

## **KING'S LYNN & WEST NORFOLK LOCAL PLAN REVIEW EXAMINATION**

### **Transport Evidence – Update to Action 7 Note**

This update to Action Note 7 provides a response to the below bullet point. Appendix 1 provides the MM version of Policy LP13.

- *Action 7 – Response to Inspectors' note G32 regarding Transport evidence:*  
*The further explanation of the transport modelling is helpful, but highlights that the baseline data on which traffic growth and its impact on the road network has been forecast, does not represent the busiest periods on the road network of between 07.00-08.00am and 16.00-17.00pm and the month of August. It is not clear therefore that the conclusions of the transport modelling set out in F48 and F48a in respect of the capacity of the network to accommodate growth are robust, in particular the construction of up to 300 dwellings at WWGA before any strategic transport intervention. The suggested MMs to Policy LP13 do not include the list of projects specified in Table 5 of F48a, as agreed at the Hearing.*

The response to G32 highlights in Table 1 that from the 45 Automatic Traffic Counts (ATCs) conducted in June / July 2018, the busiest hours on the road network in the AM are 07.45-08.45am and in the PM is 16.30-17.30pm. The modelled AM time period of 08.00-09.00am and PM time period of 17.00-18.00pm are respectively -2% and -3% than the busiest observed hours in the ATC data. The transport modelling set out in F48 and F48a is robust as this level of difference between the observed busiest hour and modelled peak hour, in the modelled 2018 base which the resultant 2039 forecast presented is reliant on, would not lead to discernible differences in the conclusions of the modelling results presented in F48 and F48a.

The response to G32 demonstrates in Figure 3 that the June and July 2018 period when the aforementioned ATCs were collected is not markedly different in terms of traffic levels compared to an August 2018 period. Figure 4 demonstrates this trend continued more recently during 2023. The transport modelling underpinning F48 and F48a has been required to match this June / July 2018 ATC data in order to show it can appropriately replicate this observed data. The focus of the transport modelling in F48 and F48a is on a typical neutral weekday which therefore covers the majority of days and months in a calendar year and demonstrates robustly that during such periods the highway network would be able to accommodate additional traffic growth associated with Local Plan development. Further to this, the Local Plan growth would predominantly be associated with trips from additional residents in the borough and/or regular commuting, business and visitor trips to/from the borough. These trips would therefore predominantly be made by individuals with local knowledge of the borough's road network and would be able to divert and plan their journey accordingly to avoid congestion during the less frequent periods of high traffic flow periods occurring in peak tourist season i.e. during August.

In terms of considering the robustness of the transport modelling in F48 and F48a in demonstrating the capacity of the network to accommodate growth, a key point to note is the 2039 forecast year presented does not take any account of changes in travel patterns which have occurred since the COVID-19 pandemic. It is now standard practice in transport modelling guidance since Summer 2023, where the base year predates the pandemic, to apply COVID-19 adjustments to transport modelling forecasts, as outlined in DfT's TAG Unit M4 on Forecasting and Uncertainty, Appendix B available [here](#). As demonstrated in the recent Transport Assessment (NCC/4.01.00/WWHAR, March 2024) to support the planning application for the WWHAR (FUL/2024/0001) which is publicly available, traffic levels across KLWN post-pandemic in 2022 were significantly lower than they were pre-pandemic in 2019, with differences being -5% in the AM (08.00-09.00am), -7% in the Inter peak (10.00am-16.00pm, average hour) and -10% in the PM (17.00-18.00pm). Further checks of AM peak periods (07.00-10.00am) and PM peak periods (16.00-19.00pm), rather than just peak hours, demonstrated this level of reduction between pre and post pandemic traffic levels remained consistent across these longer time periods. Checks of changes in overall 24-hour traffic levels showed a -8% reduction occurred in 2022 compared to 2019. The 2022 data being referenced was for a coverage consistent with the observed data locations shown in Figure 3 of F48a and is therefore extensive and comprehensive in its coverage.

The level of reduction in traffic levels demonstrated in the 2022 post pandemic traffic data is significant and if it were to be applied to the 2039 forecast year presented in F48 / F48a would notably reduce the absolute levels of traffic in the model. This in turn would demonstrate greater capacity for the network to accommodate Local Plan growth. Therefore, in light of this the transport modelling presented in F48 and F48a is very much considered to be a worst-case assessment and robust in terms of being a significant stress test of the capacity of the highway network to accommodate future growth.

In terms of the capacity of the network to accommodate 300 dwellings at WWGA, this comes from separate analysis presented in evidence document F51d related to headroom on the A10. This analysis is not the same source as the Area Wide Modelling presented in F48a. The A10 headroom analysis in F51d is based on October 2022 ATC survey data and considers the maximum observed flows recorded in the AM and PM peak periods. Therefore, the headroom analysis does not consider the same AM 08.00-09.00am and PM 17.00-1800pm time periods specified in the transport modelling, nor does it utilise modelled traffic flows. Taking ATC5, referenced in F51d, located at the northern end of the A10, the AM time period considered in the headroom analysis was 07.30-08.30am, whilst the PM time period was 16.30-17.30pm. The analysis is based solely on the worst case, maximum observed ATC flows inferred against estimated link capacity specified in DMRB Volume 5 Section 1 Part 3b TA 79/99. This assessment is robust as whilst the maximum observed flow is the focus in the headroom analysis, this demonstrates the A10 would still have spare capacity to accommodate the proposed level of traffic growth associated with the 300 dwellings at the Hardwick Green development and modest background growth in traffic.

## Appendix 1: Policy LP31 – Transportation Policy

### 5.7 LP13 - Transportation Policy

#### Introduction

**5.7.1** The borough sits at important junctions of the A10, A17 and A47 roads, which link West Norfolk to Norwich, Cambridge and Peterborough and more generally to the south and midlands. There are direct, electrified rail links between King's Lynn and Downham Market which provide frequent services to Cambridge and London. West Norfolk has an extensive system of inland waterways, and sea links to northern and eastern Europe.

**5.7.2** The existing strategic transport links are vitally important in connecting settlements in West Norfolk to regional centres and the wider area. However, the borough is characterised as being more poorly connected than the regional economic centres of Norwich and Cambridge, which have connectivity scores well above the national average<sup>(16)</sup>. This is reflected in the low proportion of jobs taken by non-residents of the borough and of residents travelling out to work elsewhere.

**5.7.3** In addition to connectivity, the borough faces some specific transport related issues. It is recognised that in such a rural borough, many people rely on the car as the main mode of transport. Issues relating to the use of vehicles include road accidents, pollution, congestion and parking which particularly affect areas in and around King's Lynn and the market towns. Vehicular related issues can be exacerbated during the summer tourist season and can cause a localised problem on coastal routes such as the A149, and through rural settlements. Whilst it is vital that West Norfolk is accessible by vehicle, the strategy will encourage the use of more sustainable transport methods to move away from fossil-fuelled vehicles, where possible, and will facilitate conditions for the reduction of vehicular traffic in the long term.

#### **Norfolk Local Transport Plan (~~2011-2026~~ 2021-2036)**

**5.7.4** ~~Norfolk's third Local Transport Plan 2011-26 has been adopted.~~ The fourth Local Transport Plan, covering the period 2021-2036, was adopted by the County Council in July 2022. The new plan replaces the previous version of the plan adopted in 2011.

~~This describes the county's strategy and policy framework for delivery up to 2026. It will be used as a guide for transport investment and considered by other agencies when determining planning or delivery decisions~~ describes the council's strategy and policy framework for transport and is used as a guide for investment priorities as well as being considered by other agencies when determining their planning or delivery decisions.

~~The plan reflects the views of local people and stakeholders, identifying six priorities;~~ is in two parts, consisting of a Strategy and Implementation Plan. It details how the County Council will deliver a transport network in Norfolk through identifying the projects and programmes important to Norfolk, and in their design and direct delivery. The plan also shows how Norfolk County Council will seek to influence key partners in government, communities, the commercial sector and the third sector.

- ~~Maintaining and managing the highway network~~
- ~~Delivering sustainable growth~~
- ~~Enhancing strategic connections~~
- ~~Reducing emissions~~
- ~~Improving road safety~~
- ~~Improving accessibility~~

### **King's Lynn Transport Study and Strategy**

~~5.7.7 Norfolk County Council (NCC) and the borough council in partnership are carrying out transport study work leading to the development of a Transport Strategy for the town. The study will comprise a series of workstreams some of which will run in parallel:~~

~~Traffic surveys during spring 2018~~

~~Analysis of the current and future transport problems and issues;~~

~~Development of possible transport options identified by both BCKLWN and NCC to address the issues;~~

~~Building a microsimulation traffic model of the central area of the town and using this to test possible transport schemes;~~

~~Stakeholder consultation/workshop and identification of a preferred strategy for BCKLWN and NCC to pursue.~~

The King's Lynn Transport Strategy (KLTS), adopted in 2020, was devised to unlock the significant potential of King's Lynn by identifying transport barriers to growth and economic development and set out transport interventions to address these in support of the Core Strategy and adopted Site Allocations and Development Management Policies (SADMP) document.

~~5.7.8 The project is to understand current and future issues and develop a preferred strategy, including modelling of the options available, to arrive at a series of implementable scheme proposals. It will provide a focus for activities in and around the town particularly with regard to ongoing initiatives by the Borough Council to improve the town:~~

~~King's Lynn Riverfront Regeneration — Nelson Quay;~~

~~Heritage Action Zone including the HAZ Parking Study;~~

~~Declared Air Quality Management Areas;~~

Local Plan review. The KLTS is currently being updated in partnership between the Borough Council (BCKLWN) and Norfolk County Council (NCC) and this work is expected to take about a year to complete so could be in place by spring 2025. In line with the current national and local policies, the new KLTS will have a much greater focus on sustainable transport to support the housing and employment growth as set out spatially in the Plan. Extensive work has already been carried out in devising and adopting a Local Cycling and Walking Infrastructure Plan (LCWIP) and this will be developed further and incorporated into the KLTS and its Implementation Plan of sustainable transport measures.

~~5.7.9 The study is intended to unlock the significant potential of King's Lynn by identifying transport barriers to growth and economic development and setting out a focus and direction for how this will be addressed following the direction of the Local Plan.~~

~~5.7.10 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. The Vision and Objectives can be applied in a slightly modified form to the wider Borough as follows:~~

### **Vision and Objectives**

~~5.7.11 [paragraphs to be re-numbered consequently] To support sustainable economic growth in King's Lynn and West Norfolk by facilitating journey reliability and improved travel mode choice for all, whilst contributing to improved air quality; safety; and protection of the built environment. The draft vision and objectives for the updated KLTS are proposed as shown below and will be subject to agreement with input from stakeholders at the Issues and Opportunities stage.~~

### **Vision**

To support sustainable economic growth in King's Lynn by facilitating journey reliability and improved travel mode choice for all, whilst contributing to improve health, air quality, safety and protection of the built and natural environment

### **Objectives**

- ~~• Provide a safe environment for travel by all modes;~~
- ~~• Encourage accessibility by all modes whilst conserving and enhancing the Borough's rich natural and historic environment;~~
- ~~• Support sustainable housing and economic growth;~~
- ~~• Reduce the need to travel by car through development planning;~~
- ~~• Manage traffic congestion where it occurs;~~
- ~~• Increase active travel mode share for short journeys;~~
- ~~• Promote and encourage the use of public transport; and~~
- ~~• Reduce harmful emissions and air quality impacts.~~
- Enhance connectivity and accessibility for all within King's Lynn
- Encourage greater use of public transport in King's Lynn
- Encourage modal shift from private car to active travel in King's Lynn
- Support the delivery of planned housing growth and development in the Borough
- Protect and enhance King's Lynn's heritage and cultural environment through place-making
- Improve local air quality and King's Lynn's natural environment and reduce overall transport emissions
- Improve road safety in King's Lynn

**5.7.12** Parts of King's Lynn are designated as Air Quality Management Areas due to vehicle emissions. Congestion and associated pollution from vehicle traffic is a key issue in the town centre. Improvements to the public realm will prioritise pedestrian and cycle

access, helping to make central King's Lynn less car orientated, as well as safer and more attractive. Congestion is also an issue on the outskirts of the town causing traffic to be held up between King's Lynn town centre and the A47 and A149, ultimately affecting the ability to connect the Sub Regional Centre to the wider area.

**5.7.13** Road safety is a particular issue in the King's Lynn area. There has been a high proportion of road accidents on A roads and several corridors were identified as having large clusters of accidents, including the A148, A149, A1076, and B1144, which form the gyratory and its southern and eastern access routes. The Borough Council are continuing to work with Norfolk County Council and [National Highways England](#) to improve road safety and reduce accident rates within the King's Lynn and West Norfolk area.

**5.7.14** It is essential for residents and businesses of King's Lynn that the town remains accessible and that planned growth is adequately accessed. In the long term, reducing the necessity for vehicles to access the town centre by improving public transport could reduce congestion and pollution from vehicles.

[Area Wide Modelling has identified various locations across King's Lynn and West Norfolk which experience congestion issues. It is considered all of the locations which are identified 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 Local Plan can be accommodated. Table below presents a summary of the transport issues discussed following analysis of forecasts and the solutions for the issues which have been raised.](#)

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

## **Hunstanton, ~~and~~ Downham Market and Growth Key Rural Service Centres**

**5.7.15** The priority for Hunstanton, ~~and~~ Downham Market ~~and the Growth Key Rural Service Centres~~ is to increase connectivity between these centres and the surrounding settlements, to ensure people have access to the services they need. As part of this, it is important for the public transport network to be maintained and improved on key routes to and within the main towns and service centres.

**5.7.16** Norfolk County Council ~~is conducting~~ has conducted Market Town Network Improvement Strategies. The strategies ~~are~~ were transport focused, aimed at resolving issues and delivering local growth in jobs and housing. Downham Market ~~is~~ was one of the market towns ~~currently being studied~~.

**5.7.17** The ~~proposed~~ scope of the study ~~is~~ was to understand for each market town the current transport issues in areas such as cycle network, road traffic, parking and access to services and facilities; its future situation such as the impacts of any growth proposals on local transport network; the implications of future changes to the economy and what infrastructure requirements is required to help bring forward growth; and identify and develop an appropriate implementation plan.

### **Rural Areas**

**5.7.18** The rural nature of the borough means that the car will remain the key transport method for many people. The isolated nature of rural areas makes it difficult to promote or adopt more sustainable methods of transport. Improving communications technology, particularly access to high speed internet connections and broadband will allow people in rural areas to access some services, or even work at home, reducing the need to travel by car. In the long term, promoting behavioural change such as car sharing, as well as facilitating opportunities to operate from home will reduce the frequency of car usage.

### **The Coast**

**5.7.19** The strategy for the Norfolk Local Transport Plan seeks to protect the North Norfolk Coast by developing market towns as entrance points into the area and by seeking to build strategic links between these and the main urban areas in the county. Innovative schemes including quiet lanes and village traffic management schemes can also help to increase safety and reduce congestion. Any amendments to the transport infrastructure on the coast will need to make reference to environmental policies, particularly the European Habitats Directive. The Coastliner bus service (formerly part of the Coasthopper) is operated from King's Lynn to Wells (and Fakenham).

### **Overview**

**5.7.20** The Sustainability Appraisal recognised the importance of the strategic road network and rail links to the borough. These documents also support the enhancement of public transport, which will be particularly important in King's Lynn, Hunstanton and Downham Market and the Growth Key Rural Service Centres.

**5.7.21** A key transport aim is to increase connectivity within the borough, particularly between Key Rural Service Centres and surrounding settlements but also increase overall connectivity to the wider area. In accordance with the Settlement Hierarchy Policy LP02, investment in transport infrastructure will be concentrated in those areas which will

experience the highest population growth. A crucial aim is to reduce the use of vehicles overall but particularly reducing the need and use of fossil-fuelled vehicles in the longer term with our need to move towards a zero-carbon future by 2050. Sustainable transport links and the encouragement and support needed to move towards active travel is also an important aim to ensure residents and workers can access jobs and services by public transport links, cycling and walking. The transport strategy will aim to protect the coast and rural areas whilst maintaining the existing levels of access.

**5.7.22** The Norfolk Local Transport Plan highlighted that the increase in households could lead to unconstrained traffic growth. For this reason, the strategic policy must work to decrease the vehicular traffic growth in the borough, by encouraging modal shift, promoting a wider coverage of high-speed broadband networks and facilitating improvements to the infrastructure for public transport.

**5.7.23** Significant levels of new growth are anticipated within the borough over the plan period, it is important that new development is well integrated with the transport and communications networks.

## Strategic Policy

### Policy LP13 - Transportation Policy

#### Strategic issues

1. The Council will work with partner organisations (including ~~the New Anglia Transport Board~~, Transport East, [National](#) Highways ~~England~~, the Department for Transport, public transport operators, Network Rail, Norfolk County Council and neighbouring authorities) to deliver a sustainable transport network which improves connectivity within and beyond the borough, and reinforcing the role of King's Lynn as a regional transport node, so as to:

- a) facilitate and support the regeneration and development priorities as identified in policy LP02 Spatial Strategy;
- b) foster economic growth and investment;
- c) improve accessibility for all.

#### 2. Priority will be given to:

a) Improving the strategic networks serving passenger and freight movements to, from and through the borough (including via the port) and including the introduction of measures to reduce congestion, and improve reliability and safety of travel within the A10, A17, A134, and A47(T)/A148/9 corridors. This will include seeking:

- i. bypasses for Middleton and East Winch working with the A47 Alliance;
- ii. the West Winch Housing Access Road;
- iii. junction improvements at key interchanges including A47(T)/A149

iv. improvements to rail infrastructure, facilities, and services on the King's Lynn to Cambridge/King's Cross and London Liverpool Street railway lines, aimed at achieving better frequency and quality of travel.

b) implementing the King's Lynn Transport Study and Strategy (KLTSS) schemes including delivering a package of transport improvements within King's Lynn arising from the KLTSS. This will involve balancing ease of access, and car parking, with flows and highway safety, active travel and public transport. Priority locations for specific transport improvements are as follows:

- A149 Queen Elizabeth Way;
- A47/ A17 Pullover roundabout;
- Southgates roundabout (A148 STARS scheme);
- King's Lynn town centre gyratory;
- Tennyson Avenue and A148;
- A148/ Castle Rising Road/ A1078 signals; and
- A1078 Edward Benefer Way.

c) achieving improvements within the towns of King's Lynn, Downham Market and Hunstanton, particularly where there are air quality issues (the Gaywood Clock and King's Lynn Air Quality Management Areas).

d) achieving a balanced package of highway, traffic management (including car parking), active travel and public transport improvements.

e) maximising the use of alternative modes of freight movement via rail and the port.

f) improving accessibility and connections between (and within) towns and villages; so, helping to reduce social exclusion, isolation and rural deprivation. To do this the Council and its partners will seek to:

- i. improve the quality of the bus network;
- ii. extend the choice of transport available for communities;
- iii. work with commercial providers of broadband to increase the accessibility of high speed connections within the borough;
- iv. provide integrated and safe routes for pedestrians and cyclists;

3. Recognise that in the rural areas the private car will remain an important means of travel.

### **Dealing with transport issues in new development**

4. Development proposals should demonstrate that they have been designed to:

a) reduce the need to travel.

b) promote sustainable forms of transport appropriate to their particular location and related to the uses and users of the development. In order of preference this should consider:

- i. walking
  - ii. cycling
  - iii. public transport
  - iv. private car
  - v. development proposals which are likely to have significant transport implications will need to be accompanied by a transport assessment and travel plan to show how car based travel can be minimised.
- c) provide for safe and convenient access for all modes.

**5.7.24 Policy LP13 contributes to Strategic Objectives 12, 13, 14, Environment, 19, King's Lynn, 22, Downham Market, 31 Rural Areas, 33 Coast.**

16. West Norfolk Partnership, Sustainable Community Strategy (2007-2030)