**Section 1412.APPENDIX A 2001 CSO Mortality Tables**

**Section 1412.ILLUSTRATION N Ultimate Age Last Birthday (Male/Female Composite/ Nonsmoker/Smoker)**

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| Ultimate Only – Age Last Birthday | | | | | | | 1 of 4 |
| Attained  Age | Male | | | Female | | | |
| Composite | Nonsmoker | Smoker | Composite | Nonsmoker | Smoker | |
| 0 | 0.72 |  |  | 0.42 |  |  | |
| 1 | 0.46 |  |  | 0.31 |  |  | |
| 2 | 0.33 |  |  | 0.23 |  |  | |
| 3 | 0.24 |  |  | 0.20 |  |  | |
| 4 | 0.21 |  |  | 0.19 |  |  | |
| 5 | 0.21 |  |  | 0.18 |  |  | |
| 6 | 0.22 |  |  | 0.19 |  |  | |
| 7 | 0.22 |  |  | 0.21 |  |  | |
| 8 | 0.22 |  |  | 0.21 |  |  | |
| 9 | 0.23 |  |  | 0.21 |  |  | |
| 10 | 0.24 |  |  | 0.22 |  |  | |
| 11 | 0.28 |  |  | 0.25 |  |  | |
| 12 | 0.34 |  |  | 0.27 |  |  | |
| 13 | 0.40 |  |  | 0.31 |  |  | |
| 14 | 0.52 |  |  | 0.34 |  |  | |
| 15 | 0.66 |  |  | 0.36 |  |  | |
| 16 | 0.78 | 0.77 | 0.86 | 0.39 | 0.39 | 0.43 | |
| 17 | 0.89 | 0.87 | 1.03 | 0.41 | 0.41 | 0.47 | |
| 18 | 0.95 | 0.92 | 1.14 | 0.44 | 0.43 | 0.51 | |
| 19 | 0.98 | 0.94 | 1.23 | 0.46 | 0.45 | 0.56 | |
| 20 | 1.00 | 0.95 | 1.30 | 0.47 | 0.45 | 0.59 | |
| 21 | 1.01 | 0.95 | 1.36 | 0.49 | 0.47 | 0.63 | |
| 22 | 1.02 | 0.95 | 1.43 | 0.50 | 0.48 | 0.66 | |
| 23 | 1.04 | 0.96 | 1.50 | 0.51 | 0.48 | 0.69 | |
| 24 | 1.06 | 0.97 | 1.58 | 0.53 | 0.50 | 0.73 | |
| 25 | 1.09 | 1.00 | 1.67 | 0.55 | 0.51 | 0.79 | |
| 26 | 1.14 | 1.04 | 1.76 | 0.58 | 0.55 | 0.84 | |
| 27 | 1.17 | 1.06 | 1.81 | 0.61 | 0.57 | 0.89 | |
| 28 | 1.16 | 1.04 | 1.82 | 0.64 | 0.60 | 0.95 | |
| 29 | 1.15 | 1.03 | 1.81 | 0.67 | 0.63 | 1.01 | |
| 30 | 1.14 | 1.02 | 1.80 | 0.70 | 0.66 | 1.07 | |
| 31 | 1.13 | 1.01 | 1.81 | 0.75 | 0.70 | 1.15 | |
| 32 | 1.14 | 1.02 | 1.84 | 0.79 | 0.74 | 1.23 | |
| 33 | 1.16 | 1.05 | 1.90 | 0.85 | 0.79 | 1.33 | |
| 34 | 1.19 | 1.07 | 1.97 | 0.92 | 0.85 | 1.46 | |
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| Ultimate Only – Age Last Birthday | | | | | | | 2 of 4 |
| Attained  Age | Male | | | Female | | | |
| Composite | Nonsmoker | Smoker | Composite | Nonsmoker | Smoker | |
| 35 | 1.24 | 1.12 | 2.05 | 1.00 | 0.92 | 1.59 | |
| 36 | 1.31 | 1.17 | 2.17 | 1.07 | 0.99 | 1.72 | |
| 37 | 1.39 | 1.24 | 2.31 | 1.14 | 1.05 | 1.83 | |
| 38 | 1.49 | 1.33 | 2.48 | 1.20 | 1.10 | 1.94 | |
| 39 | 1.59 | 1.41 | 2.67 | 1.26 | 1.16 | 2.06 | |
| 40 | 1.72 | 1.52 | 2.90 | 1.34 | 1.23 | 2.19 | |
| 41 | 1.87 | 1.65 | 3.18 | 1.43 | 1.31 | 2.34 | |
| 42 | 2.05 | 1.81 | 3.51 | 1.53 | 1.40 | 2.53 | |
| 43 | 2.27 | 2.00 | 3.90 | 1.65 | 1.51 | 2.74 | |
| 44 | 2.52 | 2.21 | 4.34 | 1.79 | 1.64 | 2.99 | |
| 45 | 2.77 | 2.44 | 4.78 | 1.96 | 1.79 | 3.28 | |
| 46 | 3.03 | 2.67 | 5.22 | 2.16 | 1.97 | 3.62 | |
| 47 | 3.25 | 2.86 | 5.59 | 2.38 | 2.18 | 4.04 | |
| 48 | 3.42 | 3.01 | 5.87 | 2.64 | 2.41 | 4.54 | |
| 49 | 3.64 | 3.20 | 6.23 | 2.93 | 2.67 | 5.10 | |
| 50 | 3.91 | 3.45 | 6.70 | 3.24 | 2.96 | 5.70 | |
| 51 | 4.26 | 3.77 | 7.31 | 3.60 | 3.29 | 6.36 | |
| 52 | 4.70 | 4.16 | 8.05 | 3.99 | 3.66 | 7.07 | |
| 53 | 5.21 | 4.61 | 8.94 | 4.41 | 4.05 | 7.84 | |
| 54 | 5.83 | 5.18 | 10.00 | 4.86 | 4.46 | 8.66 | |
| 55 | 6.52 | 5.82 | 11.13 | 5.36 | 4.93 | 9.53 | |
| 56 | 7.26 | 6.48 | 12.30 | 5.91 | 5.44 | 10.46 | |
| 57 | 7.95 | 7.12 | 13.38 | 6.49 | 5.98 | 11.40 | |
| 58 | 8.63 | 7.76 | 14.41 | 7.09 | 6.54 | 12.38 | |
| 59 | 9.42 | 8.51 | 15.62 | 7.70 | 7.11 | 13.43 | |
| 60 | 10.40 | 9.42 | 17.11 | 8.34 | 7.71 | 14.52 | |
| 61 | 11.59 | 10.53 | 18.93 | 9.03 | 8.37 | 15.70 | |
| 62 | 12.98 | 11.82 | 21.02 | 9.76 | 9.07 | 16.95 | |
| 63 | 14.47 | 13.23 | 23.26 | 10.55 | 9.81 | 18.23 | |
| 64 | 16.04 | 14.70 | 25.50 | 11.40 | 10.62 | 19.61 | |
| 65 | 17.65 | 16.23 | 27.69 | 12.33 | 11.52 | 21.10 | |
| 66 | 19.27 | 17.78 | 29.81 | 13.35 | 12.50 | 22.72 | |
| 67 | 20.96 | 19.40 | 31.95 | 14.48 | 13.59 | 24.52 | |
| 68 | 22.74 | 21.11 | 34.14 | 15.71 | 14.80 | 26.49 | |
| 69 | 24.69 | 23.03 | 36.55 | 17.08 | 16.12 | 28.66 | |
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| Ultimate Only – Age Last Birthday | | | | | | | 3 of 4 |
| Attained  Age | Male | | | Female | | | |
| Composite | Nonsmoker | Smoker | Composite | Nonsmoker | Smoker | |
| 70 | 26.94 | 25.27 | 39.31 | 18.63 | 17.61 | 31.11 | |
| 71 | 29.71 | 27.99 | 42.70 | 20.38 | 19.31 | 33.85 | |
| 72 | 32.94 | 31.17 | 46.64 | 22.29 | 21.17 | 36.83 | |
| 73 | 36.32 | 34.52 | 50.61 | 24.39 | 23.20 | 40.08 | |
| 74 | 39.96 | 38.12 | 54.91 | 26.68 | 25.45 | 43.48 | |
| 75 | 43.95 | 42.04 | 59.69 | 29.20 | 27.92 | 47.05 | |
| 76 | 48.44 | 46.46 | 64.99 | 31.95 | 30.63 | 50.91 | |
| 77 | 53.67 | 51.60 | 71.12 | 34.97 | 33.63 | 55.07 | |
| 78 | 59.72 | 57.57 | 78.15 | 38.28 | 36.90 | 59.56 | |
| 79 | 66.48 | 64.26 | 85.89 | 41.92 | 40.49 | 64.39 | |
| 80 | 74.02 | 71.72 | 94.35 | 46.43 | 44.95 | 70.41 | |
| 81 | 82.20 | 79.83 | 103.34 | 51.96 | 50.43 | 77.77 | |
| 82 | 90.82 | 88.42 | 112.59 | 57.80 | 56.23 | 85.35 | |
| 83 | 100.22 | 97.80 | 122.45 | 63.94 | 62.32 | 93.09 | |
| 84 | 110.69 | 108.23 | 133.60 | 70.74 | 69.11 | 101.15 | |
| 85 | 122.36 | 119.83 | 146.24 | 77.59 | 75.99 | 108.60 | |
| 86 | 135.17 | 132.59 | 159.95 | 85.68 | 84.12 | 117.21 | |
| 87 | 148.99 | 146.38 | 174.52 | 95.69 | 94.16 | 127.89 | |
| 88 | 163.66 | 161.04 | 189.71 | 106.25 | 104.75 | 138.58 | |
| 89 | 179.03 | 176.42 | 205.33 | 116.68 | 115.29 | 148.36 | |
| 90 | 194.28 | 191.74 | 220.42 | 124.22 | 123.05 | 153.92 | |
| 91 | 209.27 | 206.82 | 234.78 | 131.53 | 130.47 | 158.48 | |
| 92 | 224.94 | 222.62 | 249.52 | 143.72 | 142.77 | 168.33 | |
| 93 | 241.46 | 239.28 | 264.76 | 160.21 | 159.44 | 182.27 | |
| 94 | 258.86 | 256.83 | 281.02 | 180.90 | 180.20 | 201.70 | |
| 95 | 276.12 | 274.21 | 297.39 | 203.48 | 202.79 | 224.62 | |
| 96 | 292.95 | 291.18 | 312.93 | 225.69 | 225.04 | 246.45 | |
| 97 | 310.86 | 309.26 | 329.31 | 240.07 | 239.48 | 259.40 | |
| 98 | 329.95 | 328.54 | 346.60 | 247.79 | 247.32 | 264.59 | |
| 99 | 350.32 | 349.11 | 364.85 | 263.98 | 263.59 | 278.57 | |
| 100 | 369.76 | 368.76 | 381.92 | 285.02 | 284.74 | 297.48 | |
| 101 | 386.96 | 386.19 | 396.51 | 307.89 | 307.72 | 317.92 | |
| 102 | 405.25 | 404.73 | 411.85 | 333.06 | 333.04 | 340.13 | |
| 103 | 424.70 | 424.44 | 427.96 | 360.71 | 360.70 | 364.04 | |
| 104 | 445.35 | 445.27 | 446.33 | 390.86 | 390.85 | 391.63 | |
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| Ultimate Only – Age Last Birthday | | | | | | | 4 of 4 |
| Attained  Age | Male | | | Female | | | |
| Composite | Nonsmoker | Smoker | Composite | Nonsmoker | Smoker | |
| 105 | 467.29 | 467.21 | 468.20 | 422.72 | 422.71 | 423.44 | |
| 106 | 490.57 | 490.50 | 491.42 | 455.33 | 455.32 | 455.99 | |
| 107 | 515.28 | 515.21 | 516.07 | 488.48 | 488.47 | 489.10 | |
| 108 | 541.49 | 541.43 | 542.21 | 522.20 | 522.19 | 522.77 | |
| 109 | 569.27 | 569.22 | 569.94 | 557.04 | 557.03 | 557.56 | |
| 110 | 598.70 | 598.65 | 599.30 | 591.96 | 591.95 | 592.43 | |
| 111 | 629.88 | 629.83 | 630.41 | 625.62 | 625.61 | 626.05 | |
| 112 | 662.87 | 662.83 | 663.35 | 657.77 | 657.76 | 658.15 | |
| 113 | 697.78 | 697.75 | 698.19 | 690.79 | 690.78 | 691.12 | |
| 114 | 734.68 | 734.65 | 735.03 | 732.06 | 732.05 | 732.34 | |
| 115 | 773.66 | 773.63 | 773.95 | 771.35 | 771.34 | 771.59 | |
| 116 | 814.78 | 814.76 | 815.02 | 812.36 | 812.35 | 812.54 | |
| 117 | 858.15 | 858.13 | 858.32 | 855.90 | 855.90 | 856.04 | |
| 118 | 903.81 | 903.80 | 903.92 | 896.58 | 896.58 | 896.68 | |
| 119 | 951.67 | 951.67 | 951.74 | 939.06 | 939.06 | 939.11 | |
| 120 | 1,000.00 | 1,000.00 | 1,000.00 | 1,000.00 | 1,000.00 | 1,000.00 | |