

Sudbury and Great Cornard

Local Transport Action Plan

Volume 1 : Summary Report

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1. Introduction

This report is intended to concisely summarise the process, including the outcomes, for the development of a Local Transport Action Plan (LTAP) for Sudbury and Great Cornard. The commission for the development of an LTAP was made by the Suffolk County Council in 2001 to develop a transport strategy for Sudbury and Great Cornard that would ensure a sustainable approach to transport planning and infrastructure provision in the short to long term in line with prescribed government objectives.

The process included extensive traffic modelling, monitoring and public consultation to ensure that the views of the general public were always at the forefront of all technical assessments undertaken. Where the technical approach produced results that conflicted with public opinion, it was necessary to assess where it would be possible to refocus the technical approach to be more in line with the wider public view. This approach was adopted but it became clear as the project evolved that it was not always going to be possible to align the views of all stakeholders and interested parties in one solution for Sudbury and Great Cornard. The complexity of issues ranging from the rich cultural and natural environment in the area (and in particular the southern and western sectors around the town) to the obviously treasured historical environment and character of the town and then further to the obvious economic strength of the area all contributed to a situation where no single scheme would do justice to the many complex features that make Sudbury so unique in character.

A solution for Sudbury, therefore, needs to be addressed as a packaged approach phased in over time to ensure that the evolution of the transport is in line with the growth and individuality of the town. Major shifts in the current transport situation need to be advanced particularly with respect to promoting more sustainable forms of transport for the town. Conditions are ideal for nurturing an environment where cycling and walking, for instance, could form the framework for an approach aimed at reducing car travel in the town. Furthermore, the current levels and types of traffic, on streets that were clearly never designed for such intense use, need to be addressed along with minimising the effects of increased demand for roadspace, particularly in the historical core.

In the end, the LTAP has addressed these issues by examining, at a more fundamental level, the actual problems being experienced by those in the town and environs. It then sought to identify measures that could be used to address these areas of concern, ranging from traffic management related schemes to public transport possibilities to major scheme development. All of these were assessed and a large number

of transport options have been considered and the most beneficial examined further.

2. Existing Transport Conditions

2.1 Trip Making Characteristics

In order to be able to better understand and plan for a transport system that would be targeted at addressing actual conditions in Sudbury, it was considered necessary to understand the broad tripmaking characteristics of travel in Sudbury and Great Cornard. Peripheral traffic surveys undertaken late 2001 were used to compliment traffic information that was available and had been used to construct a 1995 traffic model for Sudbury. This information, together with traffic counts undertaken within the town itself and combined with a detailed assessment of land use within the study area and its resultant trip making effects, were used to paint a picture of travel in Sudbury and furthermore to construct a traffic model for the area that would act as an instrument to test various options for the area. Figures 1, 2 and 3 below outline these characteristics for the 3 periods used in the assessments undertaken, namely the morning, interpeak and evening periods.

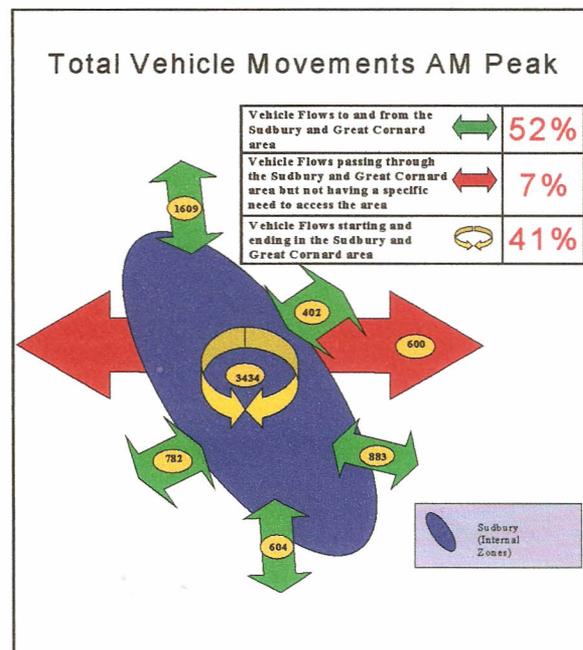


Figure 1 : Trip making characteristics – AM Peak

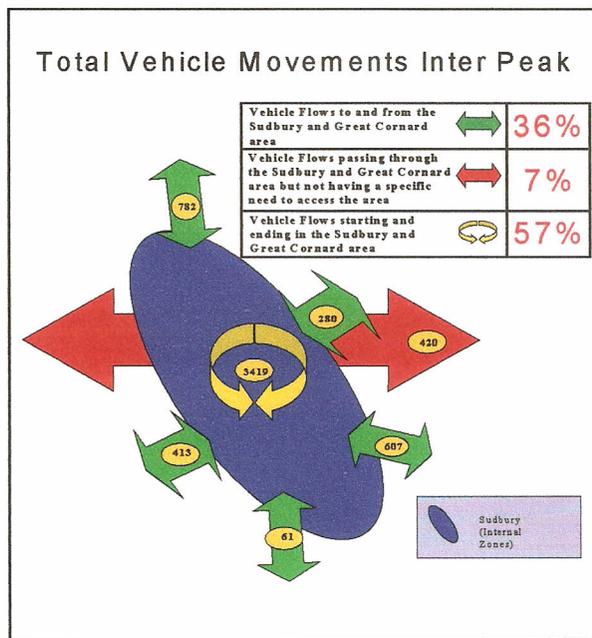


Figure 2 : Trip making characteristics – Inter Peak

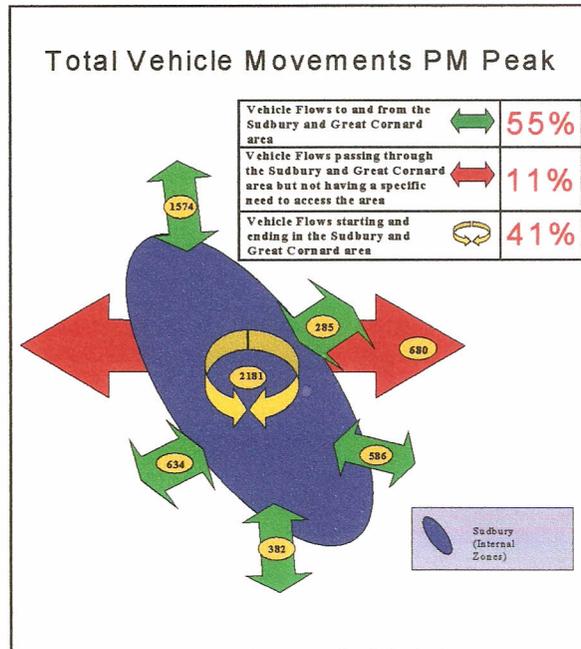


Figure 3 : Trip making characteristics – PM Peak

It is evident from the diagrams above that the vast majority of trips accessing the Sudbury and Great Cornard area have a purpose for being in the area. The extent of through traffic in Sudbury and Great Cornard is low ranging from 7% of all trips in the morning and interpeak periods to 11% in the evening peak. This is a fundamental statistic in shaping the form that a transport system should take for the area. Furthermore, it is a statistic that confirms the economic vitality of the area with many trips being external trips entering the area to undertake some form of activity. Any solution for Sudbury that seeks to address

the problems of substantial levels of traffic in the historical core should not undermine the attractiveness of the area as a core economic centre.

2.2 Safety and Accident Statistics

With respect to issues of safety, an assessment of accident rates throughout the study area was undertaken with a view to identifying areas that have particularly poor safety histories. Various conclusions were drawn from the assessment of this information as follows :

- High incidence of vehicular collisions on Springlands / Northern Road - *possible need to introduce speed restraint and better controlled entry at junctions*
- High incidence of vehicular accidents at junction of Bull Lane and Long Melford by-pass - *need to reassess design aspects of the current junction*
- High incidence of accidents in the Great Cornard area particularly involving children - *careful consideration needs to be given to furthering the traffic calming strategy here*
- High incidence of accidents in the town centre area many of which involve pedestrians - *traffic management to be geared to reducing the risks of these accidents*
- Concentration of accidents on Ballingdon Street just north of Bulmer Road - *assess need to introduce traffic management measures here*

2.3 Cycling and Pedestrians

The trip making characteristics demonstrated in 2.1 above tend to suggest, given the high level of internal trips being undertaken within the core Sudbury and Great Cornard area, the possibility of a modal shift from vehicles to cycling or walking for some trips.

The potential for this to happen would be highly dependent on the right conditions being prevalent such as the provision of adequate and safe facilities.

One feature of travel in Sudbury, however, would seem to undermine the ability for such a strategy to be effectively employed. Parking pricing is often used as a strategy to try and render softer modes of transport more attractive to road users. In an environment where parking is free and readily available, the provision of infrastructure would potentially need to be targeted at different areas such as routes to schools.

2.4 Public Transport

For those residents living in the rural hinterland of the Sudbury area without access to private vehicles, public transport is a crucial form of transport. At present, various operators service these areas and beyond to other regional destinations in Suffolk such as Ipswich and Bury St. Edmunds.

These services tend to operate at commercially viable periods to the operators and consequently, availability of late evening services, in particular, pose a particular constraint to modal shift from the car to public transport. Existing internal services do currently operate within the area although the delivery of services by different operators makes co-ordination and integration difficult.

With respect to rail, although well patronised, the introduction of direct rail services between Sudbury and regional and national destinations would augment the attractiveness of rail as a mode of travel. Such connections would, at the same time, facilitate access to and from Sudbury to other centres thereby increasing, for instance, the attraction of Sudbury to tourists and a potential workforce outside the area. Conversely, the improvement of accessibility to the town could facilitate access to more regional centres from within Sudbury and Great Cornard thereby potentially negatively impacting on the economic vitality of the town.

The better integration of bus and rail services would act as an incentive for public transport travel. Proposals are in place to better integrate the retail/public transport/leisure areas to the south-east of the town with the historical core using appropriate forms of development to achieve this. This presents an opportunity to integrate bus and rail in the form of a single interchange node and needs to be pursued further as a concept.

3. Community Involvement

Community involvement in the formulation of an LTAP for Sudbury and Great Cornard was considered to be of fundamental importance to ensure that the plan was developed in consultation with those directly affected by the outcomes of the process. Reference and Partnership Groups were established at the outset of the project comprising members and stakeholders respectively. These groups were instrumental in formulating broad objectives for transport in the town.

This was followed up by an extensive questionnaire survey in the town targeting all households and businesses in the area. A mapping the future exhibition was held where the results of prior consultation were presented and views obtained on these outcomes. Based on all this

information, the options for Sudbury were formulated and presented to the public at a final exhibition held in October 2002. The exhibition was preceded by a meeting with the Citizen's Panel which was established to scrutinise the outcomes of the technical work prior to the public exhibition.

The consultation process to date is included in Appendix A.

Following the extensive consultation process, specific transport related objectives were defined aimed at establishing a framework that recognised both the 5 key government objectives of Accessibility, Economy, Environment, Integration and Safety whilst at the same time recognising the key priorities of Suffolk County Council as follows :

- Raise levels of achievement in schools, particularly for 11 to 14 year olds
- Improve the quality of life for children in care and their families
- Help young people to get good jobs and training and reduce the chances of them getting involved in crime, drug-taking and antisocial behaviour
- Help more older people live independently in their local communities
- *Encourage more people to use public transport*
- Recycle or compost more household waste and reduce the amount going to landfill
- *Maintain our roads and footpaths to a higher standard*
- Better co-ordinate our support for those communities which need it most
- *Help more people to access our services more easily and tell us how we can improve*
- *Support local businesses, develop the local economy and improve training opportunities*
- *Reduce the number of lives lost or damaged by accidents or crime*

The priorities highlighted in italics are of particular importance in considering transport and its role in Sudbury and Great Cornard. The table below outlines the specific objectives that were finally derived for the area and these objectives formed the framework for the development of a broader transport strategy for Sudbury and Great Cornard.

Safety

- **Introduce measures such as traffic calming, physical restraint to vehicular intrusion onto sidewalks**
- **Re-route traffic away from unsuitable areas**
- **Parking zones/ restrictions**
- **Improve facilities for cycling and walking**
- **Reduce speed and volume of traffic**

Integration

- **Provide integrated transport between all modes of travel**
- **Provide integration of timetabling**
- **Integrate land use and transport planning**
- **Provide flexible integrated bus services**
- **Provide integrated ticketing**

- Environment**
 - Provide improved facilities for cycling and walking
 - Integrate all modes of public transport
 - Introduce constraints on consequential development
 - Protect / enhance the natural environment
 - Reduce through traffic

- Economy**
 - Provide sufficient car parking
 - Development geared towards retaining vitality of town centre and to recognise apparent lack of choice to citizens
 - Improve the road infrastructure
 - Designate land for employment with the best possible access to the road / rail infrastructure
 - Enhance the tourist potential of Sudbury by retaining character of town
 - Improve the rail infrastructure

- Accessibility**
 - Ensure access by public transport to all major facilities of the town
 - Improve transport links to other parts of the county and beyond
 - Reduce the number of HGVs travelling through the town
 - Ensure all residents can use the town centre fully
 - Ensure all residents have access to good quality transport

4. Identification of issues and problems

The following issues were highlighted during the consultation process as being of particular importance/concern by the general public.

Accessibility

- Improve public transport in terms of frequency, efficiency, facilities and linkages. There is poor frequency after 6pm, on Sundays and Bank Holidays. Also poor time-keeping.
- A bypass would be beneficial.
- One-way systems should be maintained or increased.
- Reduce HGVs/ increase number of town centre weight restrictions/ decrease road freight.
- Improve cycle and pedestrian facilities.

Economy

- Continue free parking. It is needed to maintain town centre trade.

Environment

- A bypass would be beneficial to the environment.
- Air and noise pollution is a problem.
- Protect the environment.
- Houses are being damaged by heavy traffic

Integration

- Bus and rail integration.

Safety

- Enforce speed limits/ implement speeding control measures / reduce speeding.
- Reduce number of HGVs. They mount the pavements.
- Enforce parking zones and restrictions. Reduce on-street parking.
- Improve pedestrian facilities including footpaths and crossings.
- The one-way system is beneficial/ the bridge work has improved traffic flows.

5. Option development

5.1 *Methodology adopted*

One of the major issues that emerged from consultation surrounded the issue of traffic volumes and its impacts on the historical core and conservation area. This formed the strongest basis on which options were considered and evaluated and as such, the ability of options to address this particular concern weighed heavily on the measure of success of such options.

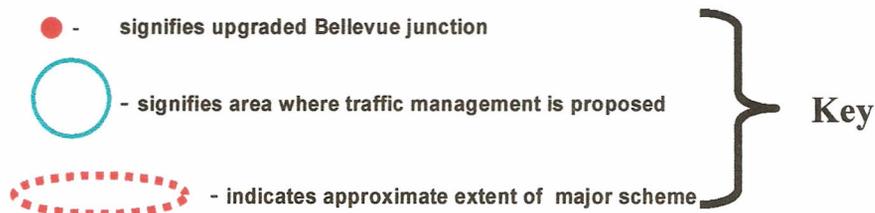
A series of traffic management measures were identified for the conservation area with a view to discourage traffic accessing the narrow streets in the conservation area. Two levels of traffic management were tested incrementally to assess the sensitivity of the area to schemes of varying severity. Of particular importance is the proposal to close Market Hill to through traffic and allow vehicular access to the area only for front delivery (where no alternative rear access is available), short stay parking and possibly for the retention of bus access should the introduction of a bus stop in Market Hill be accepted.

With the traffic management in place and recognising the fact that the majority of trips were identified to have a specific need to be in the wider Sudbury and Great Cornard area, it was necessary to provide alternative routes to allow vehicles, inhibited due to traffic management

from accessing the historical core, to continue accessing such areas. This resulted in the introduction of schemes to retain this ability. Furthermore, in all of the options tested, the need to improve the quality of the public transport system was taken as a given as this presents the primary mechanism to reduce the number of car journeys made in the area. Combined with this is a necessary commitment to develop a strategy for cycling and pedestrianisation aimed at improving conditions for these softer modes therefore promoting their use and sustainability.

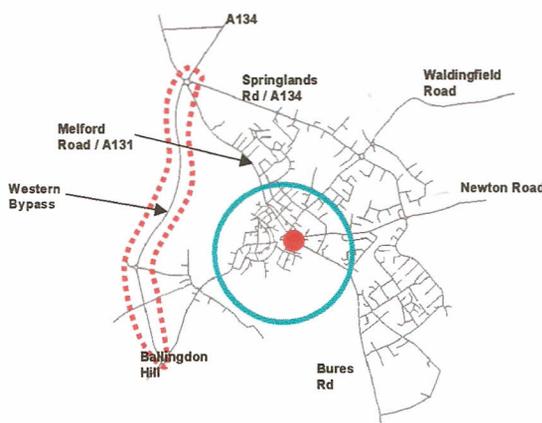
5.2 Identified options

Five preferred options were developed from 18 possibilities tested. These encompassed schemes that were designed to address the issues identified above. It should be noted that these options are not an exhaustive representation of possible solutions for Sudbury and Great Cornard but demonstrate those schemes which seek to target the concerns prevalent in the town. Possible variations on these options could involve the introduction of features of one scheme in a different option for instance. Of particular importance is the significant effect total road closures or traffic restraint measures can have on the patterns of movements of traffic. A short description of the options considered and presented at the exhibition is given below.



Option A

This option involves the introduction of traffic management in the town centre and creating a town centre pedestrian area/square in the Market Hill area that would largely eliminate through vehicular traffic from this area and create a pedestrian friendly environment. (includes Belle Vue upgrade)

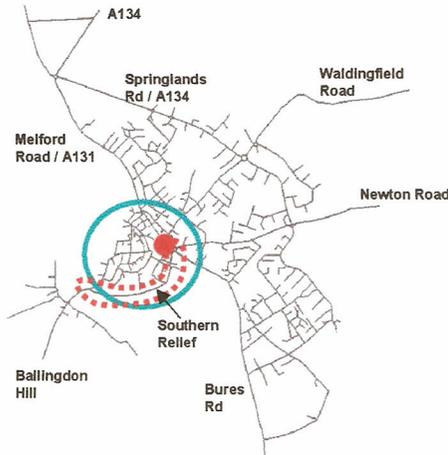
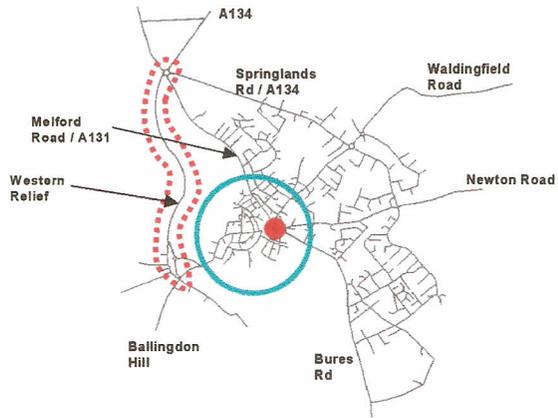


Option B

Western bypass realigned at its southern most extremity to avoid, as far as possible, sensitive environmental areas and including traffic management in the town centre (includes Belle Vue upgrade)

Option C

Northern part of western bypass combined with the southern part of the relief road linking to Ballingdon Street at Bulmer Lane, traffic management in conservation area with Bulmer Lane closed at the junction with Ballingdon Hill and a new arm provided as a replacement that effectively avoids the residential area on Bulmer Lane (includes Belle Vue upgrade) including closure of Cross Street to all through traffic and access to local residents only i.e closure of Ballingdon Street north of Bulmer Lane junction

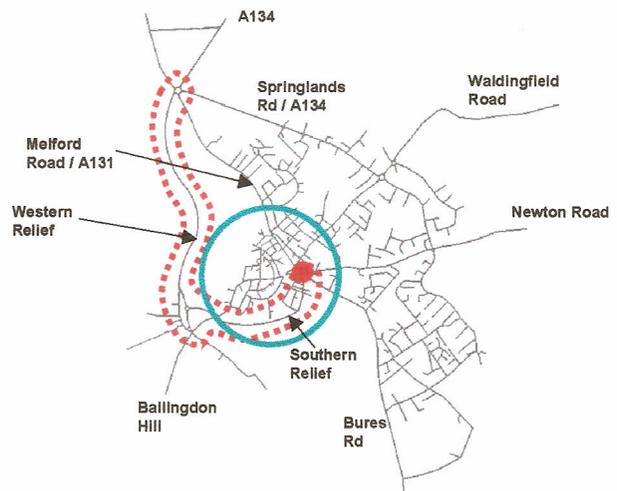


Option D

Southern relief road - Relief road joining Great Eastern Road to Ballingdon Street at approximately the location of the unused Railway Bridge with traffic management in the conservation area (includes Belle Vue upgrade)

Option E

Option C and D combined including closure of Cross Street to all through traffic and access to local residents only both south and north of the southern relief junction with Cross Street (includes Belle Vue upgrade)



6. Assessment of options and recommendations

Five key criteria were used in appraising the options identified with a view to assessing the relative strengths and weaknesses of each of the options and the approach they represented. These 6 key appraisal areas were as follows :

- Environment
- Traffic Performance
- Ability to relocate traffic away from the key conservation area*
- Subjective technical assessment made against the objectives defined through public consultation
- Assessment based on the views of the public on the relative importance of both key government objectives and objectives identified for the town
- Cost of implementation of the various schemes

* This area is defined as the area north of Friars Meadow, east of the River Stour, south of Cross Street/Gainsborough Road and west of Meadow Lane

Each appraisal area/criteria was further refined into more detailed areas for purposes of more accurately measuring the relative strengths of each of these options in each of the key appraisal areas. The summarised results are discussed further below. Details of the appraisals are contained in Appendix B.

6.1 Environment

The following environmental issues and features have been investigated as part of the study and incorporated in the environmental appraisal:

- Planning policy
- Air Quality
- Water Environment
- Noise and vibration
- Biodiversity
- Archaeology
- Cultural Heritage
- Landscape
- Geology and soils

The pattern of sensitivity to change is informed to a greater extent by an objective ranking on the basis of the degree of protection by legislation or policy and to a less extent by a subjective ranking of locally valued assets. It is stressed that this is a coarse tool only for use at this stage and in no way replaces or presupposes the outcome of the required full Environmental Impact Assessment (EIA) of any

adopted route options which would follow at a later date. Details of the environmental outcomes are contained in Appendix C.

The environmental assessment highlighted Option A as having the least environmental impact on the town as a whole due to this option not having any major scheme associated with it. All of the western bypass-related options (B, C and E) are likely to have a damaging impact upon the environment local to Sudbury with Option B, a Western by-pass showing the most adverse impact.

Option D, the southern relief road, will also result in an appreciable level of environmental damage although to a lesser extent than the western route options.

6.2 Traffic Performance

In order to establish the overall efficiency of the options to move traffic throughout the whole of the Sudbury and Great Cornard area, the traffic model developed was used to test the following features of traffic movement in the town with the options in place :

- Average trip time in the network
- Total trip time in the network
- Average distance of a trip in the network
- Average traffic throughput

This assessment identified Option D as the option that most effectively managed traffic movement in general in the town. The assessment further concluded that Option C was the least effective in terms of enhancing traffic movement in the town with Options A, B and E performing similarly in this regard.

6.3 Ability to relocate traffic away from the key conservation area

In order to establish the overall efficiency of the options to move traffic away from the conservation area as previously defined, the traffic model developed was used to test the total traffic entering and leaving a cordon around this area over an average 18 hour weekday.

This assessment identified Option E as best being able to relocate traffic from the area due to the extensive relief options provided in this option. As expected, Option A performed the worse in this regard due to the continued presence of traffic in this area as a result of no alternatives being available particularly to traffic originating or having a destination to the south of Sudbury. Option C featured relatively highly in this respect followed by Option D and then B.

6.4 Subjective technical assessment against objectives defined through public consultation

Using the objectives defined for Sudbury and Great Cornard, a subjective technical assessment was undertaken by the consultant team to assess how well each of the options could meet these objectives. The 5 key government criteria listed below were used as a framework for the assessment.

- Accessibility
- Economy
- Environment
- Integration
- Safety

Options B to E scored highly in this regard due to their inherent ability to relocate traffic from the internal road network in the historic core and relocating such traffic onto more appropriately designed routes. Option A clearly scored poorly in this regard as most of the inherent issues in the town related to in particular safety and accessibility issues would remain and possibly be concentrated on those routes experiencing traffic growth as a consequence of the closure of Market Hill.

6.5 Assessment based on the views of the public on the relative importance of both key government objectives and objectives identified for the town

Using the objectives defined for Sudbury and Great Cornard in conjunction with the views obtained from the general public on issues within the area, an assessment was undertaken on how effectively each of the identified options addressed the issues that had been raised. The 5 key government objectives, as defined in 6.4 above, were used to measure the ability of each of the options to meet public stated preferences.

Using these criteria, Option E was identified as best being able to address the key issues of accessibility and safety which had emerged as key areas of concern through the various consultation processes undertaken. Options B to D fared equally in terms of meeting public opinion whereas Option A was found to do least to address those issues raised by the public.

6.6 Cost of implementation of the various schemes

As an indicator of relative costs, the kilometers of new construction has been used as a proxy to rate the relative implementation cost of the various options. Although a specific cost assessment was not undertaken for each of the identified options, it was possible to arrange each of the options broadly within a cost range and thereby simply rank each in order of cost.

Option A clearly emerged as the lowest cost option due to the fact that it does not incorporate any major scheme. Option D was the second lowest cost being substantially shorter in length than any of the western schemes while Option E emerged as the most costly with 2 relief roads included within this option.

6.7 Combined appraisal

The table below is a summary of the appraisal process undertaken using the above 6 appraisal criteria. Using a weighting approach, the options were ranked by criteria based on their ability to meet the specific criteria. A combined rating was then determined for each of the options and a final rank determined for each of the options. The rationale behind adopting such an approach is that all of the pertinent issues, shaped largely through a combination of technical input and public view, are considered as a whole with a view to establishing the merit of each option over a wide range of relevant issues.

Criteria		Option A	Option B	Option C	Option D	Option E
Environment	Comment	Least impact on natural environment	Overall worst natural environment impact	High negative impact on natural environment	Least natural environmental impact of major scheme options	High impact on natural environment
	Weighted Rank	1.0	5.0	4.4	4.2	4.9
Traffic efficiency	Comment	Relatively effective in overall traffic movement to detriment of town environment	Relatively effective to traffic movement but worse than current situation due to induced greater distances of travel	Least effective in managing town wide traffic	Most effective in managing town wide traffic	Effectiveness of southern relief offset by ineffectiveness of western relief
	Weighted Rank	2.9	3.3	5.0	1.0	2.7
Conservation area Cordon	Comment	No diversion from inner core with no viable alternatives from the south	Same as for Option C but lower effectiveness due to increased distances	Effective in relocating particularly N-W bound traffic and vice versa	Effective in relocating particular N-B and N-E bound traffic and vice versa	Most effective in relocating traffic from inner core
	Weighted Rank	5.0	3.3	1.6	2.7	1.0
5 Key Objectives (average)	Comment	Least efficient technically in delivering objective responsive solutions	Technically efficient in delivering solutions for the objectives defined	Technically efficient in delivering solutions for the objectives defined	Technically efficient in delivering solutions for the objectives defined	Technically efficient in delivering solutions for the objectives defined
	Weighted Rank	5.0	1.0	1.0	1.0	1.0
5 Key Objectives (weighted by public opinion)	Comment	Least effective in delivering solutions sensitive to public concerns	Although not as effective as Option E, still effective in delivering solutions sensitive to public concerns	Although not as effective as Option E, still effective in delivering solutions sensitive to public concerns	Although not as effective as Option E, still effective in delivering solutions sensitive to public concerns	Effective in delivering solutions sensitive to public concerns
	Weighted Rank	5.0	3.7	3.7	3.7	1.0
Cost	Comment	Lowest implementation Cost option	Second highest implementation cost	Third lowest implementation cost	Second lowest implementation cost	Highest implementation cost option
	Weighted Rank	1.0	4.0	3.0	2.0	5.0
Overall Rank		4.0	5.0	3.0	1.0	2.0

From an environmental perspective, all of the western bypass-related options (B, C and E) are likely to have a damaging impact upon the natural environment to the west of Sudbury. Some of these negative influences are compensated for by a reduction in conservation area traffic but the results for Option B clearly show that the negative environmental implications combined largely with the cost of implementation do not sufficiently offset these negatives to yield an overall positive result.

Option D, the southern relief road, will also result in an appreciable level of environmental damage, albeit less than Options B, C and E, but the benefits associated with this option particularly related to the ability of this option to minimise cost as well as improve accessibility to the immediate periphery of the town strongly weigh in favour of this proposal. Furthermore, this option greatly enhances access to the south-eastern sector of the town where much of the retail, public transport and leisure facilities are concentrated. The presence of substantial brown-fields site in this sector of the town would benefit greatly through increased accessibility thereby enhancing the development potential of such land. Such development opportunities would present opportunities related to funding of any southern relief road scheme. The development of brown-fields sites in this sector are considered by Babergh to be fundamental in integrating the south-east of the town with the historical core.

Option A, although presenting an attractive proposition with respect to the natural environment, clearly still fails to resolve issues related to the built environment. Traffic is concentrated into less road space thereby increasing traffic levels in particular areas of the town particularly along the Church Street/Friars Street corridor and furthermore not substantially reducing traffic on the highly sensitive Ballingdon Street corridor.

Option A is essential for all of the options considered. However, considered as part of a phased implementation strategy, Option A could be developed as an initial phase of a strategy which would incorporate a by-pass or relief road scheme that would address these inherent problems at a later date.

6.8 Proposals

With respect to the question of a packaged phasing in of schemes, it is proposed that the following approach be adopted :

Phase 1 : First Order Traffic Management involving the enhancement of the town centre environment through the introduction of measures to promote safer walking and

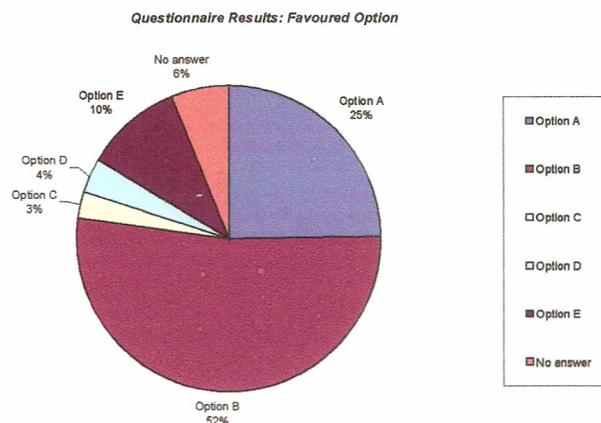
speed reduction. This could involve the protection of protected walkways (bollards, barrier kerbing etc.), introduction of traffic calming on roads experiencing safety problems.

- Phase 2 : Targeting the improvement to public transport delivery to the area. This will involve the provision of more reliable and accessible services particularly in the evenings and to regional employment areas such as Ipswich, Colchester and Bury St Edmunds. Other ways of delivering this service should be assessed and particularly opportunities associated with community transport initiatives. This would include for instance, the possibility of integrating a relocated railway station (further west) with a new bus station as an integrated public transport terminal in conjunction with suitable associated land uses.
- Phase 3 : Adopting a strategy targeted at promoting the use of softer modes of transport. This will involve a commitment to adopting a strategy aimed at implementing schemes that would increase the profile of cycling and walking in the area possibly to the detriment of the private motor vehicle. It is suggested that such a strategy be implemented as a once-off endeavour to enable the positive aspects of such modes of travel to become visible thereby enhancing the possibility of success of such a scheme.
- Phase 4 : Second Order Traffic Management including implementation of pedestrianisation of Market Hill, reconstruction of the Belle Vue junction and introduction of bus-gate on Waldingfield Road. Further measures to be considered include provision of controlled pedestrian crossings at key points in the town combined with a revised traffic system required as a result of the closure of Market Hill. Various junction upgrades will be required as a result of the changes in travel patterns as a consequence of the above schemes.
- Phase 5 : Implementation of major new road scheme to enable the traffic management system in the town centre to be completed which will include road closures and restricting access to the town area.

In considering the above approach, due recognition should be taken to promoting and targeting development proposals that would enhance the ability to achieve the above programme of delivery. As such, if adopted, the programme should form a fundamental part of the

Babergh Local Plan to ensure that the principles are contained within this and all other appropriate statutory regulations/documentation.

With respect to the outcomes of the public consultation at which the draft outcomes of the LTAP process were presented, it is important to note that in the survey conducted as part of the exhibition process, Option B was the most favoured option followed by Option A. The chart shows the questionnaires returned following the public exhibition held in October 2002. This chart refers to comments made by the general public only.



With respect to comments made by public bodies and organisations, Appendix D contains the outcomes of received correspondence from such sources. As with the general public comments, Options A and B were favoured by most except for the group supporting the case to revert to the reinstatement of the pre-Ballingdon Bridge traffic circulation in the town as well as Bulmer Parish Council who favour Option C over B as it has lesser impact on their area of jurisdiction.

Noteworthy is the obvious difference in opinion between the public view and the appraisal undertaken above.

7. Conclusions

The consultant's recommendations for the LTAP are aimed at producing a deliverable suite of measures that will address the town's economic, quality of life and objectives and aspirations for the future. Tourism and local business are important elements as well as conservation of the historic core. The intimate interrelationship between the town and its hinterland in cultural, spatial and amenity terms are a repeating theme of many policies and local objectives. A very obvious example of this is the strong visual link between the Stour Valley Common Lands and Conservation Areas. There are many subtle relationships which most local people are sensitive to and value

highly. The quality of the historic core gives a greater perceived impact from traffic than may be the case elsewhere.

The following are the primary observations from the study:

1. There is a perceived local traffic problem revolving mainly around high traffic volumes and HGV's on what is considered unsuitable infrastructure.
2. The built and natural environment of the area is extremely rich, diverse and sensitive to change.
3. The town has a thriving economy that relies upon access and parking, although most movements are short core to core journeys i.e. local traffic.
4. All road construction options will cause considerable damage to the natural environmental assets. There will have to be a regional justification to override these constraints. The benefits within the town centre may form this justification if backed by a substantial economic case that will require further study.
5. Public transport is considered to be part of the solution to the bigger problem of traffic in the historical core. Fundamental changes to public transport delivery need to be undertaken to develop an image for public transport centred on reliability, accessibility and good value.
6. Softer modes of travel such as cycling and walking are considered appropriate in an environment where a large proportion of tripmaking is local in nature – this will require careful nurturing to ensure that any strategy implemented meets with an early element of success.
7. The introduction of severe traffic management measures need to be approached in a sensitive and transparent manner to ensure the co-operation of all those affected by such strategies. Situations may arise where decisions taken for the wider benefit of the community may negatively impact at a very localised level.
8. The assessment of the traffic issues suggests that no case exists for a bypass on transport or congestion grounds alone. It is unlikely that a scheme approached in that way would be successful through the whole public inquiry and funding procedure.
9. There would be a substantial environmental cost in issues that were not as significantly weighted at the time of the previous EIA of the Western Bypass. These include issues such as Cultural Heritage and Biodiversity towards which the county now has stronger commitments and policies.
10. The south-eastern sector of the town enjoys poor accessibility which is hampering the further development of brown-field sites which have been identified as an opportunity of integrating this area with the historical core.

8. Recommendations

The part of the consultant's recommendation that is common to all options is the management works that focus upon the town centre (the Conservation Area) and can be delivered relatively quickly without a major scheme. These include the measures suggested in section 6.8. The consultants recommend that further work is commissioned to investigate the detailed feasibility of these schemes.

It is also recommended that the potential of a Tourism Development Study be investigated particularly concentrating on the cultural heritage and common lands assets. This should be linked to the work already done on the navigation possibilities.

The recommendations regarding the relief and bypass options that follow are divided into two parts:

- the consultants purely technical conclusions, and
- a way forward taking into consideration the protected corridor and the preliminary results of the exhibition.

From the combined backgrounds of transport planning and environment, the recommendation is that the town centre management scheme (Option A) should proceed without a bypass. There is sufficient road capacity to accommodate most of the proposals albeit with the implication of introducing increased traffic on specific routes in the town.

To achieve the local objective of removing the traffic from the historic core and enabling greater vehicle restriction within the centre it would be necessary to construct a means of relieving the traffic flows. The most efficient scheme in traffic and environmental terms is the Southern Relief Road and the recommendation is to investigate this further. Furthermore, this scheme offers the greatest opportunities with respect to the redevelopment of the south eastern sector brown-fields sites. This proposal may need to be considered in conjunction with a more detailed assessment of the possibility of widening Girling Street to permit two way travel thereby allowing an opportunity of substantially reducing traffic on Ballingdon Street/Cross Street/Gregory Street.

The consultants acknowledge that there is considerable local concern about the Southern Relief Road and an acceptance of the current routing of the Western Bypass. The route for this option has been protected for some time, however, the environmental constraints applied to new road proposals have become more stringent during that time. This reduces it's chances of success through the necessary procedures however, improvements to reduce the impacts are possible

and should be the subject of further urgent investigation. Accordingly the consultants recommend the following:

- Implementation of low cost high impact schemes in the town centre aimed at addressing primarily of safety and access developed in conjunction with the public
- Development of detailed designs and consultation for the town centre management schemes
- Development of a detailed study and proposals that will form the basis of the economic and environment case for the relief of the town centre
- Development of detailed Stage One Designs and Assessments for both the Western Bypass and the Southern Relief Road.
- The designs for the Western Bypass should seek to reduce the impacts introduced by higher environmental constraints since it's previous design.

Appendix A

Public Involvement Events

Date	Event	Outcome
Jan	Reference Group	Identified and prioritised objectives
Jan	Partnership Group	
Apr	Newsletter/ questionnaire	Sought views on objectives and transportation issues
May	Mapping the Future	Confirmed objectives and identified detailed concerns and issues.
Sept	Citizens' Panel	Scrutinised work carried out and gave views on options.
Oct	Public Meeting on environment issues	Clarified and enlarged upon environmental constraints.
Oct	Public Consultation	Obtained views of public on the 5 options put forward and other issues.

Appendix B

Environmental

Impact of selected route options upon the environment

The table below provides a summary of the assessment findings on the impact of the route options upon 8 key environmental issues.

Option A	Traffic management (Levels 1 & 2) in the historic core	
Planning policy	Neutral	0
Air quality	Neutral	0
Water Environment	Negligible impact	0
Noise and vibration	Moderate benefit	2
Biodiversity	Neutral	0
Archaeology	Moderate potential for archaeological constraints	-2
Cultural heritage	Moderate beneficial (Medieval Town)	2
Landscape	Moderate beneficial (Medieval Townscape)	2
TOTAL		4
Option B	Western bypass (revised outer route) with traffic management (Levels 1 & 2) in the historic core	
Planning policy	Neutral	0
Air quality	Beneficial	2
Water Environment	Moderate – Major adverse impact	-3.5
Noise and vibration	Slight adverse	-1
Biodiversity	Very serious adverse impact **	-6
Archaeology	High potential for archaeological constraints	-3
Cultural heritage	Large adverse (Gainsborough Landscape)/large beneficial (Medieval Town)	0
Landscape	Serious adverse (rural landscape)/slight benefit (Medieval Townscape)	-2
TOTAL		-13.5
Option C	Western bypass (inner route) with traffic management (Levels 1 & 2) in the historic core	
Planning policy	Neutral	0
Air quality	Beneficial	2
Water Environment	Very significant adverse impact	-2
Noise and vibration	Moderate adverse	-2
Biodiversity	Very serious adverse impact **	-6
Archaeology	High potential for archaeological constraints	-3
Cultural heritage	Slight adverse (Stour Navigation/Commonland)/large beneficial (Medieval Town)	2
Landscape	Serious adverse (rural landscape)/slight benefit (Medieval Townscape)	-2
TOTAL		-11
Option D	Southern relief road with traffic management (Levels 1 & 2) in the historic core	
Planning policy	Neutral	0
Air quality	Neutral	0
Water Environment	Significant impact	-1
Noise and vibration	Moderate adverse	-2
Biodiversity	Serious adverse impact	-3
Archaeology	Moderate potential for archaeological constraints	-3
Cultural heritage	Moderate adverse (Stour Navigation)/ large beneficial (Medieval Town)	1
Landscape	Serious adverse (semi-rural landscape)/slight benefit (Medieval Townscape)	-2
TOTAL		-10
Option E	Western bypass (inner route) with Southern relief road and traffic management (Levels 1 & 2) in the historic core	
Planning policy	Neutral	0
Air quality	Beneficial	2
Water Environment	Moderate adverse impact	-3
Noise and vibration	Moderate adverse	-2
Biodiversity	Very serious adverse impact **	-6
Archaeology	High potential for archaeological constraints	-3
Cultural heritage	Moderate adverse (Stour Navigation)/ large beneficial (Medieval Town)	1
Landscape	Serious adverse (rural landscape)/slight benefit (Medieval Townscape)	-2
TOTAL		-13

Note that the final noise assessments are not yet available - this assessment is based upon the information available to date.

Score	
10 and higher	Major beneficial impact
7 to 9	
4 to 6	
1 to 3	Minor beneficial impact
0	Neutral / Negligible impact
-1 to -3	Least severe adverse impact
-4 to -6	
-7 to -9	
-10 to -12	
-12 and less	Most severe adverse impact

Traffic

Ability of town network to relocate traffic away from the key conservation area

The table below provides an assessment of the options based on the network efficiency, the current situation is taken as a base

Option A	Traffic management (Levels 1 & 2) in the historic core	
Average time per trip		4
Total time per trip		5
Average distance per trip		-1
Average traffic through put		5
TOTAL		0
Option B	Western bypass (revised outer route) with traffic management (Levels 1 & 2) in the historic core	
Average time per trip		5
Total time per trip		4
Average distance per trip		-4
Average traffic through put		5
TOTAL		10
Option C	Western bypass (inner route) with traffic management (Levels 1 & 2) in the historic core	
Average time per trip		0
Total time per trip		4
Average distance per trip		-7
Average traffic through put		0
TOTAL		-3
Option D	Southern relief road with traffic management (Levels 1 & 2) in the historic core	
Average time per trip		10
Total time per trip		9
Average distance per trip		0
Average traffic through put		9
TOTAL		28
Option E	Western bypass (inner route) with Southern relief road and traffic management (Levels 1 & 2) in the historic core	
Average time per trip		3
Total time per trip		6
Average distance per trip		-1
Average traffic through put		7
TOTAL		16

Note that the final noise assessments are not yet available - this assessment is based upon the information available to date.

Score	
	10 and higher Most efficient
	5 to 9 Minor beneficial impact
	1 to 4 Neutral / Current situation
	0
	-1 to -4
	-5 to -9
	-10 and less Least efficient

Ability to relocate traffic from Inner Core

The table below provides an assessment of the options based on the amount of traffic entering the conservation area. For example the less traffic entering the conservation area the higher the score.

Option A TOTAL	Traffic management (Levels 1 & 2) in the historic core	1
Option B TOTAL	Western bypass (revised outer route) with traffic management (Levels 1 & 2) in the historic core	4
Option C TOTAL	Western bypass (inner route) with traffic management (Levels 1 & 2) in the historic core	7
Option D TOTAL	Southern relief road with traffic management (Levels 1 & 2) in the historic core	6
Option E TOTAL	Western bypass (inner route) with Southern relief road and traffic management (Levels 1 & 2) in the historic core	8

Note that the final noise assessments are not yet available - this assessment is based upon the information available to date.

Score	
10 and higher	Major beneficial impact
7 to 9	
4 to 6	
1 to 3	Minor beneficial impact
0	Neutral / Negligible impact

Cumulative 18 hour traffic Volumes

Subjective technical assessment based on objectives defined through public consultation

The table below provides an assessment of the options based on the 5 key objectives (average)

Option A	Traffic management (Levels 1 & 2) in the historic core	
Accessibility		1
Economy		8
Environment		8
Integration		6
Safety		9
TOTAL		32
Option B	Western bypass (revised outer route) with traffic management (Levels 1 & 2) in the historic core	
Accessibility		9
Economy		8
Environment		7
Integration		6
Safety		10
TOTAL		40
Option C	Western bypass (inner route) with traffic management (Levels 1 & 2) in the historic core	
Accessibility		9
Economy		8
Environment		7
Integration		6
Safety		10
TOTAL		40
Option D	Southern relief road with traffic management (Levels 1 & 2) in the historic core	
Accessibility		9
Economy		8
Environment		7
Integration		6
Safety		10
TOTAL		40
Option E	Western bypass (inner route) with Southern relief road and traffic management (Levels 1 & 2) in the historic core	
Accessibility		9
Economy		8
Environment		7
Integration		6
Safety		10
TOTAL		40

Note that the final noise assessments are not yet available - this assessment is based upon the information available to date.

Score	
	10 and higher Major beneficial impact
	7 to 9
	4 to 6
	1 to 3 Minor beneficial impact
	0 Neutral / Negligible impact

Assessment based on the views of the public on the relative importance of both key government objectives and objectives identified for the town

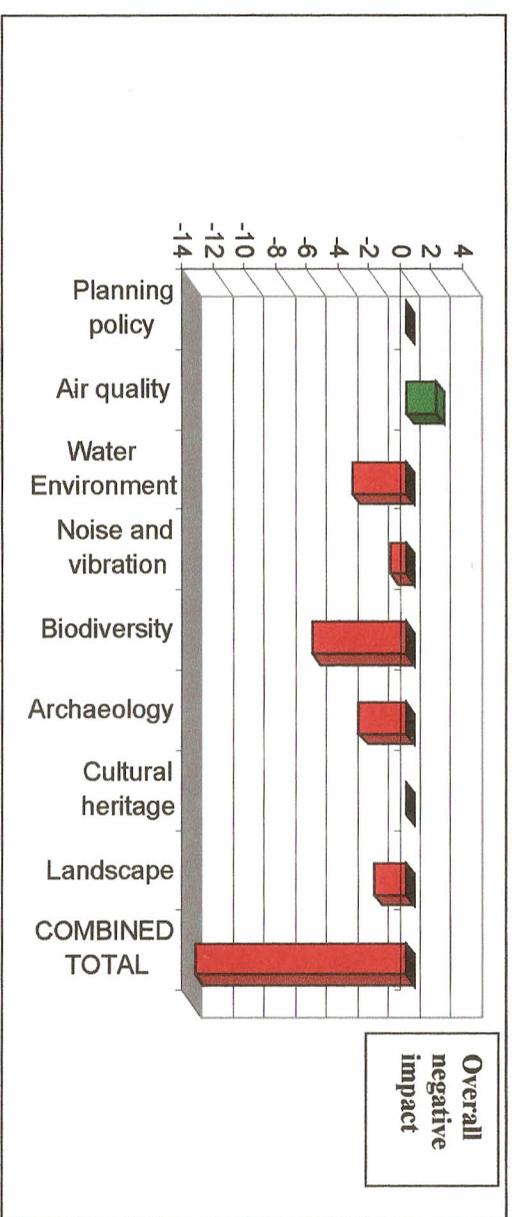
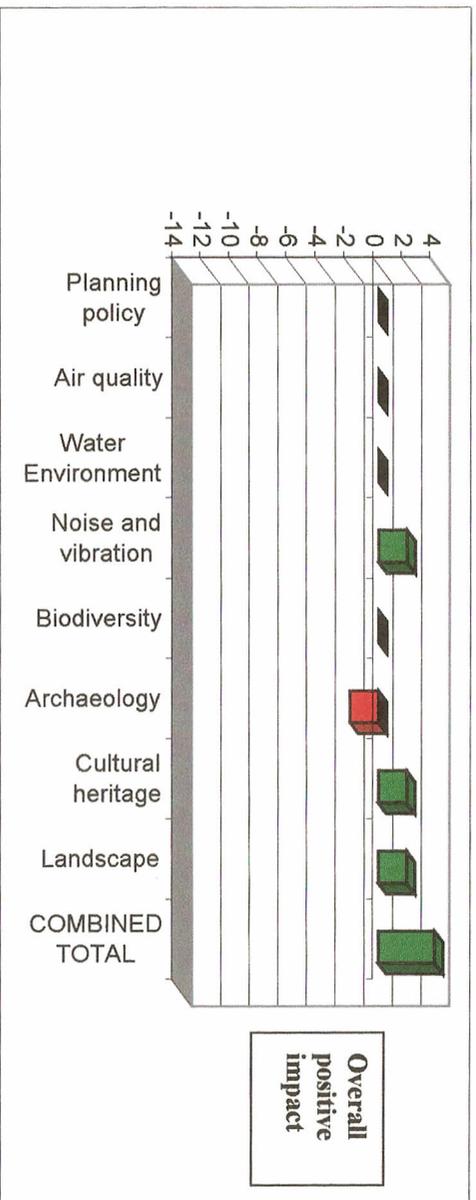
The table below provides an assessment of the options based on the 5 key objectives (weighted)

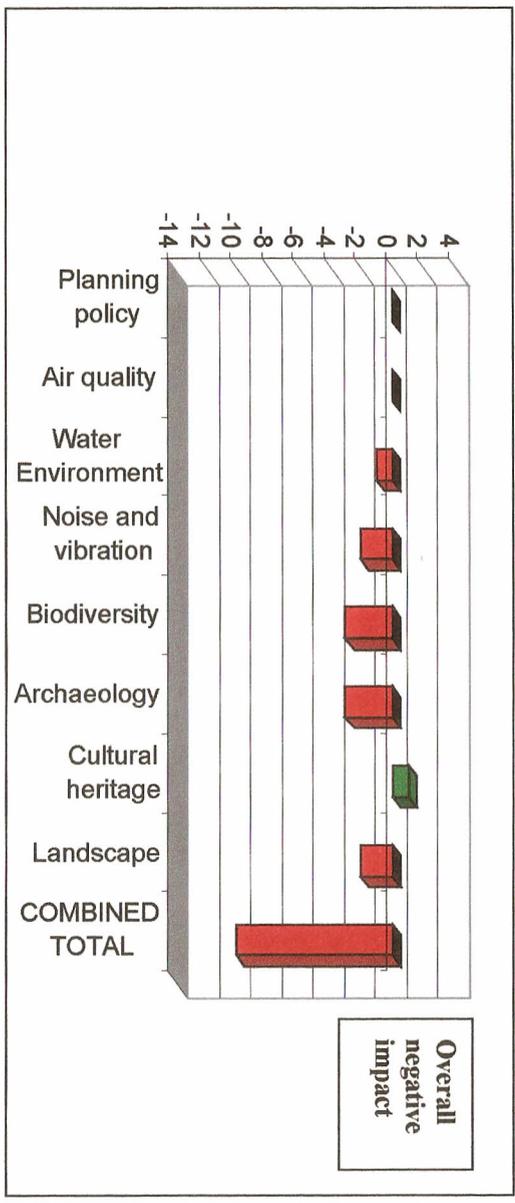
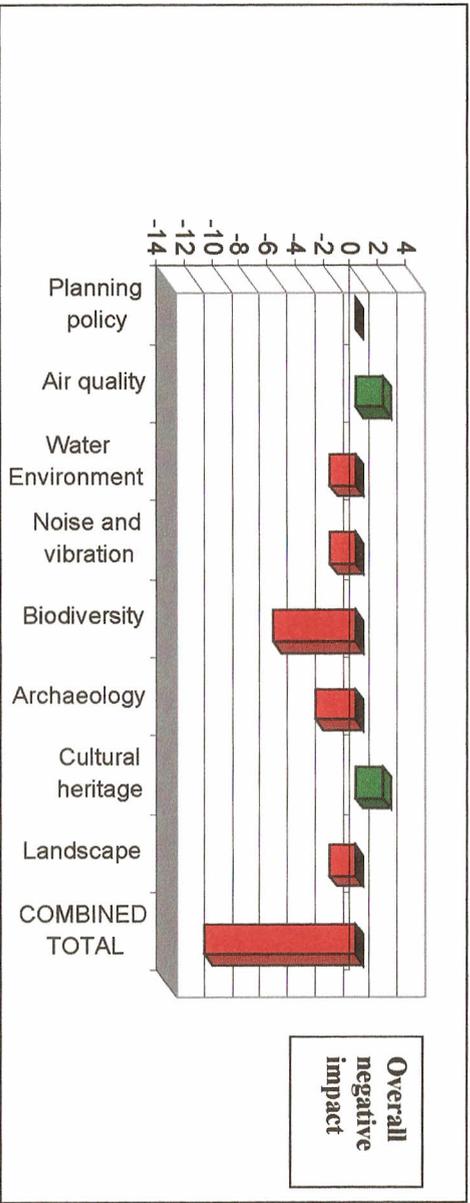
Option A	Traffic management (Levels 1 & 2) in the historic core	
Accessibility		5
Economy		2
Environment		8
Integration		1
Safety		9
TOTAL		26
Option B	Western bypass (revised outer route) with traffic management (Levels 1 & 2) in the historic core	
Accessibility		6
Economy		2
Environment		7
Integration		1
Safety		10
TOTAL		26
Option C	Western bypass (inner route) with traffic management (Levels 1 & 2) in the historic core	
Accessibility		6
Economy		2
Environment		7
Integration		1
Safety		10
TOTAL		26
Option D	Southern relief road with traffic management (Levels 1 & 2) in the historic core	
Accessibility		6
Economy		2
Environment		7
Integration		1
Safety		10
TOTAL		26
Option E	Western bypass (inner route) with Southern relief road and traffic management (Levels 1 & 2) in the historic core	
Accessibility		7
Economy		2
Environment		6
Integration		1
Safety		10
TOTAL		28

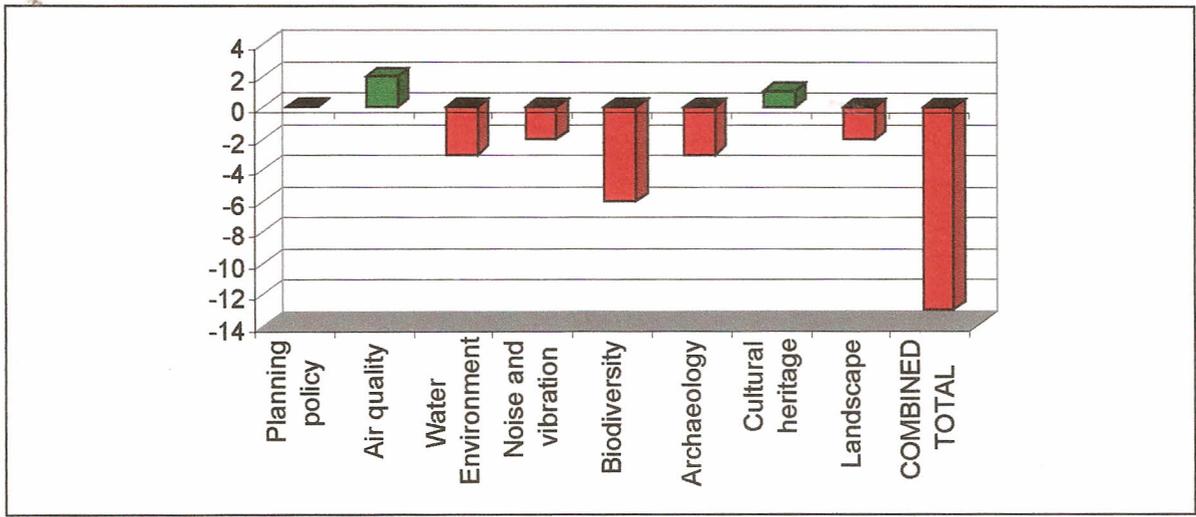
Note that the final noise assessments are not yet available - this assessment is based upon the information available to date.

Score	
	10 and higher Major beneficial impact
	7 to 9 Minor beneficial impact
	4 to 6 Minor beneficial impact
	1 to 3 Neutral / Negligable impact
	0 Neutral / Negligable impact

Appendix C







Option E Western & southern relief roads with town centre TM

Appendix D

Sudbury and Great Cornard Local Transport Action Plan : Public bodies and organisations response to exhibition 10 – 12 October 2002

Organisation / Representative	LTAP Option Favoured	Comments : Option A	Comments : Option B	Comments : Option C	Comments : Option D	Comments : Option E	Other Comments
		Traffic Management (TM) in town centre	Western by-pass + TM	Western relief road + TM	Southern Relief Road + TM	Combination of options C&D + TM	
Sudbury Town Council	B	Proposed one-way system will only work if Market Hill is closed.	Potential infill in limited areas. Route comes in too far towards Belchamp Brook.	Strong environmental concerns.	Strong environmental concerns. Would lose railway bridge and existing houses. Building on flood-plain. Noise pollution.	See comments for C&D.	Require clarification of extent of Essex CC's consultation on Western Bypass.
Bures St. Mary Parish Council	None	None.	Cannot express opinion - does not directly affect them.	None.	Strongly opposed. Would increase traffic flow between Sudbury and Colchester - passing through Parish.	None.	None.
Bulmer Parish Council	A / C	Bulk of traffic is in Sudbury to use Sudbury. Therefore effective traffic management is required. Reduce street parking + improve roundabouts.	New route for western by-pass will split village in two. Far more damaging than original proposal.	Will improve Sudbury's infrastructure.	None.	None.	Damage to water meadows will not be reversible if by-pass is built.
Thorntons Chartered Surveyors	B	Flawed, short-term parking required in centre to maintain "commercial vibrancy".	Able to route heavy through-traffic away from town centre.	Large impact on meadows and railway walk.	Cuts Sudbury off from meadows. Road would need to be heightened due to flood risk. Would encourage all through-traffic into centre.	Greatest impact on meadows.	None.
Mr JPA Comber	D	Will increase volumes of traffic in other central areas e.g.. Great Eastern Rd. Does not address stationary traffic + pollutant levels.	Will provide little relief. Most local traffic's final destination is Sudbury.	See Option B.	Offers most potential, but would need revaluation with regard to traffic flow through the town.	Impractical on commercial / financial grounds.	None.
The Sudbury Society	A+B	Traffic management cannot wait for Western by-pass. Support redesign of Belle Vue roundabout.	Western by-pass would be more effective if work is undertaken in advance on 'Eastern by-pass'.	None.	None.	None.	Concerned about inaccuracy of traffic flow figures, no. of HGVs in centre, three future developments increasing traffic flows.

Sudbury and Great Cornard Local Transport Action Plan : Public bodies and organisations response to exhibition 10 – 12 October 2002

Stephen Thorpe, Friars Street	A	Need strong consideration concerning historical importance of Market Hill. Reduce parking, pedestrian priority & vehicle management.	None.	None.	Will destroy Sudbury's most valuable asset - relationship between town, meadows, river & countryside.	None.	Approach from the east should be considered.
Suffolk Preservation Society	B	None.	None.	None.	None.	None.	Conscious of preserving Ballingdon Wood. Concerned about inaccuracy of traffic counts - limited to specific time of day etc. Need to consider effect of Stansted expansion. Improvement of Eastern Bypass + traffic management needed.
Mr J Bragg	B	None.	The only option to prevent unnecessary environmental damage and preserve Sudbury's heritage.	None.	None.	None.	None.
Sudbury and District Chamber of Commerce and Industry	A+B	Can only be implemented alongside by-pass scheme.	Should be relocated away from water meadows.	Will compromise development of rail link as well as damaging water meadows.	Will damage historic core of Sudbury i.e.. Ballingdon Street. Bridged in many places, therefore costly. Light and noise pollution increased significantly.	See C&D.	None.
English Nature	A	None.	None.	None.	None.	None.	Will not support any proposals which compromise wildlife habitats.
Dedham Vale & Stour Valley Countryside Project	A	Additional by-passes unnecessary.	Environmentally damaging. See additional comments.	Even more environmental. damaging than B.	Environmental. damaging (less than western by-pass) but with greater emphasis on effect on townscape.	Worst of all scenarios since combines problems associated with C&D.	State conflict with policy ENV4 - location, siting and design must minimise adverse impact on the environment.
Simon Pott & Co. Chartered Surveyors	None	None.	None.	None.	Will affect Auberies Estate. Concerned about lack of direct consultation.	None.	None.