

Draft Final Report

Background to Scrutiny Review

1. This topic was originally registered by Cllr Tracey Simpson-Laing in April 2005 in an effort to access the draft of the second Local Transport Plan (LTP2) prior to its submission. It was envisaged that the scrutiny process would ensure that LTP2 met the aspirations of the Planning & Transport Panel and allow time for the Executive Member to be questioned on issues of concern. A decision was taken to defer the topic and LTP2 was subsequently submitted.
2. In November 2006 Scrutiny Management Committee (SMC) reconsidered the topic registration suggested by Cllr Simpson-Laing, together with a draft remit for a revised scrutiny review focusing on tackling traffic congestion. After due consideration, SMC agreed a timeframe of six months for the review, and the following amended remit was agreed:

Aim

To identify ways including Local Transport Plans 1 & 2 (LTP1 & LTP2) and other evidence, of reducing present levels of traffic congestion in York, and ways of minimising the impact of the forecast traffic increase.

Objectives

Having regard to the impact of traffic congestion (based on external evidence and those measures already implemented in LTP1 or proposed in LTP2), recommend and prioritise specific improvements to:

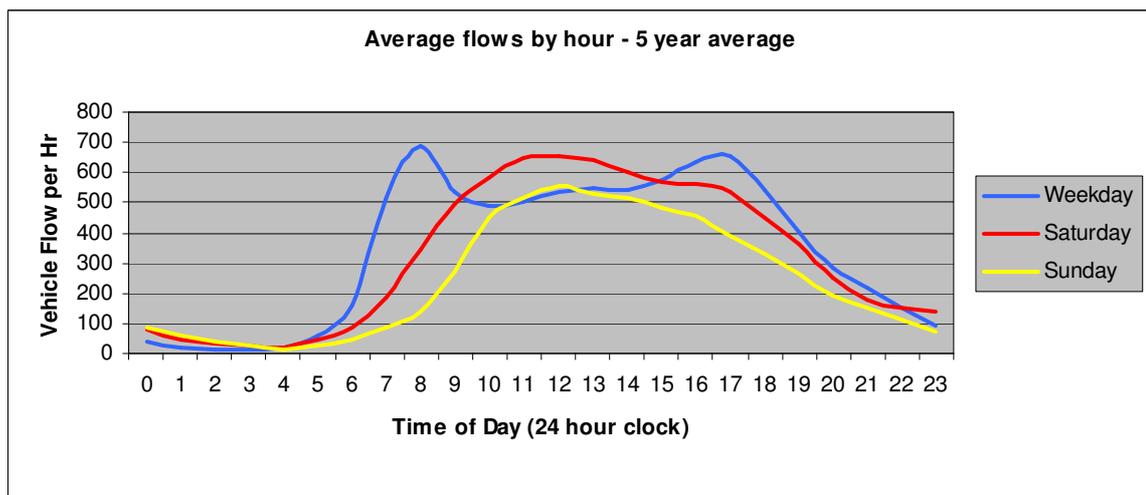
- i. Accessibility to services, employment, education and health
- ii. Air Quality, in particular looking at the five hotspots identified in the LTP2
- iii. Alternative environmentally viable and financially practical methods of transport
- iv. CO₂ Emissions
- v. Journey times and reliability of public transport
- vi. Economic Performance
- vii. Quality of Life
- viii. Road Safety

Background to Congestion Issues

3. Officers gave a number of briefings to the Committee of the congestion issues faced in York. For practical purposes, congestion was defined as 'where traffic flow exceeds 85% of the road / junction capacity'. This definition was adopted as

below that level traffic generally flowed smoothly but above that level flow became unpredictable causing disruption leading to reduced or no free flow.

4. To understand the serious growth and spread of congestion on the principal road network in York, the Committee was presented with information on the modelling work undertaken by Halcrow in 2005. This work was produced using a new traffic model (replacing the various Saturn models that had been used since 1988) and looked at the peak traffic flow (weekday mornings 7am – 9am). It compared the traffic levels for 2005, against the projected 2011 LTP2 based do minimum, the 2021 do minimum & the 2021 do something – See Annex A.
5. The future projections took into account both the additional traffic from anticipated employment and residential development such as York Northwest, University Campus 3, Germany Beck, Derwenthorpe, and Hungate etc and the LTP2 congestion tackling measures i.e. outer ring road junction improvements, Park & Ride expansion, and network management improvements for bus and cycle routes.
6. In common with most other cities, traffic flows in York (and associated congestion levels) vary greatly by time of the day, and by day of the week. The graph below shows the typical traffic flow patterns for weekdays, Saturdays, and Sundays over a selection of main roads in the City.



7. It is generally accepted that the worst periods for traffic congestion are during the early morning and late afternoon periods on weekdays, as the highest flows show in the graph. However, there are now similar levels of flow experienced on Saturdays, from late morning to early afternoon.
8. Officers also identified a number of other impediments to traffic flow not listed in the objectives of this review which contribute to congestion. The Committee took time to look at these in order to fully understand all of the factors facing the city (as detailed in Annex B).

Consultation

9. This review has been progressed in consultation with the Assistant Director of City Development & Transport, the Environmental Protection Manager and other key officers in City Strategy. Representatives of the local bus service providers and

the Chair of the Quality Bus Partnership were consulted in relation to Objective (v) - Journey times and reliability of public transport. A number of consultation events were also held. These looked at Road User Charging (presented by Capita Symonds), the 'Broad Strategic Options Available to York' (presented by the Assistant Director of City Development & Transport) and 'Quality of Life' (presented by Professor John Whitelegg).

Review Objectives - Information Gathered

10. Accessibility to services, employment, education and health

Consultation carried out as part of LTP2 found that improving access to services for all was the second most important priority for York residents, after reducing congestion. A 'Citywide Accessibility Strategy for York' was therefore developed as part of LTP2, in partnership with land-use planners, healthcare providers, education bodies, Jobcentre Plus, retail outlets, transport operators and community groups. The first stage of this strategy was to carry out a strategic audit, in order to identify local needs and objectives. As a result, action plans containing a range of solutions and available options were developed for the following key areas:

- **Access to York Hospital** – mapping identified the time taken to travel by public transport to the hospital from different areas of the city;
- **Transport information** – mapping identified that improved real-time information together with better publicity of the bus route network would improve public confidence. Also improved signage would encourage the use of pedestrian / cycle networks;
- **Access to out-of-town centres** – mapping identified a demand for responsive transport. A contribution from developers and the introduction of orbital / cross city bus services was required;
- **Rural accessibility problems** - mapping identified a demand for responsive transport and an improved public right of way network. It also recognised the need to support cross boundary services; and
- **Access to education** - mapping identified the time taken to travel by public transport to secondary schools across the city.

11. Air Quality

There are currently five technical breach areas in York's Air Quality Management Area (AQMA), where levels of nitrogen dioxide caused mainly by vehicle exhaust emissions exceed the annual objective. These are:

- Fishergate
- Gillygate
- Lawrence Street
- Holgate Road
- Nunnery Lane

12. Improved air quality was one of the four key aims of LTP2, which contains an Air Quality Action Plan to limit the average nitrogen dioxide concentrations to $30\mu\text{g}/\text{m}^3$ by 2011. If the plan is implemented as recommended within the AQMA, the annual average nitrogen dioxide objective will be met in most locations by 2011, although there will still be some exceedances in the technical breach areas. It should be noted that the predicted reductions are due mainly to cleaner vehicle

technology and not measures in LTP2, and any increase in vehicle numbers may eventually negate this reduction.

13. Outside of York's AQMA, current concentrations in Fulford Main Street give rise to serious concerns. As there are significant levels of further development planned for this area, it is recognised that a further AQMA may need to be declared if there is no improvement.

14. CO₂ Emissions

It is recognised that there is limited scope at local level for moving towards alternative fuel technology as this is predominately a matter for national Government and the motor vehicle industry. This Committee did however recognise the following broad approach to reducing transport based CO₂ emissions:

- Reduce the need to travel, and the length of journeys
- Undertake maximum number of journeys by environmentally friendly modes
- Maximise the uptake of car sharing
- In short term switch to lower carbon emission fuels and maximise engine efficiency
- In medium term switch to non-carbon based fuels
- Improve driving standards / training, to drive fuel efficiently
- Reduce congestion and engine idling

15. Alternative environmentally viable and financially practical methods of transport

There is ample evidence to support the view that the volume of vehicles using our highways is now damaging the local environment enjoyed by local residents, both through their presence and the noise and pollution they generate. Therefore, the core aspects for any 'environmentally friendly transport' are that it has a minimal polluting impact, it is quiet and it is only used when and where absolutely necessary.

16. York has a high level of short commuting trips (56% of commuting trips by York residents were less than 5km in 2001). This suggests that walking and cycling could be important in providing an alternative mode of transport for commuters and therefore particularly effective at helping to reduce congestion at peak times. At present 12% of York's commuters travel by cycle and 14% walk. With the right policies and facilities there is significant potential for increasing these levels with the added benefit of improved health.

17. LTP2 has a range of initiatives targeted at increasing the share of cycling and walking in York. However, it needs to be recognised that these modes neither suit all journeys or are attractive to everyone. The young, the elderly and those with young children are target groups, but there are constraints to growth in these areas.

18. Although much has been done in York in the past to encourage cycling, this approach has faltered and the increase in cycling's share of the travel market has remained largely static for a few years. Equally, walking has been encouraged but this also seems to have reached a point where additional trips are not being made. It is recognised that modern lifestyles and the layout of the city are constraints that could continue to result in a continued demand for motorised vehicle-based travel. If these issues can be addressed, there is the potential for increasing York's cycle

usage in line with the much higher levels of cycling in many European towns and cities.

19. To a degree, the demand for vehicle trips could be accommodated by public transport, be it multi passenger type vehicles or taxis/private hire. These 'shared' vehicles could be of an environmentally friendly type and thus provide transport at a reduced cost to the environment. However, given an option, individuals would generally opt for the use of their own private transport because of its perceived advantage over the disadvantages of shared / public transport.

20. Journey Times and the Reliability of Public Transport

As part of this review, a week long survey of a cross-section of York bus and Park & Ride services was carried out in June 2007, and a number of issues were identified. These included:

- a comparison between timetabled arrival times and actual arrival times at surveyed stops both on and off peak showed significant variation between the two. On some services the variation was as much as 4 minutes early and 4 minutes late on a timetabled 10-minute frequency.
- None of the services looked at consistently met their published timetable throughout the day or even a substantial part of it.
- Only 66% of the buses running on 'Punctuality Improvement Partnership' (PIP) routes were 'Bus Location Information Sub System' (BLISS) enabled, therefore customer perceptions were that the information provided was unreliable. This was either to do with drivers not turning the equipment on or with vehicles not having the equipment installed, despite previous agreements with some operators.
- The cost of installing the BLISS system on one bus route was in the region of £10,000
- Unforeseen difficulties affecting journey times e.g. delivery vehicles in the town centre etc – it was recognised that the relocation of large delivery vehicles to transshipment centres could create problems elsewhere
- Problems with buses not adhering to the speed limit in an effort to stick to the timetable
- Variations in peak traffic flows during school holidays - it was confirmed that flow was between 8-10% lower and that this made a significant difference to reliability.
- The relative cheapness of the Park and Ride fares relative to local bus services – it was noted that this created a perverse incentive for local residents to drive to a Park and Ride site.
- The number of buses in operation that were still not Disability Discrimination Act (DDA) compliant
- The legal status of bus timetables - it was confirmed that the Commissioner would expect 95% of services to be on time, and if the timetable was not consistently met he could impose sanctions.
- The need to make clear to the public any changes to services i.e. Rawcliffe Bar Park and Ride where additional stops had now been added which resulted in a bus service rather than a high frequency express service

21. In 2001 Steer Davies Gleave Consultants examined the reliability of bus services in York and their final report highlighted reasons leading to unreliability that included dwell time, ticketing, congestion of the road network and money in the capital programme. Unfortunately, as was acknowledged by the chair of the

Quality Bus Partnership when he met with this committee in 2007, the issues relating to bus service unreliability are still very much the same today.

22. The above issues are not helped by the fact that not all bus stops have timetables or shelters, and where more than one Bus Company services the journey; passengers have to purchase more than one ticket to cross the city making such journeys particularly expensive, leaving aside the time penalties and inconvenience of changing services.

23. In an effort to find ways of influencing journey choice, the role of wider education and promotion campaigns was discussed. It was identified that no campaigns have been undertaken between 2002 and 2007 for financial and staffing reasons. Officers expressed the view that individualised journey planning i.e. through the 'Smart Travel' initiative, had major potential to influence choice and change people's travel patterns, and evidence from previous work (pilot in 2003) and recent work in Sustainable Cities & Cycle Demonstration Towns confirm this.

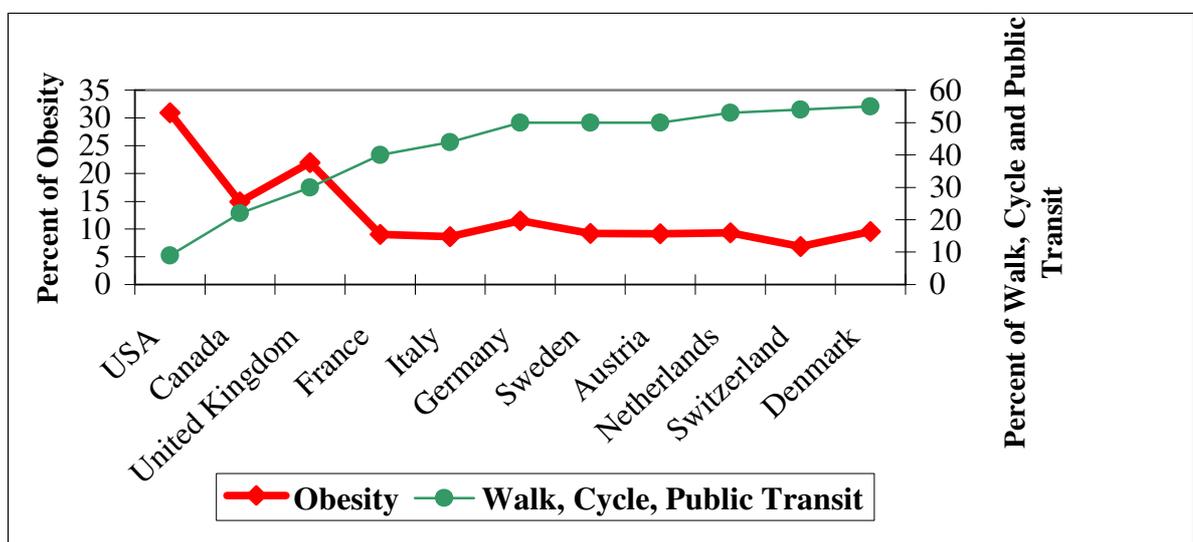
24. Quality of Life

It was recognised that traffic flow affects social interaction. For example, residents living alongside roads which experience high levels of motorised traffic are much less likely to make friends and acquaintances with others living in their road, compared to those living in areas with low traffic levels. Add to this the affects of noise pollution and poor air quality and the affect traffic can have on quality of life becomes clear.

25. In 2000, The World Health Organisation agreed guidelines for Community Noise, recognising that noise levels can have adverse effects on health causing annoyance, sleep disturbance, interference with communication, thereby affecting performance, productivity and human development. In children, noise can have a chronic adverse effect on cognitive development, memory, reading, and motivation. Health targets for Transport, Environment & Health set by Central Government aim to protect existing quiet areas, promote quietness and reverse the increase in noise pollution by introducing noise emission measures.

26. Air pollution can have psychophysiological effects, mainly cardiovascular e.g. ischaemic heart disease, hypertension and stress.

27. Choices in mode of transport can also have a long-term affect on health and quality of life. For example, obesity levels fall sharply with increased walking, cycling and use of public transport:



27. Road Safety

Many advances have been made in reducing road accidents, particularly for 'Killed or Serious Injury' accidents (KSIs). LTP2 aims to reduce KSIs by 45%. It is difficult to establish a direct link between traffic levels and accidents as increased congestion can result in lower traffic speeds, hence lower KSI risk, although, paradoxically, pedestrians may be willing to behave in a more unsafe manner to be able to cross a more busy road.

Analysis

28. As a result of all of the information provided during this review, the Committee have recognised the following:

29. Expected Increase in Congestion in York

Over the period of the City's first Local Transport Plan (2001-2006) peak-hour traffic flows remained very close to 1999 flows. Although the indicator for peak hour traffic showed traffic levels being fairly constant between 1999 and 2006, the indicator did not give any information relating to traffic levels either side of the peak period and hence any data pertaining to people commuting either earlier or later to avoid roads running at full (or over) capacity in the longer peak period.

30. Nationally, traffic growth between 1996 and 2025 could be in the range 52-82%¹ although recent actual levels show traffic growth at the lower rate York could face a 27% rise in traffic by 2016. Due to the geographical constraints and the city's historic character it is not possible to provide additional highway capacity at anything like the rate at which demand is increasing, and this has necessitated York's integrated approach to the provision of transport infrastructure since the 1987/88 MVA study, through to LTP1 and LTP2.

31. The property price boom over the past decade, the recent low levels of family housing construction in York, and the dispersion of businesses to the outskirts of the city have made it increasingly difficult to live near to places of employment. This added to the expansion of car ownership and generally decreasing motoring costs, is leading to greater population dispersion. Recent figures show that 22.5k workers commute into York from surrounding areas in comparison to 17k travelling out of the city for work. The need to relocate to more peripheral locations has necessitated longer journeys to work, which are often less suited to non-car options. Outside the main urban area, journeys are becoming increasingly more difficult to serve by public transport due to their varied nature serving a wider number of origins and destinations, along with reduced opportunities to satisfy needs locally due to a lack of local facilities and funding to provide public transport services.

32. Policy Driving Changes

Since 1997 central government has sought, through various white papers and the local transport plan system, to promote more sustainable and healthy travel by widening transport choice and reducing reliance on the private car. At a national level, more expansive programmes, such as the Transport Innovation Fund (TIF), seek to fund innovative 'package' solutions for tackling congestion. However, currently, a TIF package must contain some form of road user charging measure

¹ Source IAM motoring facts 2008

for it to be considered. The regional and local planning framework is described in more detail in Annex D.

33. The Local Transport Plan 2006-2011 (LTP2)

The strategy in LTP2 for tackling congestion is to build upon the successes already achieved by LTP1 and deal with the pressures from the growth in the economy. LTP2 predicts that, in the absence of its proposed package of measures, traffic levels will rise by 14% by 2011 with a further doubling to 28% by 2021.. The strategy proposed in LTP2 (as summarised in Annex C) seeks to limit this growth to 7% by 2011. The core strategies developed for LTP1 and LTP2 are still valid but have not yet been fully implemented due to constraints on resources. The key proposals identified in the LTP2 are to:

- increase the capacity of the Outer Ring Road (ORR) thereby reducing congestion in the city centre and creating road space to reallocate to buses, cyclists and pedestrians;
- provision of an orbital and cross city bus network – a viable and reliable orbital bus route will only be possible as a result of improvements to the ORR junctions;
- provide additional Park & Ride sites to intercept traffic on all main radials - the Council recently had a £20.8m bid approved by the Regional Transport Board, for inclusion within the Regional Funding Allocation programme to construct two new park and ride sites, one on A59, Harrogate Road at Poppleton and the other on the B1363, Wigginton Road together with a relocation of the Askham Bar site to a new site that will allow additional spaces and facilities to be provided. Each of these sites could also utilise the potential for a tram/train halt. The total cost of the scheme is £26.4m and will take an additional 0.5m cars off York's roads each year;
- manage demand through parking control and possibly access restrictions in the city centre;
- a further package of soft measures aimed at improving road safety, air quality, accessibility, safe routes to school, health and well being as well as enhancing education and the economy.

34. The maps in Annex A show that even with the congestion tackling measures included in LTP2, by 2011 there will be many principal roads in York where capacity will have reached and/or exceeded 85% during peak travel times, leading to reduced or no free flow. In addition, off peak and weekend traffic levels are increasing faster than ever before. By 2021, the projections are worse having taken into account the additional traffic from future employment and residential developments in York at University Campus 3, Germany Beck, Derwenthorpe, York Northwest, and Hungate.

35. To assess the impact that new development will have upon the road and transport networks, the Council maintains a multi modal model that combines both traffic and transport elements. Also within the model are the projected new developments and the infrastructure improvements expected to be delivered either through LTP2 and its successors, as well as any additional infrastructure delivered through major scheme bids such as Access York or through developer led

initiatives. It allows different development scenarios to be tested at both a macro and micro level and new developments are assessed to identify their impact upon the road network, which is very much driven by the type and content and extent of the development proposal.

36. The predictions for York were established on the basis of housing and employment growth contained in the Draft Regional Spatial Strategy (RSS). These have been superseded by higher levels of growth in the full RSS published in May 2008, particularly as employment growth is expected to outstrip housing provision, thereby, leading to more and longer commutes into the city.
37. Since the production of LTP2, other major land developments have been proposed and these are at various stages of planning e.g. York Central, British Sugar, Nestles and the Terry's site. Individually any one of these would have a significant impact on the local transport infrastructure with citywide effects, but when taken together could result in a major change in the city's travel patterns and demand for transport infrastructure. Therefore, it is clear that any additional development across the city in the coming years will worsen the significant adverse affects of the current high congestion levels.
38. The Committee recognised that additional congestion tackling measures would be required to compliment and work alongside those already included in LTP2 and extend beyond, if the expected rise in congestion levels are to be halted.
39. The Committee agreed that in order to raise awareness amongst York residents about congestion issues and to seek their views on the broad strategic options available to the city, it would be beneficial to carry out a citywide consultation exercise. The Committee could then use the findings to inform the decision on the best combination of additional measures required to supplement LTP2. The Committee have considered the surveys carried out as part of LTP1 & LTP2, and are in the process of agreeing the content and format for their proposed survey.
40. Findings From Residents Survey
The Committee will include the results from the proposed citywide consultation exercise at this stage in their final report in order to evidence residents views on the current congestion issues in York and the Committee's suggestions for improvements.
41. Transport Tools Available & Their Effectiveness
Significant achievements have been made to widen transport choice in the city, reduce the reliance on the private car, including keeping peak hour traffic levels close to 1999 levels and increasing bus patronage by 49%, through implementing the first LTP (2001-2006). LTP2 seeks to continue and build upon the measures in LTP1, but is unlikely to be enough in the longer term.
42. Many measures have or are close to achieving their maximum potential for restricting traffic growth at the level of investment to date and more extensive measures are likely to be required in the future, particularly if doubling York's economy by 2026 is to be realised. Failure to adopt this approach will result in this level of economic growth not being achieved. The various elements that could be considered are shown at Annex E.

43. Many cities face a situation similar to that of York. For example, Cambridgeshire County Council is currently in the process of working up a TIF bid for Cambridge which includes road user charging together with a complimentary programme of improvements to the transport network, and Nottingham City Council has recently approved the introduction of a workplace parking levy.
44. It is extremely unlikely that future LTP allocations will be sufficient to implement the full or even a significant part of the suggested strategy, so other more extensive funding sources will need to be secured. The most likely source is the Transport Innovation Fund (TIF)(Congestion), which has already been awarded by the Department for Transport (DfT) to some authorities to work up packages to address congestion that include some form of demand management. It is becoming more apparent that DfT's view is for local authorities seeking some of the TIF funding available (£290m in 2008-09 rising to £2550m by 2014-15), 'demand management' should include some form of road pricing.
45. Road Pricing is most likely to attract TIF funding and does generate a revenue income. However, the revenue collection and scheme operation costs need to be accurately assessed to determine if such a scheme is viable and sustainable.
43. Big Choice Options For Reducing Congestion
The Vision' for York as contained within the Sustainable Community Strategy states that we will make our mark by:
- Building confident, creative and inclusive communities
 - Being a leading environmentally friendly city
 - Being at the forefront of innovation and change with a prosperous and thriving economy
 - Being a world class centre for education and learning for all
 - Celebrating our historic past whilst creating a successful and thriving future
46. It is unlikely, at this stage, that this vision will change. However there is a need to bear in mind that York is part of the Leeds City Region and York's vision may, ultimately, be influenced by the Leeds City Region Vision and/or Multiple Area Agreement. An alternative vision suggested for the Long-term transport strategy's could be 'to enable the City's vision to be realised whilst enabling better access to and within the city in the most sustainable and affordable way possible'.
47. The elements considered worthwhile pursuing have been assembled in to a series of scenarios. These could be adopted either singly or in combination and could be implemented to either widen travel choice or manage the demand for travel. The results of an initial assessment of the various scenarios has been carried out. Annex F lists these scenarios in order of increasing ability to tackle the issues, but which also increase in cost and complexity, together with the expected contribution each element will make towards achieving the desired limiting of traffic. It also shows the optimum scenario (No.13) which is the proposed suggested strategy. It is recognised that these will need to be subjected to further testing.

Report Options

60. Having regard to the remit for this review and the information contained within this report and its associated annexes, Members may decide to:

- i) Amend and/or agree the suggested vision for York's long-term transport strategy as shown in paragraph 54
- ii) Amend and/or agree the proposed suggested strategy as shown in Annex E
- iii) Amend and/or agree the recommendations within this report

Implications

61. **Financial** - The financial implications associated with implementing the suggested long term transport strategy are outlined in paragraph 58. However in order to pursue these funding streams the options (scenarios) will need to be tested rigorously to confirm the validity of the suggested strategy which would require Council funding. At this stage it is unclear exactly how much funding would be required and this would need to be considered before any decisions were taken.
62. **Legal** - to follow.
63. There are no known HR, Equalities, Crime & Disorder, Property or Other implications associated with the recommendations within this report.

Risk Management

43. There are no known risks associated with the recommendations within this report.

Corporate Priorities

44. The implementation of the recommendations arising from this review will support the delivery of the following corporate priorities
 - 'Reduce the environmental impact of council activities and encourage, empower and promote others to do the same'
 - 'Increase the use of public and other environmentally friendly modes of transport'.

Recommendation

45. In light of the above options, Members are asked to:
 - i) Note all of the information provided in the report and annexes
 - ii) Agree any amendments to the report and/or additional information to be included therein, prior to its consideration by Scrutiny Management Committee
 - iii) Agree the wording for the suggested 'Vision' for York's long-term transport strategy
 - iv) Confirm which of the long term transport strategies (as shown in Annex F) is the preferred option of the Committee

Reason: To ensure full consideration of all the objectives, and the completion of the review within the agreed extended timeframe

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Final Draft Report Approved

Date 30 May 2008

Wards Affected:

All



For further information please contact the author of the report

Background Papers:

Traffic Congestion Interim Reports dates 28 January 2008 & 17 April 2008

Annexes

Annex A – Maps showing congestion levels in 2005, 2011 & 2021

Annex B – Additional Impediments to Traffic Flow

Annex C – LTP2 Strategy for 2006-11

Annex D – Summary of Regional and Local Transport Policy

Annex E – Potential Elements for a Long term Transport Strategy for York

Annex F – Long Term Strategy Scenarios For York