

# GLASGOW AIRPORT RAIL LINK BILL

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This short briefing has been produced to provide the Glasgow Airport Rail Link Bill Committee with some background information to assist in their consideration of the policy objectives of the Glasgow Airport Rail Link Bill.

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## INTRODUCTION

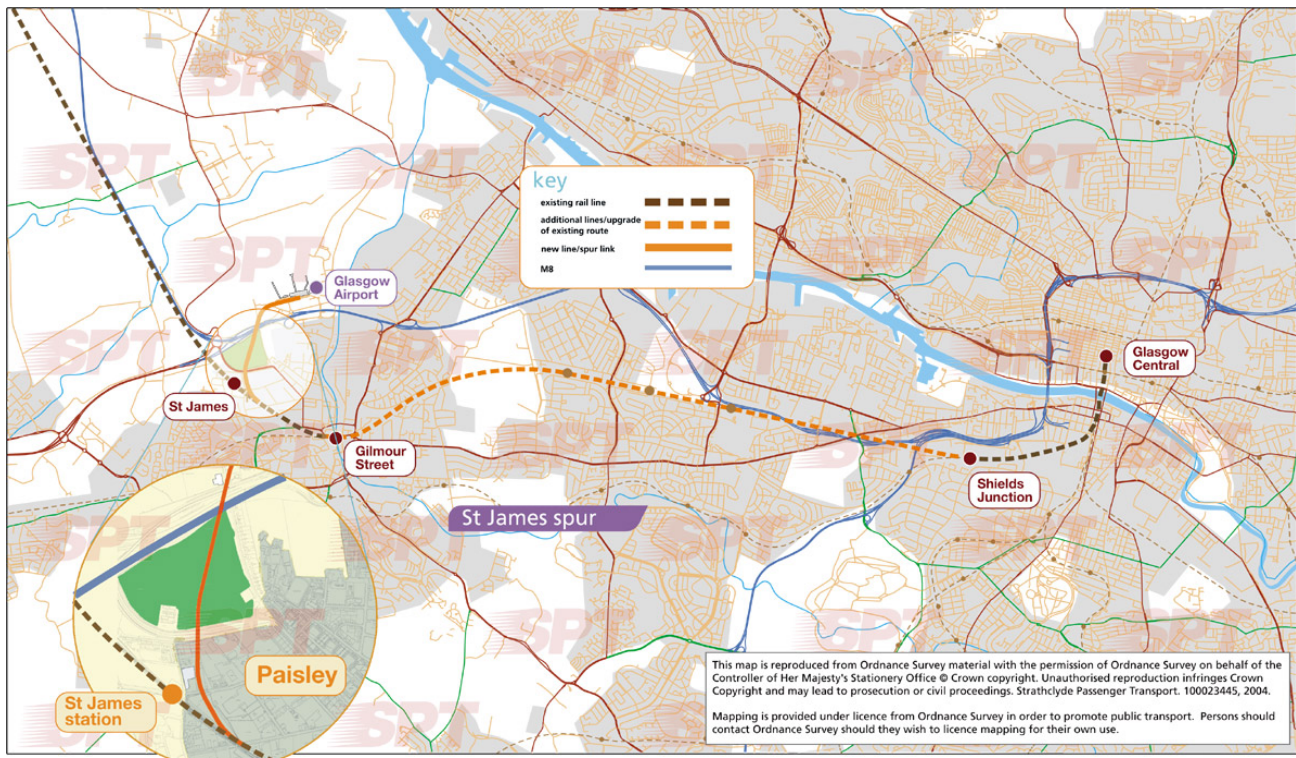
The [Glasgow Airport Rail Link Bill](#), a private bill promoted by Strathclyde Passenger Transport Executive (SPT), was introduced in the Scottish Parliament on 31 January 2006.

The Bill would grant SPT a number of powers required for the construction of a railway between Glasgow Central railway station and Glasgow Airport, as well as the power to undertake other works related to the route.

## WHAT DOES THE BILL PROPOSE?

The proposals in the Bill will allow for the creation of a direct rail link between Glasgow Central railway station and Glasgow Airport. The main features of the link include the extension of platform 11a at Glasgow Central, a third track to be laid between Shields Junction and Arkleston Junction between the current operational lines, capacity enhancements at Wallneuck Junction, the creation of a new junction east of Paisley St. James station and the construction of an entirely new 1.9km branch to the airport which will run on embankments and viaducts/bridges where required.

## Map of the proposed route of Glasgow Airport Rail Link



Strathclyde Passenger Transport Executive 2006

## WHAT DOES SPT THINK THE RAIL LINK WILL ACHIEVE?

SPT sets out the following policy objectives in the Promoter's Memorandum, which accompanies the Bill:

- *To stimulate economic growth in the West of Scotland by developing the capacity and capability of the national and regional rail network*
- *To contribute to a sustainable basis for the future growth of Glasgow and Prestwick Airports in terms of government and regional objectives for airport surface access;*
- *To support the sustainable regeneration of the M8 corridor and Ayrshire / Inverclyde corridors by developing rail capacity;*
- *To improve social inclusion and accessibility by connecting areas of low car ownership and high deprivation within west Scotland to economic opportunities at Glasgow and Glasgow Airport;*
- *To provide a high quality, high capacity public transport service between Glasgow Airport, Paisley and Glasgow that will attract car and other users through offering a high quality, high reliability, safe, frequent service and competitive journey times; and*
- *To provide public transport services to Glasgow Airport and in the M8 and Ayrshire Corridors that integrate with the existing transport network and allow for the future development of enhanced interchange opportunities with bus, car, rail, cycling and walking.*

## HOW DOES THE BILL RELATE TO THE PLANNING SYSTEM?

There is no need for the promoter of the Bill to seek planning permission for the construction of the railway and the development of the associated works outlined in the Bill. This is because

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most developments authorised by a private Act are considered to be permitted development<sup>1</sup> under powers contained in the [Town and Country Planning \(General Permitted Development\) \(Scotland\) Order 1992](#). However, the deemed permission is only 'outline permission', which means that the promoter of the Bill must consult the planning authority to ensure that the detailed design of any buildings or structures are acceptable prior to beginning construction.

The Bill would also grant an exemption from the need to obtain listed building consent for changes to listed buildings directly related to the construction of the railway.

In addition to these statutory requirements, the [Standing Orders of the Scottish Parliament](#), Rule 9A.2.3(c), require the promoter of a Private Bill that authorises the construction or alteration of a railway to provide such maps, plans, sections and books of references as the Presiding Officer may determine to the Parliament. The Bill must also be accompanied by an Environmental Statement that sets out the anticipated environmental impact of the proposals. An Environmental Statement would also need to accompany any major planning application to a local authority. The Presiding Officer has determined that any such Environmental Statement must contain all the information currently required under Schedule 4 of the [Environmental Impact Assessment \(Scotland\) Regulations 1999](#), as would be required of an Environmental Statement submitted to a local authority.

In addition to the requirement to submit an Environmental Statement, the Private Bill procedure provides an opportunity for members of the public to lodge objections to the Bill during a 60 day objection period, which follows the introduction of the Bill to Parliament.

## NEW AIRPORT RAIL LINKS IN THE UK

Three rail links to UK airports have been constructed in the last 20 years. However, it is difficult to make comparisons between these schemes and the proposed GARL as the engineering challenges, travel patterns to and from the airports and surrounding population densities mean that all three projects are quite distinct.

**Heathrow Express:** Authorised under the [Heathrow Express Railway Act 1991](#) (c. vii), which was amended by the [Heathrow Express Railway \(No. 2\) Act 1991](#) (c. ix) this railway links Paddington Station in central London with Heathrow Airport. For the first 12 miles, the route follows the Great Western main line to Airport Junction, near Hayes. Here, Heathrow Express trains leave the main line to enter a five-mile tunnel that sweeps underneath the heart of the airport. There are two stations, one serving Terminals 1, 2 and 3, and a second, four miles away, serving Terminal 4.

The service began operations on 23 June 1998. The original £350 million project was a joint venture between BAA and British Railways Board. It was designed to increase the percentage of air passengers using public transport to and from the airport from 34% (already the highest in the world) to 50%. A train operating company, Heathrow Express Ltd, formed to plan, operate and introduce Heathrow Express, took over the running of the service after the project was completed. This company is a wholly-owned subsidiary of BAA plc. The service is rare on British railways, in being separate from the franchising arrangements under which private companies pay the infrastructure owner, Network Rail, to operate trains over its tracks.

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<sup>1</sup> The General Permitted Development (Scotland) Order 1992 lists 25 categories of development where planning permission is automatically deemed to have been granted, subject to them meeting certain conditions

**Manchester Airport:** Manchester Airport is served by a dedicated rail station, which is located at the end of a short spur, which links to the main Manchester to Crewe line near Heald Green station. The station and spur line opened in May 1993, as part of the larger Manchester Airport Terminal 2 project.

**Cardiff Airport:** Although not a direct airport rail link, the Vale of Glamorgan rail line between Barry and Bridgend reopened 12 June 2005. The Rhoose station on this line is served by a shuttle bus that links it with Cardiff International Airport. The reopening of the line was supported by a £17 million grant from the Welsh Assembly Government. This was a relatively small project that involved the construction of two new stations and some minor track and signalling works to upgrade a freight only line to passenger rail standard.

## NEW RAIL LINKS IN SCOTLAND

Two rail links have opened since the creation of the Scottish Parliament.

**Edinburgh Crossrail:** The Edinburgh CrossRail project involved the re-opening 1.8km of track for passenger services from the East Coast main line at Portobello to Newcraighall, also serving a station at Brunstane. The Scottish Executive awarded City of Edinburgh Council £8 million from the first round of the Public Transport Fund in 1999 for the project and a further £501,000 in June 2001 to bridge a funding gap after signalling costs for the project rose following the Ladbroke Grove crash. The total cost of the project was £11 million, the balance of funding came from the Strategic Rail Authority (now wound up), Railtrack (now Network Rail) and the City of Edinburgh Council.

Trains leave Newcraighall for either Bathgate or Dunblane every half hour.

**Larkhall-Milngavie:** This project encompassed two distinct elements:

- 4.7km of new railway from Larkhall to Hamilton, with new stations at Larkhall, Merryton and Chatelherault.
- 1.6 km of new railway from Maryhill to Anniesland (opened on 28 September 2005) with a new station at Kelvindale plus an additional platform at Anniesland

The project cost a total of £35 million, of which the Scottish Executive provided £25 million, Strathclyde Passenger Transport £9.1 million and South Lanarkshire Council £400,000.

In addition to the two lines described above, work to reopen the Stirling-Alloa-Kincardine line is currently underway under powers granted by the [Stirling-Alloa-Kincardine Railway and Linked Improvements Act 2004](#) (2004 asp 10), the first rail related Private Bill passed by the Scottish Parliament.

## PROPOSED NEW RAIL AND LIGHT RAIL LINKS

There are three heavy rail and two light rail schemes, at various stages of development, which have been or will be brought forward for parliamentary consideration in the next couple of years. These are:

**Waverley Railway:** The [Waverley Railway \(Scotland\) Bill](#) is at an advanced stage of consideration, and was approved in principle by the Parliament on 28 September 2005. The Bill would grant Scottish Borders Council, the promoter of the Bill, the powers to rebuild approximately 35 miles of railway between Newcraighall on the outskirts of Edinburgh and

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Tweedbank, near Galashiels in the Scottish Borders. The railway would be single track with short sections of double track, known as dynamic loops, to allow trains to pass each other in opposing directions. The anticipated cost of the scheme is £151m at 2005 prices. Further details can be found on the Waverley Railway Project [website](#).

**Airdrie-Bathgate:** This scheme would link the existing Airdrie railway to the existing Bathgate railway by providing an electrified double tracked line between Drumgelloch and Bathgate. The project would also require double tracked electrified sections between Airdrie and Drumgelloch and Bathgate and Edinburgh Waverley, which could be built by Network Rail under their existing statutory powers. It is anticipated that the scheme will cost £225m. A Bill is being prepared for submission to the Parliament in 2006. Further details can be found on the [AtoB](#) website.

**Edinburgh Airport Rail Link (EARL):** This scheme would involve the construction of a railway station under Edinburgh Airport which would be served by a new line which links with the existing Edinburgh-Glasgow railway and Fife lines. These links would require the construction of rail tunnels under Edinburgh Airport. Rail services from all over Scotland would call at this station. It is anticipated that this scheme will cost in the region of £500m. A Bill is being prepared for submission to the Scottish Parliament in early 2006. Further details can be found on the EARL [website](#).

**Edinburgh Trams:** Two tram lines, one serving a circular route between Haymarket-Granton-Leith-Princes Street (Line 1) and one Newbridge-St. Andrews Square (Line 2), are proposed for construction in Edinburgh. Consideration of the two Edinburgh Tram Bills ([Line 1](#) and [Line 2](#)) is at an advanced stage. The combined cost of the schemes stands at £634m. Further information can be found on the [tramtime](#) website.

## CURRENT TRANSPORT LINKS TO GLASGOW AIRPORT

### PUBLIC TRANSPORT

[Scottish Citylink](#) provide a dedicated coach service from Glasgow Buchanan Street Bus Station to Glasgow Airport, which runs between 0600 (0700 on Sundays) and 2359. Typical service frequency is every 10 minutes between 0800 and 1800 and less frequently at other times. The journey is timetabled to take approximately 25 minutes. Open return tickets cost £5.00. Direct coach services to Gourock, Inverness and Skye also call at the airport.

Through tickets are available for use on First ScotRail trains to Paisley Gilmour Street station and connecting Arriva buses to and from Glasgow Airport. Direct rail services run between Paisley Gilmour Street and Glasgow Central, Stranraer, Ayr, Largs, Gourock and Wemyss Bay.

At present 6% of trips to/from the airport are made by public transport, either bus or a combination of train and bus, with a further 21% made by taxi (Faber Maunsell 2005).

### PRIVATE TRANSPORT

The above Citylink coach service runs for approximately 10 miles along the M8 motorway from the city centre to the airport exit at junction 28. This service competes with private cars and other vehicles for road space on the motorway and supporting road network.

The Promoter's Memorandum notes that congestion is a regular occurrence at both the Kingston Bridge where vehicles from the city centre can join the M8 and at junctions 26 and 27 where they exit for the airport. In 2005 the M8 between junctions 26 and 27 carried 108,000

vehicles in both directions (Scottish Executive 2006a). The Kingston Bridge carries approximately 150,000 vehicles a day (Scottish Executive 2006a).

## KEY STATISTICS

### GLASGOW AIRPORT

**Passengers:** Passenger numbers at Glasgow Airport have increased every year since 1996.

Table 1: Annual Passenger Numbers at Glasgow Airport (000's)

	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
Glasgow	5,422.5	5,471.6	6,011.7	6,481.4	6,758.9	6,923.0	7,249.4	7,771.9	8,117.6	8,563.6
% change	-0.6	0.9	9.9	7.8	4.3	2.4	4.7	7.2	4.4	5.5

BAA 2006

**Employees:** Approximately 5,400 people are employed at Glasgow Airport, of which 500 are BAA employees.

**Parking:** There are 3,753 short stay and 1,779 long stay car parking spaces at the airport. These are supplemented by several other off-site car parks in the area around the airport.

### GLASGOW CITY REGION

Glasgow City Region encompasses the local authority areas of Glasgow, East and West Dunbartonshire, North and South Lanarkshire, East Renfrewshire, Renfrewshire and Inverclyde. This is the geographical area currently used for regional strategic planning. In total, the city region accounts for 45% of Scotland's GDP, 40% of Scotland's jobs, and 35% of Scotland's population (Glasgow City Council 2005).

Table 2: Key economic and social indicators

Area	Total Pop. (000's)	Employment Rate	Unemployment rate	Average Weekly Earnings (£'s)	Home Ownership	Household Car Access (1 or more)
Glasgow City	578	65%	4.7%	396.10	51%	45%
East Dunbartonshire	107	81%	1.6%	491.90	83%	81%
West Dunbartonshire	92	71%	4.8%	363.50	58%	62%
North Lanarkshire	323	71%	3.3%	375.20	60%	63%
South Lanarkshire	305	75%	2.8%	419.50	69%	68%
East Renfrewshire	90	80%	1.6%	461.80	83%	79%
Renfrewshire	171	81%	3%	435.10	66%	62%
Inverclyde	82	70%	4.5%	401.80	62%	57%
<b>Glasgow City Region</b>	<b>1,750</b>	<b>74%</b>	<b>3.3%</b>	<b>418.10</b>	<b>66.5%</b>	<b>64.6%</b>

(Scottish Executive 2005a and Scottish Executive 2006b)

The [Scottish Index of Multiple Deprivation 2004](#) (Scottish Executive 2004) identifies the most deprived areas (presented as data zones) across Scotland. It is based on 31 indicators in the six individual domains of current income, employment, housing, health, education, skills and training, and geographic access to services and telecommunications. Of the 5% most deprived areas in Scotland, Glasgow City contains 70.9%; West Dunbartonshire contains 1.7%; North Lanarkshire has 2.8%; South Lanarkshire 2.2%; East Renfrewshire 0.2%; Renfrewshire 2.1%; and Inverclyde 1.6%. East Dunbartonshire does not contain any of the most deprived areas in Scotland.

## RAIL USAGE IN SCOTLAND

Glasgow Central is Scotland's busiest railway station, with 22.96m passengers passing through it during 2002-03. Paisley Gilmour Street is Scotland's third most popular station with 2.56m passengers visiting during 2002-03.

**Table 3: ScotRail Passenger Numbers from 1994-95 to 2004-05**

	1994/5	1995/6	1996/7	1997/8	1998/9	1999/00	2000/1	2001/2	2002/3	2003/4	2004/5
Journeys (millions)	49.24	50.81	52.84	56.14	58.31	61.72	63.16	60.75	57.38	62.32	68.74

Scottish Executive 2005b

## RAIL SUBSIDIES IN SCOTLAND

The Scottish Executive supports the operation of ScotRail services in Scotland through annual payments to the franchise holder, currently First Group. Payment for financial year 2006-07 amounts to £264.8m. Figures for subsidy for each line are not available, although it is generally accepted that the Edinburgh-Glasgow shuttle is the only service in Scotland that covers its operating costs through fare revenue. This means that any new service is likely to require additional subsidy payment. The ScotRail franchise includes mechanisms for additional payments to be made where additional services are provided.

## WIDER IMPACTS OF AIR TRAVEL

### ENVIRONMENTAL

Whilst the benefits of easily accessible air travel are widely spread, many of the adverse impacts are distributed unevenly. At a local level, humans, wildlife and habitats near airports have to contend with the immediate effects of aircraft noise, air pollution and increased congestion on local roads (Department for Transport 2006).

Whilst noise pollution does not have a lasting impact on the natural environment, those living close to airports and under flight paths contend that it has a significant detrimental effect, including: interference with communication, sleep disturbance, noise induced hearing loss, impact on educational performance, cardiovascular and mental health effects. The Parliamentary Office of Science and Technology (POST) has produced a useful note on [Aircraft](#)



[Noise](#) (POST 2003a) explaining how aircraft noise is measured, the causes of noise and its possible effects on those living near airports.

Whilst today's aircraft are considerably quieter than those operating in previous decades, the reduction in noise from individual aircraft has reduced, the Aviation Environment Foundation (2005) argues that in many cases this reduction has been offset by the increased number of aircraft landing and taking off. BAA (2004a) recognises the problem of aircraft noise, and has proposed a series of voluntary financial and mitigation packages. These aim to develop voluntary schemes to provide noise insulation for noise-sensitive buildings, such as schools and hospitals, and a financial package for relocation assistance for residents in the noisiest areas who want to move.

Air pollution from aviation and airports is also a major global issue, as well as a more local issue for those who live in the vicinity of large airports. Emissions from aircraft, support vehicles and airport related traffic all contribute to a build up of potentially harmful gases such as nitrogen dioxide, carbon monoxide and they also produce small particulates. Jet engines produce large quantities of nitrogen dioxide, but relatively few particulates. Road traffic produces high concentrations of particulates and nitrogen dioxide (Aviation Environment Foundation 2004). BAA (2004b) recognises these problems, and states that "air quality management remains a key priority among local and national stakeholders". They aim to develop local air quality management strategies, and promote alternative fuels and emissions abatement technology for vehicles operating in the airport. More widely BAA aims to develop incentives to encourage low emissions technology for aircraft. These include an aircraft emissions charging scheme under which airlines pay landing charges according to their fleets' emissions.

Aviation is the fastest growing emitter of CO<sub>2</sub>, which contributes to global climate change (Tyndall Centre for Climate Change Research 2003). In its recent Inquiry into Climate Change the Environment and Rural Development Committee heard evidence suggesting that by 2030, aviation is likely to contribute to 25% of the UK's CO<sub>2</sub> emissions. The Committee also found that the current 16 million air passengers per year in Scotland could rise to between 26 million and 51 million per year by 2030 - an increase of the order of 3-4% per year (Scottish Parliament Environment and Rural Development Committee 2005). BAA (2004c) notes that they are one of the top 20 energy users in the UK, and that climate change presents a significant long term risk to their business. They aspire to "achieve industry best practice in the management of direct and indirect CO<sub>2</sub> emissions associated with airport site energy consumption". More specifically, they aim for a reduction in overall CO<sub>2</sub> emissions of 15% on 1990 levels by March 2010.

POST has produced a short briefing on [The Environmental Costs of Aviation](#) (POST 2003b) which provides a useful summary of the potential economic costs of the environmental impacts of aviation.

## **ECONOMIC**

Airports are considered to be vital for business and leisure activities, and integral to the UK's infrastructure and economy. Aviation is now as important as shipping for transporting goods. While only 5% of goods by weight are carried by air, over 30% by value (£50 billion) now goes by aircraft (BAA 2006) to/from UK airports. Airports are also considered to be economic generators in their own right. BAA (2006) estimates that the aviation industry directly supports 200,000 jobs, and indirectly may support up to 600,000 in the UK.

[The Future of Air Transport - White Paper and the Civil Aviation Bill](#) (Department for Transport 2003) notes that aviation directly contributes £0.8 billion to the Scottish economy each year and accounts for 1.3% of Scotland's Gross Domestic Product.

Friends of the Earth (2005a) however contend that airport expansion is damaging for regional economies because it leads to a net outflow of money from all airports, apart from London. It states (2005a) that “foreign visitors arriving by air spent nearly £11 billion in the UK in 2004, but UK residents flying out spent £26 billion abroad – a loss to the UK economy of £15 billion”. More widely, they contend (2005b) that because VAT is not paid on aviation fuel, the industry receives a £9 billion a year tax-break. It is these tax breaks which are “a large contributor to the predictions of falling costs of flying; these falling costs are what drive the huge demand increases.” Which, in turn, contribute to CO2 emissions and global climate change (Friends of the Earth 2005b).

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