

8 COMPARATIVE ROUTE APPRAISAL

8.1 Introduction

As noted in the Stage 1 Report, in addition to carrying out a scheme appraisal for the Stage 1 Options, it was felt that a quantitative assessment should also be carried out as part of the study. Therefore, Options 9 and 10 have also undergone a comparative appraisal, assessed against various criteria which fell under three main categories of Engineering, Economic and Environmental. Points are awarded on a seven-point scale for each criterion:

- +3 = largely beneficial
- +2 = moderately beneficial
- +1 = slightly beneficial
- 0 = neutral
- 1 = slightly adverse
- 2 = moderately adverse
- 3 = largely adverse

The methodology for scoring the options in the three main categories is described in detail in chapter 8 of the Stage 1 Report.

8.2 Engineering Route Appraisal

Route Options were scored against eight engineering criteria: geometry; drainage; structures; buildability; services; earthworks; pavement and property take. For this Addendum, the 'construction cost' criteria has been renamed the 'pavement' criteria, as it considers only the cost of pavement for each option.

For each engineering criteria options were assessed against existing conditions. Therefore, only geometry could be considered beneficial, as the standard of carriageway proposed would be an improvement on existing conditions. All other criteria scored adversely, as construction of the new carriageway will incur costs and cause disruption.

8.2.1 Overall Engineering Scores

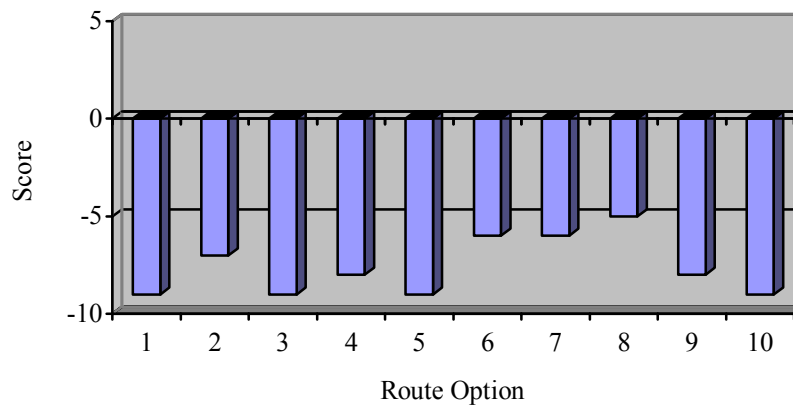
The scores allocated to Options 9 and 10 under the engineering route appraisal are detailed in the table below:

Route Option	Geometry	Drainage	Structures	Buildability	Services	Earthworks	Pavement	Property Take
9	2	-2	-2	0	-1	-2	-2	-1
10	1	-1	-1	-2	-2	-1	-1	-2

Each of the scores from the eight individual engineering criteria were added together to derive the total engineering scores for Options 9 and 10. This aggregated score gives an overall assessment of the impact the construction of each Route Option would have. The results of the engineering scheme assessment are listed in tabular and chart form below:

Engineering	Opt1	Opt2	Opt3	Opt4	Opt5	Opt6	Opt7	Opt8	Opt9	Opt10
Geometry	1	1	1	2	1	3	3	3	2	1
Drainage	-1	-1	0	-1	-1	-2	-2	-2	-2	-1
Structures	-2	-2	-1	-2	-2	-1	-1	-1	-2	-1
Buildability	-1	-1	-2	0	-1	-1	0	0	0	-2
Services	-1	-1	-2	-1	-1	-1	-1	-1	-1	-2
Earthworks	-1	-1	-1	-2	-1	-2	-2	-1	-2	-1
Pavement	-2	-1	-1	-2	-2	-1	-2	-2	-2	-1
Property Take	-2	-1	-3	-2	-2	-1	-1	-1	-1	-2
Total	-9	-7	-9	-8	-9	-6	-6	-5	-8	-9

Overall Engineering Scores



8.3 Environmental Route Appraisal

Route Options were assessed against twelve environmental criterion: air quality; cultural heritage; disruption due to construction; ecology & nature conservation; landscape & visual; land use; traffic noise & vibration; pedestrian, cyclist, equestrian & community effects, vehicle travellers; water quality & drainage; geology & soils; and policies & plans. For each environmental criterion, options were compared against existing conditions. Hence from an environmental perspective, which includes both physical and human attributes, some aspects will score positively, i.e. a benefit over the existing situation, whereas other aspects will score negatively, i.e. a dis-benefit over the existing situation.

The scoring methodology for all the environmental criteria is described in detail in Chapter 8.3 of the Stage 1 Report.

8.3.1 Air Quality

Option 9 would affect fewer properties than the existing route with only 37 properties within 200m of the route, compared to 73 within 200m of the existing A6.

Option 10 would affect a total of 65 properties by the proposed route. Although marginally less than the 73 properties which fall within 200m of the existing route, Option 10 is still within 100m of the Moneynick Primary School.

Route Option 9 Score = 2
Route Option 10 Score = 0

8.3.2 Cultural Heritage

Option 9 would impact directly on two cultural heritage sites, a Circular Enclosure recorded from aerial photography and another Enclosure. Option 10 would directly affect the former Flax Mill site on the Artlone Road, and would pass within 50m of an Enclosure.

Route Option 9 Score = -2
Route Option 10 Score = -2

8.3.3 Disruption Due to Construction

There would be delay and disruption to strategic traffic on a key transport corridor and on local connector roads during construction. There would be noise, vibration, traffic, visual and air quality impacts at housing and commercial businesses in the vicinity of the construction works. There is a potential risk of accident spillage affecting watercourses during construction. There may be sediment and bank habitat disturbance on watercourses. Option 9 would cause some disruption as it crosses the existing A6 once, but disruption is then minimised as it remains off-line. Option 10 would cause major disruption, as it involves extensive on-line widening of the existing A6.

Route Option 9 Score = -1
Route Option 10 Score = -3

8.3.4 Ecology & Nature Conservation

Overall the area is considered to be of low ecological value and of only local importance. Loss of woodland habitat would be minimal. As with any road improvement scheme, it is expected that a considerable amount of hedgerow will be lost. Further surveys would be required to establish the ecological significance of this. Both options cause some degree of disturbance to the local ecology and habitats, therefore both score negatively. Option 9 is entirely off-line resulting in significant habitat loss. Where Option 10 is near on-line, there would be limited habitat loss, with hedgerow and some habitat loss at off-line sections.

Route Option 9 Score = -2
Route Option 10 Score = -1

8.3.5 Landscape & Visual

Option 9 is entirely off-line and therefore would be more visually intrusive, particularly as it cuts across drumlim topography. Option 10 has a large cutting at Drumaslough Hill. Option 10 would be more visually intrusive through off-line sections, for example at Moneynick.

Route Option 9 Score = -2
Route Option 10 Score = -2

8.3.6 Land Use

In terms of potential demolition, Option 9 would necessitate the loss of three residential properties and one agricultural shed, and Option 10 would require nine residential properties. Both options would result in agricultural field severance, though Option 10 would have less severance than Option 9. Both options traverse areas of Best and Most Versatile (BMV) agricultural land, with Option 9 resulting in a significant loss of BMV land, and Option 10 resulting in substantially less loss of BMV land. The following scores reflect the combined land and property loss for each option i.e. Option 9, which has higher land loss but less property loss compared with Option 10, which has lower land loss but higher property take.

Route Option 9 Score = -2
Route Option 10 Score = -3

8.3.7 Traffic Noise and Vibration

Compared to the existing route, Option 9 would affect fewer properties, 73 properties within 300m of the proposed Route Option, compared to 94 properties in the vicinity of the existing route. Option 9 would move strategic traffic approximately 280m away from the noise sensitive location of Moneynick Primary School. For Option 10, 95 properties would be affected and therefore there is no significant difference compared to the existing route. Option 10 would also remain within 100m of the primary school.

Route Option 9 Score = 1
Route Option 10 Score = -1

8.3.8 Pedestrian, Cyclist, Equestrian & Community Effects

Option 9 would create very limited community severance and actually reduces community severance compared to the existing route. Option 10 would result in community severance in the vicinity of Moneynick, even though it is marginally off-line. There is also loss of a significant proportion of the local road network due to on-line sections along Moneynick Road.

Route Option 9 Score = 2
Route Option 10 Score = -2

8.3.9 Vehicle Travellers

Currently, driver stress along the existing A6 is considered to be 'high' and would be assessed as 'moderate' on completion of the proposed dual carriageway. Any of the proposed Route Options would improve road safety, with a potential reduction in strategic/local vehicle conflict. Option 9 has the potential for new views to be opened up north of the existing A6. Option 10 would have very limited new views, as it is largely within the confines of the existing road corridor.

Route Option 9 Score = 2
Route Option 10 Score = 1

8.3.10 Water Quality & Drainage

Four minor watercourses are traversed by Options 9 and 10, albeit at slightly different locations. Although there are no major watercourses affected by the scheme, consideration must be given in the design of the proposed dual carriageway, to ensure there is no deterioration in water quality of the minor streams and the wider river system, or an increased risk of flooding in the surrounding area.

Route Option 9 Score = -1
Route Option 10 Score = -1

8.3.11 Geology & Soils

Glacial till and alluvial deposits mask the bedrock, especially along the surrounding rivers. Near Randalstown, bedrock is at or close to the surface. The dominant soil types of the area include surface water gleys, interspersed with shallow brown earths, peat and alluvium. These all have their own individual drainage and nutrient characteristics. There are a limited number of potentially contaminated sites between Randalstown and Toome, most of which are classified as having a 'low' risk of contamination. The main potentially contaminated sites of concern are the two filling stations, which are in close proximity to Option 10. There are no licensed areas of mineral extraction within the immediate study area. As Options 9 and 10 will cause some degree of disturbance to soil characteristics, both score negatively.

Route Option 9 Score = -1
Route Option 10 Score = -1

8.3.12 Policies and Plans

At a national level, the Government seeks to strengthen economic and social cohesion by enhancing linkages through its policies within the Regional Development Strategy 2025 and the

Regional Transportation Strategy for Northern Ireland 2002 – 2012. The Strategy identifies that a new dual carriageway between Randalstown and Toome will be amongst the initiatives to improve the Regional Strategic Transport Network (RSTN), offering significant economic benefits resulting from journey time reduction. At a more local level, it is necessary to take cultural and natural heritage issues into consideration, but there is no other strong planning policy or land use zoning that is likely to affect the dualling proposal. Most policies at the strategic level recognise that road transport will remain the predominant means of transport for the foreseeable future, but seek to utilise alternative forms of transport.

As Options 9 and 10 both adhere to planning policy, both score positively.

Route Option 9 Score = 1

Route Option 10 Score = 1

8.3.13 Overall Environmental Scores

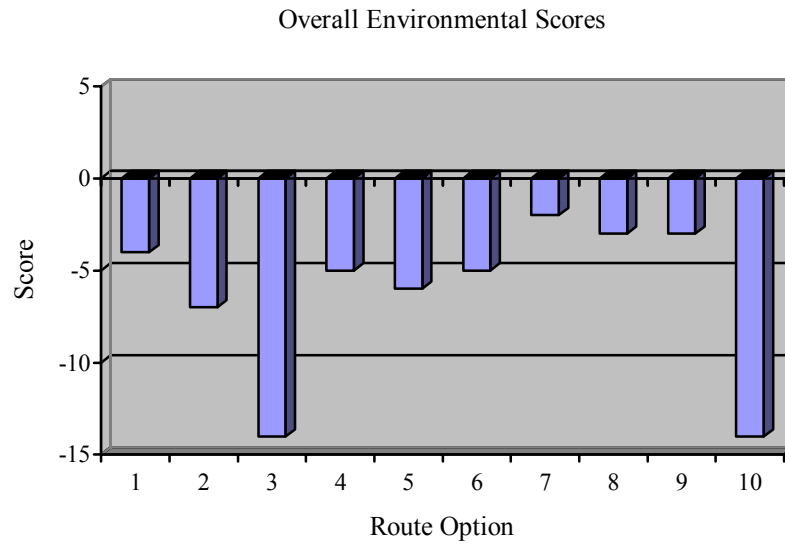
The scores allocated to Options 9 and 10 under the environmental route appraisal are detailed in the table below:

Route Option	Air	Cultural Heritage	Disruption	Ecology	Landscape	Land Use
9	2	-2	-1	-2	-2	-2
10	0	-2	-3	-1	-2	-3

Route Option	Traffic Noise	Community Effects	Vehicle Travellers	Water Quality	Geology & Soils	Policies & Plans
9	1	2	2	-1	-1	1
10	-1	-2	1	-1	-1	1

The scores from the twelve environmental criteria were added together to derive the total environmental score for each Route Option. This aggregated score gives an overall assessment of the impact the construction of each Route Option. The results of the environmental scheme assessment are listed in tabular and chart form below:

Environmental	Opt1	Opt2	Opt3	Opt4	Opt5	Opt6	Opt7	Opt8	Opt9	Opt10
Air Quality	1	1	0	1	1	1	2	2	2	0
Cultural Heritage	-2	-2	-2	-2	-2	-1	-2	-2	-2	-2
Disruption	-1	-3	-3	-1	-1	-2	-1	-1	-1	-3
Ecology	-1	-1	-1	-2	-2	-1	-2	-2	-2	-1
Landscape	-2	-2	-1	-2	-1	-2	-2	-2	-2	-2
Land Use	-2	-1	-3	-3	-2	-1	-1	-2	-2	-3
Traffic Noise	1	1	-1	1	-1	1	1	1	1	-1
Community Effects	1	-1	-3	2	1	-1	2	2	2	-2
Vehicle Travellers	2	2	1	2	2	2	2	2	2	1
Water Quality	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1
Geology & Soils	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1
Policies & Plans	1	1	1	1	1	1	1	1	1	1
Total	-4	-7	-14	-5	-6	-5	-2	-3	-3	-14



8.4 Traffic and Economic Route Appraisal

This section relates to the preliminary comparative traffic and economic assessment of the proposed Route Options. The objective of the preliminary comparative assessment is to assess each of the options against the Scheme Cost, Net Present Value (NPV), Benefit Cost Ratio (BCR), number of accident savings over 30 years and journey time savings in minutes, relative to the do-nothing scenario.

The scoring methodology for all the traffic and economic criteria is described in chapter 8.4 of the Stage 1 Report. For this Addendum report, the economic appraisals are based on a 2009 scheme opening year. The scores for Route Options 1 to 8 have been revised accordingly and are shown in section 8.4.1 below.

8.4.1 Overall Economic Scores

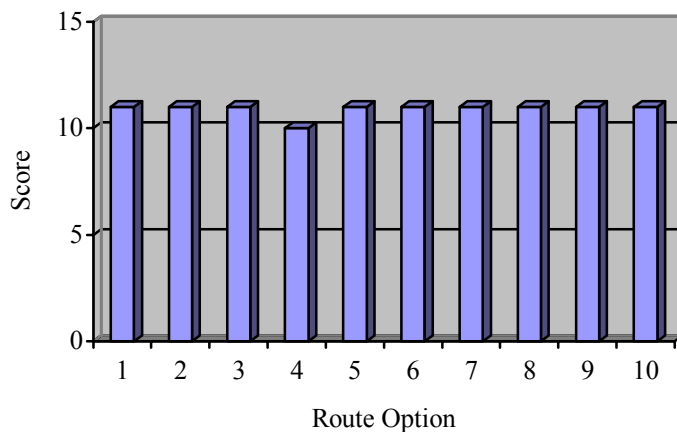
The scores allocated to Options 9 and 10 under economic route appraisal are detailed in the table below:

Route Option	Net Present Value	Benefit Cost Ratio	No. Accident Savings	Journey Times
9	3	3	3	2
10	3	3	3	2

Each of the scores from the four economic criteria were added together to derive the total economic scores for each option. This aggregated score gives an overall assessment of the impact the construction of each Route Option would have. The results of the economic scheme assessment are listed below in tabular and chart form below:

Economic	Opt1	Opt2	Opt3	Opt4	Opt5	Opt6	Opt7	Opt8	Opt9	Opt10
Net Present Value	3	3	3	2	3	3	3	3	3	3
Benefit Cost Ratio	3	3	3	3	3	3	3	3	3	3
No. Accident Savings	3	3	3	3	3	3	3	3	3	3
Journey Times	2	2	2	2	2	2	2	2	2	2
Total	11	11	11	10	11	11	11	11	11	11

Overall Economic Scores



8.5 Comparison Models

Sections 5.1, 5.2 and 5.3 of this report show the individual comparative route appraisals for the Engineering, Environmental and Economic criteria respectively. By adding the individual marks, an overall assessment of the effects of each Route Option can be made.

A total of ten options have now been assessed as part of the Stage 1 and Stage 1 Addendum Reports. To limit the number of options considered by the comparison models to eight, two options have been dropped. Route Options 3 and 4 were identified as the worst performing options in the Stage 1 Report. Option 3 (on-line) and Option 4 ranked as the bottom two options in three out of the four comparison models. Therefore, Options 3 and 4 have been superseded by new Options 9 and 10, maintaining the number of Route Options considered at eight.

The results of the Engineering, Economic and Environmental Assessments are shown in the tables below:

Engineering Assessment	Opt 1	Opt 2	Opt 5	Opt 6	Opt 7	Opt 8	Opt 9	Opt 10
Geometry	1	1	1	3	3	3	2	1
Drainage	-1	-1	-1	-2	-2	-2	-2	-1
Structures	-2	-2	-2	-1	-1	-1	-2	-1
Buildability	-1	-1	-1	-1	0	0	0	-2
Services	-1	-1	-1	-1	-1	-1	-1	-2
Earthworks	-1	-1	-1	-2	-2	-1	-2	-1
Pavement	-2	-1	-2	-1	-2	-2	-2	-1
Property Take	-2	-1	-2	-1	-1	-1	-1	-2
Engineering Marks	-9	-7	-9	-6	-6	-5	-8	-9
<i>Engineering Ranking</i>	6 th =	4 th	6 th =	2 nd =	2 nd =	1 st	5 th =	6 th =

Economic Assessment	Opt 1	Opt 2	Opt 5	Opt 6	Opt 7	Opt 8	Opt 9	Opt 10
Net Present Value	3	3	3	3	3	3	3	3
Benefit Cost Ratio	3	3	3	3	3	3	3	3
No. Accident Savings	3	3	3	3	3	3	3	3
Journey Times	2	2	2	2	2	2	2	2
Economic Marks	11	11	11	11	11	11	11	11
<i>Economic Ranking</i>	1 st =	1 st =	1 st =	1 st =	1 st =	1 st =	1 st =	1 st =

Environmental Assessment	Opt 1	Opt 2	Opt 5	Opt 6	Opt 7	Opt 8	Opt 9	Opt 10
Air Quality	1	1	1	1	2	2	2	0
Cultural Heritage	-2	-2	-2	-1	-2	-2	-2	-2
Disruption	-1	-3	-1	-2	-1	-1	-1	-3
Ecology	-1	-1	-2	-1	-2	-2	-2	-1
Landscape	-2	-2	-1	-2	-2	-2	-2	-2
Land Use	-2	-1	-2	-1	-1	-2	-2	-3
Traffic Noise	1	1	-1	1	1	1	1	-1
Community Effects	1	-1	1	-1	2	2	2	-2
Vehicle Travellers	2	2	2	2	2	2	2	1
Water Quality	-1	-1	-1	-1	-1	-1	-1	-1
Geology & Soils	-1	-1	-1	-1	-1	-1	-1	-1
Policies & Plans	1	1	1	1	1	1	1	1
Environmental Marks	-4	-7	-6	-5	-2	-3	-3	-14
<i>Environmental Ranking</i>	4 th	7 th	6 th	5 th	1 st	2 nd =	2 nd =	8 th

8.5.1 Ranking and Scoring

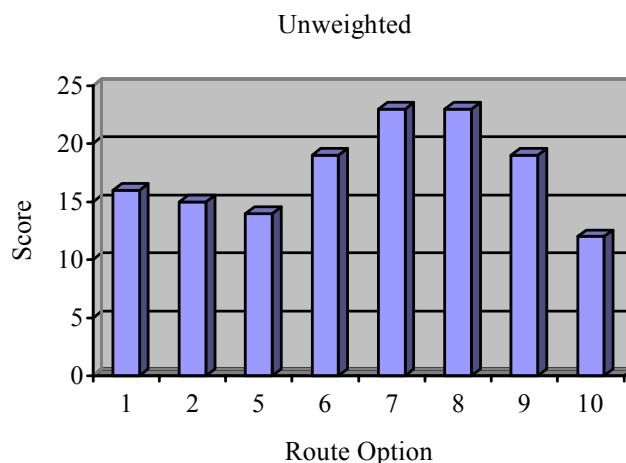
As described in the Stage 1 Report, for each assessment (engineering, economic, environmental) each Route Option was ranked between 1 and 8 depending on its performance. Those performing best in the individual assessments were ranked first and the worst ranked last. This accounts for the environmental bias which would have resulted had the total marks for each assessment simply been added together (as there are 12 environmental criteria, 8 engineering criteria and only 4 economic criteria). This provided a league table of the Route Options based on their mark in each assessment.

A score from 1 to 8 was subsequently assigned to each Route Option, based on their ranking, with the highest score given to the highest-ranking option. The ranking and scores assigned to each Route Option are shown in the table below:

	Opt 1	Opt 2	Opt 5	Opt 6	Opt 7	Opt 8	Opt 9	Opt 10
Engineering Assessment								
Marks	-9	-7	-9	-6	-6	-5	-8	-9
Rankings	6 th =	4 th	6 th =	2 nd =	2 nd =	1 st	5 th =	6 th =
Scores	3	5	3	7	7	8	4	3
Economic Assessment								
Marks	11	11	11	11	11	11	11	11
Rankings	1 st =	1 st =	1 st =	1 st =	1 st =	1 st =	1 st =	1 st =
Scores	8	8	8	8	8	8	8	8
Environmental Assessment								
Marks	-4	-7	-6	-5	-2	-3	-3	-14
Rankings	4 th	7 th	6 th	5 th	1 st	2 nd =	2 nd =	8 th
Scores	5	2	3	4	8	7	7	1

Finally, for each option, the engineering, economic and environmental scores were totalled to give a combined score. This determined the best performing option overall, shown in the table and chart below:

	Opt 1	Opt 2	Opt 5	Opt 6	Opt 7	Opt 8	Opt 9	Opt 10
Engineering Score	3	5	3	7	7	8	4	3
Economic Score	8	8	8	8	8	8	8	8
Environmental Score	5	2	3	4	8	7	7	1
Overall Scores	16	15	14	19	23	23	19	12



8.5.2 Weighting

The methodology used in the above engineering, economic and environmental assessments gives equal importance to each criterion.

As described in chapter 8.5 of the Stage 1 Report, a weighting of between 1 and 3 was applied to each of the criteria depending on its significance, with a weighting of 3 being assigned to those of the highest importance reducing to a weighting of 1 for criteria of least influence. The weighting factors used for each of the assessment criteria are detailed below.

Applying weightings to the individual totals from the engineering, economic and environmental assessments gave a weighted mark for each of the 24 criteria reflecting their importance in the selection process, shown in the tables below.

Engineering Assessment	Weighting	Opt 1	Opt 2	Opt 5	Opt 6	Opt 7	Opt 8	Opt 9	Opt 10
Geometry	3	3	3	3	9	9	9	6	3
Drainage	1	-1	-1	-1	-2	-2	-2	-2	-1
Structures	2	-4	-4	-4	-2	-2	-2	-4	-2
Buildability	2	-2	-2	-2	-2	0	0	0	-4
Services	1	-1	-1	-1	-1	-1	-1	-1	-2
Earthworks	2	-2	-2	-2	-4	-4	-2	-4	-2
Pavement	3	-6	-3	-6	-3	-6	-6	-6	-3
Property Take	3	-6	-3	-6	-3	-3	-3	-3	-6
Engineering Marks		-19	-13	-19	-8	-9	-7	-14	-17

Economic Assessment	Weighting	Opt 1	Opt 2	Opt 5	Opt 6	Opt 7	Opt 8	Opt 9	Opt 10
Net Present Value	3	9	9	9	9	9	9	9	9
Benefit Cost Ratio	3	9	9	9	9	9	9	9	9
No. Accident Savings	3	9	9	9	9	9	9	9	9
Journey Times	3	6	6	6	6	6	6	6	6
Economic Marks		33	33	33	33	33	33	33	33

Environmental Assessment	Weighting	Opt 1	Opt 2	Opt 5	Opt 6	Opt 7	Opt 8	Opt 9	Opt 10
Air Quality	2	2	2	2	2	4	4	4	0
Cultural Heritage	3	-6	-6	-6	-3	-6	-6	-6	-6
Disruption	2	-2	-6	-2	-4	-2	-2	-2	-6
Ecology	3	-3	-3	-6	-3	-6	-6	-6	-3
Landscape	3	-6	-6	-3	-6	-6	-6	-6	-6
Land Use	2	-4	-2	-4	-2	-2	-4	-4	-6
Traffic Noise	2	2	2	-2	2	2	2	2	-2
Community Effects	2	2	-2	2	-2	4	4	4	-4
Vehicle Travellers	2	4	4	4	4	4	4	4	2
Water Quality	2	-2	-2	-2	-2	-2	-2	-2	-2
Geology & Soils	1	-1	-1	-1	-1	-1	-1	-1	-1
Policies & Plans	2	2	2	2	2	2	2	2	2
Environmental Marks		-12	-18	-16	-13	-9	-11	-11	-32

8.5.3 Ranking and Scoring

As with the unweighted marks above, a score from 1 to 8 was subsequently assigned to each Route Option, based on their ranking, with the highest score given to the highest-ranking option. The ranking and scores assigned to each Route Option are shown in the table below:

	Opt 1	Opt 2	Opt 5	Opt 6	Opt 7	Opt 8	Opt 9	Opt 10
Engineering Assessment								
Marks	-19	-13	-19	-8	-9	-7	-14	-17
Rankings	7 th =	4 th	7 th =	2 nd	3 rd	1 st	5 th	6 th
Scores	2	5	2	7	6	8	4	3
Economic Assessment								
Marks	33	33	33	33	33	33	33	33
Rankings	1 st =	1 st =	1 st =	1 st =	1 st =	1 st =	1 st =	1 st =
Scores	8	8	8	8	8	8	8	8
Environmental Assessment								
Marks	-12	-18	-16	-13	-9	-11	-11	-32
Rankings	4 th	7 th	6 th	5 th	1 st	2 nd =	2 nd =	8 th
Scores	5	2	3	4	8	7	7	1

8.5.4 Scheme Assessment – Route Options

The scores detailed above were developed as part of a Weighted comparison model. As described in the Stage 1 Report, a further three comparison models were developed. An Engineering / Economic Bias Model, an Environmental Bias Model, and an Unweighted Model.

The overall scores were totalled as detailed above for the comparison models. Results for each of the four comparison models are listed in the tables below:

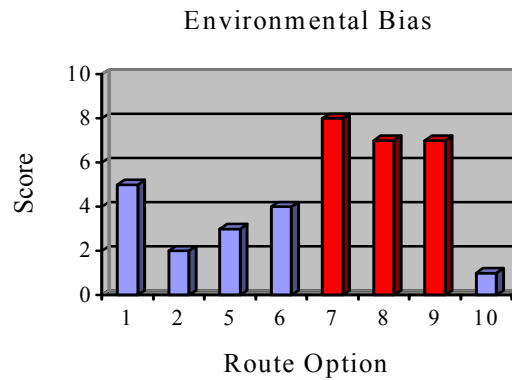
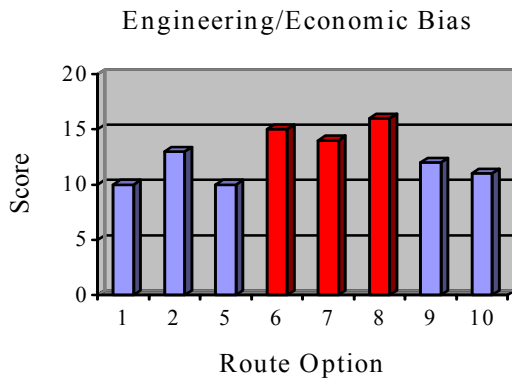
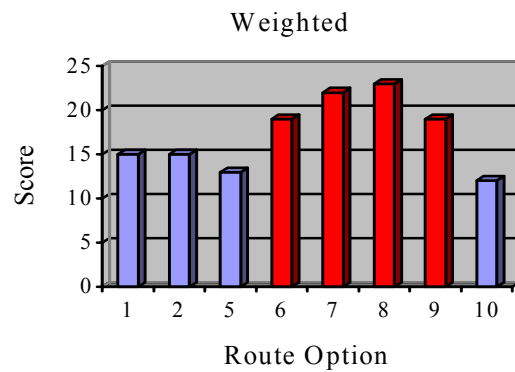
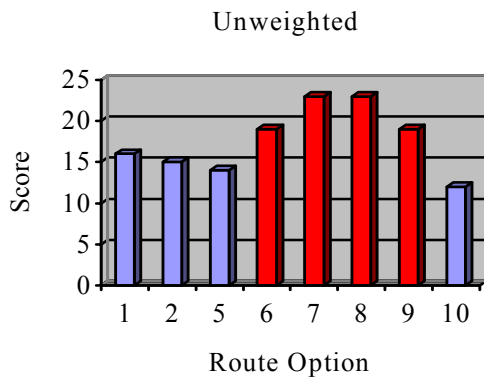
Unweighted Comparison Model	Opt 1	Opt 2	Opt 5	Opt 6	Opt 7	Opt 8	Opt 9	Opt 10
Engineering Score	3	5	3	7	7	8	4	3
Economic Score	8	8	8	8	8	8	8	8
Environmental Score	5	2	3	4	8	7	7	1
Overall Scores	16	15	14	19	23	23	19	12

Weighted Comparison Model	Opt 1	Opt 2	Opt 5	Opt 6	Opt 7	Opt 8	Opt 9	Opt 10
Engineering Score	2	5	2	7	6	8	4	3
Economic Score	8	8	8	8	8	8	8	8
Environmental Score	5	2	3	4	8	7	7	1
Overall Scores	15	15	13	19	22	23	19	12

Engineering/Economic Comparison Model	Opt 1	Opt 2	Opt 5	Opt 6	Opt 7	Opt 8	Opt 9	Opt 10
Engineering Score	2	5	2	7	6	8	4	3
Economic Score	8	8	8	8	8	8	8	8
Environmental Score	0	0	0	0	0	0	0	0
Overall Scores	10	13	10	15	14	16	12	11

Environmental Comparison Model	Opt 1	Opt 2	Opt 5	Opt 6	Opt 7	Opt 8	Opt 9	Opt 10
Engineering Score	0	0	0	0	0	0	0	0
Economic Score	0	0	0	0	0	0	0	0
Environmental Score	5	2	3	4	8	7	7	1
Overall Scores	5	2	3	4	8	7	7	1

Results for the four comparison models are also shown in chart form, with the top three options highlighted:



8.5.5 Scheme Assessment – Corridors

To establish whether any one corridor performed better than the others, the three route corridors were also assessed. Overall scores for the corridors were determined simply by averaging the overall score for the Route Options within each corridor. Options 3 and 4 were superseded by new Options 9 and 10. Option 9 fell within the extended north corridor, and Option 10 within the central corridor. Therefore, the scores for Options 1, 2 and 9 were averaged to give the north corridor score. Those for Options 2, 5 and 10 were averaged to give the centre corridor score. The scores for Options 6, 7 and 8 were averaged to give the south corridor score.

The results are detailed below in both tabular and chart form, with the preferred top performing corridor highlighted in each case:

	North	Centre	South
Unweighted	16.7	13.7	21.7
Weighted Model	16.3	13.3	21.3
Engineering/Economic Model	11.7	11.3	15.0
Environmental Model	4.7	2.0	6.3

