Tyne Valley Cycle Superhighway

Riding Mill options

Contents

This proposal has been prepared by the Parish Council of Broomhaugh & Riding as a contribution to the development of a Tyne Valley Cycle Superhighway.

Tyne Valley Cycle Superhighway: Riding Mill options

1. Introduction

The Parish of Broomhaugh & Riding would love to improve both cycle and pedestrian tracks and is keen to encourage more residents on to their cycles. There are any number of local routes. Most require on-road cycling, though some routes are relatively free of motor vehicles. Encouraging more people to cycle – and making cycling routes safe for children – will require some effort to provide routes that are more effectively separated from traffic on the busier routes.

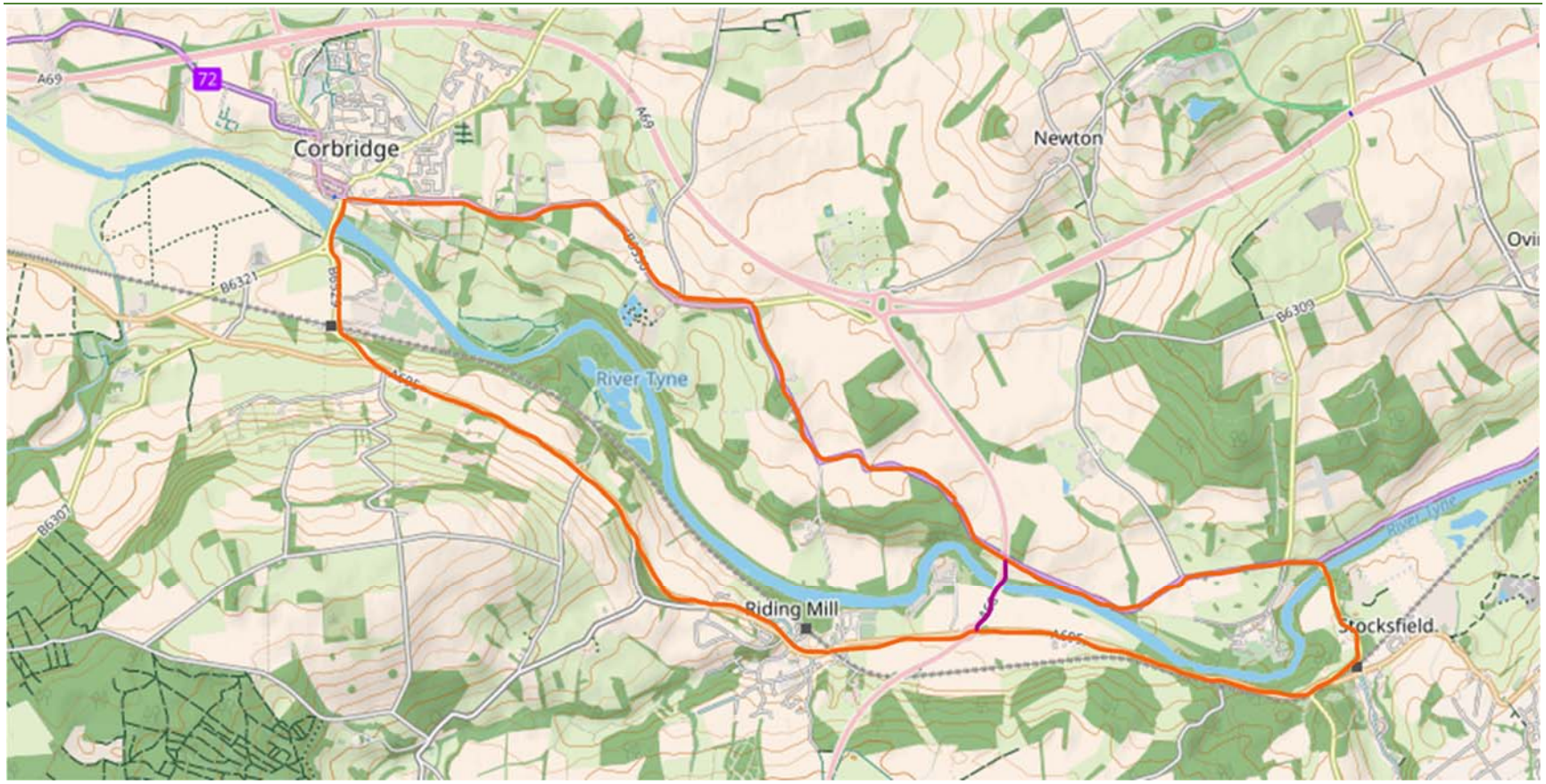
The emerging neighbourhood plan and community actions for Riding Mill identified both the importance of health and wellbeing and the need to make progress to carbon zero as key objectives. Arguably the two are closely linked – one aspect of delivering carbon zero will be cutting down on the use of motor vehicles and doing more short journeys on foot or on bicycle. The working group identified a number of possible new footpaths and cycle paths that could be created around the village and which would both serve people who already go walking or cycling as well as encouraging many more to do so by making routes safer than they are at present.

We recognise that several of the proposals will require significant budgets to implement but there are some proposals that could be delivered at a modest cost. Given that Riding Mill is on the route of the proposed Tyne Valley Cycle Superhighway – and given that Northumberland County Council is about to create a dedicated cycle route linking Hexham and Corbridge – it is more important than ever for the parish council to press for suitable cycle (and pedestrian) routes to connect Corbridge, Riding Mill and Stocksfield. Although not ideal, it is possible to join NCN72 quite easily at Stocksfield and thence to Prudhoe and the start of a cycle route, mostly off-road, all the way to the coast.

This short note summarises existing routes around Riding Mill and makes specific proposals for how these could be improved – for the benefit of both leisure cyclists and those who walk or cycle to work, to the shops and to other amenities.

2. Routes round Riding Mill

Figure 1: Riding Mill - Stocksfield - Corbridge - Riding Mill



Map: openstreetmap.co.uk

The map in figure 1 shows the two main routes that connect Riding Mill with Corbridge and Stocksfield. The A695 between Riding Mill and Stocksfield is reasonably wide for most of its length, with fairly good sight lines, though could be improved considerably. At Stocksfield it is

easy to cross the Bywell Bridge and join NCN72. The A695 between Riding Mill and Corbridge, however, is much narrower, with more corners, narrower verges and more hills. Whilst this is the route that many cyclists use, it is neither pleasant nor entirely safe. The alternative is to head, initially in the wrong direction, towards Stocksfield, either crossing the Tyne at Bywell Bridge to join NCN72 or turning north at the Broomhaugh Roundabout along the A68 for about 300 yards (shown in red on the figure) and then clambering over the crash barrier and scrambling down the bank to join NCN72. NCN72 is very quiet past Styford but joins the B3650. This is not bad, with relatively good sight lines along most of the route, but some parts are very narrow and it is prone to heavy traffic (though not as much as the A695).

These are the key routes likely to be used by commuters and others using cycles as an alternative to motor transport. Other routes round Riding Mill are more likely to be used by leisure riders.

Figure 2 shows a circular route starting from Riding Mill, proceeding up Whiteside Bank, crossing the A68, coming back along a bridle way to join Dere Street (which originally connected to Whiteside Bank but was cut off when the A68 was built. The route continues back to the Broomley Road. When the footpath is too overgrown or too muddy, it is possible to cycle south on the A68 to the Broomley/ Healey junction. At Broomley, it is possible to follow an old road (now signed as not suitable for motor vehicles) – alternatively, riders may choose to stick to the main road to visit Wheelbirks Parlour – and then cross (or join) the Hindley Road. Crossing this road leads down to Guessburn, and Old Ridley, and up to the A695. Cyclists can turn left along the A695 to return to Riding Mill, or can cross the railway at Stocksfield station, cross Bywell Bridge to join NCN72 and scramble up the bank to the A68, rejoining the A695 at Broomhaugh Roundabout.

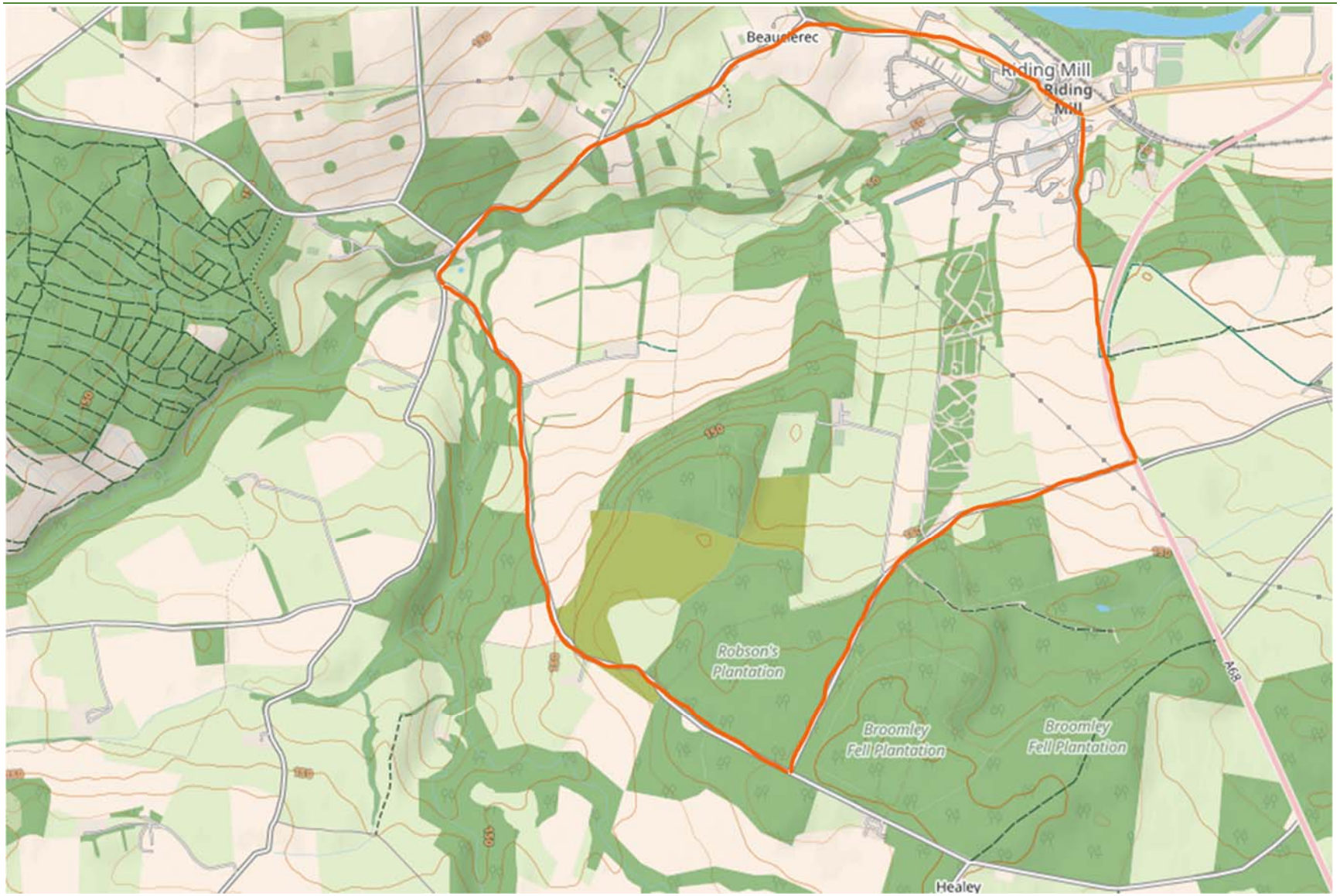
This route is one of the few routes where at least some of the ride is off-road. That, combined with some quiet roads, can mean that as little as a quarter of this route has to be on busy roads. It could be improved, however, by a dedicated cycle path south on the A68 and by a dedicated cycle path along the A695.

Figure 3 shows a circular route taking that starts up Whiteside Bank, south along the A68 to the Broomley/ Healey junction. For this route there is no alternative to the A68. The rest of the route is on roads that are generally fairly quiet and with spectacular views. Clearly, this route would also benefit from the creation of a dedicated cycle path along the side of the A68.

Figure 2: Riding Mill round trip via Broomley & Stocksfield

Map: openstreetmap.co.uk; photos © David Irwin

Figure 3: Riding Mill round trip via Healey



Map: openstreetmap.co.uk

3. Riding Mill – Stocksfield

Apart from a short narrow section on the eastern boundary of Riding Mill, the A695 has verges that are wide enough to create a segregated cycle and pedestrian path all the way between Riding Mill and Stocksfield (see Figure 4). Indeed there is a path, albeit overgrown, alongside the road for most of its length. Whilst this would mean that the cycle route was alongside the main road, this is probably the most sensible and cost-effective option (especially if constructed using compressed cinders or some other form of compressed aggregate[1]). This would make sense of the cycle path around Broomhaugh Roundabout – which very few cyclists use because it is inconvenient and neither end connects to a cycle path. It would also make sense of the cycle path signs that have recently appeared on both sides of Broomhaugh roundabout but which simply point cyclists along the main road. There would be a need to cross the road, as the existing path changes sides, at point j/k on the map. At the western boundary of Stocksfield, it would be possible to rejoin the main road and cycle into Stocksfield or take the road down to Bywell Bridge and join NCN72 at u/t on the map.

Two small additions would make a considerable difference to the ability of cyclists and pedestrians to access more routes and reduce considerably the danger felt by cyclists as cars and trucks race up the A68. These would both see very short sections of the A68 enhanced for cyclists and, in one case, for equestrians as well. The first proposal (figure 5) is to create a pedestrian/ cycle way alongside the eastern verge of the A68, commencing at High Shilford Farm (directly opposite the footpath that leads from the top of Whiteside Bank) and ending at the junction with the Broomley Road and Healey Road. This would enable cyclists and walkers easily to reach routes to Healey and Broomley. The Healey Road links up to footpaths running past High Plains and into the Lonnen/ Church Lane. For cyclists, it would allow safe riding to both the Healey Road and the Broomley Road. This is a relatively short stretch, no more than about 300 metres. The verge on the east side of the road is quite wide along this stretch, typically more than five metres, largely grassed and wild flowers. There are some trees but they are mostly set back from the road as can be seen from the photographs. A cycle route could thus be set back from the road enhancing the safety aspects.

[1] A report by Taylor I & Hiblin B (2017) *Typical Costs of Cycling Interventions: Interim analysis of Cycle City Ambition schemes*, Department for Transport, indicates that a cycle path with this type of construction should cost around £150,000 per km. The distance between Riding Mill and Stocksfield is around four km, giving a total requirement of around £600,000.

Figure 4: Riding Mill - Stocksfield

Map: openstreetmap.co.uk; photos © David Irwin

Figure 5: Riding Mill - Broomley via A68

Map: openstreetmap.co.uk; photos © David Irwin

The second proposal (figure 6) is for a segregated pedestrian and cycle path along the west verge of the A68 north from the Broomhaugh roundabout to the bridge over the Bywell-Styford Road (NCN72) and then down the bank to join the NCN72. Many cyclists use this route and many more would do so if it felt safer. The verge is easily wide enough along the entire length to create a segregated cycle lane, even on the bridge over the Tyne.

Figure 6: Riding Mill - cycle route 72

Map: openstreetmap.co.uk; photos © David Irwin

4. Riding Mill – Corbridge

Implementing a safe and cost-effective cycle path between Corbridge and Riding Mill is a challenge, but one that needs to be addressed if the vision of a Tyne Valley Super Cycleway is to be achieved. There are three possible options. The best option, as far as cyclists and pedestrians are concerned would be to construct a cycle path adjacent to the railway line (figure 7, labelled F), either on land owned by Network Rail or by compulsorily purchasing land adjacent to it. This would have the advantage of being fairly straight and fairly level. There are no bridges on this stretch of track so this route should be perfectly possible.

The second, and possibly most realistic, option is along the A695 (figure 7, labelled A). Through Riding Mill, there are narrow stretches which are unsafe for cyclists and outside the village the road is quite narrow in places, though along most of its length the verge is wide enough to be able to create a segregated cycle lane. However, this is more challenging than the Riding Mill-Stocksfield stretch as there is only a short stretch of footpath. It would be possible to create a segregated cycle lane wherever the road is wide enough, with cyclists returning to the road where it is not, until it is possible to acquire land from the adjacent landowners. The Levelling & Regeneration Act of 2023 offers scope to purchase land compulsorily and without any so called 'hope' value in certain cases, which includes health related development. Cycle routes would probably qualify.

An extension to this (figure 7, labelled C), and allowing at least some of the route to be off-road, would follow the footpath from the A695 at Farnley (the path down to the railway is quite steep so would have to be walked but is also quite short), crossing the railway on an existing crossing and then joining the existing riverside footpath just east of the Tynedale Rugby Club. The path here is good enough and wide enough to cycle and indeed can be cycled all the way rejoining the road into Corbridge just south of the bridge. This would require discussion with the landowner and may require some improvement to the pedestrian crossing over the railway.

Making it easier for cyclists to join the NCN72 by creating a path along the A68 (figure 7, label D) does not really count as a route to Corbridge but an ambitious scheme would see the creation of a bridge over the top of the weir (figure 7, label E). Given that the weir already exists and could be used as a foundation, this could be relatively cheap. It would however require the agreement of the landowners to link with an existing but private path on the north side of the river (it is wide enough for the fishermen to drive their 4x4s along, to join with the road that leads down to Styford Hall (and which, before the weir was built, joined via a ford to Broomhaugh).

Figure 7: Riding Mill - Corbridge options

Map: openstreetmap.co.uk

5. Traversing Riding Mill

Perhaps the greatest challenge is to enable cyclists to ride through Riding Mill safely. Here are some ideas though rather than focusing on the best, which may never happen because of cost or other constraints, we would start with a sub-optimal solution and then aim to build on it. The obvious and cheapest route for cyclists is simply to follow the A695. However, this is narrow in places, with blind bends and a steep hill, which slows down the cyclists and thus slows down the motor traffic as well.

The railway bridge, to the east of the village, is rather narrow. We see three potential solutions. The first, and perhaps easiest, which would also have the effect of slowing down traffic through the village (which the village would like) would be to redesign the bridge with a segregated cycle path and a single carriageway for vehicular traffic. The second, and relatively straightforward though more costly, solution would be to utilise cyclist-controlled traffic lights (as proposed for Dilston Bridge). Modern versions can sense when cyclists are approaching and change the lights automatically without the cyclist having to stop and press a button. The third solution, and the one least disruptive to the traffic, would be to direct cyclists down Buffer Lane and across a new cyclist-only bridge adjacent to the existing road bridge.

Keeping cyclists off the A695 through the rest of the village would then require, as proposed earlier, to site a cycle route adjacent to the railway line. If that could be delivered, then cyclists heading west could join the A695 for a very short distance before cutting down to Dene Close to join the railway west of the station. It would be possible to follow the railway from Buffer Lane to the station, but that would require the compulsory purchase of a strip of residential garden which would be rather unpopular.

Figure 8: Traversing Riding Mill

Map: openstreetmap.co.uk; photos © David Irwin

6. Dere Street bridge

Our most ambitious proposal is to construct a bridge to reconnect the two parts of Dere Street (see figure 8) that was split when the A68 was built. This would open many more routes for pedestrians and cyclists and make it considerably easier for those residents wishing to walk or cycle between Riding Mill, Broomley, Hindley and Stocksfield without using the A695.

Figure 9: Impression of a bridge reconnecting Dere Street and Whiteside Bank

7. Cost benefit analysis

A report commissioned by the Department for Transport[2] concluded:

- Cyclists visit local shops more regularly and spend more than users of other modes of transport. (It is not clear whether this is additional expenditure or merely expenditure moved from one place to another but it can certainly make a difference to the retailers visited by the cyclists and indeed the report asserts that towns that have been optimised for walking and cycling do see an increase in local trade.)
- Neighbourhoods that are cycle friendly with low(er) traffic volumes are more desirable
- Children who walk or cycle to school tend to be more attentive and achieve better results (and facilities that encourage and support more cycling to school can save on the public cost of school travel)
- Cycle friendly environments promote more physical activity in later years

[2] Rajé, F & Saffrey, A (2016) *The value of cycling*, Phil Jones Associates, University of Birmingham & Department for Transport [online] iga.fyi/tzv Accessed 16 Jan 2024

- Cycling appears to reduce absenteeism with regular cyclists taking fewer days off for sickness (though the report is not clear about the direction of causality)
- Locations that promote cycling in general tend to see more cycle tourism

The report also noted that cycling schemes can deliver benefit to cost ratios as high as 19 though it seems a ratio closer to five is more typical. However, that is still very good and enough to justify more expenditure on cycling facilities. An earlier report, that aimed to assess the economic benefits of investing in walking and cycling[3], noted that almost all studies report economic benefits of cycling and walking and suggest that the benefit to cost average is 13 and the average for the UK alone is 19. The report stresses the health benefits from regular cycling or walking and calls for more dedicated infrastructure to promote cycling and walking.

Sustrans[4] stress the economic and employment benefits arising from cycling. Using 2006 data, they claim that the Coast to Coast cycle route supports more than 240,000 trips and results in annual additional expenditure of nearly £11m and supports 173 jobs; Hadrian's Cycleway, they suggest, delivers a further 160,000 trips, with annual spend of £6.5m and 105 jobs. The annual spend will, of course, be significantly higher now.

The Department for Transport has prepared an excel based Active Mode Appraisal Toolkit[5] which has been specifically prepared to enable users to undertake economic assessments of cycling and walking interventions in line with transport analysis guidance (TAG). Whilst it is possible for users to utilise their own data, users are encouraged to use the pre-populated data unless they have good evidence to support alternatives. The data is used to calculate a benefit to cost ratio (BCR). Cost benefit analysis is a technique used to estimate the monetary value of the benefits and the costs to the community to assess whether a proposed initiative is worthwhile. If the present value of the benefits exceeds the present value of the costs – if shown as a ratio of benefits to costs, the ratio needs to be at least one – then the project is worthwhile.

The toolkit shows that the benefit to cost ratio for a cycle route between Riding Mill and Stocksfield costing £600,000, as suggested in the footnote on page 8, would be 7.7 – taking into account more commuting, less reliance on motor cars, much improved health outcomes, etc – which would be an excellent return. Even if the cost was considerably higher at £3m, the benefit to cost ratio would still be 1.6. It is perhaps a little harder to estimate the benefit to cost ratio for Riding Mill to Corbridge since the cost of implementation is likely to be much higher and is difficult to estimate without a clear view of where it could be located. The other short routes described earlier would undoubtedly give a positive BCR.

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[3] Davis, A (2010) *Value for money: an economic assessment of investment in walking and cycling*, Bristol City Council & NHS Bristol [online] iga.fyi/t5d Accessed 16 Jan 2024

[4] Sustrans (2017) Active travel and economic performance, Sustrans with Living Streets and the TAS Partnership [online] iga.fyi/7no Accessed 16 Jan 2024

[5] Available online at iga.fyi/cyv. A user guide is available at iga.fyi/mxz.

Whilst the accountants will be interested in the cost benefit analysis, it is additionally worth stressing the benefits more qualitatively. Health experts argue that 70 per cent of NHS and related welfare costs are due to reversible lifestyle risk factors. Some 93 per cent of people have a reversible risk factor for dementia. Inactivity is a key element of both. More walking and cycling would have an enormous impact on how long we all live, how long we live in good health rather than with ill health and on our general wellbeing. To take an example with one condition, patients with Parkinson's disease who are physically active have a slower rate of disease progression, with the rate being proportional to the amount and intensity of exercise. This is a call to arms – to improve the health of all of us, we need to create an environment which maximises the opportunity for exercise.

8. Conclusion

The Parish Council should lobby Northumberland County Council to implement a cycle and pedestrian path alongside the A695 between Riding Mill and Stocksfield.

The Parish Council should lobby Northumberland County Council to implement cycle and pedestrian paths alongside short segments of the A68 to link the A695 to the Bywell Styford road and to link the top of Whiteside Bank to the junctions for Broomley and Healey.

The Parish Council should explore options to implement a cycle way between Riding Mill and Corbridge.

Figure 10: Beadnell-Seahouses combined cycle-pedestrian path

If the money is not available for high quality schemes, then let's start with schemes of a lower standard, but which are still intended to separate bikes, and walkers, from motor vehicles. For example, rough cut, dirt paths along the A68 would be a good start; compacted aggregate would be an improvement (figure 10 shows a compacted aggregate cycle path elsewhere in Northumberland); smooth tarmac could come later. Then, as demand is demonstrated, it will become easier to justify improvements in provision.