## Appendix 2c

# Melton Mowbray Transport Study : Melton Bypass Options Testing April 2015

## Summary

**The full report is attached as an Appendix to this report and is available to view and download at:**

https://www.dropbox.com/s/g1rdrklcvzr5npe/Melton%20Mowbray%20Bypass%20Report%202015.pdf?dl=0

1.1 The evidence contained in the Report supports the formulation of policies in the new Local Plan which will include a preferred approach to the delivery of Highways infrastructure in Melton Mowbray.

1.2 The study builds upon previous work and the previous position statement summarised recent transport evidence including:

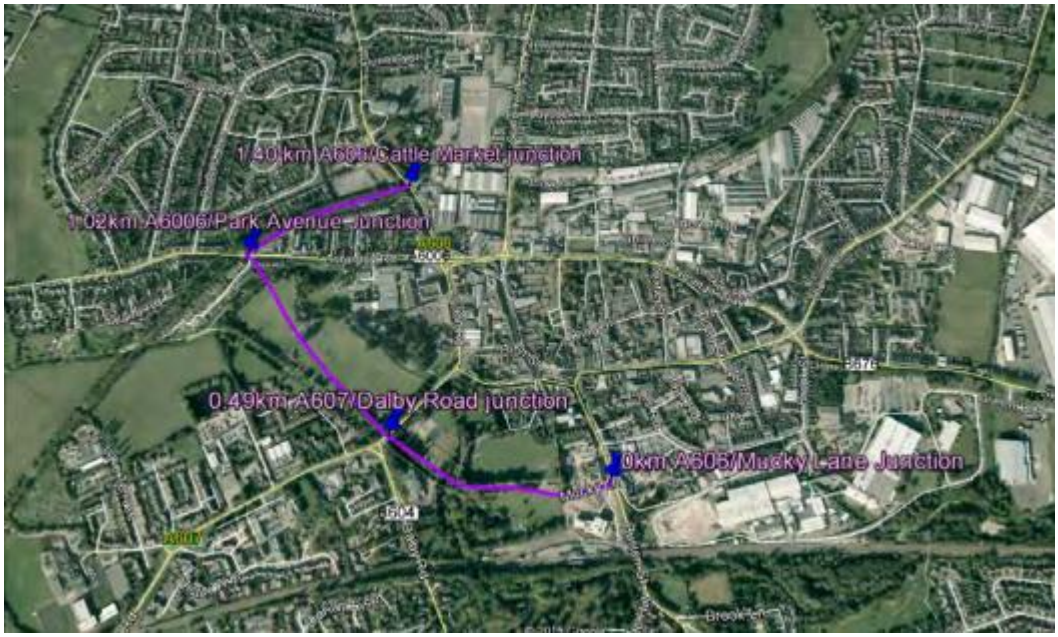
- Melton Mowbray Cumulative Development Transport Impact Study
- Melton Mowbray Transport Study – Phase 1
  (i)Stage 1 – Through Traffic Movements
  (ii) Stage 2 – Non Through Traffic Movements

1.3 These studies identified the capacity of the existing road network, how close current traffic levels are to filling or exceeding that capacity and what the impact would be of around 2500 additional houses in and around Melton Mowbray. 2500 is derived from the current level of interest rather than the Local Plan allocation, which is likely to exceed this quantity.

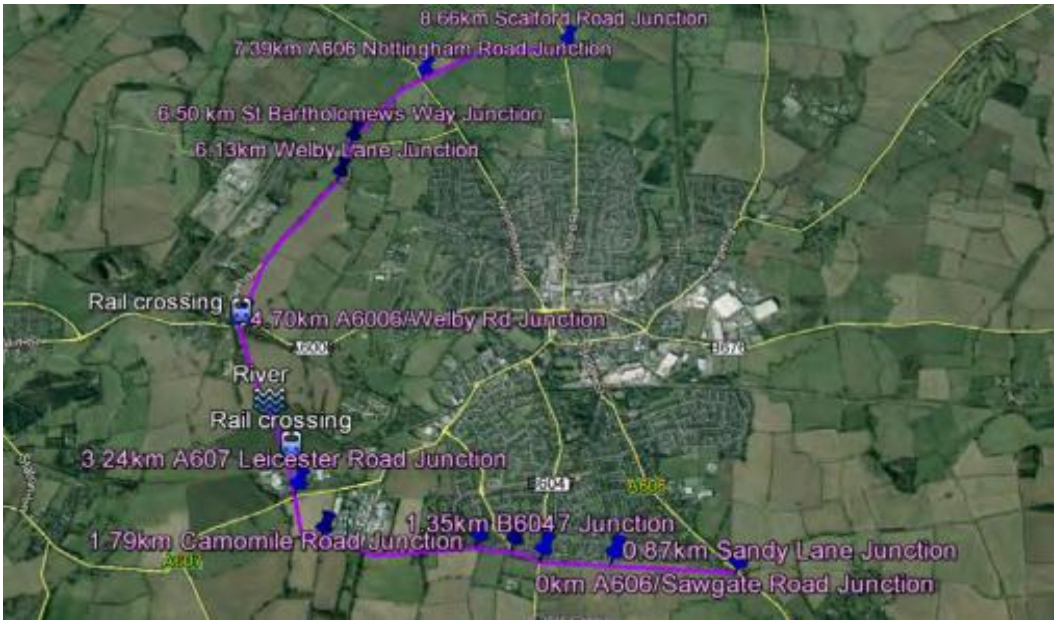
1.4 These studies have already established that the existing network cannot accommodate that level of growth without severe delays to journey times, and therefore strategic infrastructure investment is required, in order to facilitate the overall growth that the town requires.

1.5 This study examines two potential bypass options that have been identified:

- Option-1 considers a 1.4km 'Inner Bypass' starting from A606/Mucky Lane Junction and heading northwards via A607/Dalby Road junction in the west and A6006/Park Avenue Junction before tying in with the A606 at the Cattle Market junction. The Inner-Bypass is two lane, single carriageway 30 mph road with new or upgraded signalised junctions.




- Option-2 is an 8.7 km long 'Outer Bypass', starting from the A606/Sawgate Road junction south of the town and running westwards via Kirby Lane towards the A607 (Leicester Road) where it bisects the existing Chetwode House complex. It would then run north-west along the Welby Road and Welby Lane alignment until it reaches the A6006. A north-easterly route is then followed from the A606 towards A606 (Nottingham Road) and Scalford Road.




**These suggestions are entirely generic at present, i.e they do not include specific routes or designs.**

1.6 The Inner Bypass modelling aims to reduce the existing congestion in the town centre, along with additional congestion associated with growth, by encouraging traffic to bypass the town centre particularly movements between the north, south and west. Its tight alignment, keeping close to the town centre, means that the bypass is likely to be used by local traffic as much as longer distance through traffic, but is less likely to attract traffic from routes which do not already pass through the town centre. In the absence of an alternative route, the junctions along the town centre roads such as Norman Way, A606 Burton Road, A607 Thorpe End, Sherrard Street and Leicester Street and A606 Wilton Road will become more congested. By providing a new north-south connection across the town, an Inner Bypass would offer relief at these congestion hotspots.

1.7 It is envisaged that an Inner Bypass would be a completely new single carriageway alignment with a relatively short length of 1.4 kilometres and a speed limit of 30 mph. In current prices the cost estimate amounts to £9.6 million +/- 40% which excludes VAT, inflation and project/design fees.

1.8 The Outer Bypass has a more strategic alignment than an Inner Bypass in that whilst it intercepts many of the same radials out of Melton Mowbray, it is also more likely to attract traffic from other strategic corridors north-south and east-west through the town. It is also expected to provide an alternative for long distance traffic to alleviate congestion within the town centre, at the point of approaching the town. It is however, less likely to capture very local traffic movements around the town itself but could potentially attract traffic from routes which do not currently pass through the town.

1.9 The Outer Bypass alignment as proposed takes into account the locations of the cumulative development sites and would provide connections between these developments and other outer areas of the town. To keep impact to a minimum the bypass would maximise use of existing road alignments particularly Welby Road and Kirby Lane. The total length of the wide single carriageway bypass is 8.66 kilometres. In current prices the cost estimate amounts to £47.0 million (+/- 40%) which excludes VAT , inflation and project/design fees.

1.10 The report examines the impact that the options would deliver in terms of the following measures:

- Flow Changes;
- Changes in Volume/Capacity ratios;
- Changes in delay per vehicle;
- Changes in Journey Times; and
- Changes in route speeds and delay per mile.

1.10 The study examines the impact that an ‘inner’ solution would have on these factors and concludes that there would be significant benefit against all measures. It would alleviate traffic flows on existing roads within the town centre by up to 500-600 vehicles (peak hour) but clearly would not reduce traffic on the approach roads such as Nottingham Rd, Burton

Rd, Leicester Rd etc. It would have the effect of reducing congestion at all key junctions from exceeding 100% capacity (which would be the case with no intervention), although several junctions would remain in the 85-100% band and as such would be at full operational capacity with no scope to accommodate further growth (beyond 2500 homes on which the study is based) or to cope with fluctuations in traffic flow. The report also identifies some variations in driver behaviour in terms of 'rat running'.

1.11 The study undertakes a similar exercise regarding an 'outer' option and explains the very significant benefits that this would bring, i.e removal of up to 1500 vehicles from the town's existing infrastructure at peak times. It proceeds to explain the impact of such change and predicts that all of the key junctions within the town centre would be brought to within capacity, with the exception of junctions at the eastern end of Norman Way (Thorpe End/Thorpe Road junctions etc) which would be largely unaltered. This is because it would provide limited benefit for 'internal' movements within the built up area of Melton Mowbray. The report explains that the capacity created by such a solution would be greater than the additional traffic growth anticipated from 2500 dwellings and also more than the 'inner' solution.

1.12 Finally the report compares the benefits of the 'inner' and 'outer' options and demonstrates that the latter would have significantly greater benefits, approaching double that of the 'inner' option.

**1.13 Overall conclusions:**

It should be stressed that both options are conceptual at this stage and some considerable refinement would be required if further study of either of these routes is to be undertaken.

1.14 The modelling suggests that the Outer and the Inner approaches provide a distinct set of options for Melton at either currently anticipated, or potentially higher levels of growth.

1.15 The present modelling shows:

- with an inner bypass in place traffic on the roads in the town centre (such as Wilton Road, A606 Nottingham Road, A606 Burton Road and B6047 Dalby Road) will significantly reduce, however there are predicted to be some increases in traffic on North-South through routes (such as Nottingham Road and Burton Road)
- The outer bypass has much wider implications in terms of diverting North-South and East-West movements. Asfordby Road, Burton Road, Leicester Road and Nottingham Road also see significant reductions in volumes, as a consequence the town centre roads (such as Wilton Road, A606 Nottingham Road, A606 Burton Road and B6047 Dalby Road) are also expected to have a significant reduction in traffic volumes

1.16 For the Inner option, there would also seem to be merit in an additional, partial Outer option, particularly the element of the proposed development link road to the south of the town.

1.17 It is unlikely that the best long-term solution would be an Inner Bypass, supported by a full Outer Bypass, so this is an important consideration for the Local Plan. An 'inner' solution

would not create the capacity anticipated to be necessary for the level of provision anticipated by the Local Plan and would also provide no capacity for growth in the longer term.

1.18 Given the costs of the Outer Bypass it is unlikely that this could be delivered by 2,500 dwellings alone, and that additional local contribution, DfT, Local Growth Fund or LEP funding would be required to facilitate its deliverability.

1.19 The modelling suggests that a bypass option would form a sensible, proportionate backbone to an integrated package of measures for Melton, with the Inner Bypass generally well matched to the cumulative development impact of up to 2500 dwellings, but an Outer Bypass providing additional benefits to all routes in the town, to a significantly greater extent, i.e meeting the impact of the current levels of growth anticipated and providing additional capacity for future demand. The overall benefits of the Inner option are restricted to town centre junctions and to delivering traffic relief in the short term.

1.20 The Outer Bypass thereby offers a longer-term solution to the town, and is therefore a more strategic solution. Delivery of this option does however require either significantly higher levels of growth, or external and multidimensional funding being realised.

**2. Next Steps**

2.1 The Highway Authority is seeking to secure internal funding to develop the design of the 'outer' option into a complete workable design, at its Cabinet meeting scheduled to take place on 11th September 2015. However, their funding will not support the entirety of the design work and it is proposed to submit a report to a Special Meeting of Full Council on 24th September 2015 seeking a contribution from Melton BC of £400,000 for this purpose (funded from the NHB Reserve). The total cost of design work is estimated to be £1.5million and an applications to the LLEP has been made (and other sources that may become available) to complement this package.

2.2 At the same meeting it is also proposed to submit a paper to Full Council seeking authority to receive contributions from developers towards the 'outer' solution. This will set out why it is desirable to do so in advance of publication of the local plan in order to 'unlock' development in Melton. This contributions strategy will provide the means of ensuring development can take place by providing a meaningful contribution to the outer relief road in advance of strategic allocations being made in the local plan. This approach should help to address the increasing shortfall in housing supply and the emerging trend of a dispersed pattern of poorly co-ordinated housing sites , and the risks of unsustainable patterns of development with an absence of significant developer contributions towards the highway solution.

2.3 One aspect of this approach will be the need to recognise that a contributions strategy will inevitably mean that traffic conditions may worsen in the short term, until a solution (or coherent parts of a solution) have developed to a stage where they have connected and start to impact in terms of mitigation/relief, i.e. that a single development's contribution

may, in itself, not provide any mitigation but will do so once it links to a similar approach on adjacent or ‘downstream’ site(s).