Review Objectives - Information Gathered

1. In order to fully investigate and understand the affects that congestion has on the improvement areas identified within the remit for the review, Members held a series of meetings between November 2006 and October 2009, 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 improvements to 'Accessibility to Services, Employment, Education and health'						
19 June 2007	Consideration of Interim Report and Presentations on Air Quality & Accessibility Mapping						
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'. Chair of the Quality Bus Partnership and representatives from the bus companies in attendance						
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 possible solutions identified in relation to objectives (i)-(v), the recognised impact of those solutions, and 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 national & local perspective on school travel, the modes of transport used by pupils in York schools, and the cycling issues in York						
12 December 2007	Consideration of Interim Report - looking at optimising the network and revised draft table of findings, identified solutions with impact evaluation, and 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 various elements which make up the broad strategic options available to the City						
21 May 2008	Informal meeting to discuss scenarios and combinations of those which could form a long-term transport strategy for the City, and the layout of proposed city-wide survey						
12 June 2008	Consideration of draft final report, prior to its inclusion as an annex to an SMC report requesting the relevant funding for the consultation exercise						
7 May 2009	Consideration of draft final report, prior to its presentation to						

	SMC requesting a carry forward of the funding for the residents survey
1 October 2009	Consideration of draft final report, air quality update report and draft survey

2. 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 C.

3. 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.
- 4. 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.

5. Air Quality & CO₂ Emissions

Carbon fuelled engines represent the overwhelming majority of current road vehicles. They produce both CO_2 (greenhouse gas) and polluting emissions, and the pollutant Nitrogen Dioxide(NO₂) in particular. They represent a significant source of CO_2 albeit by no means the largest share, but the single most important source of the latter.

6. 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.

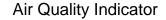
- 7. Air Quality There are currently five technical breach areas in York's Air Quality Management Area (AQMA), where levels of nitrogen dioxide caused mainly by vehicle exhaust emissions exceed the annual objective. These are:
 - Fishergate

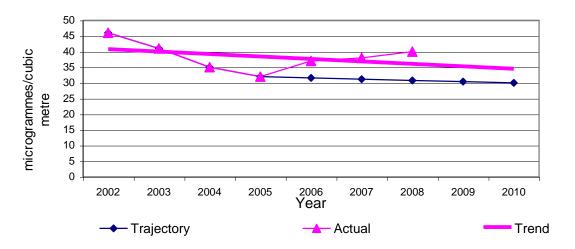
Holgate Road

Gillygate

Nunnery Lane

- Lawrence Street
- 8. 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 30µg/m³ 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 three years, which indicates 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:





- 9. 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.
- 10. Overall, the Committee shared officers' view that the current air quality management strategy has neither 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 now required. The Committee therefore endorse officers' view that a Low Emissions Strategy including a central low emission zone (LEZ) in the AQMA is required before the end of LTP2 and introduced early in LTP3. In addition, the Council should tighten the existing local

development control policy regarding the proliferation of low cost car parking in and around the city centre in the emerging Local Development Framework.

- 11. CO₂ Emissions 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 by 2050.
- 12. 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.
- 13. 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 (through IT, land use planning policies and other solutions)
 - 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, maximise engine efficiency and lower embedded carbon model
 - 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 (for fuel efficiency and safety, and to make roads safer and more attractive to green travel modes)
 - Reduce congestion delays and engine idling in traffic queues to reduce fuel wastage

14. <u>Alternative environmentally viable and financially practical methods of</u> <u>transport</u>

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.

15. 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.

- 16. 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.
- 17. 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.
- 18. 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.
- 19. 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.
- 20. 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.

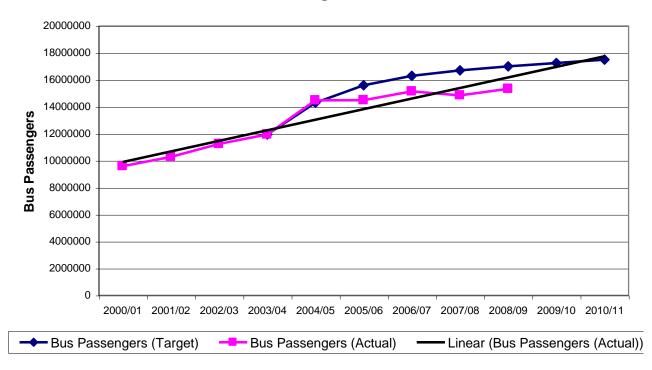
¹ DfT 'Meeting targets through Transport' (July 2008)

21. 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.
- 22. 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.
- 23. 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.
- 24. 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:

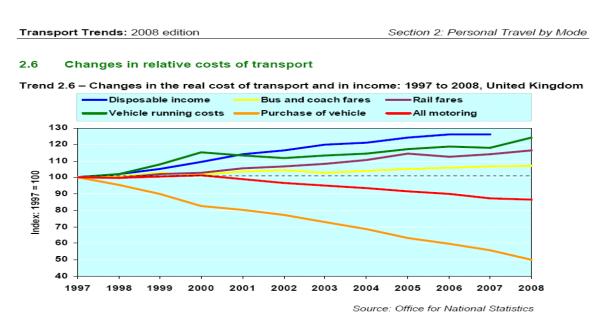


Bus Patronage in York

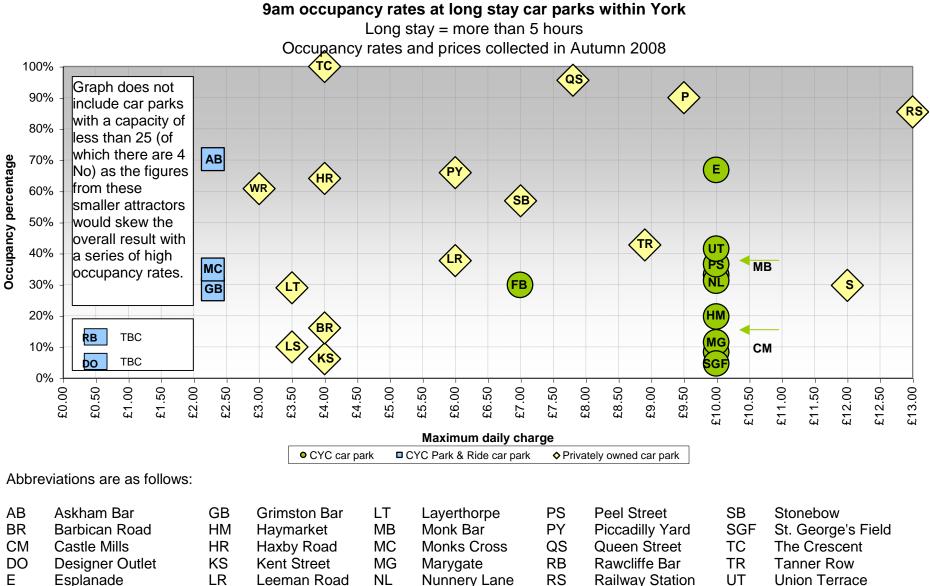
	Feb 2003	April 2004	Jan 2005	July 2005	Jan 2006	Jan 2007	Jan 2008	Jan 2009
50p. Single	£0.50	£0.50	£0.50	£0.60	£1.00	£1.10	£1.00	£1.00
80p. Single	£0.80	£0.85	£0.90	£1.00	£1.00	£1.10	£1.00	£1.00
£1.00 Single	£1.00	£1.05	£1.10	£1.20	£1.50	£1.60	£1.50	£1.60
£1.20 Single	£1.20	£1.25	£1.30	£1.40	£1.50	£1.60	£1.80	£1.90
£1.40 Single	£1.40	£1.45	£1.50	£1.60	£1.50	£1.60	£1.80	£1.90
£1.70 Single	£1.70	£1.75	£1.80	£1.90	£2.00	£2.20	£2.50	£2.70
£1.90 Single	£1.90	£1.90	£2.00	£2.10	£2.00	£2.20	£2.50	£2.70
£1.50 Return	£1.50	£1.60	£1.70	£1.90	N/A	N/A	N/A	N/A
£1.80 Return	£1.80	£1.90	£2.00	£2.20	£2.50	£2.80	£2.90	£3.00
Maximum Return	N/A	N/A	N/A	£2.30	£2.50	£2.80	£2.90	£3.00
Child	N/A	£0.50	£0.50	£0.60	£1.00	£0.50	£0.50	£0.60
Child return	N/A	N/A	N/A	N/A	£1.50	£1.50	£1.50	£1.50
£2.20 Day	£2.20	£2.20	£2.30	£2.50	£3.00	£3.50	£3.50	£3.70
£1.00 Day (child)	£1.00	£1.00	£1.00	£1.20	£2.00	£2.00	£2.00	£2.00
£10.50 Week	£10.50	£10.50	£11.00	£11.00	£12.00	£13.00	£14.00	£15.00
£40.00 Month	£40.00	£40.00	£40.00	£40.00	N/A	N/A	N/A	N/A
4 weekly	N/A	N/A	N/A	N/A	£40.00	£44.00	£47.00	£50.00
Student 10	N/A	N/A	N/A	N/A	£10.00	£11.00	N/A	N/A
journey								
Ordinary 10	N/A	N/A	N/A	N/A	£13.00	£13.00	N/A	N/A
journey								

First York Bus Fares 2003 to 2009

25. This stagnation in bus usage has being 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. 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.



- 26. 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.
- 27. 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.
- 28. 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:



FB Foss Bank LR Leeman Road LS Lawrence St

Nunnery Lane Piccadilly

Ρ

Railway Station Shambles

S

UT Union Terrace WR Wigginton Road 29. 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.

30. 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 showed an average vehicle delay of 3.92 minutes per 10 miles.

- 31. 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.
- 32. 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:

"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

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

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

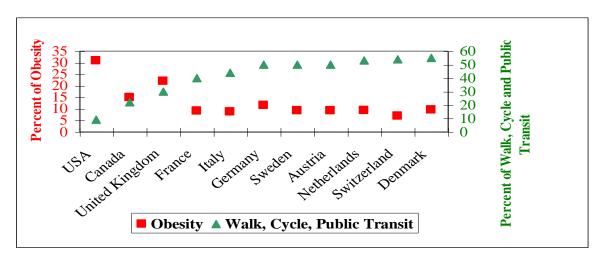
ring road will be part of a comprehensive approach to traffic management in the whole city, as part of a programme of overall traffic reduction and sustainable transport priority within the A1237/A64 ring, while also protecting York's economic success and ensuring the protection of its environment."

33. 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.

34. 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.

- 35. 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.
- 36. 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:



37. 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.

38. 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 17.

39. Other Impediments to Traffic Flow

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

- 40. **Utility & Roadworks on the Highway** From April 2008 the Traffic Management Act will require us to notify the co-ordination team of small scale works on the highway such as reactive maintenance. This should aid the management of the network and minimise the disruption.
- 41. Accidents on the Highway The Police have a major influence upon the management of road traffic accidents as they take the responsibility for the scene. Whilst we have reasonable levels of communication with the Police there is room for improvement in co-ordinating the joint response.
- 42. **Junctions** Where a junction has been improved as much as is practically possible, the only way of reducing congestion further rests on finding ways of either encouraging, or forcing, less traffic to use the roads linked to the junction.
- 43. **Signals / Crossings** This committee recognised a number of sites where the type of crossing in situ was not necessarily the ideal type for the location. The adaptation or upgrading of some of the older signals to puffin signals would be ideal but costly dependent on the age and type of the crossing already in place.
- 44. **On Street Parking** There are approximately 267km of waiting restrictions on our existing highways that are regularly patrolled for enforcement by the Council's Parking Services. As inconsiderate and illegal parking is a major

source of interruption to the flow of traffic on the Network, more enforcement is required particularly outside schools and within their local vicinity, and At other hotspots where there are frequent delays e.g. on bus routes.

- 45. **Public Events** Any additions to the current use of Intelligent Transport Systems that alter traffic signal timings and advise traffic of congested areas would be of benefit to the city utilised on major routes into the city to better manage traffic.
- 46. Education Related Travel School related travel can account for up to 20% of traffic during school term times. In fact, one out of every four cars on the road in the morning rush hour in York is on the school run. Work is ongoing in schools to minimise the impact of the "school run" by encouraging alternative modes of transport such as walking and cycling, and work is also in progress to ensure each school has its own travel plan.
- 47. **Travel Plans** All developments over a certain size had to have a travel plan but as circumstances change the travel plan do not necessarily change with them. There are well established companies and businesses in the City that do congestion within the City; maybe more so than the school run. The Council could do more to encourage the development of, and use of travel plans in the private sector by leading by example.
- 48. **Inner City Goods Deliveries** The restricted hours for delivery i.e. outside Pedestrian hours leads to a concentrated number of delivery vehicles clogging up the city centre streets. This in turn has a negative affect on pedestrians in the form of a greater potential for accidents and poor air quality from stationary traffic. There is also an issue with parking on main arterial roads during peak traffic times.

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

The Committee were briefed on the Council's DTMC system and identified that 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

50. Summary of Findings from City-Wide Consultation

A summary of the findings from the city-wide consultation survey carried out as part of this review is shown at Annex E. The Committee's analysis of these findings are shown at paragraphs 24-27 of Annex C.