**Table 1. Measured and predicted results**

|  |  |  |  |
| --- | --- | --- | --- |
|  | Predicted Lday [dB(A)] | Measured Lday [dB(A)] | Predicted -Measured [dB(A)] |
| Long-term Position 1 | 72.5 | 73.6 | -1.1 |
|  |  |  |  |
| Short-Term Position 1 | 69.3 | 66.5 | +1.8 |
| Short-Term Position 2 | 70.9 | 74.0 | -3.1 |
| Short-Term Position 3 | 63.3 | 65.0 | -1.7 |
| Short-Term Position 4 | 49.5 | 54.4 | -4.9 |
| Short-Term Position 5 | 55.6 | 56.6 | -1 |
| Short-Term Position 6 | 70.0 | 72.9 | -2.9 |
| Short-Term Position 7 | 65.6 | 67.4 | -1.8 |

**Table 2. Estimates of population exposure for study area (all roads included)**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | **<55** | **55-60** | **60-65** | **65-70** | **70-75** | **>75** |
| **Residents** | 35675 | 28411 | 14522 | 12730 | 32668 | 9033 |
|  | **45-50** | **50-55** | **55-60** | **60-65** | **65-70** | **>70** |
| **Residents** | 27020 | 14591 | 10377 | 20872 | 25346 | 458 |

**Table 3. Population exposure for the base reference condition - selected roads**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | **<55** | **55-60** | **60-65** | **65-70** | **70-75** | **>75** |
| **Residents** | 60588 | 22757 | 12064 | 6174 | 23891 | 7565 |
|  | **45-50** | **50-55** | **55-60** | **60-65** | **65-70** | **>70** |
| **Residents** | 21894 | 12587 | 5854 | 14158 | 18905 | 291 |

**Table 4. Revised population exposure from the base reference condition for 10% and 20% travel demand reductions on roads**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **(-10%)** | **<55** | **55-60** | **60-65** | **65-70** | **70-75** | **>75** |
| **Residents** | 63142  (+4.2%) | 21770  (-4.3%) | 11301  (-6.3%) | 5690  (-7.4%) | 25672  (-7.5%) | 5464  (-27.8%) |
| **(-20%)** | **<55** | **55-60** | **60-65** | **65-70** | **70-75** | **>75** |
| **Residents** | 64899  (+7.1%) | 21841  (-4.2%) | 10167  (-15.7%) | 6331  (+3.1%) | 27117  (+13.5%) | 2684  (-64.5%) |
| **(-10%)** | **45-50** | **50-55** | **55-60** | **60-65** | **65-70** | **>70** |
| **Residents** | 21132  (-3.5%) | 11729  (-6.8%) | 5425  (-7.9%) | 16452  (+16.2%) | 16643  (-12.2%) | 115  (-60.5%) |
| **(-20%)** | **45-50** | **50-55** | **55-60** | **60-65** | **65-70** | **>70** |
| **Residents** | 19630  (-10.3%) | 11347  (-9.8%) | 6236  (+6.5%) | 17354  (+22.6%) | 14153  (-25.1%) | 93  (-68.1%) |

**Table 5. Revised population exposure from the base reference condition for 10% and 20% speed reductions on** **roads**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **(-10%)** | **<55** | **55-60** | **60-65** | **65-70** | **70-75** | **>75** |
| **Residents** | 61872  (+2.1%) | 22443  (-1.4%) | 11505  (-4.6%) | 5843  (-5.2%) | 25246  (+5.7%) | 6130  (-23.4%) |
| **(-20%)** | **<55** | **55-60** | **60-65** | **65-70** | **70-75** | **>75** |
| **Residents** | 64560  (+6.5%) | 21572  (-4.4%) | 11111  (-7.9%) | 5863  (-8.6%) | 25927  (+8.5%) | 4006  (-47.1%) |
| **(-10%)** | **45-50** | **50-55** | **55-60** | **60-65** | **65-70** | **>70** |
| **Residents** | 21055  (-3.8%) | 12124  (-3.6) | 5623  (-4.0%) | 15862  (+12.0%) | 17418  (-8.5%) | 123  (-57.7%) |
| **(-20%)** | **45-50** | **50-55** | **55-60** | **60-65** | **65-70** | **>70** |
| **Residents** | 21009  (-4.1%) | 11552  (-8.2%) | 5377  (-8.2%) | 16911  (+19.5%) | 16111  (+14.8%) | 108  (-169.4%) |

**Table 6. Revised population exposure from the base reference condition for the combined implementation of two ‘acoustical planning’ mitigation measures**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **(-10%)** | **<55** | **55-60** | **60-65** | **65-70** | **70-75** | **>75** |
| **Residents** | 64110  (+5.8%) | 21863  (-3.1%) | 10265  (-14.9%) | 5907  (-4.3%) | 27147  (+13.6%) | 3747  (-50.5%) |
| **(-10%)** | **45-50** | **50-55** | **55-60** | **60-65** | **65-70** | **>70** |
| **Residents** | 20418  (-6.7% | 11466  (-8.9%) | 5453  (-6.9%) | 16604  (+17.3%) | 15200  (-20.0%) | 93  (-68.0%) |

**Table 7. Revised population exposure from the base barrier reference condition for noise barrier implementation**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **No Barrier** | **<55** | **55-60** | **60-65** | **65-70** | **70-75** | **>75** |
| **Residents** | 119582 | 5908 | 3798 | 1227 | 970 | 1554 |
| **2m Barrier** | **<55** | **55-60** | **60-65** | **65-70** | **70-75** | **>75** |
| **Residents** | 119649  (+0.1%) | 5967  (+1.0%) | 3788  (-0.3%) | 1262  (+2.9%) | 931  (-4.0%) | 1442  (-7.2%) |
| **3.5m Barrier** | **<55** | **55-60** | **60-65** | **65-70** | **70-75** | **>75** |
| **Residents** | 119670  (+0.1%) | 6060  (+2.6%) | 3715  (-2.2%) | 1256  (+3.2%) | 931  (-4.0%) | 1407  (-9.5%) |
| **No Barrier** | **45-50** | **50-55** | **55-60** | **60-65** | **65-70** | **>70** |
| **Residents** | 4993 | 4223 | 1076 | 1273 | 529 | 1234 |
| **2m Barrier** | **45-50** | **50-55** | **55-60** | **60-65** | **65-70** | **>70** |
| **Residents** | 5024  (+0.6%) | 4325  (+2.4%) | 1026  (-4.7%) | 1292  (+1.5%) | 502  (-5.1%) | 1185  (-4.0%) |
| **3.5m Barrier** | **45-50** | **50-55** | **55-60** | **60-65** | **65-70** | **>70** |
| **Residents** | 5086  (+1.9%) | 4309  (+2.0%) | 1041  (-3.3%) | 1286  (+1.0%) | 502  (-5.1%) | 1131  (-8.4%) |