Detection of the toughest: Pedestrian injury risk as a smooth function of age

# APPENDIX

Table A1 – number of cases by age groups.

|  |  |
| --- | --- |
| age group [in years] | number of cases |
| 00 – 10 | 260 |
| 11 – 20 | 269 |
| 21 – 30 | 139 |
| 31 – 40 | 107 |
| 41 – 50 | 132 |
| 51 – 60 | 125 |
| 61 – 70 | 117 |
| 71 – 80  | 117 |
| 81 – 99 | 82 |
| all | 1348 |

Table A2 – number of cases by collision speed groups.

|  |  |
| --- | --- |
| collision speed interval[in km/h] | number of cases |
| 00 – 09 | 239 |
| 10 – 19 | 340 |
| 20 – 29 | 282 |
| 30 – 39 | 261 |
| 40 – 49 | 169 |
| 50 – 59 | 32 |
| 60 –  | 25 |
| all | 1348 |

Table A3 – number of cases by injury severity groups.

|  |  |
| --- | --- |
| injury severity [in ISSx] | number of cases |
| $$\leq 1.0$$ | 740 |
| $$\leq 2.5$$ | 1167 |
| $$\leq 5.0$$ | 1255 |
| $$>5.0$$ | 93 |
| all | 1348 |

Table A4 – relation of injury scales.

|  |  |  |  |
| --- | --- | --- | --- |
| ISSx | ISS | AIS-triplet | MAIS |
| 0.00 | 0 | (0;0;0) | 0 |
| 0.29 | 1 | (1;0;0) | 1 |
| 0.58 | 2 | (1;1;0) | 1 |
| 0.87 | 3 | (1;1;1) | 1 |
| 1.08 | 4 | (2;0;0) | 2 |
| 1.37 | 5 | (2;1;0) | 2 |
| 1.67 | 6 | (2;1;1) | 2 |
| 2.17 | 8 | (2;2;0) | 2 |
| 2.46 | 9 | (2;2;1) | 2 |
| 3.24 | 9 | (3;0;0) | 3 |
| 3.25 | 12 | (2;2;2) | 2 |
| 3.53 | 10 | (3;1;0) | 3 |
| 3.82 | 11 | (3;1;1) | 3 |
| 4.32 | 13 | (3;2;0) | 3 |
| 4.61 | 14 | (3;2;1) | 3 |
| 5.40 | 17 | (3;2;2) | 3 |
| 6.47 | 18 | (3;3;0) | 3 |
| 6.76 | 19 | (3;3;1) | 3 |
| 7.56 | 22 | (3;3;2) | 3 |
| 9.09 | 16 | (4;0;0) | 4 |
| 9.38 | 17 | (4;1;0) | 4 |
| 9.67 | 18 | (4;1;1) | 4 |
| 9.71 | 27 | (3;3;3) | 3 |
| 10.46 | 21 | (4;2;1) | 4 |

Table A5: Final adapted parameter values: critical collision speed values $\tilde{v}\_{crit}$ by age and injury severity class.

|  |  |
| --- | --- |
| **critical speed**  | **age [in years]** |
| **5** | **6** | **7** | **8** | **9** | **10** | **11** | **12** | **13** | **14** | **15** | **16** | **17** | **18** | **19** | **20** | **21** | **22** | **23** | **24** |
| **injury severity class [in ISSx]** | **0.50+** | 72 | 71.9 | 71.9 | 71.9 | 71.8 | 71.8 | 71.7 | 71.7 | 71.6 | 71.6 | 71.6 | 71.5 | 71.5 | 71.4 | 71.4 | 71.3 | 71.3 | 71.3 | 71.2 | 71.2 |
| **0.75+** | 72 | 71.9 | 71.9 | 71.9 | 71.8 | 71.8 | 71.7 | 71.7 | 71.6 | 71.6 | 71.6 | 71.5 | 71.5 | 71.4 | 71.4 | 71.3 | 71.3 | 71.3 | 71.2 | 71.2 |
| **1.00+** | 72 | 71.9 | 71.9 | 71.9 | 71.8 | 71.8 | 71.7 | 71.7 | 71.6 | 71.6 | 71.6 | 71.5 | 71.5 | 71.4 | 71.4 | 71.3 | 71.3 | 71.3 | 71.2 | 71.2 |
| **1.25+** | 72 | 71.9 | 71.9 | 71.9 | 71.8 | 71.8 | 71.7 | 71.7 | 71.6 | 71.6 | 71.6 | 71.5 | 71.5 | 71.4 | 71.4 | 71.3 | 71.3 | 71.3 | 71.2 | 71.2 |
| **1.50+** | 72 | 71.9 | 71.9 | 71.9 | 71.8 | 71.8 | 71.7 | 71.7 | 71.7 | 71.7 | 71.7 | 71.7 | 71.6 | 71.6 | 71.6 | 71.6 | 71.6 | 71.6 | 71.6 | 71.6 |
| **2.00+** | 72 | 71.9 | 71.9 | 71.9 | 71.8 | 71.8 | 71.7 | 71.7 | 71.7 | 71.7 | 71.7 | 71.7 | 71.6 | 71.6 | 71.6 | 71.6 | 71.6 | 71.6 | 71.6 | 71.6 |
| **2.25+** | 72 | 71.9 | 71.9 | 71.9 | 71.8 | 71.8 | 71.7 | 71.7 | 71.7 | 71.7 | 71.7 | 71.7 | 71.6 | 71.6 | 71.6 | 71.6 | 71.6 | 71.7 | 73.2 | 74.7 |
| **2.50+** | 77.5 | 77.2 | 77 | 76.8 | 76.6 | 76.4 | 76.2 | 76 | 75.8 | 75.6 | 75.4 | 75.2 | 75 | 75.1 | 75.8 | 76.5 | 77.2 | 77.9 | 78.6 | 79.3 |
| **3.25+** | 77.5 | 77.2 | 77 | 76.8 | 76.7 | 76.6 | 76.5 | 76.4 | 76.2 | 76.1 | 76.2 | 77 | 77.9 | 78.7 | 79.6 | 80.4 | 81.2 | 82.1 | 82.9 | 83.8 |
| **3.50+** | 77.5 | 77.2 | 77 | 76.8 | 76.7 | 76.6 | 76.5 | 76.4 | 76.2 | 76.1 | 76.2 | 77 | 77.9 | 78.7 | 79.6 | 80.4 | 81.3 | 82.2 | 83 | 83.9 |
| **3.75+** | 77.5 | 77.2 | 77 | 76.8 | 76.7 | 76.6 | 76.5 | 76.4 | 76.2 | 76.1 | 76.2 | 77 | 77.9 | 78.7 | 79.6 | 80.4 | 81.3 | 82.2 | 83 | 83.9 |
| **4.00+** | 77.5 | 77.2 | 77 | 76.8 | 76.7 | 76.6 | 76.5 | 76.4 | 76.2 | 76.1 | 76.2 | 77 | 77.9 | 78.7 | 79.6 | 80.4 | 81.3 | 82.2 | 83 | 83.9 |
| **4.50+** | 77.5 | 77.2 | 77 | 76.8 | 76.7 | 76.6 | 76.5 | 76.4 | 76.3 | 76.2 | 76.2 | 77 | 77.9 | 78.7 | 79.6 | 80.4 | 81.3 | 82.2 | 83 | 83.9 |
| **5.00+** | 77.5 | 77.2 | 77 | 76.8 | 76.8 | 76.8 | 76.8 | 76.9 | 76.9 | 77 | 77 | 77 | 77.9 | 78.7 | 79.6 | 80.6 | 82 | 83.3 | 84.7 | 86.1 |
|  |   |  |
|  |  | **25** | **26** | **27** | **28** | **29** | **30** | **31** | **32** | **33** | **34** | **35** | **36** | **37** | **38** | **39** | **40** | **41** | **42** | **43** | **44** |
| **injury severity class [in ISSx]** | **0.50+** | 71.1 | 71.1 | 71 | 71 | 71 | 70.9 | 70.9 | 70.8 | 70.3 | 69.4 | 68.6 | 67.7 | 66.9 | 66.1 | 65.2 | 64.4 | 63.6 | 62.7 | 61.9 | 61 |
| **0.75+** | 71.1 | 71.1 | 71 | 71 | 71 | 70.9 | 70.9 | 70.8 | 70.3 | 69.4 | 68.6 | 67.7 | 66.9 | 66.1 | 65.2 | 64.4 | 63.6 | 62.7 | 61.9 | 61 |
| **1.00+** | 71.1 | 71.1 | 71 | 71 | 71 | 70.9 | 70.9 | 70.8 | 70.3 | 69.4 | 68.6 | 67.7 | 66.9 | 66.1 | 65.2 | 64.4 | 63.6 | 62.7 | 61.9 | 61 |
| **1.25+** | 71.1 | 71.1 | 71 | 71 | 71 | 70.9 | 70.9 | 70.8 | 70.3 | 69.4 | 68.6 | 67.7 | 66.9 | 66.1 | 65.2 | 64.4 | 63.6 | 62.8 | 62 | 61.2 |
| **1.50+** | 72.3 | 73.3 | 74.4 | 75.4 | 76.4 | 77.5 | 78.5 | 79.5 | 79.6 | 78.3 | 76.9 | 75.6 | 74.3 | 73 | 71.6 | 70.3 | 69 | 67.6 | 66.3 | 65 |
| **2.00+** | 72.3 | 73.3 | 74.4 | 75.4 | 76.4 | 77.5 | 78.5 | 79.5 | 79.6 | 78.3 | 76.9 | 75.6 | 74.3 | 73 | 71.6 | 70.3 | 69 | 67.6 | 66.3 | 65 |
| **2.25+** | 76.2 | 77.6 | 79.1 | 80.6 | 82 | 83.5 | 85 | 86.5 | 86 | 84.3 | 82.5 | 80.8 | 79.1 | 77.4 | 75.6 | 73.9 | 72.2 | 70.5 | 68.7 | 67 |
| **2.50+** | 80 | 80.7 | 81.4 | 82.1 | 82.8 | 83.5 | 85 | 86.5 | 86 | 84.8 | 83 | 81.2 | 79.4 | 77.6 | 75.7 | 73.9 | 72.2 | 70.5 | 68.7 | 67 |
| **3.25+** | 84.6 | 85.5 | 86.3 | 87.2 | 88 | 88.8 | 89.7 | 89.4 | 87.5 | 85.6 | 83.7 | 81.8 | 79.9 | 78 | 76.1 | 74.2 | 72.3 | 70.5 | 68.7 | 67 |
| **3.50+** | 84.8 | 85.6 | 86.5 | 87.4 | 88.2 | 89.1 | 90 | 89.4 | 87.5 | 85.6 | 83.7 | 81.8 | 79.9 | 78 | 76.1 | 74.2 | 72.3 | 70.5 | 68.7 | 67 |
| **3.75+** | 84.8 | 85.6 | 86.5 | 87.4 | 88.2 | 89.1 | 90 | 89.4 | 87.5 | 85.6 | 83.7 | 81.8 | 79.9 | 78 | 76.1 | 74.2 | 72.3 | 70.5 | 68.7 | 67 |
| **4.00+** | 84.8 | 85.6 | 86.5 | 87.4 | 88.2 | 89.1 | 90 | 89.4 | 87.5 | 85.6 | 83.7 | 81.8 | 79.9 | 78 | 76.1 | 74.2 | 72.3 | 70.5 | 68.7 | 67 |
| **4.50+** | 84.8 | 85.6 | 86.5 | 87.4 | 88.2 | 89.1 | 90 | 89.4 | 87.5 | 85.6 | 83.7 | 82.4 | 81.4 | 80.4 | 79.3 | 78.3 | 77.3 | 76.2 | 75.2 | 74.2 |
| **5.00+** | 87.4 | 88.8 | 90.2 | 91.5 | 92.9 | 94.3 | 95.6 | 95.6 | 93.6 | 91.6 | 89.6 | 87.6 | 85.6 | 83.6 | 81.6 | 79.6 | 77.6 | 76.2 | 75.2 | 74.2 |
|  |   |  |
|  |  | **45** | **46** | **47** | **48** | **49** | **50** | **51** | **52** | **53** | **54** | **55** | **56** | **57** | **58** | **59** | **60** | **61** | **62** | **63** | **64** |
| **injury severity class [in ISSx]** | **0.50+** | 60.2 | 59.4 | 58.5 | 57.7 | 56.9 | 56 | 55.2 | 54.3 | 53.5 | 52.7 | 52.4 | 52.5 | 52.7 | 52.8 | 53 | 53.1 | 53.2 | 53.4 | 53.5 | 53.6 |
| **0.75+** | 60.2 | 59.4 | 58.5 | 57.7 | 56.9 | 56 | 55.2 | 54.3 | 53.5 | 52.7 | 52.4 | 52.5 | 52.7 | 52.8 | 53 | 53.1 | 53.2 | 53.4 | 53.5 | 53.6 |
| **1.00+** | 60.2 | 59.4 | 58.5 | 57.7 | 56.9 | 56 | 55.2 | 54.3 | 53.5 | 52.7 | 52.4 | 52.5 | 52.7 | 52.8 | 53 | 53.1 | 53.2 | 53.4 | 53.5 | 53.7 |
| **1.25+** | 60.4 | 59.6 | 58.8 | 58 | 57.2 | 56.4 | 55.6 | 54.8 | 54 | 53.2 | 53 | 53.1 | 53.2 | 53.3 | 53.4 | 53.5 | 53.6 | 53.7 | 53.9 | 54 |
| **1.50+** | 63.6 | 62.3 | 61 | 59.6 | 58.3 | 57 | 55.6 | 54.8 | 54 | 53.2 | 53.3 | 53.4 | 53.4 | 53.5 | 53.6 | 53.7 | 53.8 | 53.9 | 54 | 54.1 |
| **2.00+** | 63.6 | 62.3 | 61 | 59.6 | 58.3 | 57 | 55.6 | 54.8 | 54 | 53.2 | 53.3 | 53.4 | 53.4 | 53.5 | 53.6 | 53.7 | 53.8 | 53.9 | 54 | 54.1 |
| **2.25+** | 65.3 | 63.6 | 61.8 | 60.1 | 58.4 | 57 | 55.6 | 54.8 | 54 | 53.2 | 53.3 | 53.4 | 53.5 | 53.6 | 53.6 | 53.7 | 53.8 | 53.9 | 54 | 54.1 |
| **2.50+** | 65.3 | 63.6 | 62.6 | 61.9 | 61.2 | 60.5 | 59.8 | 59.1 | 58.4 | 57.8 | 57.6 | 57.5 | 57.4 | 57.3 | 57.2 | 57.1 | 56.9 | 56.8 | 56.7 | 56.6 |
| **3.25+** | 65.3 | 63.6 | 62.6 | 61.9 | 61.2 | 60.5 | 59.8 | 59.1 | 58.4 | 57.8 | 57.7 | 57.6 | 57.4 | 57.3 | 57.2 | 57.1 | 57 | 56.9 | 56.7 | 56.6 |
| **3.50+** | 65.3 | 63.6 | 62.6 | 61.9 | 61.2 | 60.5 | 59.8 | 59.1 | 58.4 | 57.8 | 57.7 | 57.6 | 57.4 | 57.3 | 57.2 | 57.1 | 57 | 56.9 | 56.7 | 56.6 |
| **3.75+** | 65.3 | 63.6 | 62.6 | 61.9 | 61.2 | 60.5 | 59.8 | 59.1 | 58.4 | 57.8 | 57.7 | 57.6 | 57.4 | 57.3 | 57.2 | 57.1 | 57 | 56.9 | 56.7 | 56.6 |
| **4.00+** | 65.3 | 63.6 | 62.6 | 61.9 | 61.2 | 60.5 | 59.8 | 59.1 | 58.4 | 57.8 | 57.7 | 57.6 | 57.4 | 57.3 | 57.2 | 57.1 | 57 | 56.9 | 56.7 | 56.6 |
| **4.50+** | 73.2 | 72.1 | 71.1 | 70.1 | 69 | 68 | 67 | 66 | 64.9 | 63.9 | 62.9 | 61.8 | 60.8 | 59.8 | 58.8 | 57.7 | 57.6 | 57.4 | 57.3 | 57.1 |
| **5.00+** | 73.2 | 72.1 | 71.1 | 70.1 | 70.2 | 70.2 | 70.2 | 70.2 | 70.3 | 70.3 | 70.3 | 70.4 | 70.4 | 70.4 | 69.6 | 68.6 | 67.6 | 66.6 | 65.6 | 64.6 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  | **65** | **66** | **67** | **68** | **69** | **70** | **71** | **72** | **73** | **74** | **75** | **76** | **77** | **78** | **79** | **80** |  |  |  |  |
| **injury severity class [in ISSx]** | **0.50+** | 53.8 | 53.9 | 54.1 | 54.2 | 54.3 | 54.5 | 54.6 | 54.8 | 54.9 | 55 | 55.2 | 55.3 | 55.5 | 55.6 | 55.7 | 55.9 |  |  |  |  |
| **0.75+** | 53.8 | 53.9 | 54.1 | 54.2 | 54.3 | 54.5 | 54.6 | 54.8 | 54.9 | 55 | 55.2 | 55.3 | 55.5 | 55.6 | 55.7 | 55.9 |  |  |  |  |
| **1.00+** | 53.8 | 53.9 | 54.1 | 54.2 | 54.4 | 54.5 | 54.6 | 54.8 | 54.9 | 55.1 | 55.2 | 55.3 | 55.5 | 55.6 | 55.8 | 55.9 |  |  |  |  |
| **1.25+** | 54.1 | 54.2 | 54.3 | 54.4 | 54.5 | 54.6 | 54.7 | 54.8 | 54.9 | 55.1 | 55.2 | 55.3 | 55.5 | 55.6 | 55.8 | 55.9 |  |  |  |  |
| **1.50+** | 54.2 | 54.3 | 54.3 | 54.4 | 54.5 | 54.6 | 54.7 | 54.8 | 54.9 | 55.1 | 55.2 | 55.3 | 55.5 | 55.6 | 55.8 | 55.9 |  |  |  |  |
| **2.00+** | 54.2 | 54.3 | 54.3 | 54.4 | 54.5 | 54.6 | 54.7 | 54.8 | 54.9 | 55.1 | 55.2 | 55.3 | 55.5 | 55.6 | 55.8 | 55.9 |  |  |  |  |
| **2.25+** | 54.2 | 54.3 | 54.4 | 54.4 | 54.5 | 54.6 | 54.7 | 54.8 | 54.9 | 55.1 | 55.2 | 55.3 | 55.5 | 55.6 | 55.8 | 55.9 |  |  |  |  |
| **2.50+** | 56.5 | 56.4 | 56.2 | 56.1 | 56 | 55.9 | 55.8 | 55.6 | 55.5 | 55.4 | 55.3 | 55.3 | 55.5 | 55.6 | 55.8 | 55.9 |  |  |  |  |
| **3.25+** | 56.5 | 56.4 | 56.3 | 56.1 | 56 | 55.9 | 55.8 | 55.7 | 55.5 | 55.4 | 55.3 | 55.3 | 55.5 | 55.6 | 55.8 | 55.9 |  |  |  |  |
| **3.50+** | 56.5 | 56.4 | 56.3 | 56.1 | 56 | 55.9 | 55.8 | 55.7 | 55.5 | 55.4 | 55.3 | 55.3 | 55.5 | 55.6 | 55.8 | 55.9 |  |  |  |  |
| **3.75+** | 56.5 | 56.4 | 56.3 | 56.1 | 56 | 55.9 | 55.8 | 55.7 | 55.5 | 55.4 | 55.3 | 55.3 | 55.5 | 55.6 | 55.8 | 55.9 |  |  |  |  |
| **4.00+** | 56.5 | 56.4 | 56.3 | 56.1 | 56 | 55.9 | 55.8 | 55.7 | 55.5 | 55.4 | 55.3 | 55.3 | 55.5 | 55.6 | 55.8 | 55.9 |  |  |  |  |
| **4.50+** | 57 | 56.8 | 56.7 | 56.5 | 56.4 | 56.2 | 56.1 | 55.9 | 55.8 | 55.6 | 55.5 | 55.3 | 55.5 | 55.6 | 55.8 | 55.9 |  |  |  |  |
| **5.00+** | 63.6 | 62.6 | 61.6 | 60.6 | 59.6 | 58.6 | 57.6 | 56.6 | 55.8 | 55.6 | 55.5 | 55.3 | 55.5 | 55.6 | 55.8 | 55.9 |  |  |  |  |

Table A6: Final adapted parameter values: shape parameter values $\tilde{a}\*ISSx$ by age and injury severity class.

|  |  |
| --- | --- |
| **shape parameter** | **age [in years]** |
| **5** | **6** | **7** | **8** | **9** | **10** | **11** | **12** | **13** | **14** | **15** | **16** | **17** | **18** | **19** | **20** | **21** | **22** | **23** | **24** |
| **injury severity class [in ISSx]** | **0.50+** | 0.82 | 0.82 | 0.81 | 0.81 | 0.8 | 0.8 | 0.8 | 0.79 | 0.79 | 0.78 | 0.78 | 0.78 | 0.77 | 0.77 | 0.77 | 0.76 | 0.76 | 0.75 | 0.75 | 0.75 |
| **0.75+** | 0.97 | 0.97 | 0.97 | 0.96 | 0.96 | 0.96 | 0.95 | 0.95 | 0.95 | 0.94 | 0.94 | 0.94 | 0.93 | 0.93 | 0.93 | 0.92 | 0.92 | 0.92 | 0.91 | 0.91 |
| **1.00+** | 1 | 1 | 0.99 | 0.99 | 0.98 | 0.98 | 0.97 | 0.97 | 0.97 | 0.96 | 0.96 | 0.95 | 0.95 | 0.94 | 0.94 | 0.94 | 0.93 | 0.93 | 0.92 | 0.92 |
| **1.25+** | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.11 | 1.11 | 1.11 | 1.11 | 1.11 | 1.11 | 1.11 | 1.11 | 1.11 | 1.11 | 1.11 | 1.11 | 1.11 | 1.11 | 1.11 |
| **1.50+** | 2.94 | 2.93 | 2.93 | 2.92 | 2.91 | 2.9 | 2.9 | 2.89 | 2.88 | 2.87 | 2.87 | 2.86 | 2.85 | 2.85 | 2.84 | 2.83 | 2.82 | 2.82 | 2.81 | 2.76 |
| **2.00+** | 3.12 | 3.11 | 3.1 | 3.1 | 3.09 | 3.08 | 3.07 | 3.06 | 3.05 | 3.05 | 3.04 | 3.03 | 3.02 | 3.01 | 3 | 3 | 2.99 | 2.98 | 2.88 | 2.77 |
| **2.25+** | 3.25 | 3.24 | 3.22 | 3.2 | 3.19 | 3.17 | 3.16 | 3.14 | 3.12 | 3.11 | 3.09 | 3.08 | 3.06 | 3.04 | 3.03 | 3.01 | 2.99 | 2.98 | 2.89 | 2.78 |
| **2.50+** | 3.47 | 3.47 | 3.47 | 3.47 | 3.47 | 3.47 | 3.47 | 3.48 | 3.48 | 3.48 | 3.48 | 3.48 | 3.48 | 3.48 | 3.49 | 3.49 | 3.49 | 3.36 | 3.22 | 3.09 |
| **3.25+** | 3.5 | 3.5 | 3.5 | 3.5 | 3.5 | 3.49 | 3.49 | 3.49 | 3.49 | 3.49 | 3.49 | 3.48 | 3.48 | 3.48 | 3.49 | 3.49 | 3.49 | 3.36 | 3.22 | 3.1 |
| **3.50+** | 3.5 | 3.5 | 3.5 | 3.5 | 3.5 | 3.49 | 3.49 | 3.49 | 3.49 | 3.49 | 3.49 | 3.48 | 3.48 | 3.48 | 3.49 | 3.49 | 3.49 | 3.36 | 3.22 | 3.1 |
| **3.75+** | 3.86 | 3.86 | 3.86 | 3.86 | 3.86 | 3.86 | 3.86 | 3.87 | 3.87 | 3.87 | 3.87 | 3.87 | 3.87 | 3.87 | 3.82 | 3.69 | 3.56 | 3.44 | 3.31 | 3.18 |
| **4.00+** | 3.87 | 3.87 | 3.88 | 3.88 | 3.88 | 3.88 | 3.89 | 3.89 | 3.89 | 3.89 | 3.9 | 3.9 | 3.9 | 3.9 | 3.83 | 3.7 | 3.57 | 3.44 | 3.31 | 3.18 |
| **4.50+** | 3.87 | 4.05 | 4.36 | 4.66 | 4.97 | 4.97 | 4.85 | 4.72 | 4.59 | 4.47 | 4.34 | 4.22 | 4.09 | 3.96 | 3.84 | 3.71 | 3.58 | 3.46 | 3.33 | 3.2 |
| **5.00+** | 4.65 | 4.64 | 4.64 | 4.66 | 4.97 | 4.97 | 4.85 | 4.72 | 4.6 | 4.59 | 4.58 | 4.49 | 4.38 | 4.26 | 4.14 | 4.02 | 3.91 | 3.79 | 3.67 | 3.55 |
|  |   |  |
|  |  | **25** | **26** | **27** | **28** | **29** | **30** | **31** | **32** | **33** | **34** | **35** | **36** | **37** | **38** | **39** | **40** | **41** | **42** | **43** | **44** |
| **injury severity class [in ISSx]** | **0.50+** | 0.74 | 0.74 | 0.74 | 0.73 | 0.73 | 0.72 | 0.72 | 0.72 | 0.71 | 0.71 | 0.7 | 0.7 | 0.69 | 0.69 | 0.68 | 0.68 | 0.67 | 0.67 | 0.66 | 0.65 |
| **0.75+** | 0.91 | 0.9 | 0.9 | 0.89 | 0.89 | 0.89 | 0.88 | 0.88 | 0.88 | 0.87 | 0.87 | 0.87 | 0.86 | 0.86 | 0.85 | 0.85 | 0.84 | 0.84 | 0.83 | 0.82 |
| **1.00+** | 0.91 | 0.91 | 0.91 | 0.9 | 0.9 | 0.89 | 0.89 | 0.88 | 0.88 | 0.87 | 0.87 | 0.87 | 0.86 | 0.86 | 0.85 | 0.85 | 0.84 | 0.84 | 0.84 | 0.83 |
| **1.25+** | 1.11 | 1.11 | 1.11 | 1.11 | 1.11 | 1.12 | 1.12 | 1.12 | 1.12 | 1.12 | 1.12 | 1.12 | 1.12 | 1.12 | 1.12 | 1.12 | 1.12 | 1.12 | 1.12 | 1.12 |
| **1.50+** | 2.63 | 2.49 | 2.36 | 2.22 | 2.09 | 1.95 | 1.82 | 1.68 | 1.6 | 1.62 | 1.64 | 1.66 | 1.68 | 1.7 | 1.72 | 1.75 | 1.77 | 1.79 | 1.81 | 1.83 |
| **2.00+** | 2.67 | 2.56 | 2.45 | 2.34 | 2.23 | 2.12 | 2.01 | 1.9 | 1.79 | 1.76 | 1.8 | 1.83 | 1.87 | 1.91 | 1.94 | 1.98 | 2.02 | 2.05 | 2.09 | 2.13 |
| **2.25+** | 2.67 | 2.56 | 2.45 | 2.34 | 2.23 | 2.12 | 2.01 | 1.9 | 1.79 | 1.76 | 1.8 | 1.83 | 1.87 | 1.91 | 1.94 | 1.98 | 2.03 | 2.07 | 2.11 | 2.15 |
| **2.50+** | 2.96 | 2.83 | 2.69 | 2.56 | 2.43 | 2.3 | 2.16 | 2.03 | 1.9 | 1.9 | 1.95 | 1.99 | 2.04 | 2.08 | 2.13 | 2.17 | 2.22 | 2.26 | 2.3 | 2.35 |
| **3.25+** | 2.97 | 2.85 | 2.72 | 2.59 | 2.47 | 2.34 | 2.22 | 2.09 | 2.07 | 2.1 | 2.14 | 2.18 | 2.21 | 2.25 | 2.29 | 2.33 | 2.36 | 2.4 | 2.44 | 2.47 |
| **3.50+** | 2.97 | 2.85 | 2.73 | 2.6 | 2.48 | 2.35 | 2.23 | 2.1 | 2.1 | 2.14 | 2.18 | 2.22 | 2.26 | 2.29 | 2.33 | 2.37 | 2.41 | 2.45 | 2.48 | 2.52 |
| **3.75+** | 3.05 | 2.92 | 2.8 | 2.67 | 2.54 | 2.41 | 2.28 | 2.16 | 2.12 | 2.16 | 2.21 | 2.25 | 2.3 | 2.35 | 2.39 | 2.44 | 2.48 | 2.53 | 2.58 | 2.62 |
| **4.00+** | 3.05 | 2.93 | 2.8 | 2.67 | 2.54 | 2.41 | 2.28 | 2.16 | 2.12 | 2.16 | 2.21 | 2.25 | 2.3 | 2.35 | 2.41 | 2.46 | 2.52 | 2.57 | 2.63 | 2.68 |
| **4.50+** | 3.08 | 2.95 | 2.83 | 2.7 | 2.57 | 2.45 | 2.32 | 2.25 | 2.24 | 2.23 | 2.26 | 2.31 | 2.36 | 2.41 | 2.46 | 2.51 | 2.56 | 2.61 | 2.66 | 2.71 |
| **5.00+** | 3.43 | 3.32 | 3.2 | 3.08 | 2.96 | 2.84 | 2.73 | 2.61 | 2.49 | 2.37 | 2.39 | 2.45 | 2.5 | 2.56 | 2.61 | 2.67 | 2.71 | 2.74 | 2.78 | 2.81 |
|  |   |  |
|  |  | **45** | **46** | **47** | **48** | **49** | **50** | **51** | **52** | **53** | **54** | **55** | **56** | **57** | **58** | **59** | **60** | **61** | **62** | **63** | **64** |
| **injury severity class [in ISSx]** | **0.50+** | 0.65 | 0.64 | 0.64 | 0.63 | 0.63 | 0.62 | 0.61 | 0.61 | 0.6 | 0.6 | 0.59 | 0.59 | 0.58 | 0.57 | 0.57 | 0.56 | 0.56 | 0.55 | 0.55 | 0.53 |
| **0.75+** | 0.81 | 0.8 | 0.8 | 0.79 | 0.78 | 0.77 | 0.77 | 0.76 | 0.75 | 0.74 | 0.73 | 0.73 | 0.72 | 0.71 | 0.7 | 0.7 | 0.69 | 0.67 | 0.65 | 0.63 |
| **1.00+** | 0.83 | 0.82 | 0.82 | 0.81 | 0.81 | 0.81 | 0.8 | 0.8 | 0.79 | 0.79 | 0.78 | 0.78 | 0.78 | 0.77 | 0.77 | 0.75 | 0.73 | 0.71 | 0.68 | 0.66 |
| **1.25+** | 1.12 | 1.11 | 1.1 | 1.09 | 1.09 | 1.08 | 1.07 | 1.06 | 1.05 | 1.05 | 1.04 | 1.03 | 1.02 | 1.01 | 0.98 | 0.96 | 0.94 | 0.92 | 0.9 | 0.88 |
| **1.50+** | 1.85 | 1.87 | 1.89 | 1.91 | 1.94 | 1.96 | 1.98 | 2 | 2.02 | 2.02 | 1.98 | 1.95 | 1.91 | 1.88 | 1.84 | 1.81 | 1.77 | 1.73 | 1.7 | 1.66 |
| **2.00+** | 2.16 | 2.2 | 2.24 | 2.27 | 2.31 | 2.34 | 2.38 | 2.41 | 2.37 | 2.32 | 2.27 | 2.23 | 2.18 | 2.14 | 2.09 | 2.05 | 2 | 1.95 | 1.91 | 1.86 |
| **2.25+** | 2.19 | 2.23 | 2.28 | 2.32 | 2.36 | 2.4 | 2.44 | 2.48 | 2.44 | 2.39 | 2.35 | 2.3 | 2.26 | 2.21 | 2.17 | 2.12 | 2.07 | 2.03 | 1.98 | 1.94 |
| **2.50+** | 2.39 | 2.44 | 2.48 | 2.53 | 2.57 | 2.62 | 2.64 | 2.62 | 2.59 | 2.56 | 2.54 | 2.51 | 2.48 | 2.46 | 2.43 | 2.4 | 2.38 | 2.35 | 2.32 | 2.3 |
| **3.25+** | 2.51 | 2.55 | 2.59 | 2.62 | 2.66 | 2.7 | 2.73 | 2.74 | 2.71 | 2.69 | 2.66 | 2.63 | 2.61 | 2.58 | 2.56 | 2.53 | 2.5 | 2.48 | 2.45 | 2.43 |
| **3.50+** | 2.56 | 2.6 | 2.64 | 2.68 | 2.71 | 2.75 | 2.75 | 2.74 | 2.71 | 2.69 | 2.66 | 2.63 | 2.61 | 2.59 | 2.57 | 2.54 | 2.52 | 2.5 | 2.48 | 2.46 |
| **3.75+** | 2.67 | 2.71 | 2.76 | 2.8 | 2.85 | 2.9 | 2.94 | 2.99 | 3.03 | 3 | 2.97 | 2.95 | 2.92 | 2.89 | 2.86 | 2.84 | 2.81 | 2.78 | 2.75 | 2.73 |
| **4.00+** | 2.74 | 2.79 | 2.85 | 2.9 | 2.96 | 3.01 | 3.07 | 3.12 | 3.18 | 3.2 | 3.17 | 3.14 | 3.11 | 3.08 | 3.05 | 3.02 | 2.98 | 2.95 | 2.92 | 2.89 |
| **4.50+** | 2.76 | 2.81 | 2.86 | 2.91 | 2.96 | 3.01 | 3.07 | 3.12 | 3.18 | 3.2 | 3.19 | 3.16 | 3.13 | 3.1 | 3.08 | 3.05 | 3.02 | 2.99 | 2.96 | 2.94 |
| **5.00+** | 2.84 | 2.88 | 2.91 | 2.94 | 2.97 | 3.01 | 3.07 | 3.12 | 3.18 | 3.2 | 3.19 | 3.16 | 3.13 | 3.1 | 3.08 | 3.05 | 3.03 | 3.02 | 3.02 | 3.02 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  | **65** | **66** | **67** | **68** | **69** | **70** | **71** | **72** | **73** | **74** | **75** | **76** | **77** | **78** | **79** | **80** |  |  |  |  |
| **injury severity class [in ISSx]** | **0.50+** | 0.52 | 0.5 | 0.49 | 0.47 | 0.46 | 0.44 | 0.43 | 0.41 | 0.4 | 0.38 | 0.37 | 0.36 | 0.34 | 0.33 | 0.31 | 0.3 |  |  |  |  |
| **0.75+** | 0.61 | 0.59 | 0.57 | 0.55 | 0.53 | 0.51 | 0.48 | 0.46 | 0.45 | 0.43 | 0.42 | 0.4 | 0.38 | 0.36 | 0.34 | 0.32 |  |  |  |  |
| **1.00+** | 0.63 | 0.61 | 0.58 | 0.56 | 0.53 | 0.51 | 0.48 | 0.46 | 0.45 | 0.43 | 0.42 | 0.4 | 0.38 | 0.37 | 0.35 | 0.33 |  |  |  |  |
| **1.25+** | 0.85 | 0.83 | 0.81 | 0.79 | 0.77 | 0.75 | 0.72 | 0.7 | 0.68 | 0.66 | 0.64 | 0.62 | 0.6 | 0.57 | 0.55 | 0.53 |  |  |  |  |
| **1.50+** | 1.63 | 1.59 | 1.56 | 1.52 | 1.49 | 1.45 | 1.41 | 1.38 | 1.34 | 1.31 | 1.27 | 1.24 | 1.2 | 1.16 | 1.13 | 1.09 |  |  |  |  |
| **2.00+** | 1.82 | 1.77 | 1.72 | 1.68 | 1.63 | 1.59 | 1.54 | 1.5 | 1.45 | 1.4 | 1.36 | 1.31 | 1.27 | 1.22 | 1.17 | 1.13 |  |  |  |  |
| **2.25+** | 1.89 | 1.85 | 1.8 | 1.75 | 1.71 | 1.66 | 1.62 | 1.57 | 1.53 | 1.48 | 1.43 | 1.39 | 1.34 | 1.3 | 1.25 | 1.2 |  |  |  |  |
| **2.50+** | 2.27 | 2.24 | 2.22 | 2.19 | 2.16 | 2.14 | 2.11 | 2.08 | 2.06 | 2.03 | 2 | 1.98 | 1.95 | 1.92 | 1.9 | 1.87 |  |  |  |  |
| **3.25+** | 2.4 | 2.37 | 2.35 | 2.32 | 2.3 | 2.27 | 2.24 | 2.22 | 2.19 | 2.16 | 2.14 | 2.11 | 2.09 | 2.06 | 2.03 | 2.01 |  |  |  |  |
| **3.50+** | 2.43 | 2.41 | 2.39 | 2.37 | 2.34 | 2.32 | 2.3 | 2.28 | 2.25 | 2.23 | 2.21 | 2.19 | 2.16 | 2.14 | 2.12 | 2.1 |  |  |  |  |
| **3.75+** | 2.7 | 2.67 | 2.64 | 2.62 | 2.59 | 2.56 | 2.53 | 2.51 | 2.48 | 2.45 | 2.42 | 2.39 | 2.37 | 2.34 | 2.31 | 2.28 |  |  |  |  |
| **4.00+** | 2.86 | 2.83 | 2.8 | 2.76 | 2.73 | 2.7 | 2.67 | 2.64 | 2.61 | 2.58 | 2.54 | 2.51 | 2.48 | 2.45 | 2.42 | 2.39 |  |  |  |  |
| **4.50+** | 2.91 | 2.88 | 2.85 | 2.83 | 2.8 | 2.77 | 2.74 | 2.71 | 2.69 | 2.66 | 2.63 | 2.6 | 2.58 | 2.55 | 2.52 | 2.49 |  |  |  |  |
| **5.00+** | 3.01 | 3.01 | 3 | 3 | 2.99 | 2.99 | 2.98 | 2.98 | 2.97 | 2.97 | 2.97 | 2.96 | 2.96 | 2.95 | 2.95 | 2.94 |  |  |  |  |