**Decision making templates**

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| **Table H: Qualitative noise mitigation methodology option evaluation matrix** |
| **Assessment criteria** | **Road** **design** | **Road** **seal** | **Noise** **mounds** | **Noise** **walls** | **Acoustic** **windows** | **Monetary** **compensation** | **Other****(specify)** |
| Road safety implications |  |  |  |  |  |  |  |
| Integration with road design |  |  |  |  |  |  |  |
| Achievement of target noise levels |  |  |  | ` |  |  |  |
| Encroachment onto private land |  |  |  |  |  |  |  |
| Impingement on houses |  |  |  |  |  |  |  |
| Aesthetic considerations |  |  |  |  |  |  |  |
| Local community acceptance |  |  |  |  |  |  |  |
| Wider community acceptance |  |  |  |  |  |  |  |
| Risks of antisocial consequences |  |  |  |  |  |  |  |
| Constructability |  |  |  |  |  |  |  |
| Maintainability |  |  |  |  |  |  |  |
| Capital cost to project |  |  |  |  |  |  |  |
| Ongoing maintenance costs |  |  |  |  |  |  |  |
| **Net score** |  |  |  |  |  |  |  |
| **Scoring** |
| +++ | Major benefits | The scoring should be done by each team member independently. Each criterion of each option should be scored using +++ to - - -. The reason for each score should be recorded in a similar companion matrix. The scores of each column should then to be added to calculate a net score (each plus cancels out a minus and *vice versa*) for each option. The Project Manager should then transfer the net scores of each team member to a similar aggregated matrix. The overall reason for each score should be summarised in a similar companion matrix. The scores of each column of the aggregated matrix should then to be added to calculate an overall net score for each option.  |
| ++ | Moderate benefits |
| + | Minor benefits |
| 0 | Insignificant (no) effects  |
| - | Minor drawbacks |
| - - | Moderate drawbacks |
| - - - | Major drawbacks |
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| **Table I: Decision documentation - Project eligibility** |
| **Project name:**  |  |
| **Project manager:**  |  |
| **Date:**  |  |
|  | **Step** | **Yes/No** | **Outcome** |
| 1 | Is the road a State road (i.e. within the Department’s responsibility)? |  | If no, proceed to step 3 then stop, with no further consideration of noise mitigation. If yes, proceed to step 2. |
| 2 | **PROJECT SCENARIO – is the scenario one of the following?** | **Yes/No** |
|  | **Existing roads** |  |
| a. | Permanent increase in the maximum speed limit to more than 20 km/hr above the existing limit? |  |
| b. | Change to a noisier seal type that takes 10-year future traffic noise above LA10(18 hour) 68 dB(A)? |  |
| c. | Natural traffic growth that takes 10-year future traffic noise above LA10(18 hour) 68 dB(A)? |  |
| d. | A permanent material (>10%) increase in the volume of traffic as a result of a Departmental decision that takes 10-year future traffic noise above LA10(18 hour) 68 dB(A)? |  |
| e. | A permanent increase in the proportion of heavy vehicles as a result of a Departmental decision that takes 10-year future night time traffic noise from heavy vehicles (considered alone) on a category 1, 2 or 3 road above LAeq(8 hour) 45 dB(A)? |  |
| f. | Lane addition or road realignment within an established road corridor to facilitate a material (>10%) increase in traffic volume (not simply safety or traffic flow improvements)? |  |
|  | **Future roads** |  |
| g. | Lane addition extending outside the existing road corridor? |  |
| h. | Carriageway addition to existing road? |  |
| i. | Realignment extending outside the existing road corridor? |  |
| j. | New road outside a proclaimed future road corridor and planning scheme corridor? |  |
| k. | New road within a proclaimed future road corridor and adjacent land was built on or zoned for sensitive use prior to the proclamation date? |  |
| l. | New road within a planning scheme road corridor and adjacent land was built on or zoned for sensitive use prior to the corridor addition to the scheme? |  |
|  | **Scenario complications** |
|  | Is a scenario complication invoked? If yes, describe it below: |
|  |  |
|  | Do multiple scenarios apply? If so, describe below which scenario is considered to be dominant and why: |
| 3 | Based on all the above, is the project eligible for mitigation? If no, stop, with no further consideration of noise mitigation. If yes, proceed to identify buildings eligible for noise mitigation. | **Yes/No** |
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| **Table J: Decision documentation - Building eligibility** |
| **Project name:**  |  |
| **Project manager:**  |  |
| **Date:**  |  |
| **Receiver number** | **Receiver address** | **Existing traffic noise level at façade** | **10-year future traffic noise level at façade if the project does not proceed** | **10-year future traffic noise level at façade if the project does proceed** | **Building eligibility classification label** **(see Table F for label definitions)** | **Noise target to achieve** | **Required noise reduction to achieve target** |
| **L10(18 hour) dB(A)** | **L10(18 hour) dB(A)** | **L10(18 hour) dB(A)** | **L10(18 hour) dB(A)** | **L10(18 hour) dB(A)** |
| 1 |  |  |  |  |  |  |  |
| 2 |  |  |  |  |  |  |  |
| 3 |  |  |  |  |  |  |  |
| etc |  |  |  |  |  |  |  |
| All noise levels are 1 m from the most exposed building façade and include a +2.5 dB(A) allowance for the façade effect |

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| **Table K: Decision documentation - Building eligibility for night time heavy vehicle noise** |
| **Project name:**  |  |
| **Project manager:**  |  |
| **Date:**  |  |
| **Receiver number** | **Receiver address** | **10-year future number of heavy vehicles passing at night (between 11 pm and  7 am)** | **10-year future night time noise level at façade from those heavy vehicles**  | **Building eligibility classification** **(see Table F for label definitions)** | **Required noise reduction to achieve 45 dB(A) if building is 45-heavy or not applicable otherwise**  |
|  |  |  | **Leq(8 hour) dB(A)** |  | **Leq(8 hour) dB(A)** |
| 1 |  |  |  |  |  |
| 2 |  |  |  |  |  |
| 3 |  |  |  |  |  |
| etc |  |  |  |  |  |
| All noise levels are 1 m from the most exposed building façade and include a +2.5 dB(A) allowance for the façade effect |

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| **Table L: Decision documentation - Summary statistics for building mitigation** |
| **Project name:**  |  |
| **Project manager:**  |  |
| **Date:**  |  |
| **Classification group****(see Table F for label definitions)** | **Total number of buildings in classification group** | **Number of buildings exceeding target by:** |
|  |  | **< 1 dB(A)** | **1 to 2 dB(A)** | **2 to 3 dB(A)** | **>3 dB(A)** |
| Ineligible |  | (Not applicable) | (Not applicable) | (Not applicable) | (Not applicable) |
| 63-stet |  | (Not applicable) | (Not applicable) | (Not applicable) | (Not applicable) |
| 63-plus |  |  |  |  |  |
| 68-plus |  |  |  |  |  |
| 15-delta |  |  |  |  |  |
| 45-heavy |  |  |  |  |  |
| **Total** |  |  |  |  |  |