

Transport and Works Act 1992

CAMBRIDGESHIRE GUIDED BUSWAY ORDER

Position Paper – Histon and Impington

August 2004

This is one of a series of position papers being produced by Cambridgeshire County Council on issues concerning the Cambridgeshire Guided Busway (CGB). A full set of current position papers will be found on the County's website at www.cambridgeshire.gov.uk/sub/eandt/planning/raptrans/index.htm

The Transport and Works Act (TWA) Order and associated planning request for the CGB will be the subject of a Public Local Inquiry commencing on 28 September 2004 when the project will be examined in detail. If you have any queries concerning this paper, please contact the CGB team on 01223 716972 or transport.plan@cambridgeshire.gov.uk.

1 INTRODUCTION

1.1 The Cambridgeshire Guided Busway alignment through Histon and Impington follows the routing of the disused St Ives to Cambridge railway line. This runs adjacent to agricultural land north and south of the line from Oakington until it crosses New Road where a mix of residential properties and commercial premises are then located to the north, immediately adjacent to the line, with a mix of agricultural moving to residential and commercial on the south on the approach to Station Road in the centre of the two villages. To the east of Station Road the land use to the north is woodland followed by agricultural whilst to the south are the residential properties of Villa Place and Pepys Terrace, moving then into agricultural land again.

1.2 This paper concerns issues arising from objections to the Scheme through the TWA process for the Histon and Impington area. It sets out, in broad terms, the outline of Cambridgeshire County Council's position, as Scheme promoter, in relation to each of these at this point in time:-

- Objections to the principle of the project
- Operational noise
- Air pollution
- Visual intrusion and loss of residential amenity
- Ecological impact
- Pedestrian safety
- Increased traffic congestion
- Impact on local businesses
- Property devaluation
- The demolition of Histon Station building
- Misuse of the guideway and maintenance track
- Alternative alignments away from the disused railway corridor

2 OBJECTIONS TO THE PRINCIPLE OF THE PROJECT

2.1 The County Council's Statement of Case sets out in broad terms the Council's overall case for the Cambridgeshire Guided Busway Scheme (CGB). Specifically, it details the national, regional and local policy drivers

for the Scheme and demonstrates that the project as proposed is fundamental to delivery of transport and development policy at each of these three levels. Section 5 of the Environmental Statement (ES) details alternative systems that have been considered during development of the project and why these were rejected in favour of the project being promoted. Further position papers will deal in more detail with specific elements of the case for the project, including the background to the Cambridge-Huntingdon Multi Modal Study (CHUMMS), which recommended guided bus as the most appropriate public transport solution for this corridor, and examination of the heavy rail alternative to the guided bus project. Further material on the need for the project is also set out in the Transport Assessment. Proofs of evidence will set out in more detail matters, such as, the planning policy justification and need for the scheme.

3 OPERATIONAL NOISE

- 3.1 Section 14 of the ES assesses the potential likely noise and vibration impacts from the proposed CGB Scheme. Further noise detailed evidence will also be contained in the Proof of Evidence of Mr Chris Manning.
- 3.2 The Scheme is designed such that the same vehicles (buses) would be used on the roads and the guideway. In noise terms, this means that on the guideway these vehicles would be the only noise source, whereas on the roads the vehicles would mix with existing traffic flows.
- 3.3 As a base for the assessment, representative sites, were selected which reflect the levels of background noise likely to occur. Noise monitoring has been undertaken to measure the existing noise levels at these locations, as described in Section 14.4 of the ES. These measurements provide the baseline for the assessment of operational noise impacts arising from the Scheme.
- 3.4 The assessment of noise impacts has considered both the construction and operational phases of the Scheme. The methodologies employed in the assessment of noise and vibration, in the construction and operational phases respectively, are described in Section 14.2 of the ES.
- 3.5 The ES predicts noise level increases (without mitigation) in Histon and Impington of between 1 decibel (dB) and 13 decibels (dB) over the existing noise levels at certain residential locations, in particular properties in Melvin Way, Pease Way, St.Audrey's Close (12dB) and Villa Place (13dB), where existing noise levels are very low. The ES sets out the County Council's commitment, see paragraph 14.6.4 of ES, to install suitable acoustic barriers to protect properties adjacent to the north eastern edge of the

guided busway in Pease Way, Melvin Way and St Audrey's Close and to the southern edge of the guideway protecting properties in Villa Place. These barriers will be designed to reduce noise by up to 10 dB, thus reducing the increase at worst to a maximum of 3 dB, and in many instances mitigating any increase completely. The form of these barriers will be a matter for detailed design.

- 3.6 The Noise Insulation (Railways and other Guided Transport Systems) Regulations 1996 detail thresholds above which it is considered noise insulation work should be undertaken to affected properties. The noise predictions within the ES for the Histon and Impington area show that the statutory thresholds under these Regulations would not be triggered even without the proposed mitigation.

4 AIR POLLUTION

- 4.1 Section 8 of the ES describes the relevant air quality management policy and legislation, the methodology, existing or 'baseline' air quality situation and the findings of the assessment of potential air quality effects of the proposed Scheme, together with proposed mitigation measures.

- 4.2 The aspects of the Scheme that are most relevant to air quality are emissions from:

- the activities to take place during the construction, including associated road traffic;
- buses associated with the operational Scheme, and
- changes to traffic as a result of the operational Scheme.

- 4.3 The air quality assessment of the Scheme applicable to Histon and Impington comprised:

- a review of existing air quality in the South Cambridgeshire District Council areas, specifically five diffusion tube sites as detailed in Table 8.5 of the ES;
- assessment of the potential changes in air quality arising from the construction and operation of the Scheme, and
- formulation of mitigation measures, where appropriate, to ensure that any adverse effects on air quality are minimised.

- 4.4 The existing air quality situation has been reviewed through data available from air quality monitoring and air quality review and assessments, and discussions with the local authorities. Operational traffic effects have been assessed using a modelling approach agreed with the relevant Officers from Cambridge City, South Cambridgeshire District and Huntingdonshire District Councils. Areas to be modelled were identified by the District Officers, and included Station Road/Cambridge Road area of Histon & Impington, where the Project proposes a small car park of around 40 spaces and the stop location.
- 4.5 Traffic levels on the guided busway will be low, with up to 24 buses per hour anticipated in each direction during peak periods. All buses permitted by the Council to use the guided busway will be required to meet the vehicle quality threshold of Euro IV vehicle emissions standard. This is the emission standard that all new heavy goods vehicles (HGVs) must comply with by 1st October 2006. Euro IV vehicles are significantly cleaner than their predecessors and many conventional buses, so the required use of Euro IV vehicles on the guideway will have a significant beneficial effect on air emissions from buses in and around Cambridge.
- 4.6 Existing air quality monitoring sites, known as receptors, along Station Road/Cambridge Road (receptors 3-8) are listed in Appendix 8A and shown in Appendix 8B of the ES. Predicted ground level Nitrogen Dioxide (NO₂) and Particulate Matter (PM₁₀) concentrations at these receptors are shown in Appendix 8D.
- 4.7 The air quality modelling demonstrates that the annual mean NO₂ objective is met at all the receptors along Station Road/Cambridge Road in all modelled years, save for at the A14 Histon monitoring site in 2001 (thus agreeing with the monitoring results for this site). Comparison of the do-minimum (without the Scheme) and do-something (with the Scheme) scenarios shows that the Scheme does not have a significant impact upon local air quality in any of the future years modelled, with NO₂ concentrations forecast to change by $\pm 0.2 \mu\text{g}/\text{m}^3$, a minimal amount. Overall, the Scheme has a negligible impact on NO₂ concentrations at the modelled receptors.
- 4.8 In respect of PM₁₀, the modelling shows that there are no predicted exceedances of the current annual mean PM₁₀ standard (40 $\mu\text{g}/\text{m}^3$) or provisional 2010 20 $\mu\text{g}/\text{m}^3$ standard (in 2011 and 2021 scenarios) at any of the modelled receptors in this area. Comparing the do-minimum and do-something scenarios shows that the Scheme does not significantly affect PM₁₀ concentrations in any of the future years with changes as a result of Scheme predicted to be less than 0.1 $\mu\text{g}/\text{m}^3$ at all receptors. All receptors in

this area therefore show negligible effect in all modelled years.

- 4.9 Comparison of the predicted number of exceedances of the PM₁₀ 24-hour mean (average) between do-minimum and do-something scenarios for 2006, 2011 and 2021 also shows the negligible impact of the Scheme with the number of exceedances remaining unchanged between scenarios in all years at all receptors. The highest number of exceedances occurs at receptor 1 (A14 Histon monitor) which is predicted to have 7 exceedances in 2001. This is within both the current objective of 35 allowable exceedances of the PM₁₀ 24-hour mean and the provisional 2010 standard which states that 24-hour mean for PM₁₀ cannot be exceeded more than 7 times. Based on the number of exceedances of the 24-hour annual mean, the Scheme therefore shows a negligible effect in all modelled years.
- 4.10 Based on the assessment undertaken no mitigation measures are actually necessary given that the operation of the Scheme will have a negligible effect on air quality in Histon and Impington in all modelled years.

5 VISUAL INTRUSION /LOSS OF RESIDENTIAL AMENITY

- 5.1 Within the Histon and Impington area a number of residential properties in Pease Way, Melvin Way, St.Audrey's Close, Manor Park, Pepys Terrace, Villa Road and Villa Place are located in close proximity to, or directly back onto, the railway corridor and hence the proposed alignment of the guided busway.
- 5.2 Section 13 of the ES details the landscape and visual assessment for the Scheme and identifies that over the route as a whole the number of visual receptors exposed to the scheme is low. The ES recognises that some visual intrusion would be caused by buses where the route passes close to residential properties, such as those outlined in paragraph 5.1 above, and that the use of double decker vehicles as proposed is likely to be visible above hedgerows and other planting.
- 5.3 Whilst there will be some level of visual intrusion due to the presence of double decker vehicles this is limited and will be reduced through integration of the proposed noise barriers with appropriate planting, see paragraph 13.7.190 of ES, and, where noise barriers are not required, through appropriate planting.
- 5.4 However, any residual visual impacts on residential amenity are in the context of the current situation and does not take account of the fact that when these houses, and other properties, were built the railway was fully operational. Until recently, the proposed guided busway route was still

classified as operational rail line, meaning that train services could have been reintroduced along it at any time.

6 ECOLOGICAL IMPACT

- 6.1 Ecological issues in relation to the Scheme are assessed in Section 11 of the ES and considered in a further position paper titled *Ecology*.
- 6.2 That said, in relation to the project alignment in Histon and Impington neither the ES or the above mentioned paper could identify any significant ecological impacts in this area.

7 PEDESTRIAN SAFETY

- 7.1 For the purposes of understanding pedestrian movements and ensuring these can be safely accommodated the guideway is directly comparable with a normal road, albeit one with a very low traffic flow more akin to a quiet residential estate road.
- 7.2 It can reasonably be anticipated that pedestrian movements will take place along the maintenance track, across the guideway where public rights of way cross, at junctions of the guideway with the public highway and at stop locations.
- 7.3 Each of these forms of pedestrian movement will in essence be no different from movements alongside or across a normal quiet residential road. No physical separation, such as a hedge or fence, is proposed between the maintenance track and guideway in much the same way as there is usually no physical separation between a road and footway. Pedestrians can be expected to exercise the same level of care in respect for their own safety as they would either using a footway beside a road or crossing a road.
- 7.4 Junctions of the guideway and maintenance track with the public highway will be controlled with traffic signals that incorporate pedestrian phases. In this respect, again the guideway is no different to a road.
- 7.5 As is good practice in highway design, all junction and pedestrian crossing layouts have been subject to independent road safety assessments by the County Council to ensure designs meet the needs of all users. These have concluded that the outline designs satisfy this. Further independent assessments will be undertaken during the detailed design and following construction to ensure that what is provided on the ground meets the needs of users in a safe manner.

- 7.6 In addition, the guided sections will be subject to the approval of Her Majesty's Inspector of Railways (HMRI) who will need to be satisfied on all safety matters. Discussions to date with HMRI indicate no significant issues arise.

8 INCREASED CONGESTION

- 8.1 Section 16 of the ES assesses the impact which the Scheme would have on its users, other forms of transport and on the wider transport network. The methodology for this assessment is detailed along with the impacts of the scheme on public highways where the guideway crosses these.
- 8.2 A Transport Assessment (TA) setting out in more detail the transport case for the scheme has also been prepared. This examines the impacts on highway users through the examination of network operating conditions before and after the introduction of the guided bus and concludes that the introduction of the guided bus has a positive impact on key network performance indicators, resulting in a reduction in traffic flows, vehicle journey times and delays. Reductions in journey times come about through a transfer of existing car users on to guided bus and the subsequent reassignment of traffic from the local roads on to the A14. This means that although journey times on the A14 remain relatively stable, significant reductions in travel time are experienced on the local road network.
- 8.3 In relation to Histon and Impington, Table 16.18 and 16.19 of the ES demonstrates that the impact of signalling the guideway junction with both New Road and Station Road on other traffic is minimal.
- 8.4 The proposed parking facility at Histon and Impington will be subject to a Traffic Regulation Order limiting parking times, see Schedule 9 of the Draft Order. This will discourage use of the car park by commuters from outside the two villages but provide a facility for local users unable to walk or cycle to the stop to make time limited journeys into Cambridge.

9 IMPACT ON LOCAL BUSINESSES

- 9.1 The Guided Busway utilises an existing railway corridor and in that respect would not impact directly on local business in Histon and Impington through land take, with the exception of the old Station building site which it is proposed will be acquired to provide a small parking facility.
- 9.2 During construction there may be some short term impacts, such as one way traffic working on Station Road whilst the guideway junction with the road is constructed and the traffic signals are installed, but these will be

mitigated through the Code of Construction Practice which will keep impacts to a minimum.

- 9.3 Once the guided busway is operational businesses adjacent to the stop location can reasonably be expected to benefit from the increased footfall, for example many passengers getting on at the stop may wish to purchase a paper or other refreshments prior to boarding.

10 PROPERTY DEVALUATION

- 10.1 In general good accessibility to employment and commercial areas is one of the location factors considered by property purchasers. The Scheme will provide a high frequency, high quality public transport service to key employment and commercial areas in the City, as well as to the services at the proposed new town of Northstowe. In addition, it will link settlements along the route directly with Cambridge Railway Station. Many prospective purchasers will see this as a positive benefit and in this regard it would not be unreasonable to expect this to be reflected in property values.
- 10.2 A review study in 2002, Land Value and Public Transport, on behalf of the Royal Institution of Chartered Surveyors (RICS), the Office of the Deputy Prime Minister (ODPM) and the Department for Transport (DfT) suggested that transport improvements may have a positive effect on both residential and commercial property markets, particularly in regard to capital uplift in property values.
- 10.3 However, what could be seen by some potential purchasers as a benefit may also be seen by others as a dis-benefit. Owners of residential property who believe they have suffered a loss may be able to make a claim under the Land Compensation Act 1973. Compensation is based upon the depreciation in the value of land due to “physical factors” caused by the use of public works, in this case the guided busway works.

11 DEMOLITION OF HISTON STATION BUILDING

- 11.1 Provision of car parking adjacent to the Histon and Impington village centre stop was identified by many, through the public consultation of 2003, as a beneficial addition to the Scheme.
- 11.2 Any such facility, by its very nature, needs to be closely situated to the guided bus stops. Given existing land uses, only three locations were available, the existing station building site, the old goods yard behind the station building site, or the existing woodland located to the east of Station Road. It was considered unacceptable from an environmental viewpoint to

utilise the woodland as it would have required the removal of a large number of mature trees. The old goods yard is currently utilised by two commercial interests and taking this site would have led to adverse impacts on both of these. In addition, the goods yard site is the furthest of the three locations from the stops.

- 11.3 Irrespective of where the car park is located the project requires the demolition of the platform at the station building that are currently used to access a large section of the ground floor. Given that this impact is unavoidable, and the size, shape and proximity of the site to the stops and the public highway is the most desirable of the three locations, the old station building site was therefore chosen as the most appropriate location for the car parking facility.

12 MISUSE OF GUIDEWAY AND MAINTENANCE TRACK

- 12.1 Buses will be able to access the guideway at a number of the junctions with the public highway, including in Histon and Impington. Guideways are by their nature difficult to use for non-guided vehicles. Nevertheless, entry points into the guideway will be designed in such a way as to minimise or eliminate the potential for its unauthorised use by other motorised vehicles. A number of options are available to achieve this including the use of rising bollards, such as those already used in a number of locations in Cambridge City centre, which identify authorised vehicles through an electronic tag, vehicle traps which are pits designed for the wheel spacing of a bus that other vehicles cannot pass over easily and barriers which would operate in the same way as rising bollards.
- 12.2 Access to the maintenance track running alongside the guideway will also be controlled, whilst allowing unhindered access to pedestrians, cyclists and horseriders. This could be achieved in a number of ways, including carefully located bollards, staggered gate arrangements and the use of chicane type features. The final form of solution or combination of solutions will be determined during detailed design of the guided busway.

13 ALTERNATIVE ALIGNMENT

- 13.1 Some objectors have proposed that the alignment should be to the south west of Melvin Way, across agricultural land and further away from residential properties. Although no specific alignment has been suggested, any such alignment would involve land outside of the limits of land the County Council is currently seeking powers over and could not therefore be achieved through this current Order application.

- 13.2 Notwithstanding this, the currently proposed route utilises an existing transport corridor which until very recently was still classified as operational railway and which has been safeguarded as a public transport corridor for many years. Alternative alignments would take up greenfield land in agricultural use. By contrast, the proposed guideway alignment is consistent with the former use of the land, as well as representing the most efficient land use. The additional land take required for an alternative alignment is not justified when the Scheme can use an existing transport corridor.
- 13.3 Alternative alignments away from the former railway corridor would require slower running of the guided buses due to geometry constraints, require a greater length of guideway thus increasing costs and land taken and would cause severance of the agricultural land. Depending on actual routing some alignments could involve interference with an electricity substation and other property impacts, adding further cost to the project.
- 13.4 The frequency of guided buses through Histon and Impington will be up to 24 per hour (in 2016) in each direction during peak periods, akin to a quiet residential road. Many properties abut roads with significantly greater traffic flows, with a mix of car, bus and heavy goods vehicles (HGV) traffic without adverse effects on property values or residents quality of life. With appropriate screening and noise barriers as proposed and detailed above the impact on properties immediately abutting the guideway will not be significant.
- 13.5 The existing transport corridor is, therefore, the best and most appropriate solution for routing the guided busway through this area.

14 CONCLUSIONS

- 14.1 The County Council position is that: -
- The Scheme is fundamental to delivery of transport and development policy at local, regional and national level.
 - There will be some localised noise impacts in Histon and Impington in the vicinity of Pease Way, Melvin Way, St. Audrey's Close and Villa Place. These impacts will be mitigated through provision of noise barriers which will reduce the maximum increase to 3 dB.
 - Based on the air quality assessment undertaken no mitigation measures are necessary as operation of the Scheme will have a negligible effect on air quality in Histon and Impington.

- Whilst there will be some level of visual intrusion due to the presence of double decker vehicles this is limited and will be reduced through integration of the proposed noise barriers with appropriate planting and, where noise barriers are not required, through appropriate planting.
- There are no significant ecological impacts in Histon and Impington.
- In relation to pedestrian safety the guideway and maintenance track will function in the same manner as a road and adjacent footway. Pedestrian phases will be incorporated into guideway signal controlled junctions.
- The impact of signalling the guideway crossing with New Road and Station Road will have minimal impact on highway congestion, whilst the proposed car park for the two villages will be time limited to discourage its use by commuters.
- Any potential short term impacts on local businesses during the construction phase will be minimised through the Code of Construction practice. Once the guided busway is operational businesses adjacent to the stop location may reasonably be expected to benefit from the increased footfall.
- In general terms good public transport accessibility to employment and commercial areas is viewed positively by prospective house purchasers and hence may improve property values. However, depending on location it is possible that some properties may not be viewed as favourably by prospective purchasers. In these instances owners of residential property who believe they have suffered a loss may be eligible to claim compensation.
- The project requires demolition of the platforms at Histon station building. Given this, along with the sites size, shape and proximity to the public highway and the CGB stops the old station building site is considered the most appropriate site for the proposed Histon and Impington car parking facility.
- A number of options are available that could prevent misuse of the guideway and the maintenance track. The exact form of these will be determined at detailed design stage.
- The Council consider the existing transport corridor to be the most appropriate route to utilise for the guideway through the Histon and Impington area.