

1994 GAR Table (1994 Group Annuity Mortality Static Table with Projection Scale AA)

Society of Actuaries Group Annuity Valuation Task Force, "1994 Group Annuity Mortality Table and 1994 Group Annuity Reserving Table", Transactions Society of Actuaries Vol. XLVII, (Chicago, 1995), Table 18 p. 898-899.

<http://www.soa.org/library/research/transactions-of-society-of-actuaries/1990-95/1995/january/tsa95v4722.aspx>

Age Nearest Birthday (ANB)

Pensioner Mortality Table", Transactions Society of Actuaries Vol. XLVII,

(Chicago, 1995), Table 3 p. 824-826.

<http://www.soa.org/library/research/transactions-of-society-of-actuaries/1990-95/1995/january/tsa95v4721.aspx>

| Age | Female | | Male | |
|-----|--------------|--------|--------------|--------|
| | q_x^{1994} | AA_x | q_x^{1994} | AA_x |
| 1 | 0.000531 | 0.020 | 0.000592 | 0.020 |
| 2 | 0.000346 | 0.020 | 0.000400 | 0.020 |
| 3 | 0.000258 | 0.020 | 0.000332 | 0.020 |
| 4 | 0.000194 | 0.020 | 0.000259 | 0.020 |
| 5 | 0.000175 | 0.020 | 0.000237 | 0.020 |
| 6 | 0.000163 | 0.020 | 0.000227 | 0.020 |
| 7 | 0.000153 | 0.020 | 0.000217 | 0.020 |
| 8 | 0.000137 | 0.020 | 0.000201 | 0.020 |
| 9 | 0.000130 | 0.020 | 0.000194 | 0.020 |
| 10 | 0.000131 | 0.020 | 0.000197 | 0.020 |
| 11 | 0.000138 | 0.020 | 0.000208 | 0.020 |
| 12 | 0.000148 | 0.020 | 0.000226 | 0.020 |
| 13 | 0.000164 | 0.020 | 0.000255 | 0.020 |
| 14 | 0.000189 | 0.018 | 0.000297 | 0.019 |
| 15 | 0.000216 | 0.016 | 0.000345 | 0.019 |
| 16 | 0.000242 | 0.015 | 0.000391 | 0.019 |
| 17 | 0.000262 | 0.014 | 0.000430 | 0.019 |
| 18 | 0.000273 | 0.014 | 0.000460 | 0.019 |
| 19 | 0.000280 | 0.015 | 0.000484 | 0.019 |
| 20 | 0.000284 | 0.016 | 0.000507 | 0.019 |
| 21 | 0.000286 | 0.017 | 0.000530 | 0.018 |
| 22 | 0.000289 | 0.017 | 0.000556 | 0.017 |
| 23 | 0.000292 | 0.016 | 0.000589 | 0.015 |
| 24 | 0.000291 | 0.015 | 0.000624 | 0.013 |
| 25 | 0.000291 | 0.014 | 0.000661 | 0.010 |
| 26 | 0.000294 | 0.012 | 0.000696 | 0.006 |
| 27 | 0.000302 | 0.012 | 0.000727 | 0.005 |
| 28 | 0.000314 | 0.012 | 0.000754 | 0.005 |
| 29 | 0.000331 | 0.012 | 0.000779 | 0.005 |
| 30 | 0.000351 | 0.010 | 0.000801 | 0.005 |
| 31 | 0.000373 | 0.008 | 0.000821 | 0.005 |
| 32 | 0.000397 | 0.008 | 0.000839 | 0.005 |
| 33 | 0.000422 | 0.009 | 0.000848 | 0.005 |
| 34 | 0.000449 | 0.010 | 0.000849 | 0.005 |
| 35 | 0.000478 | 0.011 | 0.000851 | 0.005 |

| | | | | |
|----|----------|-------|----------|-------|
| 36 | 0.000512 | 0.012 | 0.000862 | 0.005 |
| 37 | 0.000551 | 0.013 | 0.000891 | 0.005 |
| 38 | 0.000598 | 0.014 | 0.000939 | 0.006 |
| 39 | 0.000652 | 0.015 | 0.000999 | 0.007 |
| 40 | 0.000709 | 0.015 | 0.001072 | 0.008 |
| 41 | 0.000768 | 0.015 | 0.001156 | 0.009 |
| 42 | 0.000825 | 0.015 | 0.001252 | 0.010 |
| 43 | 0.000877 | 0.015 | 0.001352 | 0.011 |
| 44 | 0.000923 | 0.015 | 0.001458 | 0.012 |
| 45 | 0.000973 | 0.016 | 0.001578 | 0.013 |
| 46 | 0.001033 | 0.017 | 0.001722 | 0.014 |
| 47 | 0.001112 | 0.018 | 0.001899 | 0.015 |
| 48 | 0.001206 | 0.018 | 0.002102 | 0.016 |
| 49 | 0.001310 | 0.018 | 0.002326 | 0.017 |
| 50 | 0.001428 | 0.017 | 0.002579 | 0.018 |
| 51 | 0.001568 | 0.016 | 0.002872 | 0.019 |
| 52 | 0.001734 | 0.014 | 0.003213 | 0.020 |
| 53 | 0.001907 | 0.012 | 0.003584 | 0.020 |
| 54 | 0.002084 | 0.010 | 0.003979 | 0.020 |
| 55 | 0.002294 | 0.008 | 0.004425 | 0.019 |
| 56 | 0.002563 | 0.006 | 0.004949 | 0.018 |
| 57 | 0.002919 | 0.005 | 0.005581 | 0.017 |
| 58 | 0.003359 | 0.005 | 0.006300 | 0.016 |
| 59 | 0.003863 | 0.005 | 0.007090 | 0.016 |
| 60 | 0.004439 | 0.005 | 0.007976 | 0.016 |
| 61 | 0.005093 | 0.005 | 0.008986 | 0.015 |
| 62 | 0.005832 | 0.005 | 0.010147 | 0.015 |
| 63 | 0.006677 | 0.005 | 0.011471 | 0.014 |
| 64 | 0.007621 | 0.005 | 0.012940 | 0.014 |
| 65 | 0.008636 | 0.005 | 0.014535 | 0.014 |
| 66 | 0.009694 | 0.005 | 0.016239 | 0.013 |
| 67 | 0.010764 | 0.005 | 0.018034 | 0.013 |
| 68 | 0.011763 | 0.005 | 0.019859 | 0.014 |
| 69 | 0.012709 | 0.005 | 0.021729 | 0.014 |
| 70 | 0.013730 | 0.005 | 0.023730 | 0.015 |
| 71 | 0.014953 | 0.006 | 0.025951 | 0.015 |
| 72 | 0.016506 | 0.006 | 0.028481 | 0.015 |
| 73 | 0.018344 | 0.007 | 0.031201 | 0.015 |
| 74 | 0.020381 | 0.007 | 0.034051 | 0.015 |
| 75 | 0.022686 | 0.008 | 0.037211 | 0.014 |
| 76 | 0.025325 | 0.008 | 0.040858 | 0.014 |
| 77 | 0.028366 | 0.007 | 0.045171 | 0.013 |
| 78 | 0.031727 | 0.007 | 0.050211 | 0.012 |
| 79 | 0.035362 | 0.007 | 0.055861 | 0.011 |
| 80 | 0.039396 | 0.007 | 0.062027 | 0.010 |
| 81 | 0.043952 | 0.007 | 0.068615 | 0.009 |
| 82 | 0.049153 | 0.007 | 0.075532 | 0.008 |

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|-----|----------|-------|----------|-------|
| 83 | 0.054847 | 0.007 | 0.082510 | 0.008 |
| 84 | 0.060979 | 0.007 | 0.089613 | 0.007 |
| 85 | 0.067738 | 0.006 | 0.097240 | 0.007 |
| 86 | 0.075347 | 0.005 | 0.105792 | 0.007 |
| 87 | 0.084023 | 0.004 | 0.115671 | 0.006 |
| 88 | 0.093820 | 0.004 | 0.126980 | 0.005 |
| 89 | 0.104594 | 0.003 | 0.139452 | 0.005 |
| 90 | 0.116265 | 0.003 | 0.152931 | 0.004 |
| 91 | 0.128751 | 0.003 | 0.167260 | 0.004 |
| 92 | 0.141973 | 0.003 | 0.182281 | 0.003 |
| 93 | 0.155931 | 0.002 | 0.198392 | 0.003 |
| 94 | 0.170677 | 0.002 | 0.215700 | 0.003 |
| 95 | 0.186213 | 0.002 | 0.233606 | 0.002 |
| 96 | 0.202538 | 0.002 | 0.251510 | 0.002 |
| 97 | 0.219655 | 0.001 | 0.268815 | 0.002 |
| 98 | 0.237713 | 0.001 | 0.285277 | 0.001 |
| 99 | 0.256712 | 0.001 | 0.301298 | 0.001 |
| 100 | 0.276427 | 0.001 | 0.317238 | 0.001 |
| 101 | 0.296629 | - | 0.333461 | - |
| 102 | 0.317093 | - | 0.350330 | - |
| 103 | 0.338505 | - | 0.368542 | - |
| 104 | 0.361016 | - | 0.387855 | - |
| 105 | 0.383597 | - | 0.407224 | - |
| 106 | 0.405217 | - | 0.425599 | - |
| 107 | 0.424846 | - | 0.441935 | - |
| 108 | 0.444368 | - | 0.457553 | - |
| 109 | 0.464469 | - | 0.473150 | - |
| 110 | 0.482325 | - | 0.486745 | - |
| 111 | 0.495110 | - | 0.496356 | - |
| 112 | 0.500000 | - | 0.500000 | - |
| 113 | 0.500000 | - | 0.500000 | - |
| 114 | 0.500000 | - | 0.500000 | - |
| 115 | 0.500000 | - | 0.500000 | - |
| 116 | 0.500000 | - | 0.500000 | - |
| 117 | 0.500000 | - | 0.500000 | - |
| 118 | 0.500000 | - | 0.500000 | - |
| 119 | 0.500000 | - | 0.500000 | - |
| 120 | 1.000000 | - | 1.000000 | - |

1983 Table (a)

Society of Actuaries, "Report of the Committee to Recommend a New Mortality Table Basis for Individual Annuity Valuation (Derivation of the 1983 Table a)", Transactions of the Society of Actuaries, Vol. 33. (1981) Table 16, page 708.

<http://www.soa.org/Library/Research/Transactions-Of-Society-Of-Actuaries/1981/January/tsa81v3325.aspx>

Age Nearest Birthday (ANB)

From the Report: "The age at issue was taken as the age nearest birthday on the issue date of the contract, or some reasonable approximation to that age"

| <i>Age</i> | <i>Female</i> q_x | <i>Male</i> q_x |
|------------|------------------------|----------------------|
| 5 | 0.000194 | 0.000377 |
| 6 | 0.000160 | 0.000350 |
| 7 | 0.000134 | 0.000333 |
| 8 | 0.000134 | 0.000352 |
| 9 | 0.000136 | 0.000368 |
| 10 | 0.000141 | 0.000382 |
| 11 | 0.000147 | 0.000394 |
| 12 | 0.000155 | 0.000405 |
| 13 | 0.000165 | 0.000415 |
| 14 | 0.000175 | 0.000425 |
| 15 | 0.000188 | 0.000435 |
| 16 | 0.000201 | 0.000446 |
| 17 | 0.000214 | 0.000458 |
| 18 | 0.000229 | 0.000472 |
| 19 | 0.000244 | 0.000488 |
| 20 | 0.000260 | 0.000505 |
| 21 | 0.000276 | 0.000525 |
| 22 | 0.000293 | 0.000546 |
| 23 | 0.000311 | 0.000570 |
| 24 | 0.000330 | 0.000596 |
| 25 | 0.000349 | 0.000622 |
| 26 | 0.000368 | 0.000650 |
| 27 | 0.000387 | 0.000677 |
| 28 | 0.000405 | 0.000704 |
| 29 | 0.000423 | 0.000731 |
| 30 | 0.000441 | 0.000759 |
| 31 | 0.000460 | 0.000786 |
| 32 | 0.000479 | 0.000814 |
| 33 | 0.000499 | 0.000843 |
| 34 | 0.000521 | 0.000876 |
| 35 | 0.000545 | 0.000917 |
| 36 | 0.000574 | 0.000968 |
| 37 | 0.000607 | 0.001032 |
| 38 | 0.000646 | 0.001114 |
| 39 | 0.000691 | 0.001216 |
| 40 | 0.000742 | 0.001341 |

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|----|----------|----------|
| 41 | 0.000801 | 0.001492 |
| 42 | 0.000867 | 0.001673 |
| 43 | 0.000942 | 0.001886 |
| 44 | 0.001026 | 0.002129 |
| 45 | 0.001122 | 0.002399 |
| 46 | 0.001231 | 0.002693 |
| 47 | 0.001356 | 0.003009 |
| 48 | 0.001499 | 0.003343 |
| 49 | 0.001657 | 0.003694 |
| 50 | 0.001830 | 0.004057 |
| 51 | 0.002016 | 0.004431 |
| 52 | 0.002215 | 0.004812 |
| 53 | 0.002426 | 0.005198 |
| 54 | 0.002650 | 0.005591 |
| 55 | 0.002891 | 0.005994 |
| 56 | 0.003151 | 0.006409 |
| 57 | 0.003432 | 0.006839 |
| 58 | 0.003739 | 0.007290 |
| 59 | 0.004081 | 0.007782 |
| 60 | 0.004467 | 0.008338 |
| 61 | 0.004908 | 0.008983 |
| 62 | 0.005413 | 0.009740 |
| 63 | 0.005990 | 0.010630 |
| 64 | 0.006633 | 0.011664 |
| 65 | 0.007336 | 0.012851 |
| 66 | 0.008090 | 0.014199 |
| 67 | 0.008888 | 0.015717 |
| 68 | 0.009731 | 0.017414 |
| 69 | 0.010653 | 0.019296 |
| 70 | 0.011697 | 0.021371 |
| 71 | 0.012905 | 0.023647 |
| 72 | 0.014319 | 0.026131 |
| 73 | 0.015980 | 0.028835 |
| 74 | 0.017909 | 0.031794 |
| 75 | 0.020127 | 0.035046 |
| 76 | 0.022654 | 0.038631 |
| 77 | 0.025509 | 0.042587 |
| 78 | 0.028717 | 0.046951 |
| 79 | 0.032328 | 0.051755 |
| 80 | 0.036395 | 0.057026 |
| 81 | 0.040975 | 0.062791 |
| 82 | 0.046121 | 0.069081 |
| 83 | 0.051889 | 0.075908 |
| 84 | 0.058336 | 0.083230 |
| 85 | 0.065518 | 0.090987 |
| 86 | 0.073493 | 0.099122 |
| 87 | 0.082318 | 0.107577 |

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| 88 | 0.092017 | 0.116316 |
| 89 | 0.102491 | 0.125394 |
| 90 | 0.113605 | 0.134887 |
| 91 | 0.125227 | 0.144873 |
| 92 | 0.137222 | 0.155429 |
| 93 | 0.149462 | 0.166629 |
| 94 | 0.161834 | 0.178537 |
| 95 | 0.174228 | 0.191214 |
| 96 | 0.186535 | 0.204721 |
| 97 | 0.198646 | 0.219120 |
| 98 | 0.211102 | 0.234735 |
| 99 | 0.224445 | 0.251889 |
| 100 | 0.239215 | 0.270906 |
| 101 | 0.255953 | 0.292111 |
| 102 | 0.275201 | 0.315826 |
| 103 | 0.297500 | 0.342377 |
| 104 | 0.323390 | 0.372086 |
| 105 | 0.353414 | 0.405278 |
| 106 | 0.388111 | 0.442277 |
| 107 | 0.428023 | 0.483406 |
| 108 | 0.473692 | 0.528989 |
| 109 | 0.525658 | 0.579351 |
| 110 | 0.584462 | 0.634814 |
| 111 | 0.650646 | 0.695704 |
| 112 | 0.724750 | 0.762343 |
| 113 | 0.807316 | 0.835056 |
| 114 | 0.898885 | 0.914167 |
| 115 | 1.000000 | 1.000000 |

Annuity 2000 Mortality Table

Robert J. Johansen, "Review of Adequacy of 1983 Individual annuity Mortality Table",
Transactions of the Society of Actuaries Vol. XLVII (1995) Table 2, page 240.

<http://www.soa.org/Library/Research/Transactions-Of-Society-Of-Actuaries/1990-95/1995/January/tsa95v479.aspx>

Age Nearest Birthday (ANB)

| <i>Age</i> | <i>Female</i> q_x | <i>Male</i> q_x |
|------------|------------------------|----------------------|
| 5 | 0.000171 | 0.000291 |
| 6 | 0.000141 | 0.000270 |
| 7 | 0.000118 | 0.000257 |
| 8 | 0.000118 | 0.000294 |
| 9 | 0.000121 | 0.000325 |
| 10 | 0.000126 | 0.000350 |
| 11 | 0.000133 | 0.000371 |
| 12 | 0.000142 | 0.000388 |
| 13 | 0.000152 | 0.000402 |
| 14 | 0.000164 | 0.000414 |
| 15 | 0.000177 | 0.000425 |
| 16 | 0.000190 | 0.000437 |
| 17 | 0.000204 | 0.000449 |
| 18 | 0.000219 | 0.000463 |
| 19 | 0.000234 | 0.000480 |
| 20 | 0.000250 | 0.000499 |
| 21 | 0.000265 | 0.000519 |
| 22 | 0.000281 | 0.000542 |
| 23 | 0.000298 | 0.000566 |
| 24 | 0.000314 | 0.000592 |
| 25 | 0.000331 | 0.000616 |
| 26 | 0.000347 | 0.000639 |
| 27 | 0.000362 | 0.000659 |
| 28 | 0.000376 | 0.000675 |
| 29 | 0.000389 | 0.000687 |
| 30 | 0.000402 | 0.000694 |
| 31 | 0.000414 | 0.000699 |
| 32 | 0.000425 | 0.000700 |
| 33 | 0.000436 | 0.000701 |
| 34 | 0.000449 | 0.000702 |
| 35 | 0.000463 | 0.000704 |
| 36 | 0.000481 | 0.000719 |
| 37 | 0.000504 | 0.000749 |
| 38 | 0.000532 | 0.000796 |
| 39 | 0.000567 | 0.000864 |
| 40 | 0.000609 | 0.000953 |
| 41 | 0.000658 | 0.001065 |
| 42 | 0.000715 | 0.001201 |
| 43 | 0.000781 | 0.001362 |

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|----|----------|----------|
| 44 | 0.000855 | 0.001547 |
| 45 | 0.000939 | 0.001752 |
| 46 | 0.001035 | 0.001974 |
| 47 | 0.001141 | 0.002211 |
| 48 | 0.001261 | 0.002460 |
| 49 | 0.001393 | 0.002721 |
| 50 | 0.001538 | 0.002994 |
| 51 | 0.001695 | 0.003279 |
| 52 | 0.001864 | 0.003576 |
| 53 | 0.002047 | 0.003884 |
| 54 | 0.002244 | 0.004203 |
| 55 | 0.002457 | 0.004534 |
| 56 | 0.002689 | 0.004876 |
| 57 | 0.002942 | 0.005228 |
| 58 | 0.003218 | 0.005593 |
| 59 | 0.003523 | 0.005988 |
| 60 | 0.003863 | 0.006428 |
| 61 | 0.004242 | 0.006933 |
| 62 | 0.004668 | 0.007520 |
| 63 | 0.005144 | 0.008207 |
| 64 | 0.005671 | 0.009008 |
| 65 | 0.006250 | 0.009940 |
| 66 | 0.006878 | 0.011016 |
| 67 | 0.007555 | 0.012251 |
| 68 | 0.008287 | 0.013657 |
| 69 | 0.009102 | 0.015233 |
| 70 | 0.010034 | 0.016979 |
| 71 | 0.011117 | 0.018891 |
| 72 | 0.012386 | 0.020967 |
| 73 | 0.013871 | 0.023209 |
| 74 | 0.015592 | 0.025644 |
| 75 | 0.017564 | 0.028304 |
| 76 | 0.019805 | 0.031220 |
| 77 | 0.022328 | 0.034425 |
| 78 | 0.025158 | 0.037948 |
| 79 | 0.028341 | 0.041812 |
| 80 | 0.031933 | 0.046037 |
| 81 | 0.035985 | 0.050643 |
| 82 | 0.040552 | 0.055651 |
| 83 | 0.045690 | 0.061080 |
| 84 | 0.051456 | 0.066948 |
| 85 | 0.057913 | 0.073275 |
| 86 | 0.065119 | 0.080076 |
| 87 | 0.073136 | 0.087370 |
| 88 | 0.081991 | 0.095169 |
| 89 | 0.091577 | 0.103455 |
| 90 | 0.101758 | 0.112208 |

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| 91 | 0.112395 | 0.121402 |
| 92 | 0.123349 | 0.131017 |
| 93 | 0.134486 | 0.141030 |
| 94 | 0.145689 | 0.151422 |
| 95 | 0.156846 | 0.162179 |
| 96 | 0.167841 | 0.173279 |
| 97 | 0.178563 | 0.184706 |
| 98 | 0.189604 | 0.196946 |
| 99 | 0.201557 | 0.210484 |
| 100 | 0.215013 | 0.225806 |
| 101 | 0.230565 | 0.243398 |
| 102 | 0.248805 | 0.263745 |
| 103 | 0.270326 | 0.287334 |
| 104 | 0.295719 | 0.314649 |
| 105 | 0.325576 | 0.346177 |
| 106 | 0.360491 | 0.382403 |
| 107 | 0.401054 | 0.423813 |
| 108 | 0.447860 | 0.470893 |
| 109 | 0.501498 | 0.524128 |
| 110 | 0.562563 | 0.584004 |
| 111 | 0.631645 | 0.651007 |
| 112 | 0.709338 | 0.725622 |
| 113 | 0.796233 | 0.808336 |
| 114 | 0.892923 | 0.899633 |
| 115 | 1.000000 | 1.000000 |

2012 IAR Table (2012 IAM Period Table with Projection Scale G2)

"NAIC Model Rule (Regulation) For Recognizing New Mortality Table For Use In Determining Reserve Liabilities For Annuities", 2012 Proceedings of the NAIC, Fall Volume I, p. 146-152.

Age Nearest Birthday (ANB)

| Age | Female | | Male | |
|-----|--------------|--------|--------------|--------|
| | q_x^{2012} | $G2_x$ | q_x^{2012} | $G2_x$ |
| 0 | 0.001621 | 0.010 | 0.001605 | 0.010 |
| 1 | 0.000405 | 0.010 | 0.000401 | 0.010 |
| 2 | 0.000259 | 0.010 | 0.000275 | 0.010 |
| 3 | 0.000179 | 0.010 | 0.000229 | 0.010 |
| 4 | 0.000137 | 0.010 | 0.000174 | 0.010 |
| 5 | 0.000125 | 0.010 | 0.000168 | 0.010 |
| 6 | 0.000117 | 0.010 | 0.000165 | 0.010 |
| 7 | 0.000110 | 0.010 | 0.000159 | 0.010 |
| 8 | 0.000095 | 0.010 | 0.000143 | 0.010 |
| 9 | 0.000088 | 0.010 | 0.000129 | 0.010 |
| 10 | 0.000085 | 0.010 | 0.000113 | 0.010 |
| 11 | 0.000086 | 0.010 | 0.000111 | 0.010 |
| 12 | 0.000094 | 0.010 | 0.000132 | 0.010 |
| 13 | 0.000108 | 0.010 | 0.000169 | 0.010 |
| 14 | 0.000131 | 0.010 | 0.000213 | 0.010 |
| 15 | 0.000156 | 0.010 | 0.000254 | 0.010 |
| 16 | 0.000179 | 0.010 | 0.000293 | 0.010 |
| 17 | 0.000198 | 0.010 | 0.000328 | 0.010 |
| 18 | 0.000211 | 0.010 | 0.000359 | 0.010 |
| 19 | 0.000221 | 0.010 | 0.000387 | 0.010 |
| 20 | 0.000228 | 0.010 | 0.000414 | 0.010 |
| 21 | 0.000234 | 0.010 | 0.000443 | 0.010 |
| 22 | 0.000240 | 0.010 | 0.000473 | 0.010 |
| 23 | 0.000245 | 0.010 | 0.000513 | 0.010 |
| 24 | 0.000247 | 0.010 | 0.000554 | 0.010 |
| 25 | 0.000250 | 0.010 | 0.000602 | 0.010 |
| 26 | 0.000256 | 0.010 | 0.000655 | 0.010 |
| 27 | 0.000261 | 0.010 | 0.000688 | 0.010 |
| 28 | 0.000270 | 0.010 | 0.000710 | 0.010 |
| 29 | 0.000281 | 0.010 | 0.000727 | 0.010 |
| 30 | 0.000300 | 0.010 | 0.000741 | 0.010 |
| 31 | 0.000321 | 0.010 | 0.000751 | 0.010 |
| 32 | 0.000338 | 0.010 | 0.000754 | 0.010 |
| 33 | 0.000351 | 0.010 | 0.000756 | 0.010 |
| 34 | 0.000365 | 0.010 | 0.000756 | 0.010 |
| 35 | 0.000381 | 0.010 | 0.000756 | 0.010 |
| 36 | 0.000402 | 0.010 | 0.000756 | 0.010 |
| 37 | 0.000429 | 0.010 | 0.000756 | 0.010 |
| 38 | 0.000463 | 0.010 | 0.000756 | 0.010 |

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|----|----------|-------|----------|-------|
| 39 | 0.000504 | 0.010 | 0.000800 | 0.010 |
| 40 | 0.000552 | 0.010 | 0.000859 | 0.010 |
| 41 | 0.000600 | 0.010 | 0.000926 | 0.010 |
| 42 | 0.000650 | 0.010 | 0.000999 | 0.010 |
| 43 | 0.000697 | 0.010 | 0.001069 | 0.010 |
| 44 | 0.000740 | 0.010 | 0.001142 | 0.010 |
| 45 | 0.000780 | 0.010 | 0.001219 | 0.010 |
| 46 | 0.000825 | 0.010 | 0.001318 | 0.010 |
| 47 | 0.000885 | 0.010 | 0.001454 | 0.010 |
| 48 | 0.000964 | 0.010 | 0.001627 | 0.010 |
| 49 | 0.001051 | 0.010 | 0.001829 | 0.010 |
| 50 | 0.001161 | 0.010 | 0.002057 | 0.010 |
| 51 | 0.001308 | 0.010 | 0.002302 | 0.011 |
| 52 | 0.001460 | 0.011 | 0.002545 | 0.011 |
| 53 | 0.001613 | 0.011 | 0.002779 | 0.012 |
| 54 | 0.001774 | 0.011 | 0.003011 | 0.012 |
| 55 | 0.001950 | 0.012 | 0.003254 | 0.013 |
| 56 | 0.002154 | 0.012 | 0.003529 | 0.013 |
| 57 | 0.002399 | 0.012 | 0.003845 | 0.014 |
| 58 | 0.002700 | 0.012 | 0.004213 | 0.014 |
| 59 | 0.003054 | 0.013 | 0.004631 | 0.015 |
| 60 | 0.003460 | 0.013 | 0.005096 | 0.015 |
| 61 | 0.003916 | 0.013 | 0.005614 | 0.015 |
| 62 | 0.004409 | 0.013 | 0.006169 | 0.015 |
| 63 | 0.004933 | 0.013 | 0.006759 | 0.015 |
| 64 | 0.005507 | 0.013 | 0.007398 | 0.015 |
| 65 | 0.006146 | 0.013 | 0.008106 | 0.015 |
| 66 | 0.006551 | 0.013 | 0.008548 | 0.015 |
| 67 | 0.007039 | 0.013 | 0.009076 | 0.015 |
| 68 | 0.007628 | 0.013 | 0.009708 | 0.015 |
| 69 | 0.008311 | 0.013 | 0.010463 | 0.015 |
| 70 | 0.009074 | 0.013 | 0.011357 | 0.015 |
| 71 | 0.009910 | 0.013 | 0.012418 | 0.015 |
| 72 | 0.010827 | 0.013 | 0.013675 | 0.015 |
| 73 | 0.011839 | 0.013 | 0.015150 | 0.015 |
| 74 | 0.012974 | 0.013 | 0.016860 | 0.015 |
| 75 | 0.014282 | 0.013 | 0.018815 | 0.015 |
| 76 | 0.015799 | 0.013 | 0.021031 | 0.015 |
| 77 | 0.017550 | 0.013 | 0.023540 | 0.015 |
| 78 | 0.019582 | 0.013 | 0.026375 | 0.015 |
| 79 | 0.021970 | 0.013 | 0.029572 | 0.015 |
| 80 | 0.024821 | 0.013 | 0.033234 | 0.015 |
| 81 | 0.028351 | 0.012 | 0.037533 | 0.014 |
| 82 | 0.032509 | 0.012 | 0.042261 | 0.013 |
| 83 | 0.037329 | 0.011 | 0.047441 | 0.013 |
| 84 | 0.042830 | 0.010 | 0.053233 | 0.012 |
| 85 | 0.048997 | 0.010 | 0.059855 | 0.011 |

| | | | | |
|-----|----------|-------|----------|-------|
| 86 | 0.055774 | 0.009 | 0.067514 | 0.010 |
| 87 | 0.063140 | 0.008 | 0.076340 | 0.009 |
| 88 | 0.071066 | 0.007 | 0.086388 | 0.009 |
| 89 | 0.079502 | 0.007 | 0.097634 | 0.008 |
| 90 | 0.088377 | 0.006 | 0.109993 | 0.007 |
| 91 | 0.097491 | 0.006 | 0.123119 | 0.007 |
| 92 | 0.107269 | 0.005 | 0.137168 | 0.006 |
| 93 | 0.118201 | 0.005 | 0.152171 | 0.005 |
| 94 | 0.130969 | 0.004 | 0.168194 | 0.005 |
| 95 | 0.146449 | 0.004 | 0.185260 | 0.004 |
| 96 | 0.163908 | 0.004 | 0.197322 | 0.004 |
| 97 | 0.179695 | 0.003 | 0.214751 | 0.003 |
| 98 | 0.196151 | 0.003 | 0.232507 | 0.003 |
| 99 | 0.213150 | 0.002 | 0.250397 | 0.002 |
| 100 | 0.230722 | 0.002 | 0.268607 | 0.002 |
| 101 | 0.251505 | 0.002 | 0.290016 | 0.002 |
| 102 | 0.273007 | 0.001 | 0.311849 | 0.001 |
| 103 | 0.295086 | 0.001 | 0.333962 | 0.001 |
| 104 | 0.317591 | - | 0.356207 | - |
| 105 | 0.340362 | - | 0.380000 | - |
| 106 | 0.362371 | - | 0.400000 | - |
| 107 | 0.384113 | - | 0.400000 | - |
| 108 | 0.400000 | - | 0.400000 | - |
| 109 | 0.400000 | - | 0.400000 | - |
| 110 | 0.400000 | - | 0.400000 | - |
| 111 | 0.400000 | - | 0.400000 | - |
| 112 | 0.400000 | - | 0.400000 | - |
| 113 | 0.400000 | - | 0.400000 | - |
| 114 | 0.400000 | - | 0.400000 | - |
| 115 | 0.400000 | - | 0.400000 | - |
| 116 | 0.400000 | - | 0.400000 | - |
| 117 | 0.400000 | - | 0.400000 | - |
| 118 | 0.400000 | - | 0.400000 | - |
| 119 | 0.400000 | - | 0.400000 | - |
| 120 | 1.000000 | - | 1.000000 | - |

1983 Group Annuity Mortality Table

Committee on Annuities, "Development of the 1983 Group Annuity Mortality Table",
Transaction of the Society of Actuaries Vol. XXXV, (1983), Tables 18A and 18B, pp. 880-881.
<http://www.soa.org/Library/Research/Transactions-Of-Society-Of-Actuaries/1983/January/tsa83v3527.aspx>

Age Nearest Birthday (ANB)

From Blaine Shepherd: For what it might be worth, the December 26, 1984, State of New York Insurance Department's "Insurance News" contains the table and portrays it as "age nearest birthday."

| | <i>Female</i> | <i>Male</i> |
|------------|---------------|-------------|
| <i>Age</i> | q_x | q_x |
| 5 | 0.000171 | 0.000342 |
| 6 | 0.000140 | 0.000318 |
| 7 | 0.000118 | 0.000302 |
| 8 | 0.000104 | 0.000294 |
| 9 | 0.000097 | 0.000292 |
| 10 | 0.000096 | 0.000293 |
| 11 | 0.000104 | 0.000298 |
| 12 | 0.000113 | 0.000304 |
| 13 | 0.000122 | 0.000310 |
| 14 | 0.000131 | 0.000317 |
| 15 | 0.000140 | 0.000325 |
| 16 | 0.000149 | 0.000333 |
| 17 | 0.000159 | 0.000343 |
| 18 | 0.000168 | 0.000353 |
| 19 | 0.000179 | 0.000365 |
| 20 | 0.000189 | 0.000377 |
| 21 | 0.000201 | 0.000392 |
| 22 | 0.000212 | 0.000408 |
| 23 | 0.000225 | 0.000424 |
| 24 | 0.000239 | 0.000444 |
| 25 | 0.000253 | 0.000464 |
| 26 | 0.000268 | 0.000488 |
| 27 | 0.000284 | 0.000513 |
| 28 | 0.000302 | 0.000542 |
| 29 | 0.000320 | 0.000572 |
| 30 | 0.000342 | 0.000607 |
| 31 | 0.000364 | 0.000645 |
| 32 | 0.000388 | 0.000687 |
| 33 | 0.000414 | 0.000734 |
| 34 | 0.000443 | 0.000785 |
| 35 | 0.000476 | 0.000860 |
| 36 | 0.000502 | 0.000907 |
| 37 | 0.000536 | 0.000966 |
| 38 | 0.000573 | 0.001039 |
| 39 | 0.000617 | 0.001128 |
| 40 | 0.000665 | 0.001238 |

| | | |
|----|----------|----------|
| 41 | 0.000716 | 0.001370 |
| 42 | 0.000775 | 0.001527 |
| 43 | 0.000842 | 0.001715 |
| 44 | 0.000919 | 0.001932 |
| 45 | 0.001010 | 0.002183 |
| 46 | 0.001117 | 0.002471 |
| 47 | 0.001237 | 0.002790 |
| 48 | 0.001366 | 0.003138 |
| 49 | 0.001505 | 0.003513 |
| 50 | 0.001647 | 0.003909 |
| 51 | 0.001793 | 0.004324 |
| 52 | 0.001949 | 0.004755 |
| 53 | 0.002120 | 0.005200 |
| 54 | 0.002315 | 0.005660 |
| 55 | 0.002541 | 0.006131 |
| 56 | 0.002803 | 0.006618 |
| 57 | 0.003103 | 0.007139 |
| 58 | 0.003443 | 0.007719 |
| 59 | 0.003821 | 0.008384 |
| 60 | 0.004241 | 0.009158 |
| 61 | 0.004703 | 0.010064 |
| 62 | 0.005210 | 0.011133 |
| 63 | 0.005769 | 0.012391 |
| 64 | 0.006386 | 0.013868 |
| 65 | 0.007064 | 0.015592 |
| 66 | 0.007817 | 0.017579 |
| 67 | 0.008681 | 0.019804 |
| 68 | 0.009702 | 0.022229 |
| 69 | 0.010922 | 0.024817 |
| 70 | 0.012385 | 0.027530 |
| 71 | 0.014128 | 0.030354 |
| 72 | 0.016160 | 0.033370 |
| 73 | 0.018481 | 0.036680 |
| 74 | 0.021092 | 0.040388 |
| 75 | 0.023992 | 0.044597 |
| 76 | 0.027185 | 0.049388 |
| 77 | 0.030672 | 0.054758 |
| 78 | 0.034459 | 0.060678 |
| 79 | 0.038549 | 0.067125 |
| 80 | 0.042945 | 0.074070 |
| 81 | 0.047655 | 0.081484 |
| 82 | 0.052691 | 0.089320 |
| 83 | 0.058071 | 0.097525 |
| 84 | 0.063807 | 0.106047 |
| 85 | 0.069918 | 0.114836 |
| 86 | 0.076570 | 0.124170 |
| 87 | 0.083870 | 0.133870 |

| | | |
|-----|----------|----------|
| 88 | 0.091935 | 0.144073 |
| 89 | 0.101354 | 0.154859 |
| 90 | 0.111750 | 0.166307 |
| 91 | 0.123076 | 0.178214 |
| 92 | 0.135630 | 0.190460 |
| 93 | 0.149577 | 0.203007 |
| 94 | 0.165103 | 0.217904 |
| 95 | 0.182419 | 0.234086 |
| 96 | 0.201757 | 0.248436 |
| 97 | 0.222044 | 0.263954 |
| 98 | 0.243899 | 0.280803 |
| 99 | 0.268185 | 0.299154 |
| 100 | 0.295187 | 0.319185 |
| 101 | 0.325225 | 0.341086 |
| 102 | 0.358897 | 0.365052 |
| 103 | 0.395843 | 0.393102 |
| 104 | 0.438360 | 0.427255 |
| 105 | 0.487816 | 0.469531 |
| 106 | 0.545886 | 0.521945 |
| 107 | 0.614309 | 0.586518 |
| 108 | 0.694885 | 0.665268 |
| 109 | 0.789474 | 0.760215 |
| 110 | 1.000000 | 1.000000 |