



## **Glasgow City Region - City Deal**

### **Cabinet**

### **Report by Senior Project Manager, Airport Access Project**

**Contact: George Vincent      Phone 0141 287 9477**

## **Item 8**

**12th December 2017**

### **Airport Access Project Outline Business Case**

#### **Purpose of Report:**

The purpose of this report is to provide Cabinet with commentary on the Audit of the Airport Access Project Outline Business Case which was commissioned by Transport Scotland and carried out by Jacobs consultancy.

#### **Recommendations :**

It is recommended that Cabinet:

- (1) notes the report and that work will continue with the Executive Steering Group to allow a full discussion of the issues raised in the Jacob's Audit;
- (2) notes that until this exercise has been completed any further expenditure will be kept to a minimum; and
- (3) asks that a further report is presented to a future Cabinet setting out the outcomes of the exercise and the solutions identified by the Steering Group to mitigate against the issues raised in the Audit.

## **Purpose of Report**

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## **Background**

The £1.13bn Infrastructure Fund within the Glasgow City Region City Deal has identified the Airport Access Project (AAP) as the flagship regional project (with a project cost of £144.3m), due to its strategic importance to the overall City Region. It is recognised that Glasgow Airport is over-reliant on road based access to the airport and that it is necessary to deliver a more sustainable form of surface access to the airport to support the continued growth of the airport and the sustainable and inclusive growth of the Glasgow City Region economy.

Since the cancellation in 2009 of the Glasgow Airport Rail Link there have been a numerous studies carried out to help inform and identify the best form of surface access transport intervention to assist with improving sustainable access to the airport. These include:

- (i) Glasgow Airport Master Plan (2011);
- (ii) Glasgow Airport Strategic Transport Network Study (2011) carried out by MVA Consultants, commissioned by Glasgow Airport;
- (iii) Glasgow Airport Strategic Transport Appraisal (STAG Part 1) (June 2013) jointly commissioned by Transport Scotland, Glasgow Airport Renfrewshire Council and Glasgow City Council and undertaken by consultants Aecom. (This study considered a long-list of over 80 potential transport interventions, with 7 options taken forward to the STAG Part 2);
- (iv) Glasgow Airport Strategic Transport Appraisal (STAG Part 2) (March 2014) carried out by Aecom and jointly commissioned by Transport Scotland, Glasgow Airport, Renfrewshire Council and Glasgow City Council. (This study carried out a detailed analysis of the 7 options identified at STAG1. It should be noted that the STAG methodology does not recommend a preferred option, rather it allows the relative merits of options to be understood when assessed against a multi-criteria framework. The appraisal results were accepted by the client group, and all agreed to use the findings in future studies.);
- (v) Glasgow Airport Surface Access Tram–Train Feasibility Study (January 2015) carried out by Transport Scotland. (This study allowed Transport Scotland to better understand the Tram Train option – one of the 7 options identified in the STAG work);
- (vi) The Glasgow Airport Access Project – Strategic Business Case (December 2015) prepared by Glasgow City Council and Renfrewshire Council with external technical support from Aecom & PBA. (This study assessed the Business Case of the 7 options identified by the STAG process and identified tram-train and PRT as being suitable for further consideration as part of the OBC);
- (vii) The Glasgow Airport Access Project – Outline Business Case (December 2016) prepared by external technical consultants Aecom on behalf of Glasgow City Council and Renfrewshire Council with further consultancy support on the

economic benefits of an airport rail link from PBA. The Councils then commissioned two further audits of the OBC from Turner & Townsend (costs) & KPMG (economics/ operating model). (Further detailed analysis of the 2 remaining options led to the conclusion that tram train should be taken forward as the preferred option for further development in the Full Business Case).

The robust back catalogue of work supporting the project is clearly demonstrated by the level of study carried out to date. The outcome of all this work evidenced that Tram Train was the best performing option for delivering a surface access transport link to Glasgow Airport and was able to be delivered within the City Region timescales and budget.

In December 2016, Cabinet approved the Outline Business Case (OBC) for the project, agreeing that the Tram-Train option be taken forward for development of the Final Business Case.

## **Tram Train**

The tram train project involves running 4 tram train vehicles per hour on the existing heavy rail line (15km) between Glasgow Central Station and Paisley (with a stop at Paisley Gilmour Street to allow interchange with Ayrshire and Inverclyde Services and access for local airport employees) before leaving the heavy rail line (near Paisley St James station) to join a light rail tram spur (circa 2km) which takes the tram train into Glasgow Airport. Since the tram train vehicle requires to use existing rail infrastructure for part of the route, agreement of both Network Rail and Transport Scotland is required to enable the project to proceed due to their respective roles and responsibilities for Scotland's rail network. The Councils have therefore consulted and liaised with both Transport Scotland and Network Rail from the outset to ensure that in so far as possible, work focuses on the known key risk areas such as the existing limitations on the heavy rail network.

Whilst tram train is widely used in Europe it is new technology to the UK and there are various regulatory and technical issues which require to be addressed to enable use of this vehicle type in the UK. Key areas include the mixing of heavy rail vehicles and light rail vehicles (trams) on the same line of track, the different power requirements between heavy rail vehicles and light rail vehicles, and signalling/ communication system between heavy rail and light rail. Fortunately, these and other issues are currently being addressed by a DfT funded pilot project being undertaken in Sheffield which will join the Sheffield Supertram system to the heavy rail network, allowing trams from Sheffield City Centre to access the Parkgate retail park in nearby Rotherham. This light rail system is already operational with testing being undertaken on the heavy rail network enabling passengers to be carried in early in 2018. There are various potential tram-train projects emerging elsewhere in the UK, notably in Manchester, and this type of system is expected to become more commonplace due to the number of advantages that it can bring to developing the transport network in a cost-effective and sustainable manner bringing the associated economic benefits to regions.

## **Full Business Case development**

Since OBC approval by Cabinet, work has continued to develop the project towards a Full Business Case.

The Project has been developed in a number of areas, focussing on the well-known key risk areas, to improve the understanding of the project for all stakeholders including Transport Scotland and Network Rail, and further inform the development of the project towards Full Business Case. The areas of focus were identified from our own external audits of the OBC (by Turner and Townsend and KPMG) and from discussions with Transport Scotland and Network Rail and included:

- (i) Operational modelling of railway performance/capacity of the Paisley corridor rail line & Central Station;
- (ii) The preliminary design of the link between the heavy rail and light rail infrastructure;
- (iii) The route of the light rail link into Glasgow Airport;
- (iv) Review of public utility costs in key areas;
- (v) Review of Capital Costs;
- (vi) Traffic modelling of the impact of the project on the local and strategic road network; and
- (vii) Further development of the Operation and Maintenance model.

This work will continue through the lifecycle of the project.

## **Transport Scotland Audit of OBC**

Following Cabinet approval of the OBC, Transport Scotland commissioned Jacobs to undertake a further Audit of the OBC on their behalf in February 2017. The interim findings of the audit were presented by Jacobs to the project team on 24 May 2017, where the project team provided clarification on issues raised, and further information as requested. Transport Scotland provided a copy of the final report to project partners on 21<sup>st</sup> November 2017.

Having reviewed the Audit findings the project team would advise Cabinet that although there is some good commentary in the Audit, further discussion is required on many of the conclusions in relation to the key areas of operations, costs and economics including:

- Airport demand
- Airport accessibility benefits
- Benchmarking
- Operational impacts on network
- Economic case

## **Meeting of the Executive Steering Group**

The Leaders of Glasgow City and Renfrewshire Councils met with the Transport Minister on Friday, 8 December along with representatives from the Airport, Transport Scotland and Network Rail.

A summary of the meeting and agreed actions will be issued this week. However the main points discussed and actions agreed were:

- There was a recognition that some work streams required further development which would go some way to answering many of the points raised in the Jacobs Audit;
- It was felt that the way some of the information was presented in the Audit was unhelpful and led to negative headlines;
- The airport stressed the number of options(80+) which had been sifted to arrive at tram train;
- All agreed that the Audit should be used to review any issues and try to resolve them, with a clear focus on the project, targets and timescales, with all parties participating;
- The Minister said that Transport Scotland were looking to improve capacity at central Station through to CP7. It was proposed that the AAP should be incorporated and modelled against other proposals with the best performing projects taking priority in CP6;
- There was a discussion around the impact of tram train on operational efficiency, the potential solutions and their impacts; and
- Transport Scotland will draw up a table listing the work needing done with timescales. This will be circulated before Christmas with another meeting of the Steering Group in early 2018 to review progress.

## **Conclusions and Recommendations**

The project team believe a number of the areas of concern raised by the Jacobs Audit could be closed out with further discussion, and that the key issue is the operational impact of the project on the rail network. However, clearly this needs further discussion.

Cabinet is asked to note that circa £2m has been expended to date on project development.

Without the full and active support of Transport Scotland and Network Rail meaningful progress on the Airport Access Project cannot be made.

It is therefore recommended that Cabinet:

- (1) notes the report and that work will continue with the Executive Steering Group to allow a full discussion of the issues raised in the Jacob's Audit;
- (2) notes that until this exercise has been completed any further expenditure will be kept to a minimum; and
- (3) asks that a further report is presented to a future Cabinet setting out the outcomes of the exercise and the solutions identified by the Steering Group to mitigate against the issues raised in the Audit.