



MTS STAG

Category Assessment Summary
And
Deriving Options for Testing

MTS – STAG Analysis

Category Assessment Summary and Deriving Options for Testing

1. INTRODUCTION

This document combines the performance assessments for each individual category against the objectives and problems and opportunities to give a single final summary comment and overall grading score per category. The individual category gradings are then used to reduce the 12 previously identified options to 2 or 3 for further more detailed assessment. The document should therefore be read in conjunction with the other STAG analysis documents covering Objectives, Problems and Opportunities, Options and Assessments.

The work within this report was carried out by a sub group of the MTS Implementation team. The overall summary comments and gradings developed for each category within the ‘Assessment of Categories Against Objectives’ and ‘Assessment of Categories against Problems and Opportunities’ were considered and a combined final summary comment and grading derived for each category as shown below.

2. CATEGORY ASSESSMENT SUMMARY

These summaries are based upon the gradings and summary comments of the categories against both the problems and objectives.

<u>Category</u>	<u>Final summary comment</u>	<u>Overall grading</u>
Existing Infrastructure Maintenance	Maintenance is an essential component of any Transportation Strategy, as indicated by existing infrastructure maintenance being included in every option to be considered. As shown by the assessment, however, Existing Infrastructure Maintenance on its own does little to resolve the identified problems or meet the objectives.	0
WPR	The Western Peripheral Route has a significant role to play as part of the strategy’s attempts to solve problems and meet objectives. Particularly in conjunction with other proposals, its influence on the success of the strategy is important. This comes across clearly in the assessment. Linked to Strategic Routes it has an impact on the peripherality issue. Linked to public transport improvements and pedestrian priorities it has an essential role to play in the traffic reduction targets set for the City.	+2

Category	Final summary comment	Overall grading
Strategic Routes	In conjunction with the Western Peripheral Route, this element is the major component in reducing the peripherality of the North East. This issue is a growing issue with the advent of working time directives and driving time limits. Reducing lost time due to congestion and relocating traffic onto appropriate roads will be a significant factor in addressing business costs and public perception of the remoteness of the area.	+1
Urban Roads	The construction of the Urban Road improvements as an element of the Strategy goes against current Government and Local Government policies. Specific elements of the Urban Road Upgrading programme could be damaging to the natural and built environment. Some elements may, however, be useful in helping achieve other proposals. These elements need to be examined individually, but as a group the overall impact is limited in terms of resolving the problems and meeting the objectives resulting in a neutral assessment.	0
Car Park Construction	Further car parking construction could only be justified if the strategy was intended to increase traffic levels. Therefore this element is closely linked to the Urban Road Upgrading and would only be considered if that element were to be part of the Strategy. In overall terms this does little to meet the objectives and is particularly poor at resolving the problems.	-2
Bus Priorities	Increasing bus passenger numbers helps resolve the identified problems and meets many of the objectives resulting in strong positive benefits in both areas.	+2
Park & Ride	There are many people who wish to access Aberdeen who are not well served by public transport due to the dispersed nature of the population in this region. For these people to be able to maintain accessibility without adding to congestion and pollution in the worst areas, Park & Ride is a real viable alternative. Provision of public transport from all areas to meet the many and varied journey requirements would not be economically viable. Park and Ride also performed strongly in the assessment	+1

Category	Final summary comment	Overall grading
Cycling	For many shorter journeys, cycling could play an important part in reducing congestion and pollution. It is also the most sustainable and healthy option for these medium length journeys. Although limited in the extent to which this mode can be a realistic option, there is nonetheless the possibility of creating significant improvements for limited investment.	+1
Pedestrian Priorities	A substantial number of journeys made are short length journeys that could be undertaken by walking. Many of these journeys are currently undertaken by car through perceived convenience or safety concerns. Positive intervention to improve pedestrian priorities has the potential to generate achievement in both resolving problems and meeting objectives. This element scored strongly in both areas of assessment.	+2
Crossrail	This proposal has a double advantage of reducing the peripherality issue and generating a local commuter service. Much of the North East is not served by rail and it is therefore important to make best use of this facility where it is available. This element shows good benefits with the only concern being the deliverability of capital financing.	+1
Mass Transit	It is clear that a Mass Transit system could provide good benefits in both resolving problems and achieving objectives. However within the timescale of this assessment (16 years from 1999), it is difficult to see how an economic case could be made for either the capital or revenue costs associated with this proposal. Other schemes require road user charging to become affordable. For the purposes of this study this is not an option at this time. If the scheme is not viable in financial terms it cannot be built therefore the benefits cannot be achieved. Since the proposal cannot be achieved within the timescale it necessarily grades negatively. Consequently, consideration of this type of proposal must necessarily be longer term.	-2

Category	Final summary comment	Overall grading
Strategic Rail	Improvements to the Strategic Rail system are essential to encourage people to choose rail over car. Due to limitations on the system it is as quick to use a car for journeys to the Central Belt, Inverness and indeed many parts of England as it is to use the train. These limitations on the rail system add to the perception of peripherality of the North East. This element performs particularly well in meeting the objectives.	+1
Harbours	The North East has an extensive coastline and 2 major harbours. There are significant opportunities available to increase the usage of sea borne transport for both passengers and freight to and from the North East of Scotland. Extending the sea freight routes and links to continental Europe would help to reduce peripherality issues.	+1
Airports	It is essential that the North East has excellent air links throughout Britain and continental Europe to reduce the peripherality of the area. The further you are from the main markets and main decision making centres, the more important it becomes to provide good linkages. Improved choice of destination will reduce the need to travel via other airports and would increase the number of visitors to the North East.	+2
Freight	Improved rail freight opportunities are important to the North East to ensure goods can be transferred to markets by rail rather than road. This is particularly true for our area due to the high bulk/low value nature of many of the goods transported to/from the North East.	+1
Public Transport Enhancements	The benefits to be gained from public transport enhancements are significant, however the cost of these and the ongoing nature of those costs would be a significant drain on the Local Authorities finances. The true value of this ongoing revenue expenditure could only be determined through proper assessment in a multi-modal model as part of a part 2 assessment.	+1

Table 1

3. DERIVING OPTIONS FOR TESTING

The various individual categories had previously been combined in various groupings to give 12 possible options for testing. In deriving some of the options, it was found that some individual categories naturally group with others to give a larger category of similar schemes that can be considered as a whole when combining categories for option testing. This was described within the ‘Option Generation and Sifting’ document. The individual gradings given to the categories that were thought to form a mutual grouping are:

Group Title	Consisting of	Grading	Comments
Roads	Urban Roads Car Park Construction	0	Would require to be funded by local authorities. No longer in line with current Gov. policies
		-1	
Local Transport Issues	Bus Priorities Park & Ride Cycling Pedestrian Priorities Crossrail	+2	All promote modal choice on a local scale. Public Transport Funding is available or has already been awarded towards several of these
		+1	
		+1	
		+2	
		+1	
External Links	Strategic Rail Harbours Airport	+1	All aimed at reducing the peripherality of the North East. Funding and delivery of all are outwith control of Nestrans
		+1	
		+2	

Table 2

From this table it can be seen that each category in the “Local Transport Issues” and the “External Links” is positive. None of the combined categories gradings were found to be completely contradictory with each other, which further supports the previously proposed consideration of these categories as a group. This is also in accordance with the Sustainability Study which found that any option including all of the “Local Transport Issues” and/or “External Links” is likely to be better than one including only part of each grouping.

The following 12 possible options, comprising of the individual and grouped categories described above, were identified for testing in the ‘Option Generation and Sifting’ document:

Projects	Test Number											
	1	2	3	4	5	6	7	8	9	10	11	12
Existing Infrastructure Maintenance	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
WPR									✓	✓	✓	✓
Strategic Routes							✓	✓	✓	✓	✓	✓
Roads							✓	✓	✓		✓	✓
Local Transpt Issues		✓	✓	✓	✓	✓		✓	✓	✓	✓	✓
Mass Transit						✓						✓
External Links				✓	✓	✓				✓	✓	✓
Freight					✓	✓				✓	✓	✓
Public Transpt Enhancements			✓									✓

Table 3

The Existing Infrastructure Maintenance is seen as the Do Minimum scenario and is therefore included in all 12 tests. Test 12 includes all project categories.

4. SELECTION OF PREFERRED OPTIONS FOR MORE DETAILED ANALYSIS

The overall grading of the combined performance of the categories against the objectives and problems given in Table 1 was used to reduce the 12 testing options in Table 3 to a more manageable number for further more detailed analysis. The reasoning behind the selection to progress or eliminate each of the identified options is detailed below.

Test 1 = Do Minimum

Maintenance on its own does little to resolve the identified problems or meet the objectives and received a neutral grading. It is less attractive on its own therefore than with other categories that indicate benefit. It is recommended that the Do Minimum scenario is not therefore brought forward for further consideration.

Test 2 = Do Min + Local Transport Issues

This scenario does not address the peripherality issues in the North East. It also must have less benefit than test 3 which includes the positively graded public transport enhancements in addition to all the test 2 categories.

Test 3 = Test 2 + Public Transport Enhancements

This test, although having greater benefit than test 2, still fails to address the peripherality issues in the North East.

Test 4 = Test 2 + External Links

Helps address the peripherality issues that test 2 failed to, but must have less benefit than test 5, which includes the positively graded freight in addition to all the test 4 categories.

Test 5 = Test 4 + Freight

This test addresses the peripherality issues and provides viable multi modal alternatives, making it a possible option for further testing. Although not previously proposed, there could be benefit in also including the positively graded public transport enhancements. It is recommended that this revised test be considered further.

Test 6 = Test 5 + Mass Transit

Mass Transit is unlikely to be delivered within the timescale of this assessment due to the scale of funding required and was therefore given a large negative grading in the assessment of individual categories against problems and objectives. The inclusion of Mass Transit therefore prevents this test from being considered further.

Test 7 = Do Min + Strategic Roads + Roads

This test fails to provide modal choice alternatives or address any of the problems associated with peripherality in the North East. The further car park construction contained within roads was also given a negative grading against both meeting objectives and problem solving as this strategy would only encourage greater car use and therefore not comply with current Government policies towards sustainable transport. It is therefore recommended that this test is not considered further.

Test 8 = Test 7 + Local Transport Issues

Although modal choice alternatives are included in this test, the peripherality issues have not been addressed and the negatively graded car park construction is included. It is therefore recommended that this test is not considered further.

Test 9 = Test 8 + WPR

Although the inclusion of the Western Peripheral Route helps to address the issue of peripherality, there must be greater benefit associated with test 10 which also includes the positively graded External Links criteria. The negatively graded car park construction is also included and it is therefore recommended that this test option is not considered further.

Test 10 = Do Min + WPR + Strategic Roads + Local Transport Issues + External Links + Freight

This test addresses the peripherality issues and provides viable multi modal alternatives. It does not include any categories that were graded negatively in their individual assessment against the problems and objectives. This test is therefore recommended for further consideration.

Test 11 = Test 10 + Roads

The addition of urban roads and car park construction to the categories combined in test 10 gives no further benefit as they were graded as neutral and negative respectively. It is therefore recommended that this test is not considered further

Test 12 = All Proposed Projects

Mass Transit is unlikely to be delivered within the timescale of this assessment due to the scale of funding required and was therefore given a large negative grading in the assessment of individual categories against problems and objectives. The inclusion of Mass Transit therefore prevents this test from being considered further.

5. CONCLUSIONS

The tests recommended for further analysis, following the combination of various categories and based upon their individual performance against the problems and objectives, are as follows:

Projects \ Test No.	Revised Test 5A	Test 10
Existing Infrastructure Maintenance	✓	✓
Western Peripheral Route		✓
Strategic Routes		✓
Urban Roads		
Car Park Construction		
Bus Priorities	✓	✓
Park & Ride	✓	✓
Cycling	✓	✓
Pedestrian Priorities	✓	✓
Crossrail	✓	✓
Mass Transit		
Strategic Rail	✓	✓
Harbours	✓	✓
Airports	✓	✓
Freight	✓	✓
Public Transport Enhancements	✓	

As can be seen, both tests include the existing infrastructure maintenance, local transport issues, external links and freight. The main contrast that is therefore being tested is the performance of the shared categories with either public transport enhancements or the Western Peripheral Route and Strategic Routes.

These tests will provide a direct comparison between the costs (albeit debt repayment for WPR and revenue costs for PT enhancements) and benefits of the WPR and public transport enhancements. Costs for each scheme are estimated (for a 50% fare reduction) at £10m/annum.

The tests can be built up by creating the original test 5. The two tests can be carried out on that base. If the public transport enhancements test and the WPR test show good benefits then the option 10 could be extended to include public transport enhancements to determine the combined effects, in effect a test 10A.