

Appendix C – Noise

Introduction

This appendix presents the outcome of the noise predictions undertaken to support the qualitative assessment presented in this report. Areas with a Basic Noise Level (BNL) change of less than 0.5 dBA and a population density of less than 500 people per km are not listed. The tables show the population density of a nearby area likely to experience the noise level change and the associated average speed change in the nearest road segment.

Option 1 - Noise Appraisal

A90

Table C-1 presents a comparison of Do Something 2045 versus Do Minimum 2045, Option 1, without Policy, 100% compliance.

Noise level changes indicate that there is no benefit or impact with this option, with a maximum predicted reduction in noise level of 0.6 dBA due to the small changes in average speed.

There are not expected to be any adverse noise impacts on this single carriageway route for Option 1, without policy, 100% compliance.

Table C-1 – A90 Option 1, Without Policy, 100% Compliance

Data Zone	BNL Change, dBA	Population Density, pop/km	Speed Change, km/h	Data zone Area, km
Cruden - 07	-0.6	3293.9	-3.3	0.245
Longside and Rattray - 07	-0.5	2056.6	-3.9	0.424
Peterhead Ugieside - 01	-0.5	2302.2	-4.0	0.225
Peterhead Ugieside - 03	-0.5	3317.7	-4.0	0.255
Peterhead Ugieside - 04	-0.5	3868.1	-4.0	0.144

Table C-2 presents a comparison of Do Something 2045 versus Do Minimum 2045, Option 1, without Policy, realistic compliance.

Noise level changes indicate that there is no benefit or impact with this option, with a maximum predicted reduction in noise level of 0.6 dBA due to the small change in average speed.



There are not expected to be any adverse noise impacts on this single carriageway route for Option 1, without policy, realistic compliance.

Table C-2 – A90 Option 1, No Policy, Realistic Compliance

Data Zone	BNL Change, dBA	Population Density, pop/km	Speed Change, km/h	Data Zone Area, km
Cruden - 07	-0.6	3293.9	-3.3	0.245
Longside and Rattray - 07	-0.5	2056.6	-3.9	0.424
Peterhead Ugieside - 01	-0.5	2302.2	-3.9	0.225
Peterhead Ugieside - 03	-0.5	3317.7	-4.0	0.255
Peterhead Ugieside - 04	-0.5	3868.1	-4.0	0.144

Table C-3 presents a comparison of Do Something 2045 versus Do Minimum 2045, Option 1, with Policy, 100% compliance.

Noise level changes indicate that there is no benefit or impact with this option, with a maximum predicted reduction in noise level of 0.5 dBA due to the small changes in average speed and traffic volumes.

There are not expected to be any adverse noise impacts on this single carriageway route for Option 1, with policy, 100% compliance.

Table C-3 – A90 Option 1, with Policy, 100% Compliance

Data Zone	BNL Change, dBA	Population Density, pop/km	Speed Change, km/h	Data Zone Area, km
Longside and Rattray - 07	-0.5	2056.6	-4.0	0.424
Peterhead Ugieside - 01	-0.5	2302.2	-4.0	0.225

Table C-4 presents a comparison of Do Something 2045 versus Do Minimum 2045, Option 1, with Policy, realistic compliance.

Noise level changes indicate that there is no benefit or impact with this option, with a maximum predicted reduction in noise level of 0.5 dBA due to small changes in average speed and traffic volumes.

There are not expected to be any adverse noise impacts on this single carriageway route for Option 1, with policy, 100% compliance.

Table C-4 – A90 Option 1, with Policy, Realistic Compliance

Data Zone	BNL Change, dBA	Population Density, pop/km	Speed Change, km/h	Data Zone Area, km
Longside and Rattray - 07	-0.5	2056.6	-4.0	0.424
Peterhead Ugieside - 01	-0.5	2302.2	-4.0	0.225

A702

Table C-1 presents a comparison of Do Something 2045 versus Do Minimum 2045, Option 1, without Policy, 100% compliance.

Changes are anticipated to be minor beneficial, with a maximum predicted reduction in noise level of 2.7 dBA due to small changes in average speed and traffic volumes.

There are not expected to be any adverse noise impacts on this single carriageway route for Option 1, without policy, 100% compliance.

Table C-1 – A702 Option 1, No Policy, 100% Compliance

Data Zone	BNL Change, dBA	Population Density, pop/km	Speed Change, km/h	Data Zone Area, km
Biggar, Symington, Thankerton and Dolphinton - 03	-1.2	1550.6	-7.5	0.514
Fairmilehead - 06	-1.4	1376.5	0.6	0.571
West Linton - Lower	-2.7	2163.4	-8.4	0.361
West Linton - Upper	-2.7	2174.4	-8.4	0.453

Table C-2 presents a comparison of Do Something 2045 versus Do Minimum 2045, Option 1, without Policy, realistic compliance.

Noise level changes indicate that there is no benefit or impact with this option, with a maximum predicted reduction in noise level of 0.9 dBA due to smaller changes in average speed, compared to the 100% compliance scenario.

There are not expected to be any adverse noise impacts on this single carriageway route for Option 1, without policy, realistic compliance.



Table C-2 – A702 Option 1, No Policy, Realistic Compliance

Data Zone	BNL Change, dBA	Population Density, pop/km	Speed Change, km/h	Data Zone Area, km
Biggar, Symington, Thankerton and Dolphinton - 03	-0.5	1550.6	-3.4	0.514
West Linton - Lower	-0.9	2163.4	-3.6	0.361
West Linton - Upper	-0.9	2174.4	-3.6	0.453

Table C-3 presents a comparison of Do Something 2045 versus Do Minimum 2045, Option 1, with Policy, 100% compliance.

Changes are anticipated to be minor beneficial, with a maximum predicted reduction in noise level of 1.9 dBA due to the changes in average speed and traffic volumes.

There are not expected to be any adverse noise impacts on this single carriageway route for Option 1, with policy, 100% compliance.

Table C-3 – A702 Option 1, with Policy, 100% Compliance

Data Zone	BNL Change, dBA	Population Density, pop/km	Speed Change, km/h	Data Zone Area, km
Biggar, Symington, Thankerton and Dolphinton - 03	-0.9	1550.6	-8.6	0.514
Fairmilehead - 05	-0.6	2114.1	-7.6	0.403
Fairmilehead - 06	-0.7	1376.5	-7.7	0.571
West Linton - Lower	-1.9	2163.4	-9.0	0.361
West Linton - Upper	-1.9	2174.4	-9.0	0.453

Table C-4 presents a comparison of Do Something 2045 versus Do Minimum 2045, Option 1, with Policy, realistic compliance.

Noise level changes indicate that there is no benefit or impact with this option, with a maximum predicted reduction in noise level of 0.9 dBA due to the smaller changes in average speed, compared to the 100% compliance scenario.

There are not expected to be any adverse noise impacts on this single carriageway route for Option 1, with policy, realistic compliance.



Table C-4 – A702 Option 1, with Policy, Realistic Compliance

Data Zone	BNL Change, dBA	Population Density, pop/km	Speed Change, km/h	Data Zone Area, km
West Linton - Lower	-0.9	2163.4	-3.9	0.361
West Linton - Upper	-0.9	2174.4	-3.9	0.453

Option 2 - Noise Appraisal

A96

Table C-1 presents a comparison of Do Something 2045 versus Do Minimum 2045, Option 2, without Policy, 100% compliance.

Changes are anticipated to be minor beneficial, with a maximum predicted reduction in noise level of 1.5 dBA due to the changes in average speed and traffic volumes.

There are not expected to be any adverse noise impacts on this dual-carriageway route for Option 2, without policy, 100% compliance.

Table C-1 – A96 Option 2, without Policy, 100% Compliance

Data Zone	BNL Change, dBA	Population Density, pop/km	Speed Change, km/h	Data Zone Area, km
Blackburn - 02	-1.0	3630.3	-9.3	0.211
Bucksburn North - 02	-0.8	3255.1	-8.2	0.196
Bucksburn North - 03	-0.8	1894.8	-8.2	0.447
Bucksburn North - 04	-0.8	5265.8	-8.2	0.158
Bucksburn North - 05	-0.8	1289.5	-8.2	0.798
Elgin Cathedral to Ashgrove and Pinefield - 02	-0.7	648.0	-8.6	0.983
Elgin Cathedral to Ashgrove and Pinefield - 06	-0.7	5370.2	-8.6	0.181
Forres Central East and seaward - 02	-0.9	2705.0	-9.0	0.200
Forres Central East and seaward - 03	-0.9	1582.5	-9.0	0.400

Data Zone	BNL Change, dBA	Population Density, pop/km	Speed Change, km/h	Data Zone Area, km
Forres Central East and seaward - 04	-0.9	4216.0	-9.0	0.125
Forres Central East and seaward - 05	-0.9	2648.9	-9.0	0.225
Forres Central East and seaward - 06	-0.9	1110.2	-9.0	0.472
Forres South West and Mannachie - 01	-0.9	3819.4	-9.0	0.144
Forres South West and Mannachie - 02	-0.9	4512.6	-9.0	0.199
Forres South West and Mannachie - 03	-0.9	933.5	-9.0	0.617
Forres South West and Mannachie - 04	-0.9	2258.8	-9.0	0.228
Huntly - 02	-1.0	2276.1	-8.9	0.460
Huntly - 03	-1.0	2201.7	-8.9	0.352
Huntly - 04	-1.0	4641.6	-8.9	0.173
Huntly - 05	-1.0	1932.0	-8.9	0.353
Inverurie North - 01	-0.7	3458.5	-8.9	0.277
Inverurie North - 03	-0.7	2303.2	-8.9	0.343
Inverurie North - 05	-0.7	2456.2	-8.9	0.331
Inverurie North - 06	-0.7	4365.0	-8.9	0.137
Inverurie South - 01	-0.7	4095.5	-8.9	0.157
Inverurie South - 02	-0.8	2939.6	-10.3	0.265
Inverurie South - 03	-0.7	2136.1	-8.9	0.360
Inverurie South - 04	-0.7	2383.8	-8.9	0.357
Inverurie South - 05	-0.7	3393.0	-8.9	0.229

Data Zone	BNL Change, dBA	Population Density, pop/km	Speed Change, km/h	Data Zone Area, km
Keith and Fife Keith - 02	-0.6	2954.9	-3.4	0.266
Keith and Fife Keith - 03	-0.6	2829.0	-3.4	0.310
Kintore - 01	-1.1	1303.2	-10.4	0.442
Kintore - 02	-1.1	4051.8	-10.0	0.270
Kintore - 03	-1.0	3546.8	-8.4	0.139
Kintore - 05	-1.1	2241.6	-10.0	0.207
Kintore - 06	-1.1	4750.0	-10.0	0.172
Lhanbryde, Urquhart, Pitgavney and seaward - 03	-0.8	2434.2	-9.0	0.281
Lhanbryde, Urquhart, Pitgavney and seaward - 04	-0.8	5751.9	-9.0	0.133
Lhanbryde, Urquhart, Pitgavney and seaward - 05	-0.8	2739.4	-9.0	0.165
Mosstodloch, Portgordon and seaward - 05	-1.1	3693.9	-9.1	0.147
Nairn East - 04	-1.5	1956.4	-9.1	0.321
Nairn East - 05	-1.5	1435.3	-9.1	0.549
Nairn Rural - 03	-0.9	2297.3	-9.1	0.222
Nairn West - 07	-0.9	2538.8	-9.1	0.232

Table C-2 presents a comparison of Do Something 2045 versus Do Minimum 2045, Option 2, without Policy, realistic compliance.

Noise level changes indicate that there is no benefit or impact with this option, with a maximum predicted reduction in noise level of 0.6 dBA due to the smaller changes in average speed compared to 100% compliance.

There are not expected to be any adverse noise impacts on this dual-carriageway route for Option 2, without policy, realistic compliance.

Table C-2 – A96 Option 2, without Policy, Realistic Compliance

Data Zone	BNL Change, dBA	Population Density, pop/km	Speed Change, km/h	Data Zone Area, km
Keith and Fife Keith - 02	-0.5	2954.9	-4.0	0.266
Keith and Fife Keith - 03	-0.5	2829.0	-4.0	0.310
Keith and Fife Keith - 04	-0.5	2290.2	-4.0	0.479
Kintore - 02	-0.6	4051.9	-4.0	0.270
Kintore - 05	-0.6	2241.6	-4.0	0.207
Kintore - 06	-0.6	4750.0	-4.0	0.172
Mosstodloch, Portgordon and seaward - 05	-0.6	3693.9	-4.0	0.147
Nairn East - 04	-0.5	1956.4	-4.0	0.321
Nairn East - 05	-0.5	1435.3	-4.0	0.549
Nairn Rural - 03	-0.5	2297.3	-4.0	0.222
Nairn West - 03	-0.5	720.5	-4.0	0.948
Nairn West - 04	-0.5	3849.0	-4.0	0.192
Nairn West - 06	-0.5	3628.8	-4.0	0.132
Nairn West - 07	-0.5	2538.8	-4.0	0.232

Table C-3 presents a comparison of Do Something 2045 versus Do Minimum 2045, Option 2, with Policy, 100% compliance.

Changes are anticipated to range between no benefit or impact and minor beneficial, with a maximum reduction in noise level of 1.5 dBA due to the changes in average speed and traffic volumes. In this option, localised increase in traffic flows are observed in specific segments resulting in an increase in noise levels.

There are not expected to be any adverse noise impacts on this dual-carriageway route for Option 2, with policy, 100%.



Table C-3 – A96 Option 2, with Policy, 100% Compliance

Data Zone	BNL Change, dBA	Population Density, pop/km	Speed Change, km/h	Data Zone Area, km
Blackburn - 02	-1.0	3630.3	-10.1	0.211
Bucksburn North - 02	-0.8	3255.1	-9.3	0.196
Bucksburn North - 03	-0.8	1894.8	-9.3	0.447
Bucksburn North - 04	-0.8	5265.8	-9.3	0.158
Bucksburn North - 05	-0.8	1289.5	-9.3	0.798
Bucksburn South - 03	-0.8	5072.9	-9.3	0.151
Elgin Cathedral to Ashgrove and Pinefield - 02	-0.6	648.0	-8.9	0.983
Elgin Cathedral to Ashgrove and Pinefield - 06	-0.6	5370.2	-8.9	0.181
Fochabers, Aultmore, Clochan and Ordiquish - 01	-0.7	1968.1	-9.1	0.501
Forres Central East and seaward - 02	-0.7	2705.0	-9.0	0.200
Forres Central East and seaward - 03	-0.7	1582.5	-9.0	0.400
Forres Central East and seaward - 04	-0.7	4216.0	-9.0	0.125
Forres Central East and seaward - 05	-0.7	2648.9	-9.0	0.225
Forres Central East and seaward - 06	-0.7	1110.2	-9.0	0.472
Forres South West and Mannachie - 01	-0.7	3819.4	-9.0	0.144
Forres South West and Mannachie - 02	-0.7	4512.6	-9.0	0.199

Data Zone	BNL Change, dBA	Population Density, pop/km	Speed Change, km/h	Data Zone Area, km
Forres South West and Mannachie - 03	-0.7	933.5	-9.0	0.617
Forres South West and Mannachie - 04	-0.7	2258.8	-9.0	0.228
Huntly - 02	-0.9	2276.1	-9.0	0.460
Huntly - 03	0.6	2201.7	0.0	0.352
Huntly - 04	-0.9	4641.6	-9.0	0.173
Huntly - 05	-0.9	1932.0	-9.0	0.353
Huntly - 05	0.6	1932.0	0.0	0.353
Inverurie North - 01	-0.6	3458.5	-9.0	0.277
Inverurie North - 03	-0.6	2303.2	-9.0	0.343
Inverurie North - 05	-0.6	2456.2	-9.0	0.331
Inverurie North - 06	-0.6	4365.0	-9.0	0.137
Inverurie South - 01	-0.6	4095.5	-9.0	0.157
Inverurie South - 02	-0.8	2939.6	-10.5	0.265
Inverurie South - 03	-0.6	2136.1	-9.0	0.360
Inverurie South - 04	-0.6	2383.8	-9.0	0.357
Inverurie South - 05	-0.6	3393.0	-9.0	0.229
Keith and Fife Keith - 02	-0.5	2954.9	-3.4	0.266
Keith and Fife Keith - 03	-0.5	2829.0	-3.4	0.310
Keith and Fife Keith - 03	-0.5	2829.0	-3.4	0.310
Keith and Fife Keith - 05	0.6	1778.4	-0.1	0.546
Kintore - 01	-1.0	1303.2	-10.5	0.442
Kintore - 02	-1.0	4051.8	-10.5	0.270

Data Zone	BNL Change, dBA	Population Density, pop/km	Speed Change, km/h	Data Zone Area, km
Kintore - 03	-0.8	3546.8	-8.9	0.139
Kintore - 05	-1.6	2241.6	-10.6	0.207
Kintore - 06	-1.6	4750.0	-10.6	0.172
Lhanbryde, Urquhart, Pitgavney and seaward - 03	-0.9	2434.2	-9.0	0.281
Lhanbryde, Urquhart, Pitgavney and seaward - 04	-0.9	5751.9	-9.0	0.133
Lhanbryde, Urquhart, Pitgavney and seaward - 05	-0.9	2739.4	-9.0	0.165
Mosstodloch, Portgordon and seaward - 05	-0.8	3693.9	-9.1	0.147
Nairn East - 02	-0.6	3413.4	0.0	0.254
Nairn East - 04	-0.9	1956.4	-9.1	0.321
Nairn East - 05	-0.9	1435.3	-9.1	0.549
Nairn Rural - 03	-2.1	2297.3	-3.4	0.222
Nairn West - 01	-0.6	1758.4	0.0	0.505
Nairn West - 02	-0.7	2613.0	0.0	0.261
Nairn West - 03	-1.6	720.5	-9.0	0.948
Nairn West - 04	-0.7	3849.0	0.0	0.192
Nairn West - 05	-0.7	3041.2	0.0	0.170
Nairn West - 06	-0.7	3628.8	0.0	0.132
Nairn West - 07	-1.6	2538.8	-9.0	0.232



Table C-4 presents a comparison of Do Something 2045 versus Do Minimum 2045, Option 2, with Policy, realistic compliance.

Noise level changes indicate that there is no benefit or impact with this option, with a maximum predicted reduction in noise level of 0.7 dBA due to the smaller changes in average speed compared to 100% compliance scenario.

There are not expected to be any adverse noise impacts on this dual-carriageway route for Option 2, with policy, realistic scenario.

Table C-4 – A96 Option 2, with Policy, Realistic Compliance

Data Zone	BNL Change, dBA	Population Density, pop/km	Speed Change, km/h	Data Zone Area, km
Huntly - 02	-0.5	2276.1	-4.0	0.460
Huntly - 03	-0.5	2201.7	-4.0	0.352
Huntly - 04	-0.5	4641.6	-4.0	0.173
Huntly - 05	-0.5	1932.0	-4.0	0.353
Kintore - 02	-0.5	4051.8	-4.0	0.270
Kintore - 05	-0.5	2241.6	-4.0	0.207
Kintore - 06	-0.5	4750.0	-4.0	0.172
Nairn West - 03	-0.7	720.5	-4.0	0.948
Nairn West - 04	-0.7	3849.0	-4.0	0.192
Nairn West - 06	-0.7	3628.8	-4.0	0.132
Nairn West - 07	-0.7	2538.8	-4.0	0.232

M8

Table C-1 presents a comparison of Do Something 2045 versus Do Minimum 2045, Option 2, without Policy, 100% compliance.

Changes are anticipated to be minor beneficial, with a maximum predicted reduction in noise level of 1.4 dBA due to the changes in average speed and traffic volumes.

There are not expected to be any adverse noise impacts on this motorway route for Option 2, without policy, 100%.



Table C-1 – M8 Option 2, without Policy, 100% Compliance

Data Zone	BNL Change, dBA	Population Density, pop/km	Speed Change, km/h	Data Zone Area, km
Baillieston East - 01	-1.4	764.9	-13.4	2.505
Barlanark - 07	-1.1	632.4	-11.6	1.118
Barlanark - 08	-1.1	817.6	-11.6	0.499
Calderbank and Brownsburn - 04	-1.1	2620.7	-10.4	0.174
Central Easterhouse - 03	-1.2	4576.4	-12.0	0.203
Chapelhall East - 01	-1.0	7153.4	-8.9	0.176
Chapelhall East - 02	-1.0	5230.3	-8.9	0.152
Chapelhall West - 03	-1.0	5806.4	-8.9	0.186
Craigend and Ruchazie - 01	-1.0	4110.4	-10.9	0.154
Craigend and Ruchazie - 02	-1.0	5279.6	-10.9	0.211
Craigend and Ruchazie - 05	-1.0	2541.3	-10.9	0.327
Craigend and Ruchazie - 06	-1.0	8048.4	-10.9	0.062
Craigend and Ruchazie - 07	-1.0	3725.6	-10.9	0.317
Cranhill, Lightburn and Queenslie South - 05	-0.8	7379.8	-9.8	0.079
Cranhill, Lightburn and Queenslie South - 06	-0.8	2638.3	-9.8	0.235
Cranhill, Lightburn and Queenslie South - 07	-0.8	5954.3	-9.8	0.153
Easterhouse East - 02	-1.2	2096.8	-12.0	0.124
Easterhouse East - 03	-1.2	9925.9	-12.0	0.081
Easterhouse East - 04	-1.2	4673.1	-12.0	0.156
Garrowhill East and Swinton - 01	-1.2	3590.3	-12.0	0.227
Garrowhill East and Swinton - 02	-1.2	4411.8	-12.0	0.153

Data Zone	BNL Change, dBA	Population Density, pop/km	Speed Change, km/h	Data Zone Area, km
Garrowhill East and Swinton - 03	-1.2	6150.0	-12.0	0.14
Garrowhill East and Swinton - 04	-1.2	1759.5	-12.0	0.578
Garrowhill East and Swinton - 05	-1.2	3517.2	-12.0	0.261
Garthamlock, Auchinlea and Gartloch - 02	-1.1	2160.7	-11.6	0.336
Garthamlock, Auchinlea and Gartloch - 04	-1.0	6423.9	-10.9	0.184
Greenend and Carnbroe - 01	-1.2	2799.5	-11.7	0.384
Hattonrigg - 03	-1.3	4167.7	-12.3	0.155
Kirkshaws - 02	-1.3	7793.5	-12.3	0.092
Kirkshaws - 04	-1.3	7706.9	-12.3	0.116
Kirkshaws - 05	-1.3	1770.6	-12.3	0.497
Kirkwood and Bargeddie - 02	-1.4	1932.8	-13.4	0.417
Kirkwood and Bargeddie - 03	-1.4	5535.4	-13.4	0.099
Kirkwood and Bargeddie - 04	-1.4	2795.4	-13.4	0.176
Kirkwood and Bargeddie - 05	-1.3	5419.9	-12.3	0.131
Kirkwood and Bargeddie - 06	-1.3	4052.2	-12.3	0.134
Kirkwood and Bargeddie - 07	-1.3	7023.3	-12.3	0.086
Kirkwood and Bargeddie - 08	-1.3	3934.1	-12.3	0.182
North Barlanark and Easterhouse South - 01	-1.1	4474.2	-11.6	0.194
North Barlanark and Easterhouse South - 02	-1.1	3687.1	-11.6	0.147

Data Zone	BNL Change, dBA	Population Density, pop/km	Speed Change, km/h	Data Zone Area, km
North Barlanark and Easterhouse South - 03	-1.1	6932.0	-11.6	0.147
North Barlanark and Easterhouse South - 04	-1.1	8691.2	-11.6	0.068
North Barlanark and Easterhouse South - 05	-1.2	1396.2	-12.0	0.366
Riddrie and Hogganfield - 06	-0.8	4052.6	-9.8	0.171
Riddrie and Hogganfield - 07	-0.8	991.6	-9.8	1.076
Shawhead and Whifflet - 01	-1.3	819.5	-12.3	1.003

Table C-2 presents a comparison of Do Something 2045 versus Do Minimum 2045, Option 2, without Policy, realistic compliance.

Noise level changes indicate that there is no benefit or impact with this option, with a maximum predicted reduction in noise level of 0.4 dBA due to the smaller changes in average speed compared to 100% compliance scenario.

There are not expected to be any adverse noise impacts on this motorway route for Option 2, without policy, realistic compliance.

Table C-2 – M8 Option 2, without Policy, Realistic Compliance

Data Zone	BNL Change, dBA	Population Density, pop/km	Speed Change, km/h	Data Zone Area, km
Baillieston East - 01	-0.4	764.87	-3.9	2.505
Calderbank and Brownsburn - 04	-0.4	2620.69	-3.1	0.174
Greenend and Carnbroe - 01	-0.4	2799.48	-3.5	0.384
Hattonrigg - 03	-0.4	4167.74	-3.6	0.155
Kirkshaws - 02	-0.4	7793.48	-3.6	0.092
Kirkshaws - 03	-0.4	5957.58	-3.6	0.165
Kirkshaws - 04	-0.4	7706.9	-3.6	0.116
Kirkshaws - 05	-0.4	1770.62	-3.6	0.497

Data Zone	BNL Change, dBA	Population Density, pop/km	Speed Change, km/h	Data Zone Area, km
Kirkwood and Bargeddie - 02	-0.4	1932.85	-3.9	0.417
Kirkwood and Bargeddie - 03	-0.4	5535.35	-3.9	0.099
Kirkwood and Bargeddie - 04	-0.4	2795.45	-3.9	0.176
Kirkwood and Bargeddie - 05	-0.4	5419.85	-3.6	0.131
Kirkwood and Bargeddie - 06	-0.4	4052.24	-3.6	0.134
Kirkwood and Bargeddie - 07	-0.4	7023.26	-3.6	0.086
Kirkwood and Bargeddie - 08	-0.4	3934.07	-3.6	0.182
Shawhead and Whifflet - 01	-0.4	819.54	-3.6	1.003

Table C-3 presents a comparison of Do Something 2045 versus Do Minimum 2045, Option 2, with Policy, 100% compliance.

Changes are anticipated to be minor beneficial, with a maximum predicted reduction in noise level of 1.1 dBA due to the changes in average speed and traffic volumes.

There are not expected to be any adverse noise impacts on this motorway route for Option 2, with policy, 100% compliance.

Table C-3 – M8 Option 2, with Policy, 100% Compliance

Data Zone	BNL Change, dBA	Population Density, pop/km	Speed Change, km/h	Data Zone Area, km
Baillieston East - 01	-1.1	764.9	-13.8	2.505
Barlanark - 07	-1.1	632.4	-13.5	1.118
Barlanark - 08	-1.1	817.6	-13.5	0.499
Calderbank and Brownsburn - 04	-1.0	2620.7	-13.3	0.174
Central Easterhouse - 03	-1.1	4576.4	-13.5	0.203
Chapelhall East - 01	-1.0	7153.4	-12.5	0.176

Data Zone	BNL Change, dBA	Population Density, pop/km	Speed Change, km/h	Data Zone Area, km
Chapelhall East - 02	-1.0	5230.3	-12.5	0.152
Chapelhall West - 03	-1.0	5806.4	-12.5	0.186
Craigend and Ruchazie - 01	-1.1	4110.4	-13.3	0.154
Craigend and Ruchazie - 02	-1.1	5279.6	-13.3	0.211
Craigend and Ruchazie - 05	-1.1	2541.3	-13.3	0.327
Craigend and Ruchazie - 06	-1.1	8048.4	-13.3	0.062
Craigend and Ruchazie - 07	-1.1	3725.6	-13.3	0.317
Cranhill, Lightburn and Queenslie South - 05	-1.0	7379.8	-12.9	0.079
Cranhill, Lightburn and Queenslie South - 06	-1.0	2638.3	-12.9	0.235
Cranhill, Lightburn and Queenslie South - 07	-1.0	5954.3	-12.9	0.153
Easterhouse East - 02	-1.1	2096.8	-13.6	0.124
Easterhouse East - 03	-1.1	9925.9	-13.6	0.081
Easterhouse East - 04	-1.1	4673.1	-13.6	0.156
Garrowhill East and Swinton - 01	-1.1	3590.3	-13.6	0.227
Garrowhill East and Swinton - 02	-1.1	4411.8	-13.6	0.153
Garrowhill East and Swinton - 03	-1.1	6150.0	-13.6	0.140
Garrowhill East and Swinton - 04	-1.1	1759.5	-13.5	0.578
Garrowhill East and Swinton - 05	-1.1	3517.2	-13.6	0.261
Garthamlock, Auchinlea and Gartloch - 02	-1.1	2160.7	-13.5	0.336
Garthamlock, Auchinlea and Gartloch - 04	-1.1	6423.9	-13.3	0.184

Data Zone	BNL Change, dBA	Population Density, pop/km	Speed Change, km/h	Data Zone Area, km
Greenend and Carnbroe - 01	-1.0	2799.5	-13.3	0.384
Hattonrigg - 03	-1.0	4167.7	-13.5	0.155
Kirkshaws - 02	-1.0	7793.5	-13.5	0.092
Kirkshaws - 03	-1.0	5957.6	-13.5	0.165
Kirkshaws - 04	-1.0	7706.9	-13.5	0.116
Kirkshaws - 05	-1.0	1770.6	-13.6	0.497
Kirkwood and Bargeddie - 02	-1.1	1932.8	-13.8	0.417
Kirkwood and Bargeddie - 03	-1.1	5535.4	-13.8	0.099
Kirkwood and Bargeddie - 04	-1.1	2795.4	-13.8	0.176
Kirkwood and Bargeddie - 05	-1.0	5419.9	-13.5	0.131
Kirkwood and Bargeddie - 06	-1.0	4052.2	-13.5	0.134
Kirkwood and Bargeddie - 07	-1.0	7023.3	-13.5	0.086
Kirkwood and Bargeddie - 08	-1.0	3934.1	-13.5	0.182
North Barlanark and Easterhouse South - 01	-1.1	4474.2	-13.5	0.194
North Barlanark and Easterhouse South - 02	-1.1	3687.1	-13.5	0.147
North Barlanark and Easterhouse South - 03	-1.1	6932.0	-13.5	0.147
North Barlanark and Easterhouse South - 04	-1.1	8691.2	-13.5	0.068
North Barlanark and Easterhouse South - 05	-1.1	1396.2	-13.5	0.366
Riddrie and Hogganfield - 06	-1.0	4052.6	-12.9	0.171
Riddrie and Hogganfield - 07	-1.0	991.6	-12.9	1.076

Data Zone	BNL Change, dBA	Population Density, pop/km	Speed Change, km/h	Data Zone Area, km
Shawhead and Whifflet - 01	-1.0	819.5	-13.5	1.003

Table C-4 presents a comparison of Do Something 2045 versus Do Minimum 2045, Option 2, with Policy, realistic compliance.

Noise level changes indicate that there is no benefit or impact with this option, with a maximum predicted reduction in noise level of 0.3 dBA due to the smaller changes in average speed compared to 100% compliance scenario.

There are not expected to be any adverse noise impacts on this motorway route for Option 2, with policy, realistic compliance.

Table C-4 – M8 Option 2, with Policy, Realistic Compliance

Data Zone	BNL Change, dBA	Population Density, pop/km	Speed Change, km/h	Data Zone Area, km
Baillieston East - 01	-0.3	764.9	-4.0	2.505
Barlanark - 07	-0.3	632.4	-3.9	1.118
Barlanark - 08	-0.3	817.6	-4.0	0.499
Calderbank and Brownsburn - 04	-0.3	2620.7	-3.9	0.174
Central Easterhouse - 03	-0.3	4576.4	-3.9	0.203
Chapelhall East - 01	-0.3	7153.4	-3.9	0.176
Chapelhall East - 02	-0.3	5230.3	-3.9	0.152
Chapelhall West - 03	-0.3	5806.4	-3.9	0.186
Craigend and Ruchazie - 01	-0.3	4110.4	-3.9	0.154
Craigend and Ruchazie - 02	-0.3	5279.6	-3.9	0.211
Craigend and Ruchazie - 05	-0.3	2541.3	-3.9	0.327
Craigend and Ruchazie - 06	-0.3	8048.4	-4.0	0.062
Craigend and Ruchazie - 07	-0.3	3725.6	-3.9	0.317

Data Zone	BNL Change, dBA	Population Density, pop/km	Speed Change, km/h	Data Zone Area, km
Cranhill, Lightburn and Queenslie South - 05	-0.3	7379.8	-3.9	0.079
Cranhill, Lightburn and Queenslie South - 06	-0.3	2638.3	-3.9	0.235
Cranhill, Lightburn and Queenslie South - 07	-0.3	5954.3	-3.9	0.153
Easterhouse East - 02	-0.3	2096.8	-3.9	0.124
Easterhouse East - 03	-0.3	9925.9	-3.9	0.081
Easterhouse East - 04	-0.3	4673.1	-3.9	0.156
Garrowhill East and Swinton - 01	-0.3	3590.3	-4.0	0.227
Garrowhill East and Swinton - 02	-0.3	4411.8	-4.0	0.153
Garrowhill East and Swinton - 03	-0.3	6150.0	-4.0	0.140
Garrowhill East and Swinton - 04	-0.3	1759.5	-4.0	0.578
Garrowhill East and Swinton - 05	-0.3	3517.2	-3.9	0.261
Garthamlock, Auchinlea and Gartloch - 02	-0.3	2160.7	-3.9	0.336
Garthamlock, Auchinlea and Gartloch - 04	-0.3	6423.9	-3.9	0.184
Greenend and Carnbroe - 01	-0.3	2799.5	-4.0	0.384
Hattonrigg - 03	-0.3	4167.7	-3.9	0.155
Kirkshaws - 02	-0.3	7793.5	-4.0	0.092
Kirkshaws - 03	-0.3	5957.6	-4.0	0.165
Kirkshaws - 04	-0.3	7706.9	-3.9	0.116
Kirkshaws - 05	-0.3	1770.6	-3.9	0.497
Kirkwood and Bargeddie - 02	-0.3	1932.8	-4.0	0.417
Kirkwood and Bargeddie - 03	-0.3	5535.4	-4.0	0.099

Data Zone	BNL Change, dBA	Population Density, pop/km	Speed Change, km/h	Data Zone Area, km
Kirkwood and Bargeddie - 04	-0.3	2795.4	-4.0	0.176
Kirkwood and Bargeddie - 05	-0.3	5419.9	-4.0	0.131
Kirkwood and Bargeddie - 06	-0.3	4052.2	-4.0	0.134
Kirkwood and Bargeddie - 07	-0.3	7023.3	-4.0	0.086
Kirkwood and Bargeddie - 08	-0.3	3934.1	-4.0	0.182
North Barlanark and Easterhouse South - 01	-0.3	4474.2	-4.0	0.194
North Barlanark and Easterhouse South - 02	-0.3	3687.1	-4.0	0.147
North Barlanark and Easterhouse South - 03	-0.3	6932.0	-4.0	0.147
North Barlanark and Easterhouse South - 04	-0.3	8691.2	-4.0	0.068
North Barlanark and Easterhouse South - 05	-0.3	1396.2	-3.9	0.366
Riddrie and Hogganfield - 06	-0.3	4052.6	-3.9	0.171
Riddrie and Hogganfield - 07	-0.3	991.6	-3.9	1.076
Shawhead and Whifflet - 01	-0.3	819.5	-3.9	1.003