

2 STAGE 1 REPORT – SUMMARY

The results of the Stage 1 Assessment, as reported in the Randalstown to Toome Dualling Stage 1 Report, are summarised below. A total of eight Route Options were developed during Stage 1, falling within three route corridors. The Route Options underwent Engineering, Economic and Environmental Assessments. Appraisal Summary Tables were completed, and a comparative appraisal was carried out as part of the Stage 1 study. The results of the comparative appraisal are summarised in the tables below.

Engineering Assessment	Weighting	Opt 1	Opt 2	Opt 3	Opt 4	Opt 5	Opt 6	Opt 7	Opt 8
Geometry	3	3	3	3	6	3	9	9	9
Drainage	1	-1	-1	0	-1	-1	-2	-2	-2
Structures	2	-4	-4	-2	-4	-4	-2	-2	-2
Buildability	2	-2	-2	-4	0	-2	-2	0	0
Services	1	-1	-1	-2	-1	-1	-1	-1	-1
Earthworks	2	-2	-2	-2	-4	-2	-4	-4	-2
Construction Cost	3	-6	-3	-3	-6	-6	-3	-6	-6
Property Take	3	-6	-3	-9	-6	-6	-3	-3	-3
Engineering Marks		-19	-13	-19	-16	-19	-8	-9	-7

Economic Assessment	Weighting	Opt 1	Opt 2	Opt 3	Opt 4	Opt 5	Opt 6	Opt 7	Opt 8
Net Present Value	3	9	9	9	6	9	6	6	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	30	33	30	30	33

Environmental Assessment	Weighting	Opt 1	Opt 2	Opt 3	Opt 4	Opt 5	Opt 6	Opt 7	Opt 8
Air Quality	2	2	2	0	2	2	2	4	4
Cultural Heritage	3	-6	-6	-6	-6	-6	-3	-6	-6
Disruption	2	-2	-6	-6	-2	-2	-4	-2	-2
Ecology	3	-3	-3	-3	-6	-6	-3	-6	-6
Landscape	3	-6	-6	-3	-6	-3	-6	-6	-6
Land Use	2	-4	-2	-6	-6	-4	-2	-2	-4
Traffic Noise	2	2	2	-2	2	-2	2	2	2
Community Effects	2	2	-2	-6	4	2	-2	4	4
Vehicle Travellers	2	4	4	2	4	4	4	4	4
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	-31	-15	-16	-13	-9	-11

As noted in the Stage 1 report, four comparison models were developed: an Unweighted model, a Weighted model, an Engineering/Economic Bias Model and an Environmental Bias Model. The results of these comparison models are detailed below.

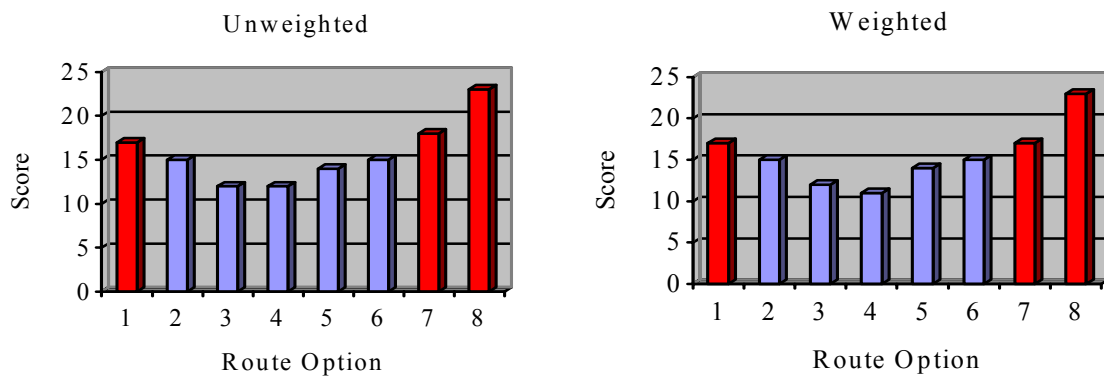
Unweighted Comparison Model	Opt 1	Opt 2	Opt 3	Opt 4	Opt 5	Opt 6	Opt 7	Opt 8
Engineering Score	3	5	3	4	3	7	7	8
Economic Score	8	8	8	3	8	3	3	8
Environmental Score	6	2	1	5	3	5	8	7
Overall Scores	17	15	12	12	14	15	18	23

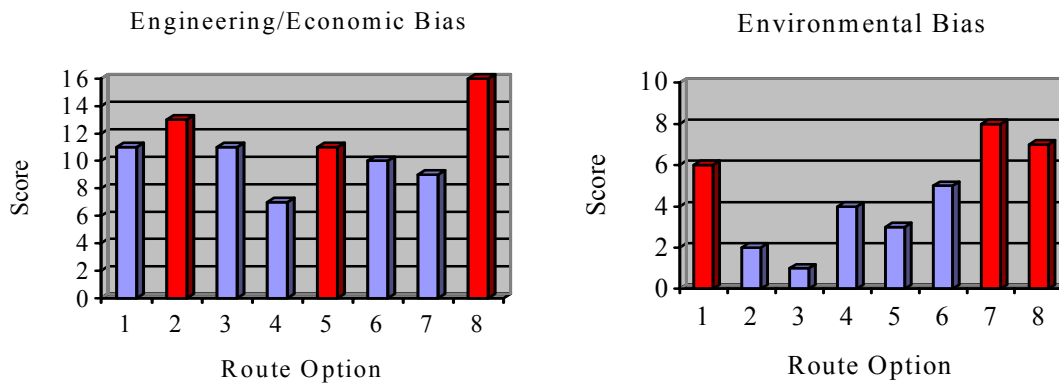
Weighted Comparison Model	Opt 1	Opt 2	Opt 3	Opt 4	Opt 5	Opt 6	Opt 7	Opt 8
Engineering Score	3	5	3	4	3	7	6	8
Economic Score	8	8	8	3	8	3	3	8
Environmental Score	6	2	1	4	3	5	8	7
Overall Scores	17	15	12	11	14	15	17	23

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

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

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





The Stage 1 Report recommended that a south corridor (including Options 6, 7, and 8) should progress to Stage 2.

Three Route Options: Red, Blue and Brown, have been developed within the south corridor during Stage 2, based on Route Options 6, 7 and 8 developed during Stage 1.