## GLASGOW AIRPORT ACCESS PROJECT

#### **Outline Business Case Briefing**



#### **Contents:**

- Strategic Business Case key findings
- Outline Business Case further work
- Outline Business Case key findings



### GLASGOW AIRPORT ACCESS PROJECT PURPOSE/ CASE & POLICY

- City Deal : £1.13bn infrastructure fund
  - Airport Access Project is flagship project/ £144.3m budget
- 8<sup>th</sup> Busiest airport in UK 5<sup>th</sup> best in class in Europe
- Key Gateway for Inbound Business and Tourist Traffic
- Major Employer
- 9m passengers (May 2015) in excess of 10m passengers by 2025
- Heavily dependant on road based access
- Current mode choice trends are unsustainable and contrary to National, Regional and Local policies



- Preferred Options:
  - Personalised Rapid Transit: existing heavy rail & elevated people carrying system.
  - Tram Train: tram type vehicles running on existing heavy rail network with a new tram spur to the airport.
- Tram Train was best performing option from both a qualitative and quantitative basis BUT
  - further investigation required (costs/ technical including rail capacity/ economics)
- OBC to further review options and :
- make recommendation on preferred option to be taken to Full Business Case
- Provide sufficient assurance that preferred option is a viable option and provide basis for development of the Full Business Case

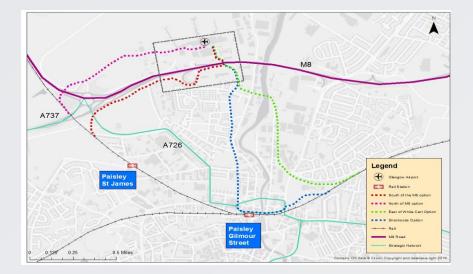






#### GLASGOW AIRPORT ACCESS PROJECT WORK DONE FOR OBC

- Costs
- Economics
- Technical



Governance





#### **Options Appraisal:**

- SMART Transport Planning Objectives
- STAG criteria
- Deliverability Issues
- Affordability
- Tram train £132.03m (excl contingency)/ PRT £144.236m (excl contingency)
- PRT would definitely require an ongoing revenue subsidy
- Economic
- Tram Train: BCR 2.5 to 3.8
- PRT: BCR 2 to 2.7

Environment

- PRT would have greater impact on landscape and visual amenity
- Tram Train is preferred option

#### Capacity:

- 2 Tram Train service patterns have been modelled (against December 2015 timetable enhanced to include services committed for 2025)
  - 4 per hour all day modelling suggests can't be accommodated without capacity interventions (or service removals)
  - 4 per hour in off peak & 3No in AM peak/ 2No in PM peak modelling suggests it can be accommodated without capacity interventions (or service removals); however
    - Performance impacts are to be fully tested; and
    - Transport Scotland/ Network Rail require other service enhancements should be included (new trains/ longer trains).
  - Work with Transport Scotland & Network Rail to agree a proposed methodology for modelling rail service changes/ ranking their impact, required capacity interventions (or otherwise) to support them.

#### **Tram – Train Capital Costs**

ltem	Cost
Feasibility Costs	-
Construction Costs	65,127,670
Land Costs	3,000,000
Equipment Cost	40,167,345
Internal Council Design & Management Fees	3,053,945
Land Remediation	-
External Consultants	12,268,345
Other third Party Costs	8,601,237
Other Costs	359,782
Contingency	11,715,675
TOTAL	144,294,000

 Capacity interventions (or cost associated with service removals) not included in costs



- Operation and Maintenance Costs V fare box return.
  - Sensitive to:
  - passenger numbers (growth)
  - Operational model franchise or concession
- GVA £240m p.a
- Benefit to Cost Ratio : 2.5-3.8 (central/ high growth & full/ interim service)
- 1m passengers per year
- 16.5 min journey time reliability just as important
- Tram Train Vehicles
  - Market testing with suppliers has proved availability of vehicles within budget
  - Further engagement with other bodies who will be buying tram trains
- Further detailed work required in Full Business Case to develop:
  - Detailed timetable
  - Design and construction of route
  - Vehicle procurement
  - Operation and Maintenance model

#### Key Risks:

- Rail Capacity
- Scope/ Costs
- Operating & Maintenance Models
- Technical and Regulatory issues
- Statutory Processes
- Procurement of Tram Trains
- Brexit
- Skills Availability

	Project Title: Member Authority:	NIRONA ACCISS RENARRINSHIRE COUNCI./GLASGOW CITY COUNCI.																
	Project Location:	Reference (Dasgow (Dasgow Apport to Disegow Central via PGS) Stephen Mdraden / Carol Convelly  * Last reporting period was to:																
	Project Manager: Date:	George Vi D3 Septer										Residual Risk Score This Reporting Period						
Date			Main Risk		escription	Inherent	Inherent	Inherent				Residual	Residual	Residual	Residu	Rank	Date	Move
Raised	Risk Ref	Status	Category	Challenge Impact		Impact	Probability	Risk Score	Rank	Owner	Controls Action	Impact	Probability	Risk Score		by#	Checked	since repo
ar-2015	AA001	Open	Financial	Delays in agreeing project scope	Leads to delay & extra cost. Potential of project not being delivered	4	3	12	High	C Connolly / S McFadden	Governance arrangements put in place to agree scope. Collegiate working with key stakeholders Transport Scotland,. NWR, Glasgow Airport) on scope and issues affecting scope.	4	3	12	High		03/09/15	1
ar-2015	4A002	Dpen	Financial	Project costs exceed available City Deal funding allocation.	Financial pressure on Councils' funding. Risk to delivery of project	4	3	12	High	C Connolly / S McFadden	crope and issues arrecting scope. Robust project management and cost control/cost management at all stages of development/delivery. Robust scrutiny of initial cost estimates; preparation of robust cost estimates and ongoing review at all stages.	4	2	8	High		03/09/15	•
ar-2015	4A012	Dpen			Desired solution cannot be delivered.	5	4	20	High	G Vincent / S McFadden	Sarly and continued engagement with NWIs and S address capacity invand. Moderss capacity invand. National sector of the sector of the sector of solution (rangement with Network Rail on Scotland Rail Study, Sarly of the sector of scotland sector of scotland while awaiting resolution of issues.	5	3	15	High		03/09/15	•
ar-2015	AA013	Open		Competition for capacity at Glasgow Central to accommodate new service.	Desired solution cannot be delivered.	5	4	20	High	G Vincent / S McFadden	Early and continued engagement with NWR and TS to address capacity issues and development of solution/way forward. Including: Engagement with Network Rail on Scotland Rail Study. Consideration to be given to 'alternative' solution while awaiting resolution of issues.	5	3	15	High		03/09/15	
ar-2015	44020	Open	Contractu al	Statutory Processes cause delay, amended design or construction process.	Delays delivery programme	5	4	20	High	G Vincent / B Walker	Early consideration of appropriate statutory process route (e.g. Planning powers, TWAS, Track Access agreements, etc.) and development of strategy, with legal input, to take forward process. Regular reviews of strategy with appropriate legal input.	4	3	12	High		03/09/15	
ar-2015	AA024	Open	Contractu al	Delays in procurement of 'rail units' affects implementation of operational service	Delay in implementation of operational service. Potential increase in cost for procurement.	4	4	16	High	G Vincent / B Walker	Entryresolution of "tachnical issues" to inform requirements for units. Early engagement with potential suppliers over design & availability of units. Timely development of procurement strategy.	4	3	12	High		03/09/15	
ar-2015		Open		Failure to adequately define project benefits (GVA) and put in place benefits realisation strategy affect progression through Gateways.	Delays delivery programme. Potential risk to grant funding income for development stages	4	3	12	High	McFadden	Dbtain clear understanding of Initial Region wide benefits outputs. Review assumptions and revise for business cases. Pul in place appropriate benefits realisation strategy. Programme Business Case will address GVA issues	2	2	4	Mediu m		03/09/15	
ar-2015			al	Appointments of all necessary Professional Services to accord with project programme	Disruption and Delay	4	3	12	High	Walker	Robust project management and reporting controls. Appropriate procurement strategy to be developed and implemented. Early engagement of consultants where possible. Early and ongoing engagement with Rotherham on skills requirements, procurement etc	3	2	6	Mediu m		03/09/15	
ar-2015		Open	y/legal	model affects Implementation of service.	Delay in implementation of operational service. Potential impact on revenue income could affect financial model.	4	3	12	High	G Vincent / S McFadden	Early engagement with stakeholders/potential stakeholders (e.g. NWR, TS, Franchise operator) to inform potential models. Timely development of necessary legal agreements.	3	3	9	Mediu m		03/09/15	•
ar-2015	AA014	Open	Physical/a ssets	Technical and regulatory ssues relating to design (e.g. Power supply, wheel/rail grofile, high floor/low floor, signalling, crash protection, etc.) affect deliverability of	Delays programme and leads to extra cost	4	3	12	High	G Vincent / S McFadden	Close liaison with Sheffield-Rotherham Tram Trial team over emerging solutions for issues. Early engagement with relevant stakeholders (e.g. NWR, TS, ORR) on issues and solutions.	3	2	6	Mediu m		03/09/15	



#### **Programme Milestones:**

- Outline Business Case Cabinet Approval\*
- Transport Scotland's HLOS (2019-2024)
- Update to Cabinet\*\*
- Annual Update to Cabinet
- Operational & Maintenance Model completed
- Infrastructure Tenders returned
- Rolling Stock Tenders returned
- Full Business Case Cabinet Approval
- Construction Completion
- System testing
- System Operational

13 December 2016 June 2017 Summer 2017 Summer 2018/ 2019/ 2020 Spring 2021 Autumn 2021 Autumn 2021 Autumn 2021 Summer 2024 Summer-Late 2024 Early 2025

#### \*seeking release of funding to progress FBC (up to £14m)

\*\* Report to Cabinet on progress on project being included in HLOS (obtaining agreement with Transport Scotland to include it in their future rail planning proposals)

•Potential for Programme Acceleration (1-1.5 years)

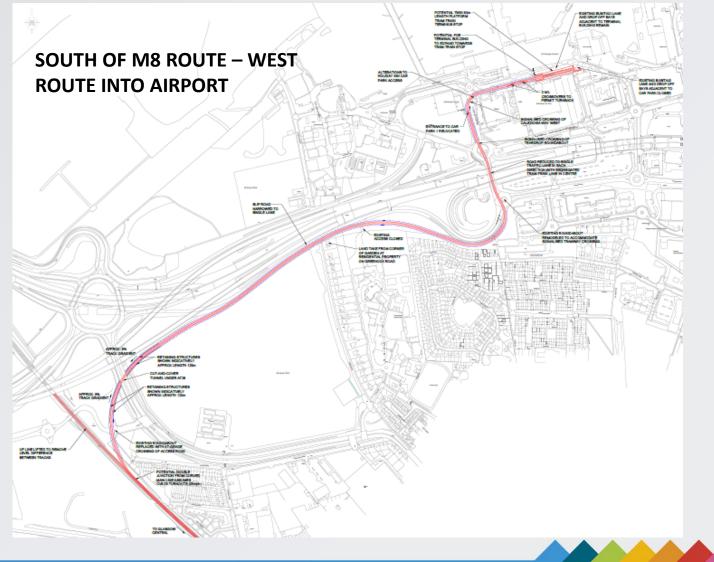
-requires assistance from Transport Scotland and Network Rail to reduce timescales for Statutory Processes and programming/ fast tracking access to heavy rail network for construction and service testing.





### **ANY QUESTIONS?**

















The World

### **Onward connectivity**

Benefitting business travellers, holiday makers and airport workers

