



Traffic Congestion Ad-hoc Scrutiny Committee

7 May 2009

Draft Final Report

Background to Scrutiny Review

1. This topic was originally registered by Cllr Tracey Simpson-Laing in April 2005 in order 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 without any pre-decision scrutiny.
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

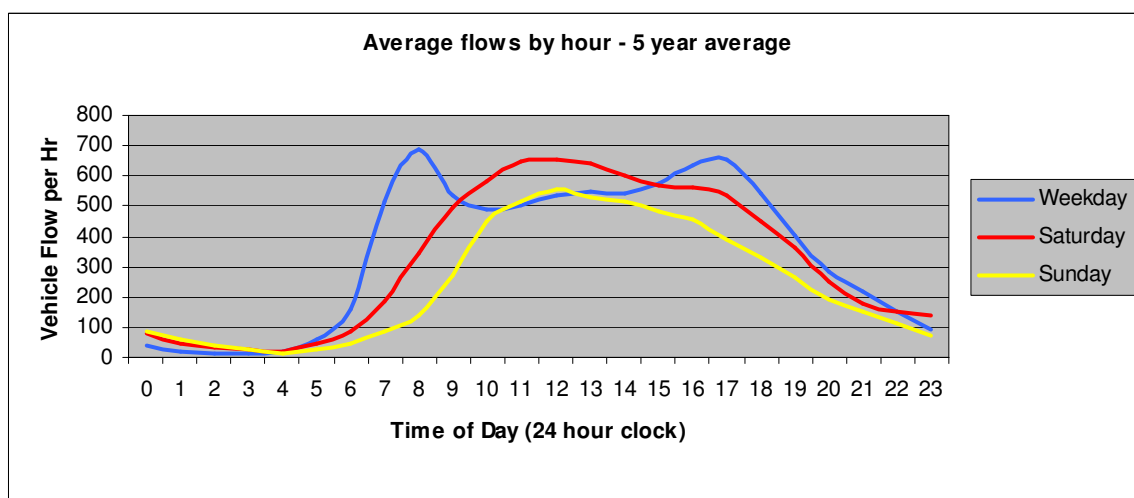
Having regard to the impact of traffic congestion (based on external evidence and those measures already implemented in LTP1 or proposed in LTP2), recommend and prioritise specific improvements to:

- i. Accessibility to services, employment, education and health
 - ii. Air Quality, in particular looking at the five hotspots identified in the LTP2
 - iii. CO₂ Emissions
 - iv. Alternative environmentally viable and financially practical methods of transport
 - v. Journey times and reliability of public transport
 - vi. Economic Performance
 - vii. Quality of Life
 - viii. Road Safety
3. In order to fully investigate and understand the affects that congestion has and the improvement areas identified within the remit above, Members held a series of meetings between November 2006 and June 2008, as detailed below:

Meeting Date	Improvement Area Under Consideration
19 February 2007	Consideration of Scoping Report
4 April 2007	Consideration of Interim Report - looking at specific improvement to 'Accessibility to Services, Employment, Education and health'
19 June 2007	Consideration of Interim Report and Presentations on Air Quality & Accessibility Mapping i.e. the analysis of alternative public transport scenarios
17 July 2007	Consideration of Interim Report – looking at 'Alternative environmentally viable and financially practical methods of transport', 'CO ² Emissions' & 'Journey times and reliability of public transport'. The Chair of the Quality Bus Partnership and representatives from the bus companies attended the meeting
4 September 2007	Consideration of Interim Report – looking at smarter choice options, sustainable fuels and York vehicle fleet statistics
25 September 2007	Consideration of Interim Report – summarising the possible solutions identified by this committee in relation to objectives (i)-(v), the recognised impact of the suggested solutions, and the resulting draft recommendations
16 October 2007	Consideration of Interim Report - looking at impediments to traffic flow
19 November 2007	Consideration of Interim Report - looking at the national & local perspective on school travel, the modes of transport used by pupils in York schools, and the cycling issues faced in York
12 December 2007	Consideration of Interim Report - looking at ways of optimising the network and Revised draft table of findings, identified solutions with impact evaluation, and draft recommendations
16 January 2008	Consideration of Interim Report – detailing the options for consulting with York residents on the broad strategic options
18 February 2008	Presentation from Capita Symonds re Road User Charging
27 February 2008	Presentation from CYC officers re Broad Strategic Options available to the City
10 March 2008	Presentation from Professor John Whitelegg re Quality of Life
17 April 2008	Consideration of Interim Report – looking at 'Road Safety' and a briefing paper on the various elements which make up the broad strategic options available to the City
21 May 2008	Informal meeting to discuss: <ul style="list-style-type: none"> • the possible content of Annex F i.e. the scenarios and combinations of scenarios which could form a long-term transport strategy for the City • the layout and content of the proposed city-wide consultation exercise
12 June 2008	Consideration of the first draft of the final report, prior to its inclusion as an annex to the SMC report requesting the relevant funding to carry out the consultation exercise

Background to Congestion Issues

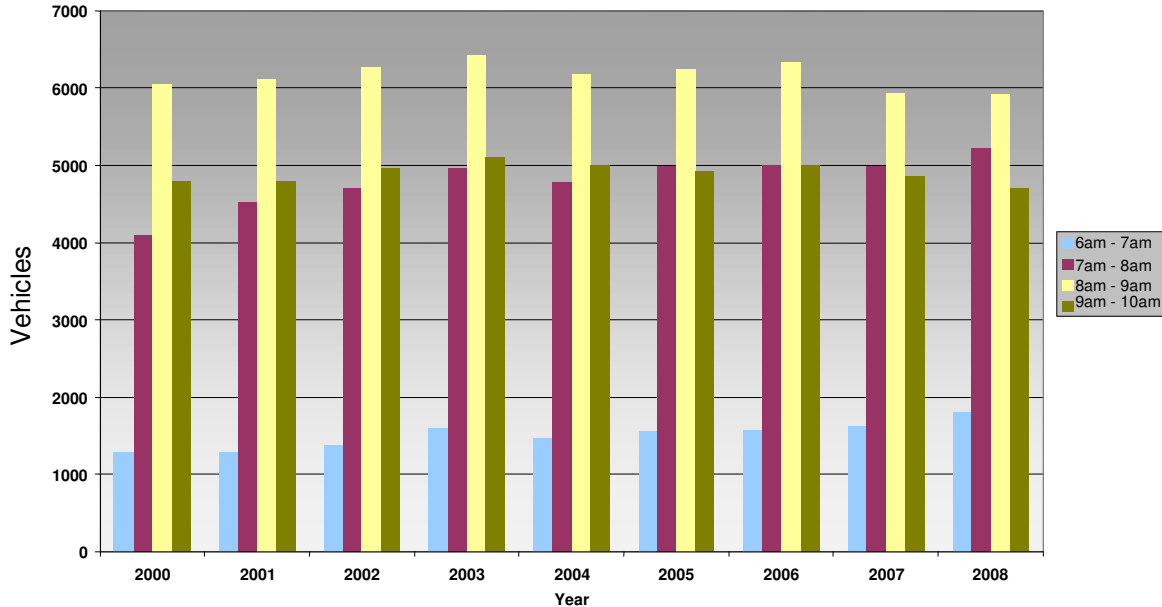
4. Officers gave a number of briefings to the Committee on the congestion issues faced in York. For practical purposes, congestion was defined as ‘where traffic flow exceeds 85% of the road / junction capacity’. This definition was adopted as below that level traffic generally flows smoothly but above that level flow becomes unpredictable causing disruption leading to reduced or no free flow.
5. 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 for the LTP2 submission. This work was initially produced using the older versions of the council’s Saturn model, which was later replaced by a new Saturn/multi-modal model in 2006. Within the model were the projected new developments and infrastructure improvements expected to be delivered through LTP2 and its successors, and any additional infrastructure delivered through major scheme bids such as Access York or through developer led initiatives. It allowed different development scenarios to be tested at both a macro and micro level and new developments were assessed to identify their impact upon the road network, which was very much driven by the type, content and extent of the development proposal. The modelling 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 Aa.
6. The future projections took into account both the additional traffic from anticipated employment and residential development such as York Central, 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. It did not take into account York Northwest (i.e. York Central plus the British Sugar works) or more recent development opportunities such as Terrys and Nestlé’s.
7. In common with most other cities, traffic flows in York (and associated congestion levels) vary greatly by time of day, and by weekday. The graph below shows the typical traffic flow patterns for weekdays, Saturdays and Sundays over a selection of main roads in the City.



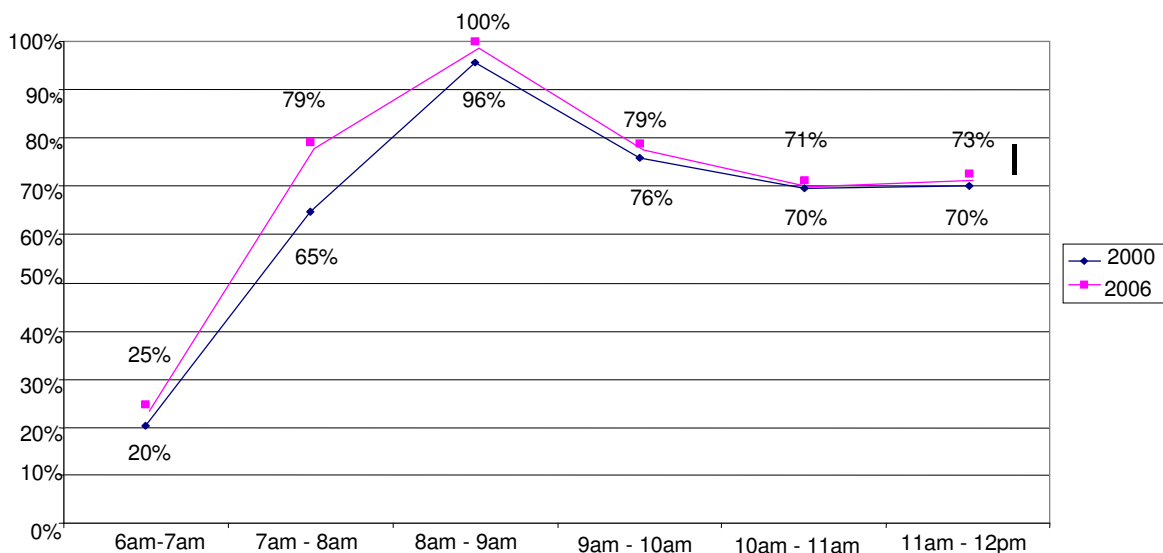
8. It is generally accepted that the worst periods for traffic congestion are during the early morning and late afternoon periods on weekdays, as the highest flows show in the graph. However, there are now similar levels of flow experienced on Saturdays, from late morning to early afternoon. These average results hide particular hotspots on certain days and at certain times. There is also evidence of the peak period spreading as a result of drivers responding to congestion:

Peak Spreading - based on average hourly weekday counts
(Data from 11 inbound automatic Traffic Counters)

Hull Rd, Fulford Rd, Bishopthorpe Rd, Tadcaster Rd, Wetherby Rd, Boroughbridge Rd, Shipton Rd, Wigginton Rd, Haxby Rd, Huntington Rd, & Malton Rd



Graph showing 2000 & 2006 percentage split by hour of AM traffic levels in the City of York
(data taken from 11 Inbound Automatic Traffic Counters)



9. 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 - see Annex B.

10. Establishing a more extensive 'toolkit' to tackle congestion

The Council's Intelligent Transport Systems Strategy has a central role to play in the development of transport in the city and will be vital in meeting the aims in LTP2 (and beyond) through both management of the City's road signalling network and information systems. It also has the potential to:

- promote public transport and cut car use by improving journey reliability for buses;
- provide better public transport & traffic information through a wide range of electronic media e.g. mobile phones and display screens;
- provide more accurate real time information;
- enhance the functionality of traffic signals through the 'Freeflow' project

Consultation

11. This scrutiny 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) see Annex Ai, 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). Reference has also been made to national Government policy documents and the Council's mid-term report on LTP2 dated November 2008.

Review Objectives - Information Gathered

12. The following sections summarise the areas / issues looked at and a matrix outlining the issues, potential solutions, impacts and draft recommendations is shown at Annex Af.

13. 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.

14. Subsequent to the submission of LTP2 there was a hiatus in the Accessibility mapping work due to the lack of resources in City Strategy. The Committee were pleased to note that this had now been addressed and the work re-commenced. However, the Committee recognised that to be really beneficial, this work would need completing, conclusions identified, and means of implementing the necessary solutions fed into future policy and programmes.

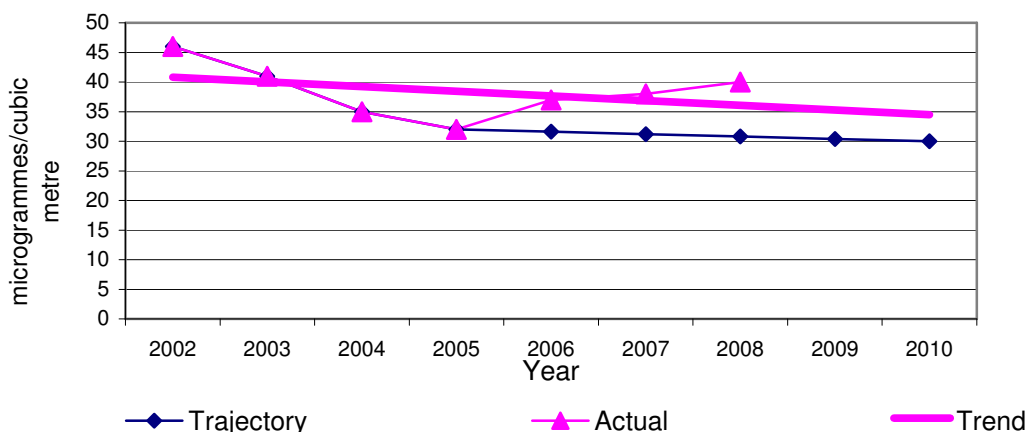
15. Air Quality

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

16. 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. It was expected that if the plan was implemented as recommended within the AQMA, the annual average nitrogen dioxide objective would have been met in most locations by 2011, although there would still be some exceedances in the technical breach areas. Subsequent monitoring has shown worsened levels in the last two years, which now casts some doubt on this. It should also be noted that the predicted reductions were due mainly to cleaner vehicle technology and not measures in LTP2, and any increase in vehicle numbers may eventually negate this reduction:

Air Quality Indicator



17. 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. Similarly, work done in regard to the recent Terrys factory site

planning application identified concerns of additional potential AQMA implications at the top end of Bishopthorpe Road from that development.

18. Overall, the Committee is less than convinced that the air quality management strategy has the strength or urgency to address the continuing problem and threat to local residents health in the current and potentially affected areas. They recognised that a more radical approach to reducing the volume of traffic and congestion in those areas is required.
19. 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 the EU, National Government and the motor vehicle industry. In isolation, the technological improvements currently anticipated are expected to result in a 14% reduction in CO₂ emissions from 2001 to 2020.
20. The issue of CO₂ emissions was also recently picked up in a Government discussion paper 'Towards a Sustainable Transport System' which was responding to the Stern Report on the Economies of Climate Change, the Eddington Transport Review and the recently passed Climate Change Act requiring an 80% reduction in the UK's CO₂ emissions.
21. The way transport could meet its share of this massive reduction target was outlined in the July 2008 Carbon Pathways Analysis, which showed that transport represents 20% of the UK's domestic emissions and that road traffic accounts for 92% of that total. This was further broken down to show that car journeys represent 58%, light vehicles 15%, buses 4% and HGVs 20%. As 57% of car journeys are under 5km, greener modes of travel would offer a major potential alternative and could be the focus for local policies. The paper also noted the high carbon footprint of business and commuter travel i.e. larger cars, low occupancy and travel in congested fuel inefficient conditions. In acknowledging the lead role for national Government, the committee also understood the clear role local policy and actions could play in supporting and encouraging modal shift and reducing people's need to travel.
22. The Committee therefore recognised the following broad local policy approach to reducing transport based CO₂ emissions:
 - Reduce the need to travel, and the length of journeys
 - Undertake the maximum proportion of journeys by environmentally friendly modes
 - Optimise 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 (although need to be mindful of recent evidence that suggests growing crops for bio-fuels may be contributing to third world deforestation and food shortages, hence affecting food prices)
 - Improve driving standards / training, to drive fuel efficiently
 - Reduce congestion and engine idling
23. 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.

24. York has a high level of short commuting trips (57% of commuting trips by York residents were less than 5km / 3miles in 2001). This suggests that walking and cycling could provide an alternative mode of transport for York's commuters and therefore be 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 clear cut benefit of improved health.
25. LTP2 has a range of initiatives targeted at increasing the share of cycling and walking in York. However, officers argue 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.
26. 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 has also reached a point where additional trips are not being made. It is recognised that without work to influence attitudes and provide alternatives, 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, the Committee recognise there is potential, supported by the recent successful bid for 'Cycling City' status and funds, for increasing York's cycle usage in line with the much higher levels of cycling in many European towns and cities.
27. In regard to walking, the Committee would like to see an initiative similar to 'Cycling City' set within a wider public approach to encouraging modal shift, and tackling perceptions of danger.
28. To a degree, the demand for trips could also be accommodated by public transport, be it multi passenger type vehicles including community transport and specialist services like 'Dial-a-Ride', 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 without wider public campaigns, improved alternatives and/or financial incentives, given an option individuals would generally use their own private transport because of its perceived advantage over the disadvantages of shared / public transport.
29. 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 were undertaken between 2002 and 2007 for financial and staffing reasons. The Committee were informed that individualised journey planning through the 'Smart Travel' initiative, had major potential to influence choice and change people's travel patterns, and evidence from previous work (York pilot in 2003) and more recent work in Sustainable Cities & Cycle Demonstration Towns confirm this i.e. the towns of Worcester, Peterborough & Darlington focussing on personalised transport planning with 56,650 households at under £20 /head, achieved 9% reduction on car

journeys, and 13%, 15% and 12% increases in walking, cycling and use of public transport respectively¹ The Committee endorsed officer's view that the 'Smart Travel' initiative was a key measure to be pursued in York in the future.

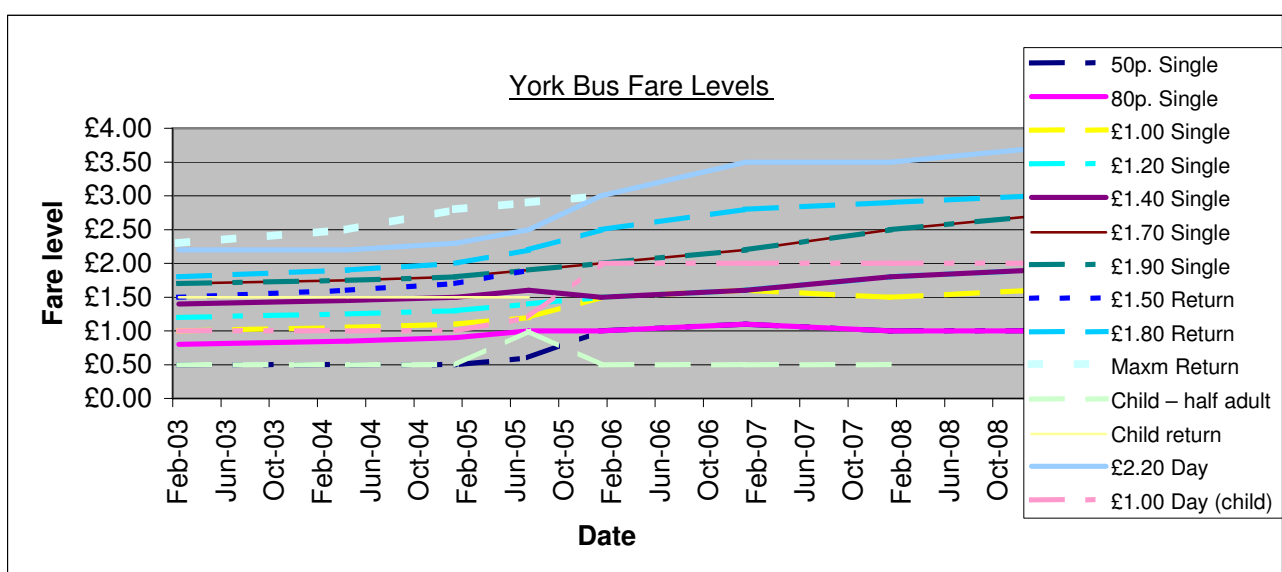
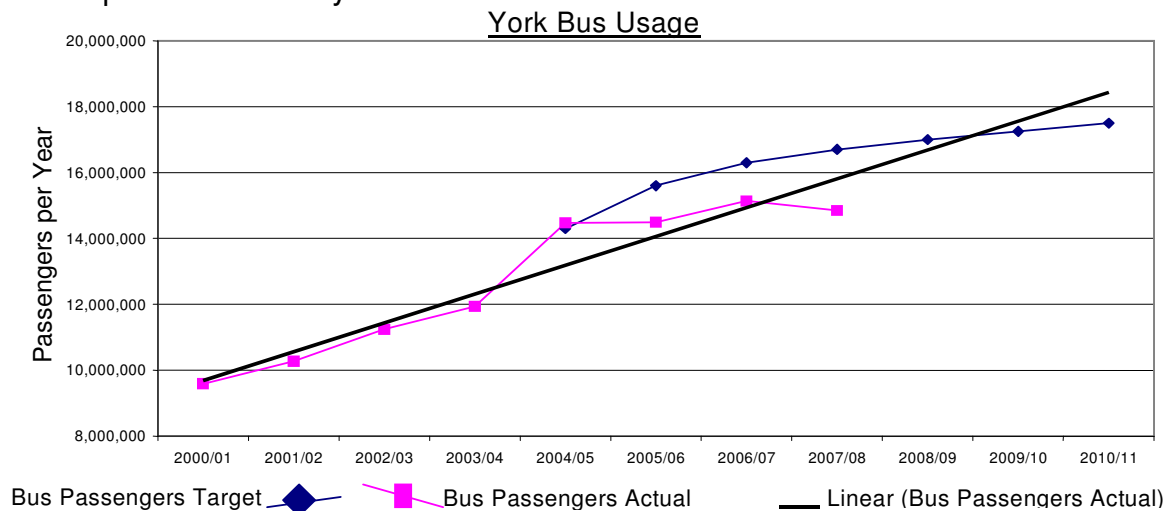
30. Journey Times and the Reliability of Public Transport

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 comparing timetabled arrival times and actual arrival times at surveyed stops both on and off peak. As a result, a number of issues were identified:

- a significant variation between the two times - 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
- 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
- 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 average cost of installing the BLISS system on a 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 transhipment 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 compared 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, although the committee acknowledges that many bus operators are continuing to upgrade their fleets to achieve greater compliance
- 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
- not all bus stops have timetables or shelters
- where more than one Bus Company services a journey, passengers have to purchase more than one ticket to cross the city making the journeys particularly expensive, leave aside the time penalties and the inconvenience of changing services. This problem has become worse since the awarding of a number of socially necessary bus services to other than the main local bus operator.

¹ DfT 'Meeting targets through Transport' (July 2008)

31. Since the survey was carried out, the main local operator has revised the timetables on some of its routes, to ensure they better reflect the actual arrival times e.g. the No.6 timetable no longer shows a service with a 10-minute frequency during peak times.
32. 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.
33. Since this earlier work more evidence has emerged showing that bus usage overall has stagnated and perhaps even fallen more recently, and bus usage by fare paying customers has fallen significantly (from circa 86% of all passengers 2005/6 to 77% last year). Despite the offsetting benefits of free bus passes for older citizens and physical improvements by the Council, this can be attributed to wider economic circumstances and a series of substantial above inflation fare rises by the main operator in the city and more recent service cuts:



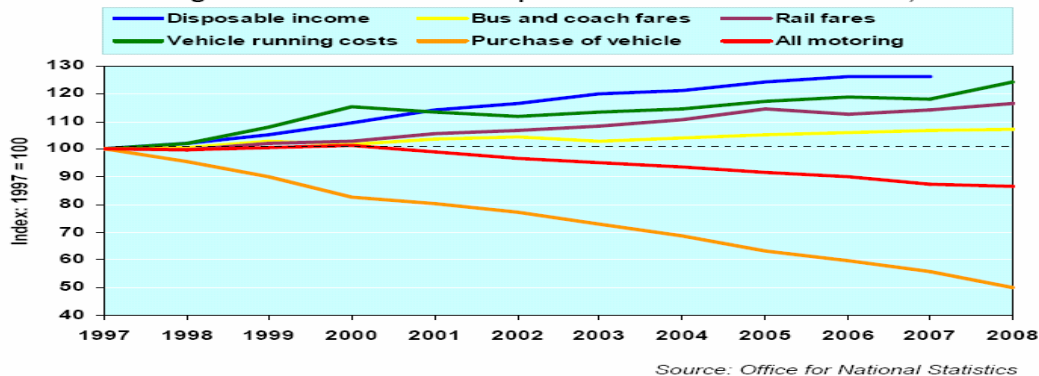
33. This stagnation in bus usage has been compounded by the recent service changes, a reduction in bus service routes, and changes in frequency, which have reduced the attractiveness of bus travel or in some cases and/or at some times removed the opportunity to use buses at all.
34. The issue of relative cost and attractiveness of different forms of travel is partly a national issue and the balance between costs of public transport and private motoring has long been moving adversely.

Transport Trends: 2008 edition

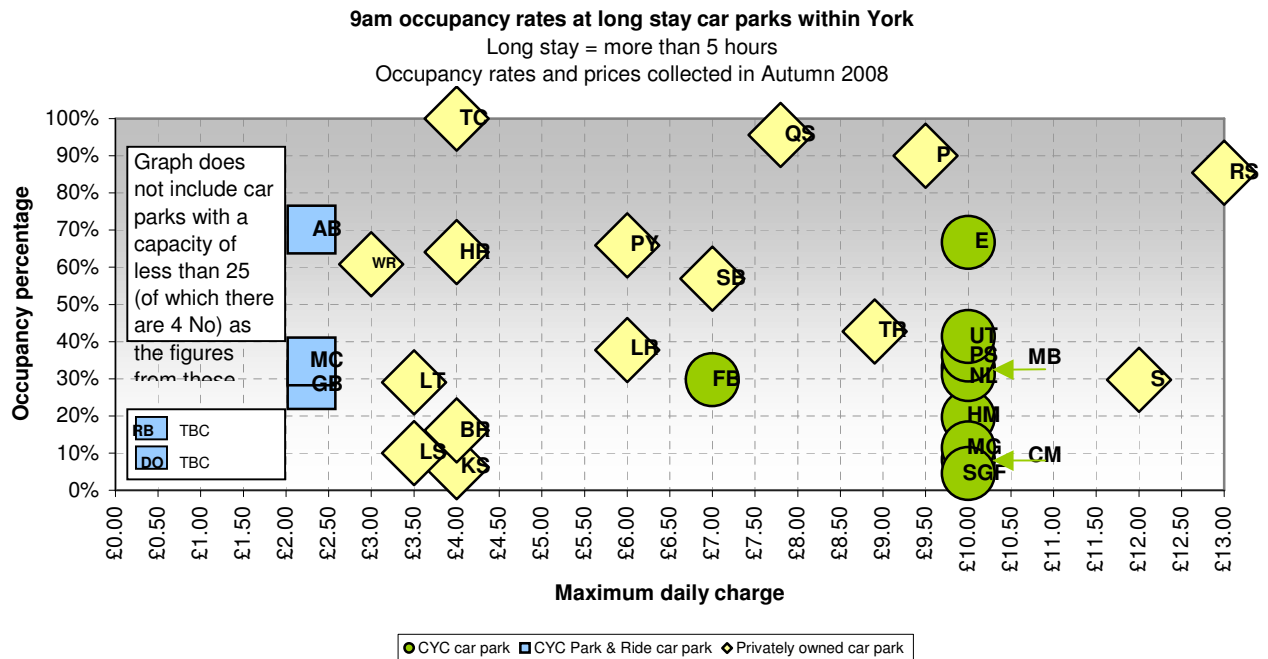
Section 2: Personal Travel by Mode

2.6 Changes in relative costs of transport

Trend 2.6 – Changes in the real cost of transport and in income: 1997 to 2008, United Kingdom



35. These overall trends are largely outside of local control, the one key exception being the relationship between car parking availability / charges and bus fares, on bus usage.
36. This inter-relationship has long been recognised and was the basis for the Council's previous transport and parking strategies following the MVA study in the late 1980s. It was also the reason for the draft local plan policy T14a, limiting the number of city centre parking spaces to 5,100. Council officers advise that there have been a number of new private sector car parks come into use, many unauthorised, bringing the number of available spaces in the city centre (as defined in the draft local plan) to 5,244, with other sites just outside. Officers are taking enforcement action against these and against breaches of conditions on others regarding length of stays.
37. Many of the private sector car parks are also much cheaper than the planning condition controlled Council car parks, increasing their attractiveness relative to bus fares, as indicated in the following graph:



Abbreviations are as follows:

TC	The Crescent	TR	Tanner Row	SGF	St. George's Field
HR	Haxby Road	P	Piccadilly	NL	Nunnery Lane
WR	Wigginton Road	RS	Railway Station	S	Shambles
LT	Layerthorpe	FB	Foss Bank	QS	Queen Street
BR	Barbican Road	UT	Union Terrace	MB	Monk Bar
KS	Kent Street	PS	Peel Street	DO	Designer Outlet
LS	Lawrence Street	E	Esplanade	RB	Rawcliffe Bar
PY	Piccadilly Yard	HM	Haymarket	AB	Askham Bar
SB	Stonebow	MG	Marygate	MC	Monks Cross
LR	Leeman Road	CM	Castle Mills	GB	Grimston Bar

38. In the light of the close connection between parking, traffic, congestion levels and the impact on bus journey times and reliability, and the parallel connection between mode choice and relative pricing of park & ride, bus journeys and car park pricing, continuing care needs to be taken on ensuring local plan policies on car park availability and pricing are adhered to, and bus / park & ride fare levels together with car park charges are kept at a reasonable level, in line with each other.

39. [Other short / medium term recommendations](#)

40. Economic Performance

In 1995 it was reported² that congestion cost the British economy £15 billion per year. This figure is now quoted at £20 billion per year (an estimated 461 billion vehicle kilometres per year³) and could reach £30 billion per year by 2010⁴. The latest monthly national statistics on congestion on inter-urban roads in England⁵

² 'Moving forward – a business strategy for transport' CBI 1995

³ IAM motoring facts 2008

⁴ The economic costs of road traffic congestion, ESRC Transport Studies Unit, 2004

⁵ Department for Transport for the year ending May 2008

showed an average vehicle delay of 3.92 minutes per 10 miles. In 2007/08, the latest measured vehicle delay time in York were 3min 48sec per mile (at 1 million vehicle kilometres per 12hr period⁶). This suggests a congestion cost to York's economy of £434,000 per year. The recent Eddington Report for National Government reinforces concern on the escalating costs of traffic congestion and its impact on economic performance.

41. The 2007 Future York Group Report⁷ analysed the York economy and proposed a series of recommendations for how York might prepare itself for meeting current and future competition. One of its particular recommendations for transport was to 'Secure funds to enable the dualling of the northern outer ring road (ORR)'. Council policy for the outer ring road was set down in a report approved by the Planning and Transport EMAP in July 2005. The basis of that report was a study undertaken by Halcrow to assess the current and future operation of the route and proposed options for addressing congestion. The study determined that congestion was principally caused by the restricted capacity of the junctions and the links had adequate capacity for the projected demand. As a result of the findings in the report, Council approved the following motion on 28th June 2008:

42. *"The City of York Council will seek immediate discussions, between the Leaders of the ruling & main opposition parties with the Secretary of State for Transport, to request the provision of funding, at the earliest opportunity, to upgrade junctions and other aspects of the York Northern Ring Road, for the benefit of all road users. The City of York Council requests this increased funding in the light of the Future York report, and recent Government proposals to increase housing and economic development planning targets for York, which have increased the need for urgent additional public investment, via the Regional Funding Allocation or other funding opportunities, to pay for major improvements to transport systems in the City. Such discussions should recognise that any upgrading of the ring road will be part of a comprehensive approach to traffic management in the whole city, as part of a programme of overall traffic reduction and sustainable transport priority within the A1237/A64 ring, while also protecting York's economic success and ensuring the protection of its environment."*

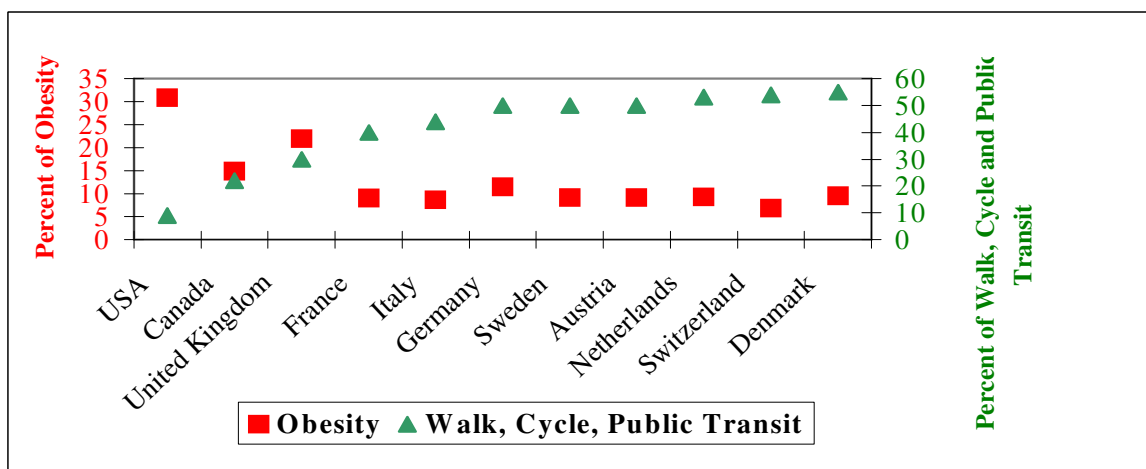
43. A subsequent report went to the Executive on 23 September 2008 presenting the results of a study of the projected performance of the outer ring road, and providing options for improvements to be included in a proposed Access York Phase 2 bid to the Regional Transport Board (RTB). The report sought approval in principle for the submission of the bid to the RTB. The bid was only partially successful and has been placed in the post 2014 priority scheme list for which there is currently no funding allocation.

44. Quality of Life
Evidence shows 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.

⁶ City of York Local Transport Plan 2006-2011, Table 8, Indicator 3B

⁷ The Future York Group Report – An Independent strategic Review of the York Economy

45. 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, and the Government is due to consult shortly on a Noise Strategy as a result of an EU noise directive. In addition, air pollution can have psychophysiological effects, mainly cardiovascular e.g. ischaemic heart disease, hypertension and stress.
46. Choices in mode of transport can also have a long-term effect on health and quality of life. For example, evidence shows a clear correlation between a fall in obesity levels with increased walking, cycling and use of public transport:



47. 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 a further 45% and a recent progress report showed that York is on track to meet this target. Evidence presented to the Committee showed a clear correlation between overall accidents and volume of traffic during weekday peaks in York, particularly linked to motorist/pedestrian and cyclist conflict. However it was difficult to establish an accurately quantifiable link between traffic levels and accidents, as increased congestion can result in lower traffic speeds, hence lower KSI risk. Paradoxically, pedestrians may be willing to behave in a more unsafe manner to be able to cross a more busy road.
48. The Committee were generally satisfied with the Council's current strategy for tackling accidents, although there was little evidence of adequate police enforcement of traffic offences outside of the county's trunk road network, or of the police and the Council having consistent or common traffic and enforcement strategies. The Committee therefore felt a stronger education and publicity campaign was needed, within a 'Considerate Road User' framework, backed up by more effective enforcement arrangements. This is also important to tackling perceptions of danger for cyclists and pedestrians referred to earlier in paragraph 27.

Analysis

49. As a result of all of the information gathered during this review, the Committee have recognised the following:
50. Expected Increase in Traffic 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 which played a part in the council's Network Management Service achieving an 'excellent' grading from the Department for Transport (DfT), for securing the expeditious movement of traffic on its road network. Although the indicator for peak hour traffic showed traffic levels being fairly constant between 1999 and 2006, the indicator hides the growth in traffic levels either side of the peak hour resulting from people commuting either earlier or later to avoid roads running at full (or over) capacity in the peak hour (see figures in paragraph 8).
51. Nationally, traffic growth between 1996 and 2025 could be in the range 52-82%⁸ although recent actual levels show traffic growth at the lower rate. Officers estimate that York could face a 27% rise in traffic from the 2003-4 position to 2020-21. Due to the geographical and physical constraints within the Authority's area 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.
52. 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 an historic relative decrease in motoring costs, has led to greater population dispersion. Recent figures show that 22,500 workers commute into York from surrounding areas and 17,000 travel 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.
53. The predictions for York were established on the basis of housing and employment growth contained in the Draft Regional Spatial Strategy (RSS). These have since been superseded by higher levels of growth, as detailed in the full RSS published in May 2008. Employment growth is now expected to outstrip housing provision, thereby, leading to more and longer commutes into the city.
54. The Local Transport Plan 2006-2011 (LTP2)
In March 2006, the Council published its second Local Transport Plan (LTP2) covering the period 2006 – 2011, setting out the council's aspirations and proposed measures for transport over a 5 year period within the context of a 15 year horizon. The strategy in LTP2 for tackling congestion was to build upon the successes already achieved by LTP1 (2001-2006) and deal with the pressures from the growth in the economy. LTP2 predicted that, in the absence of its proposed package of measures, traffic levels would rise by 14% by 2011 with a further doubling to 28%

⁸ Source IAM motoring facts 2008

by 2021. The strategy proposed in LTP2 (as summarised in Annex Ac) sought to limit this growth to 7% by 2011.

55. 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 0.5million car journeys off York's roads within the outer ring road, 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.
- Enable the Council to meet its principal network management duty under the Traffic Management Act to secure the expeditious movement of traffic on their road networks.

56. Impact of LTP2

The maps in Annex Aa 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. For example, traffic levels on the A1237 which forms the western and northern sections of the outer ring road have increased by more than 50% over the last 15 years which has resulted in heavy congestion during peak periods, particularly on its junctions with radial routes. Similarly there has been a significant increase in congestion on the inner ring road and its approach roads, and, unless extensive measures are put into place, this inexorable rise in traffic is likely to continue. 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.

57. Since the production of LTP2, other major land developments have been proposed and these are at various stages of planning e.g. York Northwest (comprising York Central and the former British Sugar works), 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, and/or require the curtailment of the scale of those developments and possible negative consequences for the future economic well being of the city (witness the 2008 Terry's factory site application).

58. Developments in the council's response and plans have moved on since LTP2 i.e. toward the end of LTP2 and beyond, the intermediate plans are to:
- implement 'Access York Phase 1';
 - develop further proposals for the outer ring road
 - investigate the feasibility of utilising tram-train technology.
 - Continue demand restraint measures, including extensive bus priority measures and access restrictions into the city with priority for buses, combined with sufficiently high parking charges at council controlled city centre public car parks and resident parking only restrictions in adjacent city centre residential streets.
59. Beyond LTP2
The Committee recognised that although LTP2 and the Access York measures seek to continue and build upon the measures in LTP1, it is unlikely to be enough in the longer term, as many measures have achieved or are close to achieving their maximum potential for restricting traffic growth at the level of investment to date. In fact, the modelling of the additional measures show they will only palliate and not eliminate the increase in congestion. Therefore additional congestion tackling measures will be required to complement and work alongside those already included in LTP2 and extend beyond, particularly if doubling York's economy by 2026 is to be realised, and the expected rise in congestion levels are to be halted.
60. Policy Driving Changes & Available Funding
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), offer significant funding to develop and implement innovative 'package' solutions for tackling congestion (£290m in 2008-09 rising to £2550m by 2014-15). However, the current inference from Government is that a TIF package must contain some form of road user charging measure for it to be considered, as evidenced by the following statement to Parliament by the Secretary of State for Transport on 5th July 2005:
- "The Fund will also be used to support local plans which will help tackle congestion. We are looking for proposals which combine some form of demand management such as road pricing, with better public transport. These pilot schemes will contribute to our work on national road pricing"*
61. A recent Government discussion paper 'Towards a Sustainable Transport System' (October 2007) endorses the views contained within the Eddington Transport Review, for a targeted approach to the most seriously congested parts of the urban, national and international networks, and that an innovative approach which makes the most of existing networks through good regulation, sending the right signals to users and transport providers, is likely to be just as important as further investment

in new infrastructure. Consequently, the Government is now reviewing the guidance to local authorities on the preparation of LTPs to ensure that it reflects both the Eddington priorities and the findings from the review of the take up of 'Smarter Choices' in LTPs (published June 2008).

62. The regional and local planning framework is described in more detail in Annex Ad.
63. It is extremely unlikely that this authority's future LTP allocations will be sufficient to further develop and implement an innovative package solution. Therefore for this Council to secure additional funding from TIF, we would need to work up a package to address congestion that includes some form of more radical demand management. However, the Committee recognise that even though the inclusion of road pricing is most likely to attract TIF funding and generate a revenue income, there were significant questions to be answered i.e.:
- the revenue collection and scheme operation costs would need to be accurately assessed to determine if such a scheme was viable and sustainable
 - the various impacts on business and local residents would need to be examined in detail, including any mitigation measures required
 - timing issues of improvements to public transport and other alternatives
 - public acceptability
64. The Committee also recognised that the implementation of any scheme would be unlikely to occur before the middle of the next decade from a scheme development and delivery viewpoint alone, which equally highlights the need for advance decision making.
65. Broad Strategic Options Available
In February 2008, the Committee received a paper on the strategic options available to the Council, which suggested a number of scenarios which could complement LTP2 to further reduce congestion in the city. Those scenarios are shown in detail in Annex Af in increasing order of complexity, cost and contribution to reducing congestion. For example, the intermediate plans shown above in paragraph 56, would go part if not all of the way to realising scenarios 5, 6 and 10.
66. Before considering the evaluation of the scenarios, it is worth noting that a partly similar exercise⁹ was commissioned by the Yorkshire and Humber Regional Assembly, in the context of the Climate Change Agenda. This modelled a series of interventions to identify 'practicable, deliverable measures within the scope of regional transport policy that would deliver a reduction in the emissions of carbon dioxide from transport across the region.' In doing this however, no resource limitations were applied, and no adjustments for political will were made (in passing, it concluded that even with an extensive package of interventions, any change of direction in carbon emissions would not come close to achieving the desired level of reduction). For the purposes of this review, a similar outcome is likely, in that although the apparent inexorable rise in congestion can not be reversed, it can only be stemmed.
67. It is recognised that the effects of these scenarios on congestion are only officer's considered opinions at the present time and do not have the benefit of rigorous

⁹ Achieving low carbon and sustainable transport systems in Yorkshire and the Humber

analysis. In order to confirm these effects (or otherwise) the scenarios will need to be subjected to further modelling and evaluation. Therefore a recommendation of this review will be that the Executive release sufficient funding for the optimal solutions to be worked up and tested.

68. Long Term Vision for Transport In York

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

69. The Committee, whilst recognising and supporting this overall vision, note that transport is almost omitted from it. The Committee strongly believe that given the massive challenge of rising traffic and congestion levels, the scale of response required, and residents high priority for tackling congestion, the City should have a complimentary long-term vision for transport. Three alternatives are suggested here for consideration:

- i. *“That by 2020, York will have transformed itself in transport & quality of life terms, reasserting its human scale through allowing many more of its residents to get about on foot or by bicycle, and reducing the dominance of motor vehicles, by reducing speeds, noise and fumes, with an excellent nationally leading public transport system of buses, tram-trains and rail services, using a smart ticketing Yorcard system and backed up by cross modal journey planning”*
- ii. *“A city which has transformed itself in traffic terms and reasserted its human scale and environmental credentials, through its residents being able and positively choosing to travel less by car and more by bicycle, foot and public transport with little delay, so as to be individually healthier and collectively to reduce greenhouse gas emissions and improve local air quality, noise levels and quality of life”*
- iii. *“That by 2020, York will have transformed itself in traffic terms such that:*
 - *it is much less traffic dominated with the majority of local journeys made by foot and bicycle, and longer distance journeys by vastly improved public transport*
 - *as a result York residents are fitter and healthier*
 - *congestion has largely been eliminated*
 - *journeys are more reliable, safer and stress free*
 - *the environment has improved through less traffic noise and visual intrusion, better air quality and more human interaction*
 - *York’s human scale has been reasserted*
 - *Business, leisure and other activity is thriving because of good quality and easy access by a choice of travel modes”*

70. At the end of this review, the Committee intend to confirm their preferred option, and make a recommendation to the Executive that they adopt this long-term vision. Whatever vision is agreed, 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.

71. The Committee have also recognised the key importance of a vastly improved public transport service within this and suggest a subsidiary vision for public transport is agreed.
72. Survey of York Residents
As part of this review, the Committee considered the findings from previously completed consultations carried out at the time of LTP1 & LTP2. They also agreed that given the need to both obtain wider public understanding of the increasing transport problems facing the city and the transport choices required to respond to those problems, it would be beneficial to carry out a further citywide consultation exercise to gather residents views on the findings of this scrutiny review and the broad strategic options available to the city, as set out in this report.
72. *This section of the final report will include the results from both the previously completed consultations (carried out as part of LTP1 & LTP2) and the new citywide consultation exercise, in order to evidence residents views on the current congestion issues in York and to support the Committee's recommendations. In order to proceed with the new citywide consultation, Members will need to agree the questions to be included therein.*

Report Options

73. 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 the findings detailed within this report
 - ii) Insert additional information
 - iii) Amend and/or agree a preferred vision for York's long-term transport strategy as per the suggestions made in paragraph 69
 - iv) Amend and/or agree the conclusions and recommendations within this report (as shown at paragraphs 86 - 91)

Implications

74. **Financial** - The financial implications associated with implementing the suggested long term transport strategy are outlined in paragraph 55. However in order to pursue these funding streams the 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.
75. **Legal** - *Information on the legal implications associated with the recommendations will be fed into this report once the findings from the citywide consultation are known, and the Committee's recommendations have been agreed.*
76. *Any HR, Equalities, Crime & Disorder, Property or Other implications will be included in this paragraph once the review recommendations have been agreed.*

Risk Management

77. There is a risk that by not including the right level of information in the new consultation document referred to in paragraph 72 above, it may limit the number of residents who choose to engage in the consultation. This in turn may effect the strength of the argument for the Executive to agree to the recommendations arising from this review. Plus, the cost of carrying out a city consultation is high therefore in order to justify the expense the exercise would need to be productive.

Corporate Priorities

78. 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'.

Review Conclusions

79. The Committee have comprehensively reviewed the Council's current transport policies as expressed through LTP2 and the 'Access York' initiative, and their impact on meeting anticipated traffic growth (including from the continued economic success and housing expansion of York) against the objectives of this review and against the views of York residents. They also noted that transport policy figures very little in the current Sustainable Community Strategy vision, despite its importance in delivering much of its ambitions, and in terms of the feedback from York resident's surveys on the importance of tackling congestion.
80. The Committee acknowledged the continuing priority that York residents place on tackling congestion, their mixed views on adopting differing solutions, and the need for continuing substantial engagement with residents and businesses to gain mutual understanding of:
- the potential future problems
 - what may or may not work, and scale of benefit
 - what the appropriate policy trade offs may be
 - the need to act in advance given ongoing traffic growth and delivery time lags
81. The Committee have recognised that whilst many positive initiatives and measures are being undertaken, they will not be sufficient to avoid significantly worsening traffic and congestion problems over the next decade or so, which could both adversely affect quality of life in York and undermine the City's future economic success and well-being. Also, the anticipated growth in motorised traffic and congestion, despite vehicle efficiency improvements and modal shift, will lead to a continuing increase in greenhouse gas emissions, against the recent government act target of an 80% cut in emissions by 2050.
82. The Committee have therefore concluded that the broad overall solution to both congestion and the climate change challenge is a concerted approach using the following hierarchy of measures:

- i. Reducing the need to travel (through IT and other solutions)
 - ii. Undertaking more of the journeys that still need to be made by green and environmentally less damaging modes
 - iii. Improving engine efficiency and switch to lower / non-carbon based fuels
 - iv. Undertaking a greater proportion of car based journeys on a shared basis
 - v. Improving driving standards (for fuel efficiency and safety, and to make roads safer and more attractive to green travel modes)
 - vi. Reducing congestion delays and fuel wastage in traffic queues.
83. Whilst point (iii) above is primarily nationally driven, all of these approaches can be progressed locally to varying degrees and with 56% of York's commuting journeys being less than 5km, there is clearly a lot of room to move in terms of points (ii), (iv) and (vi).
84. There is also a need to persuade individuals to make socially informed choices too, with the 'Smart Choices' approach being key. This will need a very specific on-going public engagement and promotional strategy around 'Smart Choices', including reinvigorating the Green Travel Plan approach with York employers and institutions.

Draft Recommendations Arising From The Review

85. The Committee have drafted a number of recommendations as result of their investigative work on the objectives of this review. These have been split into two parts, those recommendations that in the Committee's view need to be implemented in the short term, and those that make up a strategic response to tackling congestion from LTP3 onwards.

Short/Medium Term Recommendations

86. The following key priorities for the Council should be set:

Overall

- i. Continue work in support of the 'Access York' initiative and implement Phase I
- ii. Fund the development of a comprehensive 'Smart Choice' package including personalised journey planning to maximise modal shift, including a re-involution of 'Green Travel Plans' and ensure they are implemented, monitored and periodically updated
- iii. Commission a detailed study of a future Transport Strategy to 2021 and beyond based around scenario X as detailed in paragraph ? (*X to be determined based on survey responses etc*)
- iv. Adopt an on-going public engagement strategy in terms of the future transport strategy and solutions for the City
- v. Identify underused bus services and look at ticketing and marketing measures for all services, to improve usage
- vi. The role of city centre car park availability and fee levels in influencing modal choice to again be recognised and explicitly considered when fee levels are examined as part of the budget process. Or, more radically, taken out of that process entirely and set as part of a longer term policy based approach to both transport and the city centre economy, recognising the importance of both imperatives

Public Transport

- vii. Undertake an urgent review of the Council's bus strategy to see how the current stagnation in overall bus usage, decline in non-concessionary usage, and in the conventional bus network can be reversed
- viii. Renew focus through the Council's Quality Bus Partnership, on undertaking those measures that would most effectively stop the current decline in bus usage i.e. holding down bus fare levels, increased non-concessionary bus priorities, influencing public attitudes and tackling outstanding issues from the 2001 Steer Davies review
- ix. Support City Strategy and bus operators in re-invigorating the Quality Bus Partnership
- x. Quality Bus Partnership to be requested to examine and action ways of improving bus boarding times, whilst avoiding penalising occasional and less well off bus users
- xi. Undertake an early comprehensive review of the current bus network in terms of appropriate changes to match changing development patterns and gaps etc, since the 2002 review
- xii. Council to undertake with bus operators and the Police a joint review of loading and parking restrictions and their enforcement on bus routes
- xiii. Executive Member to prioritise the provision of timetable displays and bus shelters at all bus stops
- xiv. Ensure the extension of Park & Ride services to include York District Hospital
- xv. Local bus companies to be requested to continue to revise bus timetables to provide more accurate and credible timings and work to them
- xvi. The Executive Member to review the operation and delivery of the BLISS real time bus information display system and agree a comprehensive programme for its early roll out across the whole network, with local bus operators
- xvii. Ensure positive promotion of bus network and bus usage including passenger information
- xviii. Improve the quality of interchange points between public transport modes and between routes with designated interchange stops, and co-ordinate bus timings

Walking & Cycling

- xix. Tackle road safety issues and help to make roads more attractive to green modes by undertaking 'Considerate Road User' campaigns
- xx. The Council should reinvigorate cycling in York using the 'Cycling City' initiative and funding by:
 - tackling key gaps in the network and difficult locations i.e. bridges, key radials and junctions, as identified by the 2003/4 cycling scrutiny review but as yet not implemented
 - improving planning processes to ensure adequate consideration is given in new designs to cycling
 - relaunching the Cycling Forum with a view to giving stakeholders the opportunity to shape future cycling policies and proposals, and to encourage partnership work
- xxi. The Cycling Champion for York to:
 - ensure cycling measures are focused around what will make a difference
 - promote considerate road user behaviour (including by cyclists)
 - engage the business community to encourage the provision of cycling facilities for both employees and visitors/customers

Air Quality

- xxii. Undertake a review of the Air Quality Management Plan with a view to taking more radical action to eliminate the health risks associated with York's NO₂ hotspots, by the EU deadline of 2010. This should include examining the potential benefits of low emission zones, queue relocations using ITS/UTMC, further tightening of the Euro-emission vehicle requirements on the Council's own and its partner's vehicle fleets, tendered transport services and licensed vehicle services, given that buses account for 42% of road traffic emissions, and of introducing a local freight transshipment centre
- xxiii. Undertake a short term project to measure the levels of the most harmful PM2.5 carcinogen carrying particles to understand if there is a problem in York

Other

- xxiv. Council to seek an agreed traffic enforcement strategy with North Yorkshire police for the York area to address issues including bus priorities, road safety, on-street parking, school no parking zones, considerate road user campaigns, across all modes, together with establishing an on-going delivery partnership arrangement
- xxv. Council to drive through early implementation of full DDA compliance for all Council vehicles and council procured bus services, and CCTV in taxis and private hire vehicles
- xxvi. Strengthen the place of transport policy in future versions of York's Sustainable Community Strategy to recognise its importance in the life of the city

Long Term Strategic Recommendations

87. The Council and Local Strategic Partnership to adopt the following long-term vision for transport in the City, complementing the city's Sustainable Community Strategy, giving a clear direction to what the city's transport will look like in the future (three suggestions for this vision are shown at paragraph 69 above)

' insert preferred vision?'

88. Given the key importance of public transport within the above, the following subsidiary vision for public transport should be adopted:

' insert subsidiary vision?'

89. Once the agreed visions and recommended long term strategy for 2021 and beyond have been established, ensure Council and its partners work consistently towards their implementation

90. In regard to buses, the Council to:

- Ensure outstanding comprehensive 5-yearly review of the bus network is carried out to optimise the network and service frequency, to take into account new housing and other developments

91. In regard to freight, the Council to:

- Continue to keep the issue of providing a freight transshipment centre for the City under review if a suitable site and funding mechanisms come forward

- Lobby government (national and EU) to improve standards for HGV engine efficiency and emissions
- Ensure council owned and partners vehicle fleets, and tendered delivery vehicles move rapidly towards the most up to date emission and efficiency standards

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Final Draft Report Approved **Date** 9 April 2009

Wards Affected:

All

For further information please contact the author of the report

Background Papers:

Traffic Congestion Interim Reports dates 28 January, 17 April, 21 May and 12 June 2008 and 'Broad Strategic Options' Briefing Paper dated 27 February 2008

Annexes

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

Annex Ab – Information on Other Impediments to Traffic Flow

Annex Ac – LTP2 Strategy for 2006-11

Annex Ad – Summary of Regional and Local Transport Policy

Annex Ae – Broad Strategic Options - Individual Scenarios To Complement LTP2

Annex Af – Information on Other Cities' Progress in Implementing Road User Charging & Its Capacity to Attract Investment

Annex Ag – Broad Strategic Options – Combination Scenarios To Complement LTP2

Annex Ah – Matrix of Committees findings with possible solutions, impacts and corresponding recommendations **(to follow)**

Annex Ai – Road User Charging Presentation by Capita Symonds