

Northwich Cycling Strategy

Options Study Report

August 2015



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1. Introduction

The geographic area for the study will be the town centre and the radial corridors from the immediately adjacent residential communities of Hartford, Leftwich, Rudheath, Wincham/Marston, and Winnington into the town see drawing no T45-NW-DR-01, appendix 1

A large part of the study will be devoted to the core of the town centre, looking at proposed arrangements and potential improvements to cycle access as a result of the gyratory, and the larger scale redevelopment/planning sites. The aim is to provide convenient and safe access by bike, and on foot, to the town centre facilities, and at certain key points, across the centre to provide continuity in the network, see drawing T45-NW-DR-02, appendix 1

It should be stressed that the options outlined are indicative and draw upon Sustrans experience in the field and respond to circumstances found at the time of survey. Other approaches may achieve similar outcomes and may be required to reflect restrictions and circumstances not apparent at the time of or study.

2. Existing situation

2.1 Existing cycle provision

The existing network is relatively limited in its extent and relies upon a mix of signed on road routes with limited provisions and a number of off road routes which range in quality from recent good quality to narrow poorly designed link paths where cyclists currently have to dismount. The current network does not provide a comprehensive or cohesive network and does not really serve the range of likely destinations available within the town most current routes stopping short of the town centre core.

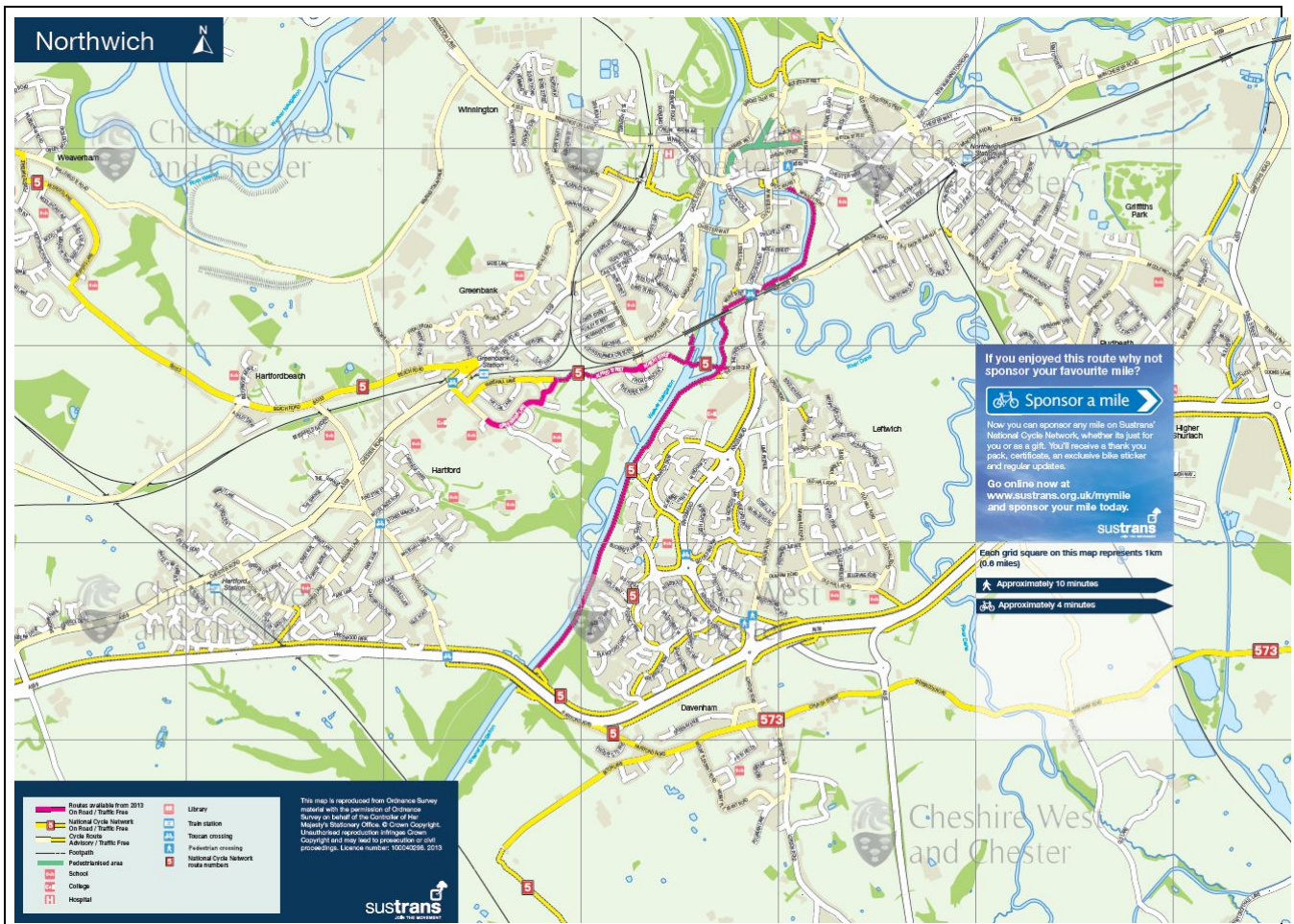


Figure 2-1 – Existing cycle provision in Northwich Extract from Northwich Local Travel Map (http://www.sustrans.org.uk/sites/default/files/file_content_type/northwich_web.pdf)

2.2 Constraints

Northwich has a transport legacy from its navigable waterways, railways and road networks which creates a number of corridors that carry heavy traffic and introduce significant pinch points and barriers to good quality and continuous cycle routes. The impact of these and their mitigation is considered below.

2.3 Opportunities

Northwich is a relatively compact town where the topography in most cases would not be a barrier to cycling and likely journey lengths are well within the three to five mile range considered likely to be attractive to would be cycle users. There are considered to be opportunities to create local networks for most of the key outlying areas of the town linking in to the town centre core and to other key destinations, subject to finding good quality solutions to the key barriers to on each route.

3. Overall strategy

3.1 Overview

As stated, this report is in two closely linked parts, the consideration of the main corridor routes into Northwich town centre complimented by a more detailed consideration of the gyratory system and access to the town centre and station areas.

Our approach has been based upon site inspection of the routes concerned supplemented by desk based study and research carried out by the authors. Our objective has been to take a practical view of what is deliverable within limited budgets and within a realistic timescale.

In considering the radial routes the primary focus has been on identifying lines of route that offer cohesive and readily identifiable routes of a standard likely to appeal to would be cyclists as well as current users.

Consideration of the town centre has been more detailed looking carefully at issues of permeability, potential conflict between users and the establishment of a common approach to the creation of access to key locations in the town centre core.

4. Potential Interventions

4.1 Radial Routes

4.1.1 Hartford corridor

Hartford lies to the south west of the town centre with the principle road corridor into the centre being Chester Road. This is currently signed as a cycle route with a mix of shared space and on road markings, but not of a standard where one would regard the route as of a uniform standard or quality.

Chester Road is the principle link and while the carriageway carries in width considerably over its length it is difficult to see a means by which a materially improved route could be delivered consistently throughout. On balance our preference would be to see the on and off road network further developed to give a more cohesive and consistent link to the town centre.

The current spine route from Chester Road via Marshall Lane and Alfred Street works well with the off road link. With additional care to maintain path widths and lighting to a uniformly high standard could be a good basis for a through route of high quality. At the eastern end of the route there is a good connection through to the riverside path via the River Weaver locks and similarly a reasonable on road route via Spencer Road and Navigation Road. Though both are already traffic calmed to a degree further detailed interventions to make the route more cycle focused would help make the route more attractive, particularly the junction of Navigation Road and Chester Way discussed separately as part of the Gyratory Section.

4.1.2 Winnington corridor

Winnington lies to the north west of the town centre and is not currently served by any cycle routes. Winnington suffers from being situated at a significantly higher level to Northwich town centre and

has limited road access via Winnington Street / Lane. Further severance is caused by the railway line that lies to the west of Verdin Park.

Winnington Street / Lane is steeply graded over the section immediately north of the River Weaver. The narrow traffic lanes of the road and steep climb make this off putting for all but the more confident cyclist and there is no real opportunity to make better provision. With this as a key pinch point on the route we do not consider the rest of Winnington Lane to be worth considering at this stage.

We would propose developing the existing mainly off road route from Appleton Street, passing through the playing fields area off Winnington Lane and having a connecting path from Cromwell Road, and utilising the route over the railway line to access Verdin Park, and thus through to Castle Street and the gyratory system. This proposal assumes that at worst wheeling ramps could be incorporated into the railway footbridge, and no other alternative route "at grade" exists to link the two portions of the route.

An interim route is possible linking into Verdin Park from Winnington Lane close to Victoria Infirmary (itself a desirable destination). It would be problematic to provide good quality infrastructure on Winnington lane, but the link through the park would mitigate the steep on road climb that is the main current option. The future of the sidings is in doubt and a road scheme is understood to be proposed for the rail corridor. Network rail have been approached but no response has been received as to whether a short term option could be an at grade crossing of the sidings site. As a general principle Network Rail seek to eliminate unnecessary level crossings so creating a new one is unlikely to be acceptable even over an unused line.. However this option may be worth pursuing if the Winnington link is considered sufficiently desirable. Alternatively, given the road scheme it would be desirable to lodge the idea of a cycle crossing with the relevant authorities so that this may be factored in to any study or design work for the project.

4.1.3 Leftwich corridor

Leftwich lies to the south of the town centre. The principal roads through the area are Kingsmead and London Road A533.

Kingsmead has a degree of pedestrian / cycle shared space provision which usefully connects local destinations but could be further improved to give greater cycle priority at junctions. The London Road Kingsmead junction has some inventive infrastructure and provides a good link to the Crescent and though to the Riverside Path.

Further north London Road remains quite wide, but suffers from a high degree of on street parking that would make it difficult to make proper provision for cyclists. However, the key pinch point is where the railway viaduct crosses the road and severely restricts that available width such that there is virtually no scope to provide good quality cycle infrastructure.

Given the comments made above, we would suggest the key focus be on making the route to the existing Riverside Path as good as possible, connecting to the traffic free route alongside the railway viaduct or the on road route via Queen Street to access the gyratory system.

The Riverside Path and connecting traffic free routes appear well used, but a key need is to maintain corridors of this type to a high standard. While on site it was noted that in places vegetation is encroaching in terms of both width and height, and there were a small number of locations where the

path appeared to be subsiding towards the river with long longitudinal cracks appearing in the path surface.

4.1.4 Rudheath corridor

Rudheath lies to the south east of the town centre. The only main road linking to the centre is Middlewich Road. This is in the main a busy single carriage road with narrow pavements though residential and commercial properties of mixed ages. Although there are some sections where there are wide verges that could offer opportunity for the creation of high quality shared or segregated cycle provision this is limited in the context of the whole corridor so is not recommended.

The majority of residential property lies on the south west side of Middlewich Road and offers potential for the creation of alternative “quiet road” routes through the area with a spine route centred upon the Gadbrook Road, Belmont Road and Malpas Street before exiting onto Middlewich Road at Royle Street. This route, carefully signed, and with attention paid to permit and improve cycle provision through the current traffic free links, such as at Royal Street and between Shipbrook Road and Greenway Drive could provide a relatively direct and pleasant route to the edge of the town centre at relatively low cost.

At Royle Street there is a footbridge that carries a footpath over two railway tracks. The available space make it unlikely that the existing structure could be replaced by one with ramped approaches and this option has been discounted. However, as the bridge gives access to the west it is suggested that as a minimum intervention cycle wheeling ramps be installed on the bridge to better facilitate the use of the route by cyclists. It is understood that Network Rail have previously considered such an approach but have required raised parapets be installed on the level sections of each span as if cycles were being ridden over then span which we consider to be unlikely given the limited span in each case. There is scope for further consideration of this issue.

Middlewich Road is the only route by which access to Northwich railway station and the adjoining retail premises can be achieved. There is insufficient space on the section from the Royle Street junction to Chester Way to create either segregated cycle provision on carriageway or shared pedestrian cycle space. Given this section of road is already heavily trafficked but frequently slow moving the most practical solution may be to create a section of road where the surface treatments, pavings and marking combined with a reduced speed limit create an environment in which people are comfortable riding a bike amongst motorized traffic. Additional provision would then be required at the currently traffic light controlled Middlewich Road / Manchester Road cross roads to give cycle priority / safety at this junction.

4.1.5 Wincham/Marston corridor

Wincham and Marston lie to the north east of Northwich and is an area of residential and industrial properties for whom the main route of access to Northwich is the B5075 New Warrington Road. This is a single carriage way road with narrow lanes and subject to the national speed limit making this an unattractive and potentially dangerous route for less confident cyclists.

While there is an existing pavement to the south side of the carriageway this is of insufficient width to provide a shared use route and there appears to be insufficient space for this to be widened to the

desirable minimum width of 3 to 3.5 metres, the bridge over the Wade Brook being a particular pinch point.

However, an alternative route is potentially available using the network of paths to the south side of Neumann's Flashes. A suitable crossing point would be required to give direct access from Wincham on to this route from the vicinity of Chapel Street but otherwise the main requirement would be to upgrade the existing paths to give an all-weather, well signed and potentially lit route to connect to Marbury Lane and Old Warrington Road. These roads see limited traffic and could readily be restricted to 20mph limits.

Crossing the Leicester Street via a toucan crossing we would suggest the route extends across existing open space, a wholly new path is required, to reach Brook Street. Brook Street is relatively quiet and 20MPH speed limits and adequate signage should reinforce the status of the route. On balance we feel it better to focus cycle use on a limited number of routes to lend weight to their designation and consequently suggest the route be signed to Witton Street joining the propose route from the Station area and south east of the town and that the junction with Venables Road be remodelled to provide easy access to Albion Street as a corridor to access the core of the town centre as well as hopefully linking to new areas of public realm to be created as a part of the Barons Quay development area.

4.2 Town Centre, Station and Gyratory System

4.2.1 Town Centre

Northwich town centre is relatively compact with much of the trip generating activity lying between Leicester Street and Chester Way, with the new Memorial Court facility just on the south side of Chester way. Witton Street is the core traditional shopping centre and this has been pedestrianized for much of its length and has limited vehicular access to the far east end. Current cycle accessibility is not good with both the pedestrianized routes and Chester Way being major barriers to access.

Barons Quay is a major development site that stands to vary the "centre of gravity" of the town centre. Of key importance here is the creation of a through route connecting the Gyratory road to the junction with London Road via Weaver Way, through the development on or close to the river frontage but then connecting to Leicester Street and access to Carey Park. In addition to access around the development site there is a one off opportunity to ensure access into the heart of the development area underlining the desirability of walking and cycling as key means of access.

Options for creating segregated or shared space on carriageway are limited and our focus has, in the main been on considering a small number of key corridors of access that would permit and encourage cycle access to key destinations.

From the North, and to connect to the radial route from Wincham, we would wish to see the Old Warrington Road / Leicester Road junction re-modelled to become more cycle friendly. Further work would be required before we can advise on whether this be a simple improvement to the existing junction, an offset cycle specific crossing or if traffic volumes require this to be a controlled crossing. We would suggest minimum intervention on Warrington Old Road but to sign the route and reduce the speed limit to 20mph to give a safer link through to Station Road.

Remaining on road we suggest the town centre be accesses via a combination of Station Road and Albion Road with the junction at Venables Road being re-modelled to allow cycles to turn right from

Station Road to access Albion Road. As elsewhere we would suggest a light touch with the main interventions being a consistent approach to 20mph speed limits and high quality and consistent signage throughout. This would reduce traffic speeds and create an environment in which people would feel more confident cycling amongst motor traffic.

In order to access Witton Street we would suggest routing cycles through to Crum Hill and Sheath Street with suitable access controls on both sides of Witton Street to encourage access but reduce the speed of cyclists. We would also suggest cycle parking provision be made on Witton Street itself rather than tucked away on the side accesses. From Sheaf Street we would suggest joining Timber Street to join the pavement of Chester Way and to create a shared pedestrian / cycle link to the existing crossing, to be upgraded to a Toucan giving access to the Memorial Court Centre and radial routes to the South of the town centre.

4.2.2 Station Area

Northwich station is an important transport hub and has a number of commercial and retail destinations around it. As such it was felt important that better links be created to encourage active access to the area.

Station Road is a major constraint and for access on this axis there is little alternative. As the route is frequently heavily trafficked we would suggest the section from Royle Street to Chester Way be reduced to a 20mph limit and signage be introduced to facilitate lower traffic speeds in order to create an environment where people are comfortable riding in amongst motor traffic over this section. To compliment this intervention we would propose a toucan crossing be introduced within the Station Road / Victoria Road junction to give a pedestrian / cycle priority phase giving access to the station area and towards the nearby supermarket. There is currently a strong desire line to directly access the station from this crossroads which should be formalized requiring dropped kerbs and markings within the station area as a minimum intervention. The Victoria Road / Kingsway Road route is a key link. This is understood to be a local "rat run" for traffic seeking to avoid congestion on Station Road. This leads to a less than desirable environment for cyclists, pedestrians and local residents. While there are options to divert a cycle route to adjoining streets the impact of the rat running on the main streets, and presence of a large primary school on Victoria Road, make it more desirable to seek to address the rat running issue discussed later.

To improve access from the west, and assuming the existing footbridge cannot be replaced with a ramped access structure, we would wish to see wheeling ramps attached to the existing structure to make wheeling cycles over this route easier. We are aware that there are potential issues with attaching wheeling ramps to Network Rails structure but feel this is an option worthy of further consideration. The connecting on road routes are covered elsewhere.

Chester Way is a major severance to both pedestrian and cycle access to the station from the town centre. We would like to see controlled crossing arrangements varied on Chester Way to give a toucan crossing between Church Road and Kingsway, with Kingsway becoming a designated cycle route, again, ideally with 20 mph restrictions on this and adjoining roads but little other intervention. We are aware of proposals from Cheshire West and Chester authority for the remodeling of the Chester Way / Leicester Street traffic island as currently proposed there is scope for an improved route into the town centre via Station Road. Should this proposal be implemented including good quality links across the major roads then the need for the proposed route via Victoria Street / Church

Road route could be reduced and is retained here as a potential link in the local network for consideration.

Mention has been made of a former mineral railway that linked from the mainline railway close to the current passenger station, to the vicinity of Barons Quay in broad terms following the course of Leicester Street. This route is readily followed on the ground and indeed offers considerable potential to create a north eastern link around the town centre. The short section that appears to lie within private ownership should be safeguarded as a potential future corridor for pedestrians and cyclists, though if the land were to be developed there would be no objection in principle to the alignment being varied provided the resulting path continues to give a clear and intuitive route towards the town centre. Two alternative routes for this initial section of route are shown and either, or other variations would deliver a useable link.

To improve connections to the Station consideration should be given to the re-modelling of the access to the station, petrol filling station and supermarket on the south side of Manchester Road. Currently there is a large expanse of "forecourt" type space presumed to be necessary to allow HGV access to the different locations. However the resulting space is a difficult one for pedestrians and cyclists to use with confidence given priorities are unclear and routes indistinct leading to potential conflict.

In order to provide a link to the North of town and Barons Quay, crossings of the A559 and B5075 roads would be required to a standard to maintain continuity and safety for users but beyond, the wide verge of Leicester Road provides good opportunity to create a useable and attractive segregated corridor that dissects the Wincham Marston corridor, provides access to Carey Park and into the Barons Quay area. We have not considered routes within the Barons Quay area as this remains an area for future development. However, we would wish to see the opportunity considered to create a continuous and intuitive route through the development creating new links to the south western end of the existing town centre and route beyond.

4.2.3 Gyratory

The intentions behind the creation of the gyratory system promoting an improvement in traffic movements is understood and appreciated as are the inclusion of a number of toucan crossings at key junctions. However, there remain considerable severances within the system that should be addressed in order to give benefit to cyclists for whom these relatively fast and heavily trafficked routes can be very daunting.

Following the system clockwise from the Memorial Court Centre we would like to see the reallocation of road space to create a sufficient width of pavement to create a continuous shared pedestrian / cycle route on the southern side of the carriageway around to the junction with Queen Street. This provision would provide the essential link from the Leftwich radial route to the town and Memorial centres. From Queen Street to Navigation Road we do not propose any interventions. Given the other options discussed we do not feel that this section adds value of route flexibility not already provided elsewhere and this section shares a number of issues also found elsewhere on the gyratory system..

From Navigation Road we would wish to see a short section of shared footway created to link to the Chester Road junction and connect to the toucan crossings already installed. This would allow a

controlled access to a shared pedestrian / cycle bidirectional route on the east side of Castle Street. To link the Winnington radial route we envisage a further toucan crossing giving access to Verdin Park. North Bound traffic has the option of being on carriageway or on the shared pedestrian / cycle route from this point. Further work would be required to determine if an additional crossing on Castle Street is required in addition to the existing crossing that serves Winnington Street or if the existing crossing should be relocated to serve both routes.

The pinch point that is hardest to resolve is access over Town Bridge. The configuration of the roads leading to the bridge suggest a 20MPH limit could be imposed reducing traffic speeds and creating an environment where people are comfortable riding a bike amongst motorized traffic. However, this is less than ideal given the twin lanes currently found on the bridge. A more detailed understanding of the background to the current layout is required before a preferred option can be arrived at and this is likely to be an iterative process.

Ideally an alternative bridge should be provided for pedestrians and cyclists to cross south of Town Bridge. This very high cost option is unlikely to be funded in the current climate. A west bound exit route is needed to allow cycles to exit town. The current footways on town bridge are too narrow to allow shared use and cycle dismount signs are likely to be ignored leading to conflict between users which is to be avoided. If the current two lanes could be reduced to a single wider lane (to accommodate buses and HGVs readily) then we would suggest a narrow (c2m) contraflow cycle lane on the south side of the bridge for West bound traffic, with east bound cyclists mingling with motor traffic in the single lane at reduced speed.

London road is a cross link that joins the northern and southern sides of the gyratory network. Currently there is no cycle provision on this route and the nature of the corridor makes it relatively inhospitable to cyclists. Combined with additional interventions on Chester Way London Road has the potential to provide a relatively direct and useful link from the South to the town centre. The importance of this link in the network is such that ideally a segregated route, requiring the reallocation of road space, would be preferred. However, it is acknowledged that at present this is not achievable given current levels of vehicle traffic. Tying into existing infrastructure on the gyratory road we would advocate the widening of the footway as far as possible to provide consistent shared pedestrian / cycle route as far as possible (there are pinch points discussed later) giving access to key locations within the circumference of the gyratory, but also in to the town centre and riverside path at the far western end.

It is understood that a new bridge may be considered as a part of the Barons Quay development. This would be to the north of Town Bridge and as such may not offer a solution to the issues already outlined. However, such a bridge does offer additional potential to circumvent some of the issues outlined in the report if continuous and intuitive routes can be created. Given the concerns raised over access through Verdin Park we would be interested in seeing the potential explored in creating an entirely new link through the open space on the western side of the river seeking a connection to the residential areas around Verdin Avenue, though the terrain appears to make this a potentially ambitious and difficult route to deliver similar was achieved on the River Goyt Connect2 project in Stockport. The status and ownership of the required land would be a key factor.

4.3 Longer Distance Connections

The primary focus of this study has been the town centre and its immediate hinterland. The hinterland is that area where riding a cycle could be normalized, that is, seen as an ordinary and sensible means of accessing local facilities without special equipment or clothing. While not a firm

measure, this is generally taken to relate to journeys of 3-5 kilometres from a given point. However, in the course of this study we have been made aware of a triangle of related settlements, Northwich Middlewich and Winsford.

At c10 and c12 kilometres distant from Northwich both would be regarded as falling outside this measure but is well within the scope of regular cycle commuters to tackle. However, connections between Middlewich, Winsford and Northwich currently depend upon single A class road route options with virtually no quiet road alternative.

While falling outside the general scope of this study it is suggested that further work could be undertaken to establish current and potential demand for improved links between these settlements. The limited road network suggest the best likely alternative may be through the upgrading of towpaths alongside the Weaver Navigation and the Trent and Mersey canal. Both routes are well promoted as leisure routes and care would be needed to avoid and potential conflicts between users.

A detailed engineering assessment would be required in order to confirm the extent of upgrade required to provide a (sealed) all weather surface on the paths. Broadly speaking, recent projects on canal towpaths suggest such a surface can be provided for circa £100-150k per kilometre assuming no enabling work to the canal infrastructure is required and that access for plant and materials is readily available.

In our experience, the promotion of canal based routes has been easier in an urban context where a case can readily be made for access to employment or education. Early work on the Bridgewater Canal, funded through Connect2 and our past Links to Schools program helped make the case for investment in the remainder of the route from central Altrincham and central Manchester. By contrast it has proven difficult to attract funding for more rural routes between Wigan and Salford where the benefit is less apparent. Key would be seeking to establish current and potential levels of use, supported by any available statistics for use, and sadly accidents, on the alternative on road routes.

5. Potential interventions

5.1 Overview

The intention of this section is to consider in greater detail potential interventions relevant to each route / area of the town centre. The radial routes have been viewed as high level proposals and have been dealt with using broad brushstrokes establishing key principles. In contrast, given the importance of access to the key town centre destinations, more detailed consideration has been given to desirable interventions, but again the intention has been to establish a common approach with a view to creating routes of a similar standard and level of usability throughout.

5.2 Radial Routes

The radial routes described fall broadly into two categories, off road and quiet way / on road routes. The key message relevant to all routes is to seek limited improvements in order to raise each route to a common standard throughout and to ensure a common strand of signage and carriageway markings necessary to give existing cyclists confidence in the route, but also to act in attracting new users through being very apparent and continuous pieces of signing and infrastructure.

Off road routes can suffer from poor maintenance through there being a lack of clear responsibility for maintenance. Frequently such routes are not maintained as highway, but similarly can suffer if maintained as open space. There is a need to make a clear commitment to such routes as a part of

the economic transport network of the town and while there can be considerable flexibility as to where responsibility lies, there is a need to commit to maintain the route as a whole.

Off road routes such as to Wincham provide a valuable alternative to an otherwise busy and unattractive main road alternative route. Lighting has been raised as being desirable in order to encourage year round use. Without this winter / night time use is likely to be much reduced. Lighting can be very contentious because of its impacts and costs. We would not wish to see a route abandoned because lighting is considered not to be possible, but a realistic expectation needs then to be applied as to likely levels of use on that route. Such a route would remain a valuable part of the overall network mix.

The on road routes described all have points where there are short sections off road on open space and on shared footways. These are desirable as they will often give an advantage to the cyclist / pedestrian over motorized traffic. This filtered permeability serves to make some locations more attractive to users and is to be encouraged. There can be concerns over potential conflict between pedestrians and cyclists but it is considered that through careful design this perception can be mitigated.

It is acknowledged that not all routes are as deliverable as others. In particular the Winnington route appears particularly problematic given the need for access over a currently unsuitable footbridge, over railway sidings. Where such issues arise we would urge the adoption of a long term view of network development. Where an interim route can be implemented at reduced cost this would be supported, though it is important that local interest groups are made aware of the background to such decisions as vocal criticism can otherwise arise damaging the perceptions of the overall project.

5.3 Gyrotory Network

Please refer to appended drawings T45-NW-DR 101 to 107 in connection with this section.

In considering the gyrotory system it has been intended continuity of route be a priority accepting that the two swing bridges on the route pose problems that are for the present insurmountable without major impact on road space available to motor traffic.

Recurrent features are the introduction of raised tables at side road crossings, the tightening of kerb lines to reduce traffic speeds for motor vehicles turning off the gyrotory system, flush kerbs to allow easy access egress for cyclists joining or leaving the carriageway and the localized variation to kerb lines to improve widths where pedestrians and cycles share space. These interventions seek to provide a degree of consistency that would be reinforced with local signage and road markings to give all users confidence in use.

No specific intervention has been proposed for the Town Swing Bridge. Here, traffic volumes appear to justify the retention of two lanes of traffic and there is no ideal alternative approach that can be proposed for use of the existing pedestrian crossings. Further detailed study would be required to identify acceptable compromises in the absence of any further funding for additional bridges between the two swing bridges. The radial routes from Leftwich and Winnington feed into the west side of the gyrotory and traffic from these routes does need to be accommodated on the Town Swing bridge or possibly through the construction of a new bridge and link path in conjunction with the Baron's Quay development area.

The London Road provides a key link in the Gyratory network from the south to the town centre as it is the one route that does not involve crossing the swing bridges. Given the importance of the link initial thoughts were towards the reallocation of road space to enable the creation of a segregated route over the entire length of this section. However, in discussion with representatives of the town and county councils it has become clear that the recent history of the area is such that so major intervention is unlikely to find the necessary support.

In order to achieve an outcome consistent with the rest of the study we therefore suggest a more minor level of intervention, retaining two 3 metre traffic lanes over the length of London Road, retaining current capacity and vehicle parking, but widening the west side pavement to give a consistent 3 metre width to be designated as shared pedestrian / cycle space. There is a single significant pinch point in this provision at the river weaver bridge where the footway width is restricted to circa 1.5 – 1.75 metres width. This compromise is unfortunate but mitigated by the short length over which it applies and the relatively good sight lines for all route users. Shared footway is consistent with the approach adopted elsewhere on the gyratory road, as is the proposed raised table crossing of the supermarket access off London Road.

On the south eastern side of the gyratory system we have proposed changes to the kerb lines to give a more uniform width for shared space and the installation of raised table crossings at side road crossings to add weight to the cycle and pedestrian routes.

A further controlled crossing in the vicinity of Victoria bridge is proposed in order to give access to the existing riverside path but also to the subways beneath Chester Way. As existing toucans provide good access to the town centre over Chester way it is suggested that the subways could be designated cycle only to give access to the town centre core and reduce possible conflict between cycles and pedestrians crossing Chester Way.

5.4 Access to Northwich Town Centre

Please refer to appended drawings T45-NW-DR 108 to 118 in connection with this section.

Northwich town centre has a historic core of traditional high street shops on Witton Street with more modern development to the north and south. In considering this area we have sought to improve accessibility while respecting the need to accommodate all users in this tightly confined area. The approach has been to seek identifiable routes where cyclists, where on road are on routes where traffic levels may be less than on the major routes and to minimize as far as possible the sections of major roads where cyclists need to undertake manoeuvres contrary to the flow of motor traffic.

Chester Way is a major severance having relatively few crossing points. Drawings 113 to 117 detail interventions intended to create a small number of key sections of quiet roads and shared spaces to link to existing or relocated toucan crossings that would provide pedestrians and cyclists good access to the town centre core. The most significant interventions are outlined on drawing 117 where we propose the link between Kingsway and Church Road be targeted to become a major crossing point for cycles and pedestrians. This location was considered important as a link from the south east of the town and from the station area.

This proposal reflects the situation on the ground at present. Possible future changes to the local road network may offer alternative means of achieving similar ends and reduce the need for the route outlines. While the reservations of the authorities are understood we feel this route should be retained as a means of underlining the need to create a network of routes to serve as wide an area as possible.

In common with other areas where the footway is changed to become shared pedestrian / cycle space we have proposed raised table crossings on all side roads and a tightening of turning radiuses designed to slow the speed of motor traffic making these manoeuvres. It was not considered practical to create a continuous shared space route alongside Chester Way as there are a number of pinch points that cannot readily be resolved. The need is therefore to provide a number of key crossings and alternative routes, such as via Percy Street, making it possible to access key destinations and creating a cohesive and versatile network of routes

Relatively few interventions are proposed for the town centre core, but these are outlined on plans 109 to 113. Key proposals are the creation of quiet road routes on Brook Street connecting to Leicester Street, Church Road connecting to Chester Way and links from Albion Road to and across Witton Street and the pedestrianized area. These routes require relatively little alteration but would need detailed attention to signage road markings and connections to adjoining roads in order to provide proper connections.

In a similar vein, at the cross roads of Witton Street and Venables Road is a major severance and alterations are proposed both to allow greater cycle permeability. The central island on Venables Road is not as wide as would be ideal, but the physical constraints on the carriageway width make it impossible to provide a refuge of greater depth.

Baron's Quay is a major development within the town centre core that will have major impacts on future traffic flows both in terms of servicing and deliveries, and staff and visitor journeys to the development and surrounding area. From the south the only available access route is via Weaver Way. This has scope to become a shared multi user corridor which with careful design and implementation should allow for a good quality environment for pedestrians and cyclists. It is understood that there are concerns over the need for this route also to be the main access route for service and delivery vehicles to parts of the development and existing commercial properties on Witton Street.

We are unable to comment in detail on the development area but would suggest a through route be secured on or close to the water front in order to connect to a possible future bridge over the Weaver. We would suggest that this be in the form of a pedestrian / cycle shared space route that continues north and east to connect to Barons Quay Road, Carey Park and the proposed segregated route adjacent to Leicester Street. Additionally, subject to the development proposals we would wish to see provision to ensure convenient cycle access to the heart of the development area coupled with high quality and accessible cycle parking for staff and visitors to the location.

5.5 Access to Northwich Station and Area

Please refer to appended drawings T45-NW-DR 119 to 127 in connection with this section.

Northwich railway station is an important destination and good links from here to the town centre are key. The local road network is very constrained and frequently congested. It is not likely that any significant reallocation of road space could be achieved in this vicinity so it is suggested that a 20mph limit be imposed on Middlewich Road / Station Road from the vicinity of Royle Street to Chester Way coupled with intensive marking of cycle signs on the carriageway to reinforce the message of sharing the available space with slower speed users. The principle interventions are focused around the Station Road Manchester road crossroads where detail changes are proposed to slow traffic maneuvers at this junction and to provide greater shared space for pedestrians and cyclists to access and use the proposed toucan crossing.

Victoria Road is proposed as a quiet route connecting to Kingsway and the town centre. We have not gone into detail of measures required to mitigate the rat running issue on Victoria Road as this is somewhat beyond the current brief. We understand the concern at focusing on this route as a cycle corridor but would urge the authority to think in terms of mitigating the rat running issue for the benefit

of residents and legitimate users rather than seeking to push vulnerable users further from the desire line as this risks undermining the perceived value of the route and value of cycling as a transport mode.

The town council raised the suggestion of utilizing a former mineral railway route to provide a further alternative route from the station to serve the north side of the town centre and Barons Quay. The route was investigated and it is agreed that this corridor offers considerable potential. The main parts of the route lend themselves to the construction of a c 3metre wide shared use path with few engineering issues. There are a number of main road crossings where toucan crossings would be proposed. Via Brook Street this route would connect to the town centre core, and through a continuation of the route to and through the Barons Quay development area and linking to the radial routes at the south west side of the town centre. The main threat to this corridor is the possible inappropriate development of the land between Manchester Road and Chester Way which is understood to be a potential residential development site. Development of this site would not be an issue as such but there would be a need to safeguard the principle of creating a shared use traffic free route through this area.

The plans outline routes on both alignments. It is known that there are proposals to remodel the island on the junction of Station Road, Manchester Road, Chester Way and Leicester Street. The potential remodeling is substantial and the impact on the local area such that proposals for both routes outlined above merit revisiting. One view is that it may be possible to create a single route from the remodeled junction into the town centre via Station Road / Witton Street in preference to those routes outlined here. We propose the routes we have based on current circumstances and acknowledge that external factors may alter how proposals are implemented. However we consider the remodeling proposals currently to be too remote from delivery to comment further on route alternatives. In the event of large scale change the need is to reconsider the best route option while remaining true to the principle of creating high quality intuitive infrastructure in keeping with the whole network envisaged.

An outlying issue is highlighted on drawing 127 which outlines the twin bridges over the operational railway. These bridges are an unfortunate barrier in what could otherwise be an ideal quiet road route. We do not consider it likely that material changes to the bridges could be achieved in the available space at an economic cost. However, in order to encourage utility cycle use of the route a minimal intervention of installing wheeling ramps to ease the passage of cycles pushed by their riders is suggested. This is not ideal, but is a benefit and encouragement to would be users and in conjunction with other minor interventions proposed in the area. Network Rail are understood to require additional modifications to the bridges that would suggest they anticipate cyclists pushing cycles up the wheeling ramps, remounting to cycle the few level metres of the span before dismounting to use the next wheeling ramp. While we understand Network Rail's technical standpoint we believe their concerns to be ill founded and would urge the authorities to re-engage with Network Rail to secure a more sensible approach. We consider it most unlikely that a cyclist would seek to re-mount for so short a section of route. Continuing to push a cycle would be more convenient and likely to be quicker.

6. Matrix of interventions

The following matrix is intended to set out the cost and benefit of each intervention against each other. At this stage it is not possible to accurately cost each element as this would require greater detail than is currently available. The measures, low medium and high are intended to reflect anticipated levels of cost use and deliverability and is set out as an aid to future discussion on what should be progressed.

Intervention	Cost	Utility	Deliverability	Comments
Radial Routes				
Hartford Corridor	Low	High	High	Corridor dependent upon delivery of link to town centre
Winnington Corridor	High	Medium	Low	Difficult to deliver in its entirety due to rail crossing
Leftwich Corridor	Low	High	High	Requires link to town centre to be completed
Rudheath Corridor	Low	High	High	Relatively easy to deliver good quality route with attractions at both ends of route.
Wincham Marston Corridor	Low	Medium	High	Mainly existing route with lighting and surface quality likely to be main issues
Central Area Interventions				
1) Station to Venables Road	High	High	Medium	High cost due to new toucan crossing on Chester Way
1A) Chester Way to Memorial Court	Medium	Medium	Medium	A useful option to extend the main route to the town centre

2) Gyratory East	Low	High	High	Relatively minor works delivering an important connection to the town centre.
3) Leicester Street	High	Medium	Medium	Relatively high cost as wholly new build with some land ownership issues to resolve. Route a little out of the town centre.
4) Gyratory West	Low	High	High	A key link in access to the town centre from the south
5) Town Centre minor interventions	Low	High	High	This is a package of minor works within the town centre core that helps link the longer routes in to the town centre core.
6) London Road Corridor	High	High	Medium	An important link but known to be both compromised by available width and deliverability.

7. Recommendations

This study has covered a wide spectrum of routes and potential interventions. All will require a degree of commitment to capital expenditure to see proposals implemented and then a similar commitment to funding future maintenance.

It would be out of place for Sustrans to seek to dictate next moves as there are developments on the ground that we are not party to that will influence how this report is interpreted and acted upon. Many approaches could be adopted. For example, it may be tempting to seek to implement small projects on a piecemeal basis as funding becomes available. This would however risk compromising the impact and value of such interventions and limit the benefit to the community.

In Chester considerable commitment has been made to the creation of a family of routes under the Cycle Chester banner and branding routes on a colour code / named route basis. This has required significant investment but has gone a long way to creating a far reaching local network. In Greater Manchester, through the Cycle City Ambition program, Transport for Greater Manchester and the local authorities have sought to develop strong line of route proposals seeking to create high quality corridors mirroring key desire lines. While still in the early stages of implementation there has been a growing sense of authorities seeking to develop further routes for development as funding permits.

With these two examples in mind we would suggest consideration be given to prioritizing the developments of key routes. The southern radial routes are relatively straightforward and perhaps one mainly on quiet road route and one off road route could be developed initially as a showcase for route development and to gauge public interest and reaction. These could form the basis of a number of identifiable routes in the Chester mold.

The Winnington corridor has significant issues centred upon the current rail sidings bridge, access across Town Bridge and future development proposals for the area. This may be the hardest route to deliver beyond a limited interim standard route. We would suggest consideration be given to the delivery of an interim route but seek to cement future development with the road scheme and development proposals and engines to deliver this route in due course. A prioritized map of potential routes could be published to be enshrined in relevant planning documents and highways strategies to ensure these are not ultimately overlooked.

More difficult is the package of town centre proposals as in many ways one intervention falls if the others are not also implemented. Given recent investment in the gyratory system there may be sensitivities around further investment in this area, but the package proposed makes a major change to the local network for non-motorized traffic and should perhaps be considered as a whole.

Selection and designation of routes could be relatively easily achieved however, there funding for the whole is unlikely to be available in a single project so will need to be phased, potentially over a number of years as some elements may be linked to future developments. It is beyond the scope of this study to recommend the future approach to the delivery of cycle infrastructure and it is appreciated that there will be many competing demands upon limited resources. We would welcome the opportunity to assist in the future development and delivery of cycle projects in the town

Appendix A – Drawings

This appendix contains the following drawings:

Table A-1: List of drawings

Drawing number	Drawing title
T45-NW-DR-01	Overview Plan
T45-NW-DR-02	Town Centre Plan
T45-NW-DR-100	Town Centre Improvements Outline Design Key Plan
T45-NW-DR-101	Town Centre Improvements Design Sheet 1
T45-NW-DR-102 REV B	Town Centre Improvements Design Sheet 2
T45-NW-DR-103 REV B	Town Centre Improvements Design Sheet 3
T45-NW-DR-104	Town Centre Improvements Design Sheet 4
T45-NW-DR-105	Town Centre Improvements Design Sheet 5
T45-NW-DR-106	Town Centre Improvements Design Sheet 6
T45-NW-DR-107	Town Centre Improvements Design Sheet 7
T45-NW-DR-108	Town Centre Improvements Design Sheet 8
T45-NW-DR-109	Town Centre Improvements Design Sheet 9
T45-NW-DR-110	Town Centre Improvements Design Sheet 10
T45-NW-DR-111	Town Centre Improvements Design Sheet 11
T45-NW-DR-112	Town Centre Improvements Design Sheet 12

Drawing number	Drawing title
T45-NW-DR-113	Town Centre Improvements Design Sheet 13
T45-NW-DR-114	Town Centre Improvements Design Sheet 14
T45-NW-DR-115	Town Centre Improvements Design Sheet 15
T45-NW-DR-116	Town Centre Improvements Design Sheet 16
T45-NW-DR-117	Town Centre Improvements Design Sheet 17
T45-NW-DR-118	Town Centre Improvements Design Sheet 18
T45-NW-DR-119	Town Centre Improvements Design Sheet 19
T45-NW-DR-120	Town Centre Improvements Design Sheet 20
T45-NW-DR-121	Town Centre Improvements Design Sheet 21
T45-NW-DR-122	Town Centre Improvements Design Sheet 22
T45-NW-DR-123 REV A	Town Centre Improvements Design Sheet 23
T45-NW-DR-124	Town Centre Improvements Design Sheet 24
T45-NW-DR-125 REV A	Town Centre Improvements Design Sheet 25
T45-NW-DR-126	Town Centre Improvements Design Sheet 26
T45-NW-DR-127	Town Centre Improvements Design Sheet 27

