

What are the main problems with the M4?

The M4 is Wales' strategic gateway to the rest of the UK and Europe yet in the last two years, this stretch of road has been forced to close over 100 times. At the moment, 100,000 vehicles travel on the M4 around Newport every day — considerably more during events like concerts and rugby matches. The road does not meet modern motorway standards, and this leads to poor air quality, increased vehicle emissions and accidents. Constrained by the oldest motorway tunnels in the UK, this critical stretch of road serves two-thirds of the Welsh population and over two-thirds of Welsh GDP.

Congestion already causes daily problems and it is destined to get much worse

By 2020 the Welsh Government predict 'severe operational problems' on junctions around Newport. With the Severn bridge tolls removed on the 17 December, congestion has increased because the popularity of the road has long outstripped its capacity. Toll removal is set to inject over £100m of economic activity into Wales in the years ahead. The problem is the bottleneck caused by the Brynglas tunnels, not the removal of the tolls.

In a globalised world with a Just-In-Time economy, every minute matters and the M4 is plagued by unpredictable journey times.

According to the World Bank, the [average domestic transport time](#) for UK exporters is five hours and costs £500. Any further increase to either of these figures would negatively impact our economic competitiveness. Around the Brynglas tunnels, it is not unusual for vehicles to be stuck for over an hour. In today's world, many firms rely on meeting tight delivery windows or their businesses grind to a halt. The movement of these goods and materials has transitioned to rail where possible, but much of it has to continue to use the road network due to its comparative convenience and flexibility. With the emergence of autonomous road-based freight, the importance of roads will only increase.

What is the "Black Route" and is it value for money?

Experts have spent years testing over 100 different options and their conclusion is the Black Route is the best option on the table to address the congestion around Newport. The route would deliver the following benefits:

- A state of the art, sustainable and future-proofed motorway, running for 14 miles parallel to the existing M4 and — critically — bypassing the two-lane Brynglas tunnels.
- The existing M4 can be reclassified, allowing those travelling on the road — including public transport — to get more quickly to Newport and all those living to the north of the city.
- Junction 25 (westbound) can be reopened, improving local access for communities like Caerleon and St Julians.

- New cycling and walking routes will be created.
- New access to 'Park and Ride' facilities will be created.
- The route will integrate with rail electrification and the Metro.
- Less than 2% of the Gwent levels will be built on and over half of the road would be built on contaminated or brownfield land. Habitats will also be enhanced. The number of draining channels will be increased which will convert wetland into useful and rich wildlife habitats.

The Economic Appraisal of the Black Route shows Wales would get back £2 for every £1 invested

The route presents value for money because the scheme costs are offset, with surplus, by the improvements to transport economic efficiency, safety and lower carbon emissions. Even under a low-growth scenario the benefits of the scheme outweigh the costs with a benefit-to-cost ratio of 1.33. Under a high growth scenario (which is likely, given the removal of the Severn bridge tolls) the Net Present Value increases to over £2bn and the benefit-to-Cost Ratio to 3.12.

Including the wider impacts of the scheme, the investment becomes even more attractive. The Black Route would boost the benefits of agglomeration by reducing transport costs and time and improving accessibility between firms across the region. Newport's 'effective density' would increase by 4%, Bridgend by 1.7% and Swansea by 0.7%.

GDP per worker would also increase, helping to tackle Wales' low productivity levels. Newport's GDP would increase by 8.8% by 2037, Bridgend's by 1.6% and Swansea by 1%. The Black Route would spread the benefits of the road to all parts of South Wales. Over the appraisal period, net economic benefits are estimated to be over £700m alone.

Some have pointed to claims that the relief road will also increase the GDP of Bristol and Gloucestershire. What people do not say is some of this 'benefit' is to do with those areas gaining a wider labour pool as the people of South Wales are more able to compete in the Bristol labour market. Furthermore, they will bring that salary home to Wales and spend it in the local economy. By far the largest increase in GDP from the road will be felt in Newport. Cardiff, Swansea, Caerphilly, Bridgend, Rhondda Cynon Taff and Torfaen will all see increases to their GDP. This is why in 2016 over 58 of Wales' leading firms signed an open letter to the Welsh Government calling on them to build the Black Route. Far from just representing South East Wales, West Wales based Bluestone and the Port of Milford Haven were signatories, so too were Rhondda based Penderyn Whisky.

Together with the Black Route, the removal of the tolls would allow Wales to offer a very attractive business environment for a range of sectors. The logistics and distribution sector, for example, is a growing part of the economy and brings with it a large amount of new development and associated jobs. The relief road would pave the way for new business parks and housing. It could deliver a step change in growth along the entire M4 corridor.

What are some common misconceptions about the Black Route?

There are a number of misconceptions and false choices surround the M4. From the 'Blue Route' being a better alternative to the impact on the Gwent Levels. Here is why the Black Route is the only credible option on the table:

The 'Blue Route'

Three versions of the Blue Route were considered by experts and all were found to provide very little relief to congestion on the M4. This proposal consists of works to the existing Newport A48 Southern Distributor Road (SDR) and A4810, by 'grade separating' some existing at-grade junctions and closing some junctions. SDR and A4810 improvements were first assessed as part of a solution to the problems on the M4 around Newport in 2011 when a motorway solution was deemed to be unaffordable. Assessments [here](#) and [here](#) explained why these options were not preferable. The key findings were:

- All three scenarios would provide very little relief — M4 congestion would continue.
- All three scenarios would mix strategic and local traffic on a sub-standard road, replicating the situation on the existing M4 around Newport.
- Costs were assessed in 2013 as £600–800m. Costs would far exceed the benefits giving poor value for money.
- Local road junctions would need to be closed, causing severance and reduced accessibility in Newport.
- The limited transfer of traffic would mean the air quality and noise problems on the existing M4 would remain and worsen.
- Commercial and residential property demolition would be needed.
- Significant and prolonged disruption to Newport during construction.

Paul Flynn MP said: "The Blue Route 'solution' would be worse for Newport than no change. It would destroy the function of the SDR by piling M4 traffic on to a route that's already full to capacity at peak times."

The South Wales Metro

Public transport modes like the South Wales Metro, trains and buses as well as cycling and walking will grow in importance, but a modern transport strategy requires all modes to work together and not understanding that has real implications for the future growth of our towns and cities. The Welsh Government has already committed £5bn to deliver the Welsh rail and Metro franchise, which will deliver a range of improvements including at least four trains per hour on the Core Valleys line.

The evidence that the metro could not address the problems on the M4 around Newport, only reducing motorway traffic by up to 5%. It is clear that we need the Metro, but we also need the M4 relief road. Even the London Assembly, which benefits from the unbeatable London Underground,

recognise that cars 'remain the most prevalent transport method used by Londoners.' It is naive to think Wales can somehow manage without a functioning motorway.

Far from contradicting other transport options, the relief road complements other projects like rail electrification and the Metro. While modal shifts must be facilitated and encouraged, 90% of all freight continues to go by road and as a result, the road is likely to be the dominant form of transport for the foreseeable future. Studies have shown that major investment in improved public transport services would have only minimal impact on reducing traffic on the M4. Only 3% of journeys on the M4 around Newport are 5 miles or less. It is not an either/or decision — we need both.

Closing Newport junctions

The other argument used is the problem of local traffic. The [majority](#) of journeys are over 20 miles and a small number of journeys are less than five miles. The option of closing a number of junctions was considered during the inquiry. The closure of Junction 25 (Caerleon), Junction 26 (Malpas), and the complete closure of Junction 27 (High Cross) were assessed. The conclusion of the analysis of these options was none of these options would have a meaningful impact on congestion, but congestion around the remaining junctions significantly increase. Taking these steps would reduce local air quality and deliver no economic benefits.

The reality is closing the junctions around Newport will have significant economic and traffic implications for the city's residents and local businesses. As we saw with the temporary closure of Junction 41 of the M4 in Port Talbot the decision led to traffic 'chaos' leading the Welsh Government to quickly reopen the junction after the local economy began to suffer and over 20,000 people signed a petition. Let's not repeat the same mistake again.

The Gwent Levels

According to the Welsh Government's own legal opinion, the relief road does not contradict the sustainability goals within the Wellbeing of Future Generations Act — one of which includes a prosperous economy that "generates wealth and provides employment opportunities." Over half of the road would be built on contaminated or brownfield land and less than 2% of the Gwent Levels will be impacted by the relief road. Furthermore, new draining channels will be made, creating new arable land. The new bridge will also be built to avoid placing any piers in the wet channel avoiding adverse impacts on migratory fish, otters and other wildlife.

Funding

The Black Route is set to cost £1.3bn. This is excluding VAT, but there is a well-established way for the Welsh Government recover the estimated £300m VAT costs. The UK government has already provided up to £1.3bn in borrowing powers (including an additional £300m in the last Budget). The Welsh Government could use this option to deliver the project. However, the Government has put aside capital reserves to deliver the project while simultaneously allowing £500m of borrowing to

fund Wales-wide transport schemes. With £5bn due to be spent on the Metro, it is hard to say that public transport is not seeing additional investment.

It also helps to put the cost in perspective. Scotland recently opened a new stretch of motorway, complete with a new bridge, at a cost of £1.35bn. The latest round of London Underground upgrades is pencilled in at £4.5bn, Thames Tideway Tunnel — £4.2bn and the dualling A303/A30/A358 corridor is £2.5bn.

There is a cost to not building the BlackRoute. If government had taken action in 1993 to build a relief road, the cost would have been £271m-£330m. In 2008 the cost was £850m. Costs do not go down and the problem is only going to get worse. Will we regret not taking action in 2018 too?

The cost of not building the relief road extends to companies opting to relocate elsewhere or not supporting future waves of investment in their Wales based operations. This is painful, and no-one wants this to take place. However, if not action is taken to address congestion around Newport, it is only a matter of time before we start to see this happen.

Conclusion

In a nutshell, these are some of the reasons why the Welsh Government needs to greenlight the [£1.3bn](#) relief road:

- The M4 underpins two thirds of the Welsh economy
- Over 100,000 people rely on this road every day
- By 2020 the junctions around Newport will suffer severe operational problems
- The Black Route will return £2 for every £1 invested
- Only 2% of Gwent levels will be impacted
- The South Wales Metro alone won't solve the problem
- The Blue Route will not work
- Closing the junctions around Newport will not work
- Self-driving vehicles will make the problem worse, not better
- The UK government has provided up to £1.3bn in borrowing to cover the costs
- £300m of VAT can be reclaimed through conventional means