

Borough Council of  
**King's Lynn &  
West Norfolk**



## **Borough Council of King's Lynn and West Norfolk Local Plan Examination**

**Update on Technical Note on  
Transport Evidence [F48] (April 2023)**

## Contents

Introduction .....	3
Summary of results and findings of Modelling .....	3
Recommended Transport Infrastructure .....	6
Transport Strategies.....	10
Appendices.....	19

## Introduction

1. Following the adjournment of the Local Plan Examination Hearing on the 11 January 2023 the Inspectors wrote to the Council requesting that we review and update the Technical Note on Transport Evidence [F39] to include an analysis of the following points:
  - Summarise the results and findings of traffic and transport modelling undertaken to assess the impacts of the development proposed in the Plan and at the West Winch Growth Area (WWGA) over the Plan period and beyond on the strategic and local transport network in the Borough.
  - Explain the recommended transport infrastructure schemes and other interventions proposed to address the impacts of planned development; the effects of those interventions in mitigating any unacceptable impacts of the proposed growth on highway safety and the operation of the road network; and the technical feasibility, financial viability and funding mechanisms of those schemes and interventions.
  - Draw together and summarise the transport strategies, programmes and measures relevant to the Plan and the WWGA, and how they would help to make the proposed locations for development in the Plan more sustainable, offer a genuine choice of travel modes and support modal shift away from dependence on the car.
  - Outline any other transport evidence which the LPA and HA consider to be relevant to justifying the sustainability and deliverability of the Plan's spatial and development strategy.

## Summary of results and findings of Modelling

2. A strategic transport model of the King's Lynn area has been built using the SATURN suite of programs based on traffic survey data and using mobile phone network data to determine origin and destinations. This strategic model includes all of the allocations and future developments set out in the extant Local Plan and beyond by using government forecasts. As such, it takes account of all the anticipated growth and predicted traffic increases in the King's Lynn area.
3. The LPA has commissioned Norfolk County Councils consultants WSP to prepare a technical note that details modelling work which shows the impacts of the development proposed in the Plan and at the WWGA which is included as Appendix A
4. The development of this model, its coverage and the forecasting assumptions are set out on pages 1 to 10 of Appendix A
5. The strategic model has been used in combination with detailed microsimulation modelling (Paramics) to investigate and evaluate key transport schemes and measures taking account of future growth as per the extant Local Plan. As well as improving transport conditions for all modes these schemes also consider wider objectives such as regeneration.
6. The most significant scheme to enable large scale growth in the King's Lynn area, by mitigating the impacts of additional traffic and providing a strategic improvement to the A10 to address existing problems, is the West Winch Housing Access Road (WWHAR). It was understood that the full growth in the West Winch Growth Area (WWGA), up to 4,000 homes, would not occur

until during the next Local Plan period after 2026 so a future year of 2039 was chosen to coincide with the Local Plan horizon. The traffic forecasting for the WWHAR, submitted as part of the Strategic Outline Business Case (SOBC) for the WWHAR, included all of the local plan allocations input spatially and was controlled to government forecasts to ensure all the other growth in the King’s Lynn area by 2039 was included, and to ensure compliance with government guidance.

7. This strategic modelling work carried out by Norfolk County Council to inform the King’s Lynn transport strategy, and subsequent modelling work on specific transport interventions like the WWHAR, has satisfied Norfolk County Council, that there are no significant transport impediments to the proposed spatial distribution of the Local Plan allocations. The only proviso is that the WWHAR is an essential prerequisite for the 4,000 homes in the WWGA, and there is a clear delivery mechanism for this intervention with DfT Major Road Network (MRN) funding support.
8. This technical note has considered 3 modelled forecast scenarios for 2039 to demonstrate local conditions with and without the WWHAR and area wide conditions across the borough. These scenarios are described on pages 11 to 13 of Appendix A and summarised in the Table 1 below.

**Table 1. Forecast scenarios for 2039**

Name	West Winch Housing Access Road provided	Intended use for scenario
West Winch Growth Area Scenario 1 (WWGA Sc1)	x	Demonstrates unacceptable network performance if the WWHAR scheme does not come forward, but the WWGA does
West Winch Growth Area Scenario 2 (WWGA Sc2)	✓	Demonstrates the WWHAR scheme will mitigate impacts from the WWGA and wider growth to an acceptable level
Area Wide Modelling	x A47 junction only	Demonstrates impacts of Local Plan growth across the wider borough and that this growth can be accommodated

9. The results of WWHAR modelling are discussed on pages 13 to 22 of Appendix A. In summary, the 2039 forecasts which have been presented for WWGA Scenario 1 and Scenario 2 are considered to show the West Winch Housing Access Road (WWHAR) scheme is key to support the delivery of the 4,000 dwellings in West Winch Growth Area and that the scheme is able to mitigate the impacts of this development on the wider highway network. The WWHAR scheme is shown to be appropriately designed to accommodate significant future traffic growth and will ease capacity issues which are currently present on the existing A10. Delivery of the WWHAR scheme will also ensure that the local highway network and associated communities will not be adversely affected by increases in traffic growth.
10. The 2039 forecasts which have been generated are considered to be a significant stress-test of the network given the high trip rates which have been assumed for the overall West Winch Growth Area, and therefore whilst the A47 Hardwick Interchange is shown to experience increased congestion as a result of both the WWGA and removal of the Constitution Hill

roundabout as part of the WWHAR scheme, it has been demonstrated this key interchange will continue to operate within capacity.

11. The Area Wide Modelling is considered the most appropriate basis from which to consider the impacts of Local Plan growth across the wider borough, focusing on Kings Lynn town and the Strategic Road Network (SRN).
12. The metric considered for the Area Wide Modelling is Volume/Capacity (V/C) percentage and locations where this is over 80% are:
  - A149 Queen Elizabeth Way, east of Kings Lynn
  - A47/A17 Pullover roundabout
  - Southgates roundabout (A148/A149 Hardwick Road/Wisbech Road/B1144 Vancouver Avenue)
  - Kings Lynn town centre, also encompassing Tennyson Avenue and the A1076
  - A148, specifically the A148/Castle Rising Road/A1708 signals, and the A1078
13. The results of the Area Wide Modelling are discussed on pages 23 to 33 of Appendix A. In summary, the Area Wide Modelling has identified various locations across KLWN which experience congestion issues. It is considered all of the locations which are flagged will either have proposals in place to deal with future traffic growth or are locations which show congestion but would continue to operate within capacity. The Area Wide Modelling is considered to demonstrate that the highway traffic growth associated with the developments within the KLWN Local Plan can be accommodated. Table 2 presents a summary of the transport issues discussed following analysis of the KLWN forecasts and the solutions for the issues which have been raised.

**Table 2. Impacts of Local Plan growth across the wider borough**

Location	Issues shown in Area Wide Modelling	Solution
A149 Queen Elizabeth Way	A149 itself and junctions between Hardwick Interchange and A1076 are close to or at capacity	Study of A149 corridor is currently being scoped. This study will determine potential improvements and linkages to area-wide sustainable transport strategies which can be implemented in order to ease any potential future congestion along this corridor
A47 / A17 Pullover roundabout	All arms of this junction are shown to be over capacity in either the AM or PM	Proposed mitigation solutions are being considered by NCC at this location in consultation with National Highways. Seeking to ensure improvements at this junction form part of the Major Road Network (MRN) fund
Southgates roundabout	Capacity issues shown	Part of STARS scheme which secured £24m in Levelling Up funding. Scheme will lead to reconfiguration of the existing junction layout
Kings Lynn town centre gyratory	Operates within but close to capacity northbound within the gyratory	Part of STARS scheme which secured £24m in Levelling Up funding.
Tennyson Avenue and A148	Close to capacity on the A148	Shown to operate within capacity and will benefit from wider shift to sustainable modes

A148 / Castle Rising Road / A1078 signals	Close to or over capacity in the AM & PM	Improvements proposed at this junction related to off-site works associated with planning applications
A1078 Edward Benefer Way	Two sets of signals are close to capacity in either the AM or PM peak	Improvements proposed along this corridor related to off-site works associated with planning applications

## Recommended Transport Infrastructure

14. The key recommended transport infrastructure scheme to address the impacts of planned development is the WWHAR. As well as mitigating the highway impacts of the largest single growth area in the plan, as set out above, it will also provide bus priority measures and extensive improvements to the Active Travel modes of walking and cycling.
15. In terms of understanding of the impact WWHAR scheme has on safety, the Paramics micro-simulation model utilised to inform the WWHAR design has fulfilled this requirement. The Paramics model is capable of modelling the interactions between individual vehicles in a high level of detail including the consideration of queuing interactions between junctions and impacts of traffic merging and diverging from the SRN. The WWHAR Paramics model has considered in detail how the WWHAR scheme performs and has been used to scrutinise and test the scheme design at a micro-level and inform the scheme highway design to ensure it is appropriate and provides a safe solution for how vehicles will interact on the highway network.
16. In addition to this, the proposed sustainable transport measures are being devised as part of the Outline Business Case (OBC) work to secure significant DfT funding towards the scheme and will be identified in a Sustainable Transport Strategy (STS) to augment the road scheme. This strategy has not yet been finalised but a narrative in the form of a note with details of the process being followed is shown in Appendix B
17. The WWHAR Sustainable Transport Strategy Narrative in Appendix B sets out:
  - That Norfolk County Council must prepare a Sustainable Transport Strategy document to be submitted alongside the Outline Business Case
  - That Norfolk County Council confirms details 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
  - That Norfolk County Council investigates further bus priority measures on the A10 approach to Hardwick roundabout
  - That Norfolk County 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
18. The narrative explains that the STS is being devised with engagement with relevant stakeholders and will include an Optioneering Study to consider the opportunities for active travel and bus priority to support the proposed housing and complement the WWHAR. In addition the STS will develop a strategy that enhances accessibility and creates a sense of place which is suitable for a larger community when the existing settlement is enlarged with the WWGA, 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.

19. The STS narrative contains an Appendix A which sets out the Movement Corridors and Linkages Plan that was used at the KLWN WWGA masterplan SPD consultation in summer 2022.
20. An STS workshop with stakeholders was held in March 2023 and the slides used for this are shown in the narrative document (Appendix B).
21. In addition to this STS work, the county council will continue to develop and bring forward measures across the borough to improve the transport network with a focus on sustainable travel.
22. With regard to other transport infrastructure and transport initiatives to support the plan, KLWN as the LPA have ensured the provision of, or obtained a commitment to provide, significant measures from the developers of local plan sites. Key measures from the larger allocations in the plan are set out in Table 3. The table doesn't include the wide range of smaller highway improvements typically applied as part of the development management process.

**Table 3. List of main mitigation measures from S106 and Transport Assessments in the large-scale allocations**

Allocation	Highway Measures	Indicative Phasing	Other Comments
<b>(E1.6) King's Lynn:</b> South of Parkway	Improvements to existing and adjacent bus shelters/stops to promote public transport; improvement of cycleway along Parkway.	Prior to first occupation (approx. Jun-Dec 2023).	Sustainable Travel contribution of £530 per dwelling to be paid as lump sum prior to first Occupation (of any dwelling).
	Improvements to cycleway on Queen Mary Road; implementation of traffic calming measures (including new 20mph speed limit on Gaywood estate).	Prior to 20% occupancy (approx. Jan-Jul 2024).	
	Improvements to Swaffham Belt and The Rookery cycleways (including lighting to improve safety); extension of cycleway on Queen Mary Road.	Prior to 50% occupancy (approx. Sep 2024-2025).	
<b>(E1.7) King's Lynn:</b> Land at Lynnsport	New road (Lynnsport Way) allowing a new connection through from Edward		Delivered with previous stages of development

	Benefer Way to Greenpark Avenue.		alongside the Marsh Lane development  Travel Plan commitments currently being implemented.
<p><b>(E3.1) South Wootton:</b> Hall Lane (Allison Homes - South site)</p> <p>New roundabout to be provided on Edward Benefer Way.</p> <p><i>and</i> Hall Lane (Persimmon Homes - North site)</p>	Scheme to improve junction of Low Road; Wootton Road; Grimston Road and Castle Rising Road	<p>Scheme to improve the junction - Initial payment of £170,000 to be made prior to occupation of 50th dwelling if total cost has not been determined by then; remaining balance due 20 working days after determination of total cost.</p> <p>To be implemented prior to commencement of other works not associated with the roundabout.</p> <p>Initial payment of £28,000 to be made prior to commencement of development if total cost has not been determined by then; remaining balance due 20 working days after determination of cost.</p>	<p>All three sites ((E3.1 (South Wootton (two sites) &amp; Knight's Hill) will contribute proportionately towards the costs of the junction improvements. NCC will then implement the improvements.</p> <p>Excluding £100,000 to be borne by County Council - maximum contribution of £200,000 by developers of Hall Lane -South site.</p> <p>7% of costs (excluding £100,000 to be borne by County Council) - maximum contribution of £45,000 by developers of Hall Lane – North site.</p>



Both sites	New spine road through the overall allocated site connecting with the Woottons at Nursery Lane.	Completed towards the end of the Allison Homes South site.	
<b>(F1.3)</b> <b>Downham Market:</b> Land east of Lynn Road in vicinity of Bridle Lane	Roundabout on B1507 Lynn Rd to provide access to site; developer to fund extension of 30mph zone to encompass site access area; other off-site highway improvements to footpaths in the area.	Implemented prior to first occupation.	Travel Plan contribution of £500 per dwelling in each phase OR £500 bond per dwelling to be returned upon implementation of an approved travel plan.
<b>(F1.4)</b> <b>Downham Market:</b> Land North of southern bypass in vicinity of Nightingale Lane	Creation of a section of rural byway between Rural Byways 17 and 23.  Roundabout on A1122 to provide suitable access to the site.  Footway and shared pedestrian/cycle route to connect to London Road; improvements on pedestrian routes along Ryston End and Nightingale Lane; implementation of a 20mph speed limit in Ryston End.	Upon commencement of development. £10,000 fund through S106 agreement.  Before any works on site.  Approval before any works above floor slab level, to be implemented in accordance with approved timetable.	
<b>(F2.4)</b> <b>Hunstanton:</b> Land north of Hunstanton Road	New roundabout on A149 providing access to development and Hunstanton Road (leading to Heacham) to help relieve pressure at Norfolk Lavender light-controlled junction in Heacham.	Roundabout completed and in operation.	Travel Plan contribution of £500 per dwelling OR £86,320 bond to be returned upon implementation of an approved travel plan.

Other Large-scale Major Developments	Highway Measures	Indicative Phasing	Other Comments
<p><b>Knights Hill</b> (Grimston Road, South Wootton)</p>	<p>Scheme to improve junction of Low Road; Wootton Road; Grimston Road and Castle Rising Road.</p> <p>Roundabout on Grimston Road</p> <p>Signals at Langley Road/Grimston Road junction</p>	<p>Initial payment of £146,000 to be made prior to occupation of 50th dwelling if total cost has not been determined by then; remaining balance due 20 working days after determination of total cost.</p> <p>Before commencement of any other development.</p> <p>Prior to occupation of 200<sup>th</sup> dwelling (approval of scheme to be prior to occupation of 125<sup>th</sup> dwelling).</p>	<p>All three sites ((E3.1 (South Wootton (two sites) &amp; Knight's Hill) will contribute proportionately towards the costs of the junction improvements.</p> <p>Maximum contribution of £172,000 by developers of Knights Hill</p> <p>Bus service contribution of £100,000 prior to first occupation of any dwelling; additional £100,000 payment per year for four years on the anniversary of the first occupation.</p>

## Transport Strategies

### King's Lynn Transport Strategy

23. The King's Lynn Transport Strategy was prepared in 2018 and 2019 and adopted in February 2020, pre-pandemic, by both Norfolk County Council and the Borough Council of King's Lynn and West Norfolk.
24. The King's Lynn Transport Strategy sets out the vision, objectives and short, medium and long-term transport improvements required to support the existing community of King's Lynn and to assist in promoting economic growth in the area. This work took account of the planned growth as set out in the Local Plan. The Transport Strategy concludes by setting out a high-level Action

Plan to deliver improved transport infrastructure that addresses existing transport barriers and supports sustainable housing and economic growth. The study stages were clearly defined during the process and included: information gathering on the issues and opportunities; identification of potential schemes; and a bespoke appraisal and sifting exercise using the study aims and objectives as well as Department for Transport guidance on early option appraisal. The transport infrastructure presented in the strategy was sifted from an initial long list of options which were subject to stakeholder engagement, appraisal and were prioritised using a bespoke Strategic Assessment tool and the Department for Transport's (DfT) Early Assessment and Sifting Tool (EAST), which compares the Strategic, Economic, Managerial, Financial and Commercial case for each transport option. An Action Plan was then produced to take forward the identified options along with a series of recommended next steps. In support of the process a traffic model building exercise was undertaken to reflect existing transport and traffic conditions; followed by traffic forecasting to include and assess the impacts of the planned development growth. Following this the traffic models were used to provide an initial understanding of a number of potential highway improvement schemes which were identified to understand impacts on congestion relief at locations such as the town centre gyratory one-way system, the Southgates roundabout and Hardings Way.

25. The King's Lynn Transport Strategy sets out a package of measures including strategic and local car and non-car based options, that enhance:
- Local Highway Network capacity;
  - Strategic Highway Network capacity
  - The bus provision;
  - Rail services and King's Lynn Railway Station;
  - Walking and Cycling infrastructure;
  - Parking provisions and management; and
  - Smarter Choices (e.g. Travel Plans).
26. Significant changes in national transport policy have occurred since then, for example, the introduction of Gearchange and Local Transport Note LTN 1/20. These illustrate how government is committed to encouraging people to make many more local trips by active means in place of the car. In view of this further studies have been carried out by Norfolk County Council and new documents adopted to supplement the King's Lynn Transport Strategy. These include the following and are discussed in detail in the following sections:
- An updated overarching Norfolk Fourth Local Transport Plan (LTP4)
  - A King's Lynn Local Cycling and Walking Infrastructure Plan (LCWIP)
  - A Bus Service Improvement Plan (BSIP) under Government's Bus Back Better (BBB) initiative

#### **Local Transport Plan (LTP4)**

27. The overarching countywide Local Transport Plan was updated to reflect the national changes in transport policy and their local implementation and adopted by Norfolk County Council in July 2022. LTP4 comprises both a strategy document and an Implementation Plan and the King's Lynn Transport Strategy sits under LTP4.
28. The Local Transport Plan strategy sets out Norfolk County Council's plans, policies and programmes on transport and transport infrastructure. The strategy details the Council's approach to delivering a low carbon, well-connected transport network in Norfolk. It does this

through identifying the projects and programmes important to Norfolk County Council, including in their design and direct delivery, as well as how the Council will work with a range of other partners on their projects and programmes. By working in partnership we believe we will most effectively achieve the desired outcomes.

29. The adopted Local Transport Plan Strategy LTP4 has seven objectives set out below:

1. The need to adapt to and make use of new technology to achieve better outcomes
2. To work in partnership with others to help shape the county's development plans and proposals
3. Improve key connections into and across the county to provide better, faster and more reliable journeys. However, this must be done in a way that puts transport firmly onto a net zero carbon trajectory
4. Place a clear priority on carbon reduction. Alongside this, give priority to tackling air quality and to improve quality of place, conserving and enhancing our built and historic environments
5. To work in partnership with bus companies, train operators, local communities, service providers and those who plan service provision which is key to increasing accessibility
6. To work in partnership to achieve casualty reductions on the transport network using the Safe Systems approach
7. To focus core funding streams towards ensuring that the most important parts of the network are kept in good repair. In urban areas and market towns the strategy is to identify sustainable and active transport corridors on which to focus maintenance and network management

30. The Implementation Plan does not detail every scheme (a project delivered on the ground such as a new zebra crossing) that the county council intends to carry out over the period. Rather, it sets out the main measures and actions that the county council will take, with partners, to implement the policies. Although its focus is the next five years, many transport initiatives take longer than this to be developed and delivered. Therefore, where appropriate, the plan looks beyond this to reflect the work that needs to be carried out to develop schemes and measures that will come to fruition in several years time.

31. LTP4 references major and significant schemes being promoted by Norfolk County Council and National Highways:

- Norwich Western Link which will provide a high standard dual carriageway route between the western end of A1270 Norwich Northern Distributor Road and the A47, linking with National Highways proposed A47 dualling scheme between Easton and North Tuddenham
- A10 West Winch Housing Access Road which will provide additional highway capacity to accommodate 4,000 new homes and address existing traffic problems on the A10 by providing an alternative route around the village that conforms to Major Road Network standards
- A140 Long Stratton Bypass which will resolve long standing congestion issues on this key route into Norfolk and facilitate planned housing growth in the village
- A17/A47 Pullover Junction improvement which is required to reduce congestion and delay in the King's Lynn area and to support the planned growth set out in the adopted Local Plan
- A47 North Tuddenham to Easton dualling A47 Blofield to Burlingham dualling

- A47/A11 Thickthorn Junction improvement
- A47 Great Yarmouth Junctions improvements

32. LTP4 also references future key trunk road and rail schemes which Norfolk County Council supports that would be promoted by other bodies. These include:

- A47 Acle Straight dualling
- A11 Thetford Bypass junctions
- A47 Tilney to East Winch dualling
- Norwich to London Rail (Norwich in 90)
- East West Rail (Cambridge to Oxford)
- Ely Area Rail Enhancements

### Local Cycling and Walking Infrastructure Plan

33. The King’s Lynn Transport Strategy has been augmented by the development of the King’s Lynn Local Cycling and Walking Infrastructure Plan (LCWIP), which was adopted by both the Borough and County Councils in 2022.

34. The Local Cycling and Walking Infrastructure Plan (LCWIP) covers King’s Lynn and neighbouring civil parishes and was developed in partnership between Norfolk County Council (NCC) and the Borough Council of King’s Lynn and West Norfolk (BCKLWN). The purpose of the plan is to identify and prioritise cycling and walking network improvements which can be implemented in the short, medium and long term.

35. The objective of the LCWIP priority schemes identified is to improve the connectivity and accessibility of the King’s Lynn cycling and walking network for everyone. The overall aim is that the improvements will encourage more people to choose a form of active travel, such as cycling and walking, for making shorter journeys which can bring health, environmental and economic benefits for the region.

36. The process followed to devise the LCWIP is set out in Table 4 below.

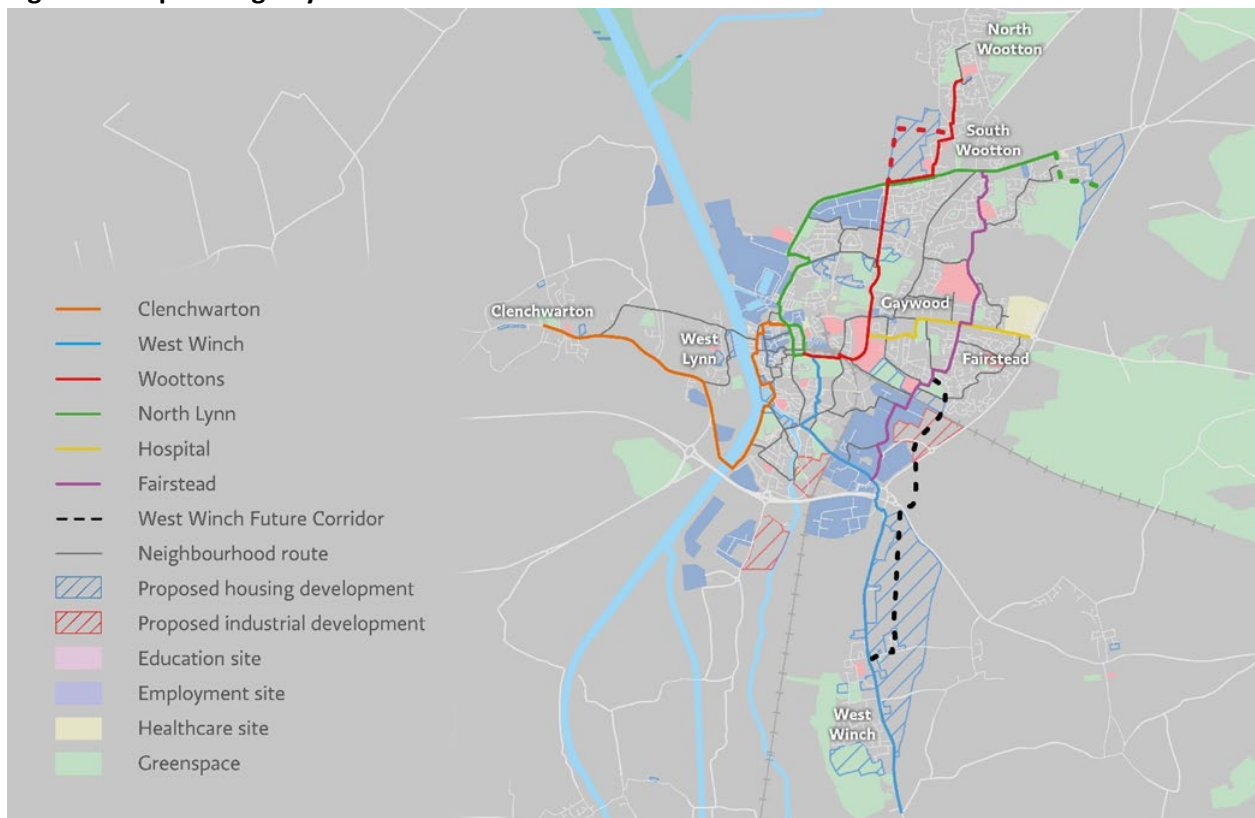
**Table 4. Stages of the LCWIP process**

Stage	Objective	Requirements	King’s Lynn
1	Determining Scope	Establish the geographical extent of the Local Cycling and Walking Infrastructure Plan, and arrangements for governing and preparing the plan.	The geographical extent of the King’s Lynn active travel network plan was established through joint planning meetings between NCC and the BCKLWN. The planning meetings identified a core focus study area and a wider connectivity study area which connects the urban area of King’s Lynn with surrounding villages
2	Gathering Information	Identify existing patterns of walking and cycling and potential new journeys. Review existing conditions and identify barriers to cycling and walking. Review related transport and land use policies and programmes.	Existing patterns of walking and cycling and potential new journeys identified through the analysis of Census Data, Strava Metro Data (GPS) and existing traffic count data. Existing network conditions and barriers to cycling and walking identified by reviewing existing policies and network schemes and Project Officer site visits. A review of related transport and land use policies and programmes included a review of adopted Neighbourhood Plans and key strategic transport, environment and public health policy documents.

3	Network Planning for Cycling	Identify origin and destination points and cycle flows. Convert flows into a network of routes and determine the type of improvements required.	Activities completed in order to create a cycle network plan included a review of key attractors within King's Lynn, cycle propensity modelling, analysis of workshop feedback and responses to the King's Lynn Vision Active Travel survey.
4	Network Planning for Walking	Identify key trip generators, core walking zones and routes, audit existing provision and determine the type of improvements required.	Activities completed in order to create a walking network plan also included a review of key attractors within King's Lynn, analysis of workshop feedback and responses to the King's Lynn vision active travel survey.
5	Prioritising Improvements	Prioritise improvements to develop a phased programme for future investment.	The active travel network improvement schemes have been prioritised following stakeholder engagement feedback. Schemes have also been prioritised based on their alignment with the strategic network and deliverability. The outcome of this process has produced a short, medium and long-term delivery scheme list for each strategic route.
6	Integration and Application	Integrate outputs into local planning and transport policies, strategies, and delivery plans.	Schemes which can be implemented in the short to medium term will be considered for funding through the King's Lynn Town Investment Plan fund and any future active travel funding opportunities.

37. The Active Travel network produced as a result of following this process is shown in Figure 1.

**Figure 1. Map of King's Lynn active travel network.**

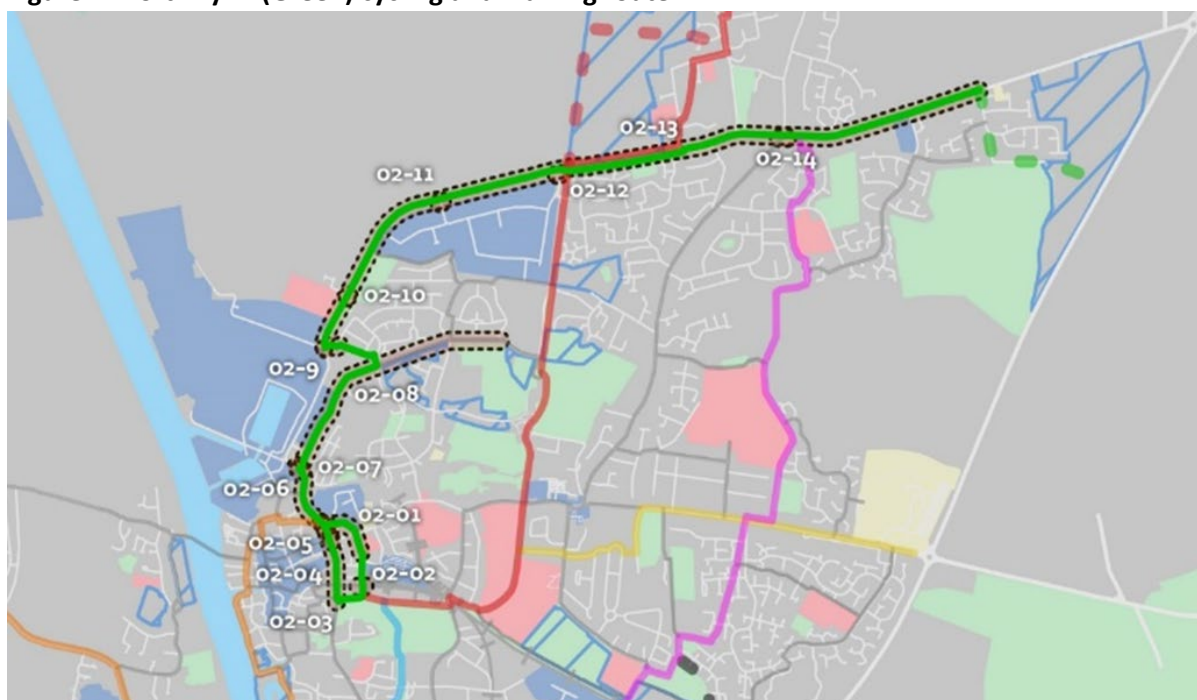


38. For each of the identified coloured routes, the LCWIP document includes further information that illustrate the individual the Active Travel improvement measures proposed at the various points along them.

39. By way of example, Figure 2 shows the Green route coming in from North Lynn. The Green route is a 6.5km long from the centre of King’s Lynn around the outer road, ending to the northeast of the town towards South Wootton. The route follows the main roads with a section following a traffic free route to the east of King’s Lynn docks. It passes by the major industrial areas of King’s Lynn docks and the North Lynn Industrial Estate, fire station, St Nicholas Retail Park, and the large residential area of South Wootton. West of South Wootton also has a large residential site in planning, so a high-quality active travel route would be beneficial to this area before it is built.

40. The existing conditions on the route that the measures are aimed at addressing are as follows. Railway Road sees high traffic volume with a three-lane one-way system for northbound traffic with no cycle provision. The route continues along John Kennedy Road which also has no cycle provision and a high volume of traffic. The following section along Bawsey Drain Path is a quiet shared-use path that connects to Edward Benefer Way through a quiet residential road. The remainder of the route along Edward Benefer Way, Low Road and Grimston Road offers a shared-use path.

**Figure 2. North Lynn (Green) cycling and walking route.**



41. The numbered locations on the plan correspond to the route improvement measures described in Table 5.

**Table 5. North Lynn (Green) cycling and walking route measures.**

Timescale	Ref	Location	Description	Design principle alignment
Short-term	O2-09	Edward Benefer Way	Create cycle lane along path to connect to St Edmundsbury Road	Summary principle: 8) Cycle infrastructure must join together, or join other facilities together by taking a holistic, connected network approach which recognises the importance of nodes, links and areas that are good for cycling.
Short-term	O2-14	Low Road	Staggered toucan crossing at junction of Wootton Road	Signal controlled cycle facility: 10.4.21 A signal-controlled cycle facility may be provided where a cycle track is connected across a road or an arm of a junction. The crossing may be for cyclists only, but can be provided adjacent to a pedestrian crossing facility

				which may be useful where separate but parallel routes exist.
Short-term	02-08	Bawsey Drain Path	Widening and protection from steep bank of drain. Streetlighting along entire length of path. Part of the North Lynn cycling and walking route and neighbourhood route.	Core Design principles - Safe: 4.2.12- Cycle routes remote from roads may have other risks relating to crime and personal security. The risk of crime can be reduced through the removal of hiding places along a route, by providing frequent access points, by providing lighting, and by passive surveillance from overlooking buildings and other users Edge protections: 5.11.1 Unguarded hazards (e.g., fixed objects, steep drops or water hazards) should not be permitted within 4.5m of the route where they would lie in the path of an out of control cycle.
Short-term	02-11	Edward Benefer Way	Pedestrian Island at junction of Bergen Way	Cycle crossings: 10.4.7 Refuges should be free of clutter, and at least 3.0m long (in the direction of travel for the cyclist) to protect users, including the cycle design vehicle, wheelchairs and mobility scooters.
Short-term	02-12	Edward Benefer Way	Toucan crossing over Edward Benefer Way near Hamburg Way junction	Signal controlled cycle facility: 10.4.21 A signal-controlled cycle facility may be provided where a cycle track is connected across a road or an arm of a junction. The crossing may be for cyclists only, but can be provided adjacent to a pedestrian crossing facility which may be useful where separate but parallel routes exist.
Short-term	02-07	John Kennedy Road	Reduce number of guardrails at junction of Loke Road	Walking Route Assessment Tool principles: Attractiveness
Short-term	02-05	John Kennedy Road	Reduce waiting time for pedestrians at Austin Street controlled crossing	Walking Route Assessment Tool principles: Directness
Short-term	02-02	Blackfriars Road	Remove cyclist dismount sign and add raised table over junction to train station parking	Summary principle: 16) Access control measures, such as chicane barriers and dismount signs, should not be used. 19) Schemes must be easy and comfortable to ride Cycle lanes at side roads: 6.4.13 Side road entry treatments are raised tables across the mouth of the side road (see Chapter 10) and help reduce the speeds of vehicles turning in and out of the junction, further adding to the safety of cyclists. They also bring significant benefits to pedestrians.
Medium-term	02-13	Edward Benefer Way / Low Road / Grimston Road	Segregated cycle lane from Sandy Lane to Estuary Road. Footway widening and move grass verge between footway and carriageway along Edward Benefer Way and Low Road.	Summary principle: 2) Cycles must be treated as vehicles and not as pedestrians. On urban streets, cyclists must be physically separated from pedestrians and should not share space with pedestrians.
Medium-term	02-10	Edward Benefer Way	Junction improvement at Motokov House park	Summary principle: 19) Schemes must be easy and comfortable to ride Visibility splays: 5.8.2 Any crossing of a highway or junction between cycle routes should be located such that all users have full visibility



Medium-term	02-03	Blackfriars Street	Junction improvements to allow access to St John's Walk from Blackfriars Street	Summary principle: 3) Cyclists must be physically separated and protected from high volume motor traffic, both at junctions and on the stretches of road between them.
Long-term	02-04	Railway Road	Segregated cycle lanes in both directions with southbound being a contraflow. Will require amendments to traffic lights at John Kennedy Road. Widen footway or reposition streetlighting and signage to remove pinch points on eastern side between Waterloo Street and Norfolk Street	Summary principle: 3) Cyclists must be physically separated and protected from high volume motor traffic, both at junctions and on the stretches of road between them. Contraflow cycle lanes and tracks: 6.4.21 There should be a general presumption in favour of cycling in both directions in one-way streets, unless there are safety, operational or cost reasons why it is not feasible.
Long-term	02-06	John Kennedy Road	Segregated cycle lane from Loke Road to junction of Austin Street	Summary principle: 3) Cyclists must be physically separated and protected from high volume motor traffic, both at junctions and on the stretches of road between them. 8) Cycle infrastructure must join together, or join other facilities together by taking a holistic, connected network approach which recognises the importance of nodes, links and areas that are good for cycling.
Long-term	02-01	Austin Street / Blackfriars Road	If ref 02-04 southbound contraflow is not feasible: Segregated cycle lane along Austin Street and Blackfriars Road for southbound travel	Summary principle: 3) Cyclists must be physically separated and protected from high volume motor traffic, both at junctions and on the stretches of road between them. 8) Cycle infrastructure must join together, or join other facilities together by taking a holistic, connected network approach which recognises the importance of nodes, links and areas that are good for cycling.

### Bus Service Improvement Plan

42. The county of Norfolk has a bus network built on a strong spirit of collaboration between the County Council, bus operator partners and public sector funding agencies and in particular the Department for Transport (DfT).
43. Norfolk County Council has adopted a Bus Service Improvement Plan (BSIP) under Government's Bus Back Better (BBB) initiative which has attracted significant funding (£50m) confirmed by DfT in 2022. This includes a number of measures in the King's Lynn area, some of which have been agreed with DfT for a programme of bus improvements and initiatives to be delivered in King's Lynn over the next 3 years.
44. The BSIP is intended to rebuild and improve passenger confidence in bus services, have a green and sustainable transport offer, have a public transport network that customers choose first for most journeys over other modes of transport and offer simple and affordable fares and ticketing

45. The approach to improving bus services as set out in the BSIP is based on the following key criteria:
- Buses running more often
  - Buses going to more places
  - More buses on time/faster journey times
  - More effort to tackle anti-social behaviour
  - Accessible buses
  - Better value for money
  - Better quality information at bus-stops
  - Cleaner buses
46. To achieve the improvements an Enhanced Partnership Plan has been set up. This is a partnership between Norfolk County Council, as the Local Transport Authority (LTA) and Local bus operators. The first enhanced partnership plan and scheme was adopted in March 2022.
47. With regard to the King's Lynn area specifically, the following types of schemes and measures have been prioritised using the governments BBB funding:
- Bus priority measures: £4,303,500
  - Travel hubs and bus stop upgrades: £1,250,000
  - Real-time information: £625,000
  - Improved and new services: £875,000 - £1,100,000
  - Flat fares scheme: £507,000
48. The bus priority measures include inbound on Hardwick Road between the Hardwick junction and the Southgates roundabout. This measure is on the key corridor into the town from the West Winch Growth Area (WWGA)

#### **Sustainable Transport Strategy to supplement the WWHAR**

49. The proposed sustainable transport measures are being devised as part of the Outline Business Case (OBC) work to secure significant DfT funding towards the scheme and will be identified in a Sustainable Transport Strategy (STS) to augment the road scheme. This strategy has not yet been finalised but a narrative in the form of a short technical note, updating on the status of the STS work associated with the WWHAR project is shown in Appendix B.

#### **West Winch Growth Area Supplementary Planning Document**

50. In parallel with developing the A10 West Winch Housing Access Road, the Borough Council has undertaken masterplanning work for the West Winch Growth Area. This was the subject of a public consultation in summer 2022. The masterplan has been adopted as a Supplementary Planning Document to inform planning considerations in conjunction with the Collaboration Agreement the Borough are entering into with landowners.

#### **King's Lynn Town Deal and the Active and Clean Connectivity Programme (A&CC)**

51. As part of the £25m the Borough Council secured from governments Town Deal Fund, a series of transport measures are being delivered. These are known as the Active and Clean Connectivity Programme and comprise:

- A travel hub at Bakers Lane car park in the town centre
- A travel hub in South Lynn at the Nar Ouse Enterprise Zone to support Active Travel
- Working with key employers to devise Active Travel Plans
- A series of targeted LCWIP measures

#### **King's Lynn Sustainable Transport and Regeneration Scheme (STARS)**

52. This scheme has two elements that will encourage sustainable transport and Active Travel on the key corridor from the WWGA to the town centre. It comprises the introduction of bus priority and LCWIP measures on the town centre gyratory, one-way system, and a reconfiguration of the Southgates roundabout to facilitate the Borough Councils regeneration masterplan for the Southgates area. At Southgates by downsizing the current roundabout and changing the junction form it will transform this key gateway area into the town to deliver the agreed masterplan.

53. The highway elements of the overall regeneration scheme have attracted £24m from the governments Levelling Up Fund and the County and Borough Councils are developing the project so that delivery can commence in 2025/6 subject to approval of the business case and statutory processes.

## **Appendices**

Appendix A Transport Technical Note

Appendix B Sustainable Transport Strategy Narrative