



APPENDIX B

WWHAR Sustainable Transport Strategy Narrative

TO	Ian Parkes	FROM	Paula Cuthbertson
DATE	27 April 2023	CONFIDENTIALITY	Public
SUBJECT	WWHAR - STS Summary Narrative		

Introduction

A Sustainable Transport Strategy (STS) is currently being produced by WSP on behalf of Norfolk County Council to accompany the Outline Business Case submission for the West Winch Housing Access Road (WWHAR).

The STS is intended to respond to queries raised by Department for Transport (DfT) in respect of Active Travel provision and bus priority. It will need to consider and respond to the following requirements stipulated in responses to queries from the DfT:

- The Council must prepare a Sustainable Transport Strategy document to be submitted alongside the Outline Business Case;
- The Council confirms at OBC stage the detail of proposed public transport and active travel measures to be provided as part of the scheme and through the wider masterplanning of the new West Winch development, including information on when the latter measures will be provided and how they will be funded;
- The Council investigates further bus priority measures on the A10 approach to Hardwick roundabout; and
- The Council engages with Active Travel England as part of the OBC development work and considers the integration of LTN 1/20 guidance in the design of the footway and cycleway provisions proposed as part of the WWHAR scheme

The scope of works for the STS includes engagement with relevant stakeholders and preparing an Optioneering Study considering opportunities for active travel and bus priority to support the proposed housing and complement the WWHAR.

It is also assumed that the full allocation identified within the Local Plan Review documentation totalling 4,000 dwellings would be implemented alongside the road. The STS assumes that the July 2022 masterplan layout is fixed and the proposals will be aligned with this. The masterplan used for the STS is shown in Appendix A.

The existing character of the A10 through West Winch is a highway dominated environment with the key function of the route being focussed on the needs of through traffic movement, rather than offering a place that is sustainable and attractive for people, despite the existence of about 1000 dwellings located on both sides of the A10 and local facilities including shops, a church and a primary school (amongst others). In October 2022 the existing A10 was observed to carry over 20,000 vehicle movements per day. With high volumes of vehicles moving at 40 mph, it is difficult to cross the road which creates severance and limits access to bus stops. It is also intimidating for pedestrians and cycles. With the WWHAR there is an opportunity to re-design the A10 corridor through West Winch with through traffic substantially reduced and increased priority for non-car modes.

The STS considers this specific opportunity and develops a strategy for enhancing accessibility and creating a sense of place which is suitable for a larger community of around 5000 total dwellings, with the former A10 changed in character to become a central spine road through the settlement connecting residents with facilities and services rather than dividing the community.

Highway modelling is being carried out to understand the capacity impacts of the relevant principles of the STS, in particular, changes to the character, improved crossing facilities and reduced speed limits on the existing A10 through West Winch to support placemaking principles, in readiness for the new development. These measures should assist with directing strategic through traffic to the new WWHAR so that the former A10 route serve predominantly local traffic with origins and destinations in West Winch.

Applicable Policy

A review has been carried out of overarching key policies and guidance documents that provide the strategic context for the STS. These include the following (amongst others):

- NPPF 2021
- Planning Practice Guidance 2021
- Norfolk LTP4
- Gear Change July 2021
- LTN1/20 – cycle Infrastructure Design
- Transport Decarbonisation Plan 2021
- Kings Lynn and West Norfolk Borough Council Local Plan
- KLWNBC Climate Change Policy (October 2020)
- Local Transport Plan 4 Strategy 2021-2036 (November 2021) and Draft Implementation Plan 2022
- King's Lynn Transport Strategy (2019)
- West Winch Masterplan Consultation Draft July 2022
- Norfolk LCWIP (Local Cycling and Walking Infrastructure Plan), 2022
- Norfolk BSIP (Bus Service Improvement Plan) October 2021.

Key findings of the review indicate a need to consider all modes in future developments, and locate housing and growth where alternative travel options for access to jobs, services and key facilities are available or can be made available in the future. Following the COVID-19 pandemic, there is a strong emphasis on enhancing active travel opportunities in particular for shorter distance journeys within 2-5km where there are more opportunities for mode shift. Gear Change policy in particular targets doubling of active mode trips in comparison with 2011 Census results.

The site is located on the edge of an existing urban area, and the further development will intensify use of existing routes and contribute to urbanisation of West Winch. LTN 1/20 guidance is therefore applicable to the development and WWHAR proposals. Hence the Non-Motorised solutions proposed should be designed in accordance with the key design principles, so the STS proposals need to be able to meet the five main criteria of Coherent, Direct, Safe, Comfortable and Attractive.

The Kings Lynn Transport Strategy set a vision for improving public transport and active travel provision, improving air quality and reducing the need to travel by car. In close proximity to the West Winch Growth Area, there are measures proposed at key junctions on Hardwick Road to optimise traffic signal timings seeking to reduce delays to bus services.

The LCWIP also promotes and aspirational route crossing under A47 at the north eastern edge of the West Winch Growth Area via an existing railway underpass that is out of use. This could be converted to a Non-Motorised User route with onward connectivity towards key employment areas on the eastern edge of Kings Lynn and towards Bawdsey country park to the east.

In relation to public transport the BSIP also identifies three schemes relevant to Kings Lynn as follows:

- Hardwick Roundabout to Southgates Inbound bus lane - links to sustainable travel plans as part of the Levelling Up Fund bid
- Portland Street and Bus Station Access Junction changes to prioritise buses
- Queen Elizabeth Hospital exit Reconfigure junction to provide priority for bus movements



Existing Travel Patterns and Accessibility

The 2011 census travel to work mode share results have been reviewed for the local area based on trip origins (for residents living) within Kings Lynn and West Norfolk Borough MSOA 014 as shown below in Table 1. These are compared with a future mode share prediction taking into account post-covid trip rates for vehicles and total people (all modes) derived from TRICS 2023 data, with future cycle mode share uplifts from Propensity to Cycle tool Policy (equality) scenario.

Table 1 census 2011 v PCT future year forecast

	Census 2011	WWHAR
TOTAL PEOPLE	100%	100%
Car driver	67%	57%
Car passenger	4%	5%
Motorcycle	1%	1%
Cycle	9%	13%
Pedestrian	15%	19%
Train	1%	1%
Bus	2%	3%

To understand the range of origins and destinations in walking and cycling distance of the West winch site, isochrone mapping has been carried out. The base network used in the analysis includes existing public rights of way. A maximum travel time of 25 minutes has been considered, based on typical walking speeds of 80m per minute and cycling speed of 200m per minute. This gives a typical travel catchment for these modes of 2km for walking and 5km for cycling.

With the advent of electric bikes, the range could potentially be extended. However, at present the majority of users do not have access to electric bikes in the local area and there are no existing e-scooter schemes available yet in Kings Lynn. Hence this has not been taken into account for the existing catchment.

The future location of accesses proposed within the housing site have been considered based on the July 2022 masterplan in Appendix A. Isochrone mapping results are shown in Appendix B for walking and cycling modes.

Based on the isochrone analysis presented in Appendix B, there are 38,365 jobs located within the 5km cycle catchment of which 30,025 (78%) are within the 2km walking distance of the site. Hence the site is located in easy reach of a wide range of employment opportunities, many of which could potentially be accessed by non-car modes based on trip distance.

Existing Active Travel Facilities

The existing conditions at the site have been reviewed via a site visit and desktop study. A draft Walking Cycling Horse Riding Assessment Review Stage 1 Report has also been prepared.

The A10 is flanked by shared surface pedestrian and cycle routes on both sides. There are a small number of existing crossing facilities currently available. A signalised crossing in the central area close to the existing primary school and

Public Rights of Way are available running north-south on both sides of the existing settlement and there are two existing public highways connecting to the neighbouring village of North Runcton to the east. Rectory Lane and Chequers Lane both enable east-west movement for all users. Rectory Lane has a footway on one side from A10 to Coronation Avenue, whilst Chequers Lane is a single track road with passing places.

The Hardwick Interchange (A10 junction with A47) at the northern edge of West Winch is a key node in the surrounding road network, at the interface of the SRN (A47 Trunk Road) and MRN (A10/A149). It is large and complex interchange and at peak times can be intimidating for Non-Motorised Users to negotiate. However, there are footways and signalised crossings on A10 arm and on the A47 slip road arms to facilitate pedestrian and cycle movement around the gyratory. The Hardwick Interchange provides onward access towards key employment and retail destinations at Hardwick Road on the south east edge of Kings Lynn. Signalised junctions also offer pedestrian phases at the Campbell’s Meadow/Scania Way junction with Hardwick Road.

Existing Public Transport Provision

There are 10 existing bus stops located along the A10 within West Winch (north of the proposed southern WWHAR junction). The majority of existing bus stops are placed in laybys to minimise delays to through traffic. There are also bus stops on side roads within the village at Gravelhill Lane, Hall Lane and Back Lane. The majority of northbound stops for journeys towards Kings Lynn have shelters and raised kerbs, southbound stops tend to have lower levels of waiting facility provision as the majority of users alight buses and do not wait at the stop.

The bus network in the study area radiates from the town centre of King’s Lynn, providing routes to and from housing areas and connecting with key employment sites such as the Hardwick Industrial Estate, on the south east edge of Kings Lynn urban area. The existing services connecting with West Winch are shown in Table 2.

Lynx Buses provides several services connecting West Winch, Middleton, Fair Green, Hardwick, Setchey, Watlington and King’s Lynn, as shown in Figure 1. Bus services also operate within the study area, connecting residential areas to major employment sites. There is, however, a lack of traditional bus services within the identified gap to the west of Norwich, including Weston Longville, Weston Green and Ringland.

Coach Services provides a service from King’s Lynn to Thetford. This is a village stopper service which provides access to many small villages. There is a good service during school term time, however there are only 5 services per day during the school holidays.

Go to Town operate a service from King’s Lynn to Mileham via Swaffham. This is mostly used for school and college travel but does offer one service per day during school holidays. This service uses the A47.

Table 2 Existing Bus Services Operating to West Winch

Service	Route	Operator	Frequency
32	Mileham to King’s Lynn (North Runcton, Swaffham and Castle Acre)	Go to Town	3 per day (1 per day during school holidays)
37	King’s Lynn to Southery/Ten Mile Bank (Via Downham Market/Occasionally via Watlington)	Lynx Buses	1 per hour (1 per day via Watlington)
38	King’s Lynn to Fair Green (Via West Winch and North Runcton)	Lynx Buses	2 per day
39	King’s Lynn to Upper Marham (Via West Winch, Tottenhill and Shouldham)	Lynx Buses	1 per 2 hours
40	King’s Lynn to Thetford (Via West Winch, Downham Market and Brandon)	Coach Services	1 per hour (Only 5 per day on school holidays)

These services show there are regular services into King’s Lynn, Downham Market and along with several villages south on the A10. There are also less frequent services to other villages such as Fair Green, Middleton, Marham, and Watlington as well as towns such as Thetford, Swaffham and Brandon. Figure 1 below shows there are three main bus routes serving West Winch – 37, 38, and 39, with an approximate frequency of 1-2 buses per hour.

Figure 1 Existing Bus Services



There are also two rail stations within a 25 minute cycle distance of the site – Kings Lynn Station in the town centre (approximately 16 minutes by bike to the north west) and Watlington Station to the south west. There are a range of existing bus services which operate to West Winch.

Review of Feedback from Public Consultations and Stakeholder Engagement

To understand local resident views, feedback from public consultation has been reviewed. Two public consultations have been carried out in relation to the west Winch scheme in the last 12 months. Firstly, Kings Lynn and West Norfolk Borough Council carried out a consultation on the proposed masterplan in July 2022 based on the illustrative site layout in Appendix A. Secondly, Norfolk County Council carried out a consultation on the proposed WWHAR highway proposals. The consultation included questions on current levels of provision and aspirations for active travel and public transport measures requested by the local community to complement the highway scheme and proposed development masterplan.

The following active travel, traffic management and bus priority options were consulted on for further consideration and development:

- Bus lane on the northbound A10 approach to the Hardwick Interchange
- A local Transport Hub on A10
- Improvements to bus stop facilities, passenger information and accessibility
- Active travel improvements north-south in the A10 corridor
- Non-Motorised User infrastructure crossing the WWHAR linking North Runcton and West Winch
- Gateway features at the southern end of the village and traffic management measures on A10 such as speed calming, seeking to reduce the through traffic component within West Winch.
- Re design of proposed WWHAR junctions to operate efficiently for buses or add priority if needed.

The consultation feedback and summary of findings from the policy and existing conditions review were used as the starting point for discussions with local transport stakeholders. A workshop was held on 24 March seeking input to the proposals at an early stage to inform the Outline Business Case submission to DfT. The slides presented and interactive feedback gathered during the workshop are shown in Appendix C. This includes a summary of feedback from the two rounds of public consultation.

Developing WWHAR Options for Non-Motorised Users

The WWHAR will cross between the villages of West Winch and North Runcton but a key principle of the design is for NMU access east-west to be preserved, with at least one of the existing public highway routes converted to a grade separated crossing and users diverted to a central bridge over the WWHAR.

The format and location of the bridge is currently being reviewed, taking into account feedback from public consultation. Non-Motorised User provision will be enhanced at the Hardwick Interchange with wider footways and improved signalised crossings to suit the new layout once the satellite roundabout on the east side of the gyratory is removed and replaced with the proposed flyover slip roads.

Norfolk County Council published a draft LCWIP proposals for the area in 2022. This suggests an existing A47 underpass (a former rail route that is now disused) on the south west side of the Hardwick Interchange, could be used as a future cycle route. The LCWIP identifies an opportunity to convert this route into a future NMU grade separated crossing under A47 connecting towards the Hardwick Industrial Estate and the south east edge of Kings Lynn (subject to achieving a suitable crossing of the A149 to facilitate access to Kings Lynn). There are also onward routes towards the Bawdsey Country Park to the east potentially available via this route. The WWHAR scheme design would not preclude this option coming forward.

An optioneering study is being carried out to inform the STS, taking ideas from the early engagement meetings and from the evidence base to identify opportunities for improving active travel and bus accessibility. The study covers active mode options and enhanced public transport facilities and services so that there is a range of options available for travel to and from Kings Lynn.

A Multi-Criteria Assessment Framework (MCAF) is being used in line with DfT TAG guidance and a sifting process is used to shortlist a subset of best performing options.

Developing Options for Bus and Public Transport Users

The review of bus facilities indicated that there are generally good waiting facilities and accessibility to bus services within West Winch, although real time passenger information would potentially enhance attractiveness of stops and improved crossing facilities and removal of bus laybys may offer improved priority for buses over through traffic once the WWHAR is in place. A public transport hub within West Winch may also be helpful to maximise integration of modes, with cycle storage, disabled parking bay and EV charging provision. There is a potential space available for this close to the Chapel Lane junction with A10.

Bus service frequency on the A10 in West Winch could be enhanced with increased population catchment offering improved bus viability as the housing site grows in the vicinity of existing bus stops. The A10 services could also make localised diversions to improve access for the new development residents and new stops within the development site could be provided. However, long and tortuous diversions should be avoided to prevent significant increases in journey times.

With the WWHAR in place, there is an opportunity for re-routing the existing 38 service through the development site using the northern part of the WWHAR.

Bus priority on A10 northbound approach to Hardwick interchange could be considered by adding a bus lane or reallocating a lane to bus. The configuration of the WWHAR junctions as roundabouts with A47 also assists with reducing delays to bus services in comparison with the previously considered priority ghost island arrangements.

Modelling and Forecasting

Updated modelling of the baseline situation to 2039 including the 4,000 dwellings proposed in West Winch is being carried out to inform the optioneering process and OBC. An existing Paramics model will be used to test relevant scenarios where highway capacity on the A10 is potentially impacted by the STS options. Once the future year modelling is updated following new surveys in October 2022, a final package of measures can be modelled to understand this in combination with the WWHAR. This will be carried out using a full run of the SATURN and Paramics models.

Conclusions

The STS document is being produced setting out the work completed at the optioneering stage and recommendations on a final package of measures to be included within the scheme, seeking to address the comments posed by DfT. The final STS will document engagement activities and how the designs have responded to the feedback from stakeholders and members of the public as well as considering how the proposals meet the scheme objectives and address the needs identified in the baseline review.

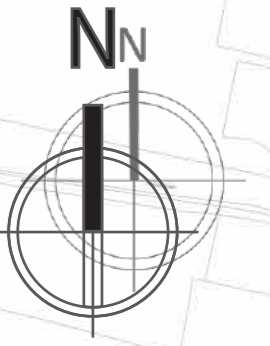
The intention is to create a place within West Winch that is capable of accommodating the needs of existing and new residents with a significantly enlarged settlement. The proposed STS would offer a network of active travel infrastructure that is coherent, safe, direct, comfortable and attractive in accordance with the core design principles of LTN 1/20. This includes a safe crossing of the A47 (east of Hardwick) and a grade separated crossing of the WWHAR close to Rectory Lane or Chequers Lane in the future to be delivered by NCC as part of the main highway design.

In relation to public transport there are already a range of services available to support the development with opportunity to further increase the frequency and enhance accessibility by diverting services through the new development site once the WWHAR is in place, seeking to enhance the catchment and viability of the routes with the additional population catchment created by the growth area. A bus hub and improved waiting facilities would enhance the attractiveness of bus as a local mode for short journeys to Kings Lynn and connections to the stations at Watlington and Kings Lynn would also assist with longer range multi-modal journeys.

Once the WWHAR is in place, there is an opportunity to re-purpose the existing A10 and offer more priority to bus and sustainable modes. The speed limit on the A10 can be reduced to 30mph, with 20mph zone in the vicinity of existing and future primary schools. The carriageway can be narrowed to 6.1m at localised crossing points to reduce crossing distances and influence slower vehicle speeds whilst maintaining a route that is suitable for buses to pass each other safely.



Appendix A – West Winch Masterplan July 2022 – Consultation Draft



Hardwick Narrows Industrial Estate

New walking and cycle crossing on Beveridge Way arm will complete provision of controlled facilities across arms at Hardwick roundabout on the desire line between new housing area and nearby employment and retail areas

ESSO

At-grade pedestrian crossing between Hopkins' site and Sheep's Course Wood

The Winch

Existing A10

Kings Lynn Caravan & Camping Park

Oriental Palace
West Winch Primary School

Retail Mix
West Winch Village Stores

William Burt Social Club and Village Hall

St Mary's Church

New Rectory Lane (north) and Chequers Lane (south) bridges will maintain active travel connections between West Winch and North Runcton

North Runcton Cricket Club

All Saints' Church North Runcton

Buttercups Pre-school

Cool-Stak



FOR COMMENT

KEY	
	Masterplan Boundary
	WWHAR Road
	Proposed Residential Development
	Proposed School
	Proposed Retail Use
	Proposed Community Use
	Proposed Employment Area
	Proposed Mix Use
	Proposed Playspace/ Playing Field
	Proposed Green Amenity Open Space
	Proposed Attenuation Ponds

SOUTH EAST KING'S LYNN GROWTH AREA MASTERPLAN SPD

Movement Corridors & Linkages Plan

Scale: 1:5000 @ A1
15th December 2021

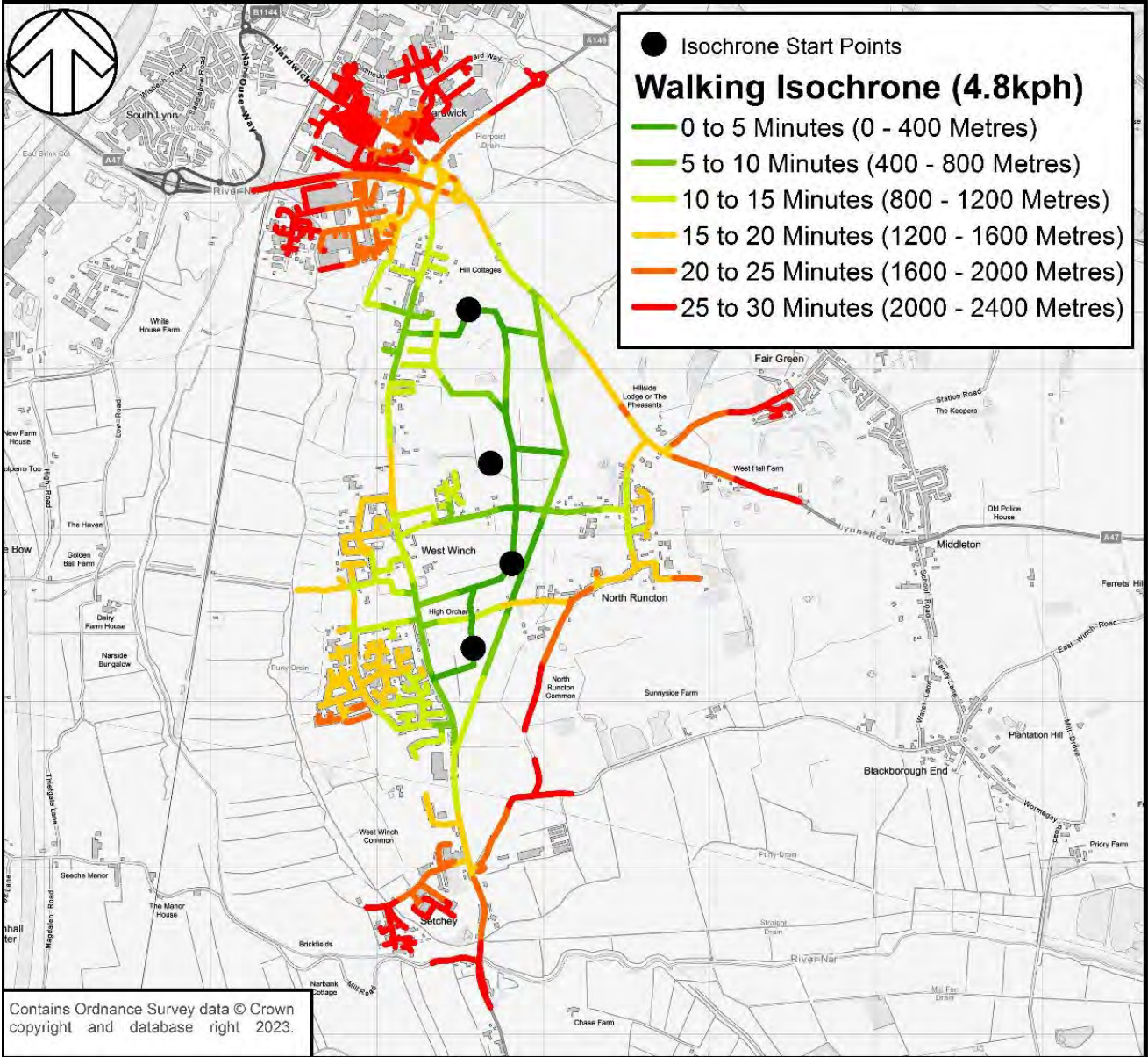
Borough Council of
King's Lynn &
West Norfolk



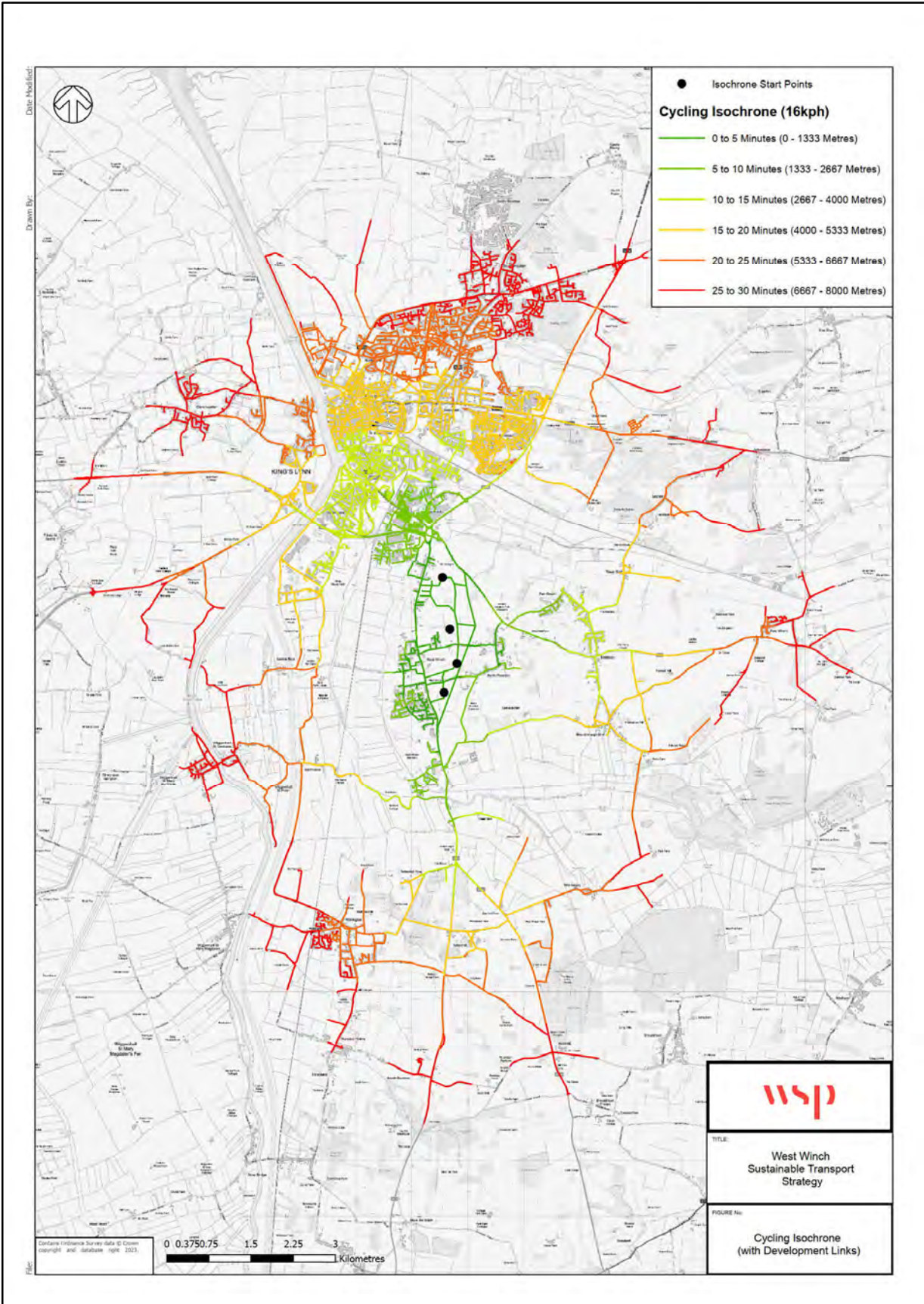


Appendix B – Walking and Cycling Isochrone Maps

WEST WINCH GROWTH AREA WALKING ISOCHRONES



WEST WINCH GROWTH AREA CYCLING ISOCHRONES





Appendix C – STS Stakeholder Workshop Slides 24 March 2023

West Winch Housing Access Road Sustainable Transport Strategy

Issues & Opportunities Workshop



24 March 2023

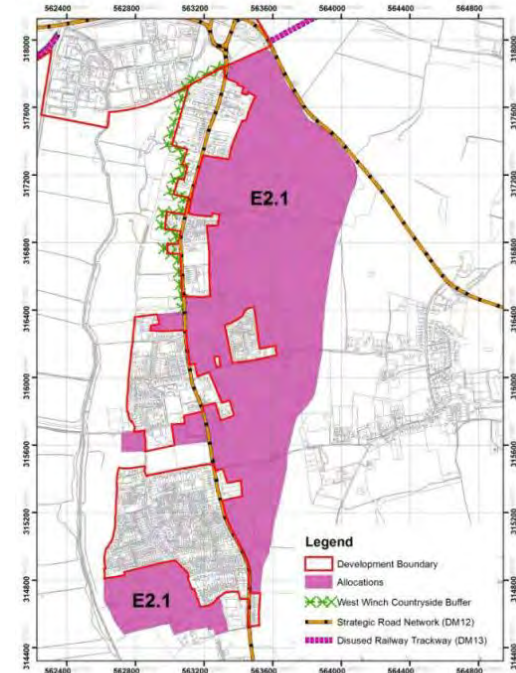
Paula Cuthbertson & Ed Hanks

Agenda

- Scheme Background
- Baseline Conditions
 - Existing NMU Accessibility
 - Public Transport Accessibility
 - Consultation Feedback
- Sustainable Transport Issues / Opportunities
 - Based on established baseline
 - Stakeholder Issues / Opportunities
- Options for enhancement
- Next Steps

West Winch Development Masterplan

- Strategic Development Site E2.1 within emerging Kings Lynn & West Norfolk Local Plan Review
- 4,000 new dwellings on land between the A10 and A47 and 1ha of employment land
- Only location available in the area which can accommodate such a level of growth
- New West Winch Housing Access Road (WWHAR) between A10 and A47 to mitigate the impacts of the additional traffic on the existing A10

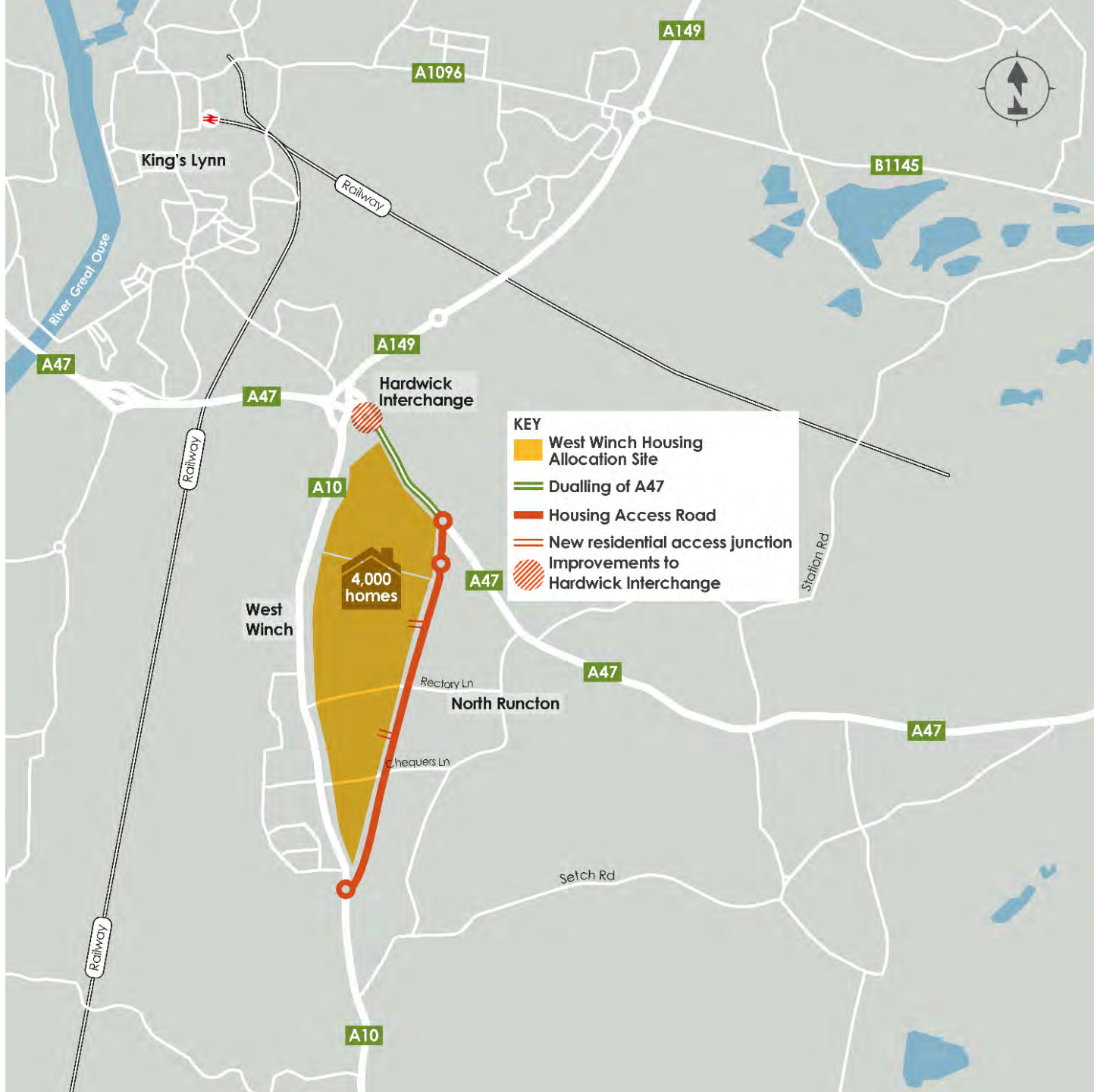


West Winch Development Masterplan

- New West Winch Housing Access Road (WWHAR) between A10 and A47 to mitigate the impacts of the additional traffic on the existing A10
- Junctions on the WWHAR to access the development site
- Dualling of the A47 between Hardwick Interchange and the housing access road
- Modifications to the existing Hardwick Interchange to accommodate A47 improvements and provide additional capacity
- Treatment of local roads severed by the housing access road
- Traffic calming / speed limits on the existing A10



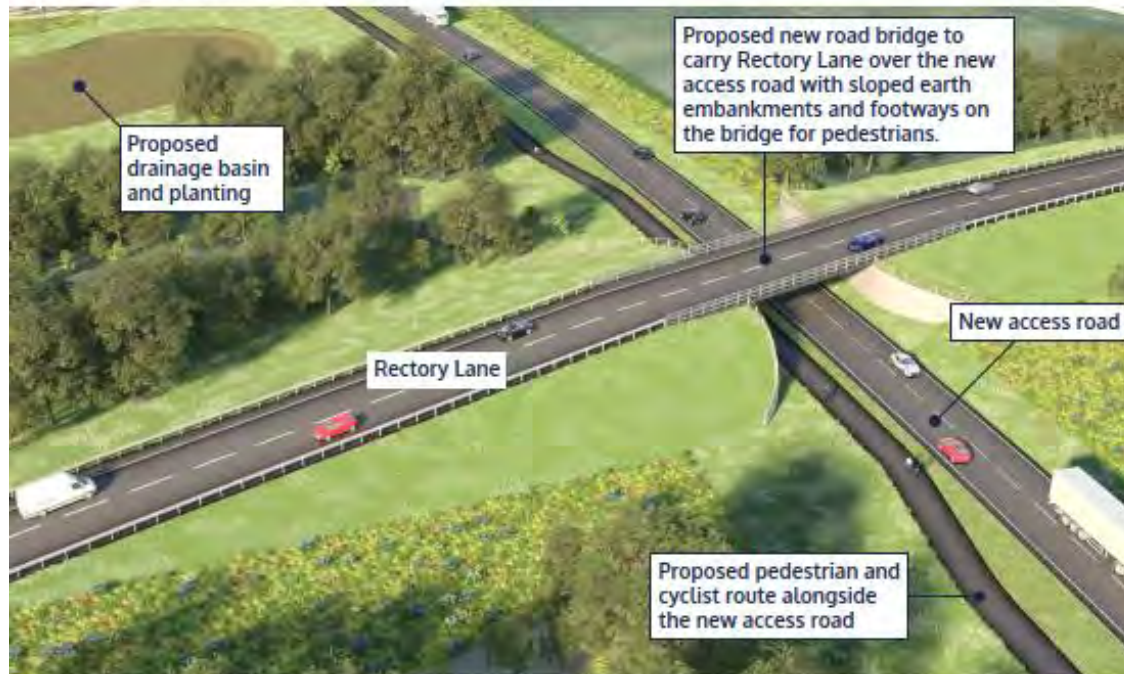
Scheme Background





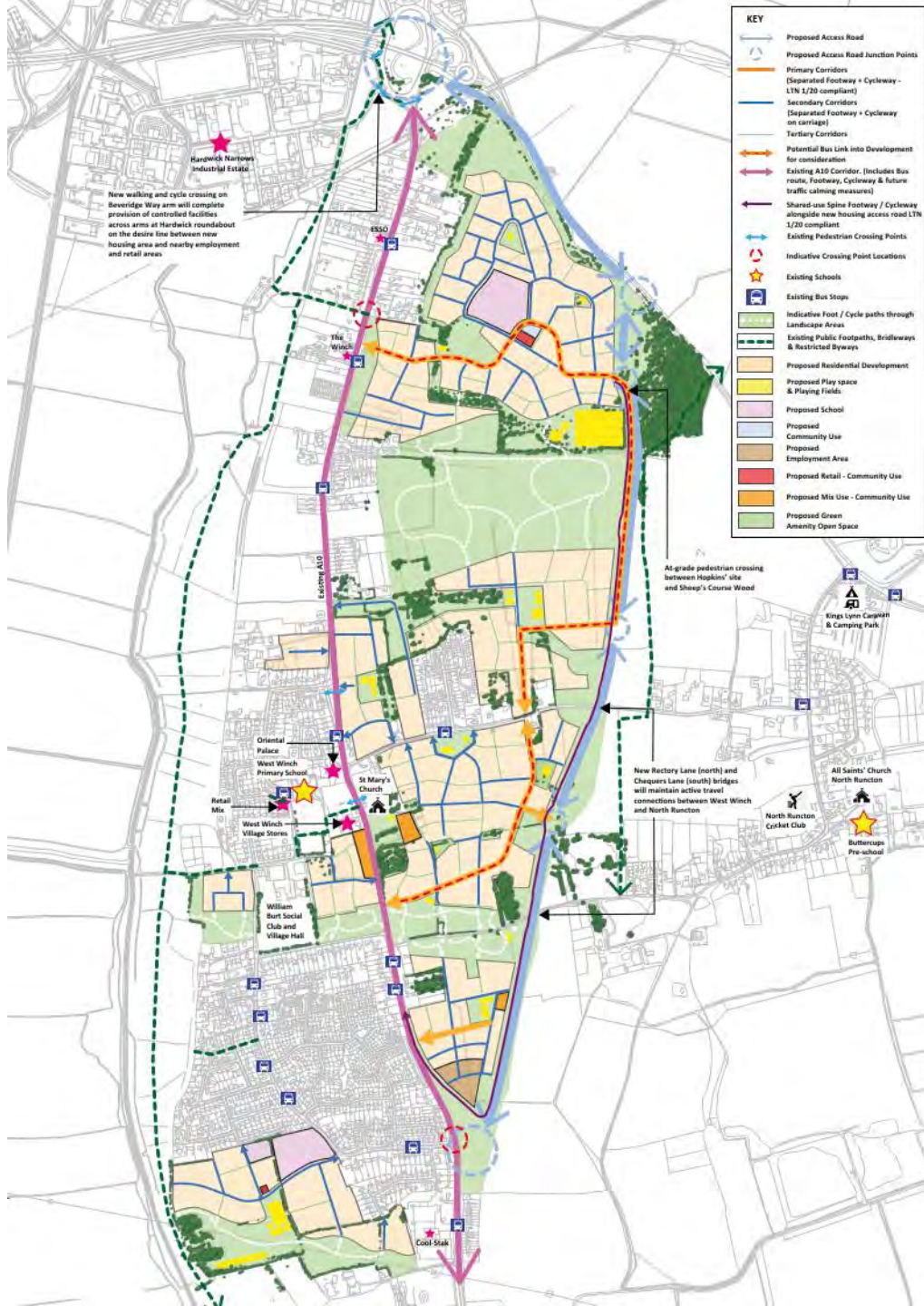


Rectory Lane overbridge visualisation



Indicative image only





Sustainable Transport Strategy

DfT requirement to consider improved support for active and sustainable transport choices:

- Public transport and active travel measures to be considered as part of the scheme
- Footway and cycleway provision to be designed to applicable standards
- Investigate opportunities for bus priority measures on the A10 approach to Hardwick Roundabout

Sustainable Transport Strategy

Sustainable Transport Strategy intends to set out the opportunities for active and sustainable transport choices to be delivered alongside the WWHAR.

Informed through

- Baseline analysis to understand current travel patterns
- Review of consultation responses
- Engagement with BCKLWN / Norfolk CC officers and Active Travel England
- Workshops with stakeholders

West Winch Housing Access Road – Scheme Objectives

SPECIFIC OBJECTIVES

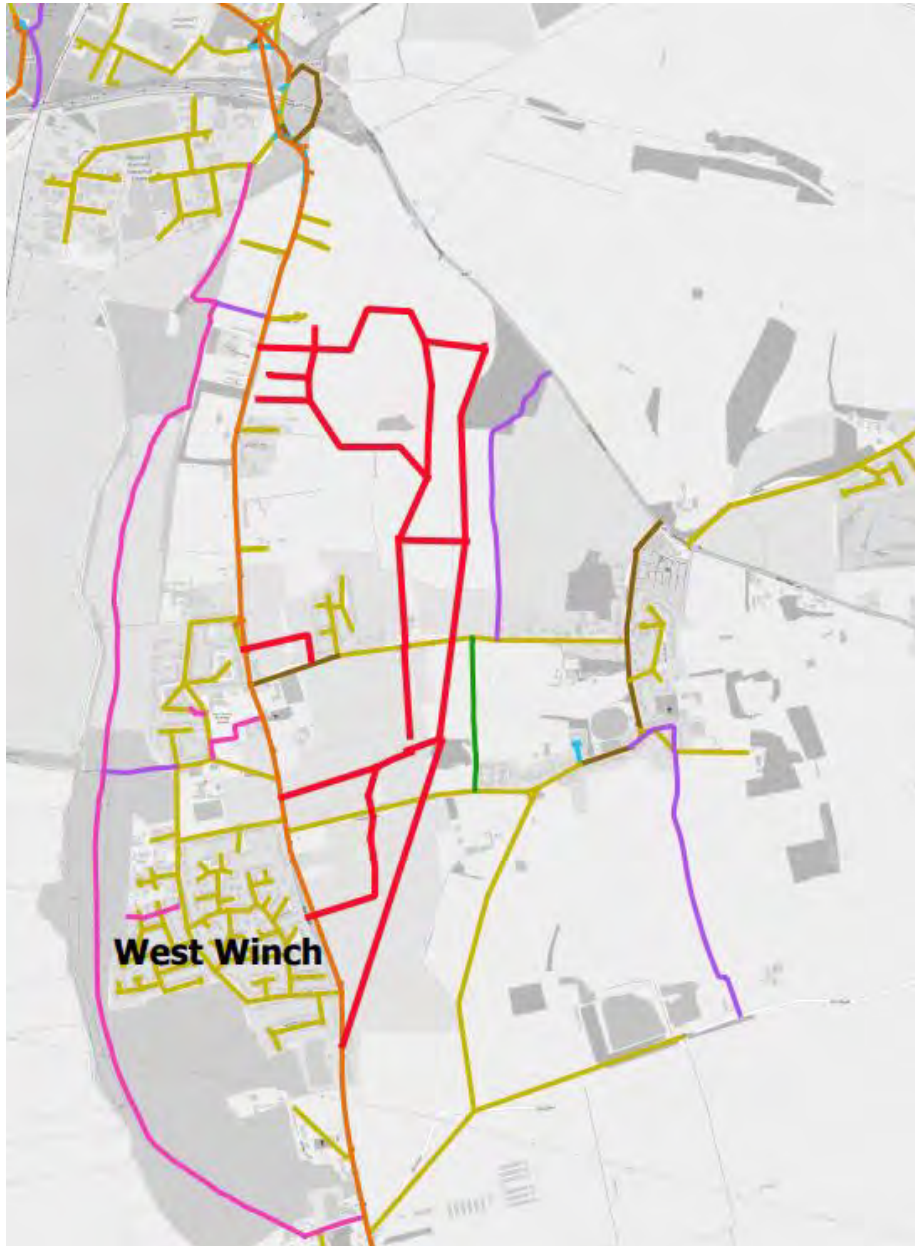
- Enable delivery of the West Winch Housing Allocation
- Increase the local and regional employment labour pool
- Reduce congestion, queueing and delay along A10, A47 and Hardwick Interchange in King's Lynn and West Norfolk
- Remove through traffic, including HGVs, from West Winch
- Improve road safety for all road users
- Increase levels of cycling and walking in the local area
- Reduce greenhouse gas emissions in the local area, and improve air quality

West Winch Housing Access Road – Scheme Objectives

OPERATIONAL OBJECTIVES

- Deliver the WWHAR scheme to become an alternative to the existing route through West Winch
- Facilitate the delivery of housing in the South-East King's Lynn Strategic Growth Area
- Provide the necessary infrastructure to support the use of active modes

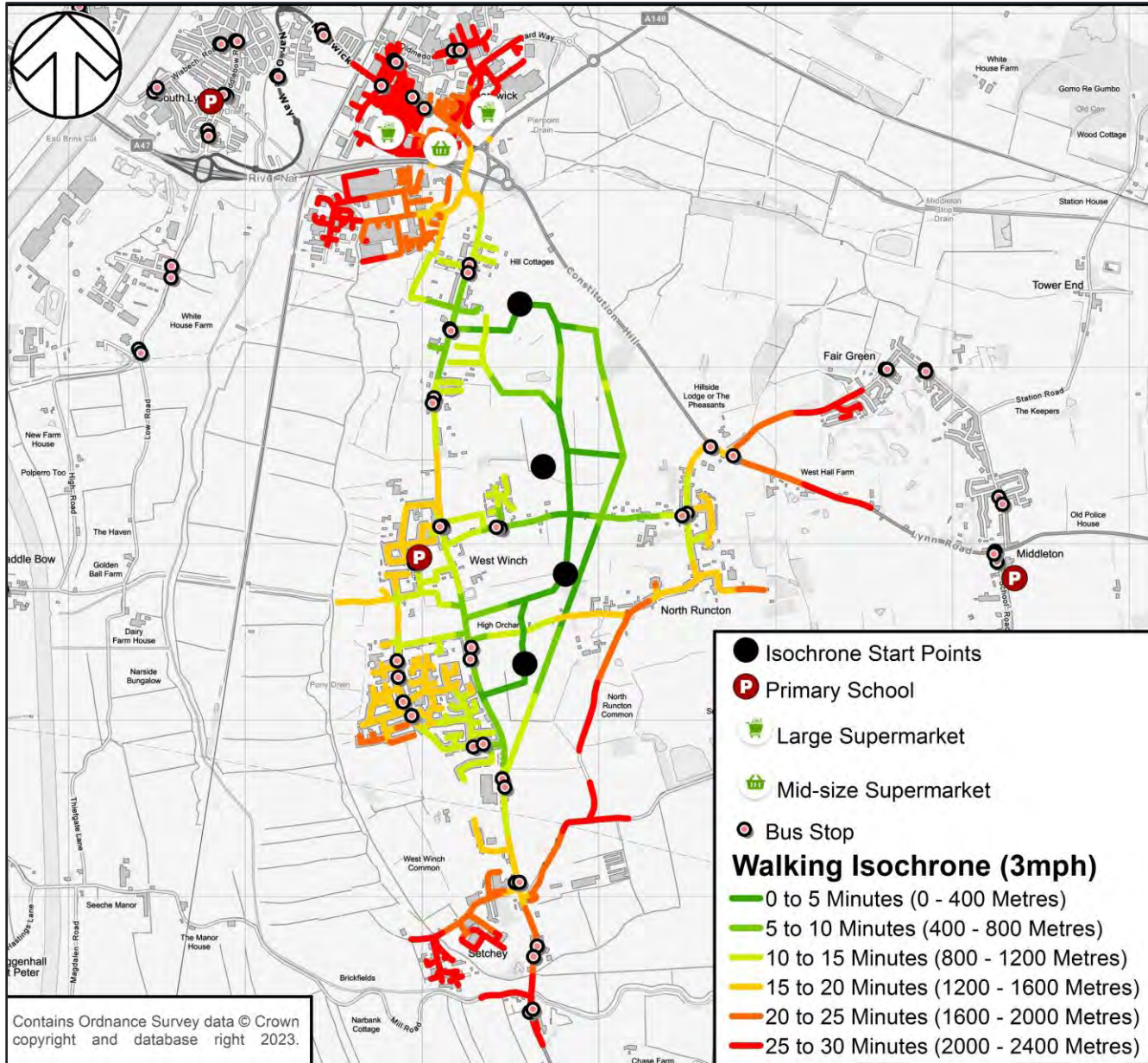
NMU Accessibility: Walking



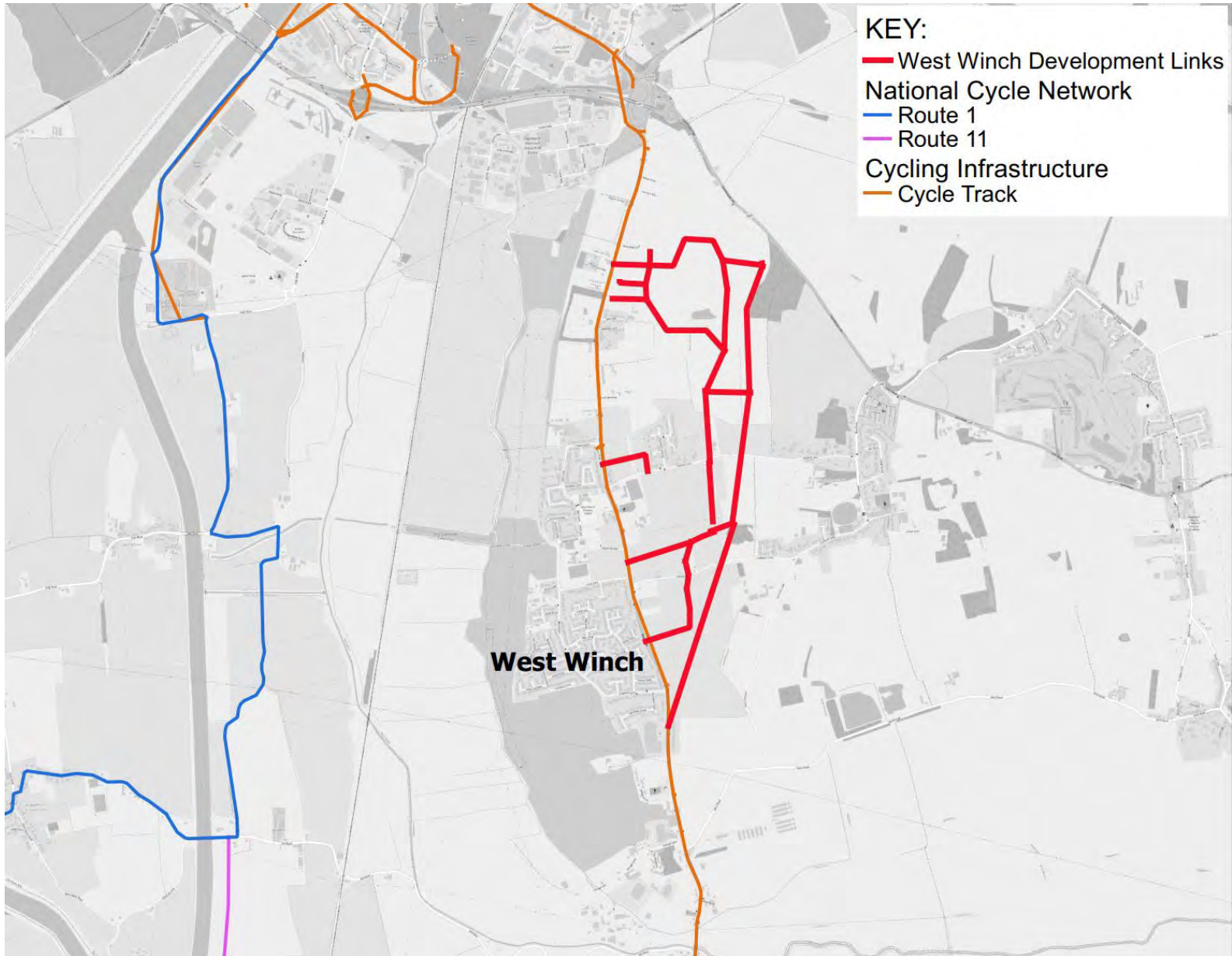
KEY:

- West Winch Development Link
- Cycling Infrastructure
 - Shared Use Route
 - National Cycle Network
- PRoW's
 - Bridleway
 - Byway (Unrestricted)
 - Byway (Restricted)
 - PRoW
- Footways
 - Both Sides
 - Right Side Only
 - Left Side Only

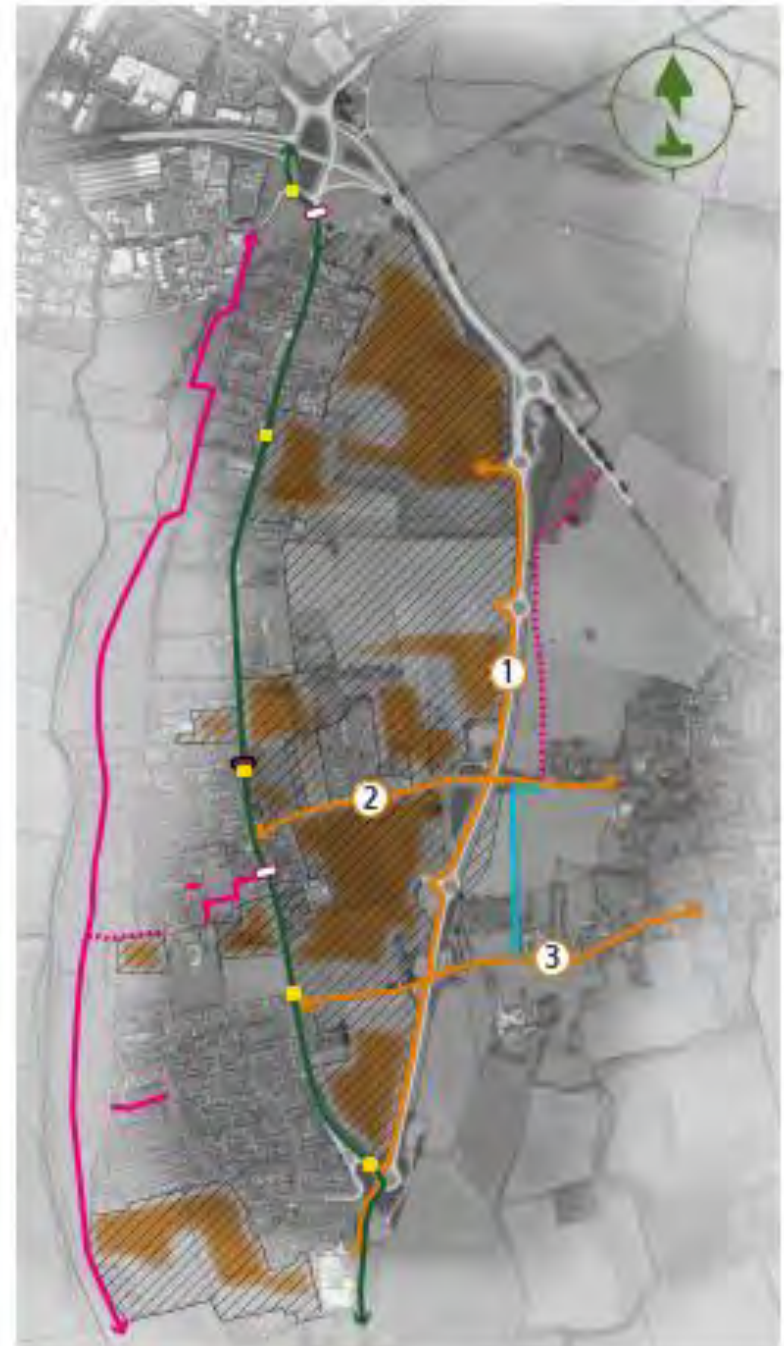
NMU Accessibility: Walking



NMU Accessibility: Cycling



NMU Accessibility:



Stakeholder Issues / Challenges / Opportunities

What do you perceive as key barriers that may discourage active travel in West Winch?

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Lost contact with audience
Press (ctrl+clic+del) to refresh connection

Instructions

Go to
www.menti.com

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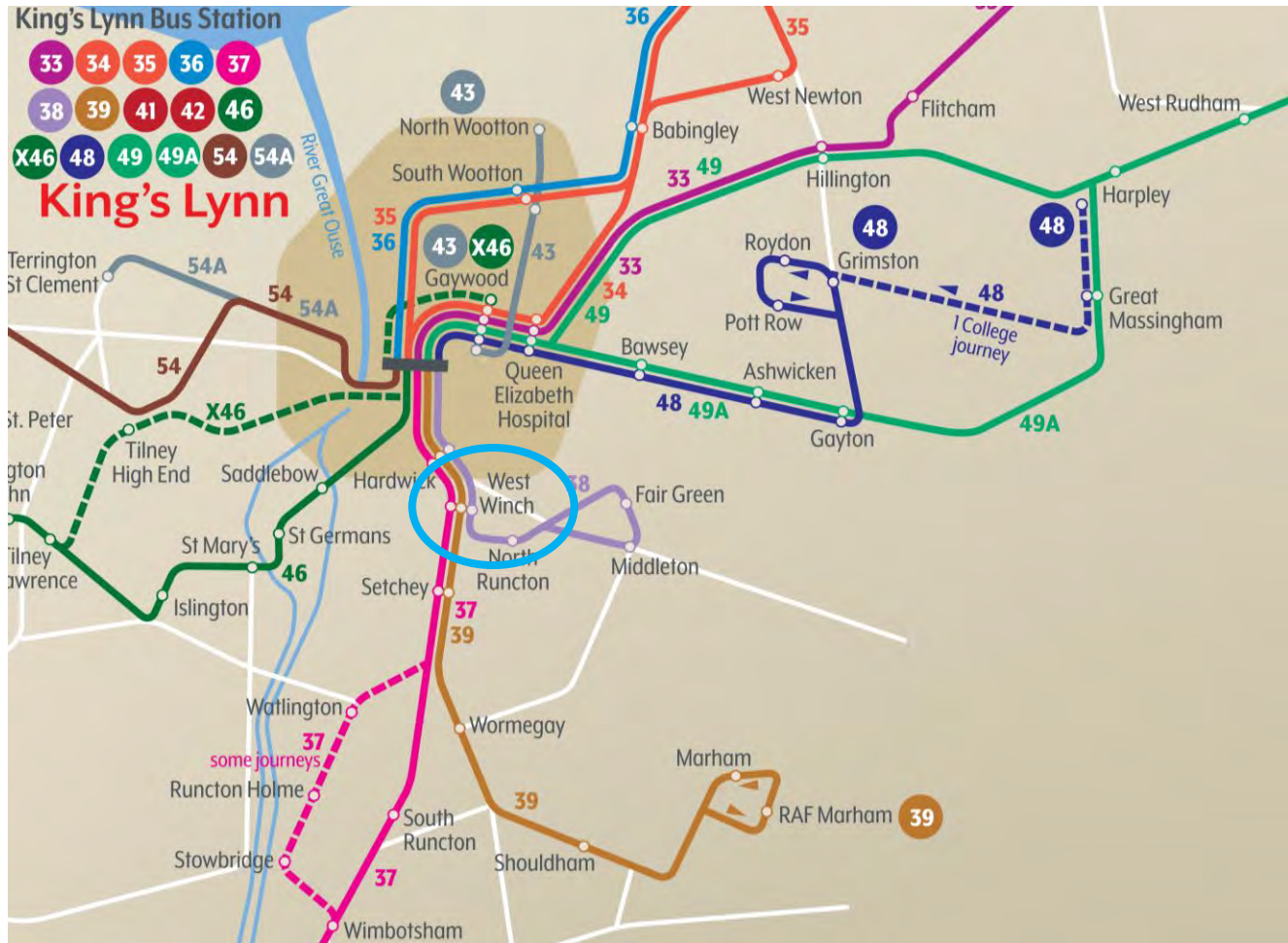
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Stakeholder Issues / Challenges / Opportunities

What do you perceive as key barriers that may discourage active travel in West Winch?



Public Transport



- 37: Kings Lynn-Southery, Mon-Sat
- 38: Kings Lynn-Fair Green (WW by request), Mon-Sat
- 39: Kings Lynn-RAF Marham, Mon-Sat
- 40: Brandon/Thetford-Kings Lynn, Mon-Fri, Sat 1 service

Existing Public Transport

First Bus Excel Services along the A47 (Closest Bus Stops Middleton Church):

- Excel A: Peterborough-Norwich (all stops along the route) – 8 buses per day
- Excel B: Peterborough-Norwich (limited stops) – hourly service
- Excel C: Peterborough-Norwich (Express Service) – hourly service

Bus Services along the A10 and West Winch:

- Lynx 37 King's Lynn-Downham Market – hourly service (8 buses per day)
 - Coach Services 40 King's Lynn-Thetford – 4 buses per day
 - Lynx 38 King's Lynn-Fair Green – 2 buses per day
 - Lynx 39 King's Lynn – 6 buses per day
- Existing Bus Stops



Stakeholder Issues / Challenges / Opportunities

What factors may influence propensity to travel by public transport in West Winch?



Stakeholder Issues / Challenges / Opportunities

Are there any other issues impacting on travel choices in the area?

demographic groups
car parks in lynn personal security
car domination evening weekend services
 distance of key services
 overall environment
cost of travel location of shops
 frequency of service
 proximity of bus stops
 where do people work



Stakeholder Issues / Challenges / Opportunities

How do you think we can grow West Winch and maximise travel by sustainable modes?

effective travel plans
better pedcycle facs key employer links
greater advertising buses serve houses
healthy streets park and ride
cycle hubs link to rail station hospital links
out of town parking excellent links to school more frequent buses
active travel from outset behavioural change
behaviour change works
sense of place secondary schools
increase local amenities
good active mode routes
secure cycle parking

Stakeholder Issues / Challenges / Opportunities

How would you like to see the existing A10 used in the future with the planned housing in place?



Stakeholder Issues / Challenges / Opportunities

What key destinations / services would you like to be connected by active/sustainable modes?



Consultation & Engagement to Date

Consultation undertaken on connected schemes to date:

- West Winch Masterplan Consultation – Aug/Sept 22
- West Winch Housing Access Road – Nov 22-Jan 23

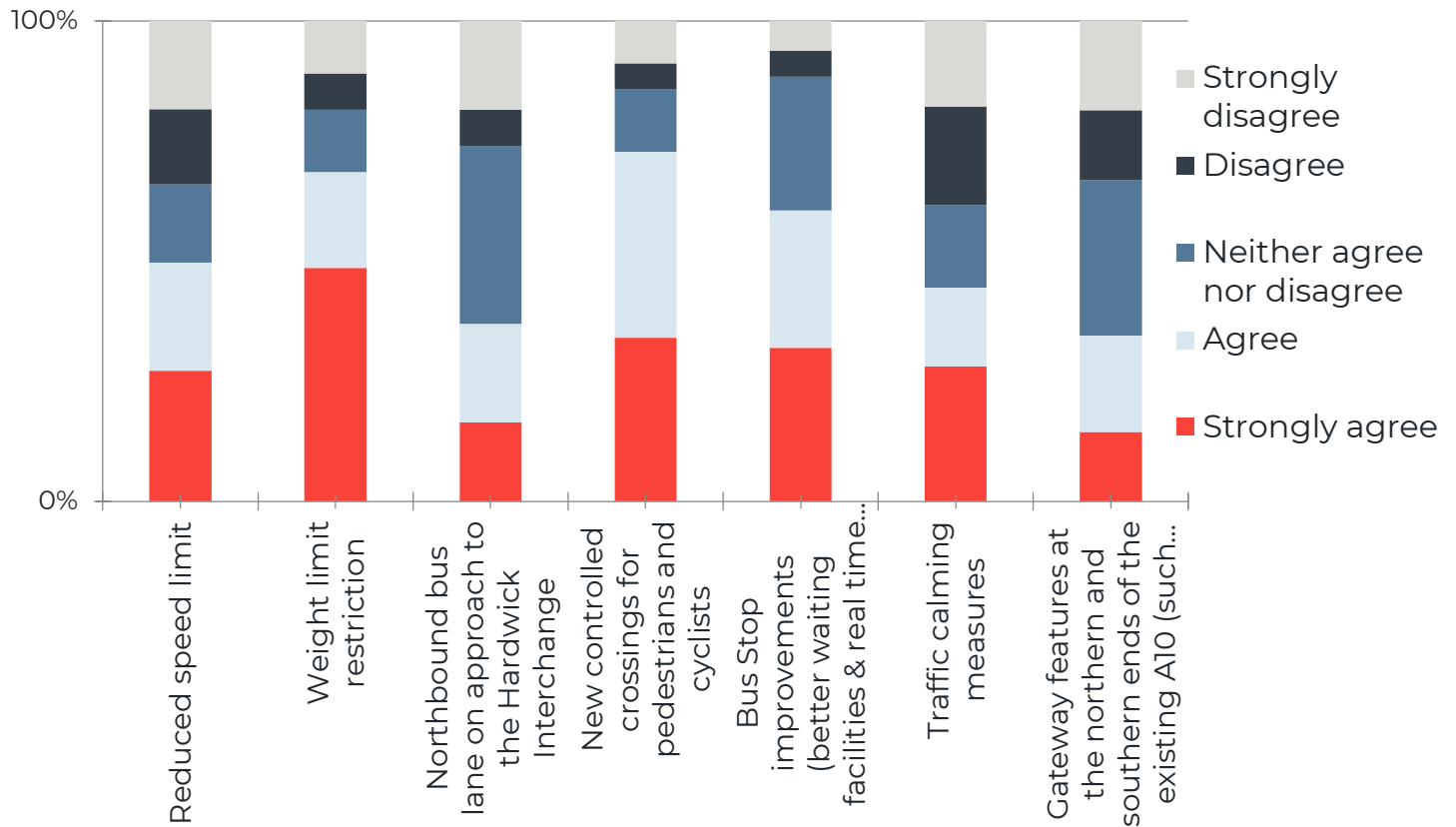
Responses to the consultations have been received / reviewed as part of the STS development

Masterplan and WWHAR consultation outcomes had similar themes and outcomes

Some of the findings from the WWHAR consultation presented next

Consultation Feedback – Potential Traffic Reduction Measures

Q: To what extent do you agree or disagree with the following potential types of measures to improve the A10 through West Winch and encourage traffic to use the Access Road?



New controlled crossings

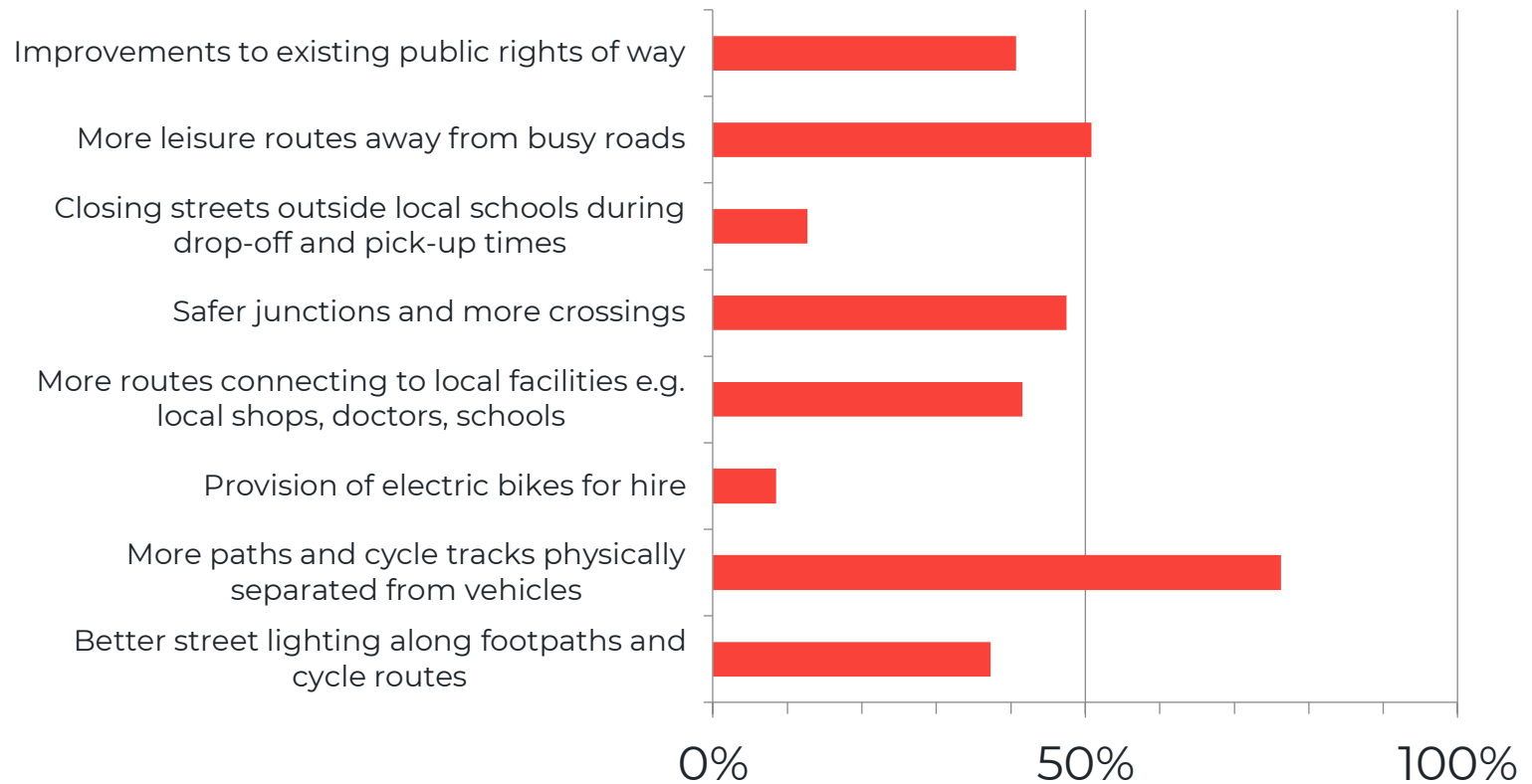
Bus stop improvements

Weight restriction



Consultation Feedback – Active Travel

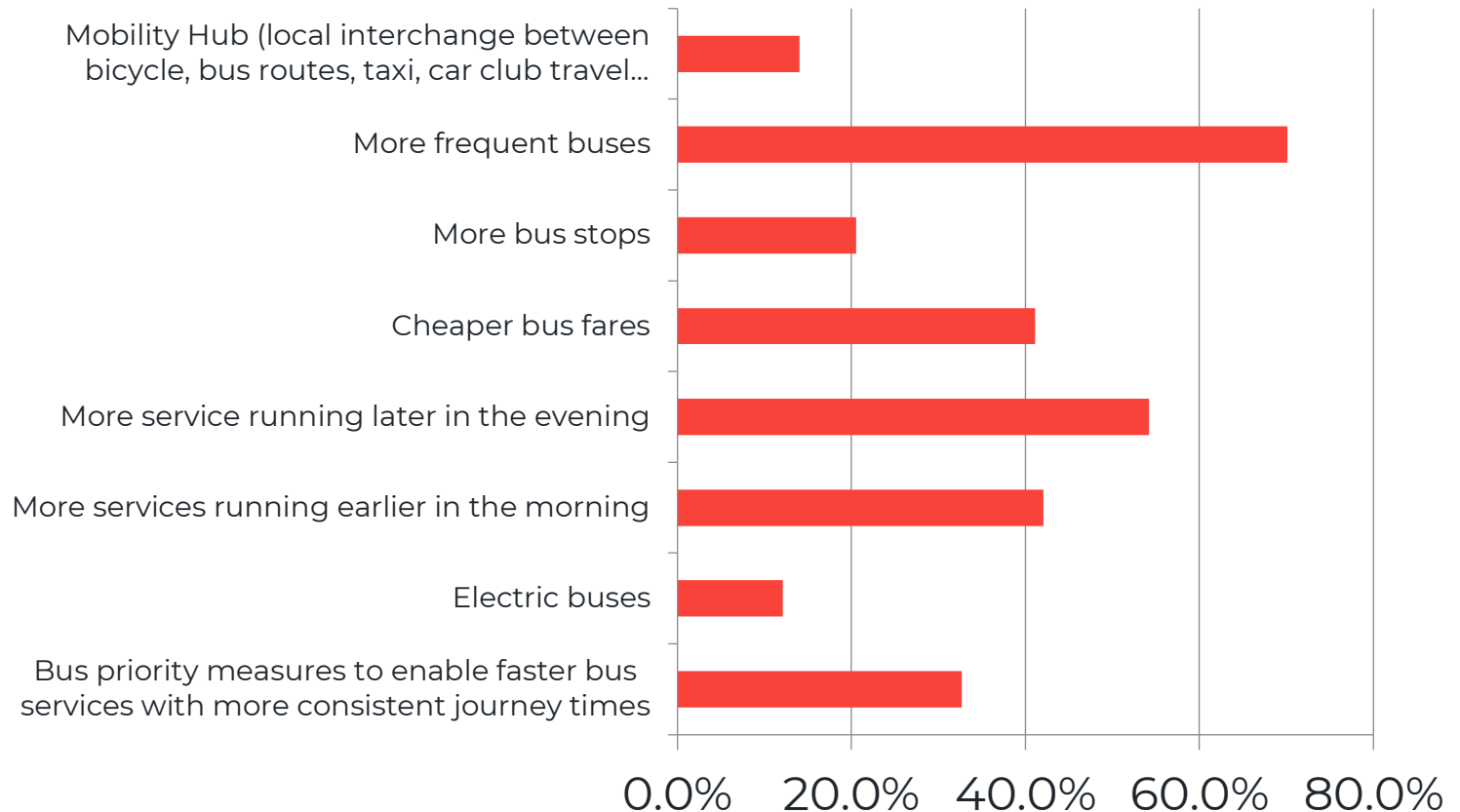
Q: Please select the top three factors that would encourage you to cycle or walk more in general.



1. More segregated paths / cycle tracks (76% responses)
2. More leisure routes away from busy roads (51%)
3. Safer junctions and more crossings (47%)
4. More routes connecting local facilities (42%)
5. Improvements to existing PRowS (41%)

Consultation Feedback – Public Transport

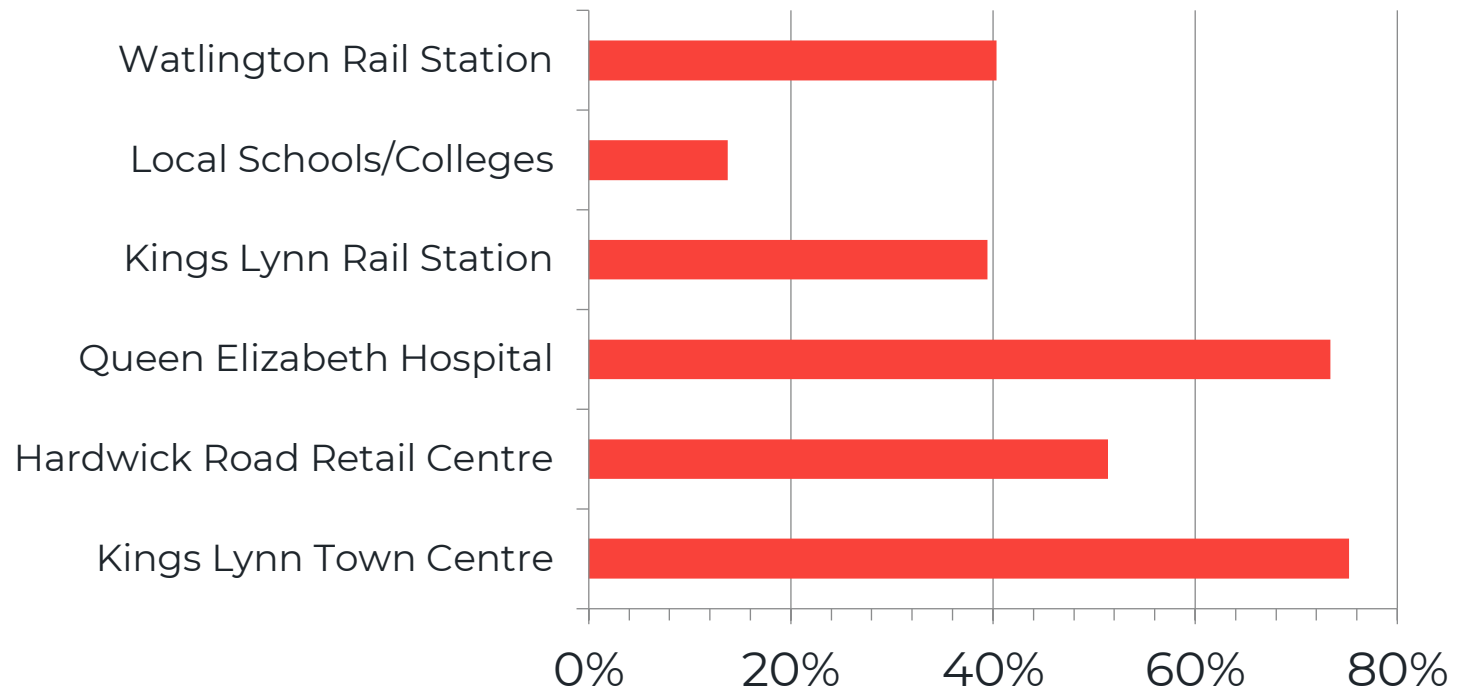
Q: Please select the top three measures that would encourage you to use public transport more.



1. More frequent buses (70% responses)
2. Buses running later in the evening (54%)
3. Buses running earlier in the morning (42%)

Consultation Feedback – Public Transport

Q: Which of the following local destinations would you like to be able to access by bus? Please tick your top three local destinations.



1. Kings Lynn town centre (75% responses)
2. Queen Elizabeth Hospital (73%)
3. Hardwick Road retail centre (51%)

Current Issues / Future Challenges – Potential Opportunities

Current Issues / Future Challenges	Potential Opportunities
Currently Limited connectivity / lower demand	Significant increase in demand due to development
High traffic flows on the existing A10	WWHAR route to cater for through traffic with measures to encourage use
One controlled crossing along the A10	More controlled / uncontrolled crossings
Connectivity across the A10 / between services/facilities / new development	Improved crossings and NMU routes along / across the A10 corridor
No dedicated cycle routes through West Winch	Potential carriageway re-distribution to provide improved northbound cycle route

Current Issues / Future Challenges – Potential Opportunities

Current Issues / Future Challenges	Potential Opportunities
Low service levels to Kings Lynn / Watlington stations	Improved bus connectivity along the corridor Improved cycle connections / crossings
Times / service patterns restrict use of existing bus services	Additional AM and PM peak services
Bus journey times similar to driving	Bus priority – bus only lanes, live-lane bus stops

Opportunities created by WWHAR

Developing a list of measures related to active and sustainable transport choices.

Informed by:

- Our baseline analysis
- Feedback from the public engagement
- WWHAR and Development proposals
- This workshop

These include:

- Cycle route along the existing A10
- Improved crossings / connections across the A10 / Development
- Bus priority measures
- Bus service pattern/route changes
- Measures to encourage vehicular use of the new WWHAR

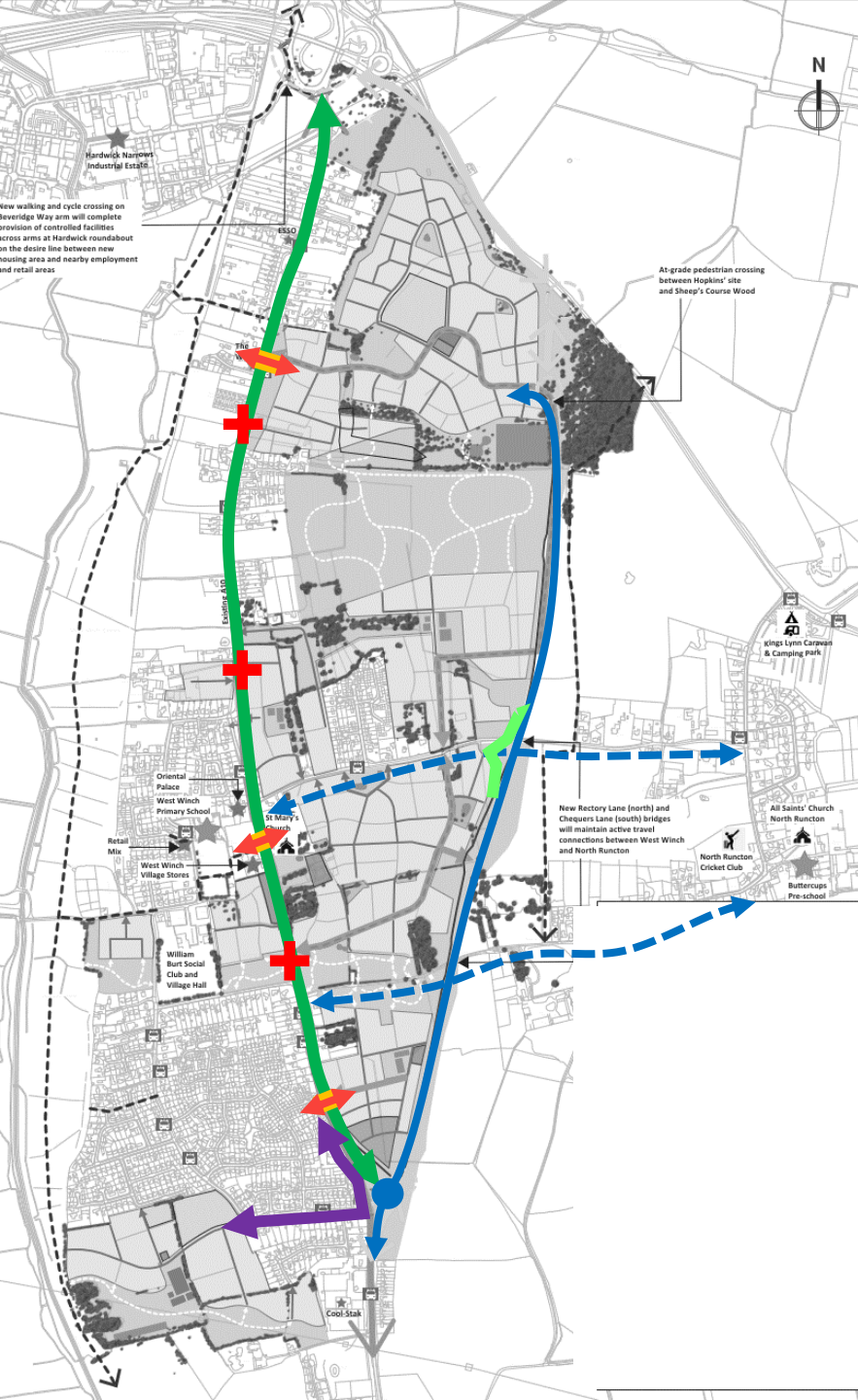
Assessing Opportunities for Improvement - NMUs

Using the objectives set out in LTN 1/20* and WWHAR Objectives to assess opportunities for improvement.

*LTN 1/20 - Cycle Infrastructure design guidance. The core principles are also considered to be relevant for walking.

Accessibility for all				
Coherent	Direct	Safe	Comfortable	Attractive
				
<p>DO Cycle networks should be planned and designed to allow people to reach their day to day destinations easily, along routes that connect, are simple to navigate and are of a consistently high quality.</p>	<p>DO Cycle routes should be at least as direct – and preferably more direct – than those available for private motor vehicles.</p>	<p>DO Not only must cycle infrastructure be safe, it should also be perceived to be safe so that more people feel able to cycle.</p>	<p>DO Comfortable conditions for cycling require routes with good quality, well-maintained smooth surfaces, adequate width for the volume of users, minimal stopping and starting and avoiding steep gradients.</p>	<p>DO Cycle infrastructure should help to deliver public spaces that are well designed and finished in attractive materials and be places that people want to spend time using.</p>

Options for Improvement - Crossings / Accessibility



1. Raised tables / signal crossings at key entry/exit points. E.g. Close to West Winch Stores



2. Potential new crossings to improve connectivity



3. NMU connections between Rectory Lane and the proposed access road



4. Crossings and shared routes at the southern end of WWHAR to new school to the south west of West Winch



5. Segregated cycle route on the western side of the A10

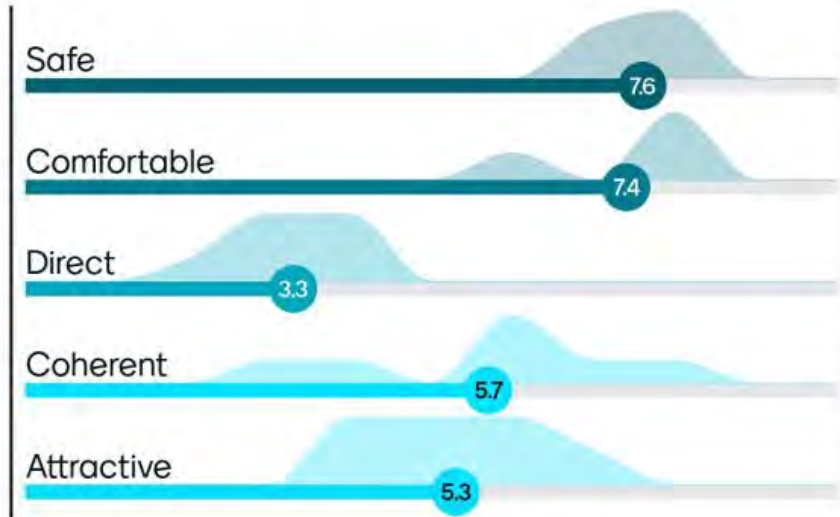


Facilities proposed as part of the WWHAR



Options for Improvement – Crossings / Accessibility

How well do the proposed crossings/accessibility options fit the following objectives?

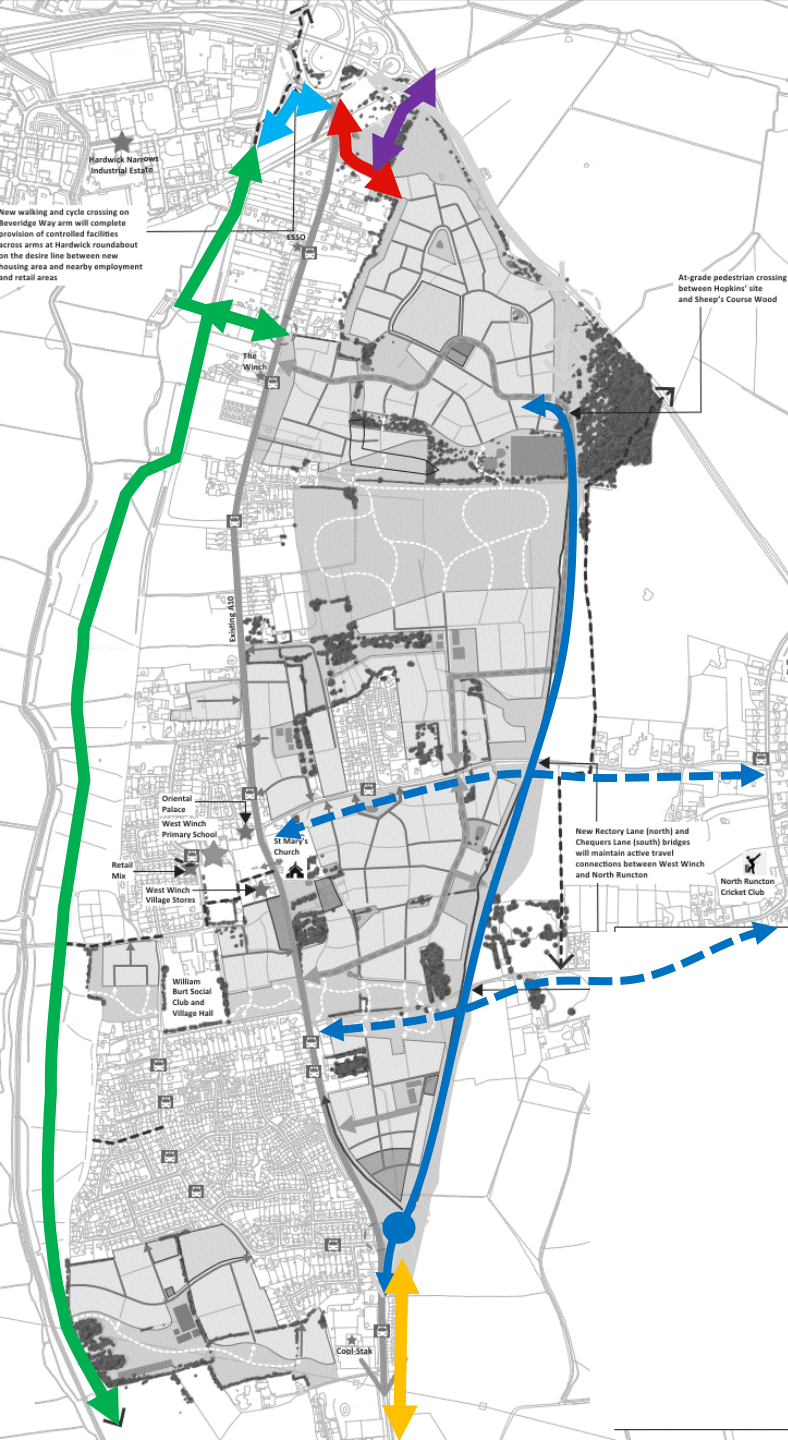


Options for Improvement – Crossings / Accessibility

How well do the proposed crossings/accessibility options align with the WWHAR objectives?



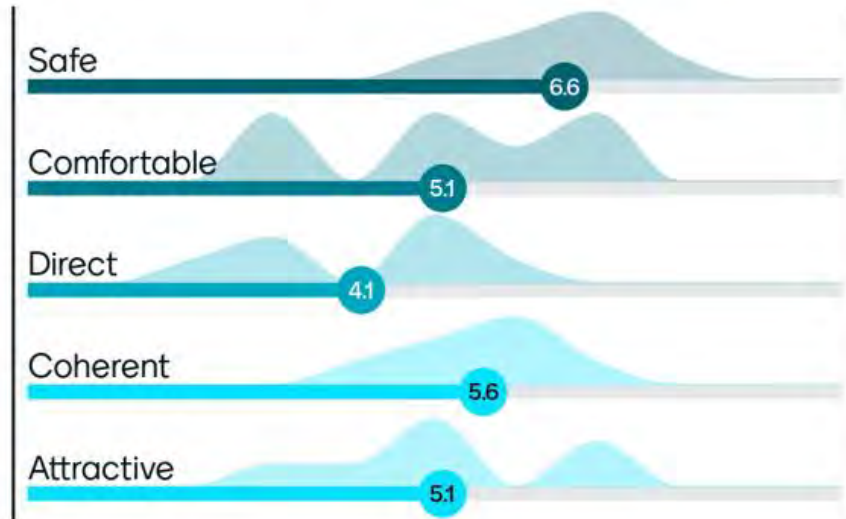
Options for Improvement – NMU Routes



1. Pedestrian/cycle route from the north of the development towards Hardwick Rbt
 2. Connectivity with Hardwick Industrial Estate – no existing route for cyclists
 3. Cycle route from West Winch towards Watlington station
 4. NMU routes via former railway lines towards East Kings Lynn / Under A47 and beyond
 5. Upgrades to FP1 / FP2 / RB2
- ↔ Facilities proposed as part of the WWHAR
↔ WWHAR

Options for Improvement – NMU Routes

How well do the identified NMU routes fit the following objectives?



Options for Improvement – NMU Routes

How well do the identified NMU routes align with the WWHAR objectives?



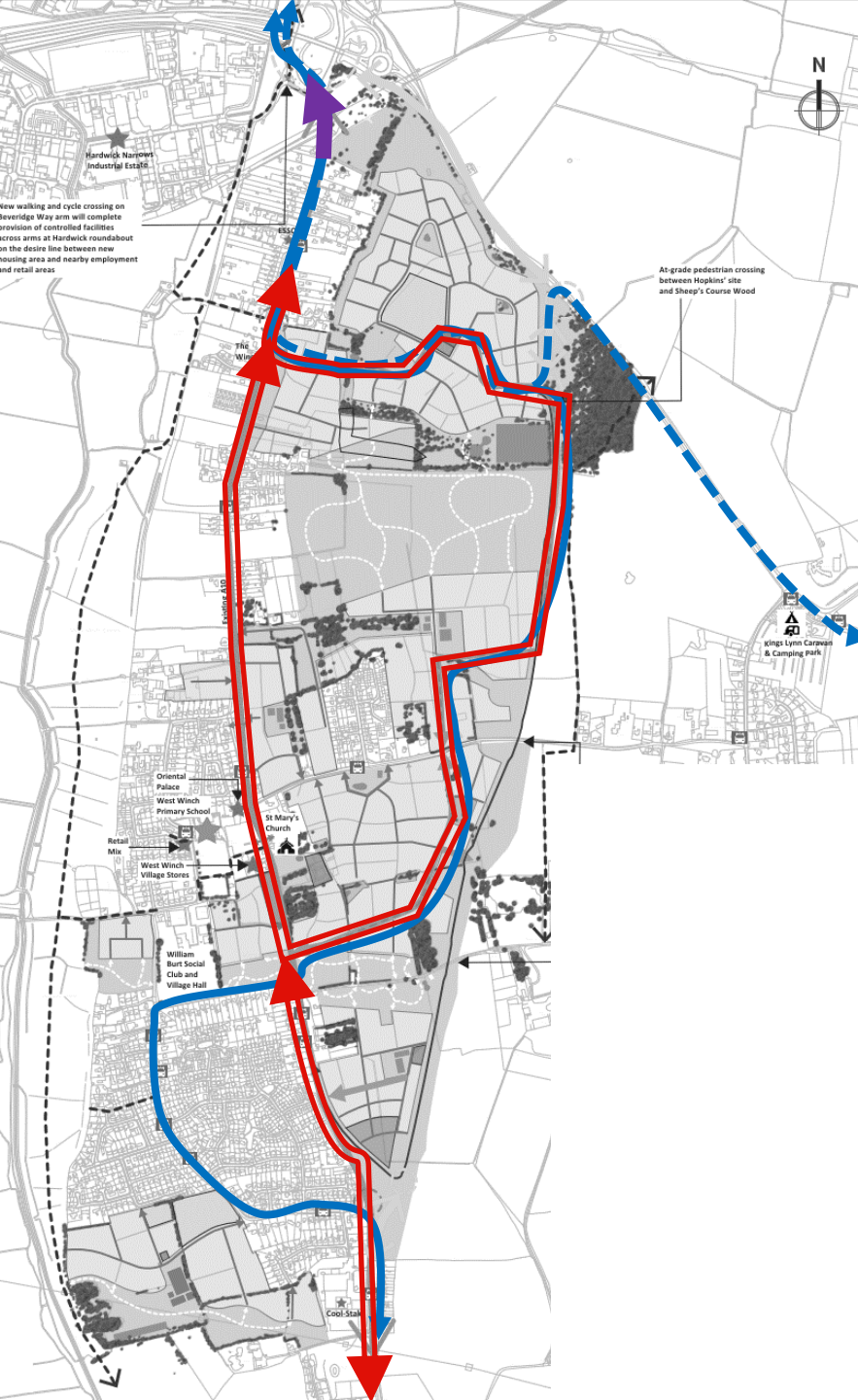
Assessing Opportunities for Improvement – Public Transport

Using the objectives set out in Norfolk County Council BSIP* and WWHAR Scheme Objectives.



*BSIP – Bus Service Improvement Plan.

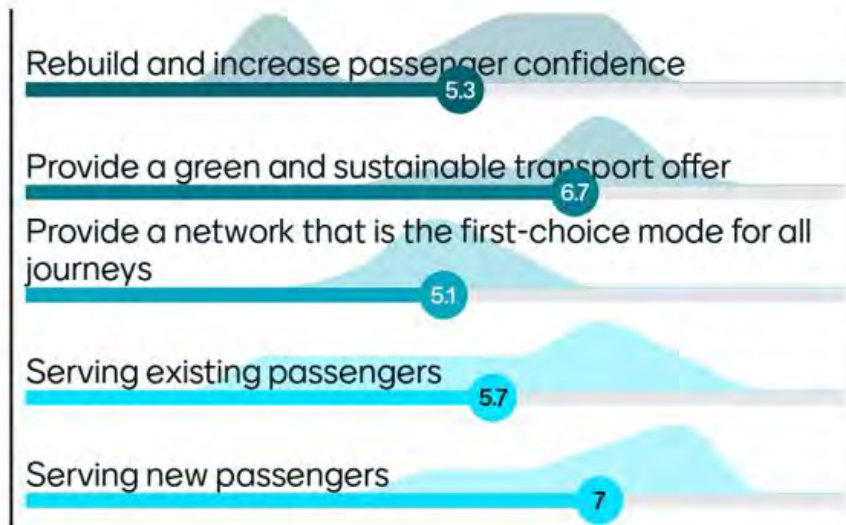
Options for Improvement – Public Transport Routes



1. Bus priority on the approach to Hardwick Roundabout
2. Re-routing of existing bus services to serve the new development
3. New fast bus services to Kings Lynn / Watlington
4. Changes to existing service patterns – more evening & weekend services
5. Increased 7am-7pm frequency on existing services

Options for Improvement – Public Transport Routes

How well do the identified bus route improvements fit the following objectives?

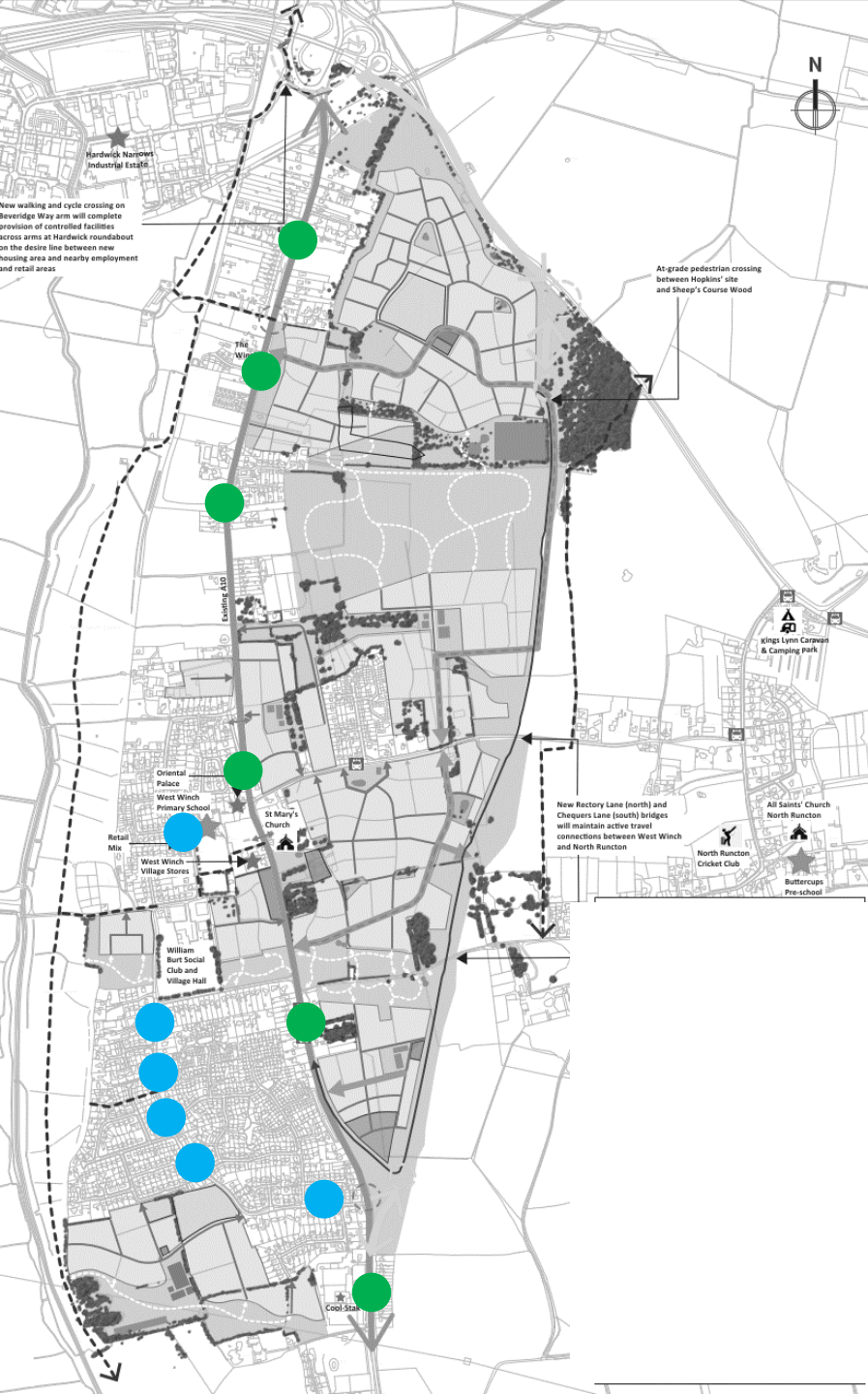


Options for Improvement – Public Transport Routes

How well do the identified bus route improvements align with the WWHAR objectives?



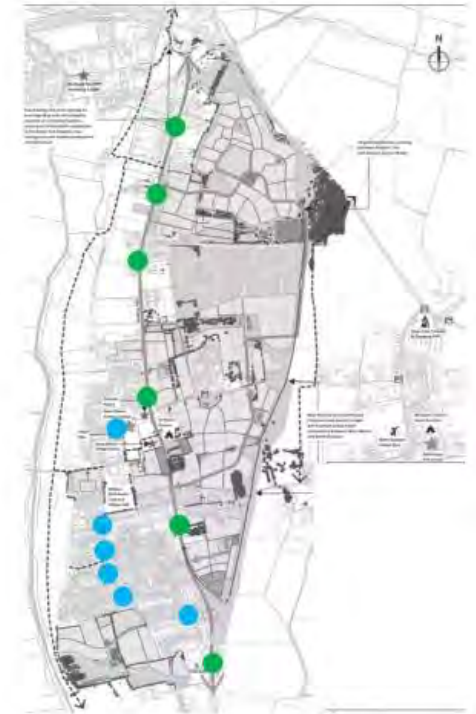
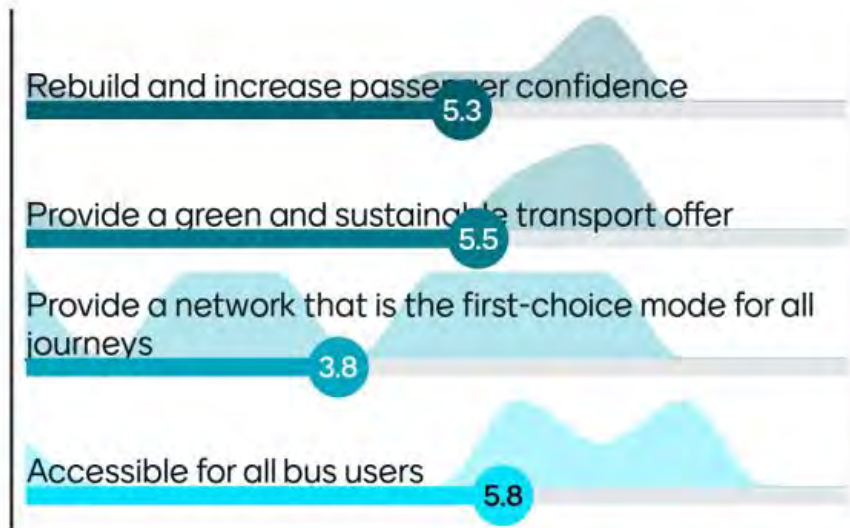
Options for Improvement – Public Transport Facilities



1. Convert stops in bus laybys to in-carriageway stops
2. Bus stop upgrade
3. New bus stop facilities – shelters, real-time information, raised kerbs

Options for Improvement – Public Transport Facilities

How well do the identified bus stop improvements fit the following objectives?



Options for Improvement – Public Transport Facilities

How well do the identified bus stop improvements align with the WWHAR objectives?

Discouraging through-traffic on the A10

Improving road safety for all users

Increase walking, cycling and public transport

Reduce noise and improve air quality

Provide infrastructure for active / sustainable modes

Question skipped due to time



Options for Improvement

Are there any other options you would like to be considered?

fit with wider network

Next Steps

- Review the outcomes from this workshop
- Finalise the long list and shortlist of options
- Develop sketches of the shortlisted measures
- Workshop 2 – Present shortlisted measures for comment – *date tbc*
- Reporting

Thank you for Contributing

