

## GENERAL PRINCIPLES

### General overview of scheme and need for railway

#### 1. What assessment has been carried out into the local, regional and national impact of the railway not proceeding?

The appraisal of the Airdrie-Bathgate rail link followed the Scottish Executive's Scottish Transport Appraisal Guidance (STAG). STAG is regarded as the key reference document for the appraisal of transport projects, policies, studies or schemes, with all transport projects requiring Scottish Executive support or approval appraised in accordance with STAG. This approach was also followed in the Design Development Appraisal (DDA) work in support of the Parliamentary Bill submission.

Following the STAG approach, the scheme was measured against a Base Case (or Reference Case) which included:

- The current transport infrastructure
- Current public transport services
- Committed changes to the present day transport infrastructure and public transport services which would be in place at the time the railway opened.

The Base Case therefore represents the situation which would exist in 2010 if the railway proposal did not proceed. As such, the costs and benefits ascribed show the long term impact. If the railway is not constructed these benefits will not be realised.

The benefits cover the five government objectives for transport: environment; safety; economy; integration; and accessibility and social inclusion. In addition, there is a series of policy objectives (refer to paragraph 5 of Promoter's Memorandum) which would not be achieved:

- Improvements in access to the Glasgow and Edinburgh labour markets for those living in the corridor
- The stimulation of the local economy through improved accessibility
- The delivery of improved social inclusion through the new opportunities created for residents of the corridor
- The increase in the number of people using public transport in Central Scotland and providing these communities with improved access into the national rail network
- The provision of improved public transport in the Central Belt providing an alternative to the private car
- The reduction in congestion on the existing Edinburgh-Glasgow services via Falkirk through some trips switching to the new line where more convenient.

**2. Please detail what the linked improvements are.**

The core of the Bill covers the section of closed route from Drumgelloch to Bathgate. The linked improvements relate to works outside the authorised limits of the existing operational railway (between Airdrie and Drumgelloch and between Bathgate and Edinburgh) where permanent or temporary land take is required. Examples of such linked improvements are:

- Works at Airdrie station
- Renewal of one bridge between Airdrie and Drumgelloch
- Provision of a light maintenance depot for rolling stock at Bathgate
- Provision of a site to replace the car storage yard at Boghall
- Renewal of nine bridges between Bathgate and Edinburgh
- Minor works to a further 12 bridges between Bathgate and Edinburgh
- Demolition of five bridges between Bathgate and Edinburgh
- Provision of a new car park and access road to serve Uphall Station
- Provision of a new footbridge over the M8 to link the car park and Uphall Station.

**3. What are the wider transport, social and economic benefits of the linked improvement elements of the proposed scheme?**

The linked improvements are integral to the scheme and have not been separately appraised as they would not proceed in the absence of the core scheme. They are described as linked improvements within the Bill to make it clear that they are not part of the core new route between Airdrie (Drumgelloch) and Bathgate.

**4. What contingency arrangements has the Promoter made to carry out the linked improvements should this Bill not proceed to Royal Assent?**

As explained in the response to question 3, the linked improvements are integral to the scheme and, as such, no contingency arrangements have been undertaken.

**Railway within local, regional and national transport plans**

**5. How will the new service integrate with other railway services operating out of Airdrie and Bathgate and the wider rail network out of Glasgow and Edinburgh?**

The new service will run four times per hour in each direction, and will be an extension of the electric multiple units (EMUs) train services currently operating between Airdrie and Drumgelloch and points west of Glasgow. At the east end it will replace the two diesel multiple units (DMUs) trains currently operating per hour between Bathgate and Edinburgh Waverley.

By linking the two existing rail routes at Bathgate and Airdrie, the line significantly improves connectivity for rail users across the Central Belt. A new range of destinations (requiring no interchange) become available for travellers originating in Edinburgh, West Lothian, North Lanarkshire, Glasgow and areas

west of Glasgow. For example, travellers originating in West Lothian will now be directly connected to Glasgow and the west, while travellers originating in the Coatbridge/Airdrie area will have direct rail access to Edinburgh.

One of the key aims of the Bill, as set out in the policy objectives, is to provide residents along the route with improved access into hub stations at Edinburgh Waverley and Glasgow Queen Street. In addition, Glasgow Central station is within 10 minutes' walking distance for travellers disembarking at Queen Street Low Level. These three hub stations will allow travellers from west of Glasgow, North Lanarkshire and West Lothian greatly improved public transport interchanges with the rest of the network.

## **6. How will the proposed service integrate with other proposed rail projects such as the Edinburgh and Glasgow airport rail links and the Borders railway?**

The Airdrie-Bathgate rail link is one of seven major rail infrastructure projects currently being developed. The remaining six are:

- Edinburgh Waverley Infrastructure Works
- Edinburgh Trams (light rail system)
- Stirling-Alloa-Kinross
- Borders Railway
- Glasgow Airport Rail Link (GARL)
- Edinburgh Airport Rail Link (EARL).

The Edinburgh Waverley Infrastructure Works project, now being delivered by Network Rail, will create the additional track capacity in the Edinburgh area to enable the Airdrie-Bathgate rail link service to operate.

The Airdrie-Bathgate rail link would permit passengers on the service a direct change at Edinburgh for Borders rail services.

It will be possible to connect to the Edinburgh tram network by changing trains at Haymarket or Edinburgh Waverley. The Airdrie-Bathgate rail link would also allow passengers to change at Edinburgh Park to access Edinburgh Airport services and services to the north.

At the moment, passengers on the Airdrie-Bathgate rail link would not be able to link directly to the proposed GARL services.

## **7. What consideration has been given to operating freight services on the proposed route?**

The concept of reinstating the Airdrie-Bathgate rail link originated in the 2002 Central Scotland Transport Corridor Study (CSTCS), commissioned by the Scottish Executive, where a full assessment was undertaken of the transport needs of the A80 and M8 corridors. One of the conclusions reached was that the Airdrie-Bathgate rail link project would reduce traffic on the M8 and provide a viable public transport alternative to car use for journeys in each direction between Airdrie/Coatbridge/East Glasgow and Livingston/Edinburgh.

As such, the justification of the new link has been as a passenger route without provision for any new freight. There is an existing freight service operating to the STVA car storage depot at Bathgate and this would continue under the scheme operated from a relocated depot at Boghall. There is, however, no significant capacity available at the east end where the route connects into the Edinburgh-Glasgow mainline for additional freight trains. Similarly, at the west end there is no realistic link into the main freight area at Mossend and the only freight activity which could use the route would be from Ayrshire via the City Union line and the Bellgrove-Airdrie section of the Glasgow North Suburban electric network. There are already routes for such traffic in place, such as using the Shotts route or via Carstairs.

**8. How will the proposed railway fit within existing timetabling and capacity constraints on existing services west and east of the proposed route?**

Timetabling work has been completed which is sufficient to demonstrate the feasibility of operating services from the west to Haymarket and Edinburgh Waverley on completion of the current enhancement works. It does not yet take account of other major changes to the rail network or resulting wider timetable changes which are planned for around the time of the opening of the Airdrie-Bathgate rail link in December 2010. This wider timetable planning process will involve Transport Scotland, train operators and other rail industry partners, and it is only after this stage is completed that the finalised service timetable will be known.

For the moment the Promoter has produced an indication of how journey times could operate, linking into an extension of the existing north electrics timetable.

**Alternatives to achieving policy objectives**

**9. What consideration was given to enhancing bus services along the Glasgow–Airdrie–Bathgate–Edinburgh corridor; what was the outcome of such consideration and how did this fit with the policy objectives of the Bill?**

In the course of the 2002 Central Scotland Transport Corridor Studies (CSTCS), which covered the A8/M8, A80/M80 and M74 Completion Scheme corridors, a range of public transport improvements were considered at an early stage in the process. (See [www.cstcs.co.uk](http://www.cstcs.co.uk) for details.) At this stage the aim was to identify schemes which would have a major impact on road traffic levels, to the extent of reducing or even removing the need to upgrade the motorway links. The impact of these potential measures is documented in chapter 11 of the CSTCS Corridor Plan for the A8 Corridor. Consideration was given to a package of express buses along the M8, with substantial park and ride provision, and the restoration of the Airdrie-Bathgate rail link.

The CSTCS found that the express buses package increased road traffic and reduced rail patronage, with a small uplift in bus use. The Airdrie-Bathgate rail link increased rail patronage and overall public transport patronage (table 11.16 A8 Corridor Plan, CSTCS). The CSTCS concluded that the restoration of the

Airdrie-Bathgate rail link should be taken forward for consideration and this was accepted by the Scottish Executive.

The policy objectives of the Bill are set out in paragraph 5 of the Promoter's Memorandum. It was not thought appropriate to evaluate further how enhanced bus services might fit with a Bill written to obtain powers to construct a railway.

**10. What consideration was given to alternative rail solutions between Edinburgh and Glasgow via West Lothian and North Lanarkshire; what was the outcome of such consideration and how did this fit with the policy objectives of the Bill?**

Other rail links were considered within the CSTCS. Specifically, the CSTCS work considered a faster and more frequent service over the route between Glasgow Central and Edinburgh via Shotts (para 11.14.5, A8 Corridor Plan, CSTCS). The analysis of this option showed that:

- Patronage over the section east of Carfin (i.e. the A8 corridor area) did not change as a result of the service enhancement
- There was some increase forecast in passengers west of Carfin into Glasgow, but this was the result of a combination of suggested improvements, such as increasing train frequencies and reducing the number of stops across the central section.

The CSTCS ruled out these improvements to the services on the Shotts line as part of the corridor plan when considered against corridor objectives. Specifically there would be no positive impact on the M8 corridor and, as alluded to above, no significant increase in patronage except from Carfin westwards. In addition, the Shotts line does not link to Edinburgh Park and has fewer destinations into Glasgow, which does not help patronage.

**Economic development and social regeneration**

**11. Please give examples of how the railway will stimulate local economic growth and assist in the delivery of social inclusion along the railway corridor.**

As part of the preparation for the submission of the Bill for the Airdrie-Bathgate rail link, West Lothian Council and North Lanarkshire Council commissioned a full Economic Activity & Location Impacts (EALI) study [*Airdrie-Bathgate Line: Economic Activity & Location Impacts Analysis November 2005*]. This study combined qualitative research – mainly interviews with local employers – and a review of the potential development sites, with a highly quantitative analysis of the impact of the new rail line, using the Scottish Executive's Transport Economic Land Use Model of Scotland (TELMoS) package. Both strands of the research looked at the impact of changing the accessibility of an area, making it easier for people to travel and in so doing:

- Widening the labour market for businesses
- Widening the employment market for jobseekers
- Widening the catchment for shopping and leisure activities.
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The EALI study found that the re-opening of the railway increases accessibility for all these types of activity and would therefore stimulate local economic growth. Specific examples of this include:

- Adding the residents of the Glasgow-Airdrie-Armadale rail corridor to the labour catchment of firms in Bathgate, Livingston, Edinburgh Park (Scotland's third largest employment centre), and central Edinburgh
- Adding the residents of Livingston, Bathgate, Armadale and Plains to the labour catchment of firms located west of Airdrie, including Glasgow city centre.

Incoming firms look to a large labour pool when choosing a location as this gives the best chance of selecting the skills they need as well as avoiding the wage pressures of an overheated local labour market.

For residents of the new rail corridor and the sections of existing line, the railway proposals give people without cars the opportunity to access a much wider variety of employment, with easy access to Edinburgh and Glasgow. It also gives car-users an alternative, perhaps where the new train service is more attractive than their existing travel arrangements. Together these factors represent greater employment opportunities, offering people the chance to move jobs and increase incomes within the area.

The key driver of local economic growth is expected to be through increased housing provision. The development plans for the rail corridor are being modified to allow more housing in what would otherwise be a less compelling area for development because of the poor public transport links. This additional housing will help to diversify the population in the area, create jobs in local services, including health and education as well as retail and leisure, and create greater wealth through home ownership and investment.

All of the above factors were taken into account in the quantitative modelling of the economic impact of the line undertaken for the EALI Study (chapter 5). This forecasted that in the Airdrie-Bathgate corridor there would be a net gain of 1,500 jobs by 2021, relative to a situation where the line was not constructed. At the local authority level, an increase of 1,350 jobs was forecast in North Lanarkshire and West Lothian.

The railway will also assist in the delivery of social inclusion. The EALI study included an extensive 'audit' of the socio-economic characteristics of the area served by the line (chapter 3, Socio economic baseline). This showed that the line will serve a large number of areas (particularly in east Glasgow and North Lanarkshire) which are classed as 'deprived' by the Scottish Indices of Multiple Deprivation (SIMD) – particularly in terms of the employment, income and education SIMD 'domains'. The area served by the line also has many communities which have levels of car ownership well below the national average. The new line will increase the travel opportunities available to these socially excluded groups. This will principally open up new employment opportunities, as well as other opportunities relating to education and training.

The land use (regional economic) / transport model (TELMoS) was used to look at the impact of the re-opening of the line. One indicator used was the

forecast increase in resident workers within an area (looking at the Assisted Areas Map and the SIMD), in particular the 15% 'most deprived' data zones by this measure. This is defined as those eligible for Community Regeneration Fund (CRF) funding. Many of the areas showing increases in people in employment were in the most 'deprived' areas, which suggests that the scheme would make a positive contribution to tackling the primary issue at the heart of social inclusion. Specifically, there are CRF eligible areas in Armadale and Caldercruix.

The accessibility calculations also indicated that the improvements in accessibility are biased towards areas of low car ownership. Again, this indicates that the social inclusion agenda is addressed by the line – people without personal transport are less disadvantaged than they would be otherwise. For these people, the new line will open up new opportunities for education and training, shopping and other leisure activities.

**12. Please provide a breakdown of the £303 million net present value and detail how much of this will fall into the local economies along the proposed route.**

The Net Present Value (NPV) of any project is the total difference between a number of different benefits and different costs. It is not possible to disaggregate this total geographically and this figure is not conventionally disaggregated. Instead, the EALI element of STAG is designed to specifically assess the impact of the scheme on the distribution of employment and population, and hence economic activity. The responses to questions 11, 14 and 16 offer further detail on these issues.

It should be noted that some of the construction and operating costs will actually flow as benefits specifically into the local economy – for example, the operating cost figures will include the salaries paid to the rail staff based at the light maintenance depot at Bathgate, which are a benefit to the local economy.

**13. What is the estimated financial impact of the railway to the local and national economies?**

The impact of the railway has been assessed in economic rather than purely financial (monetary) terms and takes account of money as well as non-money effects.

The financial impact of the railway on the national economy is measured as part of the Transport Economic Efficiency (TEE) analysis. This form of analysis is recognised by STAG as the appropriate approach. TEE analysis compares the present value of the costs of the scheme (£376m) against the present value of the benefits (£679m) accruing over a 60 year assessment period. The difference between the two is the Net Present Value (NPV), in this case £303m, and the ratio between the two is the Benefit Cost Ratio (BCR). The NPV can be regarded as the impact of the railway on the local and national economy. The BCR for the proposed scheme is 1.81. Essentially, the benefits of the scheme far outweigh the costs. These benefits and costs include both actual financial values and also monetary valuations of changes in travel time.

Additional benefits to the national economy would arise from the impact of the railway upon:

- Improving the efficiency of the labour market (i.e. facilitating a better match between skilled staff and job vacancies – principally in the West Lothian to Glasgow city region and east Glasgow / Airdrie to Edinburgh city region)
- Reducing the risk of overheated property markets
- Reducing the costs which arise from concentrations of unemployment and deprivation.

**14. What projections are there for new business uptakes along the railway corridor and how many are dependent on the railway being constructed?**

Impacts are usually considered in terms of jobs rather than numbers of businesses, since this allows for businesses being of very different sizes. A land use (regional economic) / transport model was used to estimate the impacts of the new line on the location of employment (EALI Report, chapter 5). As a result of the improved connectivity west from West Lothian and east from North Lanarkshire brought about by the new line, it is estimated that the numbers of jobs in the corridor would increase by 1,500 by 2021 compared to a situation in which the line did not reopen.

If the scheme were not to proceed, employment in North Lanarkshire is forecast to drop, and although employment in West Lothian is estimated to continue to increase, this would be at a slower rate than if the rail link was constructed.

**15. What impact might these new business have on increasing levels of road freight?**

The EALI forecasts (EALI Report Executive Summary) indicate that the overwhelming majority of the new jobs in the Airdrie-Bathgate corridor will be in the service sector (both public and private). The new jobs are not therefore expected to generate significant levels of additional road freight traffic.

**16. How many jobs will be created by the railway both locally and nationally?**

As detailed in the response to question 14, it is forecast that 1,500 additional jobs will be generated in the corridor if the railway is reopened, compared with the situation if it does not reopen.

During the construction phase of the railway, there will be a requirement for a workforce which will provide a number of employment opportunities in the corridor over a period. While short term, these jobs support the construction industry and provide training opportunities. Construction work will inject money into the local economy and provide the initial basis for the longer term regeneration of the area.

The additional direct employment from the railway will be small – up to 50 jobs in Bathgate. As the jobs at Bathgate will be primarily in light engineering, this is a positive step in a town where similar jobs have been lost over an extended period. There will also be opportunities arising both locally and nationally for additional staff such as ticketing, train drivers and cleaning and maintenance.

The net impact of the new line on total jobs at the national level has not been quantified. As described in the answer to question 13, the net impact at national level is quantified in economic terms. There is no accepted method for turning these benefits into a number of jobs at a national level. However, by the very nature of the scheme, providing better public transport access between areas with different economic conditions and helping to link Glasgow and Edinburgh together in ways which tend to improve the transport efficiency of central Scotland as a whole, it will undoubtedly have a beneficial effect.

**17. Are (a) West Lothian's and (b) North Lanarkshire's current or future social inclusion and regeneration policies entirely dependent on the establishment of the railway and, if so, what would the impact on these policies be if the railway did not proceed?**

The social inclusion and regeneration policies of the two authorities are not entirely dependent upon the Airdrie-Bathgate rail link re-opening. The rail line only serves part of each Council's area, and transport is only part of a package of measures needed to promote inclusion.

The current social inclusion and regeneration policies of West Lothian and North Lanarkshire are multi-faceted, covering a wide range of policies and measures over large parts of each local authority area. Within these policies, improved transport is an important element in improving the employment, education, training and health care opportunities available to people – particularly those without access to a car. As such, the scheme has an important role to play, providing a step change in the quality of public transport.

It is difficult to comment on the future policies that the two authorities might adopt. The overall EALI study of the impact of the line did, however, show that regeneration and social inclusion will be more difficult to achieve if the railway does not reopen.

**18. How much does the social inclusion/regeneration case for the railway add to the overall case?**

The rail link is forecast to increase both the population and employment rates in North Lanarkshire and West Lothian. The communities around Airdrie and Bathgate are expected to see increases in population of around 2,000 in each local council by the middle of the decade after the line is due to have opened.

Communities in and around the Bathgate area – including Armadale and Blackridge – are forecast to gain around 900 jobs while the communities around Airdrie – including Caldercruix, Plains and Coatbridge – are forecast to gain around 600 jobs.

Both existing and new properties will become increasingly desirable with the increased profile of the area, leading to greater market awareness and improved prospects for development locations.

These positive developments are, however, only part of the overall case for the railway, constituting only two of the six policy objectives with the weight attached to them balanced with economic and public transport aspects.

**19. In what ways does the railway offer opportunities over any other forms of transport in improving social inclusion and regeneration?**

The development of the Airdrie-Bathgate rail link is intended to integrate rather than compete with other forms of public transport. In this particular case the railway provides access to more destinations than other forms of public transport can offer.

The Airdrie-Bathgate rail link will provide reliable direct links into two city centres with acceptable journey times, frequent start and finish times, and well located stations for both employment and education opportunities. It also serves a number of other key employment locations, which are expected to increase in importance over the next five to 10 years, for example at Edinburgh Park, where rail access is direct and not subject to the unreliability associated with road congestion.

**Environmental**

**20. How will the Promoter encourage a modal transfer from car to train?**

Two key policy objectives for the project are:

- Encourage greater use of public transport in North Lanarkshire and West Lothian
- Encourage people to use public transport as an alternative to the car.

These objectives reflect Scottish Executive transport policy and are in line with the Central Scotland Transport Corridor Study. In particular, paragraph 7.3.1 of the A8 Corridor Study states: "We should consider transport interventions in the following broad order: ways to reduce the demand for travel in total and by car in particular; followed by ways to improve public transport; followed by ways to increase road capacity."

One of the criteria for choosing the sites for the relocated and new stations between Drumgelloch and Bathgate was their capacity to accommodate park and ride facilities. In addition, the redevelopment of existing station facilities at Airdrie, Livingston North and Uphall Station includes increasing the capacity of car parking facilities. This is intended to encourage car users to switch at least part of their journey from car to train.

The proposed car parking capacity of each station is as follows:

- Airdrie                      166 spaces (increased from 150 at existing station)
- Drumgelloch              336 spaces (nil at present station)

- Caldercruix 165 spaces
- Armadale 188 spaces
- Bathgate 395 spaces (increased from 132 at existing station)
- Livingston North 322 spaces (increased from 310 at existing station)
- Uphall 275 spaces (increased from 154 at existing station).

This will provide an additional 1,101 spaces at the seven stations. Opportunities may exist to provide further car parking provision at Airdrie, Caldercruix, Armadale and Uphall. In Airdrie specifically, a redesign of the layout allows an additional 16 spaces at least, and investigations are ongoing to establish whether the Promoter is able to increase the car parking through use of existing railway land. This is in addition to discussions with North Lanarkshire Council regarding the use of a piece of existing spare land it owns.

**21. How many car journeys annually will be removed from the M8 and local roads to the railway?**

Forecasting work carried out for the Design Development Appraisal (DDA) used the Scottish Executive's Transport Model for Scotland (TMfS). These forecasts show changes in car traffic on the major roads parallel to the Airdrie-Bathgate rail link. In general, traffic reduces slightly but discernibly on the M8, and increases on roads which feed the new stations. Seeing a reduction on the M8 reflects the complex nature of traffic changes on a network which is congested, where space vacated by someone now taking the train is replaced by a motorist who currently drives on minor roads to avoid motorway congestion.

The tables show the absolute annual changes in car traffic at key locations on the road network as a result of the line re-opening.

Road	Eastbound/ Southbound Annual	Westbound/ Northbound Annual
M8 (Junction 4-5)	-41,500	-28,000
A89 (east of Armadale)	-4,000	-11,000
A801 (Armadale/Whitburn)	36,000	6,000

**22. How will the proposed railway services assist in reducing congestion at peak times on the Edinburgh-Glasgow main line service?**

An analysis of the TMfS forecasts suggests a reduction up to 50 passengers per train in the peak hour. This is approximately 12.5% of the capacity of each train currently working the route.

One of the scheme's policy objectives is to construct a rail link which will allow existing services on the Glasgow North electrics to operate as through services to Edinburgh, providing an alternative to the Edinburgh-Glasgow main line

service and assisting in reducing congestion at peak times. To do this requires the provision of a fast, frequent and reliable train service.

In particular, the route provides an alternative to the existing choice for passengers, including:

- Journeys east and west through Queen Street Low Level which currently have to change to Queen Street High Level to access the Edinburgh-Glasgow main line service
- Journeys from Bathgate, Livingston and surrounding areas to Glasgow currently made via park and ride at Linlithgow station
- Journeys from Airdrie and the surrounding area to Edinburgh currently made via park and ride at Croy station.

**23. By how much will traffic pollutant levels from the M8 be reduced as a result of the railway?**

The opening of the proposed railway reduces car traffic on the M8 by a small amount (see the response to question 21). Through the TmfS model – a software package called ENEVAL (Environmental Evaluation) – it was calculated that this will lead to a small reduction in emissions of traffic pollutants within Central Scotland, giving a marginal benefit to regional air quality.

M8 between Glasgow and Edinburgh – Annual Figures

	<b>CO (Tonnes)</b>	<b>HC (Tonnes)</b>	<b>NO2 (Tonnes)</b>	<b>PM10 (Tonnes)</b>	<b>CO2 (Tonnes)</b>
<b>Total</b>	- 3.5739	- 0.4323	- 1.2763	0.0308	- 548.481
<b>Percentage</b>	- 0.25%	- 0.23%	- 0.09%	0.08%	- 0.13%

**24. By how much does the Promoter believe the railway will reduce the 95% of movement by car between North Lanarkshire and West Lothian?**

The analysis demonstrates that relatively few of the passengers who will use the reopened rail link will be travelling between North Lanarkshire and West Lothian. Most passengers will travel from one area across the other to either Glasgow or Edinburgh.

The 95% figure, taken from the CSTCS, relates to movement by car in all areas between North Lanarkshire and West Lothian, while the new rail link runs specifically from the Coatbridge area to the Uphall area. Accordingly, the railway can have only a limited impact on movement between the two local authority areas. It is anticipated that the impact will therefore be small – approximately 1%.

**25. With whom and on what did the Promoter consult over the proposed**

**relocation of the cycle path (national cycle network route 75) and what changes to the proposed new route stemmed from this consultation?**

The Promoter is in ongoing discussions with Sustrans, Railway Paths Ltd, Cycle Scotland, North Lanarkshire Council, West Lothian Council and affected land owners on the proposed relocation of the cycle path. Prior to the Bill's introduction, significant changes to the original proposed route were taken on board to retain a quality corridor. (Refer to Appendix 2 of the Promoter's Memorandum.) There is also a detailed cycle report which is available on the Airdrie-Bathgate website at [www.airdriebathgaterailink.co.uk](http://www.airdriebathgaterailink.co.uk).

**26. How will the proposed new cycle path integrate with other national cycle route network routes?**

The relocated cycleway will link directly with the existing National Cycle Route 75 at both the west and east ends. The existing cycle route between Airdrie and Bathgate does not integrate with other national cycle route networks mid-route. In relocating the cycleway, the primary objective is to provide a replacement of the existing cycle route. Full consultation has been undertaken with Sustrans, Railway Paths Ltd, Cycle Scotland, North Lanarkshire Council, West Lothian Council and affected land owners in formulating the route.

**27. What is the cost of providing the proposed new cycle path?**

The cost of construction for the relocated cycle path is estimated to be £4.7 million at Q1 2006 prices. This sum includes provision for two new dedicated cycle path bridges over the railway at Plains and Whiteside. These estimated construction costs are exclusive of the following:

- Property acquisition costs and legal expenses
- Design and consultancy fees
- Prelims and project management fees
- Contingency and optimism bias.

**28. What assessment has been made on usage along the proposed new cycle route?**

As the intention is to replace the existing cycle route, no significant changes in usage are anticipated. While no formal assessment of usage of the proposed route has been undertaken, the new route has been formulated in consultation with Sustrans, Railway Paths Ltd, Cycle Scotland, North Lanarkshire Council and West Lothian Council. None of the consultees have raised any concerns with regard to future usage.

**29. Does the railway impact on any areas of green belt land and, if so, by how much, where and what action is the Promoter taking to mitigate this impact and provide alternative areas of open space?**

North Lanarkshire Green Belt

Approximately 9km of the route between Airdrie and Forrestfield is within the Monklands Green Belt as identified in the Monklands Local Plan (covered by Policies GB1 – Restrict Development in Green Belt and GB2 – Restrict Development in Countryside Around Towns). The railway scheme is covered by Policy TR1, which supports the objective to reopen the railway for passenger use and classifies the scheme, including stations, as an appropriate use within the Green Belt.

Green Belt designation in North Lanarkshire imposes severe restrictions on any type of development not requiring a countryside location, seeks to halt the outward expansion of major cities, stop built up areas coalescing, and protect the rural setting of towns. As a result, there is no direct relationship between Green Belt and open space, nor do the local plan Green Belt policies require compensatory provision for the loss of open space within the Green Belt.

The reinstatement of the railway, together with the associated landscape planting proposals, will:

- Visually integrate the railway with the surrounding landscape
- Help screen the railway infrastructure from properties located in the Green Belt
- Improve biodiversity through the creation of an enhanced green corridor within the green belt, and remove areas of invasive alien plant species (Japanese Knotweed) from the Green Belt.

#### West Lothian Green Belt

There is no Green Belt designation in West Lothian.

#### City of Edinburgh Green Belt

The railway crosses the Edinburgh Green Belt between Ratho station and the City Bypass by approximately three miles. Within the Green Belt, the scheme comprises existing railway infrastructure which will not result in any significant permanent land use change. Compensatory provision for the loss of open space is not required.

**30. For what purpose is the land on which it is proposed the STVA depot is relocated to currently used?**

The proposed STVA depot site is private arable farmland.

**31. What alternative provision is the Promoter making for the loss of wildlife habitat along the proposed route, for example, the loss of bird feeding and breeding grounds at Caldercruix?**

The reinstatement of the railway corridor will comprise a green corridor reflecting the requirements of the various local biodiversity action plans. This will include, so far as is practicable within the confines of the project and railway safety requirements, the preparation of a Habitat & Landscape Action Plan following a recommendation from Scottish Natural Heritage. This will include:

- Tree and scrub planting to enhance attractiveness to birds
- Using native tree stock of local seed provenance where possible
- Seed mix selection for sowing compatible with local soils and NVC communities
- Natural re-colonisation from local seed sources where appropriate.

In the case of Caldercruix, the construction of the new station will result in the loss of feeding and breeding habitat for a very small number of birds. It should be noted, however, that this site includes a heavily contaminated landfill site which the project will remediate. The proposed mitigation is to retain as much of the best areas of interest for wildlife during the detailed design stage.

### Route options and choice of stations

#### 32. What was the projected (a) capital and (b) operating cost of each alternative route alignment considered?

The following alternative route alignments were considered. The associated costs would be additional to the base cost of the preferred alignment presented in the Bill. The costs are abstracted from the Initial Technical Feasibility Study (ITFS) published in 2004 and have been adjusted to reflect Q1 2006 prices. The costs include base construction costs, non-construction costs including design, contractor preliminaries and project management, as well as contingency for risk and optimism bias:

Alternative Route	Additional Costs at Q1/2006 prices
100 mile per hour alternative alignment	This option was not developed and costs were not assessed for the reasons set out in paragraphs 79 - 106 of the Promoter's Memorandum
Alternative proposed route across Bathgate Golf Course, route 1	This option was not developed and costs were not assessed for the reasons set out in paragraphs 79 - 106 of the Promoter's Memorandum
New alignment to the south of Hillend Loch, route 2	£87.7million
New alignment to the south of Hillend Loch, route 3	£59.7million
New alignment to the south of Armadale, route 4	£28.1million

Operating costs for the alternative alignments were not calculated, although it is reasonable to assume that operating costs would be broadly similar to the operating costs of the preferred alignment presented in the Bill.

**33. What were the projected patronage and revenue forecasts for each of the alternative route alignments considered?**

Consideration of each of the alternative route alignments was undertaken in 2003 through the commissioning of the ITFS. The purpose of this study was to investigate the engineering challenges and cost implications for each of the proposed routes for re-opening the rail link. As more fully explained in paragraphs 79 to 106 of the Promoter's Memorandum, the proposed route was found to be preferable to each of the alternative alignments considered.

Projected patronage and revenue forecasts were only prepared once a technically feasible route had been identified. As such, the alternative routes, which had already been discounted for cost and environmental impact reasons, were not assessed in terms of projected patronage figures.

**34. What support, and from whom, was there for each of the alternative route alignments considered?**

No formal consultation on alternative route alignments was undertaken. As part of the ITFS, technical discussions were held which reached the conclusion that the proposed route alignment was and is the optimal choice from an engineering and cost perspective.

Each of the alternative routes was ruled out for technical and cost reasons which are described in more detail in paragraphs 79 - 106 of the Promoter's Memorandum.

**35. What were the projected journey times of each alternative route alignment considered?**

The Initial Technical Feasibility Study found that the 100 mph speed would achieve a 3% reduction in journey time compared with an 80 mph speed generally constructed on the former rail solum. As explained in paragraphs 83 - 86 of the Promoter's Memorandum, this journey time improvement was not considered sufficient to justify the high environmental and financial costs of the 100 mph alignment. Alternative routes 2, 3 and 4 were such high risk and cost options that they were not progressed beyond the feasibility stage and thus no projected journey times evaluated.

**36. What are the projected patronage gains in providing a station at Caldercruix?**

260 daily boardings are anticipated at Caldercruix based on stopping pattern AB5 described in paragraph 127 of the Promoter's Memorandum.

**37. What are the projected patronage reductions in adding a station at (a) Plains and (b) Blackridge and what impact would this have on journey times?**

The addition of a station at Blackridge will result in a net loss of 513 passengers based on stopping pattern Abs7 described in paragraph 138 of the Promoter's Memorandum.

A specific model run was not undertaken to estimate the incremental effect on patronage of a new station at Plains. This was principally because Plains was discounted due to the technical, engineering and environmental issues which were seen to be affecting its viability as a station site. Nevertheless, the initial modelling of all four stations had shown that Plains had the lowest forecast patronage of any of the potential sites. It can therefore be deduced that the negative impact on patronage of adding Plains would be greater than that seen when adding Blackridge (i.e. the same number of through trips would be lost and a smaller number of new passengers would be gained).

It is estimated that adding a station at Plains would add approximately two minutes to the journey time while adding a station at Blackridge would add approximately three minutes to the journey time.

**38. What improvements are to be made to local bus services between (a) Plains and the proposed stations at Caldercruix and Drumgelloch and (b) Blackridge and the proposed station at Armadale?**

Paragraphs 122 and 124 of the Promoter's Memorandum provide information on current bus services between Blackridge-Armadale and Plains-Caldercruix respectively. It is not within the control of the Promoter to improve upon these services. However, the design of the station drop-off and pick-up areas is such that they will accommodate access by local bus services, either within the confines of the station or at a bus stop / lay-by near the entrance to the station.

The Promoter recognises that an enhancement of current bus service levels, particularly in the evening, would improve accessibility to the railway for the communities of Plains and Blackridge. With this in mind, a provision of up to £1 million per annum has been included within the projected operating costs of the Airdrie-Bathgate rail link proposals to take account of changes which are likely to be required to the local bus network, among others. The exact nature of these changes is a matter for the local authorities and their relevant partners, and the Promoter has initiated discussions with them, seeking them to take these matters forward.

**39. What would the capital cost be of providing stations at Plains and Blackridge and what additional land take would be required?**

Plains Station

As detailed in paragraph 117 of the Promoter's Memorandum, locating a station at Plains was ruled out because even the provision of a basic industry standard rail halt and associated works would have a significant environmental impact on the adjacent residential properties. The only available site has physical constraints, being located immediately adjacent to residential housing to the north, on Main Street, and the Country Park to the south.

Therefore, no detailed capital cost analysis exists. However, for the Committee's guidance, costs circa £1.8 million have been incurred in the construction of similar sized stations elsewhere. However, this does not take into account site specific constraints which may elevate this cost. These are:

- Additional land take between 118 and 156 Main Street, Plains
- Additional land take to relocate the cycle path at the south extremity of Main Street, Plains
- Provision of a bus drop-off point
- Additional environmental impacts.

#### Blackridge Station

As detailed in paragraph 125 of the Promoter's Memorandum and the response to question 37, the provision of a station at Blackridge was rejected because of the net reduction in patronage (513) along the route. Therefore no detailed capital cost analysis exists. However, for the Committee's guidance, costs circa £2.6 million have been incurred in the construction of similar sized stations elsewhere.

The land required, most of which is not currently in the Bill, comprises approximately 6,000 sq metres of farmland and public track which would be required for car parking and provision of an access road and footbridge.

The farmland to the west of the proposed station access road is currently subject to planning permission and zoned for a residential property development comprising 246 houses with garages and 54 flats, including new vehicular access and ground works. The station site clashes with the zoned development and would compromise four proposed houses.

#### **40. How will the proposed station locations maximise passenger uptake through easy pedestrian access to and from the stations and the provision of car, cycle, taxi and bus parking?**

New stations are proposed at Caldercruix and Armadale; stations at Drumgelloch and Bathgate are to be relocated; and the stations at Airdrie, Livingston North and Uphall are to be redeveloped.

At Airdrie station, pedestrian accessibility is enhanced with lift and stair access directly from the A89 to the new north platform and pedestrian footbridge. The access to the station from Cairnhill Road will be altered and maintained. Access to the footbridge between the station platforms will be achieved with the provision of lifts in addition to stairs compliant with current guidelines. New lay-bys are proposed on the A89 for both bus and taxi drop-off. The ramp from the car park to the island platform is to be re-graded and extended to make it fully accessible in accordance with the present rail industry standard. The new blue badge parking spaces are located adjacent to the foot of the ramp.

The re-located Drumgelloch station is in the Clarkston residential area and within walking distance of the existing station location. A pedestrian/cycle route into the station is proposed from the south in addition to the three footpaths

which currently link the station precinct with the A89, Forrest Road. The upgraded road junction between Old Bore Road and Forrest Road (A89) will be traffic light controlled which will benefit pedestrians. Two new bus lay-bys will be formed on Forrest Road and a drop-off area for taxis and private vehicles is located at the station entrance, as are the proposed blue badge parking spaces. There is level access between the station car park and the north platform, with access to the footbridge between the platforms by a ramp designed in accordance with the present rail industry standard. This is in addition to stairs compliant with current guidelines providing access to the footbridge.

Caldercruix Station is proposed on the periphery of the established residential area, with the original station site being unsuitable for redevelopment as established in the initial technical feasibility report. The station will be connected to the existing residential area with a new footpath / cycle path running parallel to the rail line. A new residential development is approved and under construction on the site to the south-east of the station and will access the station directly from the public footpaths. A bus and taxi turning / drop-off area is provided within the station car park to facilitate any future bus services. Blue badge parking spaces are located at the station entrance minimising travel distance to the platform. There is level access between the station car park and the south platform, with access to the footbridge between the station platforms by a ramp designed in accordance with the present rail industry standard. This is in addition to stairs compliant with current guidelines providing access to the footbridge.

The location for Armadale station is to the south of the established residential areas of Armadale. Significant new residential development is proposed in the finalised West Lothian Local Plan in the vicinity of the station. A footpath and cycle way is provided along the new access road to facilitate access to the station. A bus and taxi turning / drop-off area is provided adjacent to the station car park to facilitate any future bus services. A drop-off area for private vehicles is provided within the station car park and blue badge parking spaces are located at the station entrance minimising travel distance to the platform. There is level access between the station car park and the south platform, with access to the footbridge between the station platforms by a ramp designed in accordance with the present rail industry standard. This is in addition to stairs compliant with current guidelines providing access to the footbridge.

At Bathgate the shift of the station to the south east will make it more accessible from the Edinburgh Road and Boghall areas. It is considered the difference in distance from the town centre to the proposed location will have minimal impact on pedestrians accessing the station and a new pedestrian path is proposed on the existing rail solum to provide a vehicle free route to the station from the town centre. There is level access between the station car park and the north platform, with access to the footbridge between the station platforms by lift and stairs compliant with current guidelines. A bus stance area is provided within the station car park to facilitate future bus services. Taxi waiting and drop-off areas for private vehicles are located near the station entrance with blue badge spaces immediately outside the station entrance. The pedestrian route from the A89 is by footpaths along the car park access road. The proposed junction of the access road and the A89 is to be traffic light controlled which will facilitate pedestrians accessing the station from the north.

At Livingston North station the south car park is to be altered and will have level access directly to the south platform. The current route from the south car park is via the road overbridge and the north car park. The alterations to the south car park will also provide bus turning with bus, taxi and private vehicle drop-off and blue badge parking spaces at the station entrance. Existing routes to the station from the north car park will be improved with ramps and stairs down to the footbridge and to the north platform. Similarly, access to the footbridge from the south platform will be by a ramp designed in accordance with the present rail industry standard. This is in addition to stairs compliant with current guidelines providing access to the footbridge. Routes to the station from the east and west will be maintained.

At Uphall station, the existing pedestrian routes to the station will be retained. A route via the new north car park and M8 footbridge will provide enhanced parking provision and will create an alternative link from Uphall to the north. A new platform will be provided on the north side. The south platform will be accessed by ramp and stairs from the car park with access to the footbridge between the station platforms also by a ramp and stairs compliant with current guidelines. There is no provision for bus turning or drop-off areas within Uphall station, however, the south car park is to be altered to provide blue badge spaces and the new north car park will also provide blue badge parking.

At all new and relocated stations bicycle storage facilities will be provided in accordance with the train operating company franchise agreement, with improvement of the provision possible in response to demonstrable demand. The racks will be located as near as possible to the station entrances and be able to be monitored by CCTV.

**41. What is the distance and journey time between each station from Airdrie to Bathgate and what are the projected journey times from Helensburgh and each stop thereafter to Edinburgh Waverley?**

Distances between each station from Airdrie to Bathgate:

Airdrie	0
Drumgelloch	1.4 miles
Caldercruix	4.0 miles
Armadale	12.2 miles
Bathgate	14.8 miles

Below is an outline of the existing journey times for the Glasgow north electrics and indicative journey times for the new route through to Edinburgh Waverley. These journey times are:

<b>Journey</b>	<b>Time (minutes)</b>
Helensburgh – Glasgow Queen street	48
Glasgow Queen Street - Airdrie	28
Airdrie-Bathgate	18
Bathgate-Edinburgh	28

## **Accessibility and railway integration with other modes of public transport**

- 42. How will the railway integrate with the local bus network; what consideration has been given to through ticketing systems and what discussions have been held with local bus operators on such issues, including the integration of bus/rail timetabling?**

The Promoter recognises the benefits of closer integration between bus and rail services. The design of the proposed stations at Armadale and Caldercruix and the relocated stations at Drumgelloch and Bathgate make provision for access by bus services.

This is primarily a matter for the regional transport partnership, rail franchise holder, bus operators and local councils. The Promoter aims to engage with these bodies at a working level to ensure that the best solution is achieved.

- 43. How will the railway integrate with pedestrian and cycle access to stations?**

Please see the response to question 40.

- 44. How will the railway integrate with car travel and what arrangements have been made for park and ride facilities between Airdrie and Bathgate?**

Please see the response to question 20.

- 45. What is the predicted proportion of (a) car, (b) bus, (c) cycle, (d) pedestrian and (e) taxi trips arriving at each of the proposed stations from Airdrie-Bathgate?**

The TMfS forecasts of passenger numbers do not split the mode of access to stations in this level of detail. However, a set of passenger surveys undertaken at West Lothian, Falkirk, and Stirling stations as part of the separate SESTRAN Integrated Transport Corridor Studies (SITCoS), do give a basis on which to give an indicative estimate at this level of detail. Bathgate station was surveyed as part of this study and the results are shown in the table below. It can be assumed that the arrival pattern at Airdrie would be similar, as both are 'town' stations with a mix of local and park and ride use.

For Drumgelloch, Caldercruix and Armadale, the figures for the average of all 14 of the surveyed stations are given in the table below.

Mode of arrival	Bathgate [Airdrie assumed to be similar]	Drumgelloch / Caldercruix / Armadale
Car, as a driver	31%	31%
Car, as a passenger	21%	21%
Bus	18%	8%
Cycle	1%	1%
Pedestrian	26%	35%
Taxi	3%	3%

#### 46. How will the railway significantly improve accessibility?

The railway and its new services will have a significant impact on improving public transport accessibility across a wide area of central Scotland. In the table below, all boxes marked '✓' represent origin / destination combinations where there will be a significant improvement in the quality of public transport provision and hence accessibility. In each case, there will be a direct train service where previously an interchange was required or bus was the only public transport option.

From.....	To.....										
	Central Edinburgh	Edinburgh Park	Uphall	Livingston North	Bathgate	Armadale	Caldercruix	Airdrie area	east of GQS	Glasgow QS	west of GQS
Central Edinburgh	-	*	*	*	*	✓	✓	✓	✓		✓
Edinburgh Park	*	-	*	*	*	✓	✓	✓	✓	✓	✓
Uphall	*	*	-	*	*	✓	✓	✓	✓	✓	✓
Livingston North	*	*	*	-	*	✓	✓	✓	✓	✓	✓
Bathgate	*	*	*	*	-	✓	✓	✓	✓	✓	✓
Armadale	✓	✓	✓	✓	✓	-		✓	✓	✓	✓
Caldercruix	✓	✓	✓	✓	✓		-	✓	✓	✓	✓
Airdrie area	✓	✓	✓	✓	✓	✓		-			
east of GQS	✓	✓	✓	✓	✓	✓	✓		-		
Glasgow QQS		✓	✓	✓	✓	✓	✓			-	
west of GQS	✓	✓	✓	✓	✓	✓	✓				-

✓ - new direct train service

\* - improved frequency

As a result of the new line, train services between Bathgate and Edinburgh are increased from two trains per hour to four trains per hour – bringing a capacity improvement. The double tracking of this line is also expected to bring reliability benefits.

This combination of improved frequency and reduced journey times for travel across the centre of Scotland by rail makes public transport journeys more attractive, particularly in comparison to car journeys. This in turn improves access to jobs, leisure activities and the like, by increasing the number of opportunities within a given time from places served by the route.

Quantitative modelling of the improvements in accessibility brought about by the new line was undertaken. The modelling looked at improvements within the Airdrie-Bathgate corridor ('corridor' accessibility) and the overall change to accessibility across central Scotland ('strategic' accessibility). The selected configuration of stations and services obtained the best balance between

improvements to strategic and corridor accessibility. This is covered in greater detail in paragraph 137 of the Promoter's Memorandum.

This modelling confirmed significant improvements in access to employment for residents of the Airdrie-Uphall corridor. By the measure used in the analysis, in the corridor as a whole, access to employment is improved by around 5% with individual communities seeing improvements of up to 14% (DDA Report). In the context of accessibility changes normally associated with public transport improvements these figures are highly significant.

There are substantial improvements from Easterhouse in the west to Uphall in the east. However, the biggest impacts are in North Lanarkshire as the jobs in West Lothian and Edinburgh are 'opened up' to these local populations.

**47. What impact will the railway have on existing bus passenger levels and services?**

The railway produces an estimated reduction in existing bus usage along the Airdrie-Bathgate corridor (TMfS modelling). The biggest reduction is in services between Armadale and Edinburgh where there is an 11% reduction in passengers per year. Between Airdrie and Glasgow, the drop is 2% and there is a 9% reduction in bus passengers on Glasgow-Edinburgh (M8) services.

**Patronage forecasting and revenue yield**

**48. What electric multiple units (EMUs) will operate on the line and what scope is there to reduce journey times through the provision of other EMUs?**

Although a final decision regarding which EMUs might operate on the line is yet to be taken as part of Transport Scotland's wider rolling stock review, current modelling work has used Class 334 EMUs as a base case.

Given that Class 334s are capable of operating at 90mph and that the Airdrie-Bathgate rail link is proposed to operate as an 80mph railway, the provision of other EMUs would not provide significant scope to reduce journey times.

**49. How will the Promoter stimulate and encourage passenger uptake on the railway?**

The Promoter recognises that it is ultimately the provision of a fast and frequent service which will drive passenger numbers. This includes the provision of good quality rail infrastructure, an optimal number of intermediate stops, and pleasant and safe station environments. In this respect, careful consideration has been given to car parking, pick-up and drop-off points, accessibility, comfort and security. In particular, the provision of CCTV should help create a safe environment which the travelling public is keen to use.

**50. What are the passenger uptake projections for each of the first 10 years of the railway's operation between (a) Glasgow and Edinburgh and (b) Airdrie and Bathgate and how do these compare against similar routes and the national growth rate?**

The Promoter is not able to provide projections of annual patronage uptake figures. However, the TMfS forecasting carried out for this project suggests that:

- Rail patronage for the Edinburgh-Glasgow corridor covered by the Edinburgh-Falkirk-Glasgow service will grow by 38% in 10 years from 2011
- Rail patronage for the Airdrie-Bathgate rail link (between Edinburgh and Glasgow) is set to increase by 22% over the same period.

Comparative figures from the recent Scottish Planning Assessment over the same period are shown in the table below. These figures were calculated by a different method which does not factor in the full impact of road congestion on rail demand to city centres, and as such gives lower estimates.

<b>Sector</b>	<b>2011 - 2021 uptake</b>
Edinburgh	16%
Edinburgh Commuter	11%
SW Scotland	15%
NW Strathclyde	4%
South Strathclyde	4%
SE Strathclyde	4%
Central Glasgow	6%
Scotland in total	11%

**51. How many passengers will be transferred from (a) bus and (b) car?**

The changes included in the forecasting process are more complex than a simple change of mode for the same journey. We have modelled the overall change in bus, rail and car journey kilometres, but not the direct correspondence between a journey now and a journey when the line is open. This is because there are also changes in destination and new trips are created as housing developments are completed with resulting economic growth.

**52. What is the passenger uptake projection for each station between Airdrie and Bathgate for each of the first 10 years of the railway's operation?**

As explained in our response to question 50, we are not able to provide passenger uptake figures for each of the first 10 years of the railway's operation. However, figures reflecting the rate of corridor growth over this period, provided in the response to question 50 at 22%, would be:

	2011	2021
<b>Airdrie</b>	673	821
<b>Drumgelloch</b>	498	608
<b>Caldercruix</b>	262	320
<b>Armadale</b>	1770	2159
<b>Bathgate</b>	794	968

**53. From which groups of passengers does the Promoter see the biggest share of passengers coming from e.g. commuters, shoppers, students?**

The modelling software used (TMfS) has a relatively limited range of travel purposes explicitly represented. A more evidence-based source of information on the typical purpose of travel for rail users in Scotland is the Scottish Household Survey (SHS) Travel Diary, undertaken by the Scottish Executive. A further (more 'local') source is a set of passenger surveys recently undertaken at West Lothian, Falkirk and Stirling stations as part of the SESTRAN Integrated Transport Corridor Studies (SITCoS).

The following table gives a detailed breakdown of the proportion of rail travel as derived from SHS data (trips starting or ending in Glasgow or Edinburgh) by different purpose, together with the average purpose split obtained from the stations' passenger surveys.

Purpose of the journey	SHS	SITCoS Station Surveys
	%	%
To educational establishment	8	12
In the course of work	6	4
Other personal business	5	3
To/from place of work	41	60
Shopping	14	13
Visiting friends or relatives	8	5
Other purposes	18	3
<b>Total</b>	<b>100</b>	<b>100</b>

It can be seen that commuting is the dominant purpose representing 41% of rail travel to/from Glasgow and Edinburgh (SHS Travel Diary). From the SITCoS surveys, the proportion of travel to work is much higher, at around 60%; a figure which was also found at a similar set of surveys in East Lothian.

A similar breakdown to the above would therefore be anticipated for users of the new line.

**54. What impact will the proposed railway have on passenger levels on existing Edinburgh-Glasgow rail services?**

As detailed in the response to question 22, an analysis of the TMfS forecast suggests a reduction of up to 50 passengers per train in the peak hour, based on current capacity. This is approximately 12.5% of the capacity of each train currently working the route.

**55. What projections are there for new housing along the Airdrie-Bathgate railway corridor and over what time period?**

The resulting modelled housing allocations in the corridor are as follows (2001-2021):

- North Lanarkshire 4,000 dwellings
- West Lothian 8,000 dwellings

TMfS forecasts are fed by socio-economic data generated by the Scottish Executive's Transport Economic Land Use Model of Scotland (TELMoS). A key input to TELMoS is planning data provided by each of the local authorities. This planning data is provided periodically by the local authorities and is collated and harmonised prior to use in TELMoS. The planning data used in the forecasts was provided by the local authorities in 2003 (Note: new data is currently being provided as part of an update of TMfS). However, revised planning data was received from West Lothian Council during 2005, and North Lanarkshire Council indicated that the existing planning data held by the modelling team was still valid at that time (the local authorities were at different stages of the statutory planning process).

**56. What impact on patronage forecasting and revenue yield will any such new housing have?**

The TMfS modelling has been based on the housing allocation figures referred to in the response to question 55.

**57. What level of (a) existing and (b) proposed housing is, or will be, situated within 800 metres of each station from Airdrie to Bathgate?**

- (a) The following table provides data on existing levels of housing at each existing, proposed or relocated station:

<b>Station</b>	<b>Residential Units</b>
Airdrie	487
Drumgelloch (Relocated)	762
Caldercruix	130
Armadale	125
Bathgate (Relocated)	372

- (b) The following response has been compiled utilising the finalised West Lothian Local Plan 2005 and Glasgow & Clyde Valley Joint Structure Plan 2006. These documents are subject to change for several reasons, including local plan inquiries into objections lodged and not withdrawn and must therefore be treated with a degree of caution.

#### Finalised West Lothian Local Plan

Examining new housing allocations yet to be developed or completed, the housing allocations in the finalised plan are:

##### Armadale

A Core Development Area is allocated at Armadale with an estimated 2,000 houses which would be within 800 metres of the proposed Armadale station.

##### Bathgate

There is one new housing development currently proposed within 800 metres of the proposed station comprising 24 units.

The finalised West Lothian Local Plan provides site specific allocations for the housing allocations made by Policy HOU3 and Schedule 3.1 of the approved Edinburgh & the Lothians Structure Plan 2015. This includes an allocation of a minimum of 1,000 houses at Armadale for the plan period to 2015.

#### Glasgow & Clyde Valley Structure Plan 2006

This is the third amendment to the Glasgow and Clyde Valley Structure Plan 2006 and is currently before Scottish ministers for approval. It covers housing land requirements to 2018. As the plan has not yet been approved, the housing figures must be treated with a degree of caution.

Schedule 6 (b) (ii) of the amended structure plan would require an additional 250 houses in the Airdrie and Coatbridge Housing Market Sub-Area between 2004 and 2011. A further 1,500 houses would be required in that Sub-Area between 2011 and 2018.

In the Structure Plan, the technical report on Assessment of Potential Areas for Urban expansion explains that the main parts of the Sub-Area suitable for expansion are along the Airdrie-Bathgate rail link and in Coatbridge north and west where they relate to the rail network and to the need for improvement of the urban areas. It is therefore likely that a significant proportion of the housing to be developed in the Airdrie and Coatbridge Housing Market Sub-Area would be within 800 metres of Airdrie-Bathgate rail link in order to comply with accessibility criteria in Scottish Executive planning policy.

##### Airdrie Station

Planning permission has been granted for 12 flats at the corner of Manse Place and Weaver Street, next to the Bowling Club. Planning permission has also been granted for 300-400 housing units at Imperial Tube Factory and Pye

factory site on Victoria Place/Cairnhill Trading Estate. Furthermore, three retail units and 12 flats at 2-10 Louden Street have been submitted for approval.

#### Drumgelloch Relocated

Outline planning permission has been granted for 38 units to the south of the proposed station site.

#### Caldercruix

Phase one of the construction of a development comprising an estimated 112 units is currently underway.

Other proposed developments along the route, adjacent to proposed and relocated stations, are laid out below:

<b>APPLICATION</b>	<b>STATUS</b>
<b>NEW DRUMGELLOCH STATION</b>	
Residential Development (outline) Land North of 2-48 Dunrobin Road, Airdrie	Pending Decision Ref. 04/02012/OUT
Residential Development, Erection of 41 detached dwelling houses. Land North of 2-48 Dunrobin Road, Airdrie	Pending Consideration Ref. 05/02005/FUL
<b>CALDERCRUIX STATION</b>	
Erection of house, Plot 8, Station Road Caldercruix	Planning permission granted 01.07.03 Ref. 03/00765/FUL
Erection of house, Plot 7, Station Road, Caldercruix	Planning permission granted 22.07.03 Ref. 03/00832/FUL
Erection of house, Plot 13, Station Road Caldercruix	Planning permission granted 24.07.03 Ref. 03/00859/FUL
Erection of Dwelling house, Plot 11 Home Farm, Station Road, Caldercruix	Planning permission granted 07.09.05 Ref. 05/01101/FUL
Erection of 17 Dwelling houses (Phase 5) (Reserved Matters) Home Farm, Station Road, Caldercruix	Planning permission granted 02.11.05 Ref. 05/01580/REM
Erection of Dwelling house, Plot 11 Home Farm, Station Road, Caldercruix	Planning permission granted 12.09.05 Ref. 05/01101/FUL
Erection of Dwelling house, Plot 27, Home Farm, Station Road Caldercruix	Planning permission granted 19.09.05 Ref. 05/01197/FUL

Erection of Dwelling house, Plot 28, Home Farm, Station Road, Caldercruix	Planning permission granted, 18.08.05 Ref. 05/01195/FUL
Residential development. 6.3 ha site (outline) North of Airdrie Road, Caldercruix	Planning permission granted 20.08.03 Ref. 03/00566/OUT
Erection of 109 dwelling houses and associated access road. Land North of 57-175 Airdrie Road, Caldercruix	Planning permission granted 11.05.05 Ref. 04/01879/FUL
Residential development. 3.6 ha site (outline) S & W of Main St, Caldercruix	Planning permission granted 11.12.02 Ref. 02/01421/OUT
Residential Development, Erection of 112 dwelling houses. Land S & W of Main Street, Caldercruix.	Planning permission granted 07.12.04 Ref. 03/01304/REM
<b>ARMADALE STATION</b>	
Outline Planning application for residential development for three sites (A, B, C) (Cappers, Lower Bathville), Armadale	Received 22.10.02 Ref. 1071/02
<b>BATHGATE STATION</b>	
Detailed planning application for residential development. Blocks of flats accommodating 122 people. (Factory Road, Caledonia Homes) Bathgate	Received 3.11.03. Ref. 1226/03

**58. What overall ongoing subsidy is predicted to be required when maintenance, renewal and improvements are factored in?**

The annual operating cost estimate of £9m at Q1 2006 prices contains provision for maintenance and renewal of the rail infrastructure over the 60-year assessment period as well as direct operating costs. This sum can be broken down into the following (rounded) figures:

<b>Annual Operating Cost</b>	<b>(£m)</b>
Rolling Stock Leasing Charges	£1.9m
Rolling Stock Fuel Costs (Electricity	£0.5m
Staff Costs	£0.75m
Variable Track Access Charges	£0.7m
Infrastructure Maintenance Costs	£1.2m
Station Costs	£0.15m
Subsidies to Bus Network	£1.0m
Optimism Bias (44%)	£2.8m

Over this assessment period, the Promoter estimates the average annual subsidy required to be £4.1m at Q1 2006 prices.

**59. What assessment has the Promoter made of the need for ongoing subsidy via the ScotRail franchise?**

A proportion of the operating costs detailed in the answer to question 58 are likely to be met in the form of a subsidy paid via the ScotRail franchise. However, a formal change of the ScotRail franchise agreement will be required prior to the new services operating along the Airdrie-Bathgate route and is a matter for discussion between Transport Scotland and the franchise holder.

**60. What fare structure has the Promoter based its revenue projections on, and what are the revenue projections for each of the first 10 years of the railway's operation?**

The fare structure assumed in the TMfS modelling is the standard distance-based rail fare function used in TMfS. For details, refer to the TMfS Public Transport Model – Development and Validation Report October 2004 section 4.5. Fares are calculated using a formula which is described in this report. This function has been derived from a previous analysis of rail fares in Scotland. As is normal in these cases, the forecasting model runs for two selected years (2011 and 2021) to provide inputs to a 60-year appraisal period. Revenues are not calculated for each individual year.

## **Project costs and risk management**

**61. Do operating costs include any rolling stock upgrades?**

Although the type and amount of rolling stock to be used are matters for the franchise operator in conjunction with Transport Scotland, the estimated operating costs assume a net increase of £1.9m per annum for the leasing of the rolling stock required to operate the service. The calculations are based on the service requiring 18 three-car class 334 train sets with 15% strengthening for peak hours.

**62. What is the cost of (a) providing a new light maintenance depot at Bathgate and (b) relocating the car transfer/storage yard from Bathgate to Boghall?**

At Q1 2006 prices, the estimated construction cost of providing the light maintenance depot at Bathgate is estimated at £4.7m. Constructing the car transfer/storage yard at Boghall is estimated at £6.2m. These estimated construction costs are exclusive of the following:

- Property acquisition costs and legal expenses
- Design and consultancy fees
- Prelims and project management fees
- Contingency and optimism bias.

**63. What assessment has the Promoter carried out into the likely cost of decontaminating the land required for the proposed station at Caldercruix?**

The Estimate of Expense & Funding Statement contains a sum of £4.4m for the disposal of 70,000 cubic metres of contaminated spoil.

The physical assessment of the level of contamination at the proposed Caldercruix station site has, to date, been based on desktop studies and consultation with SEPA. On-site investigation has not been possible due to lack of access.

In order to progress detailed design of the rail link, it is planned to commence detailed site investigations in late summer 2006 along the route, which would complete early in 2007. These works will incorporate the lagoons at Caldercruix where it is proposed to construct the station car park. The outputs of the site investigations will inform the design process which will start in autumn 2006 and complete in late spring 2007. Until the detailed site investigation information is available, the Promoter will not have definitive quantities of the contaminated ground at Caldercruix requiring disposal off-site or on-site treatment. However, the Promoter is satisfied that the contaminated land costs and contingencies included in the Estimate of Expense & Funding Statement will be sufficient to deal with the contaminated land issues.

**64. The capital cost of the Waverley railway, 31 miles of track and seven new stations, is estimated at £155 million. The capital cost for the Airdrie-Bathgate railway, 14 miles of track and two new stations, two relocated stations and three station upgrades, is £300 million. Accepting that this cost also includes overhead electrification and double track, please explain the higher capital costs for this project.**

A direct comparison between two very different projects is difficult. However, a description of some of the most significant differences in the schemes, which may lead to an apparent disparity in costs, is provided below.

As highlighted in the question, one of the key factors is the fact that the Waverley project is single track while the Airdrie-Bathgate rail link is a double-tracked electrified line. In addition, while both schemes use the solum of former railway lines, the Airdrie-Bathgate rail link requires significant earthworks to widen and strengthen the track formation to provide safe walking routes and increase load capacity. Also, many of the curves need to be altered. This contrasts with the Waverley project where the solum is that of a former mainline, and as such requires little in the way of widening and strengthening to allow a single track to be installed.

For the Airdrie-Bathgate rail link, desktop studies have identified the presence of disused mine workings along the proposed route. To manage the consolidation of these, a £16m allowance has been included, along with a similar amount of risk provision, pending completion of site testing.

As the line is to be electrified over a distance of 36 miles between Airdrie and Haymarket, wires and masts work has to be undertaken on 40 existing bridges to accommodate the additional height requirement. An additional 10 bridges need to be replaced completely and a further five require additional works.

The Airdrie-Bathgate rail link cost is significantly affected by the extensive interface it has with the operational railway. As large amounts of work must be carried out on an operational railway line, compensation will be paid to the train and freight operating companies using the route for loss of business while the works are carried out. To minimise this compensation, much of the work will need to be undertaken at night. This, however, lengthens the time taken to complete the project and has a further impact on costs. Although construction safety requirements on any rail project are high, they are necessarily more stringent on an operational railway, which also has a cost implication. The Waverley rail project did not have such an interface with the operational rail network and so did not incur this additional cost element.

It is also important to note that the Airdrie-Bathgate rail link has a further £15.6m allocation to provide a relocated cycle path (£4.7m), a car transfer and storage yard (£4.7m) and a new light maintenance train depot (£6.2m). These estimated construction costs are exclusive of the following:

- Property acquisition costs and legal expenses
- Design and consultancy fees
- Prelims and project management fees
- Contingency and optimism bias.

Perhaps a more appropriate yardstick for costs is the recently opened Larkhall-Milngavie project. The pre-construction cost estimate was £34.5m, of which circa £25m covered the electrified Larkhall branch which comprises three miles of single track railway with a passing loop. This gave a cost per mile of circa £8m. The Airdrie-Bathgate rail link comprises 14 miles between the towns, plus 10 miles of the Bathgate branch, gives 24 miles of new and upgraded twin track railway. From simple calculation, there is a very close similarity to the £300m presented in the Estimate of Expenses for the Bill.

**65. The operating costs in 2006 are £9 million. How does this compare with the annual running costs of comparable lengths of railway line?**

The anticipated costs of the Airdrie-Bathgate rail link are fully in line with the costs of operating existing railway infrastructure and have been based on existing costs. As costs are not calculated on a line by line basis it is not possible to offer a direct comparison.

The operating costs associated with the existing franchise were tendered on the basis of provision of services for the whole of the Scottish network and are not broken down into individual sections of line.

**66. How does the project represent ‘very good value for money?’ [Promoter’s Memorandum, paragraph 75]**

Public transport projects are assessed using STAG criteria, listed below:

- Environment
- Safety
- Economy
- Integration
- Accessibility.

The Airdrie-Bathgate rail link fulfils all the above criteria. A detailed explanation of this can be found in paragraphs 41-43 of the Promoter’s Memorandum.

The Airdrie-Bathgate project, as proposed, has a Benefit-Cost Ratio (BCR) of 1.81. (See response to question 13.) Effectively, this means that for every £1 invested, the project will offer benefits worth £1.81 when assessed over a 60 year period. This is comparable with the two other rail infrastructure bills currently under consideration by Parliament: the Edinburgh Airport Rail Link (EARL) and Glasgow Airport Rail Link (GARL). The Promoter’s Memoranda for these projects detail a BCR of 2.16 for EARL (paragraph 98) and a BCR of 1.28 for GARL (paragraph 115).

A BCR of 1.81 provides a good economic case to proceed with a project. When combined with other factors, particularly environmental and social inclusion, the scheme is robust. This is why the Promoter considers the project represents ‘very good value for money’.

**67. What conditions, if any, have been attached to the funding allocation from the Scottish Executive?**

The project is funded by Transport Scotland. Any changes to the design, scope, commitments, obligations or programme which would have an impact on the stated funding require the prior written consent of Transport Scotland.

**68. What risk management strategy does the Promoter have in place to ensure the project comes in on time and budget?**

The Promoter has a Risk Management team working on this project. Since becoming the Promoter in 2005, in conjunction with Transport Scotland and other key stakeholders, Network Rail developed the existing risk register. This risk register covers several project streams, focusing mainly on technical, commercial and operational risks.

All risks included in the register have been assessed for cost and time impact. The potential cost implications of these risks are included in the overall project costs. These risks have been integrated into the project programme to identify how they might impact on the project timetable.

**69. How will capital costs and the timetable for expenditure be monitored?**

The project team continues to carry out monthly risk reviews to monitor and control the risks and opportunities, with involvement from Transport Scotland. These reviews will be complemented with quarterly Risk Assessments for both cost and timescales. The estimated forecast for expenditure is as follows:

<b>Future Years</b>	<b>Forecast (k)</b>
05/06	£744
06/07	£7,563
07/08	£59,848
08/09	£103,285
09/10	£105,467
10/11	£22,823
End of Project	£299,730

## ACCOMPANYING DOCUMENTS

### Promoter's Memorandum: Consultation

**1. What guidance or remit was given to the Promoter, and from whom, on how to consult, with whom, on what, and when?**

Consultation and communication has evolved as the project has developed with guidance from and referral to:

- The Scottish Transport Appraisal Guidelines
- Experience drawn from other private Bills
- The Scottish Executive and Transport Scotland
- North Lanarkshire and West Lothian Council
- The professional expertise and experience of Jacobs Babbie and Harrison Cowley through working on other railway Bills.

Full details of the consultation methodology, stakeholder consultation, environmental consultation, general public consultation and local interests consultation are provided within paragraphs 172-264 of the Promoter's Memorandum.

**2. How were those affected by land take or potential environmental impact (e.g. noise, vibration, visual impact) identified for consultation?**

Appendix 7 of the Estimate of Expense & Funding Statement sets out the methodology used for land referencing. Following the completion of the land referencing work and prior to formal notification, selected landowners were contacted for further consultation. These consultation meetings related primarily to specific land issues, where a potential conflict between the landowner and the project works had been identified. Environmental impact issues were also discussed at such meetings.

In addition, following a series of public meetings associated with the project works, any landowners requesting an individual meeting were met by the project team. Public meetings were advertised in local media for each area of the route and on posters distributed within community centres, local shops and libraries. Any parties in the vicinity of the route had the opportunity to attend public meetings associated with the project.

Parties whose properties abut the railway line received notices. Additionally, parties whose property was specifically identified in the Environmental Statement as being a receptor likely to experience substantial, severe, high or significant impacts by virtue of noise or vibration were notified even if their property did not abut the line.

### 3. What specific businesses were consulted and what, if any were their views?

Consultation with business falls into three headings. First, a programme of detailed interview surveys was carried out by MVA Consultancy with businesses across a range of sectors in North Lanarkshire and West Lothian. The objectives were to build a picture of the operational characteristics of business in the area, to establish views on the pros and cons of being located in the area, and to pick up perceived constraints on business growth in the area. The following businesses were consulted:

- ABP (Anglo Beef Products)
- ACR Logistics (was Hays Logistics)
- Airchannel – compressed air
- Albert and Sons Veg pickers and packers
- Aldi
- API Foils (manufacturer)
- Arnold Clark Automobiles Ltd
- Asda
- Banta Global Turnkey
- BeCogent
- Central Motors (refuse collection vehicles)
- Christian Salvesen
- Christies Bakery - Airdrie
- D&J Haulage
- Dacoll Ltd
- EWOS Ltd (fish feed)
- Highlander Snacks Ltd
- Inland Revenue
- Intelligent Finance
- Inverhouse Distillers
- John Orr and Sons - Airdrie Dept store
- Mitie Property Services
- Motorway cars Ltd
- MRS Distribution
- Procurator Fiscal
- Pyramid Windows
- Royal Bank of Scotland
- Scotshield fire/security Systems
- SHB plant hire (tractors etc)
- Sibcas Ltd (portacabins)
- Sky
- Sweeney Plant Hire Ltd
- Terra Trek
- Tesco
- United Central Bakeries
- Vauxhall Car Dealer
- Wincanton Logistics.

The main findings of this consultation can be summarised as:

- Businesses in the area are generally optimistic about the future and have been stable or expanding in recent years
- Over half reported difficulties in recruiting suitable staff – identified as a constraint on growth
- There is evidence of labour market exhaustion in some sectors (call / contact centres) and lack of skilled staff in other sectors (e.g. trades, plant, sales)
- The sample of North Lanarkshire firms was more locally orientated in terms of its geographical operations (markets and suppliers) than those in West Lothian
- Poor public transport, parking or congestion are identified as negative characteristics of their location by some firms
- ‘Car driver – single occupant’ is by some margin the most common method of travel to work
- There is a reasonable awareness of the proposals
- More than half of firms thought the line would be used in their business
- 26 of the 37 firms thought they would benefit from improved access to labour, with other smaller benefits foreseen.

The above findings suggest that the re-opening of the railway line could potentially address a number of constraints on growth and regeneration. A full list of the consultees and their views can be found in paragraphs 196-199 of the Promoter’s Memorandum.

As expected, utilities businesses wished reassurance that their infrastructure would not be compromised by the proposed railway. The answers to questions 18 and 19 of Annex B detail how the Promoter has sought to consult with utilities providers. Further detail on the consultation undertaken with relevant stakeholders in the rail and transport industries can be found in paragraphs 198 and 199 of the Promoter’s Memorandum.

The final area of consultation (ongoing) is with businesses whose land is directly affected by the project. At the time of writing, representatives from Network Rail and Jacobs Babtie have met with the following businesses on at least one occasion to discuss the project proposals and subsequent effects to the businesses:

- Aptuit
- Bedlormie Mains Farm
- Boghall Farm
- Buchanan Homes
- Caldervale Forge
- Caledonia Homes
- Clints Farm
- Drumbow Homes
- Easterton Farm
- Ford Farm
- Holm Farm
- Mario Rea Developments

- Mosshouse Farm
- Mowlem as owners of Bathgate Foundry
- Netherhouses Farm
- Raiziehill Farm (Mac corns popcorn)
- Sibbald Training
- Sibcas
- Standhill Farm (Kerr)
- Standhill Farm (Orr)
- Stepends Farm
- Turnhouse Farm
- Upland Developments
- Wester Moffat Farm
- Wester Torrance Farm
- Westfield Farm
- Whiteside Farm
- WM Estates.

Most of the businesses consulted above were generally supportive of the principles of the project. However, all had concerns over the likely impact of the works on their business operations and over the inclusion of certain plots of land in the Bill works. The Promoter is continuing to liaise with the above companies with a view to resolving any outstanding issues they may have with the detail of the project proposals.

**4. Did the Promoter seek the views of local community groups as to the form and timing of its consultation and, if so, how and from which groups?**

The Promoter sought to develop and implement a consultation strategy which allowed it to engage with the broadest range of stakeholders. See paragraphs 172-264 of the Promoter's Memorandum. It sought the views of local representatives – MSP/MPs, Councils, Councillors and Community Councillors – as to the nature and timing of consultation activities and also used their contacts and channels of communications to reach a wider range of people. Community representatives also remained engaged in many of the subsequent consultation activities such as the public meetings. All community councils along the line of route between Airdrie and Uphall were written to at the time of the Bill's introduction with the offer of a meeting with the Promoter and its consultants to provide a briefing on the details of the Bill and to discuss any concerns they may have had. Advice was sought from the line of route constituency MSPs on locations for the placing of the Bill documents for public viewing, the timing of the summer consultation and what further public consultation was required.

**5. What consideration did the Promoter give to including local community councils or groups as 'key stakeholders'?**

As set out in the answer to question 4 above, we have consulted regularly with the local communities and their elected representatives. The objective of the consultations was and remains to engage with a broad range of people in order to share information and obtain their input. Sharing information and working

closely with key representative stakeholders played an important part in reaching and communicating with some target audiences.

## **6. How did the Promoter actively encourage information to come in from the public?**

On 20 February 2004, the Airdrie-Bathgate rail link project was launched to all key local and national audiences. Launch media activity focused on briefing journalists, issuing a news release and holding a photocall. The launch and accompanying media information involved opening the public information helpline (0131 556 1515), website ([www.airdriebathgaterailink.co.uk](http://www.airdriebathgaterailink.co.uk)), project email address ([info@airdriebathgaterailink.co.uk](mailto:info@airdriebathgaterailink.co.uk)), by which individuals were encouraged to contact the project. In all public meetings and exhibitions, members of the public have been able and encouraged to share their views and ask questions.

Project information leaflets were distributed throughout the consultation period, in particular during the public meetings and exhibitions. To reach a wider audience, large numbers were also delivered to community groups, community councillors, community wardens and left at community centres. As above, the leaflets detailed the project helpline, website and email address and also incorporated a freepost feedback form to allow people to voice their views. These views have all been logged and considered by the Promoter.

At each public meeting and exhibition, the consultation team provided a comments book where meeting and exhibition attendees could express and record their views on the project. The comments were reviewed after each meeting and passed to the Promoter.

Throughout all consultation activity, the helpline, email address and website have been promoted at every opportunity, appearing on: project leaflets; display boards; posters; banners; news releases; letters; and emails to interested parties. In addition, key community figures (MSPs, councils, councillors and community councillors, community centres) were provided with these communication details to enable them to contact the consultation team and were encouraged to pass these details on to other interested parties.

The Airdrie Bathgate website 'contact us' page encourages readers to contact the consultation team by calling the helpline, writing to the communication office, sending an email, or completing a query/information request form. All enquiries are logged, researched and responded to.

## **7. What 'innovative' ways of engaging with the public did the Promoter consider and carry out?**

The priority for all consultation was to provide as much information to members of the public and key stakeholders in line with best practice communications and STAG. The communication methods detailed below indicate the desire to use a wide range of mechanics and activities in order to reach all stakeholders:

- An interactive website set up on 24 February 2004. The website was,

and continues to be, regularly updated as and when additional project information becomes available. The website also provides visitors with the opportunity to send an instant message to the project team, to which an initial response was provided within 24hrs.

- Development of accessible, well-designed and informative materials. Project leaflets were distributed throughout consultation, containing a synopsis of project information, contact details for the project team and a freepost feedback form allowing readers to send their thoughts on the project to the project team. Display boards used for exhibitions were an alternative method for people to understand the scope of the project.
- Public meetings were held within each of the main communities along the route (Airdrie, Caldercruix, Armadale, Bathgate, Uphall Station and Livingston). Project information was provided for communities in the form of a presentation by Ron McAulay, Director of Network Rail, Scotland. The opportunity was given to put questions to the project team and write comments in the dedicated comments book. Such meetings were a public forum in which to voice opinion.
- Public exhibitions were held within each of the main communities along the route (Airdrie, Caldercruix, Armadale, Bathgate, Uphall Station, Livingston) and also at Edinburgh Waverley and Glasgow Queen Street stations. These provided project information for communities, the opportunity to put questions to the project team and to write comments in the comments book. Both the public meetings and exhibitions displayed information boards with additional project information and contact details for the project team.

**8. Was the consultation on this project on a par with consultation for such infrastructure projects and with Scottish Transport Appraisal Guidance?**

Yes. The STAG principles guided the production and implementation of a detailed communications and consultation strategy. Consultation has been broad and detailed and carefully planned, as is required for major infrastructure projects.

The Promoter has worked closely with public relations consultants, Harrison Cowley, which has managed other railway consultations.

**9. On how many occasions has the Promoter written to all owner/occupiers to keep them informed of this scheme since the Bill was introduced?**

All owners/occupiers were notified of the scheme immediately prior to the introduction of the Bill on 31 May 2006. This notification included information on where to view the Bill and accompanying documents, who to contact should they have any concerns and how to object if they wished to do so.

As such, no further correspondence has been issued to all owner/occupiers since the Bill was introduced. Instead, ongoing consultation has been taking place between the Promoter and particular owner/occupiers who have sought additional information, raised concerns, or lodged objections following receipt of the Bill Notices.

It is the Promoter's intention to prepare regular information leaflets for distribution, the first of which shall be available in autumn 2006.

**10. How many requests did the Promoter receive from people who may be affected by the railway seeking clarification or further information and how many follow-up meetings did the Promoter undertake?**

To date, there have been approximately 950 people requesting information and voicing their views on the project. This number is made up of calls and emails to the helpline (approximately 600 people – many of whom made multiple requests for information at different stages of the project). There were also approximately 70 calls/emails regarding the confirmation schedule and approximately 100 calls/email regarding the Bill Notice. Approximately 180 people sent in the leaflet feedback forms either voicing their opinion or requesting additional project information.

The Promoter has taken a proactive approach in respect of meeting people affected by the railway. Meetings have been offered to those whose land is affected by the railway; to date approximately 40 such meetings have taken place. The Promoter also responded positively to meeting requests from individuals and organisations and, as such, approximately 50 other meetings have also taken place.

**11. What targets has the Promoter set for dealing with, and responding to, correspondence from people affected by the proposed railway and how has it performed in meeting these targets?**

The Promoter aims to respond to enquiries and requests for information in the first instance before close of business the following working day. Every enquiry was and continues to be responded to within this time period. When information is required from an additional source, individuals receive an initial response thanking them for their enquiry/ies and explaining that information would be provided as soon as possible.

Subsequent information was usually provided within seven days. Where further research was required beyond this timeframe, enquirers were kept up to date with the progress of the information they were requesting.

**12. How many offers were made to the Promoter to attend public meetings, how many were accepted and subsequently attended, where did these take place and what was the public attendance at each?**

The Promoter has been proactive in organising public meetings and exhibitions in order to engage fully with a wide range of audiences. For full details and description of the public meetings that took place prior to Bill introduction, please see paragraphs 238-255 of the Promoter's Memorandum.

As set out in the answer to question 4, the Promoter has written and offered meetings to all community councils since the Bill's introduction.

As a result of the number of enquiries in the Livingston area following Bill introduction, the Promoter invited local residents to a public meeting at

Mosswood Community Centre on 29 June 2006. Approximately 50 people attended.

**13. What did the Promoter consult on during its pre-Bill introduction consultation process and what influence have people had on the actual route of the railway and the cycle route?**

Reopening the rail link was identified in the CSTCS in 2002. Alternative alignments to the existing solum were considered during the Initial Technical Feasibility Study, as is more fully detailed in the answer to question 32 of Annex A and in paragraphs 79-106 of the Promoter's Memorandum.

As detailed in the answer to question 25 of Annex A, consultation on the cycle path was extensive and remains ongoing. Appendix 2 of the Promoter's Memorandum provides details on changes made to the scheme as a result of consultation.

Consultation on other issues has been undertaken as detailed below:

- Location of stations and inclusion of additional stations
- Station facilities including car parking, CCTV and lighting
- The Bill process
- Timescales of the project and construction process
- Property enquiries, including compensation and mitigation
- Environmental and safety issues.

**14. Did the Promoter seek to publicise or inform individuals of the outcome of its consultation exercise and, if so, how?**

Every effort has been made to inform individuals of changes which might affect them as the project has developed. Furthermore, the Airdrie-Bathgate rail link website contains a section entitled 'What Changes Have Been Made to the Project Plan as a Result of Consultation'.

Three of the most significant changes made as a result of the consultation carried out in early 2006 were to the plans for the stations at Airdrie, Caldercruix and Uphall. The details of these alterations were made public through press releases issued to the local media, copies of which were given in advance to the local MSPs and relevant local authority. Copies of all press releases issued by the Promoter can be found on the Airdrie-Bathgate rail link website.

In addition, the Promoter published the outcome of the consultation in the Promoter's Memorandum which has been made available to the public in partner libraries and council offices.

**15. How have those who have contributed to consultation been updated on the work undertaken since they contributed their views on the Bill?**

Please refer to the response provided to question 14 above.

**16. How will the Promoter continue its consultation with the public generally and more specifically with affected persons?**

The Promoter intends to continue its consultation with the general public and affected persons throughout the Bill process and the construction phase through:

- Ongoing briefings with community councils so that they in turn can feed information back to residents
- Update meetings with all key stakeholders
- Ongoing project consultation via the designated helpline and email address, enabling both affected and interested parties to put questions and seek information from the project team
- Continual updates on the designated project website where the compensation document is available for download. The website also includes a FAQ section with answers on compensation and a link where queries can be emailed directly to the project team
- Media relations activity; publicising project developments in local and regional media
- Regular updates for affected parties in the form of meetings, phone calls and letters
- Project newsletter to be distributed to interested parties and all communities along the route and to include project progress updates.

**17. How will the Promoter ensure a clear and constant dialogue with, for example, those people seeking compensation and more widely on the development of the project, for example on measures dealing with environmental mitigation should the scheme proceed?**

The Promoter has produced a plain English compensation guide for all individuals who have been identified or believe they may be entitled to compensation. The Promoter has met with all individuals who requested a meeting about the compensation process and had discussions with individuals and groups about the impact of the project along the line of route in relation to environmental impacts and possible mitigation. The Promoter intends to continue this dialogue with affected parties as the project develops through design and into the construction phase.

**18. What assurances have been given and agreements and safeguards are in place with respect to the protection of public utility apparatus?**

Part of the project scope is to identify all public utility apparatus which is potentially affected by the works as proposed. Consultation has taken place with all utility companies and the purpose of these discussions was to confirm the accuracy of the information, to discuss their views on the impact and to open appropriate dialogue on what protective measures may be required to safeguard their assets. Such consultation is continuing.

**19. What active measures has the Promoter taken to reduce the likelihood of objections to the Bill being lodged by public utility companies?**

Please refer to the response provided to question 18 above.

**Promoter's Statement: Notification**

**20. How did the Promoter identify those individuals to whom it issued notification letters?**

The individuals entitled to notification letters were those having an interest in heritable property affected by the Bill. Such property was identified as explained in paragraph 2 of Brodies' Note on Land Referencing Methodology & Service of Notification. (Part 1 of Appendix 7 to the Promoter's Statement), using the criteria set out in John Kennedy & Co's Note (in Part 2 of Appendix 7).

Having determined the categories of individuals entitled to notification, the Promoter's referencing team identified those individuals in accordance with the Land Referencing Methodology contained in paragraph 3 of Brodies' Note (Promoters Statement).

**21. How did the Promoter ensure that the notification process was carried out accurately, timeously and thoroughly?**

The Promoter's referencing team followed the Service of Notification procedure detailed in Appendix 7 to the Promoter's Statement so as to ensure that the Notification process was carried out as accurately, timeously and thoroughly as reasonably possible.

The Promoter's referencing team did its best in accordance with the Methodology to ensure that all Notices were delivered timeously. However, as part of the Promoter's checking procedure, the Promoter identified that a large number of Notices, particularly in the Livingston area, had not been delivered by Royal Mail. When the Promoter's referencing team discovered that these Notices had not been delivered, the Promoter prepared fresh Notices and arranged for these to be delivered personally in accordance with the procedure detailed in paragraph 8.5 of Appendix 7 to the Explanatory Notes in the Promoter's Statement (see Question 28 below also). The Promoter can confirm that all Notices which Royal Mail failed to deliver were delivered approximately six weeks in advance of the closing date of the objection period.

The land referencing team has been as flexible as possible in responding to queries and information received from interested parties both in response to the Confirmation Schedules mentioned in Paragraph 3.8 of Appendix 7 of the Explanatory Notes and in response to the Notices.

**22. What assurances can the Promoter give that no properties will come to light that should have been notified?**

The Promoter is not able to guarantee that no parties will come to light that should have been notified. However, the Promoter can assure the Committee

that all reasonable steps have been taken to ensure that parties entitled to Notification have been notified.

The land referencing team has continued to re-serve Notices which have been returned to the referencing team wherever possible (for example where items have not been called for or due to non-delivery by Royal Mail). The referencing team has also sent out new notices following receipt of new information (for example where there were changes in ownership or occupier details) so as to ensure that as far as reasonably practicable, all properties that should have been notified have been notified in fact.

As part of the checking procedure put in place by the Promoter's team, the land references checked the list of parties notified against the supporting documents relating to the Environmental Statement. It was noted by the Promoter's team during the objection period that eight houses in Bedlormie Drive, Blackridge, which would be affected by an increase in noise, had not been notified. The Promoter was able to ensure delivery to all of these properties within the objection period.

There are various reasons why the Promoter cannot guarantee that no parties will come to light which should have been notified. Firstly, there are changes taking place all the time in land ownership and occupation. As a result, at any point in time there will always be a number of parties whose interests are unregistered and not readily traceable. Secondly, the Register of Sasines is not plan-based and therefore it is not always easy to identify the extent of ownerships and current boundaries. In addition, some titles identified in the Sasines Register refer to proprietors of the land several decades ago with no reference to a transfer of title. This means that the parties identified in the Register of Sasines may have died or passed on title to the property without a title being registered.

Whilst no guarantee can be given that no properties will come to light that should have been notified, the Promoter is confident that the Methodology followed by the land referencing team will have kept these to a minimum.

**23. In the light of the notification errors made during the course of referencing for the Waverley Railway (Scotland) Bill, what changes have the Promoter's land referencers made to their approach to referencing and notification for this Bill?**

The Promoter's referencing team was well aware at the commencement of the referencing process of the issues which arose during the course of the referencing for the Waverley Bill. In determining the Methodology to be used, the land referencers looked at the particular issues and errors in notification which had arisen in the Waverley Bill Project and took specific steps to avoid similar errors arising with the referencing for this project.

The main errors identified by the referencing team in terms of notification for the Waverley Bill project were: the Ordnance Survey had been relied on without additional site visits and owners or affected parties had been missed; servitudes, wayleaves, burdens and rights of access were not identified; and delivery of notices was 'patchy' in difficult to find streets. The Land Referencing

Methodology contained in Appendix 7 of the Promoter's Statement details the Methodology used by the land referencing team on pages 61-66.

The land referencers employed by the Promoter included professional searchers, Millar & Bryce Limited, experienced searchers of public registers. Instead of the conventional land reference, the searchers undertook a review of the full titles identified by Millar & Bryce Limited and Scottish lawyers, Brodies LLP. This means that the risk of failing to identify a party with an interest in land such as a right of common property, right of access, drainage or other lesser right was reduced.

The carrying out of door-to-door enquiries at all houses and properties along the route prior to commencement of the referencing procedure reduced the chances of interested parties being missed and careful examination of the route reduced the chance of affected properties being omitted due to peculiarities on the ground such as incorrectly erected fences, sloping ground and the like.

The land referencers were aware of the danger of failing to identify parties who use informally constituted crossings and paths, as well as those with servitudes and rights of access. Therefore, they arranged with Railway Paths Limited to put up notices on the cycle path where there appeared 'on the ground' to be crossings. In this way, the project was brought to the attention of parties crossing the proposed route whether or not such parties were owners or occupiers of adjacent land.

**24. What cross-checking or peer review has been carried out over the Promoter's land referencing arrangements to reduce any risk of error?**

The carrying out of searches by professional searchers, reviewed by lawyers qualified in Scots Property Law, and assisted by thorough questioning of parties along the route, meant that the Promoter did not consider it necessary to have a peer review of the land referencing arrangements carried out.

Throughout the process of referencing, information has been exchanged among the land referencing team, public relations consultants, Promoter and engineering team, and this exchange of information has functioned as a cross-checking of the land referencing information.

In addition, the information obtained from questionnaires completed at houses along the whole route was cross-checked with the information obtained from the searching in the Land, Sasines and Company Registers and in the Electoral Roll. Confirmation Schedules were issued and agents and solicitors who might have information with regard to ownership and occupation have been questioned. Information has been obtained from local authorities and other stakeholders. All of the information obtained has been cross-checked with information obtained from other sources.

**25. What discussions have the Promoter's land referencers had with Registers of Scotland regarding the methodology and approach to land referencing used for this Bill and what assistance did RoS offer?**

In connection with the land assembly work relating to the Stirling-Alloa-Kincardine Railway project, representatives of the Promoter's land referencers attended a meeting at Registers of Scotland. At that meeting, Registers of Scotland demonstrated the procedures which they could carry out to identify interests registered in the Land Register.

Based on the knowledge gained at that meeting, in the land referencing for this project the Promoter's Land referencers utilised the procedures demonstrated by providing a plan to Registers of Scotland showing the proposed route. (As detailed in paragraph 3.4.1 on page 63 of the Methodology.) Registers of Scotland provided details of properties registered in the Land Register along that route. The Land Register title information was therefore obtained direct from the Registers of Scotland and was plotted by Registers of Scotland directly from the Ordnance Survey map held by them on to the GIS system, which is the basis of the land referencing data assembly. The title information contained on the GIS system has been utilised in preparation of the maps and plans.

In that way, Registers of Scotland provided assistance in the land referencing data assembly.

Insofar as methodology is concerned, the Promoter's land referencers were confident that, as professional searchers, Millar & Bryce Ltd had the searching skills and expertise necessary to ensure identification of the relevant property interests and were confident that Brodies' experience in land assembly work would ensure that the Book of Reference contained as accurate a statement as possible of affected property interests.

Registers of Scotland has confirmed that Millar & Bryce Limited is one of a number of searching firms which carry out searches in the Registers of Scotland and that solicitors in Scotland rely upon the searches produced by it in property transactions.

The Promoter's land referencing team also includes Brodies LLP solicitors, which has extensive expertise and experience in examining and interpreting titles both in the Land Register and Register of Sasines and in land assembly work.

**26. What consideration did the Promoter give to conducting title searches at this time; were such searches carried out and, if not, why not?**

The Promoter carried out full title searches in respect of all land within the limits of deviation and the limits of land to be acquired or used.

**27. How has the Promoter defined 'affected' for the purposes of identifying an affected person?**

This question is understood to refer to persons with an interest in heritable property which is affected by the Bill but which is not within the limits of deviation or the limits of land to be acquired or used.

The categories of property to be treated as affected for this purpose are:

- Heritable property abutting (i.e. sharing a common boundary with) the limits of deviation or the limits of land to be acquired or used
- Heritable property which structurally adjoins abutting property so as to be part of the same structure
- Heritable property (whether or not abutting limits) specifically identified in the Environmental Statement (ES) as being likely to experience significant impacts.

For reference, see paragraphs 2.2.2, 2.2.3 and 2.2.4 of the Referencing Methodology and paragraphs 4.2, 4.3 and 4.4 of the John Kennedy & Co Note (both in Appendix 7 to the Promoter's Statement).

Because of the way in which properties were identified in the ES, the properties included in the third category were those likely to experience an increase in noise and vibration. The persons entitled to notification were those with an interest in properties falling within one of these categories.

**28. What action has the Promoter taken to respond to any instances of non-delivery of notification letters, giving details of the number of such letters and the timetable for when such instances occurred, the action taken by the Promoter and individuals received their letters?**

The Promoter's land referencing team followed the Methodology contained in Appendix 7 paragraph 8.

Where notices were returned by Royal Mail marked as 'not called for' or where notices were returned marked as 'gone away', either by Royal Mail or by those in receipt of the notices, notices were re-served personally in accordance with the Methodology.

Where parties returned notices and provided information with regard to changes in owners or occupiers or additional information with regard to ownership or occupation, fresh notices were served in accordance with the Methodology.

Where, as a result of the Promoter's land referencers' system of checking, it became apparent to the land referencers that a large number of notices had not been delivered nor returned as uncalled for, these notices were collected from Royal Mail and re-served personally in accordance with the Methodology.

As a result of the land referencers checking the Royal Mail website to obtain copies of the receipts in respect of Recorded Delivery, they noticed that a large number of notices had neither been returned nor marked as received. The

Promoter contacted Royal Mail to ask for information with regard to these notices. When it became apparent that Royal Mail could not confirm that the notices had been served, nor provide information with regard to what had happened to the notices, the land referencing team prepared fresh notices and re-served these personally in accordance with the Methodology.

**Promoter's Statement: Notification to, and consent from, Promoter's board**

**29. Please provide details of Network Rail's governance arrangements as referred to in paragraph 252 of the Promoter's Statement and a copy of the paper referred to in the Group Company Secretary's e-mail.**

The paper referred to in the Group Company Secretary's email is not a public document. Its contents are confidential and, as such, the Promoter is not in a position to provide a copy. In relation to Network Rail's corporate governance arrangements, these can be summarised as follows:

**Board of Directors**

The Board is responsible for governing the strategic direction of the business, supervising its operational management and providing leadership within a governance framework which it oversees. This responsibility extends to taking overall responsibility for financial performance, internal controls and risk management of the Company.

**Directors**

The Company is led and controlled by a Board currently comprising four Executive and nine Non-Executive Directors with wide experience both within the rail industry and generally. The responsibilities of the Chairman include leading the Board and ensuring its effectiveness. He sets the agenda for the meetings of the Board and, with the assistance of the Group Company Secretary, ensures that the Directors receive timely, accurate and clear information before Board meetings and updates on issues arising between meetings. The roles of the Chairman and the Chief Executive are distinct and separate and their responsibilities are clearly established, set out in writing and agreed by the Board. The Chairman is responsible for the workings and leadership of the Board. The Chief Executive is responsible for leading and managing the business within the authorities delegated by the Board.

**Board meetings**

The Board is scheduled to meet 10 times a year. A format is prepared and agreed which ensures that the Directors are able to review corporate strategy, the operations and results of the business units regularly together within the Group and discharge their other duties. In addition to these meetings, the Board meets at least once a year to focus on the future strategy of the business. Certain matters are formally reserved for decision by the Board, including approval of the interim and year-end financial statements of the Company, the Business Plan, material changes to the network licence and pension matters. Matters delegated to the Executive Committee or below are also subject to financial limits above which Board approval is required.

## Organisational structure

The Board has established an organisational structure which is designed to allow for effective and efficient decision-making across the business. The Board has delegated authority to the committees described below on specific matters which are set out in their terms of reference. These authorities are reviewed regularly. The terms of reference of the Safety, Health and Environment, Audit and Remuneration Committees are published on the Company's website and copies are available on request. Minutes of all committee meetings are made available to Directors.

There are six standing committees with defined terms of reference as follows:

The Safety, Health and Environment Committee comprises four Non-Executive Directors and the Chief Executive. The Committee's role is to monitor the safety, health and environmental responsibilities of the Company. In addition to this Committee, reflecting the recommendations in the Cullen Report, two executive committees have been set up, dealing with strategic and tactical safety matters. Moreover, the Board receives a report on safety, health and environment matters at each of its scheduled meetings.

The Audit Committee is comprised exclusively of four independent Non-Executive Directors and the Chairman. The external auditors, the Chief Executive, the Group Finance Director, the Group Financial Controller and the Head of Internal Audit normally attend meetings of the Committee. The Committee also periodically meets with the external auditors without management present. The main responsibilities of this Committee are to monitor the integrity of the financial reporting and the audit process and to monitor that an effective management and internal control system is maintained. The Committee has a structured programme of activities including receipt of regular detailed reports on relevant aspects of management, focused to coincide with key events of the annual financial reporting cycle.

The Remuneration Committee comprises all nine Non-Executive Directors and determines appropriate levels of Directors' and senior executives' remuneration including the incentive scheme.

The Nominations Committee is chaired by the Chairman of the Board and comprises two further Non-Executive Directors. The role of the Committee includes:

- Reviewing regularly the size, structure and composition of the Board (including use of suitable periodic performance evaluation processes)
- Making recommendations to the Board on any adjustments which may be deemed necessary and feasible (including on matters such as succession planning)
- Evaluating the balance of skills, knowledge and experience of the Board
- Identifying and nominating candidates for appointment as Director for approval by the Board
- Satisfying itself that appropriate succession plans and processes are in

place for the appointments to the Board and to senior management positions.

The Treasury Committee comprises three Directors and a Non-Executive Director as Chairman. The Committee's role is to review and satisfy itself as to the appropriateness of proposed treasury transactions including banking, cash management, debt raising and management and investment management.

The Executive Committee is chaired by the Chief Executive and comprises all four Executive Directors and three other senior executives of the Company. This Committee manages the functions of the business and implements the operational and financial objectives within limits set by the Board. Except for matters specifically reserved for the Board, or which are over the financial limits as prescribed by the Board, the Executive Committee has authority to transact such other business of the Company as is required.

**30. How many members of the Executive Committee are there?**

There are seven members of the Executive Committee.

**31. Did the member of the Executive Committee from whom the Promoter did not receive approval to promote this Bill dissent or not reply to the Group Company Secretary's request?**

The member of the committee from whom approval was not obtained did not reply.

**Book of reference and maps, plans and sections**

**32. Please clarify the methodology used in compiling the Book of Reference and the maps, plans and sections and was this approach consistent with accepted best practice?**

Book of Reference

The Methodology contained in Appendix 7 of the Promoter's Statement and, in particular, paragraphs 4, 5, 6 and 7, details the Promoter's land referencers' methodology used in compiling the Book of Reference and collating the information relating to property interests in so far as that impacted upon the maps, plans and sections. The Methodology detailed in Appendix 7 paragraphs 1-4 details the approach used by the land referencers to identify the parties who should be included in the Book of Reference.

Maps, Plans & Section

The outline design land take from the ITFS was taken as a basis for preparing the draft maps, plans and sections. These drafts were then refined and amended to take account of design changes and additional works added during the design process. Initially, plot boundaries were determined according to assumed land ownership marked by boundaries such as fence-lines and roads. However, once the title searching process was complete, the referencing team and the maps, plans and sections team met to rationalise the plots so that, as

far as practicable, each plot had only one owner and occupier. The revised plans, plot numbers and shoulder notes were then subject to review and checking over the duration of the preparation period by the maps, plans and sections team, land referencing team, the environmental specialists, Parliamentary Agents and the Promoter. These review sessions were undertaken to ensure the land plots and land-take was in line with title information, engineering design and environmental assessment as far as reasonably practicable and to ensure that the Bill Schedules accurately reflected the information contained in the plans and shoulder notes. At most of the meetings held to review the maps, plans and sections, the plans were checked 'plot by plot' to ensure consistency and accuracy as far as possible. Although not all were present at all the meetings, there were no fewer than 11 iterations of the plans to ensure correct correlation between title, purpose, area, description of plots and works and rationalising future vesting requirements.

**33. What discussions have the Promoter's land referencers had with Registers of Scotland regarding the methodology and approach to compiling the Book of Reference and the maps, plans and sections and what assistance did RoS offer?**

See response to question 25.

**34. Will the Promoter meet and discuss with any objector who requires clarification of land take and use?**

The Promoter is happy to offer clarification on land take and use to any objector and meet with them whenever it is necessary to do so.

**35. What additional drawings or plans has or will the Promoter make available to assist individuals affected by land take identify the land plots being acquired?**

Additional plans will be made available to affected parties as necessary. In response to a request by an affected party, the Promoter has already placed simplified engineering drawings of the rail route and relocated cycle path on its website and in partner libraries.

**36. Has a cautionary approach been taken to land take or is the land take the minimum necessary or a reduction?**

A realistic approach has been adopted in determining land take through outline design and land referencing. It is considered that, based on continuous review and consultation of the parliamentary plans, sufficient land take has been provided to construct the works and necessary working space.

**Estimate of Expense and Funding Statement**

**37. What factors might impact on capital costs and lead to an increase?**

The estimate has been derived from engineering quantities produced from a concept design. Risk and contingency has been calculated using the Promoter's

standard processes to ensure good corporate governance. Principal factors which affect all cost estimates are discussed below.

If the scope of works is increased or contracted, it has a directly proportional impact on the cost estimate. The contingency provision in the present estimate is not sufficient to accommodate significant changes in scope. Indeed, the scope of works for this project and included in the Parliamentary Bill has been defined in detail between the Promoter and Transport Scotland.

Although the Promoter can predict, within limits, how contractors will price delivery of this project once tenders are issued, it will be approximately two years before the major delivery contracts are awarded. This is sufficient time for external factors driven by market forces outwith the control of the Promoter to change how contractors may price their tenders. Examples of these factors may include skills shortages, inflation caused by other rail enhancement projects, or continuing fuel price escalation.

In addition to the above, the Promoter believes the following areas are the principal specific risks to the capital cost estimate for the Airdrie-Bathgate rail link scheme:

- More mine workings might require consolidation than estimated
- Land price inflation – because the proposed route runs through or adjacent to a number of communities which are experiencing increased land and property values
- Committee recommendations and Parliament determination.

**38. Is the level of optimism bias (19%) consistent with other rail and tram infrastructure projects in Scotland?**

The level of optimism bias has been calculated in accordance with guidelines contained in The Supplementary Green Book Guidance on Optimism Bias (HM Treasury 2003).

Network Rail has also applied a robust risk management process to identify and quantify a number of project specific risks. The project-specific risk register accounts for 16% of construction costs and its robustness has allowed for the optimism bias provision to be reduced proportionally.

Network Rail is not in a position to comment on other Promoters' optimism bias and contingency figures.

### 39. Please provide a breakdown of the costings for structures, stations and contingency

The capital cost estimate for structures works is:

- Construction Costs – Overbridges: £7.3m
- Construction Costs – Underbridges: £3.6m
- Construction Costs – Footbridges: £3.7m
- Construction Costs – Culverts: £596,000
- Design, Project Management and Contractor Prelims: £4.4m

Total: £19,550,000

The capital cost estimate for works at stations is:

- Construction Costs – Airdrie: £2.6m
- Construction Costs – Relocated Drumgelloch: £1.9m
- Construction Costs – Caldercruix: £2.5m
- Construction Costs – Armadale: £3.2m
- Construction Costs – Relocated Bathgate: £2.4m
- Construction Costs – Livingston North: £1.9m
- Construction Costs – Uphall Station: £1.6m
- Design, Project Management and Contractor Prelims: £4.7m

Total: £20,925,000

The above estimated construction costs are exclusive of the following:

- Property acquisition costs and legal expenses
- Design and consultancy fees
- Prelims and project management fees
- Contingency and optimism bias.

The contingency is applied to the project as a whole rather than being allocated as a proportion of individual cost elements. The contingency was developed through adherence to the Promoter's risk management process in order to quantify the cost of known risks. Three risk identification workshops were held in December 2005, followed by a quantitative risk analysis workshop to allocate maximum, minimum and most likely costs. These outputs were modelled using the @risk software package. This calculated a P50 (mean) risk value of just over £22,000,000 and a P80 value of £29,900,000.

The P50 value effectively means there is a 50% probability that the figure of £22,000,000 would not be exceeded, and the P80 value means that there is an 80% probability that the figure of £29,900,000 would not be exceeded. The Promoter's corporate governance stipulates that for an enhancement project such as this, the P80 risk value is to be utilised at this stage of the project development.

**40. What other source of public and private funding is the Promoter investigating detailing any applications made, or to be made, to whom and the sums involved?**

Transport Scotland has confirmed it is its intention to fully fund this scheme based on the Estimate of the Expense and Funding Statement as submitted. However, with Transport Scotland, the Promoter is working to secure contributions where possible, from other sources such as West Lothian and North Lanarkshire Councils.

**41. What contribution is being made to the capital costs of the proposed railway by West Lothian and North Lanarkshire councils, Scottish Enterprise, and others and through section 75 agreements (under the Town and Country Planning (Scotland) Act 1997)?**

With support from Transport Scotland, the Promoter is working to secure contributions from West Lothian and North Lanarkshire Councils. However, because the Promoter is not a planning authority it has no power to require developers to make financial contributions under the terms of section 75 of the Town and Country Planning (Scotland) Act 1997.

### **Environmental Statement**

**42. This is a large and complex scheme which encompasses not only the upgraded and new tracks, but also upgraded and new stations, a new train depot, a relocated vehicle storage yard and a relocated cycle path. Much of this could only be described in broad terms at this outline design stage. What controls will there be over the final design of the new or upgraded stations, the depot and the vehicle storage yard and will these still be subject to local authority approval?**

Class 29 of the Town and Country Planning (General Permitted Development) (Scotland) Order 1992 granted permitted development rights to development authorised under a private Act of Parliament. However, development is not permitted by this class if it consists of or includes the erection, construction, alternation or extension of any building, bridge, aqueduct, pier or dam, unless the prior approval of the planning authority in respect to the detailed plans and specifications is first obtained. Prior approval must not be refused by the planning authority, or granted subject to conditions, unless it is satisfied that:

- The development ought to be and could reasonably be carried out elsewhere on the land designated specifically in the said Act or order
- The design or external appearance of any building, bridge, aqueduct, pier or dam would injure the amenity of the neighbourhood and is reasonably capable of modification to avoid such injury.

The mechanism of prior approvals will give local authorities a degree of control over the final design of the station buildings, light maintenance depot and vehicle storage yard in accordance with the provisions of Class 29 of the 1992 General Permitted Development Order.

Additionally, the Promoter has specified that the station designer must employ an architect with appropriate experience of transport facilities as this will be key in developing the detailed design of the stations to the satisfaction of all stakeholders, including the planning authorities. This dialogue will continue the consultation process which has taken place throughout the feasibility and design development appraisal stages.

The ES also sets out a range of environmental mitigation measures for the new and upgraded stations, the light maintenance depot, the relocated vehicle storage yard, and the replacement cycle path. These are included in chapter 17, Summary of Environmental Commitments.

**43. The new station at Caldercruix is on the edge of a conservation area: this would seem to make it important that there be some very tight controls over the final design to ensure that it is sympathetic with its surroundings. Will the local authority have the final say in approving the detailed designs and what specific discussions has the Promoter had with environmental regulators and local environmental bodies on this?**

The Bill will grant permitted development rights for the railway scheme. However, as detailed in the response to question 42, the Promoter will need to secure the prior approval of North Lanarkshire Council as planning authority for the design of the new station at Caldercruix.

After consultation with North Lanarkshire Council, it was determined that there is no conservation area in terms of the Planning (Listed Buildings and Conservation Areas) (Scotland) Act 1997 adjacent to the new station at Caldercruix. Therefore the station is not subject to the special degree of control which is applicable to developments in such conservation areas.

There is a Site of Interest for Nature Conservation (SINC) at the proposed station site. To ensure the new station is sympathetic to the SINC and its surroundings, extensive consultation has been carried out with North Lanarkshire Council planning department and the Conservation and Greening Section.

North Lanarkshire Council has noted that the design and materials used in the construction of the car park and associated landscaping would be important in this location. It has also been stated that the landscape design for the proposed station at Caldercruix will be determined at the detailed design stage. Additionally, the car parking area and access road will be landscaped, particularly where close to residential properties. Material selection and construction methodology will be subject to further consultation with SEPA, SNH and North Lanarkshire Council.

**44. Has a worst case assessment been carried out to ensure that whatever the final design of station buildings, the depot, the vehicle storage yard and other significant elements of the scheme, it will have been fully taken into account in the assessment work for the ES?**

The scheme has been based on a set of design parameters which has evolved to reflect the operational requirements and physical and technical constraints

which have arisen through the design development process. As a result, the environmental assessment has addressed all the major components of the scheme. The Promoter is currently in discussion with the relevant planning authorities to determine which aspects of the scheme will be subject to prior approvals as described in the answer to Question 42 of Annex B.

In terms of bridges along the route, the environmental assessment considers the replacement or upgrading works to some 103 bridges, of which 33 are scheduled for replacement. However, as a result of further assessment, the Promoter considers that certain bridges may not now need to be replaced but can be retained and repaired. As a result, the environmental assessment has considered the worst case number of replacement bridges.

In terms of land take along the route, the environmental assessment is based on the land requirements to construct the rail scheme, as contained within the Maps, Plans and Sections.

In the case of stations, the prior approval of the planning authorities will be required in terms of Class 29 of the 1992 General Permitted Development Order as described in the answer to Q.42. In addition, continued consultation will take place with the local authority planning departments on the station design – as has taken place through both feasibility and design development appraisal stages.

**45. One of the more significant potential impacts of a scheme such as this is noise and vibration. Please explain the approach taken in assessing the noise and vibration impacts, the mitigation measures proposed, and the likely significance of impacts following mitigation?**

The significance of impact for noise and vibration was derived on the basis of consideration of the sensitivity of the receptors and some measure of the magnitude of impact. All residential properties are, for instance, considered as highly sensitive.

**Operational Noise**

It is the Promoter's objective that, where reasonably practicable, the construction and operation of new infrastructure, as provided for within the Bill, should result in no significant noise and vibration impacts to the local environment. This will be achieved through design and mitigation. Where such impacts are unavoidable, the Promoter will address the circumstances under which residential properties and other sensitive receptors may be eligible for other measures, such as sound insulation. In the absence of noise insulation regulations in Scotland, it is likely the Noise Insulation (Railways and Other Guided Transport Systems) Regulations 1996 [SI 1996 NO.428] will be used as a guide for determination of applicability.

**Construction Noise**

The Promoter will require contractors to control and limit noise and vibration levels so that residential properties and other sensitive receptors are protected,

so far as is reasonably practicable, from excessive noise and vibration arising from construction activities. This will comply with the best practicable means (BPM) requirements under the Control of Pollution Act, 1974 (COPA). It is a contractual requirement that contractors must apply for s61 consent for all works or gain agreement that s61 consent is not appropriate. As part of this process, details will be discussed in advance with the local authorities and throughout construction as necessary. In establishing criteria, controls and working methods, contractors will take account of guidance in BS5228 as set out in the Planning and Environmental Management Strategy and in this policy.

Chapter 13 of the Environmental Statement provides more detailed information on noise and vibration.

**46. Will noise barriers be enough for mitigation, or will noise insulation be required in certain cases to ensure that the impacts of the scheme are within acceptable bounds?**

Noise barriers will not be sufficient at some locations along the route. It is likely that insulation will be required at approximately three properties at ground floor and five properties at first floor.

**47. The ES states that there are certain gaps in data and the Committee notes, in particular, that no survey information was available on the extent of use or distribution of different types of users of community facilities such as open space. Why was such a survey not carried out in order to inform the likely impacts of the scheme on pedestrians and cyclists in chapter 12 and of construction works on pedestrians and cyclists in chapter 16 and what plans does the Promoter have to now carry out such surveys?**

Throughout the preparation of the ITFS and the subsequent Environmental Statement, the Promoter's environmental consultants have followed the assessment methodology contained in the Scottish Executive's publication Design Manual for Roads and Bridges, Volume 11 Environmental Assessment. In view of the overall length of the rail scheme, and the understanding of the locational impacts on pedestrians and community facilities gained from regular site visits, the Promoter's environmental consultants have exercised their best professional judgement to establish the main pedestrian and community impacts.

The Promoter believes that this was the most efficient and cost effective method of ensuring that a robust and thorough assessment was carried out. With this in mind, and in view of the level of assessment carried out to date, and the closure of the National Cycle Network Route 75 for the two-year construction period due to safety considerations, it was not deemed necessary to carry out further surveys in addition to those described below.

The assessment includes consideration of the impact of the rail scheme on 32 existing crossings for vehicles, pedestrians, equestrians and cyclists. The assessment includes several assumptions which reflect pedestrian numbers and that the level of use is higher within and close to settlements. The significance of impact is assessed accordingly. Wherever impacts were identified, proposed mitigation has been taken into account.

As part of the assessment for Chapter 12 of the Environmental Statement, survey information was obtained from North Lanarkshire Council for Plains Country Park. Information received from the Council revealed that Countryside Rangers operated in the Park from 1998 to 2004 organising an event programme, with visitors either coming to the Park, or rangers making visits on behalf of the Park. Typically, the Park attracted some 1,200 visitors to events, and more than 10,000 visitors annually. Ranger funding was withdrawn in 2004/2005 but the Council continues to provide a budget for annual maintenance and restoration/rehabilitation of Park structures. In view of the level of baseline information available, the downgrading of the Park's status by North Lanarkshire Council, and observations from site visits, it was determined that there was sufficient information available to carry out the assessment of the impact on the Park. In addition, the design proposal for the railway includes the provision of a replacement road access to the Park and the provision of a Disability Discrimination Act-compliant pedestrian footbridge from Plains to the Park, immediately adjacent to the Park. The assessment fully documents the baseline information, quantifies and assesses the environmental impact, specifies the mitigation measures, and states the residual impacts on the users of the Park in compliance with best practice. As a result, further studies of users of community facilities, such as open space, are not considered necessary for environmental assessment purposes.

In view of the level of assessment carried out to date, and the statement that the National Cycle Network Route 75 will be closed for the two year duration of the construction period due to safety considerations, there are no current proposals for the Promoter to undertake any further survey work of pedestrian or cyclist movements.

**48. Which environmental bodies, both local and national, were consulted during the preparation of the ES?**

The following environmental bodies were consulted during the preparation of the Environmental Statement:

- City of Edinburgh Council, City Development
- Edinburgh and Lothian Badger Group
- Forestry Commission Scotland, Central Scotland Observatory
- Historic Scotland
- Lanarkshire Badger Group
- Lothian Wildlife Information Centre
- North Lanarkshire Council, Conservation and Greening Unit
- North Lanarkshire Council, Planning Department
- Royal Society for the Protection of Birds
- Scottish Environment Protection Agency
- Scottish Executive Air, Climate and Engineering Unit
- Scottish Executive Countryside and Natural Heritage Unit
- Scottish Executive Development Department, Planning Division, Environment & Rural Affairs Department
- Scottish Natural Heritage (East and West)
- Scotways

- West Lothian Council, Planning and Environment Unit.

A summary of the issues raised during environmental consultation can be found in Appendix 1 of the Environmental Statement.

**49. The Committee notes that as well as a scoping exercise having been carried out, mandatory consultees were also invited to comment on the draft ES and made a number of comments on it. How far have those comments been picked up in the final document?**

The comments made by mandatory consultees were considered in detail by the Promoter and each point raised has been addressed. This information is fully documented in Appendix 8 of the Environmental Statement and Appendix 1 of the Promoter's Memorandum.

**50. Among the comments made were the need for a flood risk assessment at certain locations, targeted investigations for contaminated land, and for hydro-geological surveys of areas of mine working. How can the ES be robust if these surveys have not yet been carried out?**

The Environmental Statement contains extracts from two documents prepared by Jacobs Babbie in relation to flooding: 'Earthworks, Mineral and Geotechnical Surveys' (June 2004) and a Drainage Study (March 2006), both of which provide baseline conditions of the flooding issues along the route and areas which will be at risk from flooding. In addition, in respect to Scottish Planning Policy 7 Planning and Flooding February 2004 (SPP7), and through consultations with SEPA, sites considered to be at risk of flooding have been identified.

The Environmental Statement has assessed the impact significance of flooding as negligible. SPP7 states that the redevelopment of previously developed sites in areas protected by existing flood defences should generally be acceptable, provided defences achieve the minimum design standard. These have already been incorporated into the Environmental Statement.

Keeping in mind that the proposals for the Airdrie-Bathgate rail link are to reinstate a railway largely on an existing solum, along with the baseline information gathered and the impact assessment carried out, it was felt that a flood risk assessment was not required at this stage and that an assessment at the detailed design stage would be sufficient and appropriate in terms of SPP7.

The Environmental Statement does note that flood risk assessments are considered essential at those sites listed as being at risk of flooding, and they will include reference to the new generation flood mapping to be published later in 2006.

The issue of construction proposals potentially worsening the risk of flooding to agriculture holdings will be addressed through provision in the Promoter's Contract Requirements: Environment.

In terms of contaminated land, the Environmental Statement states that an informed and comprehensive investigation/risk assessment will be undertaken

at detailed design stage whereby the full extent of any issues can be identified. This is the appropriate timescale for such works when detailed proposals, timescales and funding allow a fully informed assessment, consultation and decision-making process to be undertaken.

In addition, the following detailed assessments were also carried out:

- Previous experience of the investigation of railway and the DoE Profile on Railway Land
- Information provided by North Lanarkshire Council
- Information provided by West Lothian Council
- Review of DoE Industry Profile for Pulp and Paper Manufacturing Works (Settling lagoons at Caldercruix station car park)
- Initial sampling, reporting and analysis by Jacobs Babbie.

An assessment of the impact of contaminated land was also undertaken and this includes:

- Toxic effects on construction workers
- Toxic effects on rail users, maintenance workers, adjacent residents and livestock
- Chemical attack on rail and drainage elements
- Disturbance of contaminated materials via construction operations-excavations.

In accordance with current guidance and best practice for impact assessment, the significance of all impacts will be considered after the mitigation measures have been implemented.

**51. In particular it would seem that targeted testing and risk assessment for contamination will be needed for the proposed station area at Caldercruix, and will be very important there. On what basis is this being left over for later investigation, rather than tackling it now for the purposes of the ES?**

Initial contamination testing along the route was intended to back up and verify the desk study analysis undertaken on historical and current potential sources of contamination. The initial testing was not intended to comprise a fully comprehensive investigation. It was recognised and proposed within the Environmental Statement that more comprehensive testing would be undertaken at detailed design stage. In the case of Caldercruix station, the testing undertaken pre-dated the current position of the station and hence samples were not taken at this location. While a few samples at this location would have been useful for preliminary purposes, the historic use of the site and the extent of the lagoons are relatively well known and are sufficiently understood for this stage of the process.

An informed and comprehensive investigation and risk assessment will be undertaken at detailed design stage when the full extent of any issues can be identified. This is the appropriate timescale for such works when detailed proposals, timescales and funding allow a fully informed assessment, consultation and decision-making process to be undertaken.

- 52. Chapter 17 summarises the mitigation measures that are being proposed throughout the ES, described as the ‘minimum standard of mitigation required’. Is the Promoter committing itself to all the measures described in chapter 17?**

Please refer to the answer provided to question 19 in Annex D.

- 53. Are the mitigation measures outlined in the ES consistent with the local biodiversity plans along the proposed route?**

The Environmental Statement has fully considered the relevant Local Biodiversity Action Plans (LBAP) covering the route, namely those of North Lanarkshire Council, Falkirk Council, West Lothian Council and the City of Edinburgh Council. The Promoter considers that the Environmental Statement is fully consistent with each LBAP.

The main theme running through the four biodiversity action plans is to conserve and enhance biodiversity and to seek to deliver biodiversity enhancement through the management and improvement of habitat.

The mitigation measures in the Environmental Statement seek to protect and improve biodiversity along the route, with the main principles to minimise impacts as follows:

- Avoid, where possible, adversely affecting areas of conservation value
- Minimise the impacts of the proposals where sites of value cannot be avoided by the proposals
- Mitigate any unavoidable impacts by creating new areas of habitat as part of the landscape proposals
- Manage future habitats to maximise their biodiversity potential where Possible
- Retain as much of the existing habitat (grassland, scrub and trees) as possible, where practicable.

- 54. Please comment on the mitigation measures generally. Are they realistic and capable of being achieved?**

The Promoter considers that the mitigation measures proposed in respect of the powers being sought under the Bill are realistic and capable of being achieved.

- 55. In particular the Committee notes the following very important proposals for mitigation—**

- **The provision of an alternative 3 metre wide cycle and footpath along the entire route to replace NCM75 – will this prove an acceptable alternative route, when compared to the existing route?**

Yes. The Promoter has engaged in extensive consultation with Sustrans, Railway Paths Ltd, Cycle Scotland, North Lanarkshire Council and West Lothian Council. General agreement has been reached with these parties that the relocated three metre wide cycle and footpath route proposals are acceptable.

- **Tree planting to replace planting lost, to soften the visual effects of stations, parking areas, over bridges and the rail line itself - how long will this tree planting need before it becomes effective?**

The time taken for the planting to become effective will vary over the scheme as a whole, depending on a number of factors such as plant size, soil conditions and exposure to wind. Nevertheless, it is our experience in schemes of this nature that noticeable effects can be achieved in the first five years. After 10 years most of the planting on the railway should be achieving mitigation objectives such as screening and visual softening, and after 15 years the Promoter would expect most of the mitigation to be fully effective.

- **Provision of noise barriers to minimise noise impact on adjacent sensitive receptors and residential property - can the noise barriers suggested physically be located in the positions shown i.e. has it been checked whether there is sufficient space between the track and the limits of the railway land?**

There is sufficient land provision contained within the Bill to install noise barriers where they could potentially be used.

## SHOULD THE BILL PROCEED AS A PRIVATE BILL

### 1. What powers or benefits are sought by the Promoter which are in excess of, or in conflict with, the general law and why they are necessary?

The powers sought by the Promoter which are in excess of, or in conflict with, the general law are the statutory authority to:

- Carry out authorised works which would otherwise give rise to actions in nuisance
- Interfere with railway crossings and with public and private roads for the purpose of constructing those works
- Stop up railway crossings and public and private roads both temporarily and permanently
- Vest public and private roads and spaces in, respectively, roads authorities and private owners
- Secure contributions towards the cost of utility diversions
- Compulsorily use watercourses for the discharge of water from the works
- Acquire land and rights to use land compulsorily
- Extinguish or suspend private rights of way
- Enter land for survey purposes
- Fell, lop or cut back the roots of trees or shrubs that interfere with or endanger the authorised works
- Disapply the requirement to obtain listed building consent for the works
- Transfer these statutory powers to another body.

In addition, the enactment of the Bill will automatically bring with it planning permission for the project without the need to make an application for planning permission.

These powers are equivalent to statutory powers relating to railways throughout the United Kingdom, in particular those recently authorised by the Scottish Parliament. They are the powers necessary to ensure that the scheme can be constructed in a timely, efficient and economic manner. In the absence of statutory authority or compulsory powers, it is open to a person with a potential nuisance claim or a person whose land is required for the project to prevent the scheme proceeding at all, or only at disproportionate expense. While it is possible to obtain planning permission, consents to alter listed buildings and permit interference with public roads through separate statutory processes, it is more convenient and satisfactory in terms of overall consideration (including ability to object) for the consents to be sought together with the principal powers to construct and maintain the works. This reduces the risk to the project of delays and potentially inconsistent consents.

**2. Are there any powers or benefits already enjoyed by the Promoter that are nonetheless sought by it under the Bill and, if so, why is it seeking these powers or benefits if it already has them?**

The Promoter does not have any of the statutory powers sought in the Bill. It could only seek separate consents or attempt to obtain the agreement of affected parties (see Question C1).

**3. What statutory powers enable the Promoter to promote a Private Bill?**

The Promoter does not have or need specific statutory powers to promote a private Bill.

Network Rail Infrastructure Limited is a limited company. It therefore has the, effectively unlimited, legal capacity given to limited companies generally by the Companies Act 1985 (c. 6).

Network Rail Infrastructure Limited was formed for the purpose (very broadly) of owning, maintaining, developing and managing the United Kingdom's main railway infrastructure. The promotion of the Bill has been approved, as described in the Group Company Secretary's letter set out in the Promoter's Statement (paragraph 252) and in accordance with the company's corporate governance arrangements.

## OTHER ISSUES

### ECHR

#### 1. **How has the Promoter satisfied itself that the approach taken to private land interest is consistent with the requirements of article 1 of protocol 1 and article 8 of the ECHR?**

##### Article 1 of Protocol 1

To comply with Article 1 of the Protocol 1 to the European Convention of Human Rights (ECHR), any law which deprives someone of their possessions must be 'in the public interest' and 'subject to the conditions provided for by law and by the general principles of international law'. The Bill will give the Promoter power to acquire certain specified third party land interests, either temporarily or permanently.

The Promoter must, therefore, ensure that, in so far as the Bill deprives anyone of a land interest, this deprivation:

- Furthers the public interest
- Is proportionate
- Is in accordance with law.

##### The Public Interest test

A member state is accorded wide latitude in determining what it considers to be in the public interest and a court would be reluctant to overturn this determination. The public benefits of the scheme are set out in full in the Promoter's Memorandum. The fact that the policy consideration behind the Bill is subject to scrutiny by this Committee and, ultimately, by the Scottish Parliament, will ensure that the determination of the public interest behind this Bill has been arrived at reasonably. In addition, the Promoter has consulted with local stakeholders who will be affected by the Bill. Details of consultation can be found in paragraphs 172-264 of the Promoter's Memorandum. Changes made to the scheme as a result of such consultation can be found in Appendix 2 of the Promoter's Memorandum.

##### Proportionality

In determining the route to be taken and the land affected by the project, the Promoter has sought to ensure, in so far as is reasonably practicable, that the impact on private land interests is proportionate to the public policy objectives behind the Bill. In terms of the alignment of the railway, substantial new land take has been avoided by utilising the solum of the former rail route. The acquisition of new land has been limited to circumstances where this is necessary to meet the required line speed or safety standards. Wherever possible, steepening measures have been adopted at embankments and

cuttings to avoid unnecessary land take. The Promoter has also, where appropriate, taken powers enabling less than outright acquisition, either by way of temporary or permanent rights or by temporary occupation of land. The Promoter has sought to minimise the impact of the project, for example, by providing alternative means of access to property.

Where a land interest is to be acquired on a temporary or permanent basis, the authorised undertaker will be legally obliged to pay compensation required by the law relating to compulsory purchase throughout Scotland. This ensures a level of compensation such that the private interests do not bear a disproportionate burden. Where the amount cannot be agreed, the right of appeal to the Lands Tribunal for Scotland proposed by the Bill is sufficient to ensure that this will happen.

In accordance with law

It is clear from the face of the Bill the land interests which will be affected and the manner in which compensation will be determined, in the absence of agreement.

The land which will be subject to compulsory acquisition of use under the Bill is clearly identified in the Bill and its accompanying plans. The Bill deals with the acquisition of private land interests by applying the precedented system of compulsory purchase and compensation in Scotland. There are clear legal procedures for determining compensation payable and for appealing against any compensation decisions to the Lands Tribunal for Scotland.

The power for the authorised undertaker to acquire land will therefore be clearly set out in law and the authorised undertaker's exercise of this power is subject to independent legal scrutiny.

Article 8

Article 8 guarantees the right to a private and family life.

Private and family life may be impacted by the loss of land rights. By applying the compulsory purchase and compensation measures described above, the Bill will ensure that the compensation payable is such as adequately to compensate for that loss.

The Promoter has sought, by undertaking an environmental impact study and other studies detailed in the Environmental Statement (ES), to ensure that the project does not impact on the quality of private or family life in such a way as to amount to a breach of Article 8. In particular, as a result of these studies, the Promoter is satisfied that the environmental and other impacts identified in the ES which might have a serious or harmful impact on the private or family life of any individual are capable of being mitigated by the measures proposed by the Promoter or by mitigation to the same level. In light of the ES, the Promoter believes that such mitigation will, if not remove the impact altogether, then reduce it to such a level that it ceases to threaten a breach of Article 8.

During the construction phase, property impacts will be regulated through a Code of Construction Practice and Noise & Vibration Policy.

The Promoter would be content for these documents, including the commitments in the ES, to have statutory force. This will ensure that the authorised undertaker is under a statutory duty to use reasonably practicable means to ensure that the authorised works are carried out in accordance with these documents. The Promoter would also be content for its commitment to mitigation of the authorised works to be given statutory force. This could be achieved by the inclusion in the Bill of an obligation to provide mitigation to the level contemplated by the ES.

**2. How has the Promoter satisfied itself that the provisions in the Bill which give rise to a determination that ‘civil rights and obligations’ are compatible with article 6 of the ECHR?**

Article 6 requires, inter alia, that the determination of ‘civil rights and obligations’ are undertaken by an independent and impartial tribunal established by law.

The Bill provides for the determination of such disputes in ways that ensure a right of recourse to an Article 6-compliant tribunal. Compensation issues are referred to the Lands Tribunal for Scotland, from which there is appeal to the Court of Session. Factual disputes are referred to arbitration, which carries the right to have a case stated for the Court of Session. Applications for the correction of errors in the plans or book of reference are heard by the sheriff. The following is a summary.

<b>Section of Bill</b>	<b>Subject</b>	<b>Tribunal</b>
10(4), 11(7), 17-19, 20(5), 21(6), 26(12), 27(4), 28(7), 36(4)	Compensation	Lands Tribunal for Scotland
10(5)	Completion or provision of substitute or alternative private road	Arbitration
16(5)	Use of artificial watercourse or public sewer or drain	Arbitration
26	Extent of compulsory purchase	Lands Tribunal for Scotland
31	Correction of errors in plans or book of reference	Sheriff

In this way, the system set up under the Bill ensures that there is ultimately independent legal adjudication of any disputes.

## Land Acquisition, Compensation and Permitted Development

- 3. Has the Promoter prepared and published a policy paper on compensation similar to those done for other recent Private Bills and, if so, please give details.**

The Promoter has prepared a briefing note on compensation similar to the guidance provided in connection with other Bills. It is available to access via the project website (under Information / A guide to compensation) and has been made available through public meetings and briefings.

- 4. Do the compulsory purchase provisions in the Bill simply apply the general law on that subject or do they differ from, or seek to modify, the general law and, if so, how?**

In general, the Bill applies the general body of law on compulsory purchase through the incorporation of the Land Clauses Acts by section 46 and the application by section 34 of the general vesting declaration process (see paragraph 172 of the Explanatory Notes.) The powers under the Lands Clauses Acts have been modified in a number of respects following standard precedents in legislation authorising railway or tramway projects, and also reflecting modifications of the Lands Clauses Acts which apply under modern legislation relating to compulsory purchase orders.

The principal modifications are as follows:

- There is provision allowing the acquisition of rights over property (or the subsoil of property) without being required to acquire the whole land, and to occupy land temporarily where it is not necessary to acquire it outright (see sections 18, 19 and 21 of the Bill)
- There is provision allowing the acquisition of rights in roads or public places (or in the subsoil of or airspace over roads or public places) without being required to acquire all of a road or public place (see section 20)
- There is provision dealing with the case where only a part of a person's property is being acquired. Instead of having an absolute right to require acquisition of his property, the landowner may only require the purchase of the rest of his property if he can show there is a material detriment to it (see section 26 and paragraphs 126 to 163 of the Explanatory Notes)
- In addition, section 32 makes specific provision for the time limit of 10 years for the exercise of compulsory powers. The Land Clauses Act leaves it to the particular enactment authorising a scheme to specify a time period, but provide a period, if no period is specified, of three years.

- 5. Has the Promoter made any representations regarding the level of payment made under the home loss payment scheme that will apply in respect of this project, detailing the substance of any such representations, to whom they were made, when and what response was received?**

The Promoter has not, and does not consider it is for the Promoter to make representations regarding the level of payment made under the home loss payment scheme. The Promoter considers this is a matter for elected representatives.

### **Advance Purchase Scheme**

**6. Will an advance purchase scheme be available in respect of this scheme and, if so, how will the scheme operate and what criteria will be applied?**

The Promoter has been considering this issue in some detail and has discussed the matter with Transport Scotland. The Promoter is working towards preparing a draft Advance Purchase Scheme to reflect the nature of this project and ensure consistency across its projects, bearing in mind that Network Rail is a national business.

Any proposed scheme would operate within the limits of deviation and would be consistent with the Code of Compensation. The Promoter considers it important to ensure such a scheme benefits from certainty on the detailed design to ensure that only the land which is actually needed is taken. Previous experience of operating railway schemes suggests that finalisation of the detailed design often allows for engineering solutions to be identified which may result in a number of owners either being unaffected or having the affect lessened by the project, to the extent they may have the option to remain in their property with appropriate mitigation.

**7. Have such costs been factored into the Estimate of Expense and Funding Statement?**

The statement of expense and funding contains provision for acquisition of all land referenced as being required permanently or temporarily under the Bill. The values calculated include provision for legal and disturbance costs if required. No specific differentiation has been made for a difference in costs between land or property compulsorily acquired or through advance purchase.

**8. What discussions has the Promoter had with the Scottish Executive on the timing for, and implementation of, such a scheme, detailing the timetable the Promoter will work to?**

Network Rail commenced discussions in November 2005 when a draft Advance Purchase Agreement was issued by Network Rail to Transport Scotland for comment. A further revised draft was issued by Network Rail in June 2006 and discussions are currently ongoing between the Promoter and Transport Scotland to reach an agreed process.

**9. If such a scheme is not to exist, why not?**

Please see the response to question 1.

The Promoter is working towards proposing an Advance Purchase Scheme, the details of which are currently under discussion with Transport Scotland.

**10. How many and which properties might be eligible for advance purchase?**

As the Advance Purchase Scheme is still under development, the Promoter does not have exact numbers of eligible properties. However, as the extent of the scheme is proposed for certain properties within the limits of deviation, it is believed that up to 15 properties potentially fall to be considered. It is, however, important to stress that some of these properties may not be subject to compulsory purchase due to design or engineering solutions identified at the detailed design phase, or mitigation measures may be possible.

**Voluntary Purchase Scheme**

**11. Will a Voluntary Purchase Scheme be available in respect of this scheme and, if so, how will the scheme operate and what criteria will be applied?**

The Promoter has been considering this issue in some detail. It has discussed the matter with Transport Scotland and further discussions will take place. At this stage no decision has been taken. Before reaching a decision, the financial and regulatory implications of adopting such a scheme require further consideration and discussion with Transport Scotland and others. As with an Advance Purchase Scheme, if a Voluntary Purchase Scheme were to be developed, the Promoter considers it would benefit from clarity on the detailed design to ensure that only the land which is needed is taken.

**12. Have such costs been factored into the Estimate of Expense and Funding Statement?**

The statement of expense and funding contains provision for acquisition of all land referenced as being required permanently or temporarily under the Bill. The values calculated include provision for legal and disturbance costs if required. No specific differentiation has been made for a difference in costs between land or property compulsorily acquired or through advance or voluntary purchase.

**13. What discussions has the Promoter had with the Scottish Executive on the timing for, and implementation of, such a scheme, detailing the timetable the Promoter will work to?**

Discussions are currently ongoing between the Promoter and Transport Scotland on this matter. The Promoter appreciates the need for clarity and is working to resolve this as soon as possible.

**14. If such a scheme is not to exist, why not?**

Please see the response to question 6.

**15. How many and which properties might be eligible for voluntary purchase?**

As this issue is still under discussion it is not known how many properties may be eligible.

## Time Limits – compulsory acquisition powers and planning permission

- 16. Sections 32(1) and 40(2) of the Bill provide that the compulsory acquisition and general permitted development powers under the Bill require to be exercised within 10 years from the date the Act comes into force. Why was 10 years considered appropriate for this project given the potential state of uncertainty in which affected proprietors will be living for a considerable time? Further, does the Promoter consider that such a period of time has any ECHR implications and, if so, how has it addressed these?**

Development authorised by the Bill will be permitted in terms of Class 29 of the Town & Country Planning (General Permitted Development) (Scotland) Order 1992. This means that the Bill effectively grants planning permission for the project. There is no time limit imposed by the Permitted Development Order for implementing development authorised by a Private Act. However, it is recognised that indefinite permitted development powers give rise to uncertainty for affected landowners. It is therefore standard practice for Private Bills to contain a provision which imposes a time limit upon when development must begin and, in this case, the 10 year period provided for is commensurate with the period provided for the exercise of compulsory purchase powers, as set out below.

As regards compulsory purchase, while the Promoter is confident that the compulsory purchase powers will be exercised as soon as possible after the Act comes into force, it is necessary in a project of this scale to allow the Promoter a reasonable period of time in which to exercise compulsory purchase powers. Evidence from other major rail infrastructure projects indicates that a period of five years, which was normal in Scotland up to the mid-1990s, left the detailed and satisfactory planning, funding and development of such projects open to threat. A longer timeframe is therefore considered necessary and is also in line with Scottish Executive policy that a period of 10 years is appropriate.

The Promoter believes landowners should know from the outset for how long (a) planning permission will last if not implemented and (b) the compulsory purchase powers will operate. It is better to have a fixed period than the uncertainty associated with the possibility of a time limit being extended. The Promoter notes that the Promoters of the Edinburgh Airport Rail Link Bill and the Glasgow Airport Rail Link Bill have also sought fixed 10 year time limits for the exercise of compulsory purchase powers. Bearing in mind the scale of the Airdrie-Bathgate rail link scheme, it is considered that such a timescale is reasonable and proportionate for the project.

The existence of compulsory purchase powers might leave vulnerable landowners unable to sell except at a substantially lower price than might be expected if the land were not subject to compulsory purchase. Some relief is provided by section 41 of the Bill. This incorporates the statutory procedures regarding planning blight (enabling affected landowners to require the purchase of their property). These are the procedures that apply to compulsory purchase

under general powers. Section 41 therefore places landowners affected by the Bill in the same position as people generally affected by compulsory purchase.

If there were no time limit for the exercise of the compulsory purchase powers under the Bill then there would be an interference with an individual's property rights under Article 1 of Protocol 1 which could not be justified because the interference would not be proportionate. However, the Bill does contain a time limit. The Promoter therefore considers the Bill's interference with property rights is justified in the public interest and is proportionate given the rights to compensation, provisions regarding blighted land and the fixed cap on the period during which the powers can be exercised.

**17. What consideration did the Promoter give to reducing these time periods in the Bill but inserting a provision that would allow Scottish Ministers to extend the period (to perhaps 10 years) by subordinate legislation?**

As detailed in the response to question 16, the Promoter considers that it is better for landowners to know, from the start of the project, how long the powers granted for the project will last – as opposed to the possibility of the powers being extended by subordinate legislation. The Promoter also considers that the time periods for exercise of compulsory purchase and permitted development powers should be consistent, which may not be the case if there was a possibility of time extension by means of subordinate legislation.

**Implementation of mitigation measures**

**18. The Committee draws attention to the code of construction practice and noise and vibration policy documents which were prepared and applied to the recent Edinburgh tram and Borders railway Bills. The Committee invites the Promoter to consider these documents and the commitments and standards set and to submit a code of construction practice and a noise and vibration policy for this project.**

The Promoter notes the comments of the Committee in relation to the Code of Construction Practice and Noise and Vibration Policy. The Promoter is already in the process of drafting such documents.

**19. While it will be for this Committee to determine what amendments are made to this Bill at phase two of Consideration Stage, what consideration has the Promoter given to indicating a commitment to propose draft amendments to the Bill that would attach the environmental statement, code of construction practice, noise and vibration policy and Crichton Down Rules to the Bill?**

The Promoter considered the issues raised in this question at the time the Bill was prepared, and they have been under review since. The question effectively falls into two parts, because the treatment of the Crichton Down Rules is a quite different topic from the rest.

- Commitment to environmental statement, code of construction practice and noise and vibration policy

The Promoter is committed to providing the works as contemplated by the Environmental Statement with the same or an equivalent level of mitigation as that which the Environmental Statement recommends. The code of construction practice and a noise and vibration policy come within this commitment as being essential mitigation tools contemplated by the Environmental Statement. The Promoter is aware of the way in which the Edinburgh Tram and Waverley Acts have provided for similar commitments to be included as statutory duties on the face of the Bill. The Promoter would wish to test the precise form of the specific amendments, but in principle would be pleased to see its environmental commitment made plain in this way. The Edinburgh Tram and Waverley Acts also dealt with the question of enforcement by going via the planning process. This course commends itself to the Promoter as applying a tried and tested enforcement mechanism which is known to be effective. However, the Promoter is conscious of the need for local planning authorities to be sufficiently comfortable with this process for it to operate. The Promoter will accordingly defer making any specific suggestions to the Committee in this regard until it has completed further consultations with the affected local authorities.

#### - Application of the Crichton Down Rules

The Committee will be aware that the Crichton Down Rules are a set of guidelines which certain public authorities have discretion to apply. Where the Promoter of a Bill, subsequently to be the authorised undertaker, is itself a public authority, the effect of applying them is to remove that discretion, so that the Rules automatically apply (as has been done in the Edinburgh Tram and Waverley Acts).

The purpose of rules of this sort for a public authority is, not least, to meet the authority's need to be sure that it is acting properly in its disposal of land which has become public property and which was acquired using public money.

None of these considerations apply in the case of the Airdrie-Bathgate rail link because the Promoter is not a public authority and does not fall within the scope of the Crichton Down Rules.

In any event, due to the preliminary work done on the scheme, the Promoter was able to prepare the Bill proposals starting from a clearly defined project. As a result, it has been possible to draw the limits fairly precisely. It has been explained elsewhere that they reflect minimum land requirements as now ascertainable. While it is impossible to say that these limits will be the absolutely precise extent of the land required, it is unlikely that there will be significant variances. As land assembly will not occur until after the scheme has been designed in greater detail, the likelihood is that most variances will be picked up at that stage, so that land which turns out to be surplus will not be acquired in the first place.

The Promoter has made known its concern not to be left holding surplus land which is not required for the railway. It has framed the vesting provisions in sections 6, 7 and 8 of the Bill with this specific issue in mind. Wherever the Bill has had to allow for the acquisition of land for the construction of road works, it is wide enough to authorise instead the acquisition of rights to construct the

works. In the event that there is any surplus land, the Promoter will want as a matter of policy to dispose of what can only be a potential liability.

Accordingly, the Crichel Down Rules are neither necessary nor appropriate. Most importantly, they do not secure the desired aim that the Promoter or authorised undertaker should be divested of surplus land. The Crichel Down Rules require an acquiring public authority to offer the original owner of surplus land a first option to buy it, but there is no assurance that the owner will take up the offer. The Promoter's experience from dealings with landowners is of resistance to the concept of having to buy back one's own land, especially at the market price at time of buy-back, with no discount reflecting the circumstances. The Promoter is more concerned that it may be left with very small pieces of land – slivers of roadside verges and the like – which are not required for operational purposes.

**20. What consideration did the Promoter give to the noise and vibration policies for both Edinburgh tram and Waverley Bills and, in particular, the noise threshold levels for these schemes and what elements of these policies have been incorporated into the environmental statement for this scheme?**

When preparing the Noise and Vibration chapter of the ES, cognisance of both the Edinburgh Tram Line and Waverley Bills was taken, and elements of these incorporated into the ES. As with both Bills, the methodology of the Noise Assessment for the Airdrie-Bathgate rail link ES was based on current best practice and guidance notes, as described below.

**Mitchell Report 1991**

To compare different types of time varying sound it is necessary to obtain some representative level. In environmental noise this is commonly the equivalent continuous sound level, the LAeq. The LAeq was recommended by the Mitchell Report (published in 1991, this provided recommendations to the Secretary of Transport in relation to the day and night time qualifying levels for insulation with respect to new railways) as the most appropriate measures for describing railway noise.

**PAN 56**

The current advice from the Scottish Executive on planning and noise is contained within Circular 10/99, and a planning advice note 56 (PAN 56). Both are entitled 'Planning and Noise'. The Circular is a statement of Government policy, and PAN 56 is a good practice guide. When considering noisy development, which a new or more intensively used railway line is, paragraph 17 of PAN 56 states that: 'Planning authorities should generally aim to ensure that a development does not cause unacceptable noise disturbance. They should also make appropriate provision for development necessary for the creation of jobs and the construction and improvement of essential infrastructure even though it may generate noise. Areas vary in character and the levels of noise that are acceptable in one location may not be acceptable in another.'

PAN 56 also introduces the concept of Noise Exposure Categories (NECs) which contain noise guideline levels for planning authorities in determining the outcome of planning applications. The NECs include railways, although the guideline levels, defined within the NECs, only relate to the introduction of new housing alongside existing transportation sources and not the reverse. Paragraphs 22-23 of PAN 56 refer to noise associated with railway development, and make reference to the calculation method set out in Calculation of Railway Noise (DoT, Welsh Office 1995) for assistance in the prediction of noise from the railway.

#### CRN (Calculation of Railway Noise)

CRN was originally developed as the method to be used during the implementation of the Noise Insulation (Railways and other Guided Transport Systems) Regulations 1996. The provisions of the 1996 Regulations, which came into force under the Land Compensation Act 1973, do not extend to Scotland (Scotland has the Land Compensation (Scotland) Regulations 1973, as amended). The 1996 regulations apply to new or improved railways and the procedure only deals with the airborne component of railway noise, but this is the major component from surface railways built at grade or on earthwork structures. However, while the 1996 regulations are not legally applicable in Scotland, it is understood that because there is no Scottish equivalent the qualifying criteria and procedures are accepted as relevant in Scotland.

#### Land Compensation (Scotland) Act 1973

As stated above, there are no similar regulations under the Land Compensation (Scotland) Act 1973. The Land Compensation (Scotland) Act 1973 allows the Secretary of State to make regulations requiring authorities, responsible for public works, to insulate buildings against noise from construction, or use of public works, or to make grants towards the cost of such insulation. The only regulations, to date, are in relation to roads and the relevant Regulations are the Noise Insulation (Scotland) Regulations 1975.

Public works are defined in the Land Compensation Act 1973 and are any highway, aerodrome or works on land (not being a highway or aerodrome) provided or used in the exercise of statutory powers. Therefore, although there is no Scottish equivalent of the 1996 Regulations with respect to railways, it is not unreasonable to assume that the same trigger levels of LAeq (daytime) 68dB and LAeq (night-time) 63dB can be incorporated into the assessment of eligibility to insulation works. Should the Scottish Ministers decide to introduce regulations in relation to compensation from railways into Scotland it is not unreasonable to assume that the regulations would be broadly similar, in terms of the technical content, to the Noise Insulation (Railways and other Guided Transport Systems) Regulations 1996. In the interim, the matter could be dealt with by a Noise and Vibration Policy issued by the Promoter that sets out the approach the Promoter proposes to adopt in order to mitigate noise from the operation of the railway track.

## The World Health Organisation

WHO (1999) provides guideline values for community noise in specific environments. Main sources of community noise include road, rail and air traffic, industries, construction and public work, and the neighbourhood. The guideline values in relation to noise sensitive receptors in this impact assessment are included as table 13.1 of the ES.

## Guidance on Scottish Transport Appraisal

Scot-TAG is the Scottish Executive's web based central information source for transport analysis guidance ([www.scot-tag.org.uk](http://www.scot-tag.org.uk)). Although this assessment is not a STAG assessment, it is worth noting that TAG Unit 3.3.2 advises that when consideration is given to the long-term impact of infrastructure schemes LAeq (18hr) 55dB is the recommended cut off level to use when estimating the total population annoyed. This is in line with the WHO guideline level of LAeq (daytime) 55dB below which there should not be any serious annoyance. The aforementioned levels are free field levels, which mean that the receiver location should be at least 3.5m away from any hard reflective surface other than the ground.

Also, as part of the process of developing the methodology for assessing impact significance for the Airdrie to Bathgate railway, the noise consultant undertook a review of the impact criteria used for each of following schemes:

- Edinburgh Tram 1
- Waverley Railway
- Stirling Alloa Kincardine Railway
- Mersey Tram.

The criteria for provision of mitigation for the Airdrie to Bathgate scheme are based on this review.

Para 13.6.6 of the ES notes: 'Where the significance of impact would be classified as 'moderate' or worse, consideration should be given to the incorporation of mitigation into the scheme design. For example, where the predicted level of railway noise is LAeq 18hr 55dB the increased noise level, above the pre-existing LAeq T level, will have to be 5dB or greater, and where the external LAm<sub>ax</sub> levels exceed 82dB (façade). While it is acknowledged that an external level of LAm<sub>ax</sub> 82dB will not facilitate compliance with WHO standards with windows partially open, the Edinburgh Tram (Line One) Bill Committee report stated that 'In planning terms the Committee understands it would be unusual to set a level guaranteed to cause no disturbance and noted that the 82 LAm<sub>ax</sub> approach was adopted by the Inspector at the recent Mersey Tram inquiry. Unfortunately there is no right answer to what is the acceptable level, however the precedents in the English planning system have come down in favour of 82db (sic). On this basis the Committee accepts that level as being the correct approach.'

## Vibration

Vibration assessment for the Edinburgh Tram Line was carried out using BS6472 and by applying the Vibration Dose Value (VDV) of this Standard. The VDV is a measure of the accumulated level of ground vibration over a period and is used to predict the likelihood of adverse comments from building occupants. The adoption of the VDV parameter is based on social studies undertaken in the 1980s and 1990s into human response to vibration.

This standard has also been applied in this ES. Table 13.22 of the ES contains an appraisal of the maximum probable vibration of residential buildings for a range of distances from the tracks. The Dose Values have been calculated on the basis of:

- A maximum of 80 to 96 passenger train passes per day
- 20 seconds per train pass event
- A frequency band of 12 Hz to 16 Hz to represent the probable range for foundation response, for horizontal, vertical and resultant vibration
- 15m, 20m and 25m distance bands from the closest rail.

Table 13.22 of the ES indicates that at a set back distance of 25m the vibration from the passage of electric passenger trains would be just perceptible to humans but would be unlikely to raise more than minor comments from those subject to the vibration. The situation is similar for a 20m set back distance. At 15m from the closest rail the vibration is bordering on that which could be expected give rise to some adverse comment on a longer-term basis.

This policy is similar to that of the Edinburgh Tram Line, with the only difference being that the Tram Line ES only looked at distance bands up to 20m from the closest rail.

## Railway safety

### **21. Has the Promoter prepared and published a policy paper on railway safety?**

The Promoter already has a railway safety case as a requirement of its network licence.