

95 Bothwell Street
 Glasgow, Scotland G2 7HX
 United Kingdom
 T +44 (0)141 243 8000
 F +44 (0)141 226 3109
 www.jacobs.com

Subject	Option Generation & Sifting: Executive Summary	Project Name	Aberdeen City Region Deal Strategic Transport Appraisal
		Project No.	B2289FAT06
From	Calum Robertson		
Date	July 22, 2019		

1.1 Introduction

Following the publishing of the Interim Aberdeen City Region Deal Strategic Transport Appraisal: Pre-Appraisal in June 2018, Jacobs was commissioned in October 2018 to prepare an Option Generation and Sifting Report to act as an addendum to the Interim Appraisal Report. This note provides a high level summary of the findings of Option Generation and Sifting Report.

1.2 Option Generation and Sifting Framework Overview

The process used to generate and sift options is outlined in Figure 1 to the right.

The generation of options was informed by:

- Holding three Option Generation Workshops with Officers, Key Stakeholders and Elected Members.
- Detailed review by the Jacobs Project Team
- Collaborative review with the Project and Client Team

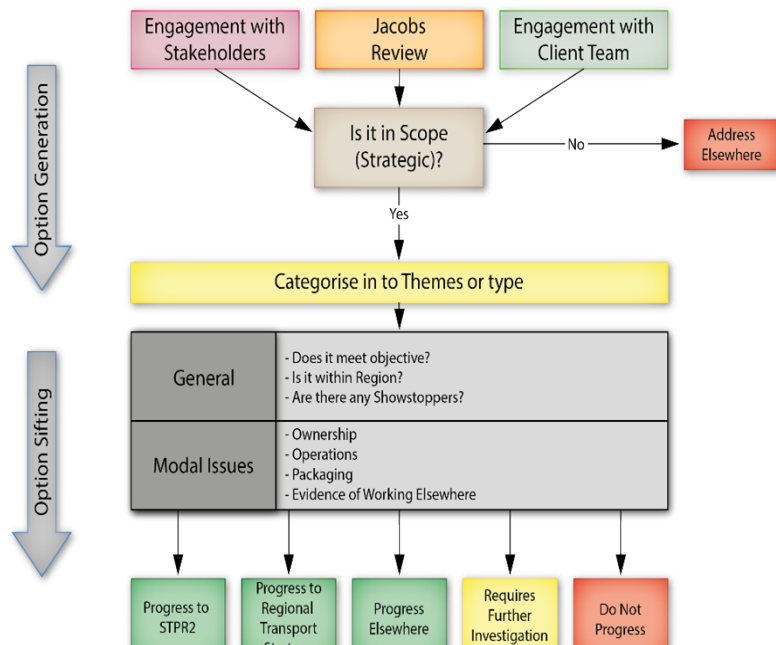


Figure 1 - Option Generation and Sifting Framework

1.3 Option Generation

Through the Project and Client Team reviews and the engagement workshops, a total of 774 options were generated. An initial 'cleaning' exercise was then undertaken by Jacobs to reduce that number to a manageable level. This involved the removal of options that were not sufficiently defined, consolidation and grouping of similar options by type and some minor refinement of option wording. This process resulted in a list of 94 options, which can be broken down into the following types:

Table 1 - Breakdown of Option Types

Types of Options (based on breakout table modes)	No. of Options
Active Travel	31
Public Transport and Freight	27
Roads	17
Technology/Behaviour	19
Total	94

The options list then underwent a second review to further package and consolidate options, and resulted in 51 options being retained to progress into the option sifting stage.

1.4 Option Sifting

The option sifting, to qualitatively gauge the performance of each option against the criteria shown in Figure 1, was then undertaken using a multi-step process. The key steps involved were as follows:

1. Sifting out of options which were not within scope – i.e. options which are not considered strategic (given the strategic nature of the study)
2. Sifting out of options which do not provide at least a minor contribution to one or more of the 6 study objectives
3. Sense check of any options which are out with the region (given the regionally specific nature of the study)
4. Sifting out of options that presented any model issues – under the headings of:
 - a. Ownership – who is likely to have responsibility in the delivery and maintenance of the option, such as public or private sectors, or a mixture of both, and whether there is likely to be insurmountable issues with this meaning an option must be sifted out;
 - b. Operations – to what extent does the option affect the operation of the existing transport network, and will it cause any operational issues that may cause it to be undeliverable, and as such should be sifted out; and / or,
 - c. Packaging - is the option able to be delivered on its own, or would it be more successful if delivered as a package with other options. This was not used to sift out options but rather reduce the overall number of options through consolidation.
5. Sifting out of options which are ‘showstoppers’ - i.e. are unlikely to be deliverable

The sifting process outlined above resulted in the retention of a total of 42 options, as identified in Table 2.

95 Bothwell Street
 Glasgow, Scotland G2 7HX
 United Kingdom
 T +44 (0)141 243 8000
 F +44 (0)141 226 3109
 www.jacobs.com

Table 2 - Summary of Retained Options

Summary Table of Recommended Options									
No	Type	Option Name	Transport Planning Objectives						Rationale for Outcome
			1	2	3	4	5	6	
1	Active Travel	Upgrade existing routes and develop a network of high quality and safe active travel routes across the region	✓✓	✓	✓✓✓	✓✓	✓	✓✓✓	Option is likely to require TS to act as National Lead, with responsibility for development and delivery most likely to be through the RTS and LTS.
2	Active Travel	Increase the provision and quality of active travel facilities across the Region	✓✓	○	✓	○	✓	✓✓	This option is recommended to progress to the RTS as it has positive benefits for both local and regional aspects of the active travel network in the North East.
3	Active Travel	Implement a regional cycle hire scheme	✓✓	○	✓	✓	✓	○	This option is recommended for consideration in the RTS due to the cumulative positive impact at the local level leading to a greater impact at regional level.
4	Active Travel	Continue development and roll out of Regional Active Travel Promotion Strategy with innovative awareness campaigns and incentives to encourage people to travel by active modes	✓	✓	✓✓✓	✓	✓	✓	This option is recommended for consideration in both STPR2 and the RTS due to the cumulative positive impact at the local level leading to a greater impact at regional level; and potential delivery as part of a national active travel promotional strategy.
5	Bus	Implement BRT/Bus Priority schemes which improve bus service journey times and reliability on key corridors in the City and Towns in the Region	✓✓	✓✓	✓✓	✓	✓✓✓	✓✓	This option is recommended to be considered for the RTS. This option is likely to have positive benefits to journey time and journey time reliability for both local and regional bus services in Aberdeen City and towns across the region.
6	Bus	Consider future ownership/regulation/partnership models for buses - working with North East Bus Alliance	✓✓	✓	✓	✓✓	✓✓	○	This option is recommended to be Progressed Elsewhere - Scottish Government - as it requires legislation change at Scottish Government level to give provisions for Local Authorities to implement new ownership/regulation models for bus services. The potential policy/legal challenges and the acceptability issues may mean Showstoppers.

Summary Table of Recommended Options									
No	Type	Option Name	Transport Planning Objectives						Rationale for Outcome
7	Bus	Demand Responsive Services	✓✓✓	✓	○	✓	✓✓	○	This option is recommended for consideration in the RTS to build on current experience in the region. Considered as having a regional level of impact due to the cumulative positive impacts across the towns and city, and also likely to have a positive impact on equality.
8	Freight	Development of an integrated, multimodal network of freight hubs across the Region	○	✓✓✓	✓	○	○	✓✓	This option is recommended to be considered in both STPR2 and the RTS as implementation should be progressed at national and regional levels to positively influence the logistics chain, ensure consistency across regions, and optimise 'Hub' locations.
9	Freight	Review provision of Rest Stops on trunk roads and key freight routes for HGVs	○	✓	✓	○	○	✓✓	This option is recommended to be considered in both STPR2 and the RTS due to the positive impact it should have on both national and regional freight traffic, the need for consistency across the regions and to optimise rest stop locations.
10	Freight	Improve road access to all regional ports	○	✓✓	○	○	○	✓✓	This option is recommended to be considered in STPR2 and the RTS due to the significant contribution the region's ports have at the national level. Links to the Northern Isles will also presumably inform the national Ferries Plan work.
11	Policy	Use price mechanisms to manage demand	○	○	✓✓	✓✓	✓✓	○	Recommended to be considered in STPR2 given there are tools within this option that would impact across the trunk road network as well as at the regional and local level.
12	Policy	Revised approach to Development Planning Policy	✓✓✓	✓	✓✓	✓✓✓	✓✓	✓	This option is recommended for consideration in the RTS, in conjunction with Local and Regional Planning Bodies, as it should take into account the local and regional planning considerations that are specific to the North East, in order to create a new approach to transport in development planning policy.
13	Policy	Maintain and expand routes* and destinations (domestic and international) served by Aberdeen International Airport *Note: scope of STPR2 extends only to domestic air routes.	○	✓✓	○	○	○	✓	This option is recommended for consideration in the RTS given the importance of air travel to the region. It is also recommended for consideration STPR2, however it is noted the scope of STPR2 only extends to domestic air routes.
14	Policy	Maintain and enhance maritime services serving Aberdeen, and connections to Orkney and Shetland	✓	✓✓	○	○	○	✓	This option is recommended for consideration in both STPR2 and the RTS given the regional importance of ferry routes to the NE region, the national importance of the connecting services to the Northern Isles and the potential for expansion of the visitor cruise ship market.

Summary Table of Recommended Options									
No	Type	Option Name	Transport Planning Objectives						Rationale for Outcome
15	Public Transport	Provision of high quality Park and Ride and multimodal interchange facilities, and supporting services	✓✓	✓	✓✓	✓✓	✓✓	✓	This option is recommended to be considered in both STPR2 and RTS as park and ride sites exist (and new ones as part of this intervention) on regional and nationally significant routes (i.e. rail network/stations, intercity bus services).
16	Public Transport	Improved marketing, information and digital connectivity (on and off) Public Transport services	✓✓	✓	○	○	✓✓	✓	This option is recommended for consideration in both STPR2 and the RTS as it involves increasing provision of public transport information across modes. This is not restricted to services within the North East region so should be considered at a national level to take into account regional and cross-border services, consistency of standards, hardware, comms etc.
17	Public Transport	Introduce new fares model for public transport (potentially linked to MaaS)	✓✓	✓✓	○	○	✓✓	○	This option is recommended for consideration in both STPR2 and the RTS as it involves the integration of tickets across modes, simplification of fare structures across modes/services that are not restricted to the North East region, as well as regional specific services.
18	Public Transport	Development of fully integrated public transport services across the region, including timetabling and multimodal interchanges/attractors	✓✓	✓✓	✓	✓	✓✓	✓	This option is recommended for consideration in both STPR2 and the RTS as the intervention involves improving timetable integration between all modes (bus, rail, ferry and air) within the North East, other regions, Nationally and Internationally
19	Public Transport	Timetable and capacity enhancements to deliver faster/more frequent services on core corridors	✓✓	✓✓✓	✓	○	✓✓✓	✓	This option is recommended for consideration in both STPR2 and the RTS as the intervention involves improving timetable and capacity enhancements to bus and rail services within the North East and extending to other regions in Scotland (and to England for cross-border bus and rail services).
20	Public Transport	Light Rail/Tram	✓✓	✓	✓✓	✓	✓✓✓	✓	Recommended for consideration in the RTS as similar examples of Fastlink (Glasgow) and Tram (Edinburgh).
21	Public Transport	Improve City Centre connections between Bus and Rail Stations	✓✓	✓	✓	✓✓	✓✓	✓	This option is recommended to be considered in the RTS as the intervention is of Regional significance and likely be delivered at this level.
22	Public Transport	Public Transport Connections to Airport	✓	✓✓	✓✓	✓✓	✓✓✓	✓	This option is recommended to be considered in both STPR2 and the RTS as the intervention would have regional and national importance - both for staff working at the airport, and for domestic/international air journeys

Summary Table of Recommended Options									
No	Type	Option Name	Transport Planning Objectives						Rationale for Outcome
23	Rail	Expand the rail network in the North East (to the benefit of both Passenger and Freight users) via new and/or reinstated railway lines	✓✓	✓✓	✓	✓✓	✓✓✓	✓✓	This option is recommended for consideration in both STPR2 and the RTS as the intervention would likely have implications on across the wider national rail network, as well as the rail network within the region.
24	Rail	New Local Rail Stations on existing local routes	✓✓	✓✓	✓	✓✓	✓✓	✓	This option is recommended for consideration in both STPR2 and the RTS as the intervention would likely have implications on across the wider national rail network, as well as the rail network within the region.
25	Rail	Improve Strategic Inter-City Rail Connections	✓✓	✓✓	✓	✓✓	✓✓	✓✓	This option is recommended for consideration in both STPR2 and the RTS as the intervention would likely have implications on across the wider national rail network, as well as the rail network within the region.
26	Road	A90/A952 Upgrade Ellon to Peterhead/Fraserburgh	○	✓✓✓	○	○	○	✓✓	This option is recommended for consideration in both STPR2 and the RTS as the intervention would involve changes to the trunk road network between Aberdeen and Fraserburgh - a key corridor for commuter, freight and strategic movements - therefore of regional and national significance.
27	Road	A90 Upgrade south of Aberdeen to Dundee (including the Kingsway)	○	✓✓✓	○	○	○	✓✓	This option is recommended for consideration in both STPR2 and the RTS as the intervention would involve changes the trunk road network to the south of Aberdeen - a key corridor for commuter, freight and strategic movements - therefore of regional and national significance.
28	Road	North/North West Radial Route Action Plans incl. delivering the A947 Route Action Plan	○	✓✓	○	○	○	✓✓	This option is recommended for consideration in the RTS as the North/North West radial routes, notably the A947, perform a regionally significant function.
29	Road	Western Radial Routes Action Plans	○	✓✓	○	○	○	✓✓	This option is recommended for consideration in the RTS as these routes perform a regionally significant function.
30	Road	Route Action Plan on former A90/newly designated A92 between Blackdog and Stonehaven following AWPR completion	○	✓✓	○	○	○	✓✓	This option is recommended for consideration in both STPR2 and the RTS because of the significant role this section of the A90/newly designated A92 has at a regional and national level on access (for example, the Dee and Don crossings, and access to Aberdeen).

Summary Table of Recommended Options									
No	Type	Option Name	Transport Planning Objectives						Rationale for Outcome
31	Road	Consolidated Asset Management and Prioritisation System	○	✓✓	✓	○	○	✓✓✓	This option is recommended as part of the RTS as it is the largely the remit of Local Authorities to maintain transport infrastructure (excl. for example Trunk Roads and Rail Network). This could however be incorporated into a National Asset Management and Prioritisation System, therefore, is also recommended for consideration in STPR2.
32	Road	Introduce 20mph zones	✓	○	✓✓	○	○	✓✓	This option is recommended to be included as part of the RTS as it takes a region-specific approach to implementing 20mph speed limits, although it is likely to have positive impacts at the local level.
33	Technology	ITS to manage vehicle entry to lanes and zones based on vehicle types, time of day, real-time emissions and congestion levels	✓	✓	✓✓	○	✓✓	✓	This option is recommended to be considered in the RTS as aspects of it are region-specific and would need to be administered by the Local Authorities. Aspects would most likely be implemented on key access routes to the city and larger towns, and is likely to affect local and regional movements.
34	Technology	Wayfinding App for Tourists	✓	○	✓	○	○	✓	This option has been recommended to be considered in the RTS as it should consider the local and regional visitor hotspots and linking them with transport routes to create the trails.
35	Technology	Implement new technologies strategy for the region, across modes	✓✓	○	✓✓✓	○	✓	✓	This option has been recommended for consideration in STPR and the RTS as it should consider the local and regional needs and benefits of such technology, as well as consider local knowledge/research (e.g. alternative energy & fuels - Hydrogen) which could assist in the delivery of new technologies across the region. At the national level this should consider for example the impact of alternative fuels including Hydrogen for ferries, and the need for consistency of standards and optimisation of a national network of charging/fuelling stations.
36	Technology	Enhance network monitoring capability to collect real-time user information across all modes, to input to journey planning tools and real-time network management	✓	✓✓	✓	○	✓✓	✓	This option is recommended to be progressed to the RTS as it is a regional-based system. It could however complement a National Monitoring System
37	Technology	Policy support for a digital working strategy (including Broadband Connectivity Improvements) for the region to reduce peak-time travel, and	○	✓✓✓	✓✓✓	✓✓	✓	✓	This option is recommended to be progressed to the RTS as it is seen as a key option in influencing travel decisions and expanding travel choices. Not by itself a direct transport function or responsibility but will have a significant part to play in the future development of the region.

Summary Table of Recommended Options									
No.	Type	Option Name	Transport Planning Objectives						Rationale for Outcome
		encourage communities to develop potential working hubs							Also needs close engagement with Scottish Government on broadband connectivity roll-out programmes.
38	Technology	Promotion of shared mobility services, including car clubs and facilitation of MaaS (mobility-as-a-service) providers	✓✓	✓✓	✓	○	✓✓	○	This option is recommended for consideration the RTS and Progress Elsewhere - NTS. The North East is already investigating MaaS Technology, however it is considered that Scottish Government/Transport Scotland would need to take a national lead on MaaS Technology, and examine the impacts (may be positive and/or negative) from a transport perspective.
39	Various	Infrastructure measures to complement City centre Masterplan proposals	✓✓	○	✓✓	✓	✓	✓✓	This option has been recommended to be progressed to the RTS and Progress Elsewhere - CCMP - as it identifies interventions which mainly have a local focus, with regional benefits.
40	Various	Improved access to healthcare strategy	✓✓	○	✓	✓✓	✓✓	✓✓	This option has been recommended to be considered both in the RTS and 'Progress Elsewhere'. - The RTS should consider the healthcare needs across the region, the different levels of care and emergency provision, and the catchments served; and - Progress Elsewhere which references working with NHS and Third Sector Partners
41	Various	Programme of access for all improvements at all key public transport points, and within urban areas, to benefit those who may have mobility impairment	✓✓✓	○	✓	✓	✓✓	✓✓	This option has been recommended to be considered in the RTS to improve the local and regional mobility access, ensure consistency across the region in terms of implementation and provision.
42	Funding	Local Transport Funding	✓✓	✓	○	✓✓	✓✓	✓✓	This option has been recommended to be considered in the RTS and also Progress Elsewhere - Scottish Government, LTS - as it consists of funding mechanisms that may be specifically tied to development planning, and what provisions may or may not be contained in the Planning Bill. - It would also be for the relevant authorities to consider and implement as a 'ring-fenced' funding stream. - Would require legislation to Progress Elsewhere - Scottish Government - and acceptability barriers may be Showstoppers for this option.



Memorandum

95 Bothwell Street
Glasgow, Scotland G2 7HX
United Kingdom
T +44 (0)141 243 8000
F +44 (0)141 226 3109
www.jacobs.com