Newcastle's Local Cycling and Walking Infrastructure Plan

Newcastle City Council

Part 1: Supporting Report

1. Background

The Department for Transport (DfT) published their cycling and walking investment strategy in April 2017 which set out the government's ambition to make cycling and walking a natural choice for shorter journeys, or as part of longer journeys by 2040.

The Strategy's objectives, by 2020, are to:

- increase cycling activity, where cycling activity is measured as the estimated total number of cycle stages made,
- increase walking activity, where walking activity is measured as the total number of walking stages per person,
- reduce the rate of cyclists killed or seriously injured on England's roads, measured as the number of fatalities and serious injuries per billion miles cycled,
- increase the percentage of children aged 5 to 10 that usually walk to school.

To achieve these objectives, the DfT published guidance on the preparation of Local Cycling and Walking Infrastructure Plans (LCWIPS). LCWIPs, as set out in the Government's Cycling and Walking Investment Strategy, are a new, strategic approach to identifying cycling and walking improvements required at the local level. They enable a long-term approach to developing local cycling and walking networks, ideally over a 10 year period, and form a vital part of the Government's strategy to increase the number of trips made on foot or by cycle.

The key outputs of LCWIPs are:

- a network plan for walking and cycling which identifies preferred routes and core zones for further development,
- a prioritised programme of infrastructure improvements for future investment,
- a report which sets out the underlying analysis carried out and provides a narrative which supports the identified improvements and network.

The Council applied to the DfT for support with regards to developing a LCWIP, in line with the recently published UK Cycling and Walking Investment Strategy and grant funding was received in 2018.

The Council's intention was to develop a LCWIP setting out proposed improvements to walking and cycling infrastructure and developing a corresponding network of provision. Ultimately this will look to continue Newcastle's history of investment in high quality infrastructure, however it should be noted, that whilst the development of LCWIP sets out investment requirements and priorities, there is no clear funding stream to deliver these improvements.

It should also be noted that identifying links on the walking and cycling network plans does not commit the Council to delivering them or commit Council funding. Neither does it set standards for cycling provision or dictate what type of provision should be provided on the proposed links. Any proposals will be subject to usual scheme development process which is outside of the LCWIP scope.

Part 1 contains details of:

- consultation that was undertaken as part of the development of the LCWIP and a summary of responses made through our online consultation,
- the methodology undertaken to develop stages 1 to 4 (determining the scope, gathering information, network planning for cycling, network planning for walking),
- how consultation responses have influenced the development of the LCWIP and details of the prioritisation methodology,
- our approach to developing a walking network plan.

2. Consultation

Two workshops led by AECOM were held in June 2018 in order to gather views on walking and cycling provision, to inform the development of Newcastle LCWIP. The structure of the workshop provided details regarding LCWIP requirements, informed stakeholders of work to date, including methodology and looked to gauge specialist stakeholder input and insight to a range of questions. Attendees were targeted stakeholders representing walking and cycling interest groups, public health, Newcastle City Council and NECA.

Stakeholders were asked to consider:

- Additional destinations which may be omitted from datasets
- The level of provision that is required to key destinations, considering different types of user and differing trip purposes
- User priorities, for cycling these being directness, gradient, safety, connectivity and comfort and for walking attractiveness, comfort, directness, safety and coherence
- Prioritisation of investment in the short (under 2 years), medium (2-5 years) and longer term (over 5 years)

On-line consultation via platform Commonplace ran between November 2018 and March 2019.

Targeted drop-ins during consultation period in outer east and west areas as majority of comments were from central areas.

Engagement with both North Tyneside and Northumberland Councils was undertaken to ensure consistency in terms of cross boundary proposals that are being developed.

The Commonplace engagement dashboard relating to the LCWIP public consultation is illustrated below in Figure 1. It shows that there was a total of 428 respondents and 915 comments were made.

Figure 1 Commonplace Engagement Dashboard

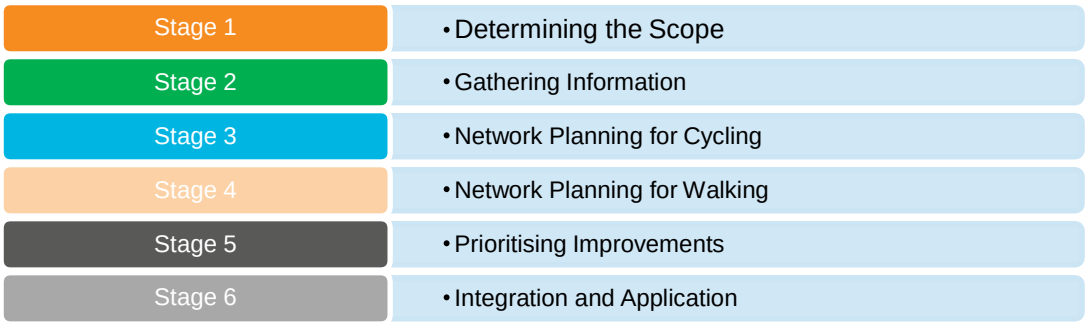
These comments were analysed and supported the development of revised network plans. Further analysis generated by Commonplace is included Appendix 2.

3. Development of LCWIP Stages 1 to 4

3.1 Outline

There are clear requirements for LCWIP which are set out in DfT's LCWIP Technical Guidance for Local Authorities. It sets out the requirements for a six stage process, as shown in Figure 2.

Figure 2 Six Key Stages to LCWIP Development



3.2 Stage 1 – Determining the Scope

The LCWIP is focused within the administrative boundary of Newcastle. Consideration was given to neighbouring local authorities where cross boundary improvements were considered beneficial.

It was recognised that more recently, the focus of walking and cycling investment has been on providing links from surrounding residential areas to the city centre to promote the modal shift away from car use; thus supporting the business case for investment in terms of value money return. It was important that the approach to the LCWIP was evidence led with investment being founded from a thorough understanding of existing infrastructure and current and future travel desire lines. This accords with LCWIP guidance.

The intention at the outset was not been to pre-empt the outcomes of the LCWIP but to consider a scenario where investment may be focused on providing additional connections to existing radial routes, enabling a greater population to access existing infrastructure, amongst other options. Also, investment could be focused on routes which, whilst connecting major origin/destination movements, were not immediately aligned to the city centre.

3.3 Stage 2 – Data Collection

Available datasets

An extensive data-gathering and mapping exercise was undertaken. This broadly followed understanding the current policy context and frameworks in which the LCWIP sits and collation and reviewing of a range of data sources.

In recognition of available data sources, there were a number of existing datasets. This mainly related to the existing infrastructure and site allocations for ongoing and future development. Infrastructure datasets included amongst other items, existing and proposed cycle networks, road network, rail and Metro infrastructure data. The provision of housing and employment development data provided an opportunity to consider future network demands, as well a catering for immediate needs.

Additional data included key trip attractors; including city centre and district centre locations, leisure and recreational locations, retail and business locations, education and healthcare establishments.

Existing GIS datasets were supplemented through local knowledge, mapping and stakeholder discussions to ensure that all possible destinations were captured.

With a detailed understanding of key destinations, a process of clustering was undertaken to group destinations which were in locational proximity. With a series of destination clusters, additional data was sought to understand potential desire lines to the clusters.

Further data included Census data, including travel to work data to establish origin destination patterns whereby an existing quantum of movement was through walking or cycling. Distance data was also analysed and mapped to show areas with high proportions of people travelling short distances; to establish those locations that could be targeted though modal shift.

Residential and workplace population density data identified areas where higher population numbers could be targeted to better represent value for money investment and identify areas of largely likely demand.

Areas for future cycling and walking growth were also identified from the propensity to cycle tool, indicating hotspots for future increases.

To establish where safety improvements could be required, accident data was mapped by severity and to show accidents involving cyclist and pedestrians.

To understand a representation of socio-demographic context, IMD data was plotted to establish areas of deprivation and areas of prosperity; both of which would benefit from infrastructure improvements; both in the context of the health agenda and likely areas of walking and cycling uptake.

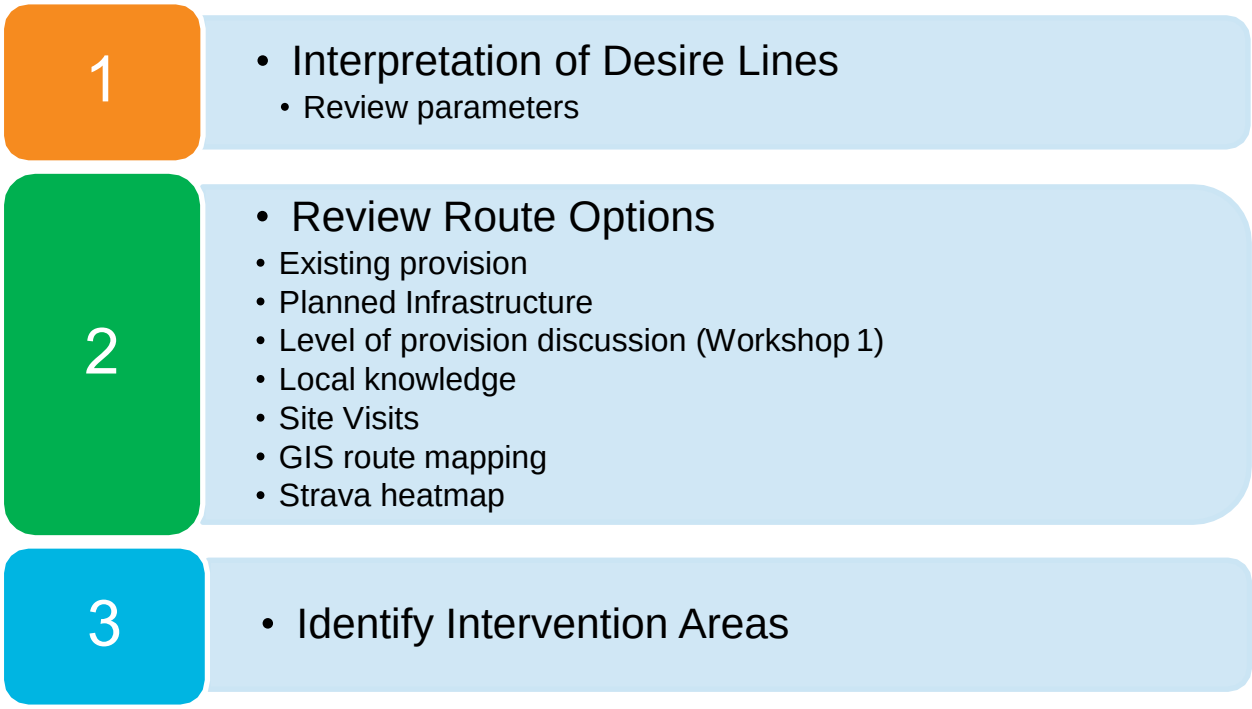
To understand the scale of potential constraints, key points of severance such as the River Tyne, and major road network was mapped. Added to this, were a series of other constraints including gradient and key environmental considerations. Combined, datasets of this type produced a raster base which provided an indication of areas which may pose difficult in respect of scheme delivery.

The culmination of extensive data collection and review established a series of desire lines which provided connectivity to the destination clusters. The range and type of datasets used enabled interrogation and challenge of the desire lines as a network developed. To provide context, and ensure the platform for network building was robust in delivering the aims of increasing the numbers of people walking and cycling, distance thresholds were set around the destination clusters, being mindful not to overestimate the distances that people could reasonably walk or cycle.

3.4 Stage 3 – Network Planning for Cycling

The approach to Network Planning for Cycling followed the broad process set out the in the LCWIP guidance document. The precise methodology to route selection and network planning is summarised in Figure 3. The figure illustrates a three-step process to defining the Cycle Network Plan.

Figure 3 Process to Develop Cycle Network Plan



Step 1: Interpretation of Desire Line

Step 1 of the process was to interpret each of the developed desire lines to understand the destination and area parameters which led to the origin and destinations of the desire lines being prioritised in the GIS outputs.

Due to the large number of parameters considered in the creation of each desire line, the interpretation process required an analytical approach to understand the key drivers behind each path. To provide an understanding of this procedure an example of the interpretation process is detailed below.

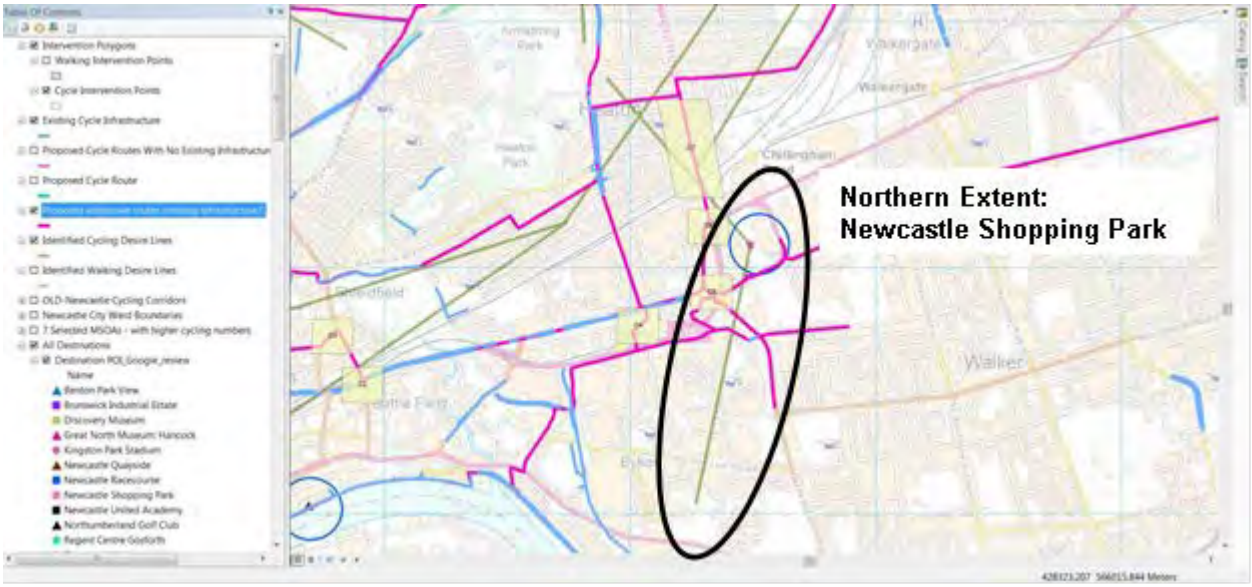
Figure 4 highlights the relevant data sources instrumental to the identification of a specific desire line between Byker and Newcastle Shopping Park.

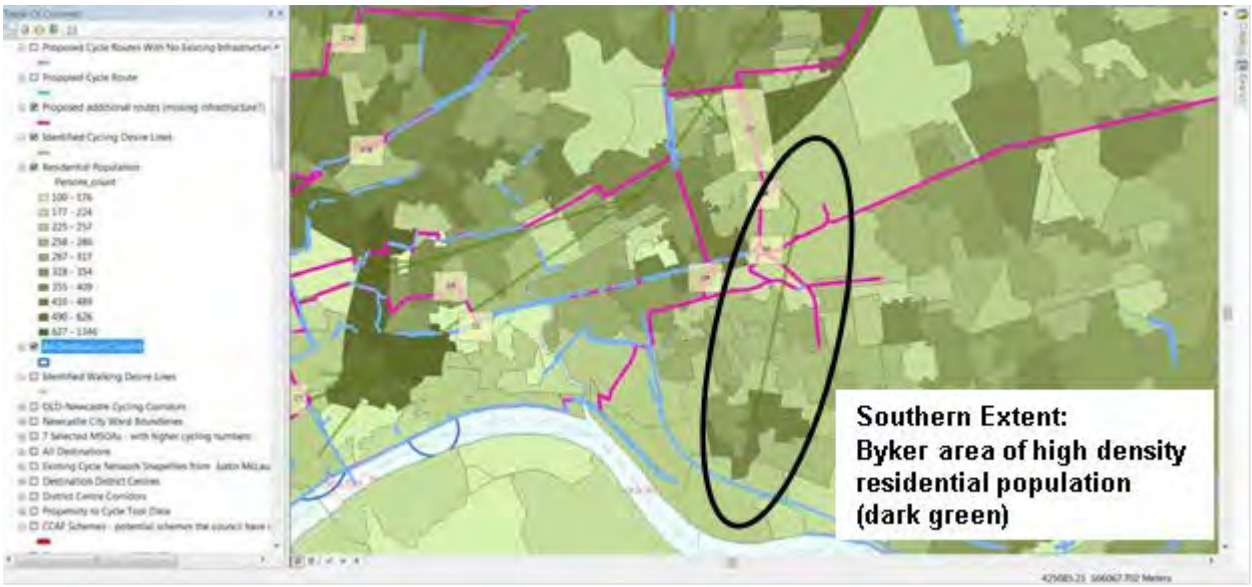
The presence of the desire line is a result of the interaction of multiple parameters across the full scope of considered data, including wider area elements such as the 'propensity to cycle tool' and 'travel to work' area data (discussed in Section 2). However, within this context, it is possible to identify two specific data sources considered to be the primary drivers behind the desire line extents.

In this example, the northern desire line extent is readily identifiable as Newcastle Shopping Park. This destination was identified as a 'destination cluster' during the data development process and is a popular retail shopping and leisure destination. The southern line point is

defined by an area of high-density residential population in Byker, south of Commercial Road. This area was identified within the desire line development process as a result of satisfying multiple criteria, including its proximity to the previously identified ‘destination cluster’ which highlights it as suitable for potential cycling trips.

Figure 4 Interpretation of Cycle Desire Line Example: Byker to Newcastle Shopping Park.





Step 2: Review Route Options

The knowledge and understanding of the origin-destination movements gained in Step 1: Interpretation of Desire Line subsequently enabled route options to be reviewed to meet each of the identified desire lines.

As highlighted in Figure 3, a wide range of considerations were explored during the review of route options. A short description on how each of these items were utilised to shape to selected routes is detailed below.

- Existing provision
  There is a strong existing network of cycling provision in Newcastle. Prior to the consideration of new infrastructure, it was sensible to consider the extent to which the existing network met the identified desire lines. In a number of cases existing high-quality cycle provision largely met identified movements, negating the need for further works, for example the Quayside cycle route. In other examples, existing cycle infrastructure partially supported routes. In these cases, effort was made to build on the existing facilities and tie any proposed routes to the existing network. Finally, consideration was given to desire lines which ran in close proximity to existing infrastructure. In these cases, provision of additional routes adjacent to existing cycle facilities would be unlikely to represent good value.

- Planned Infrastructure
  Knowledge of planned infrastructure was also used to inform route choice. If planned works had the potential to support considered desire lines, priority was given to ensuring that these routes were selected if they represented a satisfactory option.

- Level of provision discussion (Workshop 1)
  Discussion regarding the targeted level of cycling provision was used to assess the suitability of considered routes. For example, avoiding right turns into traffic on preferred routes.

- Local knowledge
  Local expertise of the area from a cycling perceptive has been developed over extensive involvement with a range of past and present cycling infrastructure projects. Additionally, key members of the delivery team were strong cycling enthusiasts with experience of applying first hand local knowledge as part of route option assessment.

- Site Visits
  Supporting site visits allowed for any gaps in local network knowledge to be filled and allowed consideration to be given to the feasibility of any proposed new links.

- GIS route mapping
  GIS route planning software has been used to identify potential routes between the identified desire line extents. GIS derived routes have been used as a starting point for the route options, as well as a sense check against the finalised selected routes.

- Strava Global Heatmap
  Strava Global Heatmap data was used as an empirical sense check against the finalised routing, where relevant. Whilst the direct use of Strava derived data in the project was considered ill-advised, due to capture rate issues and lack of data transparency, it nonetheless serves as a helpful tool for considering the relative popularity of key routes and links amongst existing cyclists engaged with Strava's platform.

All of the above tools were utilised in the review of route options. In order to more clearly demonstrate their application to route choice and network planning, a continuation of the example desire line presented in Step 1 between Byker and Newcastle Shopping Park is provided below.

Figure 5 provides aerial imagery covering the example area, as well as the proposed cycle network. As can be seen, the proposed cycle network in response to the Byker to Newcastle Shopping Park does not match the desire line 'as the crow flies'. The reasons for this are reflected in the use of the data listed above and support the approach outlined in LCWIP guidance.

Figure 5 Review Route Options Example: Byker to Newcastle Shopping Park

Reviewing the southern extents of the desire line, our understanding of successful cycle infrastructure delivery and local knowledge of the area identified that an internal cycle network within the residential area should not be prioritised. The streets within this area of Byker do no present a significant barrier to cycling; as the minor residential link roads are generally lightly trafficked and localised internal cycling provisions have already been provided at key access points.

Instead, the key to unlocking cycle access for the wider residential area has been to provide connectivity to the wider network via an east-west parallel link to the north. By providing a quality cycle facility on Conyers Road, multiple residential streets can gain access to a wider network via connections at, for example, Gordon Road, Brinkburn Close and Raby Way. Additionally, the proposed Conyers Road route was tied in to an existing cycle route running west of the area to provide connectivity to the south with Quayside cycling routes.

The next step of the cycle route development in this area was to consider onward access to the northern desire line extent, Newcastle Shopping Park destination cluster. A193 Byker bypass represents a key barrier to the existing cycling movements to the north. Whilst the GIS route mapping identified that there is a crossing point under the bypass to the west, behind the police station, the onward provision is poor for cyclists and its location does not well serve the considered desire line. Alternatively, proposed through links further east, behind the East End Pool would provide a more direct link to Heaton Road, connecting with identified existing cyclist facilities on the link. The use of Heaton Road in the routing was also supported by Strava Global Heatmap data which indicates that Heaton Road is reasonably highly trafficked link.

To provide further support, an additional linking route from Conyers Road under the bypass, east of Shields Rd/ Byker bypass roundabout, completes this section of the network development. From north of A193 Byker bypass the proposed route follows existing links, which would require cycling improvements in line with the provision set out in LCWIP Stage 1 and 2.

Finally, the route navigates Shields Rd/ Byker bypass roundabout and the road network adjacent to Newcastle Shopping Park.

Step 3: Identify Intervention Areas

Intervention areas represent key physical barriers to the delivery of the proposed networks. They have been identified as part of an iterative process with Step 2: Review Route Options.

The core value of identifying key intervention areas is to allow a high level understanding of where significant network improvements are required, and enable planners to recognise where future funding should be prioritised To complete the Byker to Newcastle Shopping Park desire line example set out in Steps 1 and 2, the key Intervention areas associated with this movement are provided in Figure 6. Both the selected intervention areas are key barriers which have been identified and discussed during the development of Step 2: Review Route Options.

Figure 6 Intervention Areas: Example, Byker to Newcastle Shopping Park.

Intervention ID	Intervention area	Intervention notes
C4	Shields Road to Conyers Road through link	Cycle access improvement links to west of East End Pool
C5	A193/ A187 East Byker roundabout	Off carriageway cycle routes/ lead-in lanes

The Cycle Network Plan has been developed at a high level, ensuring that detailed cycling schemes at each intervention area have not been developed. However, Figure 6 provides ‘intervention notes’ detailing suggestions of type and level of improvements necessary. For example, off carriageway cycle routes/ or lead-in lanes at A193/ A187 East Byker roundabout. These high level scheme outlines will be costed during the subsequent LCWIP Stage 5.

3.5 Stage 4 – Network Planning for Walking

The development of the Walking Network Planning followed the same three step process as that adopted for the Cycle Network Plan in Stage 3, and summarised in Figure 3.

However, whilst the same processes have been applied across both user modes, the outputs differ in that a walking route network has not been provided. Instead, the Walking Network Plan is limited to an Intervention Areas map.

Details of the processes and data used in the three steps are not contained in this section to avoid repetition of the previous Stage 3 descriptions. However, similarly to Stage 3, further detail on the development of the Walking Network Plan is provided via a worked example to give greater understanding of the processes adopted. The walking example also highlights the decision process behind the conclusion that the provision of defined walking routes at a city scale did not represent a desirable or feasible output.

Step 1: Interpretation of Desire Line

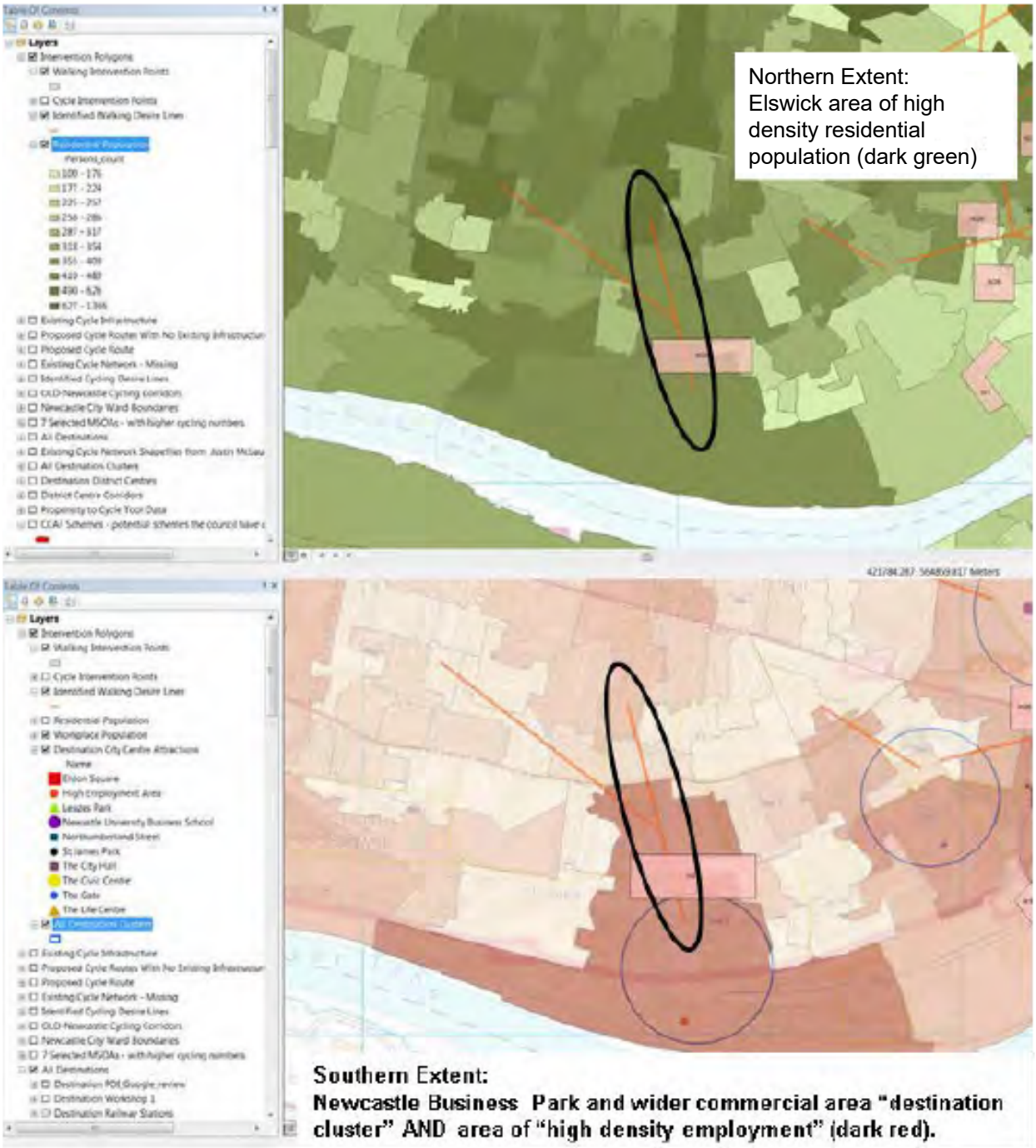
As with the Stage 3 Cycling Network Planning, Step 1 of the process has been to interpret each of the developed desire lines to understand the destination and area parameters which led to the origin and destinations of the desire lines being prioritised in the GIS outputs.

Figure 7 highlights the relevant data sources instrumental to the identification of a specific example desire line between Elswick and Newcastle Business Park.

The north extent of the desire line is defined by an area of high density residential population in Elswick, south of Westgate Road. This area was identified within the desire line development process as a result of satisfying multiple criteria, including its proximity to Newcastle Business Park and surrounding commercial areas.

The Newcastle Business Park and surrounding commercial areas were identified as a ‘destination cluster’, and mark the southern extent of the desire line. However, the southern extent also represents an area of high density employment which incorporates an even larger area of commercial, retail and employment extending north as far as Elswick Road.

Figure 7 Interpretation of Walking Desire Line Example: Elswick to Newcastle Business Park



Step 2: Review Route Options

As discussed earlier in this section, a walking route map has not been produced as an output of this project. However, the process of reviewing route options was still carried out and remained instrumental to the delivery of the Step 3 Intervention Areas.

Given the knowledge of origin-destination movements gained in Step 1: Interpretation of Desire Line it has been possible to consider route options to meet the Elswick to Newcastle Business Park desire line. Two examples of potential routes are illustrated in Figure 8.

Figure 8 Review Route Options Example: Elswick to Newcastle Business Park

Both identified routes outlined in Figure 8 are directly serving the single identified desire line. However, given the desire line is based on potential walking demand between two physically large areas, the scope for route choice within the areas is extremely varied and the range of possible origin-destination pairs vast.

For example, a resident of Durham Street walking to the Environmental Agency, would be highly unlikely to take the same route as a resident of Grainger Park Road walking to British Airways Customer Services. Nonetheless, both routes are equally valid.

Within the context of LCWIP, the central scope of this development stage is to enable walking improvements to improve connectivity. Given the example above, which is relevant for all the identified walking desire lines, it was considered counterproductive to concentrate improvements on a single route, or limited few routes as this approach would be unlikely to bring wider benefit to serving a wide range of individual walking trips.

For this reason, the provision of a Walking Network Map was viewed as counterproductive as well as impractical given that, at a city scale, the number of generated routes would produce a largely incomprehensible network of contrasting routes. This decision was made in contrast to cycling, as walking route choice is typically significantly less constrained and requires a different level of integrated infrastructure to achieve satisfactory progress.

Step 3: Identify Intervention Areas

Walking Intervention Areas represent key physical barriers to walking mobility throughout the city. As with the Stage 3 Cycle Network Planning, they were identified as part of an iterative process with Step 2: Review Route Options.

In line with the previous Steps, the Elswick to Newcastle Business Park example desire line is useful for demonstrating the processes behind how the Intervention Areas were finalised. Reviewing the large number of potential routes between the two areas identified in Figures 6 and 7, a subsequent review of significant barriers relevant to multiple considered routes has been carried out in accordance with the processes set out in Stage 3.

For the Elswick to Newcastle Business Park example, three parallel roads to the direction of the desire line have been identified as the potential barriers, as listed below.

- Elswick Road
  The pedestrian provision on Elswick Road could be improved. However, there are existing crossing points which would meet the majority of the identified potential routes. For example, a zebra crossing east of Saint John’s Cemetery, and number of pedestrian refuge islands. Moreover, the footways appear sufficiently wide to support east-west movement.

- Westmorland Road/ St John’s Road
  There are no formal crossing points along Westmorland Road/ St John’s Road. Whilst traffic volumes are not excessive it was considered that the complete lack of infrastructure represents a barrier to potential walking routes.

- Scotswood Road
  Pedestrian provision on this section of Scotswood Road could also have been highlighted for improvement. However, the key junctions both contain ‘walk with traffic’ signalised pedestrian facilities.

There was evidence for all three of the identified potential barriers to be designated as Intervention Areas. However, given the city wide scale and high level nature of this process, it was decided that prioritising improvement on Westmorland Road/ St John’s Road would represent the most significant intervention to improving access across the example desire line and multiple associated routes.

Figure 9 provides ‘intervention notes’ detailing suggestions of type and level of improvements for this example. The high level scheme outlines will be costed during the subsequent LCWIP Stage 5.

Figure 9 Walking Intervention Area: Example, Elswick to Newcastle Business Park

Intervention ID	**Intervention area**	**Intervention notes**
W24	Westmorland Road	Walking links between the residential areas north of Elswick Road and the business and commercial parks to the south is generally poor. Whilst crossing points are provided on Elswick road, the east-west routes along the corridor are poorly served and could be improved, for example, Elswick Road/ Grainger Park Road roundabout. However, the more significant barrier exists on Westmorland Road, where no formal crossing provision is provided in the entirety of this section. Provision of a zebra crossing (s) would improve connectivity.

4.3 Stage 5 (Prioritisation)

Following completion of the walking and cycling network, previously developed outline costs for delivery of the schemes were reviewed, and costs developed for the walking and cycling routes and interventions included as a result of the consultation.

Aligned with scheme costing, each of the routes and interventions were considered in terms of deliverability, where a short term (less than 3 years), medium term (3 to 5 years) or long term (over 5 years) timescale were identified. The approach to allocating a timeframe was based on an understanding of the current priorities, an understanding of the complexity of each scheme and collating schemes which were connected to enable progressive infrastructure delivery.

Each proposed scheme was also been scored using an appraisal framework to ascertain how it met a range of criteria, using a 5-point scoring system. The following list identifies the categories that have been used to form the framework, and rationale for their inclusion. For each scheme, a score between 1 and 5 was allocated, depending on the 'fit' or each scheme to each criteria, with a score of 5 being allocated to best fit. Given the range of criteria, both data thresholds and rationalised scoring have been used to establish the 1-5 score.

- Forecast increase in walking / cycling trips
  Inevitably, it is crucial to understand potential uptake of walking and cycling infrastructure. Data was gathered from the Propensity to Cycle Tool (PCT) to establish potential future use, with a score of 5 being given to schemes where higher uptake is indicated.

- Population who directly benefit from the intervention
  Given that the PCT is founded on workplace travel, it is also important to ascertain the wider population who will also benefit from the proposed schemes. Population density was determined, with a score of 5 being given to schemes in proximity to higher levels of population.

- Serves education
  When considering the trip purpose, the proximity of schemes to education establishments was identified, this includes schools, colleges and universities. A score of 5 was given to schemes in proximity to education establishments.

- Proximity to a major development site
  Future land use will bring new trips and has scope to alter existing trip patterns. The Council has identified major development sites for both housing and residential purposes, with a score of 5 being given to schemes which serve future development locations.

- Tourism link
  To accommodate leisure type trips in the assessment, key tourist and recreation sites were identified and a score provided based on an intervention's proximity to the site or location. A score of 5 was given to interventions in closest proximity to tourism locations.

- Area of deprivation
  Consideration was given to deprivation, with a view that providing infrastructure will be of greater benefit in these areas in the context of certain local government priorities. The index of multiple deprivation was used as a data source with a score of 5 applied to areas ranked in the most deprived quintile.

- Area of low car ownership
  Whilst car ownership is increasing, providing walking and cycling infrastructure can assist in improving the travel horizons for those without private car access. This correlates with the inclusion of areas of deprivation in the assessment, where walking and cycling are seen as the lowest cost forms of transport.

- Improved transport connections
  Considering accessibility criteria, connections with the existing transport network are key, with interchanging between modes being an enabler of onward travel. Proximity of the scheme to existing transport hubs, including rail and Metro, has been considered with a score of 5 being given to schemes in closest proximity to existing public transport infrastructure.

- Cost of construction
  The cost of delivering the scheme was ascertained and used in the assessment. A score of 5 has been given to costs at the lower end of the range; giving merit to those that can be delivered without significant investment.

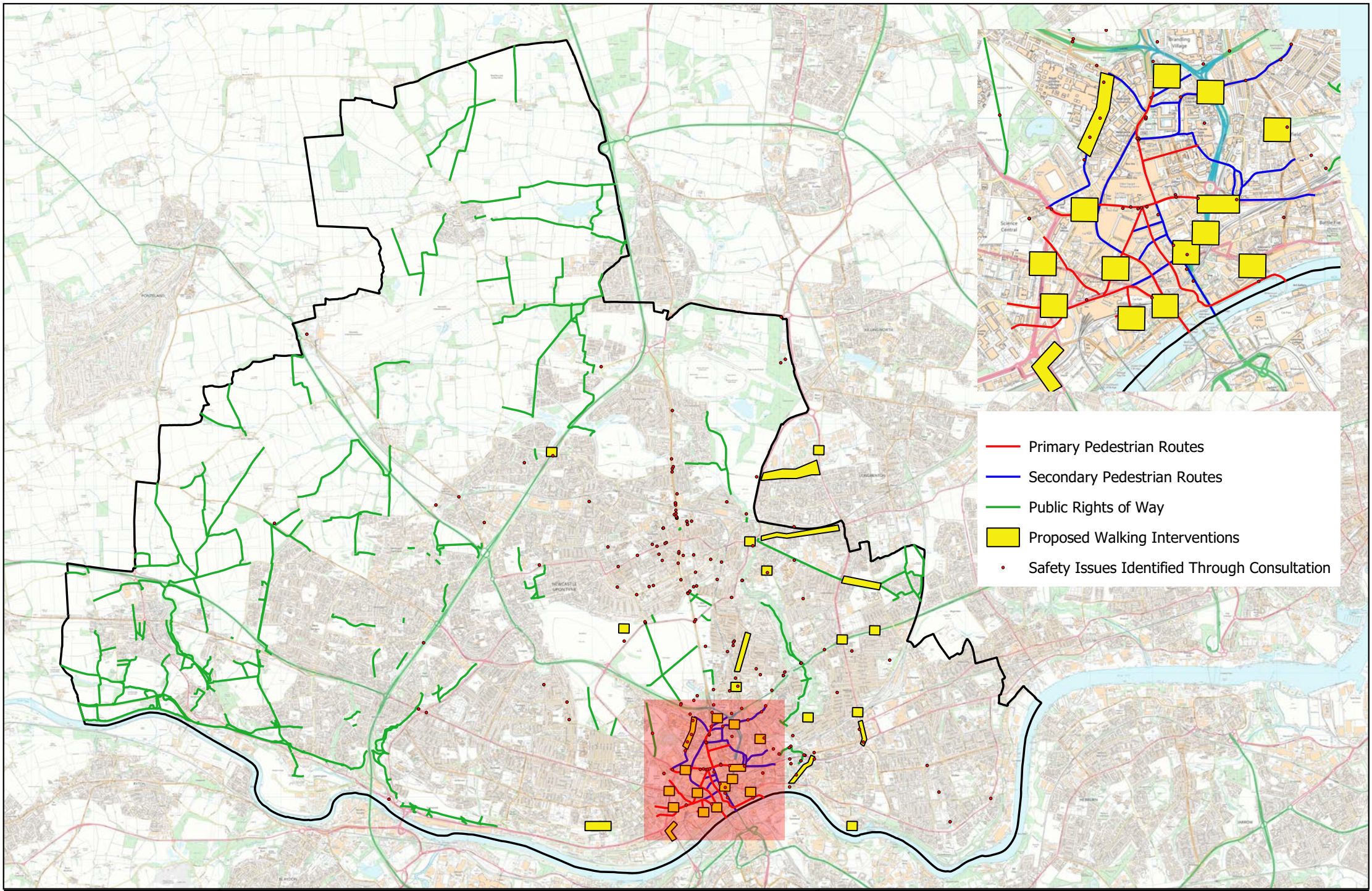
The outcome of the scoring has been a ranked score for each route and intervention area. The appraisal framework covers a range of categories and the scoring provided is unweighted. Depending on future funding streams, the Council will be able to use the framework to establish priorities in the context of funding objectives. In order to prioritise in terms of LCWIP, the ranked scoring has been taken alongside the delivery timeframes to create a prioritised list for short, medium and long term deliverables. The top three short term priorities for walking and cycling are:

Walking
1. Orchard Street Tunnel
2. Westmorland Road
3. Swan House Roundabout

Cycling (site specific schemes)
1. Sandyford Road / Portland Terrace junction / Osborne Terrace Roundabout
2. West Road / Gowland Avenue / Hampstead Road junction
3. Kenton Road / Elmfield Road Roundabout

Cycling (routes)
1. Benwell to Monument
2. RVI to South Gosforth High Street
3. Barrack Road to Town Moor

The full list of prioritised schemes can be found in Part 3 of this document.



Newcastle City Council

Walking Network Plan

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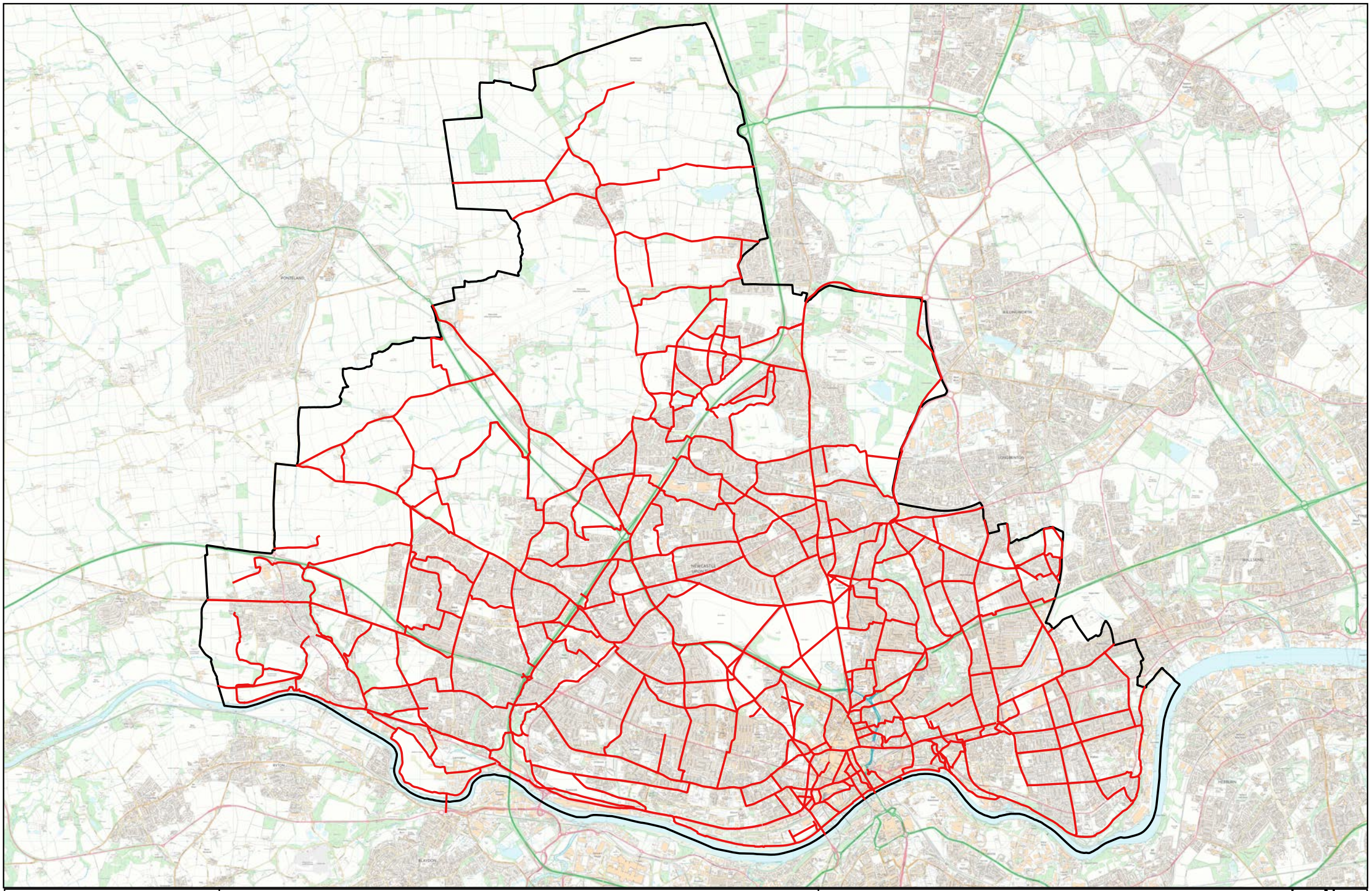

Newcastle City Council

Cycle Network Plan

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Ranked Walking Interventions

Intervention ID	Intervention area	Intervention notes	Cost Element	Cost (£)	Timescales	Forecast increase in walking / cycling trips	Population who directly benefit from the intervention	Serves education	Proximity to a major development site	Tourism link	Area of deprivation	Area of low car ownership	Improved transport connections	Cost of construction	Total Score	Overall Ranking	Ranking by Timescale
W2	Orchard Street Tunnel	Orchard Street tunnel from rear of central station Forth Street to A186 Neville Street front of central station. Currently used as taxi rank so heavily polluted within the tunnel, with other issues requiring remediation including water leaks and general dilapidation of paintwork, presence of graffiti & anti-bird netting fallen to disrepair. Already a popular route, it is set to increase in foot traffic with introduction of improvements planned for Stephenson Quarter, and has recently seen an increase in popularity due to introduction of additional commercial spaces on Forth Street in the past couple of years. Also a popular route for several offices, and commercial businesses located at the back of Central Station.	Urban realm scheme within tunnel (art/ lighting etc.)/ potential to relocate taxis and pedestrianise the link High level cost for relocated taxi rank	£ 211,500	Short Term	5	2	1	5	2	5	5	2	5	32	9	1
W24	Westmorland Road	Walking links between the residential areas north of Elswick Road and the business and commercial parks to the south is generally poor. Whilst crossing points are provided on Elswick Road, the east-west routes along the corridor are poorly served and could be improved, for example, Elswick Road/ Grainger Park Road roundabout. However, the more significant barrier exists on Westmorland Road. Where no formal crossing provision is provided in the entirety of this section.	Pedestrian buildouts/ zebra crossing	£ 211,500	Short Term	4	3	4	3	1	5	5	1	5	31	13	2
W4	55 Degrees North	55 Degrees North Roundabout underpasses. There are multiple issues that could be addressed including graffiti, water leaks, slippery surfaces in wet conditions, lighting in disrepair, paintwork etc. dilapidated. Wayfinding signage could be improved.	Junction wide urban realm improvement scheme	£ 317,500	Short Term	5	2	1	5	3	4	5	1	4	30	17	3
W13	Sandyford Road Pedestrian Route	Potential upgrades to the pedestrian environment on Sandyford Road are limited at the key pinch point of the A167(M) Central motorway bridge without significant works. However, improvements to the supporting approach routes could be made, and through the provision of a higher quality environment such as improved drainage and additional lighting.	Public realm scheme on Sandyford Road	£ 127,000	Short Term	5	4	4	2	1	3	4	1	5	29	21	4
W32	St Peter's Basin	Provide safe footway through St Peter's Basin to provide continuous Quayside pedestrian link	Road narrowing/ footway works	£ 127,000	Short Term	4	2	1	2	3	5	5	1	5	28	22	5
W18	Coach Lane Campus	The area around Northumbria University's Coach Lane Campus does not have efficient ways to traverse through, with Coach Lane and Benton Road severed where there could be a strong link introduced. The campus itself (and adjoining student accommodation) could be better served through improved pedestrian access provision to the surrounding network.	Improvement through routes from Coach Lane Campus to Benton Road	£ 95,500	Short Term	4	2	5	2	1	2	1	1	5	23	25	6
W1	Central Station to Metro Radio Arena	Walking route from Central Station to Metro Radio Arena. Popular route for Arena event attendees. Railway Street has narrow footways and poor crossing facilities. There is difficulty crossing Redheugh Bridge Road, and provision could be improved as no formal provision currently exists. Signage to the Arena could be improved due to higher likelihood of non-locals utilising the route. Remedial works to the aesthetics of the route such as underneath the bridge would be well placed, as this route will be a first impression of Newcastle as they attend events from outside the area.	Toucan Crossing Pedestrian scheme including c90m of road narrowing	£ 201,000	Medium Term	5	2	1	5	5	5	5	4	5	37	1	1
W25	Westmorland Road/ Neville Street	Pedestrian provision on Westmorland Road between St James' Boulevard and Central Parkway is not to the same standard as the surrounding areas following improvements around Central Station and St James' Boulevard. Narrow footways, street furniture and significant use of safety barrier impacts on pedestrian mobility. Improvements in this area would enable a continuous high quality walking route between the station and west Newcastle.	Pedestrian/ cycle/ urban realm scheme to upgrade the link between the rail station and St James' Boulevard. A standard similar to the recent improvement works outside Newcastle Station is envisaged including improved crossings and footpath surfaces. Scheme to incorporate Neville Street/ Central parkway and Neville Street/ Marlborough junctions.	£ 635,000	Medium Term	4	2	2	4	4	5	5	5	3	34	4	2
W10	Windsor Terrace	Windsor Terrace behind Newcastle University Library provides a significant pedestrian route, especially for students, from Jesmond/ Heaton to Newcastle. Windsor Terrace has narrow footways and is bounded by garages. A number of upgrades to the pedestrian environment are possible.	Pedestrian improvement scheme/ urban realm scheme. Access only street.	£ 106,000	Medium Term	5	2	5	4	3	3	5	2	5	34	4	3
W6	Byker Bank	Byker Bank serves as the link between several target commercial and entertainment destinations such as multiple specialist gyms, bars and music venues, as well as linking Byker to Newcastle City Centre and the Quayside. Pedestrian environment is poor, with obstructions in the footway and vandalism leading to the presence of broken glass. Top of Byker Bank leads into Byker, however, pedestrian provision at the A193/ Byker Bank roundabout is poor. The pedestrian route in to Byker leads pedestrians through the rear of a fast food chain car park and could be significantly improved.	A193/ Byker Bank roundabout pedestrian improvement scheme, including signalised pedestrian provision Byker Bank link pedestrian improvements between A193/ Byker Bank roundabout and A186/ Cut Bank	£ 794,000	Medium Term	5	4	1	4	4	5	5	2	3	33	6	4
W14	Osborne Road/ Clayton Road	Large junction used to access Jesmond station and part of the direct walking route into Newcastle from Jesmond. A number of pedestrian improvement options could be explored e.g. narrowing the junction area, widening footways, providing crossing refuges and/ or walk with traffic, and adding cycle provision.	Junction improvements	£ 127,000	Medium Term	5	4	3	4	3	2	3	4	5	33	6	5
W7	Stoddart Street	The link from Heaton to Newcastle results in significant numbers of pedestrians passing through "City Stadium Park", which leads out onto Stoddart Street and through a cut-through adjacent to a high rise residential building where refuge bins are kept and loading/emergency vehicle use bays are located. This is signposted as a cycle route and footpath, but has poor provision for both despite high footfall, especially among students. The route would benefit from some works to reinforce the connection and discourage route severance.	Off carriageway Pedestrian scheme west of Stoddart Street	£ 63,500	Medium Term	5	4	1	4	3	4	4	2	5	32	9	6
W8	Newcastle Shopping Park, Byker	Newcastle Shopping Park, Byker has poor provision for routes to access on foot. Pedestrians arriving from Byker or Heaton have to traverse around to the northeast side of the business park to gain access, despite potential access points at the west side which are restricted due to the presence of fencing. Pedestrians arriving on foot from Walker/Walkergate/Walkerville must pass through a large traffic-centric junction either to the northeast or the southeast approach.	Off carriageway pedestrian improvement scheme. Note this land is likely privately owned by the business park land owners.	£ 127,000	Medium Term	4	2	1	5	3	5	5	2	5	32	9	7
W11	Heaton Park View	Pedestrian route into Heaton Park has high demand and serves as a link to Newcastle. The southwest entry/exit leads directly onto a junction with poor pedestrian link to traverse effectively.	Junction realignment and tie in pedestrian/ cycle scheme	£ 159,000	Medium Term	5	4	1	4	4	2	4	2	5	31	13	8

Ranked Walking Interventions

Intervention ID	Intervention area	Intervention notes	Cost Element	Cost (£)	Timescales	Forecast increase in walking / cycling trips	Population who directly benefit from the intervention	Serves education	Proximity to a major development site	Tourism link	Area of deprivation	Area of low car ownership	Improved transport connections	Cost of construction	Total Score	Overall Ranking	Ranking by Timescale
W3	A186/ Milk Market/ Forster Street junction	Junction that has limited pedestrian provision, with difficult or restricted crossing points and some movements requiring multiple movements. Links nearby Travelodge & top of quayside multi-storey to quayside, as well as linking various residential areas along the quayside to Newcastle via Pilgrim St Roundabout.	Pedestrian improvements, crossings and pedestrian way widening at A186/ Milk Market/ Forster Street junction Improved pedestrian facilities at the adjacent B1600, Milk Market, Sandgate junction.	£ 264,500	Medium Term	5	4	1	4	3	4	4	1	4	30	17	9
W16	Osborne Road	Osborne Road provides a high demand pedestrian thoroughfare and supports a large pedestrian presence due to a high concentration of restaurants and bars in close proximity. Pedestrians often spill over onto road, especially bar patrons where large crowds are known to gather on the public space outside. Potential for traffic calming type intervention here/road narrowing to give space back to footway. Review of crossing points required.	Urban realm/ road narrowing/ road calming scheme	£ 317,500	Medium Term	5	4	3	4	3	2	3	2	4	30	17	10
W17	Coast Road/ Cochrane Park Avenue underpass	Strong pedestrian desire line between Heaton and Benton, including Northumbria University Coach Lane Campus. Unattractive pedestrian underpass, positioning of safety fence on north side interrupts direct desire line. General remediation works, stronger connection to the adjacent footpaths and signage would benefit this route. Options to provide pedestrian build out to support crossing at northern enter of underpass.	Urban realm and improvement scheme	£ 84,500	Medium Term	3	3	5	4	3	2	2	1	5	28	22	11
W21	Benton Park Road	Popular pedestrian route for commuters including those accessing HMRC. Route from Four Lane Ends to HMRC provision for people wanting to cross Benton Park Road could be improved. Space reserved for on-street parking which could be used for east-west pedestrian provision.	Footway improvements, buildouts to support east-west pedestrian movement Formalised crossing point east of HMRC	£ 169,500	Medium Term	4	2	5	5	1	1	1	1	5	25	24	12
W33	Nuns Moor (North)	Surface a footpath from the north east of Nun's Moor south-easterly to Grandstand Road for a good connection to a walking route into the city centre (including appropriate accesses)	Footpath and accesses	£ 724,000	Medium Term	3	2	3	2	1	4	3	1	3	22	26	13
W31	A1/ Kingston Park Road Grade Separated Junction	Upgrade pedestrian crossing facilities at the southern arms of the junction	Signalised pedestrian facilities on south facing slips	£ 211,500	Medium Term	2	1	3	3	1	1	1	1	5	18	28	14
W9	Queen Victoria Road	The walking route that runs along the RVI is a popular pedestrian route. The links sees high student use due to its running through the middle of the University campus, and should be considered in higher need of good walking provision due to its proximity to the RVI hospital. However, it has restricted footways, signage with posts placed in the middle of the footway, and has a very vehicle-centric focus with a high amount of on-street parking in close proximity to hospital entries/exits limiting visibility and forcing pedestrians to path around them, with some cases of on-street parking available directly outside pedestrian entries. Richardson Road itself has poor pedestrian provision and crossing points or a wider pedestrian scheme would support north-south pedestrian desire lines between the RVI and residential areas to Leazes Park/ St James' Park and central Newcastle	A project to improve the Queen Victoria Road City Centre North is already in development. Improvements include: New and improved crossings; New road and footpath surfaces; Introducing a bus gate to retain access for public transport and authorised vehicles; Providing access to the proposed Multi Storey Car Park; Removal of through traffic.	£ 1,587,500	Long Term	5	2	5	5	4	3	5	4	2	35	2	1
W30	Carliol Square Bridge Access	Provide ramped access to west end of ramped bridge over central motorway, to tie in with Pilgrim Street to reduce level difference from existing CME bridge (to provide more cost effective solution than providing direct access to Carliol Square). Options to pass to north of 55 degrees north assuming land is not forecast for development. Or south of 55 degrees north adjacent to existing carriageway (a technically challenging solution).	Ramped bridge access	£ 1,810,000	Long Term	5	4	5	5	3	3	4	4	2	35	2	2
W28	Westgate Road/ Clavering Place	A key pedestrian route from the Quayside to Newcastle Central Station follows Westgate Road. The pedestrian provision on this link is poor with narrowing footways and no crossing facilities at Westgate Road/ Clavering Place side road.	Urban realm and pedestrian improvement scheme c200m	£ 741,000	Long Term	5	2	1	4	4	5	5	4	3	33	6	3
W5	Shieldfield to Newcastle across the A167(M) central motorway	Pedestrian bridge linking Shieldfield to Newcastle. Passes through a derelict building making it a hostile environment to pass through at night, with no lighting etc. Spiral staircase on the Newcastle City Centre side is in disrepair and slippery in adverse conditions. Disabled access is present Shieldfield side where ramped access is available, but Newcastle side only has the spiral staircase, making it impassable for those requiring disabled access, and is only evident once actually crossed from Shieldfield.	New pedestrian bridge provide ramped access to New Bridge Street West from Shieldfield west of A167(M). Improvements to existing pedestrian bridge with additional lighting and scheme to enhance urban realm.	£ 529,000	Long Term	5	4	5	4	3	3	4	1	3	32	9	4
W26	St James' Boulevard/ Westgate Road junction and Westgate Road	St James' Boulevard/ Westgate Road junction has poor pedestrian facilities with multiple crossings are required to meet movements and desire lines that are not well-served. Pedestrian improvements to the junction as per the recently completed St James' Boulevard/Westmorland Road junction would significantly improve the junction and continuality of the corridor. Westgate Road has poor pedestrian crossing provision, narrow footways and mobility is regularly limited by obstructions. The road would benefit from a scheme to reduce carriageway widths and improve pedestrian facilities and the urban realm.	St James' Boulevard/ Westgate Road junction pedestrian improvements Westgate Road pedestrian scheme c450m	£ 1,217,000	Long Term	5	2	2	4	4	5	5	2	2	31	13	5
W29	Grainger Street	Grainger Street offers the opportunity to provide a high quality continuous link between Newcastle Central Station and Newcastle's central retail areas around Grey's Monument and Northumberland Street. The south and northern extents of Grainger Street are already pedestrianised and offer high quality pedestrian facilities. However, there is a step change to the level of facilities in the central section between Westgate Road and Market Street. Narrow footways relative to the large volumes of pedestrians result in observed pedestrian congestion. Whilst it is recognised that the street also supports significant bus infrastructure, which impacts on the level of change possible to improve the pedestrian environment there is scope to rationalise the extensive bus stands in order to widen footways and produce a three lane cross section (with north and southbound bus stands staggered within the length of the street. Implementing this change would offer a continuous high quality pedestrian gateway between Central Station and central Newcastle.	Urban realm and pedestrian improvement scheme c350m Grainger Street/ A186 and Grainger Street/ Bigg Market junction improvements	£ 2,222,500	Long Term	5	2	1	4	5	4	5	4	1	31	13	6

Ranked Walking Interventions

Intervention ID	Intervention area	Intervention notes	Cost Element	Cost (£)	Timescales	Forecast increase in walking / cycling trips	Population who directly benefit from the intervention	Serves education	Proximity to a major development site	Tourism link	Area of deprivation	Area of low car ownership	Improved transport connections	Cost of construction	Total Score	Overall Ranking	Ranking by Timescale
W27	Gallowgate/ Blackett Street	Gallowgate east of St James' Boulevard forms a key element of the existing pedestrian link between St James' and Newcastle centre. There is considerable scope to improve pedestrian facilities in this section of the walking route. The carriageway widths on Gallowgate could be reduced and space reallocated to widen the existing narrow footways. Additionally, Gallowgate/ Percy Street junction could be upgraded to more directly meet pedestrian desire lines and reduce crossing widths. The scheme could tie in to the proposed pedestrianisation of Blackett Street drawing wider benefit from the scheme.	Urban realm and pedestrian improvement scheme c300m Gallowgate/ Percy Street junction improvements	£ 1,323,000	Long Term	5	2	1	4	5	3	5	3	2	30	17	7
W15	Benton Road/ Coast Road grade separated junction	Junction provides walking connectivity between High Heaton and Heaton. Remedial works to improve aesthetically would make the route more attractive for use. Options for at grade pedestrian provision throughout the junction are possible.	Large junction pedestrian /cycle scheme	£ 264,500	Long Term	4	3	2	2	1	2	2	1	4	21	27	8
W19	Freeman Road/ Castle Farm Road roundabout	Pedestrian provision accessing Newcastle Freeman hospital could be improved, with traffic-centric junctions currently bounding Freeman Road and the surrounding network. Pedestrian improvement schemes at Freeman Road/ Castle Farm Road would improve connectivity with South Gosforth via Haddricks Mill Road and/or Castles Farm Road.	Costed as Cycle Intervention														
W20	Haddricks Mill Roundabout	The layout at Haddricks Mill Roundabout is complex for pedestrians and provides poor pedestrian legibility. Multiple crossings are required to meet movements and desire lines are not well-served. A revised layout that better meets pedestrian needs should be explored.	Costed as Cycle Intervention														
W12	Chillingham Road Bridge	Pedestrian link is via a caged bridge running adjacent to the traffic bridge. Potential options for improvements to the bridge and walking route. Whilst not directly related to LCWIP Chillingham Road Metro is in need of improvement, with the route for pedestrians very intimidating.	Costed as Cycle Intervention														
				£ 14,768,500													

Ranked Cycling Interventions

Intervention ID	Intervention area	Intervention notes	Cost (£)	Timescale	Forecast increase in walking / cycling trips	Population who directly benefit from the intervention	Serves education	Proximity to a major development site	Tourism link	Area of deprivation	Area of low car ownership	Improved transport connections	Cost of construction	Total Score	Overall Ranking	Ranking by Timescale
C10	Sandyford Road/ Portland Terrace junction and Sandyford Road/ Osborne Terrace roundabout	Improvements to existing cycle facilities	£ 127,000	Short Term	4	4	1	4	3	3	4	1	5	29	4	1
C8	West Road/ Gowland Road/ Hamstead Road junction	ASLs with lead-in lanes for travel across Westgate Road	£ 101,500	Short Term	3	4	3	3	1	4	4	1	5	28	6	2
C23	Kenton Road/ Elmfield Road roundabout	Cycle lead-in lanes. Crossing upgrades.	£ 159,000	Short Term	4	3	5	1	1	1	2	1	5	23	20	3
C22	Kenton Road/ Salters Road roundabout	Cycle lead-in lanes. Crossing upgrades.	£ 106,000	Short Term	4	3	4	1	1	1	3	1	5	23	20	4
C16	Newton Road	Toucan crossing(s) to support cycle route	£ 63,500	Short Term	4	3	1	3	1	2	2	1	5	22	24	5
C32	A1/ A69 / A186 Denton Roundabout	Add ramp to the crossings as needed and upgrade them to toucans at Denton Roundabout	£ 73,000	Short Term	3	2	1	1	1	3	3	1	5	20	28	6
C3	Stoddart Street/ Shieldfield Lane Roundabout	Lead-in cycle lanes/tracks & off carriageway improvements	£ 127,000	Medium Term	4	4	3	4	3	4	4	2	5	33	1	1
C9	Claremont Road/ Queen Victoria Road roundabout	Off carriageway cycle routes / lead-in lanes / crossing review	£ 148,000	Medium Term	3	2	4	5	1	4	5	1	5	30	3	2
C1	55 Degrees North roundabout access to Pilgrim Street from A186 west	Improvements to off carriageway cycling facilities	£ 63,500	Medium Term	3	2	1	5	3	4	5	1	5	29	4	3
C6	Chillingham Road/ Shields Road roundabout	Off carriageway cycle routes/ lead-in lanes	£ 106,000	Medium Term	4	2	1	3	1	5	5	1	5	27	7	4
C14	Osborne Road/ Haldane Terrace and junction; Osborne Road to Osborne Road/ Holly Avenue; and Osborne Road/ Holly Avenue Junction	Cycle scheme to facilitate this movement. Close Haldane Terrace to traffic.	£ 106,000	Medium Term	4	4	2	4	2	1	4	1	5	27	7	5
C4	Shields Road to Conyers Road through link	Cycle access improvement links to west of East End Pool	£ 84,500	Medium Term	4	2	1	4	1	5	4	1	5	27	7	6
C19	Fawdon Lane/ Fawdon Park Road and Fawdon Lane/ Edgefield Avenue junctions	Cycle scheme to facilitate this movement.	£ 349,500	Medium Term	4	3	3	3	1	4	3	1	4	26	11	7
C27	Salters Road/ Jubilee Road	Cycle lead-in lanes and/or off-carriageway lanes with supporting toucan crossings	£ 222,500	Medium Term	4	3	5	3	1	3	1	1	5	26	11	8
C20	Carrfield Road/ Kenton Road	Upgrade crossing facility. Cycle lanes / tracks	£ 127,000	Medium Term	4	3	2	2	1	5	3	1	5	26	11	9
C11	Ponteland Road/ Kenton Lane roundabout	Off carriageway cycle routes and supporting toucan crossings	£ 275,000	Medium Term	3	2	3	3	1	5	3	1	4	25	14	10
C5	A193/ A187 East Byker roundabout	Off carriageway cycle routes/ lead-in lanes	£ 264,500	Medium Term	4	2	1	3	1	5	4	1	4	25	14	11
C13	Ponteland Road/ Springfield Road	Cycle lead-in lanes and / or off carriageway lanes and supporting toucan crossings	£ 296,500	Medium Term	4	3	1	2	1	5	3	1	4	24	16	12
C26	Freeman Road/ Newton Road roundabout	Cycle lead-in lanes and/or off-carriageway lanes with supporting toucan crossings	£ 106,000	Medium Term	4	2	3	5	2	1	1	1	5	24	16	13
C28	Freeman Road/ Castles Farm Road	Cycle lead-in lanes and/or off-carriageway lanes with supporting toucan crossings	£ 106,000	Medium Term	4	2	3	5	2	1	1	1	5	24	16	14
C12	Ponteland Road/ Harehills Ave roundabout	Cycle lead-in lanes and / or off carriageway lanes and supporting toucan crossings	£ 169,500	Medium Term	3	2	1	2	1	5	3	1	5	23	20	15
C15	Jesmond Park West/ Jesmond Park East roundabout	Additional lead-in lanes/ enhanced cycle scheme	£ 53,000	Medium Term	4	3	1	3	2	2	2	1	5	23	20	16
C21	Kenton Road/ Kenton Lane junction	Cycle corridor upgrade	£ 127,000	Medium Term	3	2	3	2	1	2	3	1	5	22	24	17
C29	Station Road	Cycle lanes	£ 317,500	Medium Term	4	3	1	3	1	2	2	1	4	21	26	18
C31	A1/B6324 and B6324/W Denton Way	Upgrade at grade crossing facilities at south side to improve safety for cyclists	£ 211,500	Medium Term	2	2	4	1	1	4	1	1	5	21	26	19
C24	Blue House Roundabout	Off carriageway cycle improvements. Crossing facility upgrades	£ 529,000	Medium Term	4	3	2	3	1	1	2	1	3	20	28	20
C18	A1 / Kingston Park Road grade separated junction	Scheme to upgrade existing off carriageway footpaths to permit cycle movement on approach to the junction. Scheme on Kingston Park Road providing continuous access to new development areas. Part signalisation of junction with controlled pedestrian cycle facilities on two southern nodes.	£ 317,500	Medium Term	3	1	2	4	1	1	3	1	4	20	28	21
C2	A193 New Bridge Street/ Stoddart Street Junction	ASLs/ toucans/ junction improvement scheme	£ 106,000	Long Term	4	4	3	4	3	4	4	2	5	33	1	1
C7	Chillingham Road bridge and surrounding link	Key pinch point - widening or separate pedestrian bridge to create off-carriageway space and supporting cycle routes	£ 529,000	Long Term	4	5	4	3	1	2	4	1	3	27	7	2
C25	Jesmond Dean Rd/ Ilford Road; Ilford Road/ Moorfield; and Jesmond Dene Road/ Moorfield junctions	Junction improvements and off carriageway cycle bypasses	£ 317,500	Long Term	4	4	3	3	2	1	2	1	4	24	16	3
C17	Red Hall Drive Bridge and Benfield Road junctions	Improved junctions and cycle crossings	£ 317,500	Long Term	4	3	1	3	1	1	2	1	4	20	28	4
C33	Salters Bridge	Close Salters Bridge to vehicular traffic	£ 5,000	Long Term	4	1	1	1	1	2	1	1	5	17	32	5
C30	Haddricks Mill junction	Off-carriageway facilities and supporting toucan crossings	Under construction													
			£6,012,000													

Ranked Cycling Routes

Route Number	Route Name	Length (m)	Cost (£)	Timescale	Forecast increase in walking / cycling trips	Population who directly benefit from the intervention	Serves education	Proximity to a major development site	Tourism link	Area of deprivation	Area of low car ownership	Improved transport connections	Cost of construction	Total Score	Overall Ranking	Ranking by Timescale
4	Benwell - Monument	2400	£ 1,588,500	Short Term	3	2	5	5	3	5	5	4	2	34	8	1
14	RVI - South Gosforth High Street	100	£ 120,500	Short Term	4	4	5	5	3	2	4	2	5	34	8	2
17	Barracks - Town Moor	600	£ 101,000	Short Term	3	2	1	5	3	5	5	4	5	33	15	3
24	Byker - Corner House	1300	£ 800,000	Short Term	4	4	5	4	1	4	4	1	3	30	22	4
13	West Jesmond - Sandy Lane	2600	£ 594,000	Short Term	3	3	5	4	1	1	1	1	3	22	41	5
28	City Centre - Shields Road	3200	£ 1,744,500	Medium Term	4	2	5	5	4	5	5	4	2	36	2	1
50	St James' - Westmorland Road	600	£ 773,500	Medium Term	3	2	3	5	5	5	5	4	3	35	4	2
23	Haymarket - Coast Road	2200	£ 464,000	Medium Term	4	3	4	5	4	4	3	4	4	35	4	3
27	Haymarket - Heaton	1500	£ 259,000	Medium Term	4	4	4	5	3	3	4	4	4	35	4	4
35	Central Station - Quayside	600	£ 509,000	Medium Term	3	2	1	5	5	5	5	5	3	34	8	5
45	Monument - Mosley St	400	£ 361,500	Medium Term	3	2	1	5	5	4	5	5	4	34	8	6
42	Central Station - Monument	400	£ 345,500	Medium Term	3	2	1	5	5	4	5	5	4	34	8	7
44	Theatre Royal - St Nicholas'	300	£ 188,500	Medium Term	3	2	1	5	5	4	5	4	5	34	8	8
41	Mosley St - Quayside	500	£ 85,000	Medium Term	3	2	1	5	5	4	5	4	5	34	8	9
18	Cruddas Park - Monument	2200	£ 2,291,500	Medium Term	3	2	1	5	4	5	5	5	1	31	17	10
7	Monument - Kenton	1500	£ 1,906,000	Medium Term	3	2	5	5	3	2	5	4	2	31	17	11
30	Quayside - New Bridge St	600	£ 386,000	Medium Term	4	4	1	4	3	4	4	3	4	31	17	12
6	Great Park - Kenton	2300	£ 656,500	Medium Term	4	3	5	4	1	5	3	2	3	30	22	13
29	Universities - Jesmond	1400	£ 276,000	Medium Term	4	4	5	3	1	3	5	1	4	30	22	14
22	Heaton - Coach Lane	2500	£ 1,010,500	Medium Term	4	5	4	2	1	4	4	3	2	29	26	15
3	Cowgate- St James	1500	£ 1,730,000	Medium Term	3	3	1	5	3	3	5	3	2	28	28	16
21	Heaton - Byker	700	£ 414,500	Medium Term	4	2	5	2	1	5	4	1	4	28	28	17
10	South Gosforth High St - Four Lane En	2200	£ 1,283,500	Medium Term	4	2	5	4	1	2	2	4	2	26	34	18
9	Westfield - South Gosforth Metro	1500	£ 264,000	Medium Term	4	3	5	3	1	1	2	3	4	26	34	19
12	Jesmond Dene - Great North Road	900	£ 195,000	Medium Term	4	4	1	2	1	1	3	1	5	22	41	20
15	Bluehouse - Freeman Hospital	1100	£ 719,000	Medium Term	4	3	1	2	1	2	2	1	3	19	49	21
43	Sage - Brunton Park	1700	£ 587,500	Medium Term	3	1	1	2	1	4	1	1	3	17	50	22
19	Scotswood Road	300	£ 351,000	Long Term	3	3	5	5	3	5	5	4	4	37	1	1
32	RVI - Gallowgate	700	£ 935,000	Long Term	3	2	4	5	5	4	5	5	3	36	2	2
37	Leazes Park - Centre for Life	1000	£ 253,500	Long Term	3	2	1	5	5	5	5	5	4	35	4	3
20	Newcastle Business Park - Walker	2200	£ 618,000	Long Term	4	2	1	5	4	5	5	3	3	32	16	4
51	Forth Banks - Westgate Road	500	£ 683,500	Long Term	3	2	1	5	3	5	5	4	3	31	17	5
38	Shieldfield - Jesmond	900	£ 544,000	Long Term	4	4	5	5	1	2	3	4	3	31	17	6
36	City Stadium - Quayside	800	£ 365,500	Long Term	4	4	3	3	2	5	4	1	4	30	22	7
2	Cowgate - Benwell	2200	£ 529,500	Long Term	3	4	5	3	1	4	5	1	3	29	26	8
48	Regent Centre - Great North Rd	500	£ 653,500	Long Term	4	3	5	4	1	3	1	4	3	28	28	9
39	Lemington - Blakelaw	2600	£ 491,500	Long Term	3	3	5	2	1	5	4	1	4	28	28	10
34	Fawdon - Gosforth	1400	£ 914,500	Long Term	4	3	4	4	1	5	1	2	3	27	32	11
16	West Jesmond - South Gosforth Metro	1300	£ 284,000	Long Term	4	3	5	3	1	2	2	3	4	27	32	12
1	Kingston Park - Cowgate	6800	£ 2,061,500	Long Term	3	2	4	5	1	5	3	2	1	26	34	13
25	Coast Road - Four Lane Ends	2000	£ 1,353,500	Long Term	4	2	5	3	1	2	2	4	2	25	37	14
47	Newbiggin Hall Estate - Ponteland Roa	1700	£ 294,000	Long Term	3	3	3	2	1	5	3	1	4	25	37	15
5	Ponteland - Kenton	800	£ 1,067,000	Long Term	3	2	5	3	1	3	3	2	2	24	39	16
49	Great North Road - Longbenton	100	£ 51,500	Long Term	4	3	2	2	1	2	2	3	5	24	39	17
8	Kenton - South Gosforth Metro	1400	£ 735,500	Long Term	4	3	4	3	1	1	1	2	3	22	41	18
11	Longbenton - Corner House	2300	£ 1,725,000	Long Term	4	2	5	3	1	1	1	2	2	21	44	19
46	Denton Hall - Silver Lonnen Rd	500	£ 656,000	Long Term	3	2	3	1	1	3	4	1	3	21	44	20
40	Osborne Road	400	£ 292,500	Long Term	4	4	1	2	1	1	3	1	4	21	44	21
31	Jesmond Dene - HMRC	600	£ 129,500	Long Term	4	2	1	5	1	1	1	1	5	21	44	22
33	Bluehouse - West Denton	7000	£ 2,895,000	Long Term	2	3	3	2	1	4	3	1	1	20	48	23
			£ 37,539,000													