Borough Council of King's Lynn & West Norfolk



### Follow up work in relation to the Examination into the King's Lynn and West Norfolk Local Plan: Site Allocations and Development Management Policies

The King's Lynn and West Norfolk Local Plan: Site Allocations and Development Management Policies

Issue 4 Note on Site Allocations, Transport Evidence and Assessments and Policy DM 12

October 2015

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#### 1 Relationship between the Core Strategy and the SADMP

1.1 The Core Strategy (GD01) was adopted in July 2011. It went through extensive rounds of public consultation that included the County Council and was subject to a public examination. The Core Strategy identifies scales and directions of growth and is founded on Norfolk's Local Transport Plan (2006-2011) and the King's Lynn Area Transport Strategy (KLATS) (CIV07 and CIV08).

1.2 The evidence base for the Core Strategy includes the King's Lynn Area Land Use and Transportation Study prepared by Mott MacDonald in 2009 http://www.westnorfolk.gov.uk/pdf/2009%2003%2005%20KLATS%201%20Final%20Report.pdf The Study considers the baseline conditions and develops this with transport modelling and option development for various modes of travel.

1.3 The growth locations in King's Lynn are well related to the services, facilities and employment opportunities and offer the potential to maximise the use of non-car modes and reduce the need to travel by their location.

1.4 The Core Strategy does not define the delivery of KLATS measures in any detail nor does it tie it to phasing of development in the town. Policy CS11 identifies the key strategic issues facing the area and identifies the requirement for development to assess its transportation impacts and promote improvements to encourage sustainable travel. Practically, delivery will come from a variety of sources. Some will be funded as a direct requirement of individual development sites. Other area wide improvements will have to be funded through Local Growth Fund.

1.5 The expansion area at West Winch was supported on the basis that it was a means of providing a long held aspiration for a bypass to West Winch relieving the existing community on the A10. The West Winch growth location will provide an urban extension of a scale to develop a range of local services (e.g. primary schools). It is also well related to the existing employment and retail uses at Hardwick.

#### 2 Update of New Evidence since Core Strategy/Relevance

#### King's Lynn Area Transportation Strategy

2.1 Norfolk's Second Local Transport Plan 2006-2011 (LTP2), adopted in March 2006 identifies a King's Lynn Sub-regional Strategy to 2021. A key influence on that strategy was the need to manage the impacts of emerging plans for large scale growth in King's Lynn of around 11,000 homes to 2021.

2.2 Following on from the adoption of LTP2 work commenced in 2007 on developing a strategic transport model for King's Lynn to evaluate possible transport interventions. Traffic modelling was undertaken and the strategy was developed through engagement with the Borough Council and local community taking account of the wider implications of planned growth. The outcome of this work was set out in the King's Lynn Area Transportation and Land Use Study Stage 1 Final Report March 2009 (referred to above) and contained six key themes:

- Sustainable transport measures to support large scale growth in the southeast
- Improvements to the central gyratory system to reduce congestion and address air quality issues
- New sustainable transport corridor on the Sandline railway (when it becomes available), or adjacent to it, and links to it from the Fairstead estate
- Dualling or capacity improvements to the A149 eastern bypass
- A new multi storey car park and re-use of existing surface car parks for other town centre uses and consideration of Park and Ride
- Queen Elizabeth hospital access and parking improvements.

2.3 Additional reports were also prepared which developed the strategy further:

- KLATS2 Final Report August 2010 (CIV08)
- KLATS2 Multi Storey Car Park Feasibility Study

2.4 The six key themes were developed further based on this work and distilled into more specific measures and an Implementation Plan was agreed with the Borough Council in autumn 2010. Improvement to the gyratory system was identified as a priority.

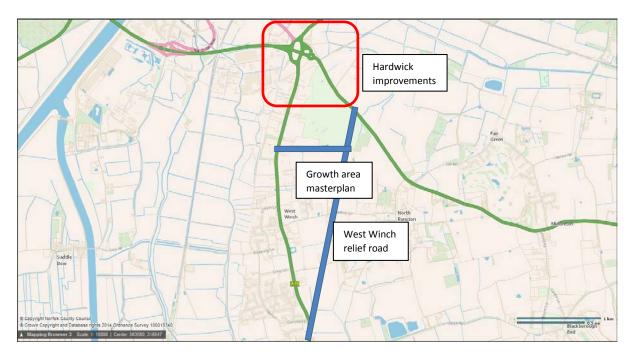
2.5 Norfolk's third Local Transport Plan (LTP3) [CIV06] was published in April 2011. LTP3, reflecting guidance for its preparation, did not have such detail on area based strategies, but took a thematic approach. One of the themes is sustainable growth, and within that section King's Lynn is identified as an urban area that will continue to face growth pressures. LTP3 was supported by an implementation plan which states that:

3.9 Emphasis will be on influencing the location of new development through the planning process to ensure that it is well located in settlements with a range of services. Norwich, Thetford, Attleborough and King's Lynn will see significant growth whilst Great Yarmouth has been identified as an area of regeneration. 2.6 The KLATS implementation plan provides a more detailed expression of current priorities for transport improvement and investment in King's Lynn. The Implementation plan originally prepared in 2011 was refreshed in 2014 and a copy is attached at Appendix 1.

#### Interventions and Investment in the King's Lynn area since 2009

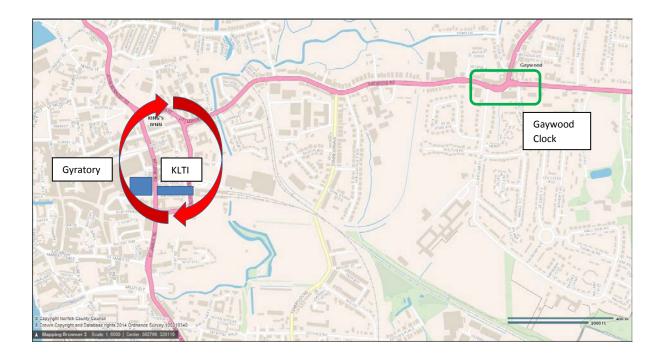
#### Sustainable transport measures to support large scale growth in the southeast

- 2012 Worked with the Prince's Foundation and the local parishes to masterplan the growth area to minimise travel and maximise internalisation of trips
- 2013 Determined an appropriate form of West Winch relief road that could be supported by the developers and the parishes
- 2014 Carried out extensive work to determine the required highway improvements in the Hardwick area to accommodate the impacts of housing and jobs growth



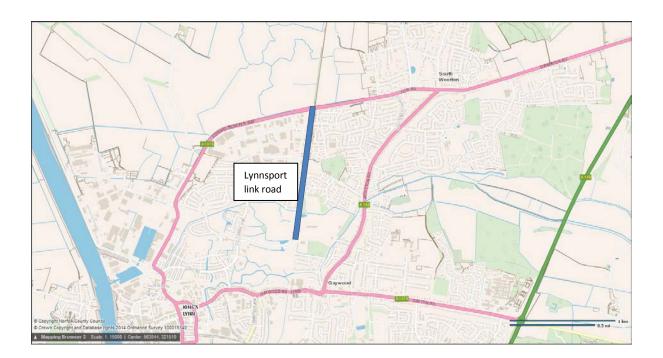
### Improvements to the central gyratory system to reduce congestion and address air quality issues

- 2011 Held a workshop with Borough Council colleagues to refine the central gyratory scheme proposed by Mott MacDonald to suit local concerns
- 2011 Undertook some strategic modelling to determine impacts of the proposals
- 2014 Highway junction improvements around the Gaywood Clock area to improve traffic flow and reduce emissions and improve local air quality
- 2015 Implemented a new access arrangement for the new town centre bus station that should have air quality benefits King's Lynn Transport Interchange (KLTI)
- Improved the pedestrian linkage between the railway station and the new (2015) town centre bus station KLTI



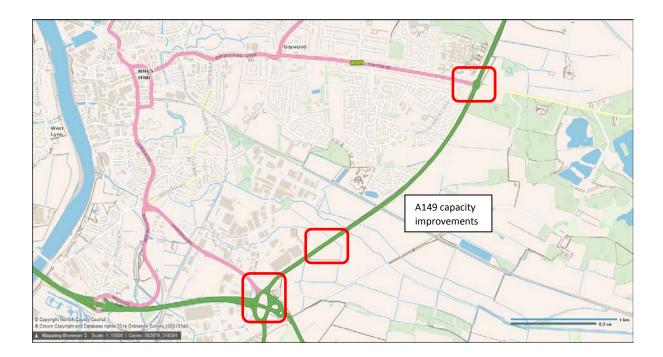
### New sustainable transport corridor on the Sandline railway (when it becomes available), or adjacent to it, and links to it from the Fairstead estate

- 2011 Considered measures for improving bus links from the Fairstead housing estate in advance of the railway line becoming available as a public transport corridor. However, the emerging growth locations do not suit this proposal or the Sandline corridor so neither is currently being pursued.
- 2014 Developed the Lynnsport link road to assist with the delivery of key housing sites.



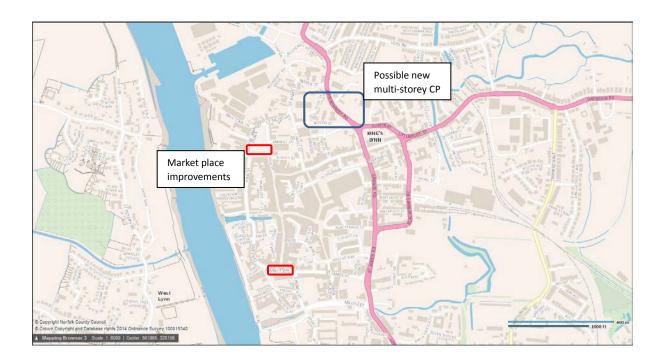
#### Dualling or capacity improvements to the A149 eastern bypass

• 2013/14 - Some A149 improvement associated with the junction schemes implemented using S106 funding from two new supermarket developments



#### A new multi storey car park and re-use of existing surface car parks for other town centre uses and consideration of Park and Ride

- 2011 Considered the Mott MacDonald car parking report and with the Borough Council determined a suitable location for a new multi storey car park to the north that would enable the reuse of existing surface car park sites and reduce traffic levels in the historic part of the town
- 2013/14 Implemented public realm enhancement schemes to two key market places (Tuesday and Saturday Market Places)
- 2014/15 Developing a parking management plan with the Borough Council



#### Queen Elizabeth Hospital access and parking improvements

- 2013/14 Developed and implemented an improvement scheme for the A149 Hospital Roundabout to relieve congestion using S106 funding from two new supermarket developments
- 2013/14 Working with the Hospital enhanced the roundabout scheme with a local road widening on Gayton Road to further reduce delays exiting the Hospital
- 2013/14 Helped the Queen Elizabeth Hospital to implement a new parking management scheme that gave more priority to patients and visitors by segregating staff parking



#### Interventions and Investment in the Rest of Borough

#### Wisbech Area Transport Study/Mitigation Strategy

2.7 Cambridgeshire County Council and Fenland District Council have jointly prepared a Wisbech Area Transport Study and Mitigation Strategy.

2.8 The Wisbech Area Transport Study involves the commissioning, building and testing of a traffic model. The model is to assess the transport implications for different scales of housing and job growth in Wisbech up to 2031. The outcomes of the testing are to support the Fenland District Council Core Strategy.

2.9 Since 2009 a range of traffic modelling has been undertaken to assess different scales of housing and job growth. The results of this modelling work are set out in a range of technical notes and reports that form part of the study. It is however clear from the different modelling runs that there are problems and

congestion on the transport network in Wisbech that will need to be addressed. It is clear that transport mitigation measures will be needed in a number of key locations to reduce the transport issues associated with the development traffic. Work has been undertaken to put together a package of schemes that will address the transport issues, it is known as the Wisbech Transport Mitigation Strategy (January 2013).

# 3 Requirement for Transport Assessments to accompany planning applications

3.1 The site allocations proposals build on the Core Strategy and the progress with KLATS which includes the recent work looking at the Hardwick area (CIV09) and identifying the required improvement measures to accommodate the growth. It does not revisit numbers or the principles of location but concerns itself with more detailed requirements of the sites themselves.

3.2 Since adoption of the Core Strategy County Council officers have engaged with the Borough Council and local community to identify mitigation associated with the major sites in King's Lynn.

3.3 The housing at South Wootton will need to provide a new link serving the primary school together with junction improvements on Low Road/Edward Benefer Way.

3.4 Development on a range of sites in the vicinity of Lynnsport have as a requirement the Lynnsport link road providing access to development sites from Edward Benefer Way.

3.5 Growth in West Winch is required to deliver a range of improvements including:

- A link from the A10 to the A47 including any required improvements to the A47 and the Hardwick junction.
- Pedestrian and cycle routes to King's Lynn and other transport improvements to support the growth at West Winch.
- Local highway improvements and management measures to integrate development into the surrounding network.

3.6 The County Council is working with the local community, Borough Council, Highways England and developer interests to develop the transport measures that are required to support the West Winch growth location. Traffic assessment work is being carried out and progress continues to be shared with the interested parties. The Hardwick Transport Strategy report (CIV09) includes some information on costs and the phasing of improvements required to accommodate the planned growth.

3.7 A key finding of this work was the requirement to dual the section of A47 from the new junction on the A47 to Hardwick.

3.8 Work on developing improvements in King's Lynn to address wider impacts of growth continues through the KLATS implementation plan. Where the need for measures has been attributed to specific development sites, they are identified in policy as requirements of development of that site. Furthermore, further detailed transport assessments (TA) will be required for Knights Hill, South Wootton and West Winch and polices for these sites (with the proposed modification for Knights Hill) state that requirement. Outside the King's Lynn area transport assessments

have also been specified in the policies for Downham Market North-East (F1.3) and South-East (F1.4). The County Council threshold of 80 units would indicate that TAs would also be required for the King's Lynn and West Lynn housing allocations (except for E1.8 South Quay, E1.10 North of Wisbech Road, E1.11 Southgates and E1.14 West of St Peter's Road, West Lynn). It is also likely to be required for the 2 King's Lynn employment allocations. Allocations at Hunstanton (F2.2 and 4) and the Wisbech Fringe (F3.1) are also above the 80 unit threshold.

3.9 Other sites may have to produce transport assessments. Local guidance (based on DfT Guidance published in 2007, but recently withdrawn) identifies thresholds for when a TA should be prepared. This is attached as Appendix 2. As can be seen from the table thresholds are guidance and the need for a TA will be influenced by local factors and the detail of the specific proposal.

3.10 The National Planning Policy Framework (NPPF) was introduced in 2012 and requires development to be safe and sustainable. It states that development should only be resisted when the directly attributable residual impacts are deemed to be severe.

3.11 When considering traffic impacts of specific development applications the impacts of that proposal have to be assessed on the basis of the current traffic levels plus that of other already permitted/committed but unbuilt sites in the locality. The assessment is required to consider the cumulative impacts of all local plan allocations.

3.12 All modes of transport are considered and walking/cycling and public transport mitigation measures are required where there are deficiencies in the local networks. Walking and cycling routes to school are of particular importance to try to ensure that pupils have an available and safe walking route to school.

3.13 Mitigation of any assessed impacts has to be provided to bring the network back to the current level of efficiency (i.e. 'to consume its own smoke'). The efficiency of a junction is measured by the ratio of flow to capacity (rfc). Above 1.0 indicates the junction will be over capacity and congested in the peak hours. If a junction has a current rfc of 1.1 the mitigation only has to being the rfc back to 1.1, not below 1.0 to bring the junction back to free-flow.

3.14 The funding of any transport measures associated with the development must be reasonable and has to be judged against the following criteria:

- Be necessary to make the development acceptable in planning terms i.e. without the obligation permission would be refused;
- Be directly related to the development;
- Be fairly and reasonably related in scale and kind to the development.

#### 4 Wider Transport Impacts and Funding Opportunities

4.1 There will be area wide improvements for which a case for development to fund cannot be made through the planning process. These improvements will help manage the increased traffic from development.

4.2 If a planning authority introduces CIL that money can be used to fund infrastructure to support development of the area which would include area wide traffic improvements.

4.3 The main other source of funding for area wide transport improvements is through Local Growth Fund (LGF). LGF provides an opportunity to bid for funding of transport infrastructure. King's Lynn is identified as a growth area in the New Anglia Local Enterprise Partnership (LEP) Strategic Economic Plan (SEP) and provides the basis for bidding for LGF transport funding for King's Lynn to support planned economic growth.

4.4 A bid was put in for just over £16.5m for a range of transport infrastructure, some site specific, some area wide, to support growth in King's Lynn but this was not funded by Government.

4.5 Through the A47 Alliance the County lobbies for improvements to be funded by Government. Currently the proposed investment in the A47 does not include any schemes in the vicinity of King's Lynn.

4.6 A number of priorities have been identified:

- Hardwick (cost est. £20m-£30m);
- Kings Lynn to Swaffham (including East Winch and Middleton Bypasses) (cost est. £166m);
- Tilney to Kings Lynn dualling (cost est. £36m).

The County Council has resolved that Tilney to East Winch should be a priority of the Alliance to lobby for in the next round of trunk road funding.

4.7 The local authorities are in the process of developing the case for government funding through the next round of Local Growth Fund and the projects under consideration are set out below.

Scheme	Description	Cost
Town Centre Gyratory King's Lynn	Remodelling gyratory system addresses air quality, sustainable transport and conditions in the town centre for businesses and retail	£5m
King's Lynn Package	Package of sustainable transport and network management (congestion) measures	£6.6m shown in SEP
A10/A47 link, King's Lynn	Forward funding of the A10 West Winch bypass to link with A47 east of Hardwick to ensure A10 mitigation is in place before significant numbers of houses are built	£14.2m
A10 West Winch Road Network Management	Mitigation measures arising from development proposals	To be funded by developer as part of mitigation measures
A47 Hardwick Junction King's Lynn	£0.6m one arm of roundabout, £1.6m localised widening, £3.1m revisions to small roundabout to east	Circa £5.5m
A149 King's Lynn to Hunstanton Network Management	Congestion measures on A149 north of King's Lynn	£1.5m shown in SEP

# 5 Policy DM12 – relationship of restrictions on new accesses and new allocations proposed in SADMP

5.1 Policy DM12 – Strategic Road Network aims to resist development along strategic routes, which would prejudice the ability of such routes to carry traffic freely and safely. In doing so, development is focused towards urban areas with high connectivity and therefore to more accessible locations where the ability to travel more sustainably is maximised. Conversely, locating development alongside the strategic road network, outside urban areas, would severely curtail opportunities to provide high quality access to public transport and safe walking/cycling route.

5.2 Sporadic development along strategic routes has the effect of further reducing the connectivity of the rural areas, an adverse effect that the policy seeks to avoid.

5.3 The Policy is not intended to apply to allocated sites and a modification is proposed to clarify this (see Proposed Modifications section).

#### 6 List of modifications proposed (text/policies/glossary)

#### Transport

6.1 Include an extra paragraph after Policy E1.12 under the 'Transport' heading expanding on the details of the transport issues as follows:

"Norfolk's Second Local Transport Plan 2006-2011 (LTP2), adopted in March 2006 identifies a King's Lynn Sub-regional Strategy to 2021. A key influence on that strategy was the need to manage the impacts of emerging plans for large scale growth in King's Lynn of around 11,000 homes to 2021. Following on from the adoption of LTP2 work commenced in 2007 on developing a strategic transport model for King's Lynn to evaluate possible transport interventions. Traffic modelling was undertaken and the strategy was developed through engagement with the Borough Council and local community taking account of the wider implications of planned growth. The outcome of this work was set out in the King's Lynn Area Transportation and Land Use Study Stage 1 Final Report March 2009 (referred to above) and contained six key themes:

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The six key themes were developed further based on this work and distilled into more specific measures and an Implementation Plan was agreed with the Borough Council in autumn 2010. Improvement to the gyratory system was identified as a priority."

#### Glossary

6.2 Include in the Glossary the following definition of Transport Assessment:

**Transport assessment:** A comprehensive and systematic process that sets out transport issues relating to a proposed development. It identifies what measures will be required to improve accessibility and safety for all modes of travel, particularly for alternatives to the car such as walking, cycling and public transport and what measures will need to be taken to deal with the anticipated transport impacts of the development.

#### DM12 – Strategic Road Network

6.3 In relation to the issue of allocations on the strategic road network for clarity it would be helpful to clarify that Policy DM12 does not apply to allocated sites, to use the term 'Transport Assessment' instead of 'Traffic Impact Assessment' and to reference Policy CS11 and paragraph 013 of the PPG as follows:

"The Strategic Road Network within the Borough, comprising the A10, A17, A47, A134, A148, A149, A1101 & A1122 and shown on the Policies Map, will be protected as follows outside of the settlements specified within Core Strategy policy CS02:

- New development, <u>apart from specific plan allocations</u>, will not be permitted if it would include the provision of vehicle access leading directly onto a road forming part of this Strategic Road Network;
- New development served by a side road which connects to a road forming part of the Strategic Road Network will be permitted provided that any resulting increase in traffic would not have a significant adverse effect on:
  - The route's national and strategic role as a road for long distance traffic
  - Highway safety
  - The route's traffic capacity
  - The amenity and access of any adjoining occupiers.

In appropriate cases a <u>Traffic Impact Transport</u> Assessment will be required to demonstrate that development proposals can be accommodated on the local road network, taking into account any infrastructure improvements proposed.

Policy CS11 of the Adopted Core Strategy sets out the transport requirements for development proposals to demonstrate that they accord with. Paragraph 013 - Transport Assessments and Statements of the Planning Practice Guidance should also be considered."

### 7 Conclusion

7.1 The County Council has been fully involved in the preparation of the Core Strategy and the SADMP plans with the Borough Council.

7.2 A holistic view was taken when the Core Strategy was prepared between 2008 and 2011, and testing undertaken as part of the KLATS. The strategic scales and distribution of development were assessed at that time. Broad approaches were incorporated into KLATS implementation work as explained.

7.3 At this detailed SADMP stage the focus has been on the detailed mitigation necessary for individual sites. Overall concerns about transportation effects of growth on King's Lynn town are considered to have been dealt with adequately through Core Strategy/ongoing KLATS implementation stages.

7.4 This site specific consideration is done in the context (as appropriate given the scales of development) of transport assessments triggered for the thresholds in Appendix 2.

#### Appendices

#### Appendix 1 KLATS draft updated Implementation Plan 2014

#### 1.0 Introduction

Mott MacDonald has carried out extensive work in pursuit of developing a transportation strategy for King's Lynn. This included origin and destination traffic surveys traffic counts and the building of a 2007 based strategic highway model. The outcome of this work was set out in the following reports:

- KLATS Stage 1 Final Report March 2009
- KLATS2 Draft Final Report August 2010
- KLATS2 Multi Storey Car Park, Feasibility Study

This work was drawn together into an Implementation Plan in autumn 2010. The elements of this plan were agreed with Borough Council officers and presented to and discussed with senior Borough Council Members.

The Implementation Plan comprised the following measures:

- Gyratory
- Parking
- Sandline
- Hospital
- Southeast
- A149
- Strategic cycling network

Whereas the Borough Council Members were in agreement with the measures in the plan, they had a different priority order which, in the opinion of Norfolk County Council officers, was not achievable at that time.

At a meeting of Borough and County Council officers in autumn 2013, it was agreed that this Implementation Plan would be reviewed and updated.

#### 2.0 Town centre gyratory system improvements

The Mott MacDonald KLATS2 Draft Final Report August 2010 identified the need to implement measures to resolve the problem of poor air quality in the declared Air Quality Management Areas (AQMA) of King's Lynn. An area of particularly high exceedences of pollution levels is on Railway Road on the western side of the central gyratory system. The report concluded that a low emission zone (LEZ), that encourages improvements to the quality of the bus fleet, was unlikely to be effective and therefore considered changes to the road layout as a solution. Two options for changes to the gyratory were considered and the likely benefits were set out but these were not verified by any technical assessment work.

The autumn 2010 Implementation Plan included the following actions:

- **Convene a 'workshop'** with key partners to devise gyratory options to test operationally with the highway model November/December 2010
- Test gyratory options with highway model January to March 2011

#### 2.1 Convene a 'workshop'

In order to take this work forward and assess possible changes the road layout on the gyratory system, a workshop was conducted on 12 January 2011 which was attended by:

Mike George	Economic Regeneration Manager	BCKL&WN
Alan Gomm	LDF Manager	BCKL&WN
Peter Jermany	Planning Policy Manager	BCKL&WN
Dave Haines	Environmental Health	BCKL&WN
Fabia Pollard	Environment	BCKL&WN
Rob Mills	Project Engineer Traffic Analysis	NCC
lan Parkes	Principal Transport Planner	NCC

To assess different options for the central gyratory system it was felt appropriate to identify objectives against which different options could be judged. These were:

- Address congestion/traffic movements
- Improve air quality
- Quality of streetscape
- Economic viability of Railway Road/town centre
- Facilitate development
- Improve bus operations
- Improve efficiency of car park use
- Permeability walking and cycling access (including railway and bus stations)
- Safety issues

Five	options	were	considered	on	this	basis.	These	were:
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#### Option 1

Option 1, devised by Mott MacDonald, shortens the existing gyratory for general traffic by encouraging the use of Wellesley Road and removing the right turn from Blackfriars Road. It also improves bus access to the bus station by creating a bus only link on Waterloo Street and a northbound bus lane at the southern end of Railway Road.

#### Option 2

Option 2 is more radical than Option 1 and involves closing the western, Railway Road, side of the system to general traffic but still allowing vehicular access to the Old Cattlemarket (Sainsburys) car park, service areas and bus only access to the bus station.

#### Option 2a

On closer examination a number of potential issues were identified with Option 2. Amendments to address these issues and enhance the scheme were discussed and a further option incorporating these amendments was created and called Option 2a.

The amendments were:

- Allowing a right turn from Norfolk Street onto John Kennedy road, to avoid traffic wishing to make this move having to use Loke Road
- To use Wellesley Street for inbound buses and for them to cross Railway Road into the bus station from the north rather than using the Old Market Street entrance.
- Create a new bus station entrance from Albion Street
- Not to allow buses to use the section of Railway Road in a southbound direction between Waterloo Street and Blackfriars Road
- To allow general traffic to go straight ahead from Blackfriars road into Blackfriars Street

#### Option 3

Option 3 comprises widening the footways equally on both sides between Waterloo Street and Wellesley Street and reducing the three lanes down to two, and between Wellesley Street and Norfolk Street, widening the footways equally on both sides and reducing the four lanes down to two. This would move the traffic further away from the building facades also offers the opportunity to use the converted carriageway for amenity short stay parking if that is felt desirable.

#### Option 4

This option has been devised based on the views of stakeholders. Because Railway Road is a very wide one way street with a lot of unused capacity, it has been suggested that it could be made two-way by having two lanes northbound and one lane southbound.

#### Workshop conclusions

The conclusions were that Option 2a performed the best, as it would remove traffic from the sites where the air quality is worst, but that further assessment work using the highway model was required to determine its impact on congestion. It was also recognised that, due to the removal of general traffic, Option 2a offers the best opportunities for improving the economic vitality of the town and redevelopment. It will also make it easier to get about as a pedestrian or cyclist.

Option 3 had many positives and it was thought that it could provide some air quality improvements in the worst areas but that this will need to be verified. By managing traffic flow on Railway Road, it may provide some economic vitality and waking and cycling benefits.

Options 1, 2 and 4 were discounted.

It was agreed that further testing would be carried out on Option 2a and that this should be the preferred option to pursue, but this is likely to be costly option and unaffordable in the short term as it will require the modification of a number of signalised junction and streetscape improvements to implement the pedestrianisation.

It was also agreed that subject to further testing, Option 3 could provide a low cost interim solution to address air quality in the worst areas and confer some other benefits.

Further details of this workshop can be found in Appendix A.

#### 2.2 Test gyratory options

For Option 2a, Norfolk County Council undertook some preliminary design of revised junction layouts for the gyratory system to create such a scheme. These designs were then input into the highway model and it was run to see the effects on traffic patterns. This work suggested that it may be necessary to implement additional traffic management measures to prevent displaced traffic finding routes through the town using Queen Street and King Street.

Another aspect of this modelling work to develop Option 2a was possible changes to car parking provision which could also reduce the impact of traffic in the historic core of the town and reduce the displacement effect described above. However, no detailed overall parking scheme was available at that time to incorporate into this feasibility work.

For Option 3, the Borough Council of King's Lynn and West Norfolk looked at the air quality screening and assessment tool set out in the Design Manual for Roads and Bridges (DMRB). This appeared to indicate that widening the footways may not have a significant impact upon pollutant levels.

#### 2.3 Suggested way forward for the Gyratory system

Consider latest position on car parking in conjunction with BCKL&WN and test Option 2a in combination with car parking and traffic management measures to determine effect on congestion and residual traffic on Railway Road and impacts on pollutant levels.

On the basis that Option 3 is now being considered by the BCKL&WN for its public realm and economic vitality benefit, develop this further on the understanding that it may have some benefit in terms of air quality which will be determined by the NOx diffusion tube monitoring.

In response to the work on the King's Lynn Transport Interchange (KLTI), there may also be merit in investigating some lower cost alternatives to the wholesale change to the gyratory system as defined in Option 2a.

#### 3.0 Car Park Rationalisation and Park and Ride

The Mott MacDonald report presents a section on the location of a new multi storey car park, as part of an overall car park consolidation exercise, and one on the suitability of Park and Ride for the town. With regard to a new multi storey car park, there is a separate report that considers 3 possible locations and makes a recommendation as to what they believe appears to be the most viable site.

Both of these themes, a multi storey car park and Park and Ride, are elements of a wider overall car parking strategy for the town which needs to focus on rationalising car parks to make the most efficient use of the available parking stock.

In order to take this car park rationalisation/parking strategy forward it is proposed that work is done in conjunction with assessing options for reconfiguring the gyratory system. For example, if we can identify which surface car parks are going to be rationalised into a multi storey car park, this can then be reflected in the highway model to determine the beneficial traffic reduction effects. This work will also be able to take account of the possible gyratory system alterations and help to inform the best location for a new multi storey car park.

The autumn 2010 Implementation Plan included the following actions:

- Confirm the car parks to consider for consolidation November/December 2010
- Test car park consolidation measures in model and in conjunction with gyratory options January to March 2011
- Agree an overall car parking strategy for the town April 2011 onwards

#### 3.1 Progress

Following discussions between NCC and the BCKL&WN, some work is advancing in terms of the creation of a Controlled Parking Zone (CPZ). Principally this is to maximise the availability of on street parking and to enable a workable enforcement regime to prevent abuse of parking restrictions.

#### 3.2 Suggested way forward for Car Parking

Building on the CPZ work it is recommended that further discussions should take place between NCC and the BCKL&WN to determine a likely strategy for the consolidation of public car parks and the role of Park and Ride. An agreed location for a second multi storey car park will need to be determined and deliverability issues considered. The strategy will need to be informed by an assessment of the likely alternative uses of existing car parks and the income these sites could yield to fund the multi storey car park.

#### 4.0 Sandline Public Transport Corridor

The Sandline runs from the sand pits near Leziate and carries two trains per day into King's Lynn where they access the mainline for destinations in other parts of the country. Until this railway line is no longer required for this purpose it is not available to provide a new public transport, walking and cycling corridor into King's Lynn town centre.

However, north of the Sandline from Tennyson Avenue towards the A149 there is a walking and cycling route along the Swaffham Belt. This path then skirts around the Howard Junior School and runs along the edge of the Gaywood Plantation and ties in at the southern end of the Fairstead housing estate. In the medium term there is potential to improve this route to enable it to accommodate a bus route. This would then enable those buses that presently loop through the Fairstead housing estate to divert from Gayton Road/Lynn Road and avoid the Gaywood Clock Air Quality Management Area (AQMA).

At Tennyson Avenue there is the issue of crossing the road and railway lines to access the town centre. A public transport bridge as suggested in the Mott MacDonald report could be a solution if there is a need to tie into the town centre south of the station. However, there may be merit in looking at other solutions which could include a signalised junction with bus priority immediately north of the existing level crossing, a new level crossing over the private sandline and then tying into the access road to the rear of the Morrisons supermarket. If it is possible, this could offer a cheaper solution to the bridge.

The autumn 2010 Implementation Plan included the following actions:

- Instigate discussions with Borough Council and others to investigate the possibility of the Sandline Public Transport Corridor tying in north of the station via Morrisons November/December 2010
- Discuss the likelihood of being able to bring forward development sites that will facilitate the development of the Sandline Public Transport Corridor January to March 2011

#### 4.1 Progress

There have been no discussions regarding the Sandline, or an interim public transport corridor to the north of the actual railway line tying in north of the station via Morrisons. However, the Borough wide Core Strategy has been adopted and work has taken place in identifying specific development sites for housing and employment growth.

#### 4.2 Suggested way forward for Public Transport Corridor

It is recommended that further discussions should take place between NCC and the BCKL&WN to determine the likely development patterns that will arise from the site specific work and to review the suitability of a public transport corridor in this location.

#### 5.0 Queen Elizabeth Hospital Access and Public Transport

Access to the Queen Elizabeth Hospital remains a key issue and at present it is all off the busy Gayton Road. Delays experienced getting out of the site by public transport has had a detrimental impact on bus services to the hospital. This is clearly not conducive to encouraging more trips to be made by public transport and creating a modal shift. Further growth of the town in line with the Core Strategy will only increase the demand for hospital services and trips to and from the hospital.

The Mott MacDonald report proposes two measures that are likely to be beneficial.

The first is an additional left in-left out access onto the A149 which could relieve pressure on the existing access because trips from outside of Kings Lynn could get to the hospital without using Gayton Road. An analysis of the present traffic movements, to determine the split between town centre and rural origins/destinations, will help to understand the extent of this benefit.

The other measure is a new signalised junction with selective vehicle detection (SVD) bus priority at the location of the present Winston Churchill Drive/Gayton Road mini-roundabout. This would afford buses priority in exiting the site and crossing into Winston Churchill Drive. This measure clearly has synergy with the Sandline Public Transport Corridor as the buses could then continue through to the town centre avoiding the Gaywood Clock AQMA and potentially serve new housing areas.

The autumn 2010 Implementation Plan included the following actions:

- NCC to analyse available traffic data to understand the benefits of a new left in left out access on the A149 January to March 2011
- Liaise and work with Hospital in terms of delivering the required access improvements Ongoing

#### 5.1 Progress

Since that time NCC has analysed origin/destination data from the highway traffic model to determine the benefits of a new left in left out access for the hospital on the

A149. It has also prepared cost estimates for such a new access and also for a new dedicated access for public transport at the Winston Churchill Drive/Gayton Road mini-roundabout. Bids were then made to the governments Local Sustainable Transport Fund (LSTF) for a 50% capital contribution to these measures estimated to cost approximately £1m. Unfortunately this bid was unsuccessful.

However, working closely with the Queen Elizabeth Hospital, we have encouraged them to segregate their staff and patient/visitor parking and to implement other travel plan measures. Collectively these measures have had a positive impact on staff travel habits and gone some way to resolving the parking difficulties experienced by patients and visitors.

Working with the BCKL&WN and the Hospital, NCC has facilitated an additional improvement to the Gayton Road/A149 hospital roundabout. This improvement is over and above that provided by the two superstore developments and comprises the introduction of two separate queuing lanes from the roundabout back to the Winston Churchill Drive/Gayton Road mini-roundabout. The scheme was opened in January 2014 and has gone some way to alleviating congestion and delay at this location with a direct benefit to vehicles exiting the hospital.

# 5.2 Suggested way forward for Queen Elizabeth Hospital Access and Public Transport

It is recommended that NCC and the BCKL&WN review the current situation with regards to hospital access and the general levels of congestion and delay at the Gayton Road/A149 hospital roundabout. The dialogue with the hospital should also be maintained to understand any unresolved, residual or new issues that could be addressed by partnership working and new measures.

#### 6.0 South East Quadrant

The Core Strategy has an allocation of at least 1,600 new homes to the southeast of the town between the A10 and the A47 east. This allocation is intended to contribute to the current need and establish a direction for future growth of the town.

The Mott MacDonald reports refers to master planning work for this southeast development that will be required as part of the plan making process and indicates that the site could accommodate up to 5,000 new homes, schools, an employment area together with community and green infrastructure.

In order to serve the growth in this part of the town, it is likely that a link road will be required through the development joining the A47 to the A10 which additionally serves as a bypass/relief road for the community of West Winch along the A10.

The autumn 2010 Implementation Plan included the following actions:

• Consider the current proposal and layout from Hopkins Homes (900 dwellings) and the most likely configuration of delivering the remaining 700 to

meet the 1,600 envisaged by the end of the plan period 2025. Devise access assumptions with Borough Council - November/December 2010

- Undertake preliminary assessment work to identify likely highway junction improvements to facilitate access for the 1,600 dwellings. This will need to pay regard to the desire to grow this development beyond 2025 to 5,000 dwellings and associated employment development and community facilities – January to March 2011
- Discuss the possibility of master planning work for this southeast growth beyond 2025 January to March 2011 or April 2011 onwards

#### 6.1 Progress

During 2012, with the assistance of the Princes Foundation, a series of workshops were carried out to help masterplan this South East Quadrant area and inform a Neighbourhood Plan for the adjoining parishes of West Winch and North Runcton. These included representatives from the landowners/developers, the Parish, Borough and County Councils and the Highways Agency. In January 2013, the two developers for the area, Hopkins Homes and Zurich Assurance Limited agreed on a line for the link between the A10 and A47 that would serve the growth in the area and eventually provide relief to the A10 route running through West Winch.

#### 6.2 Suggested way forward for the South East Quadrant

The current view from the Borough Council planners is that they would like to see both developers' sites, Hopkins Homes and Zurich Assurance Limited, commencing in the near future to deliver the 1600 homes as set out in the current plan period to 2026. Beyond 2026 they envisage the total number of new homes in the quadrant rising to 3500 rather than the 5000 figure mentioned previously. Both of these development areas will have an impact on the A47 Hardwick interchange which will need to be mitigated.

It is recommended that NCC and the BCKL&WN carefully consider the planning applications for the Hopkins Homes and Zurich Assurance Limited sites to ensure they are developed in such a way as to support the Preferred Options for a Detailed Policies and Site Plan document which states:

**5.2.5** This is likely to be the largest residential development opportunity in the Borough for many years. It provides a once-in-a-generation opportunity to form a thriving and vibrant new community immediately south of King's Lynn. The intention is to integrate a large number of new homes and associated facilities with an existing village community, generate a range of major improvements in a range of areas, and shape a place that promotes a sense of community among its residents, existing and new.

The County Council working with the A47 Alliance and the New Anglia Local Enterprise Partnership (LEP) has made campaigning for improvements to the A47 route a high priority. It is also recognised that general housing and employment

growth in the King's Lynn area will place an additional burden on the A47 Hardwick junction. In view of this the County Council has commissioned a feasibility study to identify an appropriate, and if possible phased, improvement strategy for the junction.

In addition to improvements to the highway network, because the South East growth area is separated from the higher order services and facilities in Kings Lynn, it will be necessary for the developments to provide high quality public transport links to King's Lynn for access to higher order services. The onus will be on the developers in the South East growth area to propose the form of these links and ensure their delivery.

#### 7.0 A149 Roundabout and access improvements

The dualling the A149 eastern bypass was a measure considered during the first stage of the Mott MacDonald work. Although it did not score highly in the agreed appraisal process at the stakeholder workshop in August 2009, the view was that this longer term aspiration should not be forgotten due to its potential to reduce ratrunning through the town when there is congestion on the A149. In isolation dualling of the road may be of limited benefit unless congestion and delay experienced at the junctions also addressed.

To take this forward incrementally, measures to improve the existing junctions may be possible in conjunction with proposed developments. The key example is the Sainsbury superstore proposal which will provide improvements to the Hospital roundabout as well as a new roundabout on the A149 between the Hospital and Hardwick roundabouts.

The autumn 2010 Implementation Plan included the following actions:

 In partnership with the Borough Council work with developers (e.g. Sainsbury's) to secure the best level of transport improvement possible, but in keeping with policy, to facilitate sustainable development NCC/BCKL&WN -Ongoing

#### 7.1 Progress

As part of mitigation measures for two new superstores the A149 hospital roundabout has been improved and a new roundabout has been installed on the A149 between the hospital and Hardwick roundabout. The hospital roundabout improvement has been further enhanced by an extended free flow left turn from Gayton Road.

#### 7.2 Suggested way forward for the A149

It is recommended that NCC and the BCKL&WN continue to seek opportunities to improve the junctions on the A149 in relation to mitigation measures that will be required for the growth as set out in the emerging Local Plan.

#### 8.0 Strategic cycling network

King's Lynn has higher proportions of cycling and walking than Norfolk or regional averages. Over the last 10 years, as part of the Local Transport Plan and the capital programme, a number of walking and cycling routes have been improved some of which serve connections between employment and residential areas. In the past studies have also been carried out looking at providing connections to the key cycle paths. However, we do not currently have an identified "strategic cycle network" upon which we can focus any potential improvements. With a defined network we can, consider any gaps and potentially identify low cost measures that can be implemented for quick wins.

The autumn 2010 Implementation Plan included the following actions:

 Develop a strategic cycle network for King's Lynn upon which to identify targeted and affordable improvements to secure quick wins if possible NCC/BCKL&WN – February/March 2011

#### 8.1 Progress

No work has been progressed to develop a strategic cycle network to date. This is largely as a result of particular Norfolk County Council staff leaving and the remaining available resources being reduced in response to severe funding cuts and the lack of funding to deliver schemes.

#### 8.2 Suggested way forward for the Strategic cycling network

Discussions are currently in hand at the County Council to determine how a strategic cycle network for King's Lynn can be developed.

Ian Parkes - 17 March 2014

Appendix 2 Indicative thresholds for transport assessments