

SCOTLAND'S NEXT TRAINS

The ambition and urgency for fleet investment





Introduction

Why Scotland needs new trains

Scotland's railway is a core component of the country's economic and social infrastructure, and a vital public service. It supports access to jobs and education, leisure and tourism, and contributes to climate and traffic-reduction targets. Yet **the full value of rail is often understated and poorly communicated**, meaning investment decisions can miss the benefits that a well-functioning network can deliver.

When rail is unreliable or unattractive, the costs are immediate: suppressed demand, lost revenue, increased road congestion, and reduced access to opportunity. Protecting the reliability and quality of the railway is essential to maintaining its wider value to Scotland.

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Two-thirds of ScotRail's trains will need to be replaced within the next 15 years."

Scotland currently has the second oldest fleet in Britain – a combination of 145 diesel and 203 electric trains – with the majority built between the 1970s and 1990s. By late 2026, ScotRail will be the only operator still using several of these older types, after others have modernised their fleets.

The good news is that recent upgrades and electrification have improved reliability. The electric trains introduced on the Edinburgh-Glasgow route in 2019 have set a new benchmark for service quality, providing faster journeys, more seats, and improved passenger facilities across the Central Belt. Interim replacement has begun on intercity routes, with the current High Speed Train fleet due to be phased out from 2027, replaced by repurposed Class 222 Meridians.

However, **overall fleet renewal is now urgent**. Around two-thirds of ScotRail's trains will need to be replaced within the next 15 years to avoid a railway defined by declining reliability.

The challenge is that the Scottish Government faces **tight fiscal constraints**, with the transport budget competing against other priorities such as health, education, and social services. In this context, investment decisions for ScotRail must place cost-effectiveness and efficiency at the heart of planning, ensuring that every pound delivers maximum value for passengers, taxpayers, and the wider economy.



ScotRail's InterCity fleet (Class 125s) were built in the 1970s.



The value of rail

What can new trains deliver?

Beyond the trains themselves, Scotland's railway plays a wider role in connecting communities, supporting business and tourism, and influencing how Scotland is perceived at home and abroad.

Delays to fleet renewal are therefore not neutral: over time, they will erode the railway's ability to deliver these benefits. Replacing the ageing fleet is not just about keeping trains running, but about **unlocking a modern, ambitious rail network which is a source of national pride.**

New trains will:



Generate wider economic value

Most appraisals understate the full value of rail. Beyond the [£2.50 generated for every £1 spent](#) and ScotRail's [£4billion annual contribution](#) to tourism, leisure, and hospitality, reliable services expand the labour market catchment, putting more jobs within distance of people's homes and boosting productivity. Looking at the wider economy, ScotRail generates fiscal benefits, including higher tax receipts from increased employment and reduced public spending as more people can access work, in addition to avoided costs from road maintenance and expansion. In this way, rail delivers a far stronger return on public investment than traditional measures suggest.



Improve connectivity and regional development

ScotRail is more than tracks and trains; it is a critical component of Scotland's infrastructure, serving over 360 stations across the country. Investing in new trains enhances network reliability, enabling smoother, more predictable journeys that connect people to work, education, and essential services, facilitating regional economic activity. ScotRail directly [employs over 5,000 people](#) in Scotland and supports around [11,300 jobs nationwide](#), underpinning productivity, regional development, and the growth of sectors such as tourism, leisure, and hospitality.



Boost patronage

Although ScotRail passenger numbers have been climbing year-on-year, the latest data shows that there are still [16% fewer](#) passenger journeys than in 2019. A reliable, modern fleet attracts more people to the railway. For instance, the Class 385 fleet introduced on the Edinburgh-Glasgow corridor in 2019 has facilitated continued [ridership growth](#) by helping provide faster journeys, more seats, and more services.



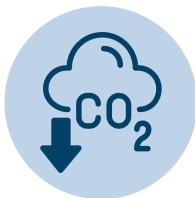
Upgrade passenger experience

New trains provide an opportunity to design services around passenger needs. Features such as level boarding, cycle storage, and upgraded catering increase accessibility, reduce stress, and build passenger loyalty, encouraging habitual use and boosting fare revenue. International examples, such as [Norway's family-dedicated carriages](#) or [Switzerland's panoramic scenic trains](#), show how thoughtful design can turn rail into an inclusive and compelling mode of travel which encourages modal shift from cars and strengthens the railway's broader economic and social impact.



Optimise railway cost-effectiveness

A modern, standardised fleet would improve the cost effectiveness of Scotland's railway. Higher passenger numbers directly translate into greater fare income, strengthening the commercial viability of services and reducing reliance on public subsidy. At the same time, new trains enable economies of scale in maintenance, upgrades and refurbishments. Improving energy efficiency also lowers operating costs over the life of the fleet.



Cut climate emissions

Replacing ageing fossil-fuel trains with electric units directly reduces CO₂ emissions from rail services. These energy-efficient and lower-maintenance trains also cut operational and lifecycle emissions. Beyond this, a modern and reliable rail network is a key enabler of Scotland's traffic-reduction targets. By encouraging passengers to switch from road (the [largest contributor](#) to transport emissions) to rail, trains cut traffic, reduce carbon emissions, and support Scotland's broader climate objectives.



Improve public health

Phasing out diesel trains eliminates harmful particulate matter around stations and rail corridors, directly [improving air quality](#) and community health. A modern fleet also encourages a shift from private cars to rail, which is [statistically safer](#) and replaces sedentary door-to-door driving with the increased physical activity naturally involved in traveling to and from the station.



Passenger experience & ridership

New trains upgrade passenger experience

Each year, ScotRail serves over [80 million passenger journeys](#), connecting communities across the country. Yet many passengers face overcrowding, limited luggage space, a lack of catering, and numerous accessibility barriers.

Upgrading the fleet is not just about the logistics of replacing trains: it is an opportunity to make rail a modern, reliable, and attractive public service that more people can use. Engaging passengers in the design of new trains, as Merseyrail has done, can enhance the passenger experience and support increased ridership.

On **intercity routes**, ageing trains are prone to delays, cascading disruption across the network. Families, leisure travellers, and long-distance commuters can face cramped seating, limited catering, and unpredictable journey times, making alternative travel more attractive.

Spacious seating, reliable air conditioning, accessible toilets, luggage storage, and quality onboard catering are all key requirements. Passengers would enjoy smoother, punctual trips with better views and more comfort, making rail a competitive, enjoyable alternative to road travel. Upgrading these services can turn Scotland's intercity routes into experiences in their own right, supporting tourism, access to work and education, and long-distance leisure travel.

For local communities, **rural routes** are vital lifelines, while for tourists they offer a gateway to Scotland's world-renowned landscapes and culture. These routes, including the West Highland and Far North lines, remain constrained by the fleet's oldest trains, with cramped seating, limited facilities, and unreliable heating. Modern diesel, or future battery- or hydrogen-powered trains, could transform this experience, providing spacious, warm carriages, level boarding, reliable toilets, luggage and cycle storage, and smooth, punctual journeys. Thoughtful design could include flexible seating options and tiered amenities - catering to daily travellers, families, and occasional visitors alike - without relying on expensive, tourist-only services. With a modern fleet for the rural network, ScotRail can strengthen community connections, support regional economies, and showcase Scotland's scenery, much like Switzerland's scenic routes, while remaining practical and sustainable for everyday use.

For regular users of Glasgow and Edinburgh **suburban** services, rail is more than transport: it is part of their routine. Overcrowding and limited amenities make travel frustrating for commuters, families, occasional travellers, and passengers with mobility needs alike. A new, standardised electric fleet would transform this experience: quieter trains with level boarding, ample seating, and generous space for bikes and luggage, designed to arrive predictably at the same platform each day, creating a sense of familiarity and ease. Consistent interiors, reliable timetables, and fewer cancellations make journeys feel automatic rather than effortful, encouraging habitual use.



CASE STUDY

Involving passengers in rolling stock decisions | Merseyrail

Merseyrail conducted an 18-month [passenger consultation](#) with Transport Focus to ensure its new trains were genuinely designed for passengers, by passengers.

A community focus group helped shape more than 20 features - from sliding steps and seat layouts to livery - ensuring the publicly owned fleet delivers comfort and accessibility, suitable for commuters and families alike.

The comprehensive final report was published in 2021, and the new fleet began running in January 2023.

Since then, Merseyrail has been recognised as the UK's [top train operator for customer satisfaction](#) and the most family-friendly operator, proving that engaging passengers in design delivers better journeys and stronger confidence in rail travel.

However, the fleet's [delayed rollout](#) also provides an important lesson for Scotland: passenger-led innovation should be supported by realistic timelines and strong governance to ensure benefits are realised on schedule.

New trains boost passenger numbers

Passenger demand in Scotland has [changed fundamentally](#) since the pandemic. Whilst peak commuting remains important, growth now comes from leisure and seasonal travel with [1 in 5](#) ScotRail passengers travelling for tourism or overnight stays. At the same time, Scotland is a [highly urban nation](#): around three-quarters of the population live in urban areas, and [over half](#) of all rail journeys start or end in Glasgow or Edinburgh. This creates significant untapped potential on suburban and inter-urban routes, particularly among infrequent travellers who could use rail more often. New train fleets play a central role in unlocking this demand - **improving reliability and first impressions.**

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Evidence shows that reliability and consistency are the strongest drivers of passenger confidence and repeat use. **ScotRail currently operates one of the most varied fleets in Britain**, running 10 different train types - far more than comparable UK operators - resulting in variable performance, uneven onboard standards, and higher disruption risk. For passengers, this translates into uncertainty: different trains on the same route, inconsistent layouts, and an experience that changes day to day. Standardised, modern fleets fundamentally change this dynamic. When the same train arrives at the same platform each day, with predictable capacity, level boarding, quiet running and dependable systems, travel becomes automatic rather than effortful. That familiarity is what converts occasional users into regular ones and underpins sustained ridership growth

For ScotRail, **fleet renewal should therefore be understood as a revenue-enabling investment:** increasing demand, supporting modal shift from road, boosting tourism and regional connectivity, and reducing long-term reliance on public subsidy by growing the number of journeys made by rail.

CASE STUDY

New trains drive up passenger numbers | Transport for Wales

Transport for Wales (TfW) has invested £800 million to modernise its fleet and introduce new trains across the network. The modern trains have enhanced passenger experience through greater comfort, accessibility, and capacity, helping to reduce overcrowding and meet rising demand.

Since the rollout, services have become more reliable, with TfW achieving the [greatest improvement in punctuality](#) among all UK train operators in 2025. This increased reliability has strengthened passenger confidence in rail travel and the new trains have expanded leisure and active travel opportunities. On the Heart of Wales line for instance, seating has doubled and 10 dedicated cycle spaces have been introduced, demonstrating how modern rolling stock can meet diverse passenger needs to grow ridership.

This, alongside improved payment options, marketing campaigns, and line reopenings, has driven a significant [increase in passenger journeys](#) and revenue (up nearly a fifth on the previous year). Double-digit annual ridership growth has been recorded on Core Valley Lines, which carry around 50% of all passenger journeys in Wales despite accounting for less than 10% of the network. This highlights how investment on high-demand corridors can deliver significant growth - a lesson directly relevant to Scotland's Central Belt routes.





Economy

New trains as an economic multiplier

Rail is a foundational enabler of economic activity. It provides access to work, education, services, and leisure opportunities. As [Transport Scotland](#) recognises, rail underpins labour markets, productivity, land use, and investment decisions across the economy. By connecting people and places reliably, rail lays the groundwork for broader economic benefits.

Conventional appraisals tend to understate rail's full economic value. While [every £1 invested](#) in rail is estimated to generate around £2.50 in wider economic benefits, and ScotRail contributes around [£4 billion](#) annually to tourism, leisure, and hospitality, these figures do not fully capture productivity uplift, agglomeration effects, or long-term fiscal returns. Improved reliability and capacity mean city-regions can operate as larger, more productive labour markets. This boosts productivity in existing firms while also supporting longer-term growth, as better connectivity attracts new businesses, housing and investment.

[Evidence](#) suggests that **poor transport infrastructure is constraining productivity growth** in both Scottish and UK cities outside London. High congestion, crowding, and unreliable commuter services reduce the effective size of cities, limiting economic output. Fleet renewal directly addresses these constraints by improving punctuality, capacity, and service resilience - particularly in the Central Belt, where Scotland's population density and employment concentration offer the greatest potential returns.

Rail also supports inclusive growth by improving mobility for everyone. With [1 in 5](#) people in Scotland identifying as disabled, accessible rail services ensure independence and participation in everyday life. For people without access to a car - including nearly three-quarters of unemployed job-seekers - reliable, modern transport opens up opportunities for work, education, and training. **Modern, level-boarding trains therefore reduce barriers to economic and social participation**, helping more people access employment, training, and community life.

Beyond direct economic impacts, investing in our railways supports wellbeing, healthier travel behaviours, and place-making. Stations act as anchors for local economic activity, supporting retail, hospitality, and services, while reliable intercity and rural services sustain regional economies and tourism in areas where alternative transport options are limited.

New trains boost revenue and public value

Higher ridership is essential to long-term revenue stability and reduced reliance on public subsidy. It is well documented that demand grows where the railway adapts to changing travel patterns and offers reliable, high-quality services. New trains play a central role in rebuilding confidence, converting suppressed demand into regular use, and supporting modal shift from road to rail.

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Increased patronage strengthens the fare box, generates wider fiscal returns through higher employment and tax receipts, and **reduces pressure on public finances by avoiding road congestion, maintenance, and expansion costs**. In this way, fleet renewal should be understood not as a cost to be managed, but as a revenue-enabling investment that delivers lasting economic (and public) value for Scotland.

New trains also directly influence mode choice, particularly on longer-distance and rural routes where the quality of the onboard environment materially affects whether people travel at all. Facilities such as seating availability, ventilation, heating, accessible toilets, luggage and cycle space, and ride quality are not marginal extras - they can be decisive factors for families, older passengers, tourists and long-distance commuters. International and UK experience shows that where modern fleets are introduced alongside reliable timetables, [passenger numbers rise](#) and fare box performance strengthens.



Whole-life costs & supply chain

The Scottish Government faces **tight fiscal constraints**, with transport funding competing against other priorities such as health, education, and social services. In this context, investment decisions for ScotRail must place cost-effectiveness and efficiency at the heart of planning, ensuring that every pound delivers maximum value for passengers, taxpayers, and the wider economy. Optimising whole-life costs and streamlining supply chains is therefore critical to modernising services without placing unsustainable pressure on the public purse.

New trains boost efficiency & reduce whole-life costs

ScotRail's current fleet presents significant operational and financial challenges. A varied mix of ageing trains increases maintenance complexity: depots must hold multiple spare parts inventories, and engineers require training across several systems. Older units are less reliable, leading to more frequent repairs, inspections, and service disruptions - all of which drive up operational and labour costs. **Fragmented fleet management makes it harder to standardise maintenance procedures, achieve economies of scale, or plan long-term**, leaving the system more expensive to operate over its life cycle than a modern, standardised fleet would be.

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Modern trains, in contrast, can reduce whole-life costs. Improved reliability, lower maintenance requirements, and higher operational performance directly reduce unscheduled costs, while indirect savings arise from fewer crew overtime hours, reduced compensation payments, and lower lost revenue. Evidence from other UK networks demonstrates this effect: [Greater Anglia](#)'s new bi-mode and electric trains have delivered industry-leading reliability, and [Transport for Wales](#) recorded one of the largest punctuality improvements among UK operators following fleet renewal. These examples show that **upfront capital investment in trains is a lever for operational and financial efficiency over decades.**

Adopting a total cost of ownership approach ensures that investment decisions are guided by the full lifecycle of the fleet rather than just the purchase price. By considering maintenance, energy consumption, reliability, and operational performance over the lifetime of trains, Scottish operators can secure long-term financial and operational benefits while making the network more resilient and sustainable.

New trains support jobs & industry

A rolling programme of fleet modernisation serves as a direct catalyst for **high-value engineering roles, skilled apprenticeships, and technical career paths** within Scotland. Modern fleets leverage cutting-edge software and emerging clean energy technologies (including alternative hydrogen or battery traction for rural routes) positioning the rail sector as a primary launchpad for industrial research and development rather than a passive consumer of technology. Building on successful initiatives like Network Rail school partnerships and Scotland's Railway Skills Academy ensures that this transition actively up-skills the domestic workforce, drawing in new talent and securing specialist capabilities before they are lost to the wider economy.

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To fully realise these benefits, fleet procurement must be backed by the consistency of a continuous network decarbonisation programme. A predictable pipeline of fleet replacement provides regional supply hubs and domestic maintenance providers with the long-term commercial confidence required to invest in local facilities and capital equipment. Crucially, this continuity mitigates the structural [risk of boom-and-bust](#) investment cycles, which historically force suppliers to downsize and allow critical engineering skills to dissipate during funding gaps. Aligning new train deployments with steady infrastructure expansion maintains vital sector momentum, building directly on Scotland's recent [electrification success](#).

Consolidating the network around a standardised fleet also reduces complexity and dependency on fragmented international supply chains, cutting material waste and improving parts availability. Ultimately, **a predictable investment pipeline provides a baseline of financial security for the entire domestic supply chain**. This protects skilled industrial jobs in Scotland's engineering hubs and creates a reliable flow of work that sustains local subcontractors and businesses.



What next?

The nationalised ScotRail already provides a more punctual and reliable service, with higher levels of customer satisfaction, than the majority of the UK population. The removal of peak fares and this year's fares freeze have also boosted ScotRail's prospects for growth.

Yet this **opportunity will remain constrained as long as Scotland is burdened by one of the oldest train fleets in Britain** — a fleet of which two-thirds will require replacing within the next 15 years.

Progress is already being made with fleet renewal. Plans are well-advanced for the procurement of new trains to serve suburban routes. Meanwhile, more reliable Meridian trains are being brought in to replace the 1970s High Speed Trains which have served our inter-city routes for the past decade.

But the Meridians are an interim arrangement, and the long-term modernisation strategy for Scotland's rural routes remains as-yet unaddressed. Therefore, **much work remains** for Scotland to transform its rail fleet and build upon recent success.

This programme of fleet renewal has to be carried out in the context of the country's **challenging fiscal situation**. Given the borrowing limits within which the Scottish Government has to operate, a clear case will need to be made of the benefits of investment in new trains rather than in other areas of public policy. But the railway can make a strong case: deferring procurement is a false economy that drives up volatile day-to-day operational costs. Instead, strategic capital investment unlocks structural efficiencies and opens up the potential for revenue growth, moving the railway towards lasting financial sustainability.

It is critical that fleet renewal is communicated as a preventative, revenue-enabling investment: increasing demand, supporting modal shift from road, boosting tourism and regional connectivity, and reducing long-term reliance on public subsidy by growing the number of journeys made by rail.

While interim fixes are on the agenda, delaying full renewal does not save public capital. Delay merely converts any short-term savings into escalating overheads, lost passenger revenue, and a decline in the commercial viability of the public transport network.

Here at Transform Scotland, we're going to be making this case, and we're inviting a range of voices from key sectors across Scotland to join us in building the undeniable case for Scotland's next trains.

This discussion paper outlines why Scotland needs a clear and comprehensive delivery plan for new train fleets. The paper argues that fleet renewal is a preventative, revenue-enabling investment: increasing demand, supporting modal shift from road, boosting tourism and regional connectivity, and reducing long-term reliance on public subsidy by growing the number of journeys made by rail.

Transform Scotland is the national alliance for sustainable transport, bringing together 75 public, private, and third sector organisations. For 30 years, we have campaigned for a cleaner, fairer and more efficient transport system.

Paper prepared by Laura Hyde-White. *With thanks to Paul Tetlaw, Colin Howden & other contributors.*

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