

4. Network Planning for Cycling

This section sets out the strategic cycling routes that are recommended in this plan. The routes have been recommended based on an analysis of the information presented in preceding chapters of this report, including information from the Propensity to Cycle Tool, stakeholder engagement and an awareness of existing infrastructure projects and growth, specifically related to employment and housing. Investing in this network of routes is likely to have the largest impact in achieving an increase in cycling levels in the study area.

Illustrated in Figure 4-1 below are the strategic corridors that are recommended for investment. The routes include improvements to existing provisions and new infrastructure that has been investigated through both desk-based research and also on site, to fully unlock the potential for walking and cycling in the study area.

A number of factors, including the Level of Service score for each route and site visit observations were taken into account, before finalising each of the routes. An overview of the routes is shown in Figure 4-1 below and the detailed summary sheets are included in the remainder of the section.

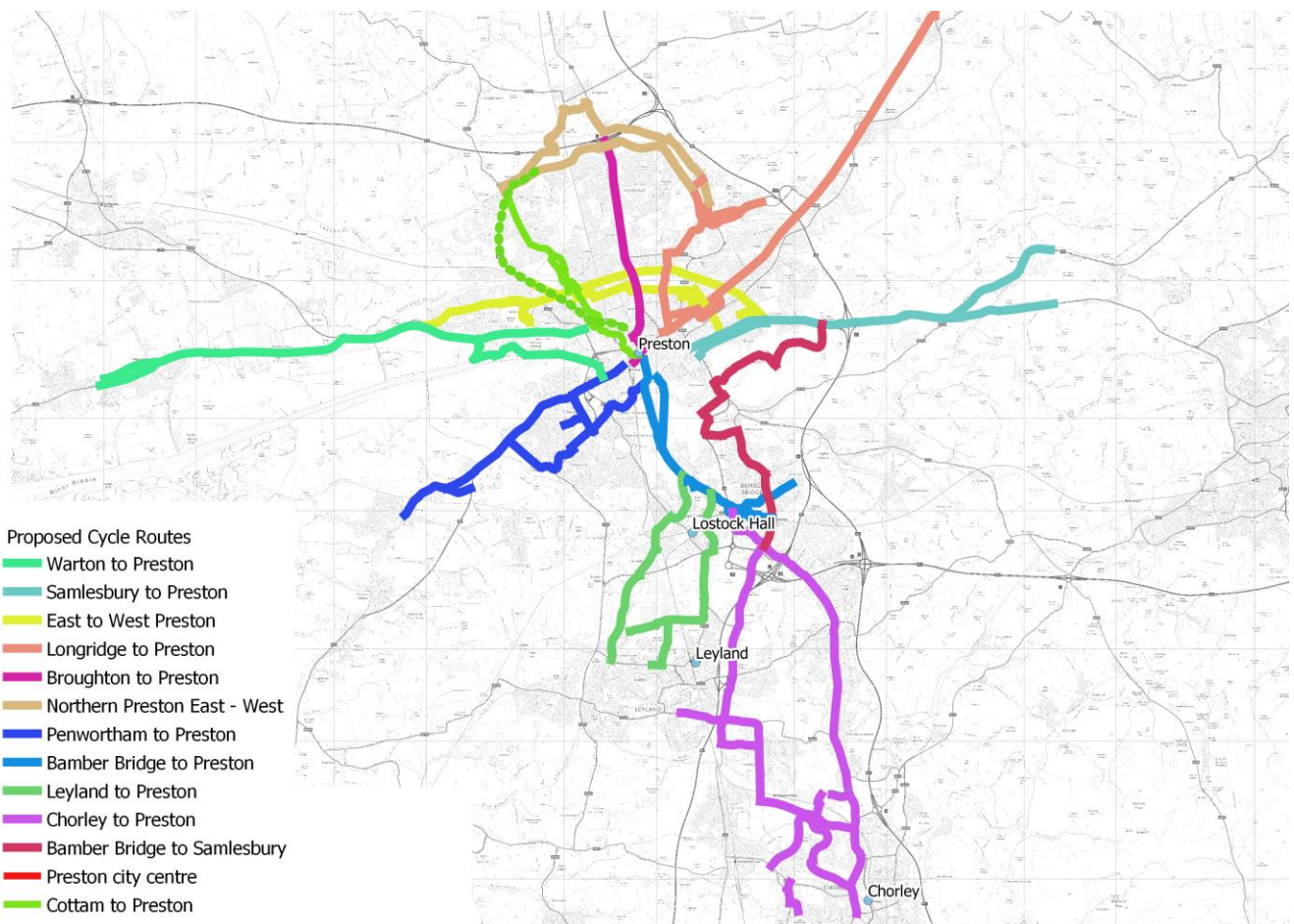


Figure 4-1 Overview of the Strategic Routes

4.1 Key Areas for Improvement

The existing cycling network was assessed against the five Core Design Outcomes (directness, coherence, safety, comfortability, attractiveness) within the LCWIP guidance, on a scale of 0 - 5 with 0 as the lowest score and 5 as the highest score. A summary of the overall scoring from the assessment is included within the Cycling Network Summaries in Section 4.2. The areas outlined below were identified as requiring the greatest level of improvement:

- Route 3: East to West Preston Route
- Route 11: Chorley to Preston
- Route 13: Preston Cycling City Centre Routes
- Route 5: Broughton to Preston
- Route 2: Samlesbury to Preston
- Route 1: Warton to Preston
- Route 9: Bamber Bridge to Preston
- Route 6: Cottam to Preston

4.2 Cycling Network Summaries

The strategic network is broken down into 13 individual corridors. A summary is provided for each route is included in the summary sheets below. Each summary provides background information about the route, such as the primary use and the key trip attractions it would connect. A section providing a brief strategic case for each route is also included.

Detail is also provided on the high-level costs and benefits of all measures that have been recommended on each route. The key suggested interventions are summarised, split into Minor Works, Small Schemes, Medium Schemes and Major Schemes. This provides a short narrative on the key aspects of the routes and the level of investment required.

Finally, the objective appraisal scores reflect the alignment of the proposed route against the criteria within the Level of Service (LoS) tool. The outputs from the DfT Active Mode Appraisal Toolkit (AMAT) are also displayed as Present Value Costs, Present Value Benefits, and the overall Benefit Cost Ratio.

Route 1: Warton to Preston

Route Summary

This route would predominantly upgrade existing provision, linking Preston with employment growth as part of the City Deal programme at Warton Enterprise Zone via an off-road cycle track. It is expected that the majority of journeys on this route would be commuter cycle trips, although sections of this route form part of the existing Guild Wheel, which is primarily a leisure route. There may be potential in the future to investigate an alternative shared use trail along the Ribble Estuary as part of the England Coast Path project that could link Preston with Lytham St Annes via Warton.

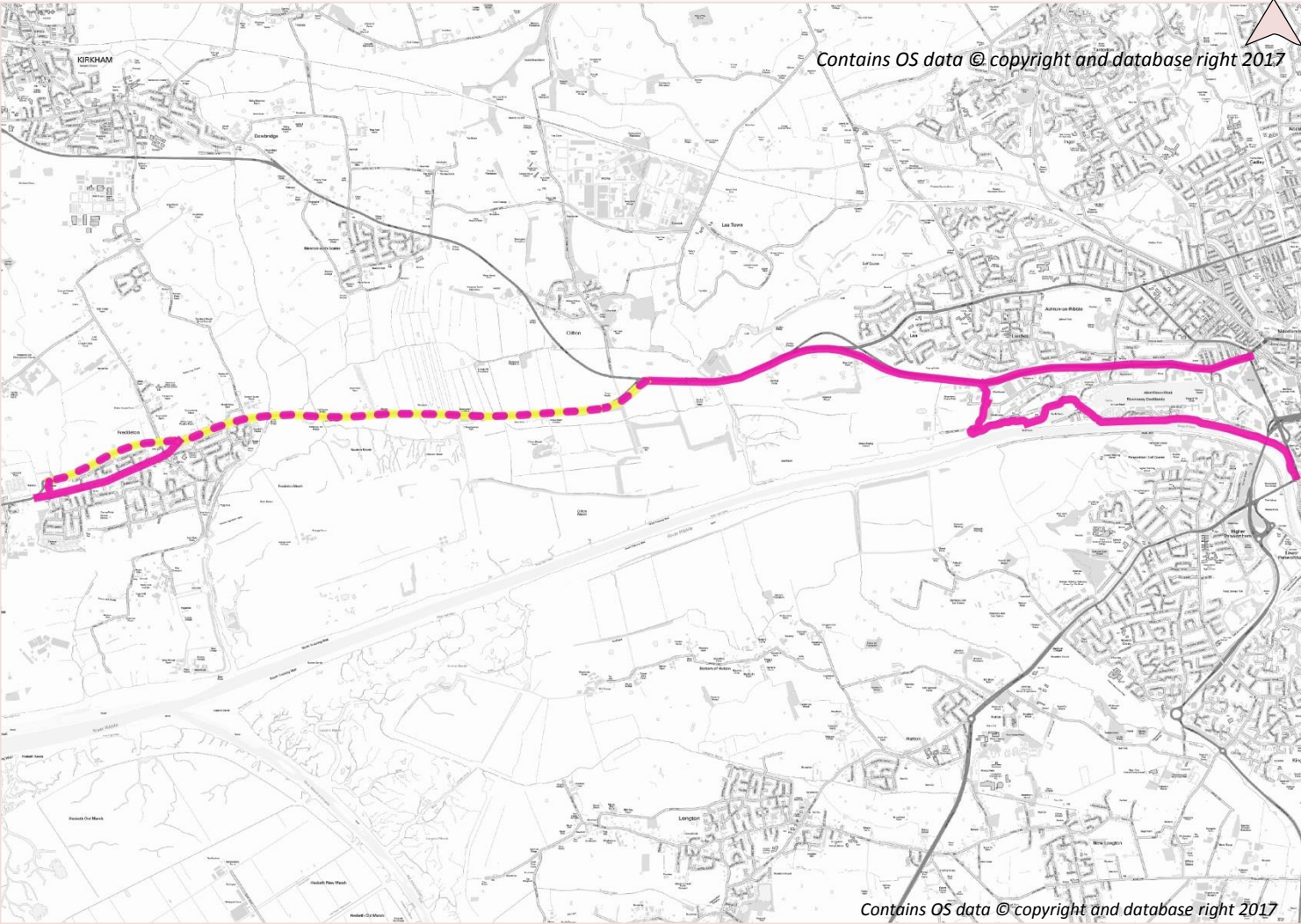
The Strategic Case

This route would support existing commuting patterns from central Preston to Warton EZ; as well as approximately 4000 people Warton EZ is expected to employ in the future. The route would also support future economic growth, as it passes proposed employment development sites near the Marina.

During AM and PM peak periods, congestion currently occurs at Warton EZ and at the Preston New Road / Blackpool Road junction. With employment expected to increase, congestion is likely to worsen. This route would provide a viable off-road, safe alternative to commuting via car. This route would also provide a safer route to primary schools within Freckleton and those travelling to primary schools near the route to the west of Preston.

Providing safer, more accessible travel options will encourage active travel and associated health benefits; this would be particularly beneficial in the LSOA areas around the Marina and Guild Wheel improvement area as these areas are in the bottom 20% nationally for health deprivation.

The route improvements would provide an alternative for those travelling within Freckleton to local shops, and improve the leisure route along the Guild Wheel.



Level of Service

Level of Service (%)	Cycling (Existing)	Walking (Existing)	Cycling (Proposed)	Walking (Proposed)
Cohesion	15	29	67	100
Directness	57	49	80	92
Safety	26	36	88	67
Comfort	45	55	83	83
Attractiveness	32	41	75	75
Average	35	42	79	83

Active Mode Appraisal Toolkit

Present Value Benefits (£,000s)	3313.22
Present Value Costs (£000's)	1343.54
Benefit Cost Ratio	2.47

Minor Works (£20,000)

Only a small budget is required on this route for minor works. Recommendations include the introduction of a maintenance schedule, including regular sweeping and vegetation clearance which would require ongoing revenue support. Prioritisation of cycle movements across the heritage rail line at Navigation Way would increase route coherence outside of rail operation hours.

Small Schemes (£93,000)

Only 2 small schemes are suggested on this route, which score highly on the appraisal tool. A tiger crossing is suggested at the Nelson Way and Chain Caul Way junction, which will cater for desire lines. A subway currently exists linking Rylands Crescent to Riversway; this should be upgraded to shared use to cater for cyclists, which would increase NMU access from residential areas onto the route.

Medium Schemes (£435,000)

A majority of this route would require substantial investment, as current facilities are unsuitable for use alongside a busy 50mph dual carriageway and parts of this route have no facilities at present. It is recommended that the junction of Blackpool Road and Riversway would be upgraded, replacing existing informal crossings with a Toucan crossing to cater for those travelling from Blackpool road. A further recommendation is to add lighting along the riverside section, which is part of the Guild Wheel. This will ensure that the route is suitable for year round use and this scores well in the appraisal.

Major Schemes (£1,240,000)

Major investment is required on this route as current facilities are substandard. Major schemes on this route aim to improve continuity to Warton EZ, through provision of a continuous 2 way off-road cycle track from Freckleton and Warton EZ to Nelson Way (where the route joins the Guild Wheel); this will replace on road advisory cycle lanes and upgrade existing off road facilities. This will improve the comfort, attractiveness and safety of the route alongside the 50mph dual carriageway traffic. Sections on Preston new road from Blackpool Road junction to Lytham Road, Freckleton and Nelson Way to Blackpool Road score highly in the appraisal.

This route has a total Cost of **£1,788,000**

Route 2: Samlesbury to Preston

Route Summary

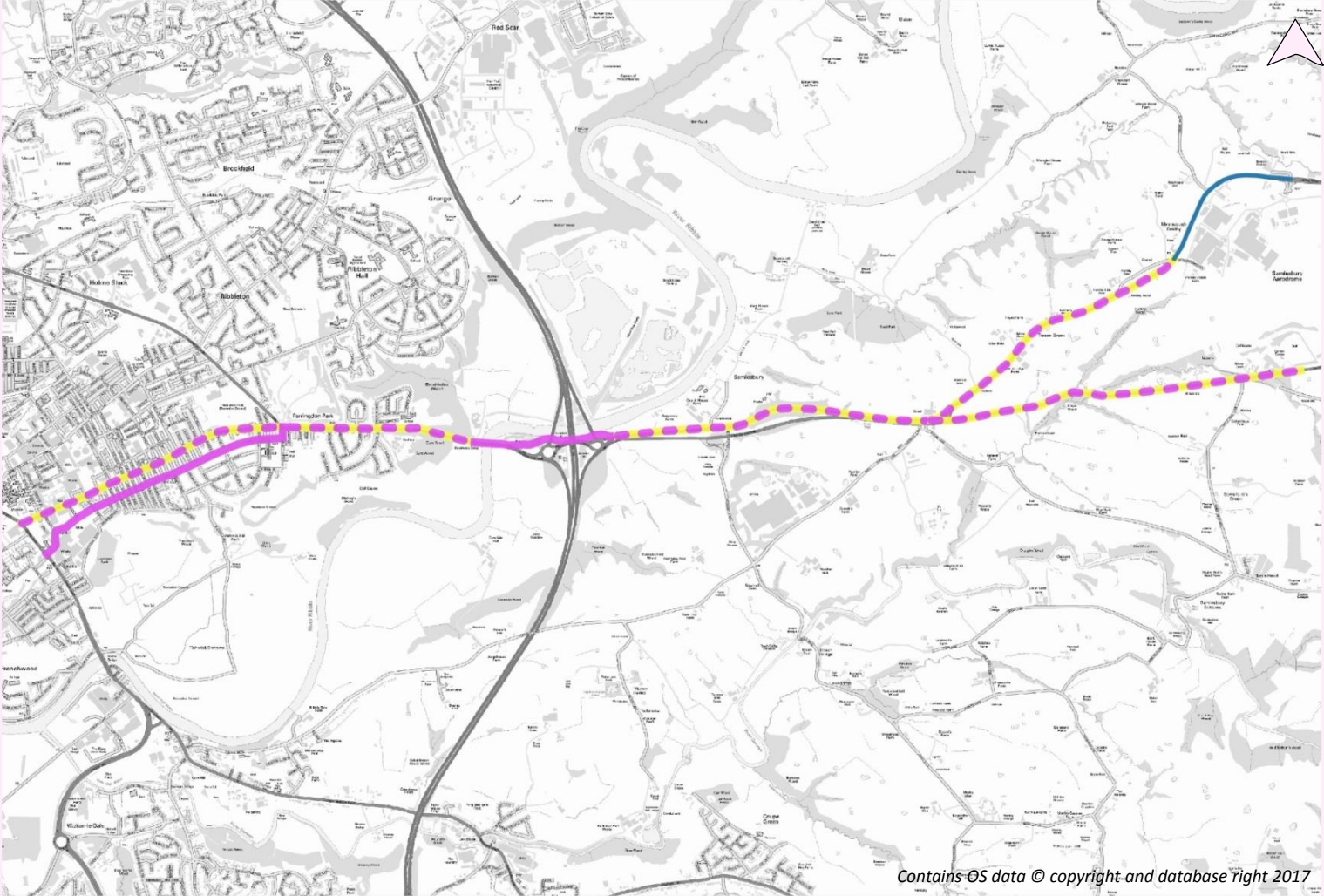
This route will link Preston with the employment growth at Samlesbury Enterprise Zone with almost continuous off road provision. It is expected that the majority of journeys on this route would be commuter trips, although improvements from the Ribbleson area to the city centre will upgrade sustainable transport links to leisure, education and employment opportunities in the area. The route would also improve access to Brockholes Nature Reserve and could form part of a future route between Preston and Blackburn.

The Strategic Case

The route from Samlesbury to central Preston supports commuter trips from Preston to Samlesbury EZ. Samlesbury EZ employs 2036 at present. With plans to grow in the future, this route will support economic growth associated with the EZ. The route will also support the delivery of employment growth sites in central Preston.

Peak hour congestion is currently an issue along the length of the A59 covered by this route. With growth at Samlesbury EZ, this issue will only worsen. Improved cycling infrastructure would encourage sustainable travel as a viable alternative, which could improve air quality in the New Hall Lane AQMA. This route will also provide a safe and sustainable alternative for school children traveling within the Ribbleson and Fishwick areas of Preston.

The A59 in the Ribbleson urban area of Preston is without active travel facilities at present. Facilities near the local centre would provide safe walking and cycling options for locals to utilise for work and school. This would be especially beneficial as this route passes through locations which rank poorly nationally in terms of the Index of Multiple Deprivation. A safe and coherent route would benefit local residents through additional health benefits and improve access to jobs and employment.



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Level of Service

Level of Service (%)	Cycling (Existing)	Walking (Existing)	Cycling (Proposed)	Walking (Proposed)
Cohesion	33	33	67	100
Directness	52	64	60	92
Safety	25	36	69	50
Comfort	33	50	83	75
Attractiveness	42	38	75	75
Average	37	44	71	78

Active Mode Appraisal Toolkit

Present Value Benefits (£,000s)	2580.87
Present Value Costs (£000’s)	1958.03
Benefit Cost Ratio	1.32

Minor Works (£55,000)

A relatively small budget would be required on this route to make minor changes; however significant investment in medium and major schemes would be required in order to make this route safe and desirable. Minor works include those to make the route more attractive for users; recommendations include improvements to maintenance, specifically on the A59/M6 junction, where debris and overgrown vegetation make the area feel unsafe. A traffic management suggestion is to extend the 20mph speed limit along Mercer St, Cranborne St, Adelaide St and Primrose Hill which would also improve access to Eden Boys’ School.

Small Schemes (£130,000)

There are three suggestions for Small Schemes on this route. Two of these schemes involve environmental enhancement, which will help to improve perceptions of safety. Environmental enhancements from Fishwick Road to Mercer Street score particularly highly in the intervention appraisal. These enhancements include catering for desire lines and junction narrowing to calm traffic. This is recommended at the start of the route on the roads south of New Hall Lane and East of London Road.

Medium Schemes (£915,000)

The majority of the recommendations on this route fall into the medium and major scheme categories; major investment is required to ensure safe sustainable travel options are in place to serve the population. A reduction in the radius of the Blackpool Road roundabout is recommended to slow vehicles and improve the environment for cyclists and pedestrians. Other measures include crossing improvements. This is suggested for the A59/M6 junction to allow safe crossing and at the EZ entrance, with the aim of reducing the occurrence of accidents at this location. Crossing points such as this one score highly on the appraisal.

Major Schemes (£1,505,000)

It is recommended to link the existing local centre environment enhancement scheme at New Hall Lane with segregated cycle tracks. Recommendations east of the A59/M6 junction also include delivery of a 2 way off road cycle track leading to both EZ entrances, replacing on road advisory lanes at present. This will provide a safer facility away from congestion and/or fast moving vehicles. Recommendations would provide almost continuous off road provision for cyclists, ensuring a safe route. The section from A59 junction to the south Samlesbury entrance in particular scores highly against appraisal objectives.

This route has a total Cost of £2,605,000

Route 3: East to West Preston

Route Summary

There is currently no coherent east / west route for cycle trips within Preston. The Propensity to Cycle Tool identified the significant potential for latent active travel demand on this route.

The route acts as a distributor, connecting a number of the proposed primary routes as well as linking key employment, education and leisure destinations. Recommendations on this route are primarily focused on the creation of on carriageway segregated cycle lanes, with an alternative quieter route. Further safety recommendations are also made.

East / West routes through the city centre were highlighted in the public consultation phase of the project but have not been considered at this stage.

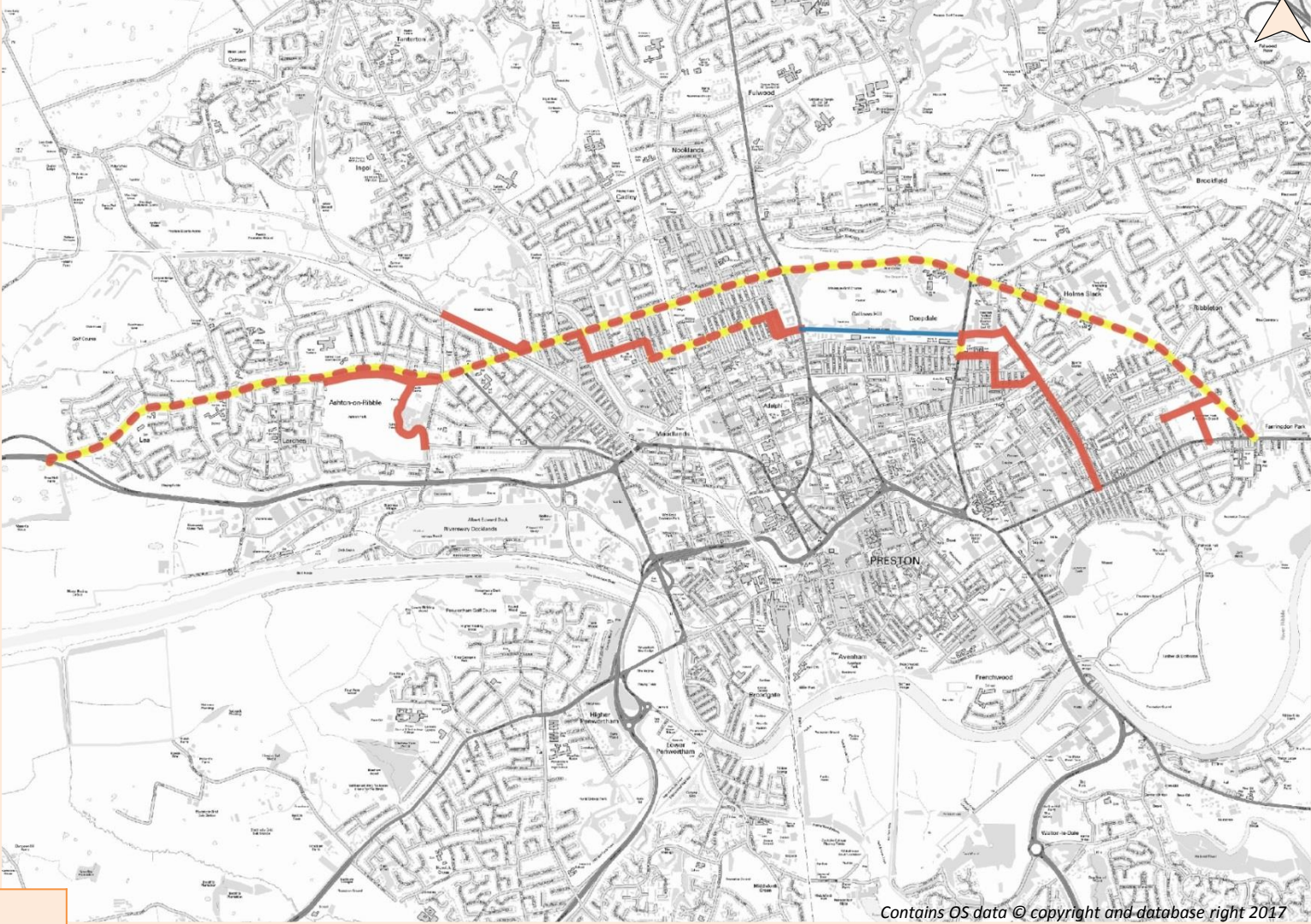
The Strategic Case

Stakeholder consultation raised the issue of a lack of East – West routes in the city. This route would act as a distributor across the city, and intersects with routes 1, 2, 4, 5 and 6 creating a permeable and interconnected network linking residential, education, employment and leisure opportunities.

The routes passes a number of employment development sites and therefore would support these additional jobs and provide alternative commuting options for those travelling on the congested Blackpool Road.

This route is highlighted especially for its close proximity to a number of primary and secondary schools. As continuous east-west links are currently of a poor standard, this route would assist in creating safer routes to primary and secondary schools in the city.

Provision of a safe route across the city will facilitate an improvement in health and wellbeing within the city as a result of improved opportunities for active travel.



Level of Service	Blackpool Road		Alternative Route					
Level of Service (%)	Cycling (Existing)	Walking (Existing)	Cycling (Proposed)	Walking (Proposed)	Cycling (Existing)	Walking (Existing)	Cycling (Proposed)	Walking (Proposed)
Cohesion	33	0	100	100	54	63	83	100
Directness	40	58	70	83	68	65	60	92
Safety	31	50	81	67	61	75	69	67
Comfort	33	33	100	92	54	71	83	75
Attractiveness	50	63	92	88	63	66	92	100
Average	38	41	89	86	60	68	77	87

Active Mode Appraisal Toolkit	
Present Value Benefits (£,000s)	4428.48
Present Value Costs (£000's)	4190.69
Benefit Cost Ratio	1.06

Minor Works (£90,000)

A budget of around £90,000 would be recommended on this route for minor works. Recommendations are made for minor improvements at Moor Park; these include rationalising barriers , where access may be restricted for users of non-standard bicycles / mobility scooters, which would open up access for all. Recommendations for parking restrictions are also made near schools within the housing area south of Deepdale Stadium. Parking currently restricts the width of pavements & blocks cycle routes, resulting in poor continuity and an unattractive environment.

Small Schemes (£510,000)

Recommendations focus on small and medium schemes to improve route safety (with a focus on schools) and route continuity, in particular near Eldon Primary School, Deepdale Community Primary School and Roebuck Road / Inkerman Street parking restriction interventions score highly. Junctions throughout this route are recommended for tightening measures and signalised crossings for desire lines (some also fall into the medium scheme category). This will slow vehicles at these junctions, making it safer for NMUs. Some of these junctions include Blackpool Road / Deepdale Shopping Centre and at St Gregory Road, further details are provided in Appendix D. A small section of segregated route is proposed along Deepdale Road, between St Stephen’s Road and Moor Park, providing a safe link between housing, schools and Moor Park where there is currently no provision.

Medium Schemes (£3,055,000)

There are a variety of medium Schemes on this route. Many schemes on this route include further junction improvements to incorporate provision for pedestrians and cyclists, in particular the Blackpool Road junction with Miller Road and Ribbleton Avenue score particularly highly in the appraisal. Another suggestion is a new off-road track through the north of Moor Park which would provide a pleasant route alternative to Blackpool Road and could be further developed into a circular route around the park. Ramped access to Lancaster Canal from Roebuck Road would improve links to other routes on the network for all users.

Major Schemes (£1,920,000)

The major scheme along this route is to reduce the carriageway to a consistent single lane operation in either direction and this option scores highly against the appraisal objectives. The space made available would be repurposed to create dedicated on carriageway segregated cycle lane along Blackpool Road. This would provide a continuous east – west route serving commuter / school journeys.

This route has a total Cost of £5,575,000

Route 4: Longridge to Preston

Route Summary

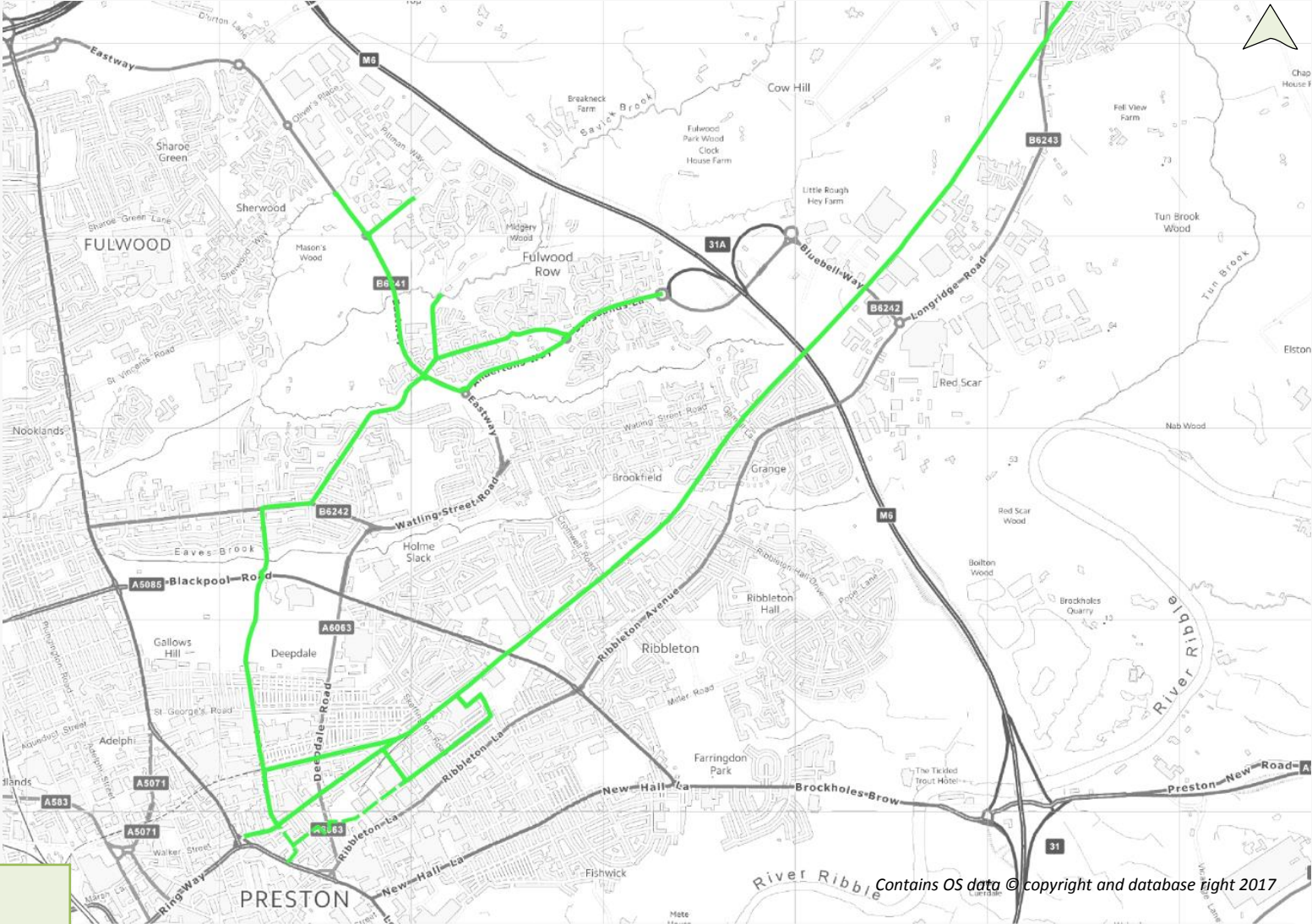
This proposal links communities on the edge of Preston to employment sites including, Preston North Eastern Employment Area, Redscar Industrial Estate and the city centre. A large proportion of the route uses the disused railway line which has already been converted to a shared used trail through the city.

The route is already signed in part, but is incomplete, has a number of barriers and needs improvement to wayfinding and perceptions of personal safety. As well as encouraging trips for employment, the route has the potential to encourage more leisure trips out to the North East of Preston, particularly as it is away from traffic and also passes the historic site of the Battle of Preston.

The Strategic Case

This route would support commuter trips into Preston from the outskirts of Preston, Grimsargh and Longridge. Preston’s CBD is expected to provide an additional 1584 jobs in future, which will increase commuter trips to central Preston, exacerbating current peak congestion in the City. This route would provide a safe alternative, particularly on the peak time congested Longridge Rd and Ribbleson Ln.

This route is especially important in terms of promoting safer routes to schools, as the route is close by to 16 schools. The strand of route up to Longridge is a disused railway, which provides an opportunity to regenerate and provide a safe off-road route as a direct link serving communities.



Minor Works (£168,000)

There are many minor works suggested on this route, focusing on the continuity of the route and access for all. Improved signing is recommended especially at West View and St Paul’s Road. Signage is currently unclear, improvements would benefit wayfinding to local attractions. A second recommendation is to widen a section of pathway on West View to the standard shared width of 3 metres.

Small Schemes (£540,000)

A majority of Schemes suggested fall into the Small or Medium category, which suggests a focus should be in this area. A majority of recommendations focus on improvements on the old railway line pathway from West View to Redscar and developing and resurfacing the line up towards Longridge. In particular, recommendations on the section from West View Leisure Centre to Redscar score highly on the appraisal. A number of recommendations include rationalising the barriers in place to open up access for all. A second recommendation is to create a regular maintenance schedule for the entire route to clear vegetation and ensure it is suitable for year round use.

Medium Schemes (£1,040,000)

Development and extension of the railway towards Longridge and any associated works, such as access points, are recommended and rank highly on the appraisal tool. Another suggestion is for a bi-directional off-road cycle track along Eastway from Midgery Lane to Pittman Way, which would serve the employment area at the industrial estate and provide a safe, off-road route avoiding traffic.

Major Schemes (£400,000)

A section of the disused railway line, from Grimsargh to Longridge, is a recommendation of this route. This will provide a safe link between Grimsargh and Longridge as an alternative to using the car. Extending this section to Longridge scores highly against appraisal objectives and also has a high BCR.

This route has a total Cost of **£2,148,000**

Level of Service	Old railway line				Alternative			
Level of Service (%)	Cycling (Existing)	Walking (Existing)	Cycling (Proposed)	Walking (Proposed)	Cycling (Existing)	Walking (Existing)	Cycling (Proposed)	Walking (Proposed)
Cohesion	33	50	83	100	33	0	83	100
Directness	83	50	90	83	20	58	40	83
Safety	50	83	81	100	38	50	63	67
Comfort	50	50	83	83	33	50	67	67
Attractiveness	50	38	75	100	42	38	83	100
Average	53	54	82	93	33	39	67	83

Active Mode Appraisal Toolkit	
Present Value Benefits (£,000s)	2946.90
Present Value Costs (£000's)	1614.32
Benefit Cost Ratio	1.83

Route 5: Broughton to Preston

Route Summary

A north south route linking the village of Broughton, Preston Hospital and the University of Central Lancashire to the city centre via the A6 Garstang Road. The proposals will improve facilities for both pedestrians and cyclists and make better connections to and from residential areas as well as connecting major employment and education sites.

The Strategic Case

This route would support movements from Broughton and Fulwood to central Preston. It would also serve trips from student accommodation towards the university and city centre. As there are over 32,000 students at the university, this route will provide improved options for students and locals alike. Additionally, the route passes Preston College and Fulwood Academy amongst other schools, this route would be a safe route for students and school children to commute.

This route would also link in with the City Deal Broughton village improvements and Broughton Bypass which start at the M55. At present this route is heavily congested at peak times, especially near central Preston and the M55. This route, however, is likely to become quieter as a result of the Preston Western Distributor, which would make this a more pleasant route with less traffic.

The route south of Moor Park passes through 5 areas in the top 20% most deprived in the UK; upgrading this route would improve access to facilities, jobs and improve health for residents of these areas.

The recommendations for this route focus on the creation of dedicated on carriageway segregated cycle lanes, with junction upgrades throughout to provide safe crossing facilities and junction improvements to improve continuity and safety.



Level of Service

Level of Service (%)	Cycling (Existing)	Walking (Existing)	Cycling (Proposed)	Walking (Proposed)
Cohesion	5	30	100	100
Directness	41	57	70	83
Safety	16	58	75	67
Comfort	29	58	83	92
Attractiveness	38	53	83	88
Average	26	51	82	86

Active Mode Appraisal Toolkit

Present Value Benefits (£,000s)	3695.83
Present Value Costs (£000's)	2747.99
Benefit Cost Ratio	1.34

Minor Works (£36,000)

There are few minor works and small scheme suggestions on this route, with a focus on major improvements to the current facilities which would require major investment. Minor works focus on improvements at Corporation Street and Ringway, with recommendations to improve drop kerbing and route continuity as well as investigating small improvements to give pedestrians priority at crossings on Fishergate.

Small Schemes (£50,000)

Only one small scheme is recommended; this is to make improvements on Friargate. As a key bus corridor in the city centre, a scheme may be difficult, however local enhancements could be make to make this more pleasant for cyclists and pedestrians.

Medium Schemes (£1,330,000)

Major investment is recommended on this busy route to maximise the potential for sustainable modes. The shared pathway on Ringway is widened to standard shared path width, this route is especially important as it carries high volumes of traffic and is a key pedestrian and cycle link from the University to central Preston and the station. Space is however limited, presenting a challenge to engineers. On Corporation St and north of the Adelphi Junction there is scope for on carriageway segregated lanes. Improvements are also recommended throughout this route in order to provide safe crossings points and better cater for desire lines, an example which scores highly on the appraisal tool is North Road / Moor Lane junction, where it is recommended to continue segregated lanes at the junction.

Major Schemes (£2,240,000)

On carriageway segregated cycle lanes from Moor Lane / A6 junction to the M55 are recommended, linking from those proposed in the city centre area to create continuous provision throughout the length of this route. Works would include junction treatments at side roads along the route, which scored highly on the appraisal of this route. This would incorporate pedestrian and cycle priority, slow vehicles, reduce pedestrian crossing distances and provide a safer environment. Major works are proposed at the Adelphi junction making it easier and more intuitive to negotiate for pedestrians and cyclists.

This route has a total Cost of **£3,656,000**

Route 6A: Cottam to Preston

Route Summary

This route links the residential area of Cottam and the Preston north western housing growth sites to the city centre. It also passes the University of Central Lancashire campus.

The proposals incorporate improving accessibility to the Lancaster Canal making it suitable for commuter and everyday journeys as well as making it more accessible for those with limited mobility.

The Strategic Case

This route would support existing movements from Cottam and Ingol to Preston City Centre. The route is widely residential in nature and development sites to the north of Lightfoot Lane means that this area will grow and expand in the future, and this route would serve this new residential population.

During peak periods, congestion occurs along the B6241 and Woolplumpton Road. With these improvements suggested, the route and canal in particular would provide a viable alternative for NMUs year round, reducing congestion on these links. The route along the canal could also be promoted as an off-road route for education journeys. Route 6 also acts as a leisure route, with the canal linking into Haslam Park. There are also connections to route 3 and route 7.

Improvements on route 6 would benefit the nearby areas which are in the top 20% nationally for health deprivation through encouraging improvements to health as a result of a quality cycle route being in place.



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Level of Service

Level of Service (%)	Cycling (Existing)	Walking (Existing)	Cycling (Proposed)	Walking (Proposed)
Cohesion	39	33	75	100
Directness	60	57	75	83
Safety	53	56	81	92
Comfort	36	49	75	83
Attractiveness	35	44	88	94
Average	45	48	79	90

Active Mode Appraisal Toolkit

Present Value Benefits (€‚000s)	3280.66
Present Value Costs (€‚000’s)	1405.96
Benefit Cost Ratio	2.33

Minor Works (€‚146‚000)

The majority of this route focuses upon small to medium scale interventions. These include additional signage to make the routes clearer and a suggestion scoring highly on the appraisal is to improve maintenance schedules along the route to make them safer and more pleasant, especially along the canal. At various points, such as at the entrance to the Guild Wheel and entrance to Haslam Park it is recommended to remove motorcycle barriers improving access for all.

Small Schemes (€‚405‚000)

Small schemes on this route aim to address problems of safety at junctions and roundabouts by providing crossing points for NMUs. One junction which scores highly against objectives where this is recommended is Leighton/Pedder St junction. Changes are also recommended at Shelley Road/Woolplumpton Road and Cadley Causeway Roundabout. This will improve the attractiveness of the route, making the junctions easier to negotiate for NMUs. Other small schemes include provision of ramped access points to the Lancaster Canal, replacing the current steps. This would make the route more accessible by cycles and for less able users.

Medium Schemes (€‚670‚000)

Medium schemes which score highly on the appraisal mostly involve the canal and include creating a gateway feature at Aqueduct St onto the canal to promote the route, making it safer and providing a sloped access to the canal. It is also recommended to add lighting along the canal and upgrade the surface to cater for all needs including cyclists, wheelchairs and mobility scooters. Some improvements are scheduled within the City Deal programme.

Major Schemes (€‚650‚000)

The major scheme on route 6 is to upgrade Woolplumpton road from Blackpool road to Tom Benson Way; this is also in line with many of the appraisal tool objectives. This would capitalise upon the wide roads and footways, and recommends the creation of on carriageway segregated cycle lanes. In addition to this, it is recommended that side road junctions are narrowed and have pedestrian and cycle priority in order to create a safe and continuous route with limited breaks. The issue of pavement parking would also have to be addressed as a result of this.

This route has a total Cost of €‚1‚871‚000

Route 6B: Cottam to Preston

Route Summary

This option provides a high quality route from Preston city centre towards Cottam and incorporates a significant amount of residential dwellings through a direct and accessible route.

The Strategic Case

This route would support existing movements from Cottam and Ingol to Preston City Centre. The route is widely residential in nature and development sites to the north of Lightfoot Lane means that this area will grow and expand in the future, and this route would serve this new residential population.

During peak periods, congestion occurs along the B6241 and Woolplumpton Road. The interventions proposed on this route would segregate cyclists from passing motor vehicles and therefore increase the attractiveness of the route, particularly for those cyclists who are commuting from residential properties along the route, towards the city centre.

Improvements on route 6 would benefit the nearby areas which are in the top 20% nationally for health deprivation through encouraging improvements to health as a result of a quality cycle route being in place.

Level of Service				
Level of Service (%)	Cycling (Existing)	Walking (Existing)	Cycling (Proposed)	Walking (Proposed)
Cohesion	39	33	75	100
Directness	60	57	75	83
Safety	53	56	81	92
Comfort	36	49	75	83
Attractiveness	35	44	88	94
Average	45	48	79	90

Active Mode Appraisal Toolkit	
Present Value Benefits (£,000s)	3280.66
Present Value Costs (£000’s)	1631.53
Benefit Cost Ratio	2.01



Minor Works (£100,000)
Minor improvements on this link include signage and lighting improvements.

Medium Schemes (£500,000)
Small schemes on this route aim to increase the safety and attractiveness of the route for cyclists. To connect into the major scheme of the cycle superhighway along Tom Benson Way, a shared use cycleway is proposed along Flyde Road which will form part of the wider network to improve links to the city centre and university. At Tulketh Brow and along Fylde Road, parking will be formalised to provide more footway space and crossings will be significantly improved through signalling

Major Schemes (£350,000)
The major scheme upgrade involves implementing a two-way segregated cycleway on Tom Benson Way, and upgrading the crossing provision at the Tag Lane/Tom Benson Way/Tanterton Hall roundabout. This will facilitate movements to high schools, universities, and the city centre.

This route has a total Cost of **£950,000**

Route 7: Northern Preston East - West

Route Summary

The north of Preston is the focus of major residential development. As part of this growth, it is important that the walking and cycling networks are fit for purpose, providing for all users and connecting the places people live, work and learn.

The northern section of the Guildwheel is currently mainly suitable for leisure journeys. These proposals will upgrade the existing route making it more suitable for year round, everyday journeys as well as delivering a more direct alternative link from housing growth areas to key employment sites.

The Strategic Case

Route 7 proposes improvements to the existing Guild Wheel route, and provides an additional East – West route across the north of Preston. This will act as a distributor across the north of the city, connecting local residential areas, in addition to linking to the Preston North Eastern employment site. There are housing and employment development sites adjacent to this route. The route would connect these development sites and link into the north of Preston, supporting growth in the area.

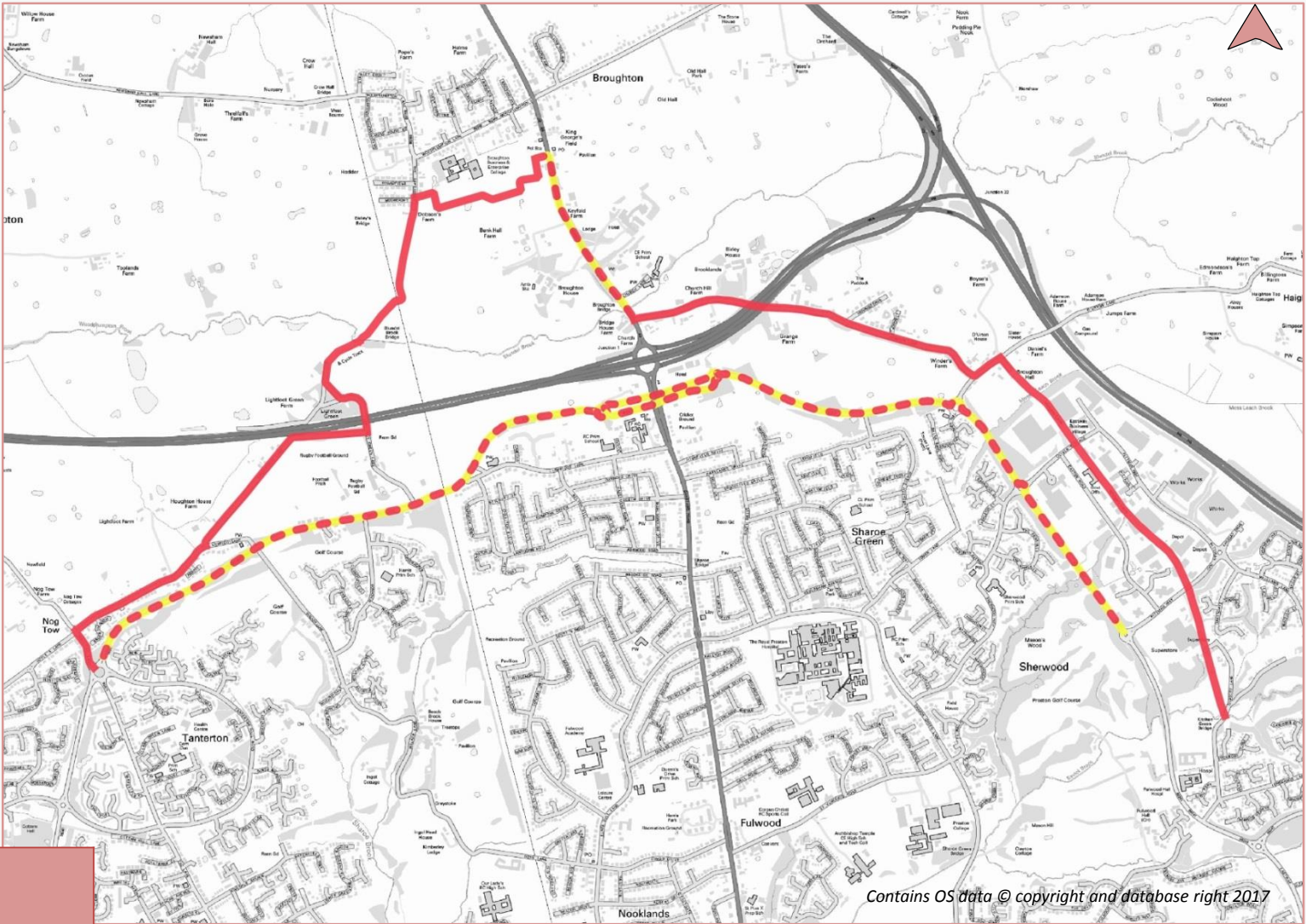
The route along Eastway and the junction linking to the A6 is heavily congested during peak hours. Provision of a direct high quality route along these roads would encourage a mode shift from car to walking and cycling along this route, easing congestion.

There are a number of schools nearby to this route which would benefit from the enhancements, further encouraging children to travel sustainably.

Level of Service	Guild Wheel				B6241			
Level of Service (%)	Cycling (Existing)	Walking (Existing)	Cycling (Proposed)	Walking (Proposed)	Cycling (Existing)	Walking (Existing)	Cycling (Proposed)	Walking (Proposed)
Cohesion	33	0	50	100	0	0	83	100
Directness	30	50	50	67	70	8	80	83
Safety	56	50	69	33	19	8	94	67
Comfort	67	33	67	58	33	29	100	100
Attractiveness	33	75	75	100	33	6	75	63
Average	44	42	62	72	31	10	86	83

Active Mode Appraisal Toolkit

Present Value Benefits (£,000s)	2580.87
Present Value Costs (£000's)	1663.29
Benefit Cost Ratio	1.55



Minor Works (£66,000)

Minor works apply to the section of this route on the Guild Wheel. Suggestions include vegetation clearance and regular maintenance on the route, improving the attractiveness and perceptions of personal safety. An additional suggestion is to replace staggered barriers with more user friendly bollards, to allow non standard bicycles, mobility scooters onto the route.

Small Schemes (£122,500)

The majority of small schemes are suggested to improve safety on this route. It is recommended that D’Urton Lane from B6281 to Midgery Lane is reduced to 30mph as this is a fast section of road. A dedicated crossing point is recommended at the Midgery Lane/ Oliver Place Junction in addition to parking enforcement, through the addition of double yellow lines. This junction scores highly on the appraisal tool with similar works proposed at the Midgery Lane / Pittman Way junction.

Medium Schemes (£1,055,000)

Medium and major schemes constitute the majority of the cost for route 7. The majority of proposed works are improved crossing points at junctions, continuing the safety improvements on this route. Dedicated crossings are required on the Tom Benson Way junctions with Longfield junction, D’Urton Lane and Wychnor. Pittman Way roundabout and Garstang Road A6 at Eastway also require crossing facilities and rank highly in the appraisal. These interventions will improve the continuity of the route as well as safety.

Major Schemes (£970,000)

The major scheme on this route is to convert the grass verge along Tom Benson Way, Lightfoot Lane and Eastway from Tag Lane to Pittman Way into a continuous cycle track, providing a direct route East – West link across the north of Preston.

This route has a total Cost of **£2,213,500**

Route 8: Penwortham to Preston

Route Summary

Construction of the Penwortham bypass is expected to deliver a substantial reduction in vehicular traffic through the local centre and along Liverpool Road. This presents a real opportunity to deliver a step change in provision for pedestrians and cyclists along this desire line corridor connecting residents with local facilities, education sites and the city centre.

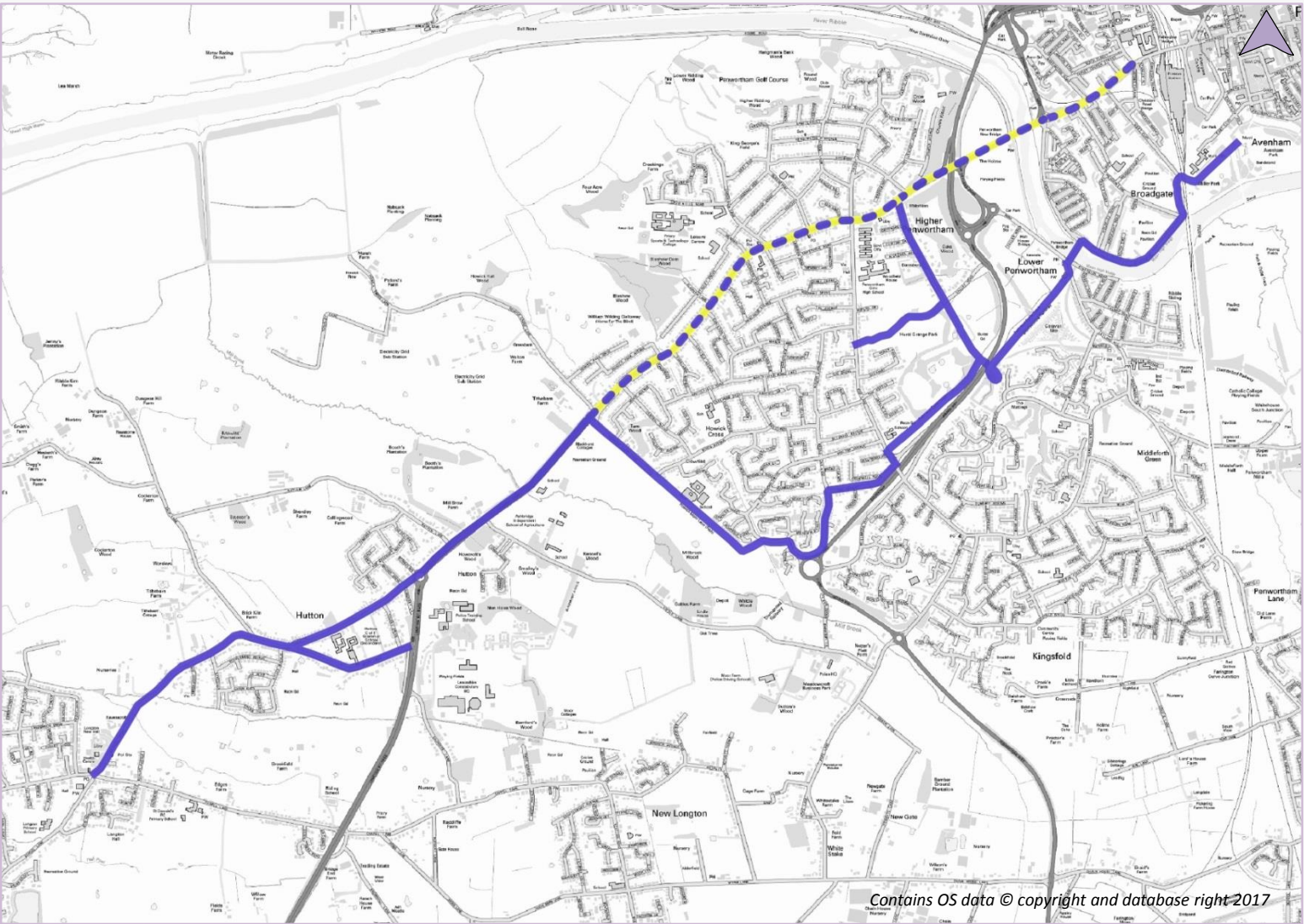
Enhancements to an existing quiet alternative route are also proposed making it more suitable for year round everyday journeys.

The Strategic Case

Route 7 primarily would connect commuter movements from Longton, Hutton and Penwortham to central Preston. Passing 9 schools, this route would also support safer routes to school and encourage active travel for education journeys, through provision of a safe route to and from schools in the area. The route would serve users of the local centres in Penwortham, Hutton and Longton, ensuring that walking and cycling is a viable option.

During peak times, traffic movements on the A59 Liverpool Road are frequently very slow with congestion towards the city centre. Provision of a direct, segregated route would encourage modal shift to sustainable travel, reducing congestion in this area and also improving health of users of the route.

The route would also contribute towards improvements to air quality through encouraging sustainable travel, this would benefit the AQMA at Liverpool Road / Cop Lane and help to reduce pollution in this area.



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Level of Service

Level of Service (%)	Cycling (Existing)	Walking (Existing)	Cycling (Proposed)	Walking (Proposed)
Cohesion	35	50	67	100
Directness	65	51	65	75
Safety	27	60	88	75
Comfort	42	54	92	88
Attractiveness	50	44	88	94
Average	44	52	80	86

Active Mode Appraisal Toolkit

Present Value Benefits (£,000s)	3459.75
Present Value Costs (£000's)	1663.06
Benefit Cost Ratio	2.08

Minor Works (£198,500)

Many improvement suggestions on this route are for minor works. This includes signage improvements to aid wayfinding to local attractions such as Avenham Park and on Cop Lane amongst other areas. Improvements are suggested to improve the route at Howick Moor Lane, such as resurfacing, replacing staggered barriers with bollards and providing a link through to the school to improve access for pupils.

Small Schemes (£262,500)

The recommendation is to undertake safer routes to school work with Hutton CofE Grammar School, investigating the opportunity for an extension of parking enforcement and / or widening of the footway outside the school. Reducing the speed limit in Longton village centre to 20mph along with some traffic calming and highway narrowing will improve safety within the area. There is also a suggestion to provide lighting through Hurst Grange Park, this would allow this section of route to be used as a traffic free and quiet alternative.

Medium Schemes (£1,137,500)

On Fishergate Hill it is recommended to further investigate the scope for reducing outbound highway capacity from 2 lanes to 1 lane, and reallocating this space to create dedicated on carriageway segregated cycle lanes, this intervention scores highly in the appraisal. This would provide a new section of route and would link in with the city improvements and a safer access to the Guild Wheel. Continuing this section, a 2 way cycle track is proposed from the River Ribble Bridge to Hill Road, improving the safety and route options for those travelling to Penwortham, which scores highly on the appraisal. Provision is recommended between Hutton and Longton, by removing road centre lines, on road advisory lanes could be introduced here where there is currently no facility. Improvements are suggested on the shared path from Leyland Road to Golden Way – it is recommended to light this section and undertake maintenance, making this route more attractive and useable year round.

Major Schemes (£930,000)

There are two major schemes on this route and both score highly in the appraisal tool. Firstly, it is suggested that changes are made on the Liverpool Road / Leyland Road junction. This is currently a 4 phase crossing and would benefit from a cycle track on the south side, and rationalising the remaining crossings to benefit users through reduced waiting times. A second major intervention is to create on carriageway segregated cycle lanes and reduce the speed limit to 20mph through the local centre of Penwortham on Liverpool Road between Hill Road and Howick Moor Lane.

This route has a total Cost of **£2,528,500**

Route 9: Bamber Bridge to Preston

Route Summary

This existing route forms the spine of the study area network. It connects Preston to much of the growth in employment and housing in South Ribble, Chorley as well as many of the local leisure routes. From Preston the route passes the historic Winkley Square and Avenham Park yet there are few links from the city centre.

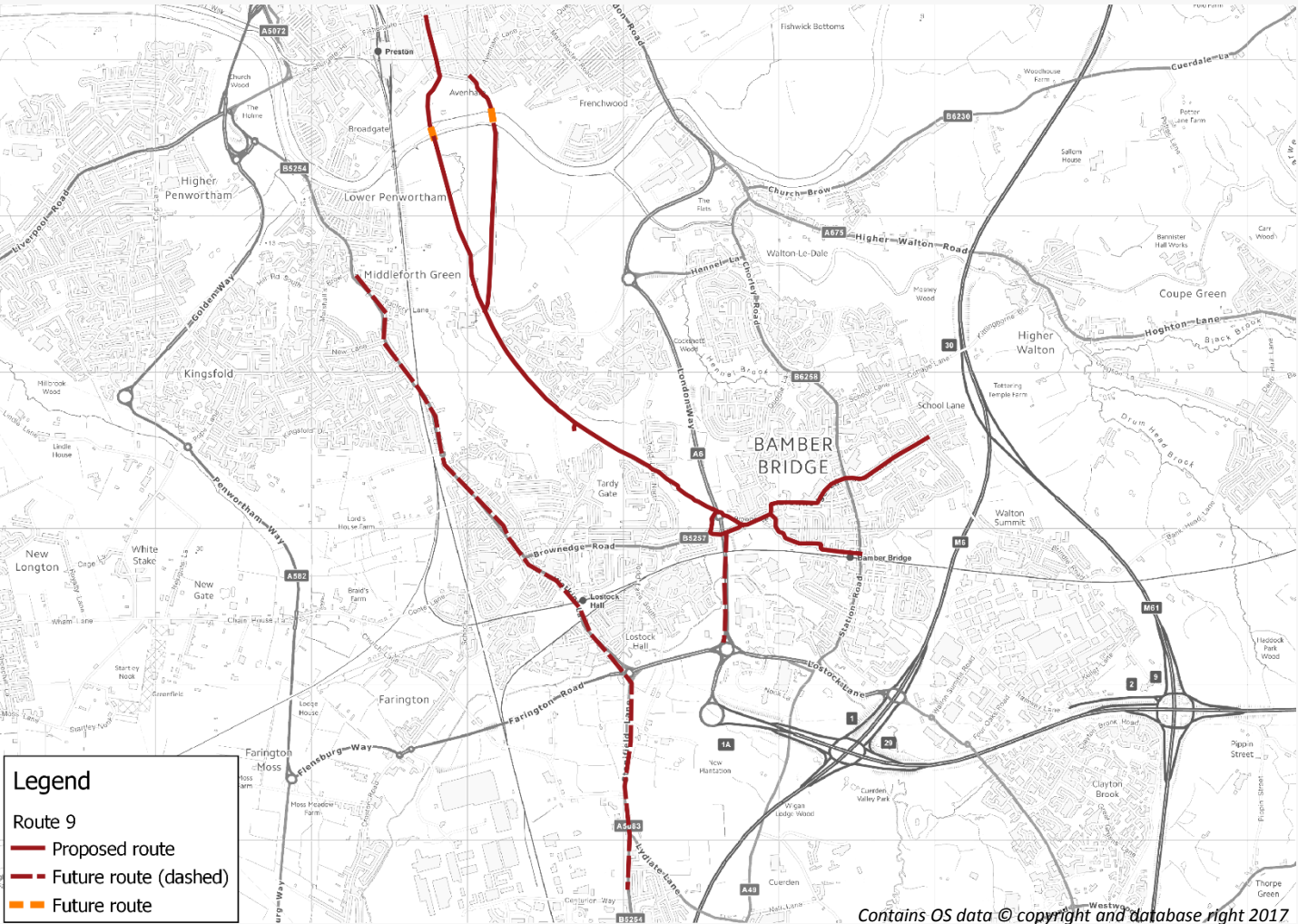
With housing and employment growth in the area, the intention is to upgrade the route from a largely rural leisure trail making it more suitable for year round everyday commuter, education and recreational journeys.

The Strategic Case

Already a popular route, works are proposed linked to growth in the area to accommodate a greater proportion of north / south and east /west journeys. This will create high quality, traffic free links from Preston to Bamber Bridge and the Cuerden strategic growth site whilst linking with the Penwortham area of South Ribble. It also delivers improvements set out in South Ribble’s Central Parks proposals.

The recommendations for this route would make it more accessible, reduce feelings of isolation and improve perceptions of personal safety. This would make it a year round commuter alternative and provide a real alternative for journeys to many of the City Deal growth areas. Within the Bamber Bridge area, the route connects residential areas with the local centre, station as well as local shops and schools.

This route would also link into other routes in the South Ribble and Chorley, connecting with route 10, 11 and 12.



Level of Service

Level of Service (%)	Cycling (Existing)	Walking (Existing)	Cycling (Proposed)	Walking (Proposed)
Cohesion	42	75	83	100
Directness	60	63	70	100
Safety	56	67	94	100
Comfort	50	65	100	67
Attractiveness	42	53	75	75
Average	50	65	84	88

Active Mode Appraisal Toolkit

Present Value Benefits (£,000s)	4477.33
Present Value Costs (£000’s)	740.22
Benefit Cost Ratio	6.05

Minor Works (£91,000)

The majority of recommendations on this route are minor schemes, enhancing the provision already in place.

Small Schemes (£270,000)

One suggestion for this route which scored highly is to create a gateway feature from Fishergate to Avenham Park and towards this route, this would open up access as presently this is hidden away and not celebrated as a valuable local asset. An additional suggestion is to surface a path that links the rail path and Old Tram Road. It is also recommended to better promote access to other links off this route such as the link towards Penwortham to the West by opening up access to improve perceptions of personal safety. As well as this, it is proposed to include new links to development areas such as near Watering Pool Lane Close, this will improve access for developments in future.

Medium Schemes (£350,000)

Recommendations focus at the Brownedge Rd / A6 roundabout. At present, there is no NMU provision other than drop kerbs at this junction with route users having to cross at a busy approach. A dedicated facility is recommended where the path ends to aid pedestrians and cyclists in crossing the road safely. This would make the route safer for all. It is recommended that the short section of pathway is resurfaced and upgraded to create a coherent route.

Major Schemes (£640,000)

A key recommendation for this route, scoring highly in the appraisal, is to provide continuous lighting on the off road section of route in order to ensure that it is available for year round use. The proposed cycle superhighway will improve connections to Lancashire Central and is therefore recommended for further investigation. There is also potential to introduce a cycleway along the A6 to the south of Bamber Bridge to support movements to Cuerden site.

The current pedestrian/cyclist diversion for the Old Tram Bridge, following its closure, is Avenham Viaduct, which is privately owned. This is currently the only walking and cycling crossing point linking the city centre/railway station/ retail area to the South Ribble / Bamber bridge area. Further work is required to determine design options and costs alongside a detailed business case.

This route has a total Cost of £1,350,000

Route 10 : Leyland to Preston

Route Summary

This route comprises 2 options that both connect Leyland to route 9 at Lostock Hall.

Both routes link housing and employment within the Growth Deal area with the eastern route in particular travelling through new development at Cuerden.

The Strategic Case

Route 10 provides a cycle connection between Lostock Hall and Leyland. The majority of the eastern route provides a new link, with the western route making improvements and/or replacing existing facilities.

The eastern route in particular passes through a large area of development land to be used for employment. In future, this route would be used for commuter trips to significant employment areas including the Cuerden strategic site, as well as possible trips between Leyland, Lostock Hall and Preston. This route connects in to the wider network of strategic routes linking directly to route 9, which connects onto Fishergate at Preston city centre. This is an indicative route based upon the information known at the time of writing. Future technical work will be required to ensure detailed route proposals link into development masterplans as they develop.

At peak periods, the roads linking Leyland to central Preston in particular Flensburg way, Penwortham Way and the B5254 experience heavy congestion, resulting in slow moving traffic. This route provides an alternative sustainable option, with a continuous route towards central Preston. This would contribute towards reducing congestion and improving air quality, which could have a positive impact on the Leyland Road / Brownedge Road AQMA.

Level of Service	Croston Road		Centurion Way					
Level of Service (%)	Cycling (Existing)	Walking (Existing)	Cycling (Proposed)	Walking (Proposed)	Cycling (Existing)	Walking (Existing)	Cycling (Proposed)	Walking (Proposed)
Cohesion	33	50	67	100	33	50	67	100
Directness	60	42	60	83	60	33	70	83
Safety	19	17	69	50	13	0	75	67
Comfort	33	42	83	83	33	42	83	83
Attractiveness	58	50	92	88	42	50	92	88
Average	41	40	74	82	36	35	77	84

Active Mode Appraisal Toolkit	
Present Value Benefits (£,000s)	4013.31
Present Value Costs (£000's)	1056.52
Benefit Cost Ratio	2.66



Minor Works (£45,000)

The majority of works on this route are medium schemes, with only a small budget required in order to make minor and small interventions. Some minor works include tightening the junction radial at Todd Lane South junction and narrowing the carriageway with a chicane crossing at the Todd Lane North / Old railway Line junction.

Small Schemes (£105,000)

There are two small schemes suggested for route 10. Firstly, it is suggested that the junction of Croston Road/School Lane junction is narrowed to ensure safer road crossings, and this could be done in addition to Safer routes to school measures. This is one of the top scoring interventions from the appraisal. Secondly, it is recommended that Coote Lane from Fir Trees Avenue to Leyland Road has improved pedestrian provision to the Tardy Gate local centre, through tightening junctions and providing pedestrian priority. This needs to be complemented with parking enforcement to prevent parking on the narrow footways.

Medium Schemes (£1,555,000)

The majority of the costs of this route are for larger investments required to make it a coherent good quality year round option. A number of schemes are suggested, however, it is mostly roundabout and junction upgrades which have come out best value on the appraisal tool. Changes include tightening the junction at Todd Lane South / Brownedge Road and Centurion Way / Stanifield Lane. In addition, it is recommended for a new crossing at Farington Road and to create dedicated on carriageway cycle lanes along Centurion Way.

Major Schemes (£300,000)

There is one recommended scheme for route 10. This is to provide dedicated facilities on Stanifield Lane. Ideally, off-road provision would be the best option, as there are HGV movements on this road. This section of route is required as there is currently no provision, this would make the route more coherent.

This route has a total Cost of **£2,005,000**

Route 11 : Chorley to Preston

Route Summary

This route comprises two options connecting Chorley with Preston via a number of growth sites. It is challenging route as there are high volumes of traffic along both corridors. The routes upgrade some existing facilities as well as recommending new links to create continuous coherent options, mainly for employment and education journeys.

The Strategic Case

This route connects Chorley with Bamber Bridge and Leyland and also has direct links to routes 9 and 12 that link into central Preston. This route provides 2 options linking Preston to Chorley, as well as improving links within Chorley.

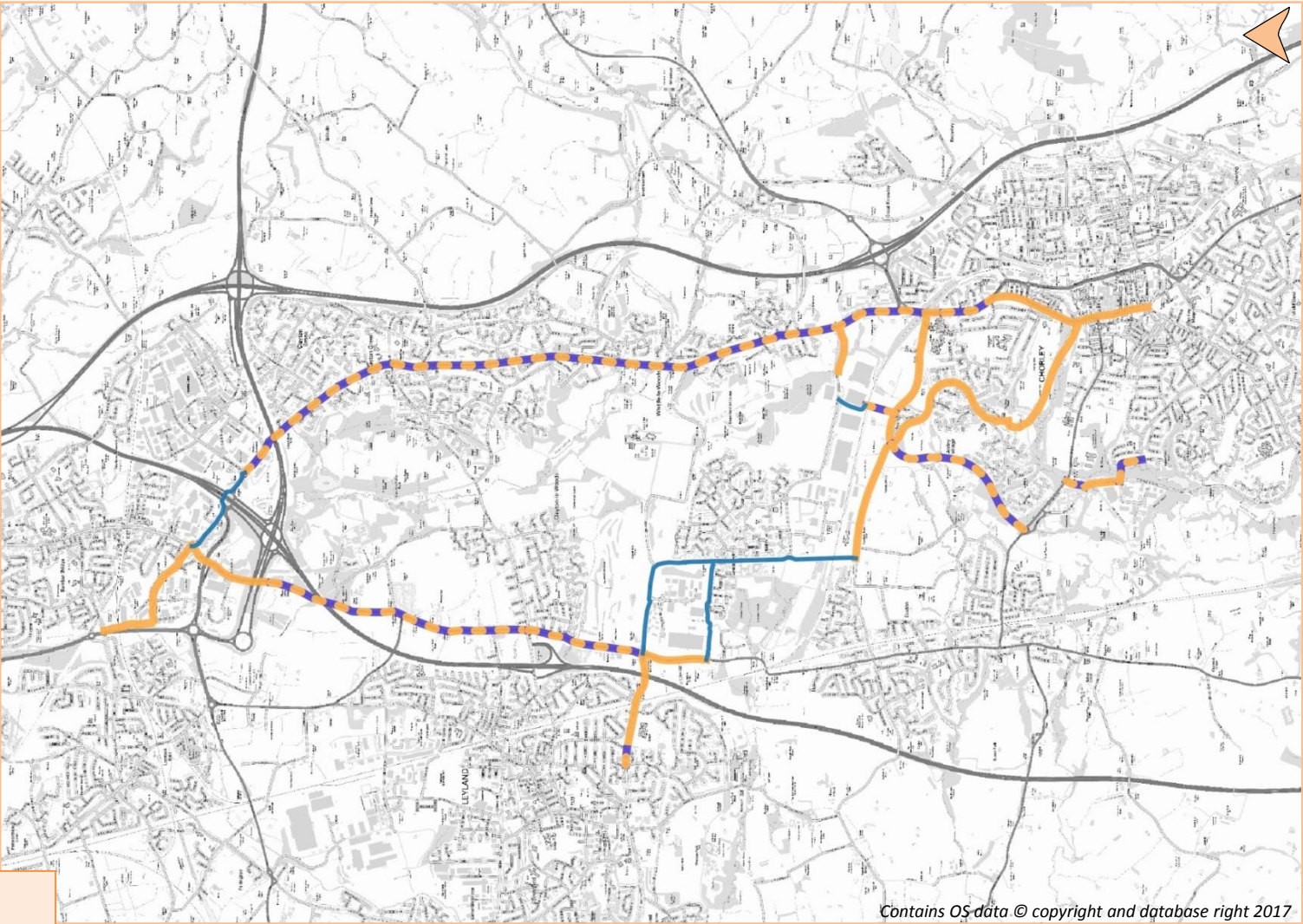
This route supports growth; to the north of the route it connects employment development sites at Walton summit and additional employment and housing growth sites in the Buckshaw area. The route also connects to the significant planned development at the Cuerden strategic site. This is an indicative route based upon the information known at the time of writing. Future technical work will be required to ensure detailed route proposals link into development masterplans as they develop.

The two roads from Preston to Chorley, the A6 and Wigan Road, both experience congestion at peak times, with slow moving traffic. The proposed cycle links along these routes would provide a viable alternative mode to travel, reducing congestion and improving air quality.

The interventions suggested in Chorley would especially benefit schools and colleges in the area, providing safer routes to schools and encouraging active and sustainable travel.

Level of Service	Wigan Road		A6					
Level of Service (%)	Cycling (Existing)	Walking (Existing)	Cycling (Proposed)	Walking (Proposed)	Cycling (Existing)	Walking (Existing)	Cycling (Proposed)	Walking (Proposed)
Cohesion	17	50	67	100	17	50	83	100
Directness	40	67	70	75	30	42	60	83
Safety	13	33	83	50	6	50	63	50
Comfort	33	25	67	75	17	50	83	75
Attractiveness	42	25	83	83	42	38	92	83
Average	29	40	74	77	22	46	76	78

Active Mode Appraisal Toolkit	
Present Value Benefits (£,000s)	6496.19
Present Value Costs (£000's)	4186.40
Benefit Cost Ratio	1.55



Minor Works (£55,000)

Only a small budget is required to cover minor works on this route. Those which have come out top in terms of meeting the objectives on the appraisal tool are improving signage in two areas: Astley Park and Buckshaw Village main road. Improving this signage would aid wayfinding and improve the route coherence in these areas and would benefit users.

Small Schemes (£430,000)

tool are to widen Ackhurst Drive from Southport Road to Foxhole Road to shared use anThe interventions which meet most objectives in the appraisal d to provide a tiger crossing on this road near to Common Bank Lane. Other small schemes include crossings on Buckshaw Village Central Avenue / Old Worden Ave roundabout and resurfacing the road where it is in poor condition, such as Euxton Lane from Chancery Rd to Buckshaw Village main road, which also meets many of the appraisal objectives.

Medium Schemes (£2,445,000)

These routes require major investment in order to make the route coherent and safe for users, therefore the majority of interventions are medium and major schemes. Two junction crossings score well on the appraisal which are to provide a crossing at Dawson Lane / Waitrose Depot and to create a crossing on Chancery Road near to Astley Village shops where there is a desire line from the bus stop to Buckshaw Primary School. A number of upgrades to segregated cycle lanes and off road sections are recommended on this route, to separate traffic from NMUs. In particular, the section of road from Four Oaks roundabout to Walton Summit Road roundabout scores well in the appraisal tool for cycle tracks on both sides of the road.

Major Schemes (£2,640,000)

The majority of the major schemes suggested are focused on the creation of off-road or segregated cycle tracks on this route. The proposal which scores highest on the appraisal tool is to create on carriageway light segregated lanes in both directions from Euxton Lane roundabout to Four Oaks Road roundabout. Another suggestion which scores highly is to widen the pathway to shared use on Euxton Lane from Chancery road to the A6.

This route has a total Cost of **£5,570,000**

Route 12 : Bamber Bridge to Samlesbury

Route Summary

This route is formed partly of improvements to the South East Guild Wheel, which then connects to Bamber Bridge with new and upgraded infrastructure through residential areas.

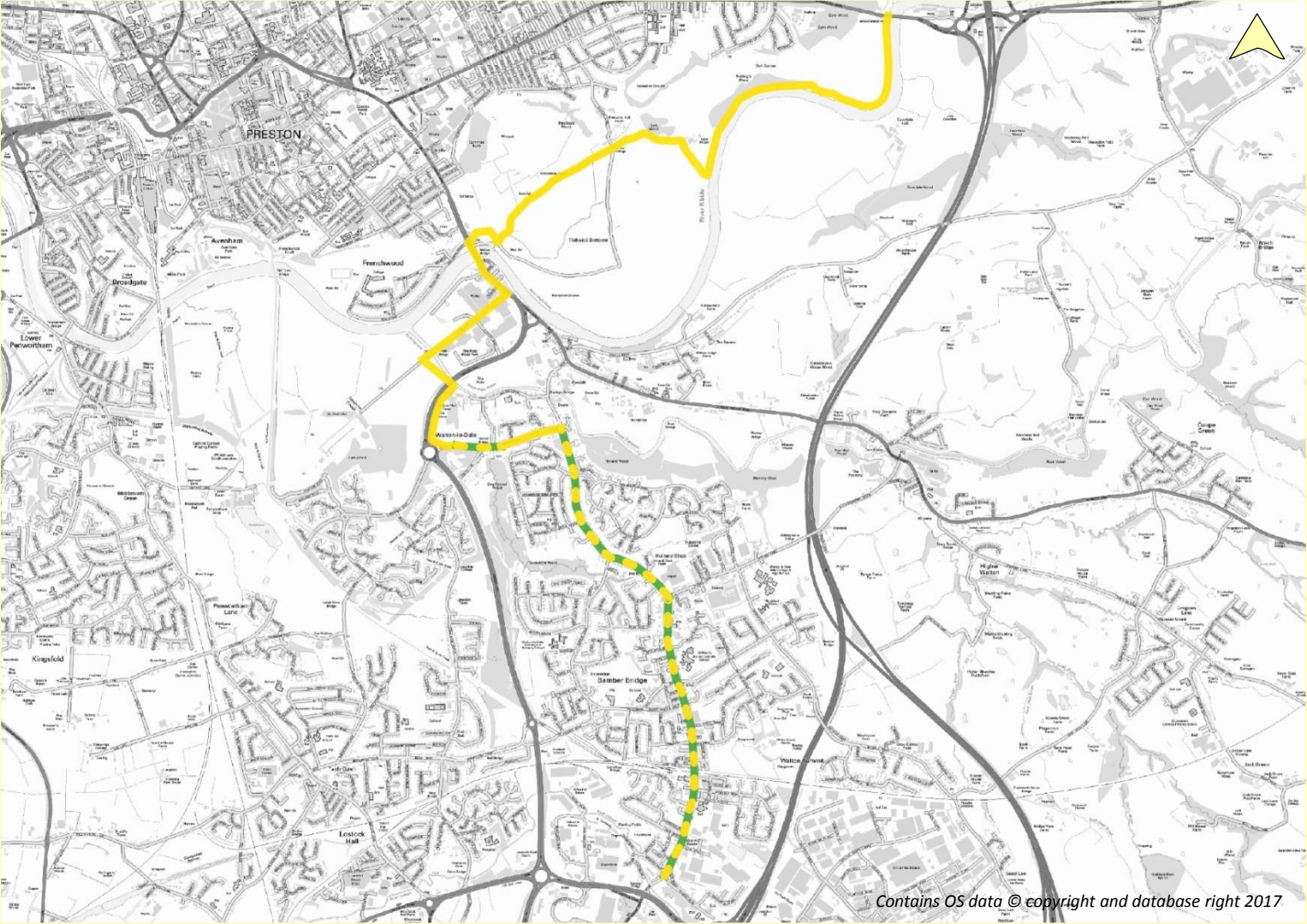
This route is most likely to be used by those from the South Ribble area travelling to employment areas in Preston or at Samlesbury EZ.

The Strategic Case

This route would act in part as a leisure route, in particular the section of this route that is the Guild Wheel. The route would provide a continuous link from the Bamber Bridge area to connect to the Guild Wheel. This route would also support employment at Samlesbury EZ, with a direct connection to route 2, providing an alternative, pleasant off-road and congestion free route from the South Ribble.

This route also serves the local centre at Bamber Bridge, along with nearby schools and development sites at the Walton Summit Centre. This route would complement the recent local enhancement scheme, providing a safe route to visit local shops and for school children to travel to schools in Bamber Bridge. Provision of this route would also benefit locals in Bamber Bridge as they can travel via an alternative sustainable mode. In turn, modal shifts to cycling and walking could ease congestion on a road where traffic is slow during peak periods and improve air quality, in particular the AQMAs at A6 / A675 Victoria Road and London Road.

In addition to route 2, this route links with route 9, and route 11, providing a continuous route to Chorley from Preston.



Level of Service				
Level of Service (%)	Cycling (Existing)	Walking (Existing)	Cycling (Proposed)	Walking (Proposed)
Cohesion	0	25	83	100
Directness	50	44	60	75
Safety	19	25	75	67
Comfort	17	19	67	75
Attractiveness	17	34	83	75
Average	21	29	74	78

Active Mode Appraisal Toolkit	
Present Value Benefits (£,000s)	2214.24
Present Value Costs (£000's)	721.25
Benefit Cost Ratio	3.07

Minor Works (£35,000)

There are a range of measures at a range of costs suggested on route 12. It is suggested that improvements are made on the Guild Wheel section of the route such as maintenance works to improve the surface for walkers and cyclists. It is also recommended to remove barriers onto the Guild Wheel in order to open up access for all users. These minor changes would encourage wider use of the route.

Small Schemes (£100,000)

Continuing improvements on the Guild Wheel, re-surfacing works are recommended from Mete House Farm to the River Ribble. This would need to be agreed with the farmer as it is still an operational site, however it ranks highly according to appraisal objectives. A strict maintenance regime is needed to keep the surface clear of waste matter and flood debris.

Medium Schemes (£550,000)

The majority of works in the medium schemes category make this route continuous and safe to use. On carriageway light segregation is recommended from School Lane to Holland House Road and towards Hennel lane Roundabout, providing a new link to serve the community. The appraisal tool ranks highly the suggestion for environmental enhancement such as lowering the speed limit through the Bamber Bridge town centre with junction narrowings and pedestrian side road priority on Station Road from Church Road to the roundabout at school Lane. This would slow traffic and create a better environment for NMUs.

Major Schemes (£275,000)

A major investment on this route would be to investigate the opportunity to provide lighting on the off-road sections of this route, near the River Ribble. Lighting provision would enable this route to be used for leisure and for commuting year round, providing a safely lit off road route.

This route has a total Cost of **£960,000**

Route 13 : Preston City Centre Cycling Routes

Route Summary

The routes act as distributors connecting a number of proposed primary arterial routes, linking them to Preston City Centre, Bus and Railway Station.

Recommendations on this route are primarily focussed on the creation of a cycle superhighway along Ringway. The cycle superhighway will connect the arterial routes with the proposed inner city centre cycling funnel routes with high-quality junction design to create a safe and attractive cycle network.

The Strategic Case

The Inner City Centre cycle routes will provide a network that will provide central city connections, linking proposed and existing routes to the city centre, bus and railway Stations.

The flagship scheme as part of Route 13 relates to transforming Ringway through a high-quality fully segregated cycleway and CYCLOPS junctions to create a safe, attractive and cohesive cycle network around the city centre.



Level of Service

Level of Service (%)	Cycling (Existing)	Cycling (Proposed)
Cohesion	16.67	100.00
Directness	40.00	70.00
Safety	18.75	75.00
Comfort	33.33	83.33
Attractiveness	8.33	75.00
Average	22.00	80.67

Active Mode Appraisal Toolkit

Present Value Benefits (£,000s)	8427.49
Present Value Costs (£000's)	8896.10
Benefit Cost Ratio	0.95

Minor Works (£35,000)

There are four minor costings along the inner city centre routes, these are for comprehensive cycle route signage, along Church Street, Meadow Street, Manchester Road and Syke Hill/Stoneygate.

Small Schemes (£100,000)

The small schemes proposed as part of Route 13 comprise of junction improvements, upgrading crossing provisions and the implementation of informal cycle/pedestrian routes along Syke Hill/Stoneygate, Mancategory. These aim to improve safety and cycling movements, connecting the arterial routes to inner city centre Preston. Further measures include re-surfacing Chester Road to improve access to Cardinal Newman College.

Medium Schemes (£250,000)

The proposed medium schemes comprise of light-segregated cycleway from Knowsley Street to Winkley Square, and along Manchester Road from Frenchwood Ave junction to Halsbury Junction. Further, an informal streets arrangement is proposed outside Cardinal Newman College, and it is recommended that a number of junctions are upgraded to toucan standard.

Major Schemes (£1, 907, 464)

A major investment on this route is to provide a bidirectional cycle track along Queen Street/Avenham Lane from London Road to Knowsley Street junction, an informal street arrangement along Butler Street, Lancastergate and Church Street, in which these measures should follow similar design criteria to Fishergate. The flagship scheme however is a cycle superhighway along Ringway from Corporation Street to Queen Street London Road junction, which incorporates two CYCLOPS junctions and creates a route designed to the highest quality for maximum uptake.

This route has a total Cost of £11,833,413