brownfield and already allocated sites.

Much of Wiltshire's track remains in place from historic station closures, giving a strong platform to restore a reliable and efficient 'metro' service for a relatively low cost. The Bath and Wiltshire Metro area is a collection of towns within a 20km radius, containing 400,000 people, a population larger than Cardiff, Stoke and Southampton.



All the track for the metro route already exists making upgrades comparatively cheap

The strategic aim of the Bath and Wiltshire Metro:



1. Enable higher density housing to be built on less land and meet Wiltshire's housing requirements



2. Reduce road congestion by enabling more journeys to be made by rail



3. Boost local economies by improving access to jobs and amenities for 400,000 residents

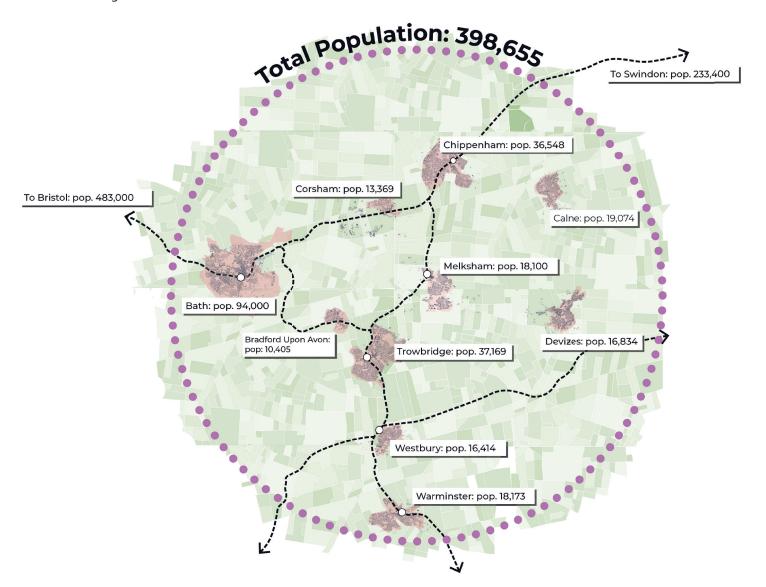
A resident's perspective

Despite its sizeable population, Wiltshire faces poor and infrequent rail services and increasing road congestion as a result. Most towns in Wiltshire have train stations already, but they have limited services and don't connect well to each other.

For example between the two key Wiltshire towns of Swindon and Melksham there are just nine direct services a day, while the equivalent distance between Newport and Cardiff has around 200 direct services (running every 15 minutes). With just two trains between 3pm and 6pm, it effectively rules out any public transport commute. People simply have to drive to get around.

"I live in Chippenham, and like to go the cinema in Trowbridge, but I have to drive there and back because the last train home is at 10pm – when I don't have my car I'm completely stuck. It's only 10 miles away!"

"I live in Bradford upon Avon and have lots of friends in Frome where there are some great pubs – there's just one train per hour in the afternoon there are only two trains home after 8:30pm so I often can't see them because it's just too difficult getting there and back."



At nearly 400,000 the population of the West Wiltshire area exceeds the population of many cities in the UK, yet has patchy and infrequent rail services, prompting people to drive everywhere instead.

The infrastructure components of the Bath and Wiltshire Metro

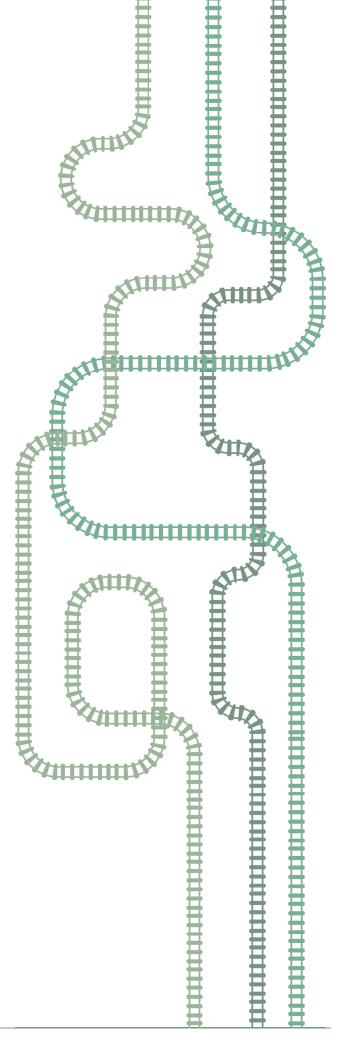
A small number of low-cost, and, crucially, quick to implement, interventions would increase the frequency and reliability of the local rail network, creating a Wiltshire 'metro' service. The interventions could be staged alongside housing delivery to both enable the delivery of more homes on allocated, often brownfield land, and such that housing may contribute to the costs of this infrastructure.

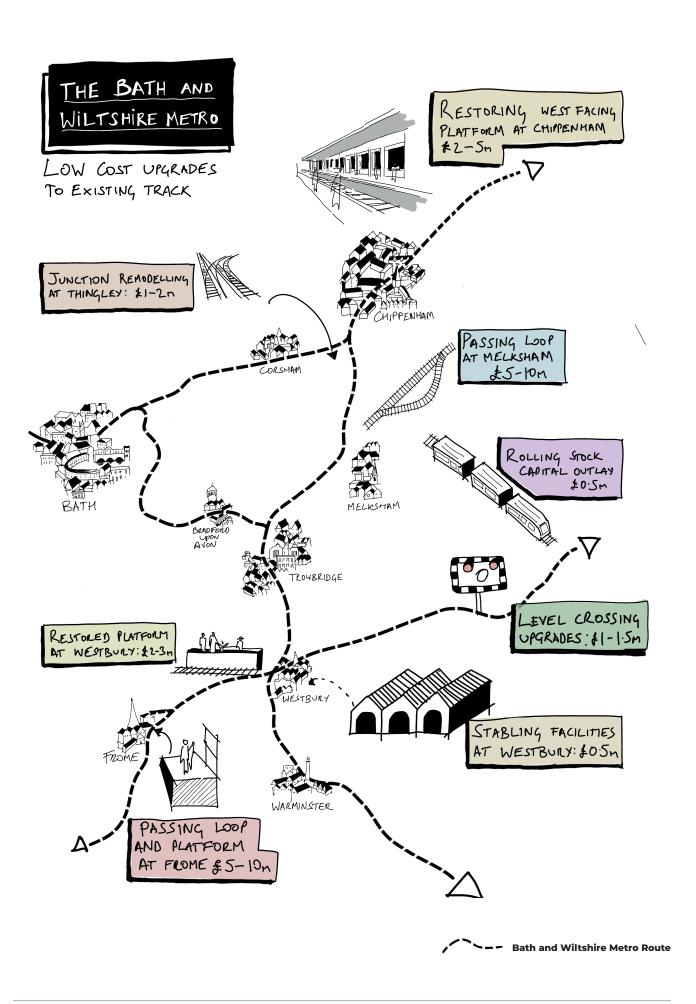
The improvements can be done in any order, incrementally, without the need to spend large sums up front to make it all work. Interventions like these could be completed in under three years. The international engineering firm Amey has scoped the following upgrades.

These upgrades are:

- Restoring west-facing platform at Chippenham: £2-5m.
- Junction remodelling at Thingley: £1-2m.
- Passing loop on the Melksham branch: £5-10m
- Restored platform at Westbury: £2-3m
- Passing loop and platform at Frome: £5-10m
- Level crossing upgrades/closures: £1-1.5m
- Stabling facilities at Westbury: £0.5m
- Rolling stock capital outlay: £0.5m

Total cost: £17m - 32.5m





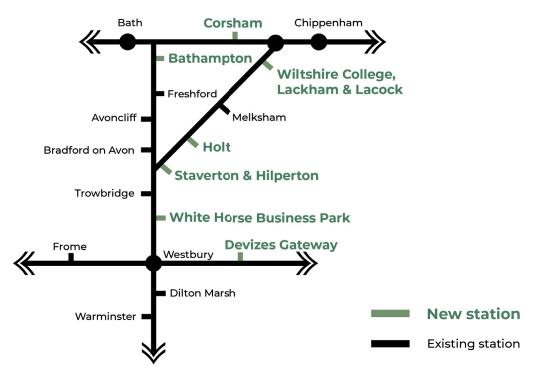
New stations for new homes

Alongside upgrades to the existing lies, the existing but unused track can also be put to better use by restoring and opening seven new stations in local network where there are existing towns. New development can be built around these stations too, making truly sustainable new homes. Following revisions to the NPPF in late 2024, Wiltshire's annual target rose 84 per cent, to around 3,500 homes per year, with new stations and better rail frequencies these extra homes can be delivered on less land with gentle density. Based on recent station construction, costs for new station are likely to be £8-15m each¹:

- Corsham (pop. 13,500)
- Bathampton (pop. 10,000)
- Wiltshire College, Lackham & Lacock (pop 1,000)
- Holt (pop. 2,000)
- Staverton & Hilperton (pop. 9,500)
- White Horse Business Park (pop. 14,000)
- Devizes Gateway

Total cost: £56m - £105m





Benefits

Making these upgrades to Wiltshire's existing rail infrastructure will be transformational for the local economies, including the city of Bath, and large neighbouring towns such as Chippenham, Melksham² and Trowbridge, boosting jobs, travel and investment. The upgrades will result in a regular two trains per hour service across the metro route.

Similar schemes across the UK are proving successful, such as the Northern Hub and the South Wales Metro, and The Northern Hub is expected to boost the northern economy by £4 billion, with 700 more trains per day introduced across the network, allowing people to move more freely.³

Early predictions for the Core Valley Lines were for an anticipated 20 per cent modal shift⁴ from cars to trains, and an 11 per cent reduction in car trips across the region.⁵ Our research on a 7,500 Chippenham masterplan found that increasing local train frequency at Chippenham Station, alongside other bus and active travel improvements, would see up to a 26 per cent reduction in car journeys, resulting in 12,000 fewer car trips a day. Across Wiltshire, these rail upgrades would see thousands of car trips taken off the roads every day, freeing up space on local roads, and national routes both for commuters who have to drive and freight.

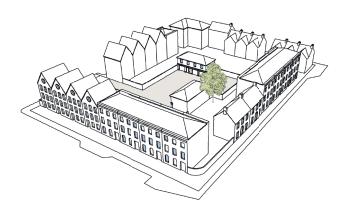


Route	Current no. trains departing hourly	No. of trains departing hourly after upgrades
Frome, Westbury, Trowbridge & Melksham to Chippenham & Swindon	<1 (6 per day)	2* (*change at Chippenham for Swindon)
Warminster, Westbury, Trowbridge & Bradford upon Avon to Bath & Bristol	3	4
Swindon & Chippenham to Bath & Bristol	2	4
Frome to Bath & Bristol	Not practicable	2* (*change at Westbury)
Melksham to Bath & Bristol	Not practicable	2* (*change at Trowbridge)
Warminster to Chippenham & Swindon	Not practicable	2* (*change at Westbury or Trowbridge)

Building communities and unlocking new homes around the Bath and Wiltshire Metro

Housing targets for Wiltshire have risen from 1,917 to 3,476 homes per annum requiring new allocations to be found. These rail improvements will allow for new homes to be built on much less land. In total around 50,000 thousand extra homes can be built due to the improved rail infrastructure allowing higher-density development.

Households with easy, walkable and cyclable access to a well-connected train station have more transport choice, this enables gentle density housing to be built. An example of this is the Chippenham masterplan from Create Streets.





An alternative masterplan for Chippenham: by masterplanning at a gentle density of around 50dph (shown here in green), homes can be built much closer to the rail station and centre of town, saving large swathes of countryside from low-density, car-dependent sprawl such as this previous masterplan for Chippenham (shown here in red).

Sharing value uplift of new homes to pay for infrastructure

The estimated cost for these upgrades is modest by infrastructure standards, at £17–32.5 million. Similarly, delivering the seven proposed new stations would cost between £56–105 million. Given the high market value of homes in the area, there is a strong business case for adopting a land value uplift sharing model, similar to the approach used for the Northumberland Line, where it covered 25 per cent of capital costs. Given the higher property values in this area compared to Northumberland, it is likely that an even greater share of capital costs could be met through this mechanism.



A quarter of capital costs for the Northumberland Line was funded by land value uplift capture.

Endnotes

- See for example the recent opening of Bow Street Station on the Cambrian line, in 2021, for a cost of £8m. This was a single platform, without a footbridge.
- See for example plans to develop the old tyre factory site in Melksham next to the station, where improved frequency would unlock much greater sustainable travel choice for hundreds of new homes.
- 3 Travel News (2012) 130m is a welcome show of confidence in rail, available at: https://www.breakingtravelnews.com/ news/article/130m-for-northern-hub-is-a-welcome-show-ofconfidence-in-rail/
- Transport Committee (2011), Written Evidence for the Cardiff Business Partnership, available at: https://publications. parliament.uk/pa/cm201012/cmselect/cmtran/1185/1185we44. htm
- Jones Lang Lasalle et al. (2013) A Cardiff Capital Region Metro: Impact Study, available at: https://www.gov.wales/sites/ default/files/publications/2018-06/south-wales-metro-impactstudy.pdf
- 6 Create Streets (2024) Stepping off the Road to Nowhere, p.51, available at: https://www.createstreets.com/wp-content/ uploads/2024/03/Road-to-Nowhere-110324.pdf

