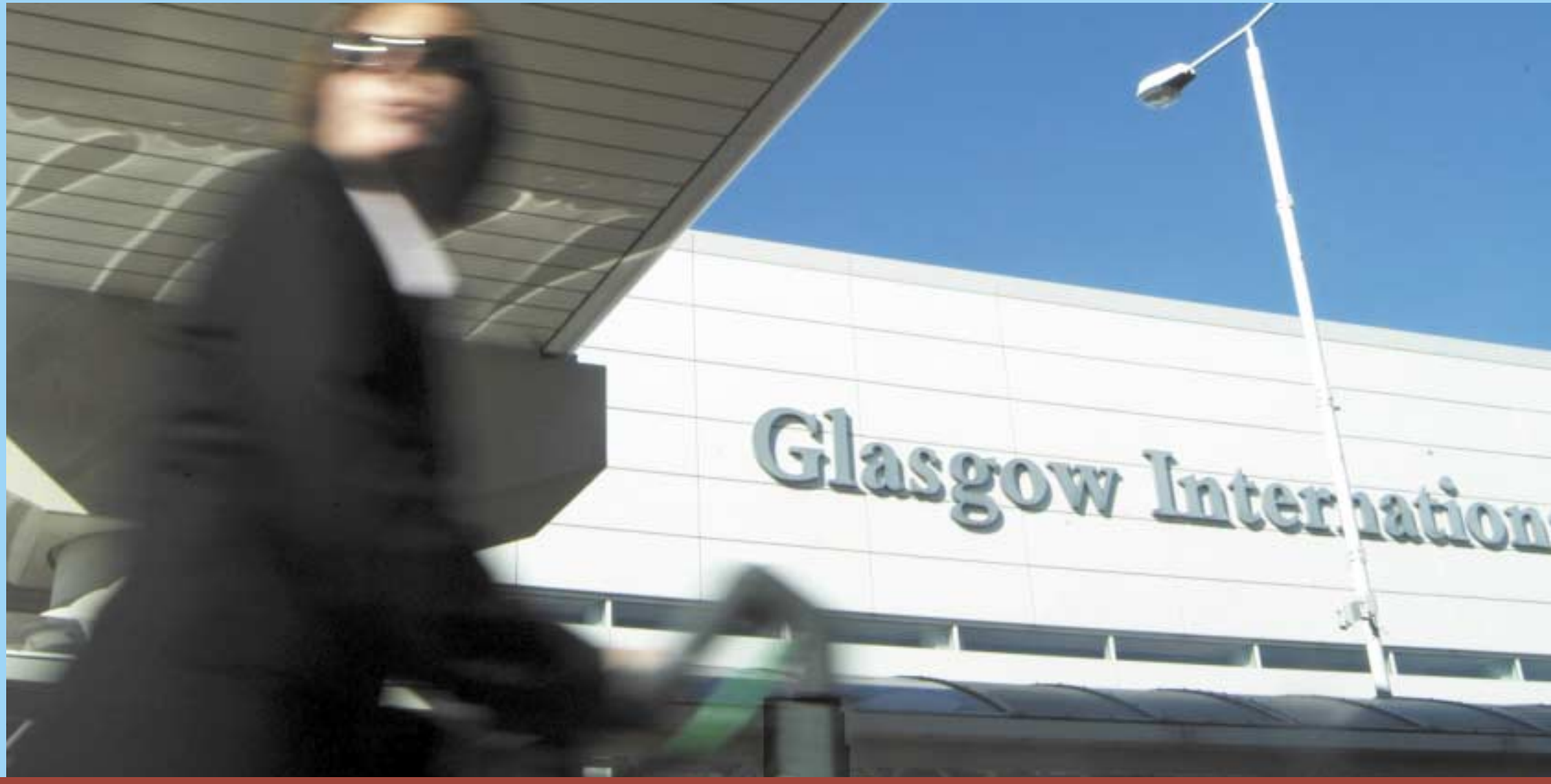
where next? SPT rail

# Glasgow Airport Rail Link



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# introduction

**Strathclyde Passenger Transport (SPT) is looking at proposals to provide a new direct rail link between Glasgow Central station and Glasgow Airport.**

**The new link would operate every 15 minutes from Glasgow Central, calling at Paisley Gilmour Street station before terminating at a purpose-built station at the airport.**

Studies into an airport rail link have been ongoing for over 15 years. In December 2001, the Scottish Executive commissioned an independent feasibility study from consultants Sinclair Knight Merz (SKM) to determine the potential for a rail link to Glasgow Airport. A substantial amount of work was carried out to identify the best route for the rail corridor.

All new railways need the approval of the Scottish Parliament. The Scottish Executive and SPT have earmarked £3 million to prepare a Bill to be submitted to the Parliament. Following public consultation, the scheme will be refined and a Bill submitted to Holyrood.

The proposal for a rail link is now out to public consultation. This booklet provides some background information on the work done to date in examining and establishing the options for a feasible scheme.

## Why does Glasgow need an airport rail link?

Road congestion on the M8 is a major problem, making journey times unpredictable. With airport passenger numbers expected to almost double to 15 million by 2030, alternative access has to be provided.

Apart from air transfers (2.5%) all passengers travel to Glasgow Airport by road:

- 84.6% by car or taxi
- 10.4% by bus or coach
- 2.5% by other

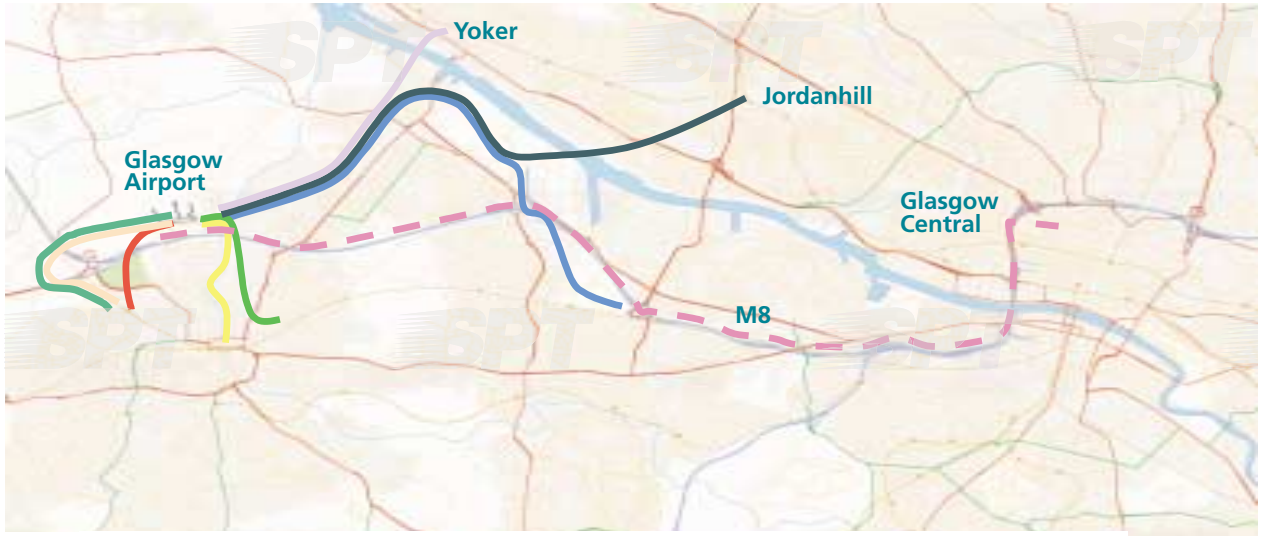
A rail link will improve access and make it easier for airport workers, non-car-owners, holiday-makers and business travellers to get to the airport.

# background

**Over the last ten to fifteen years, considerable work has been undertaken to look at options to provide a fast, direct service between Glasgow city centre and Glasgow International Airport. This work has considered various alternative transport solutions. Some of the options previously considered were not taken forward for a variety of reasons, including property demolition, environmental impact, long journey times, cost or technical feasibility. They are briefly summarised below.**

## Braehead/Renfrew Heavy Rail Option

This option would have used an upgraded freight facility from the Glasgow Central/Paisley main line to Braehead before tying into an old rail alignment, which passes through Renfrew and south through Babcock Works. The final approach to the Airport would use either an elevated structure or a tunnelled alignment. This option would require significant demolition of residential properties within Renfrew and have environmental impacts. In addition, this route would not provide a fast, direct service to the Airport. The complex crossing of the White Cart is technically questionable and presents the potential for cost increases. This option was not taken forward.



# background

## Linkage of North Electrics Network at Yoker South to the Airport

A further heavy rail alignment through Renfrew to the Airport by linking the North Electrics network at Yoker south to the Airport was explored. This option was not recommended, as it would require a new swing bridge crossing of the River Clyde, which was not considered practical in terms of potential disruption to an Airport service. This option was not taken forward.

## Heavy Rail Link from Jordanhill via a Tunnel under the Clyde

This option was not recommended as it would have involved significant property demolition and was technically difficult with potential for cost increases. The complex bridge over the White Cart was technically questionable, and presented further potential for cost escalation. There are high capital costs associated with this option. This route would not provide a fast, direct service to the Airport. This option was not taken forward.

## Paisley St James Option 1 (West of Paisley Gilmour Street) - Tunnel

This option would have involved the development of a direct route from west of Paisley Gilmour Street to the Airport by a tunnel. This would allow interchange at Paisley Gilmour Street station and enhance accessibility for travellers from Ayrshire and Inverclyde to the Airport. This option entails poor ground conditions including deep foundations under the M8 and the location of the Airport buildings make tunnelling difficult. In cost terms the tunnel option plus underground airport station would cost three times that of an above ground solution. This option was not taken forward.

## Paisley St James Option 2 (West of St James Interchange)

This option would have followed an alignment to Glasgow Airport from Paisley St James Station utilising a disused rail solum north of Ferguslie Park housing estate and passing west of St James Interchange. This option was considered as both an elevated option and a tunnelled option. The elevated option was not feasible, as it would impinge on the Airport vertical clearance regulations. The tunnelled option entailed uncertain technical feasibility and ground conditions, with potential for cost increases. This option was not taken forward.

## Arkleston Heavy Rail Option

This option would have involved the reinstatement of a rail alignment on a disused freight line from the existing Arkleston Junction to a station in the Airport complex, by either an elevated or tunnelled alignment. The technical feasibility of the complex crossing of the White Cart was questionable and presented the potential for cost increases. In addition this option would involve significant property demolition. This option was not taken forward.

## People Mover Connection Between Paisley Gilmour Street Station and the Airport

This option would have provided a route between Paisley Gilmour Street Station and the Airport, via the Laigh Park area and across the White Cart. This option entailed a forecasted low level of patronage and a journey from Glasgow City Centre would involve an interchange at Paisley Gilmour Street. This option was not taken forward.

## More Frequent Bus Services from the City Centre

This option would provide more frequent bus services between Glasgow City Centre and Glasgow International Airport. This option entailed slow journey times, particularly during peak times on the M8, and hence low forecast demand by air passengers and Airport employees. This option was not taken forward.

## Park and Ride and Light Rail / Monorail near Paisley St James to Glasgow Airport

This option would have involved a light rail or monorail line between a new rail station near Paisley St James station and Glasgow Airport. A Park-and-Ride facility adjacent to the mainline station was also provided. This option would require all passengers to interchange between heavy rail and light rail and passengers from Ayrshire lines would have to change twice. The levels involved at the new station location would lead to a complex and costly station structure. In addition, it is unclear whether the changes required to the highway network would be feasible in highway design terms. It is also uncertain whether a crossing of the M8 at the required location would be compatible with the runway take-off zone. This option was not taken forward.

# the preferred route

## The preferred route for accessing Glasgow Airport uses the mainline from Central Station with upgrades to the track and a spur at St James.

### Central Station

Extra platform capacity will be created at Glasgow Central Station in order to service the airport rail link. Platform 11a will be extended to provide additional capacity.

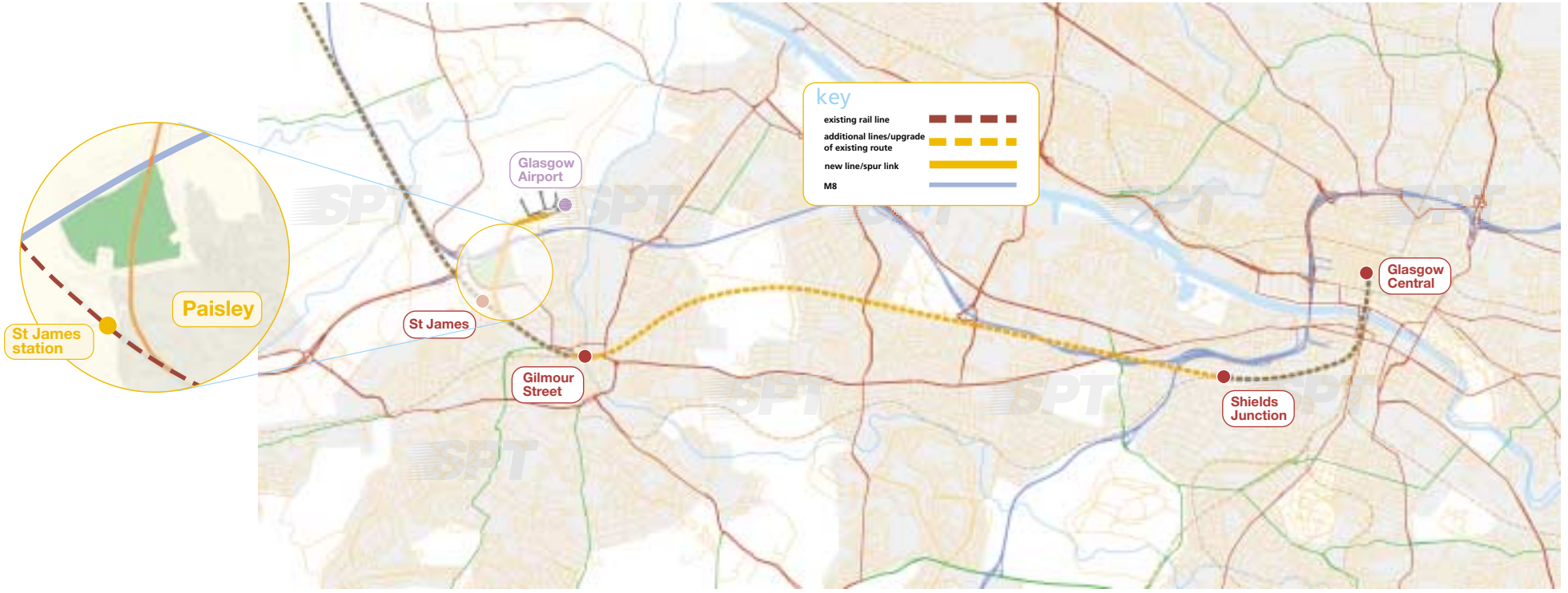
### Two, three or four-track?

The existing track between Glasgow and Paisley is a two-track rail line, which is nearing capacity and so work was carried out on whether to upgrade to three or four tracks. Two tracks were found not to provide sufficient capacity and reliability. Three tracks were found to provide sufficient capacity for the rail link with potential for additional services on Ayrshire and Inverclyde routes. The four-track option was found to be possible, but was expensive and did not offer significant additional benefits over three track. Under SPT's proposals 9km of existing track between Glasgow and Paisley will be upgraded.

### Wallneuk Junction

Wallneuk Junction will be relocated eastwards of Paisley Gilmour Street to allow the trains to travel at higher speeds and increase capacity.

# the preferred route

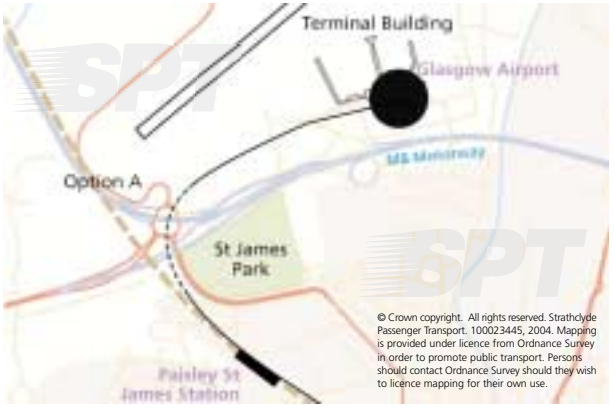


# the st james options

**Studies concluded that the most viable option for the rail link would be a spur link from the existing mainline near to Paisley St James station. Various options for this spur were considered before the preferred route was decided.**

## Tunnel underneath St James Park

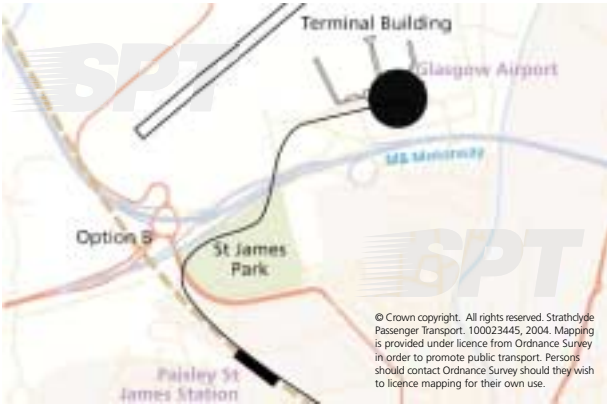
The option of a tunnel underneath St James Park was considered, but investigations showed that the ground conditions are not good. The deep foundations under the M8 and the location of the airport buildings also make tunnelling difficult. A tunnel and underground airport station would cost three times as much as the above-ground solution and so was not considered to be a viable option.




## Option A

This option is the most westerly and avoids St James Park entirely. However, it requires a short tunnel to be built under St James interchange to cross the M8.

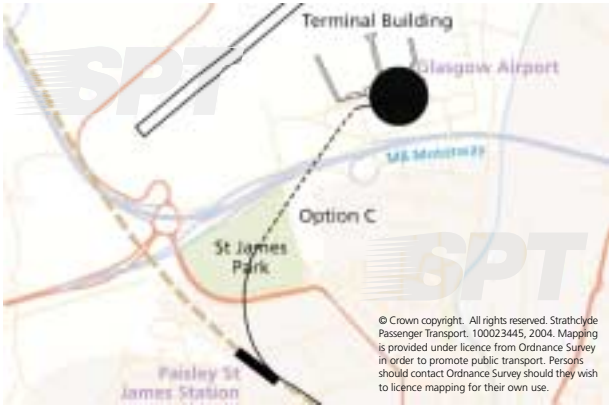
This option was found to be the most expensive and least attractive due to the cost of tunnelling, high construction risk and the environmental impact on the nature reserve.




## Option B

This route would run adjacent to the M8 on the north side of St James Park before crossing the A726 to the south of St James Interchange and the western end of St James Avenue.

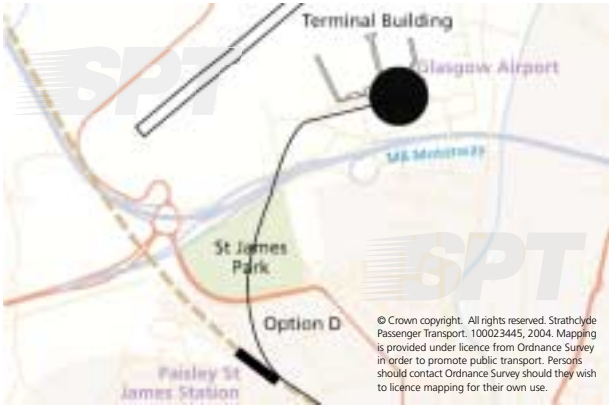
This option is more difficult to construct than C or D and therefore is more expensive. Residential property would be required and the journey time would be longer. In addition, the tight curves of the alignment are just within recommended design standards and therefore incur higher maintenence costs




## Option C

This is a more easterly option and crosses the M8 to the east of options B and D, crossing Greenock Road on the east of the park. It then uses the same alignment through Murray Street industrial area as Option D.

This route has similar benefits to option D, but would have a significant impact on Greenock Road and require residential property. Due to the alignment as it approaches the airport, this option would also require a more complex bridge crossing of the M8 which would be visually intrusive. This option also restricts the location of the airport station.




## Option D

This route runs through Murray Street industrial area and crosses the A726 to the south of the park. It crosses through the centre of the park and bridges over the M8 at its lowest point.

This route has fewer construction and maintenance risks than options B and C and has less direct noise and vibration impacts. There is also less need for land take and no demolition of residential property required. Option D provides the best route for accessing the airport from the Inverclyde line.

# the preferred st james spur - option D

**The spur could pass through the Murray Street industrial area and cross the A726 to the south of St James park. Its crosses the open area of the park and then the M8 at its lowest point to enter the airport boundary.**

The new spur link will run east of Paisley St James station, northwards towards the airport building.

The new spur is likely to be a two-track line to increase the reliability of the service. However, there is the option for a single-track, with sections of double-tracking to allow incoming and outgoing trains to pass.

There are two above-ground solutions for crossing the park – an embankment or a viaduct. This means that there will be the loss of some of the playing fields or football pitches in the park. SPT is working with Renfrewshire Council and the local community to achieve a suitable solution.

The public consultation for the Glasgow Airport Rail Link also addresses this issue directly, asking for options from the public and suggestions as how any impact might be mitigated.

## embankment

There could be a landscaped embankment across the park with a bridge / viaduct crossing the motorway. More football pitches would be lost with this option.

## viaduct

A viaduct could be built at around nine metres high, which would retain more of the football pitches and generally maintain access across the park.

## Airport station location

The design team is working closely with BAA who own Glasgow Airport to examine the options for the siting of the station. A key consideration is to get a good direct connection into the airport for passengers and their luggage.

**In summary:**

- Increased platform capacity will be established at Glasgow Central station
- 9 kilometres of existing track between Glasgow (Shields Junction) and Paisley (Arkleston) will be upgraded from 2-track to 3-track
- Wallneuk junction will be relocated eastwards
- A new spur will run through Murray street industrial area and cross the A726 to the south of the park. It crosses through the centre of the park and bridges over the M8 at its lowest point.
- A double platform station will be built at Glasgow Airport.

## Land and property

SPT aims to minimise the land take required to deliver a feasible and cost effective scheme. However, in the absence of any voluntary agreement there will be required to be some compulsory acquisition of land or temporary possession in any scheme such as this. Residents and business affected by compulsory purchase or temporary possession will be individually contacted once the extent of the land required for the scheme is clear and they will be provided with further information and guidance at that stage. In addition, they will receive a formal notice in terms of the process in due course.

It is acknowledged that in some circumstances, there is a possibility that property values could increase - due to increased accessibility to good transport links - or decrease due to the physical effects caused by the new rail link. The Land Compensation (Scotland) Act 1973 potentially allows for owners to be compensated following construction of the scheme. Owners wishing to pursue this course of action should seek legal advice.

Further information will be provided about this to residents and businesses adjoining the proposed work.

# potential benefits

## There are many potential benefits of the Glasgow Airport Rail Link, particularly the increased connectivity and accessibility to the airport.

- Improved access to the city centre direct from the airport would make the west of Scotland a more attractive destination to inbound passengers, allowing them to make connecting journeys across the region
- Journey times on the M8 are unpredictable currently, and with predicted passenger growth at the airport, this will only get worse. The airport rail link would provide a safe, reliable and fast travel alternative to road-based transport
- Up to 500,000 passengers are expected to use the Glasgow Airport Rail Link in the first year, reducing road congestion. Without the rail link these passengers would continue to travel to the airport by road and impact on the local environment
- Movement of goods will be easier and quality of travel better and more reliable
- The upgrade of the existing track will improve accessibility and services to Paisley town centre, Ayrshire, Prestwick Airport and Inverclyde
- Both the airport station and the trains will be accessible to passengers with disabilities.


## The construction of airport rail links in other cities has shown that there are other benefits that are more difficult to quantify at this stage.

- Large-scale infrastructure projects such as heavy rail links are a considerable "vote of confidence" in an area and can reduce the perceived investment-risk of development. The Glasgow Airport Rail Link could therefore boost inward investment in Glasgow and the west of Scotland, showing it to be an area attractive to large investments
- Improved access and reduced congestion will have benefits to local businesses and increase the attractiveness of the area to business investment. Road congestion is often cited as a concern by businesses in Glasgow and the potential time and cost savings will be important
- Increased accessibility and reliability of public transport to and from the airport and as far afield as Ayrshire will increase the ability of people to choose rail as an option. Local business will benefit from improved choice in the labour market and more flexibility
- An airport rail link can improve the visitor's first impression of a city, which may encourage repeat trips for business or leisure. Eighty-three per cent of visitors to the UK in the last five years have been repeat visitors, showing the importance of this to the tourism market
- Rail travel is a more sustainable option for the environment. Improved rail links will help to encourage more people out of cars.

# parliamentary process

## New railway lines need to be authorised by the Scottish Parliament by means of a Private Bill. The Scottish Executive has given SPT funding to put a Bill to Parliament.

The public consultation is a key step in helping shape the proposals in the Bill and information on the scope and outcome of the consultation will be submitted with the Bill.

The consultation responses will be analysed and further feasibility work will be carried out on the fine detail and cost of the proposals. A final report will then be compiled and a Private Bill and accompanying documents will be prepared.

Private Bills have a different legislative process from the more usual Public Bills (those instigated by the Scottish Executive).

There are three key stages in the Bill process, after submission.

### Submission

Firstly, the Bill is submitted to the Scottish Parliament and the 60-day objection period begins after formal introduction. A Private Bill committee is established to consider the Bill.

### Preliminary stage

After the 60-day objection period, the Private Bill committee considers the general principles of the Bill and whether it should proceed to the next stage. The committee also considers objections to the whole Bill and gives preliminary consideration to other objections.

The committee then produces a report for the Scottish Parliament on whether the general principles of the Bill should be agreed to; and whether the Bill should proceed as a Private Bill.

After a debate, the Parliament must decide if it agrees on the Bill's general principles and whether it should pass to the Consideration Stage.

### Consideration stage

The consideration stage has two phases.

If the Bill is approved by the Parliament at the Preliminary stage debate it is referred back to the Private Bill committee. In the first phase the committee will carefully consider the objections to the Bill and may ask the promoters and objectors to present further evidence. Once this is complete, the committee will produce a Consideration Stage report giving its decisions on the objections. The report may also indicate areas where the Committee expect to see the Bill amended.

After an interval of five sitting days from completion of the first phase, the committee can begin considering amendments to the Bill.

### Final stage

After the committee has made any amendments, the Bill reaches the Final Stage. Here the Bill (as amended by committee) is reprinted and is debated by the full Parliament and a vote is taken. If voted positively, the Bill will receive Royal Assent and will become an Act of the Scottish Parliament.

There is more information on the Scottish Parliament website, including a flowchart.

You will find information about how to object at http://www.scottish.parliament.uk/business/bills/billguidance/gprb-1.htm#P422_34845

# timeline

**SPT intends to have the Glasgow Airport Rail Link operational by 2008. The table below summarises the process to get to that stage.**

| | |
|---|---|
| 2004 / 2005 | consultation and final planning |
| Spring 2005 | private bill introduced |
| Spring 2006 | royal assent |
| Summer 2006 | tender for construction |
| 2006 – 2008 | construction |
| Late 2008 | rail link operational |

# take part in the public consultation

**Please participate in the Glasgow Airport Rail Link consultation. Your feedback is important to deliver a successful airport rail link which best serves the community.**

You are invited to submit comments on SPT's proposals by:

- Completing the questionnaire from the GARL leaflet or online at **www.spt.co.uk/garl**
- Contacting a member of our communications team on **0800 085 2109**
- Visiting one of the exhibitions in your area. Details are contained in this document, in the leaflet and on the website
- Attending a public meeting

## Consultation leaflet

A consultation leaflet has been issued to homes and businesses along the line of the preferred route. It is available on tape, in Braille, large print or in other languages. If you or someone you know would like information on the Glasgow Airport Rail Link in an alternative form or just want a copy of the leaflet, please contact the communications team on freephone 0800 085 2109.

## Exhibitions

| Date | Time | Venue |
|---|---|---|
| 8 November 2004 | 9am - 8pm | Glasgow Central Station |
| 11 November 2004 | 9am - 8pm | Glasgow Central Station |
| 13 November 2004 | 9am - 6.30pm | Braehead Shopping Centre |
| 14 November 2004 | 10am - 6pm | Braehead Shopping Centre |
| 17 November 2004 | 10am - 5pm | Cardonald Library |
| 18 November 2004 | 12pm - 8pm | Cardonald Library |
| 25-26 November 2004 | 9am - 8pm | Paisley Central Library |
| 3-4 December 2004 | 9am - 8pm | Glasgow Airport |
| 9 December 2004 | 9am - 7pm | Paisley Shopping Centre |
| 10 December 2004 | 9am - 5.30pm | Paisley Shopping Centre |

## Public Meetings

| Date | Time | Venue |
|---|---|---|
| 24 November 2004 | 7pm | St George's Primary |
| 30 November 2004 | 7pm | Hillington Primary School |
| 1 December 2004 | 7pm | Mossvale St James Primary School |
| 2 December 2004 | 7pm | Paisley Town Hall |

# fast facts

- The new rail link will be 15km (9 miles)
- 9km (5.4 miles) of existing track between Shields Junction and Paisley Gilmour Street will be upgraded
- 2km (1.2 miles) of new track will be built between Paisley and the airport
- The new link will cost an estimated £140m
- It will cost approximately £3m per year to run
- Up to 500,000 passengers estimated to use the rail link in Year One
- Glasgow Airport – Scotland's busiest – employs 50% of Scottish airport workers and creates over 15,000 jobs in the area

visit our website at www.spt.co.uk/garl

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