Table 1  
Summary statistics of analyzed subregions in countries

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Country | Number of subregions | Median area (km2) | Q1 area (km2) | Q3 area (km2) | Median population | Q1 population | Q3 population | Population with access <60 minutes (%) | Population with access <120 minutes (%) | Population with access <240 minutes (%) | Median travel time (minutes) | Q1 travel time (minutes) | Q3 travel time (minutes) |
| Afghanistan | 328 | 1158 | 537 | 2436 | 64416 | 35186 | 105744 | 0 | 0 | 0 | Inf | Inf | Inf |
| Akrotiri and Dhekelia | 2 | 108 | 109 | 125 | 9844 | 9844 | 18305 | 0 | 0 | 0 | Inf | Inf | Inf |
| Åland | 13 | 117 | 78 | 140 | 1032 | 512 | 2005 | 0 | 0 | 0 | Inf | Inf | Inf |
| Albania | 378 | 64 | 38 | 100 | 2808 | 1234 | 5950 | 52 | 78 | 97 | 54.74 | 17.64 | 116.8 |
| Algeria | 1504 | 121 | 66 | 250 | 14082 | 7851 | 28327 | 41 | 69 | 91 | 77.85 | 30.58 | 141.47 |
| American Samoa | 74 | 1 | 1 | 3 | 363 | 187 | 1087 | 0 | 0 | 0 | Inf | Inf | Inf |
| Andorra | 7 | 68 | 47 | 79 | 15288 | 13145 | 19214 | 0 | 0 | 0 | Inf | Inf | Inf |
| Angola | 527 | 1375 | 753 | 2803 | 19353 | 8913 | 49400 | 45 | 47 | 48 | 293.9 | 34.89 | 773.68 |
| Antigua and Barbuda | 8 | 44 | 26 | 62 | 4740 | 1836 | 7956 | 98 | 98 | 98 | 1.61 | 1.61 | 11.23 |
| Argentina | 502 | 3367 | 1553 | 6522 | 29240 | 11914 | 68271 | 67 | 83 | 94 | 29.14 | 14.9 | 89.74 |
| Armenia | 11 | 2518 | 1972 | 3582 | 210800 | 110397 | 259765 | 54 | 84 | 100 | 50.73 | 11.75 | 113.23 |
| Aruba | 1 | 182 | 182 | 182 | 115656 | 115656 | 115656 | 100 | 100 | 100 | 23.71 | 23.71 | 23.71 |
| Australia | 568 | 2543 | 405 | 6247 | 11396 | 2579 | 40935 | 82 | 92 | 96 | 16.92 | 8.12 | 40.75 |
| Austria | 2100 | 27 | 15 | 48 | 1826 | 1121 | 3183 | 85 | 99 | 100 | 27.78 | 9.49 | 47.74 |
| Azerbaijan | 79 | 1101 | 750 | 1490 | 88592 | 48101 | 123004 | 37 | 63 | 96 | 85.41 | 14.11 | 142.93 |
| Bahamas | 32 | 218 | 43 | 486 | 1118 | 412 | 3226 | 71 | 71 | 72 | 8.06 | 8.06 | 345.05 |
| Bahrain | 4 | 63 | 35 | 162 | 474097 | 312247 | 557993 | 100 | 100 | 100 | 14.84 | 14.84 | 21.33 |
| Bangladesh | 545 | 239 | 154 | 323 | 265582 | 177215 | 375216 | 51 | 88 | 99 | 59.42 | 28.57 | 89.66 |
| Barbados | 11 | 35 | 34 | 43 | 17288 | 9118 | 37264 | 100 | 100 | 100 | 12.68 | 3.03 | 20.58 |
| Belarus | 118 | 1614 | 1380 | 2037 | 26059 | 17956 | 56354 | 68 | 97 | 100 | 37.27 | 10.21 | 72.62 |
| Belgium | 43 | 612 | 404 | 976 | 194026 | 86456 | 347245 | 98 | 100 | 100 | 9.45 | 5.67 | 21.14 |
| Belize | 6 | 3355 | 2323 | 4663 | 47047 | 46186 | 98797 | 0 | 0 | 0 | Inf | Inf | Inf |
| Benin | 546 | 60 | 24 | 218 | 17100 | 10076 | 28381 | 0 | 0 | 0 | Inf | Inf | Inf |
| Bermuda | 11 | 6 | 5 | 9 | 5316 | 4908 | 5852 | 100 | 100 | 100 | 8.9 | 3.1 | 15.03 |
| Bhutan | 205 | 109 | 54 | 210 | 2634 | 1755 | 4115 | 0 | 0 | 0 | Inf | Inf | Inf |
| Bolivia | 344 | 1092 | 522 | 2821 | 11943 | 6494 | 22912 | 44 | 58 | 75 | 97.42 | 31.66 | 241.18 |
| Bonaire, Sint Eustatius and Saba | 3 | 23 | 14 | 286 | 5293 | 2303 | 21535 | 0 | 0 | 0 | Inf | Inf | Inf |
| Bosnia and Herzegovina | 141 | 290 | 160 | 520 | 15587 | 6809 | 30490 | 52 | 89 | 100 | 56.59 | 32.97 | 84.86 |
| Botswana | 30 | 7786 | 1691 | 28823 | 62126 | 34048 | 112267 | 17 | 25 | 33 | 264.66 | 158.94 | 367.22 |
| Brazil | 5572 | 417 | 205 | 1027 | 11868 | 5479 | 25991 | 58 | 73 | 89 | 39.71 | 19.62 | 124.86 |
| Brunei | 39 | 74 | 36 | 137 | 4395 | 1039 | 17056 | 84 | 100 | 100 | 17.8 | 13.63 | 30.56 |
| Bulgaria | 263 | 372 | 246 | 540 | 10480 | 5562 | 20813 | 68 | 93 | 100 | 35.73 | 7.58 | 69.48 |
| Burkina Faso | 351 | 578 | 351 | 922 | 40443 | 25698 | 64910 | 20 | 33 | 64 | 188.28 | 92.33 | 280.08 |
| Burundi | 2644 | 7 | 4 | 12 | 2954 | 1864 | 4709 | 0 | 0 | 0 | Inf | Inf | Inf |
| Cabo Verde | 22 | 120 | 80 | 235 | 15445 | 6981 | 21994 | 0 | 0 | 0 | Inf | Inf | Inf |
| Cambodia | 1630 | 45 | 24 | 105 | 8306 | 5481 | 12879 | 30 | 50 | 73 | 118.59 | 45.01 | 252.21 |
| Cameroon | 360 | 578 | 244 | 1329 | 38137 | 17268 | 83889 | 33 | 39 | 54 | 207.63 | 20.95 | 821.95 |
| Canada | 5581 | 49 | 4 | 256 | 666 | 187 | 2122 | 77 | 89 | 95 | 21.82 | 8.8 | 52.07 |
| Caspian Sea | 1 | 371583 | 371583 | 371583 | 93332 | 93332 | 93332 | 0 | 0 | 0 | Inf | Inf | Inf |
| Cayman Islands | 6 | 29 | 21 | 78 | 4108 | 2326 | 14258 | 0 | 0 | 0 | Inf | Inf | Inf |
| Central African Republic | 51 | 8729 | 6094 | 14652 | 82142 | 33394 | 122823 | 0 | 0 | 0 | Inf | Inf | Inf |
| Chad | 348 | 861 | 354 | 2075 | 32034 | 16392 | 52902 | 0 | 0 | 0 | Inf | Inf | Inf |
| Chile | 345 | 629 | 257 | 1623 | 19873 | 8961 | 55852 | 60 | 77 | 87 | 36.36 | 17.96 | 100.77 |
| China | 2421 | 1932 | 1154 | 3199 | 433574 | 238199 | 742849 | 81 | 96 | 99 | 25.02 | 11.64 | 49.89 |
| Colombia | 1119 | 281 | 132 | 725 | 16156 | 7590 | 34522 | 41 | 75 | 91 | 69.62 | 25.61 | 117.41 |
| Comoros | 3 | 433 | 219 | 1022 | 330474 | 64452 | 442629 | 0 | 0 | 0 | Inf | Inf | Inf |
| Cook Islands | 11 | 24 | 8 | 31 | 194 | 66 | 435 | 0 | 0 | 0 | Inf | Inf | Inf |
| Costa Rica | 486 | 34 | 9 | 139 | 6671 | 3086 | 12102 | 56 | 70 | 90 | 47.16 | 15.21 | 140.37 |
| Côte d'Ivoire | 113 | 2356 | 1305 | 3598 | 132449 | 88395 | 229713 | 21 | 26 | 44 | 281.7 | 92.09 | 402.29 |
| Croatia | 560 | 67 | 37 | 122 | 2774 | 1718 | 5442 | 58 | 94 | 100 | 48.84 | 10.77 | 83.03 |
| Cuba | 168 | 559 | 374 | 842 | 40951 | 29818 | 70795 | 48 | 81 | 97 | 67.38 | 22.17 | 108.96 |
| Curaçao | 1 | 438 | 438 | 438 | 171851 | 171851 | 171851 | 100 | 100 | 100 | 12.83 | 12.83 | 12.83 |
| Cyprus | 5 | 1264 | 913 | 1367 | 158721 | 119242 | 271283 | 82 | 100 | 100 | 49.14 | 32.41 | 51.98 |
| Czechia | 98 | 911 | 241 | 1213 | 103259 | 69290 | 128878 | 92 | 100 | 100 | 24.41 | 11.74 | 42.39 |
| Democratic Republic of the Congo | 240 | 6860 | 76 | 16613 | 258342 | 30880 | 660703 | 0 | 7 | 9 | 1729.07 | 1067.65 | 2219.45 |
| Denmark | 99 | 359 | 89 | 690 | 44561 | 30303 | 59660 | 84 | 99 | 100 | 25.44 | 8.93 | 45.15 |
| Djibouti | 21 | 989 | 511 | 1503 | 29839 | 9394 | 41916 | 0 | 0 | 0 | Inf | Inf | Inf |
| Dominica | 10 | 59 | 34 | 123 | 5261 | 1649 | 8035 | 0 | 0 | 0 | Inf | Inf | Inf |
| Dominican Republic | 155 | 202 | 122 | 402 | 25731 | 11735 | 62104 | 67 | 89 | 99 | 26.54 | 16.38 | 66.63 |
| Ecuador | 1039 | 117 | 53 | 255 | 4420 | 2065 | 10661 | 49 | 70 | 93 | 66.66 | 33.45 | 146.84 |
| Egypt | 343 | 154 | 19 | 318 | 205293 | 57936 | 405668 | 94 | 98 | 99 | 20.8 | 10.64 | 37.46 |
| El Salvador | 266 | 50 | 25 | 96 | 10637 | 5849 | 23634 | 54 | 83 | 100 | 59.64 | 22.61 | 90.13 |
| Equatorial Guinea | 32 | 724 | 316 | 1181 | 27525 | 16270 | 50026 | 0 | 0 | 0 | Inf | Inf | Inf |
| Eritrea | 50 | 1132 | 708 | 3353 | 72072 | 44335 | 105901 | 0 | 0 | 0 | Inf | Inf | Inf |
| Estonia | 4684 | 6 | 3 | 11 | 33 | 13 | 82 | 62 | 88 | 100 | 32.54 | 12.49 | 90.11 |
| Ethiopia | 690 | 964 | 538 | 1586 | 133321 | 84399 | 193362 | 6 | 13 | 36 | 299.24 | 185.4 | 455.21 |
| Faroe Islands | 30 | 34 | 19 | 55 | 634 | 189 | 1794 | 0 | 0 | 0 | Inf | Inf | Inf |
| Fiji | 15 | 959 | 493 | 2246 | 26879 | 11595 | 57381 | 0 | 0 | 0 | Inf | Inf | Inf |
| Finland | 80 | 2692 | 1755 | 4004 | 30054 | 18075 | 58667 | 71 | 92 | 99 | 38.17 | 26.8 | 71.72 |
| France | 350 | 1519 | 968 | 2163 | 133209 | 73328 | 234955 | 93 | 100 | 100 | 20.44 | 12.19 | 40.53 |
| French Guiana | 21 | 2564 | 1032 | 4434 | 7468 | 2885 | 16718 | 0 | 0 | 0 | Inf | Inf | Inf |
| French Polynesia | 5 | 990 | 429 | 1049 | 9516 | 7340 | 34710 | 0 | 0 | 0 | Inf | Inf | Inf |
| Gabon | 37 | 6498 | 4533 | 9347 | 26446 | 12923 | 57202 | 0 | 37 | 42 | 374.33 | 84.15 | 733.83 |
| Gambia | 37 | 198 | 153 | 355 | 27538 | 13614 | 48057 | 0 | 0 | 0 | Inf | Inf | Inf |
| Georgia | 69 | 848 | 622 | 1186 | 28135 | 18573 | 46656 | 57 | 84 | 97 | 44.26 | 7.49 | 91.46 |
| Germany | 4680 | 56 | 32 | 99 | 8133 | 4307 | 14557 | 98 | 100 | 100 | 17.17 | 6.83 | 28.35 |
| Ghana | 260 | 574 | 278 | 1106 | 100049 | 73283 | 147008 | 36 | 52 | 78 | 116.16 | 26.14 | 203.86 |
| Greece | 326 | 358 | 80 | 611 | 18783 | 9396 | 38554 | 64 | 84 | 95 | 27.71 | 7.91 | 86.15 |
| Greenland | 5 | 539091 | 105587 | 545945 | 7583 | 6001 | 13304 | 0 | 0 | 0 | Inf | Inf | Inf |
| Grenada | 7 | 40 | 36 | 74 | 10086 | 4065 | 24289 | 0 | 0 | 0 | Inf | Inf | Inf |
| Guadeloupe | 32 | 48 | 24 | 66 | 8269 | 4334 | 19645 | 91 | 98 | 98 | 28.47 | 11.95 | 42.65 |
| Guam | 19 | 21 | 14 | 46 | 3318 | 1699 | 9864 | 0 | 0 | 0 | Inf | Inf | Inf |
| Guatemala | 354 | 123 | 48 | 250 | 33365 | 17476 | 61741 | 35 | 73 | 95 | 84.62 | 40.77 | 128.71 |
| Guinea | 336 | 508 | 310 | 901 | 21388 | 14748 | 33254 | 0 | 0 | 0 | Inf | Inf | Inf |
| Guinea-Bissau | 37 | 804 | 649 | 1036 | 34528 | 20131 | 57404 | 0 | 0 | 0 | Inf | Inf | Inf |
| Guyana | 116 | 76 | 26 | 913 | 3789 | 1469 | 6772 | 55 | 71 | 79 | 41.41 | 16.13 | 149.42 |
| Haiti | 134 | 169 | 97 | 254 | 53685 | 33249 | 100630 | 0 | 0 | 0 | Inf | Inf | Inf |
| Honduras | 298 | 183 | 87 | 360 | 13316 | 7002 | 25337 | 27 | 58 | 89 | 101.7 | 41.83 | 167.49 |
| Hungary | 168 | 493 | 348 | 708 | 34349 | 20093 | 52676 | 79 | 100 | 100 | 36.68 | 10.56 | 56.91 |
| Iceland | 119 | 391 | 138 | 1141 | 310 | 148 | 940 | 68 | 81 | 85 | 23.14 | 15.46 | 91.63 |
| India | 2347 | 1046 | 670 | 1551 | 371122 | 207727 | 677818 | 49 | 87 | 99 | 61.54 | 31.48 | 96.52 |
| Indonesia | 6695 | 100 | 46 | 257 | 28480 | 13584 | 52917 | 49 | 69 | 81 | 63 | 23.17 | 163.5 |
| Iran | 268 | 3343 | 1747 | 6542 | 155244 | 81965 | 301615 | 38 | 74 | 95 | 70.59 | 35.08 | 128.55 |
| Iraq | 102 | 2059 | 1161 | 3831 | 257893 | 129139 | 494708 | 56 | 86 | 98 | 57.38 | 24.74 | 94.86 |
| Ireland | 106 | 546 | 297 | 908 | 33099 | 27717 | 44157 | 71 | 94 | 100 | 37.31 | 16.78 | 62.43 |
| Isle of Man | 21 | 25 | 11 | 42 | 2331 | 1431 | 4641 | 0 | 0 | 0 | Inf | Inf | Inf |
| Israel | 7 | 1235 | 584 | 3528 | 1256413 | 1012860 | 1507850 | 86 | 100 | 100 | 27.76 | 7.11 | 47.4 |
| Italy | 8100 | 22 | 11 | 43 | 2474 | 1015 | 6367 | 93 | 100 | 100 | 20.33 | 9.39 | 34.58 |
| Jamaica | 14 | 787 | 593 | 1191 | 145694 | 92768 | 192083 | 68 | 97 | 100 | 49.83 | 24.23 | 76.79 |
| Japan | 1811 | 113 | 45 | 267 | 23265 | 8422 | 60077 | 99 | 99 | 100 | 9.28 | 5.25 | 18.18 |
| Jersey | 12 | 10 | 8 | 12 | 4633 | 3577 | 8538 | 0 | 0 | 0 | Inf | Inf | Inf |
| Jordan | 52 | 381 | 159 | 790 | 51548 | 22760 | 118327 | 87 | 94 | 99 | 26.27 | 11.39 | 40.44 |
| Kazakhstan | 174 | 9633 | 6474 | 18615 | 34222 | 19179 | 77822 | 45 | 64 | 85 | 90.76 | 21.23 | 163.45 |
| Kenya | 1442 | 85 | 38 | 244 | 34022 | 26303 | 44854 | 29 | 55 | 83 | 105.49 | 51.54 | 185.24 |
| Kiribati | 1 | 1012 | 1012 | 1012 | 76874 | 76874 | 76874 | 0 | 0 | 0 | Inf | Inf | Inf |
| Kosovo | 30 | 339 | 274 | 501 | 55978 | 33735 | 88598 | 67 | 100 | 100 | 54.67 | 36.81 | 70.56 |
| Kuwait | 6 | 72 | 55 | 4639 | 378326 | 360488 | 708995 | 70 | 100 | 100 | 12.93 | 7.01 | 67.75 |
| Kyrgyzstan | 44 | 3644 | 2008 | 6079 | 84796 | 48467 | 138912 | 1 | 1 | 2 | 470.87 | 412.17 | 543.54 |
| Laos | 142 | 1449 | 903 | 2238 | 42518 | 28458 | 73847 | 13 | 17 | 24 | 391.91 | 261.41 | 519.22 |
| Latvia | 26 | 2492 | 2158 | 2684 | 45740 | 38676 | 63468 | 65 | 94 | 100 | 27.42 | 25.58 | 81.38 |
| Lebanon | 1565 | 3 | 2 | 7 | 1692 | 497 | 4944 | 98 | 100 | 100 | 7.32 | 3.98 | 22.77 |
| Lesotho | 10 | 2818 | 2123 | 3768 | 125491 | 113134 | 274488 | 0 | 0 | 0 | Inf | Inf | Inf |
| Liberia | 305 | 195 | 95 | 410 | 7292 | 3742 | 13918 | 0 | 0 | 0 | Inf | Inf | Inf |
| Libya | 22 | 28235 | 8534 | 85593 | 173920 | 94742 | 368011 | 51 | 68 | 79 | 55.48 | 39.43 | 216.1 |
| Liechtenstein | 11 | 10 | 6 | 26 | 4019 | 2000 | 5004 | 0 | 0 | 0 | Inf | Inf | Inf |
| Lithuania | 48 | 1403 | 1144 | 1655 | 29446 | 22792 | 41722 | 69 | 97 | 100 | 43.05 | 20.84 | 71.13 |
| Luxembourg | 102 | 21 | 15 | 30 | 2911 | 1896 | 4988 | 94 | 100 | 100 | 17.45 | 13.48 | 31.7 |
| Madagascar | 110 | 4828 | 2735 | 7452 | 197683 | 131700 | 309694 | 15 | 18 | 25 | 573.1 | 254.58 | 1092.42 |
| Malawi | 3126 | 16 | 9 | 30 | 4762 | 3707 | 6119 | 15 | 31 | 49 | 243.98 | 93.89 | 324.5 |
| Malaysia | 144 | 1350 | 663 | 2460 | 117444 | 63575 | 237491 | 52 | 70 | 79 | 57.73 | 13.84 | 211.78 |
| Mali | 289 | 1585 | 940 | 2938 | 49108 | 30717 | 77974 | 23 | 27 | 42 | 280.12 | 92.8 | 457.6 |
| Malta | 68 | 3 | 1 | 6 | 4248 | 2436 | 9958 | 94 | 100 | 100 | 10.4 | 7.71 | 15.5 |
| Martinique | 32 | 34 | 24 | 44 | 10001 | 4084 | 14669 | 98 | 100 | 100 | 21.03 | 14.36 | 30.46 |
| Mauritania | 44 | 9928 | 3585 | 17702 | 64906 | 35277 | 104770 | 30 | 30 | 30 | 425.97 | 16.25 | 671.81 |
| Mauritius | 12 | 183 | 41 | 246 | 90369 | 42542 | 109046 | 97 | 97 | 97 | 25.16 | 4.69 | 34.42 |
| Mayotte | 17 | 22 | 14 | 33 | 10126 | 6972 | 13675 | 0 | 0 | 0 | Inf | Inf | Inf |
| México | 2457 | 233 | 86 | 662 | 15058 | 4864 | 39799 | 59 | 80 | 95 | 41.49 | 18.9 | 103.95 |
| Micronesia | 74 | 3 | 1 | 11 | 267 | 109 | 894 | 0 | 0 | 0 | Inf | Inf | Inf |
| Moldova | 37 | 825 | 692 | 1078 | 73273 | 52569 | 95909 | 26 | 64 | 100 | 82.62 | 57.36 | 132.58 |
| Monaco | 1 | 2 | 2 | 2 | 26102 | 26102 | 26102 | 100 | 100 | 100 | 5.96 | 5.96 | 5.96 |
| Mongolia | 327 | 3582 | 2508 | 5649 | 2366 | 1678 | 3530 | 55 | 56 | 61 | 21.24 | 21.24 | 483.29 |
| Montenegro | 21 | 493 | 330 | 829 | 20666 | 7208 | 26214 | 40 | 79 | 100 | 84.78 | 23.28 | 114.88 |
| Morocco | 399 | 46 | 13 | 1285 | 57455 | 9792 | 143574 | 52 | 80 | 95 | 56.54 | 14.36 | 102.71 |
| Mozambique | 413 | 1359 | 728 | 2521 | 46322 | 22816 | 91917 | 10 | 10 | 14 | 1360.06 | 872.66 | 1599.04 |
| Myanmar | 286 | 1833 | 1025 | 2924 | 129124 | 85087 | 197551 | 22 | 41 | 68 | 166.03 | 73.52 | 277.32 |
| Namibia | 107 | 2151 | 317 | 10933 | 19324 | 12467 | 28202 | 15 | 22 | 32 | 448.15 | 166.4 | 506.13 |
| Nepal | 75 | 1664 | 1272 | 2322 | 266837 | 159677 | 647397 | 44 | 62 | 92 | 103.72 | 29.77 | 143.3 |
| Netherlands | 355 | 76 | 35 | 129 | 30978 | 20837 | 51006 | 100 | 100 | 100 | 21.29 | 14.78 | 29.28 |
| New Caledonia | 35 | 546 | 257 | 827 | 2225 | 1471 | 4562 | 0 | 0 | 0 | Inf | Inf | Inf |
| New Zealand | 75 | 2373 | 600 | 4952 | 28844 | 10202 | 52924 | 66 | 78 | 94 | 29.91 | 23.73 | 106.72 |
| Nicaragua | 139 | 401 | 141 | 918 | 25182 | 11975 | 53486 | 33 | 44 | 73 | 144.3 | 43.82 | 258.28 |
| Niger | 131 | 1493 | 774 | 3360 | 119404 | 63248 | 233092 | 7 | 11 | 23 | 500.27 | 245.67 | 665.86 |
| Nigeria | 775 | 694 | 286 | 1514 | 241071 | 185487 | 326683 | 14 | 24 | 53 | 226.57 | 125.49 | 356.95 |
| North Korea | 186 | 551 | 358 | 854 | 93148 | 57708 | 137153 | 24 | 46 | 77 | 127.75 | 61.52 | 234.79 |
| North Macedonia | 81 | 234 | 139 | 431 | 14918 | 7013 | 37766 | 45 | 72 | 100 | 65.1 | 35.69 | 134.55 |
| Northern Mariana Islands | 4 | 111 | 90 | 123 | 1656 | 0 | 2637 | 0 | 0 | 0 | Inf | Inf | Inf |
| Norway | 438 | 464 | 205 | 966 | 4342 | 1998 | 10098 | 56 | 78 | 95 | 50.93 | 12.58 | 104.15 |
| Oman | 49 | 1727 | 674 | 3708 | 59799 | 39593 | 91016 | 30 | 50 | 80 | 107.77 | 33.94 | 229.1 |
| Pakistan | 141 | 3536 | 1844 | 7528 | 1013497 | 414873 | 2154995 | 0 | 54 | 77 | 116.72 | 103.52 | 194.34 |
| Palau | 16 | 25 | 8 | 44 | 362 | 268 | 1507 | 0 | 0 | 0 | Inf | Inf | Inf |
| Palestine | 16 | 264 | 69 | 606 | 321777 | 182552 | 436405 | 34 | 96 | 100 | 69.76 | 52.69 | 95.87 |
| Panama | 598 | 61 | 31 | 124 | 2174 | 986 | 4613 | 52 | 57 | 68 | 59.21 | 20.5 | 295.29 |
| Papua New Guinea | 87 | 2926 | 1127 | 7004 | 89141 | 71145 | 118915 | 2 | 3 | 6 | Inf | Inf | Inf |
| Paraguay | 218 | 435 | 189 | 1026 | 14541 | 7126 | 33306 | 40 | 46 | 64 | 148.99 | 18.48 | 282.9 |
| Peru | 1815 | 208 | 93 | 494 | 4675 | 1893 | 12675 | 49 | 57 | 70 | 65.95 | 20.26 | 289.22 |
| Philippines | 41948 | 3 | 1 | 6 | 1672 | 842 | 3787 | 74 | 85 | 93 | 10.89 | 5.3 | 63.88 |
| Poland | 2479 | 112 | 77 | 159 | 7788 | 5085 | 13642 | 72 | 99 | 100 | 38.28 | 15.33 | 63.44 |
| Portugal | 4259 | 11 | 5 | 23 | 872 | 340 | 2241 | 87 | 98 | 100 | 23.05 | 10.64 | 42.71 |
| Puerto Rico | 78 | 108 | 73 | 143 | 33822 | 22921 | 48315 | 98 | 100 | 100 | 19.22 | 10.77 | 33.48 |
| Qatar | 7 | 886 | 249 | 2553 | 601874 | 112857 | 1883863 | 91 | 91 | 100 | 36.92 | 6.31 | 49.28 |
| Republic of the Congo | 48 | 5112 | 2947 | 7407 | 30026 | 18063 | 56955 | 0 | 0 | 0 | Inf | Inf | Inf |
| Réunion | 24 | 92 | 51 | 142 | 28366 | 8242 | 43103 | 60 | 95 | 100 | 48.68 | 24.84 | 72.97 |
| Romania | 2939 | 67 | 47 | 97 | 3144 | 2108 | 4991 | 46 | 96 | 100 | 67.24 | 36.12 | 89.67 |
| Russia | 2562 | 1687 | 457 | 3395 | 22161 | 11128 | 49450 | 50 | 72 | 91 | 60.63 | 19.4 | 130.43 |
| Rwanda | 422 | 48 | 34 | 63 | 27657 | 20772 | 37497 | 21 | 58 | 100 | 109.98 | 66.62 | 142.6 |
| Saint Kitts and Nevis | 14 | 18 | 14 | 23 | 3115 | 2599 | 3859 | 0 | 0 | 0 | Inf | Inf | Inf |
| Saint Lucia | 10 | 46 | 35 | 95 | 8038 | 5918 | 16655 | 0 | 0 | 0 | Inf | Inf | Inf |
| Saint Vincent and the Grenadines | 6 | 49 | 44 | 81 | 8356 | 7541 | 22827 | 0 | 0 | 0 | Inf | Inf | Inf |
| Saint-Martin | 1 | 56 | 56 | 56 | 42303 | 42303 | 42303 | 0 | 0 | 0 | Inf | Inf | Inf |
| Samoa | 43 | 46 | 29 | 89 | 2829 | 1686 | 4930 | 0 | 0 | 0 | Inf | Inf | Inf |
| São Tomé and Príncipe | 7 | 125 | 106 | 227 | 19250 | 8049 | 48096 | 0 | 0 | 0 | Inf | Inf | Inf |
| Saudi Arabia | 147 | 5001 | 1561 | 14264 | 88311 | 52963 | 181051 | 36 | 51 | 64 | 111.82 | 43.86 | 336.76 |
| Senegal | 123 | 864 | 553 | 2160 | 93959 | 58829 | 151360 | 37 | 55 | 73 | 100.18 | 30.05 | 308.13 |
| Serbia | 161 | 422 | 283 | 637 | 22501 | 12244 | 48636 | 51 | 88 | 99 | 58.42 | 26.85 | 91.83 |
| Seychelles | 26 | 7 | 4 | 15 | 3462 | 2836 | 4147 | 0 | 0 | 0 | Inf | Inf | Inf |
| Sierra Leone | 153 | 383 | 219 | 600 | 27063 | 17552 | 44577 | 0 | 0 | 0 | Inf | Inf | Inf |
| Singapore | 5 | 130 | 103 | 133 | 921827 | 719475 | 1061096 | 100 | 100 | 100 | 14.31 | 12.11 | 17.87 |
| Sint Maarten | 1 | 38 | 38 | 38 | 29437 | 29437 | 29437 | 0 | 0 | 0 | Inf | Inf | Inf |
| Slovakia | 79 | 595 | 368 | 843 | 62669 | 36636 | 92280 | 81 | 100 | 100 | 37.05 | 18.11 | 54.85 |
| Slovenia | 192 | 71 | 37 | 133 | 5665 | 3099 | 11506 | 72 | 100 | 100 | 42.71 | 21.45 | 63.96 |
| Solomon Islands | 183 | 122 | 28 | 228 | 2021 | 1268 | 3842 | 0 | 0 | 0 | Inf | Inf | Inf |
| Somalia | 74 | 7955 | 4048 | 11180 | 92220 | 62339 | 166890 | 0 | 0 | 0 | Inf | Inf | Inf |
| South Africa | 234 | 3561 | 1943 | 5966 | 111667 | 62412 | 200988 | 57 | 73 | 96 | 34 | 11.61 | 132.83 |
| South Korea | 3503 | 9 | 1 | 46 | 11054 | 4061 | 22518 | 95 | 100 | 100 | 10.1 | 5.63 | 21.05 |
| South Sudan | 49 | 10814 | 6298 | 15710 | 257628 | 128876 | 345333 | 0 | 0 | 0 | Inf | Inf | Inf |
| Spain | 369 | 1223 | 668 | 1959 | 45587 | 17199 | 130196 | 83 | 96 | 100 | 31.3 | 15.38 | 45.67 |
| Sri Lanka | 323 | 139 | 76 | 256 | 54090 | 32183 | 79247 | 57 | 92 | 100 | 53.83 | 28.64 | 84.89 |
| Sudan | 237 | 3138 | 1134 | 7605 | 111378 | 67036 | 194043 | 16 | 24 | 36 | 366.57 | 123.94 | 974.02 |
| Suriname | 62 | 345 | 39 | 1213 | 6955 | 1794 | 16511 | 73 | 81 | 89 | 25.14 | 14.94 | 93.82 |
| Swaziland | 55 | 295 | 184 | 466 | 18291 | 13037 | 23799 | 0 | 0 | 0 | Inf | Inf | Inf |
| Sweden | 290 | 724 | 383 | 1480 | 15418 | 9605 | 35039 | 71 | 92 | 98 | 37.35 | 14.86 | 65.76 |
| Switzerland | 2781 | 7 | 4 | 15 | 1201 | 470 | 3078 | 97 | 99 | 100 | 17.05 | 8.65 | 25.87 |
| Syria | 60 | 1248 | 559 | 3016 | 270734 | 164443 | 454669 | 24 | 42 | 82 | 128.06 | 62.73 | 195.86 |
| Taiwan | 22 | 1407 | 155 | 2244 | 526842 | 406745 | 1706107 | 95 | 99 | 99 | 15.77 | 9.28 | 41.52 |
| Tajikistan | 360 | 167 | 92 | 359 | 16021 | 7374 | 31237 | 36 | 66 | 92 | 86.27 | 36.8 | 159.97 |
| Tanzania | 3663 | 97 | 30 | 225 | 12278 | 7832 | 18800 | 16 | 21 | 37 | 326.68 | 161.35 | 531.59 |
| Thailand | 5926 | 52 | 27 | 97 | 6854 | 4353 | 10985 | 55 | 84 | 96 | 52.39 | 20.8 | 98.38 |
| Timor-Leste | 493 | 20 | 10 | 39 | 1761 | 997 | 3359 | 0 | 0 | 0 | Inf | Inf | Inf |
| Togo | 373 | 101 | 50 | 203 | 12457 | 6841 | 23253 | 37 | 49 | 68 | 124.18 | 16.55 | 296.9 |
| Tonga | 11 | 48 | 23 | 95 | 7886 | 4036 | 12655 | 0 | 0 | 0 | Inf | Inf | Inf |
| Trinidad and Tobago | 15 | 244 | 29 | 615 | 91832 | 37849 | 107413 | 93 | 95 | 100 | 36.82 | 24.98 | 41.46 |
| Tunisia | 268 | 292 | 69 | 548 | 36294 | 20623 | 57904 | 61 | 85 | 96 | 45.24 | 16.68 | 90.61 |
| Turkey | 929 | 648 | 336 | 1188 | 23952 | 9600 | 71534 | 73 | 92 | 100 | 25.74 | 12.16 | 65.7 |
| Turkmenistan | 58 | 6309 | 346 | 12128 | 113168 | 62126 | 211392 | 38 | 48 | 64 | 131.37 | 28.1 | 271.38 |
| Turks and Caicos Islands | 6 | 151 | 19 | 258 | 969 | 104 | 5277 | 0 | 0 | 0 | Inf | Inf | Inf |
| Uganda | 965 | 136 | 69 | 274 | 37513 | 25613 | 50219 | 14 | 24 | 54 | 222.47 | 124.84 | 321.52 |
| Ukraine | 629 | 986 | 634 | 1351 | 40800 | 26614 | 66652 | 45 | 70 | 91 | 68.58 | 11.11 | 143.62 |
| United Arab Emirates | 530 | 6 | 2 | 31 | 7385 | 3271 | 16190 | 65 | 94 | 100 | 34.6 | 21.73 | 91.54 |
| United Kingdom | 406 | 280 | 90 | 622 | 132339 | 92192 | 202643 | 95 | 100 | 100 | 23.18 | 13.14 | 34.33 |
| United States | 3148 | 1637 | 1135 | 2455 | 26879 | 11225 | 72707 | 87 | 97 | 100 | 19.02 | 9.2 | 38.67 |
| Uruguay | 141 | 449 | 137 | 975 | 6644 | 2200 | 22616 | 56 | 68 | 95 | 37.13 | 17.39 | 134.52 |
| Uzbekistan | 161 | 659 | 389 | 1947 | 191237 | 116330 | 272144 | 61 | 84 | 97 | 46.12 | 28.39 | 81.43 |
| Vanuatu | 63 | 127 | 48 | 276 | 2814 | 1449 | 4781 | 0 | 0 | 0 | Inf | Inf | Inf |
| Venezuela | 338 | 602 | 236 | 1845 | 41036 | 21287 | 101418 | 53 | 72 | 94 | 53.79 | 25.25 | 129.4 |
| Vietnam | 11163 | 15 | 6 | 36 | 6448 | 3772 | 11163 | 66 | 84 | 97 | 33.24 | 7.8 | 81.34 |
| Virgin Islands, U.S. | 20 | 14 | 4 | 30 | 3822 | 1933 | 7004 | 0 | 0 | 0 | Inf | Inf | Inf |
| Western Sahara | 4 | 43402 | 30395 | 66955 | 46103 | 41225 | 126922 | 0 | 0 | 0 | Inf | Inf | Inf |
| Yemen | 332 | 418 | 180 | 976 | 68804 | 39285 | 121576 | 12 | 22 | 61 | 214.41 | 131.52 | 295.14 |
| Zambia | 115 | 5186 | 2740 | 9273 | 108501 | 70669 | 162646 | 17 | 18 | 30 | 350.18 | 152.18 | 605.19 |
| Zimbabwe | 1960 | 113 | 47 | 214 | 4611 | 2617 | 8259 | 26 | 40 | 77 | 148.87 | 51.17 | 231.94 |

Table 2  
Proposed locations of 100 new radiotherapy centers maximizing the global 120-minute access to radiotherapy

|  |  |  |  |
| --- | --- | --- | --- |
| Country | Latitude | Longitude | Population gaining 120-minute access |
| IND | 25.77895 | 87.47422 | 36285989 |
| NGA | 4.77742 | 7.0134 | 18546668 |
| NGA | 12.00012 | 8.51672 | 17445140 |
| BGD | 23.16971 | 89.21371 | 11822278 |
| NGA | 6.01798 | 7.02027 | 11535667 |
| NGA | 6.33815 | 5.62575 | 10809177 |
| ETH | 7.06205 | 38.47635 | 9189307 |
| PAK | 28.41987 | 70.30345 | 8584209 |
| BDI | -3.42708 | 29.92463 | 8113676 |
| SYR | 36.20124 | 37.16117 | 8058068 |
| IND | 24.10473 | 88.25155 | 7550867 |
| PAK | 30.66595 | 73.10186 | 7345731 |
| IND | 26.35367 | 86.07169 | 7175894 |
| AFG | 34.52813 | 69.17233 | 7135519 |
| HTI | 18.54349 | -72.33881 | 6782063 |
| MWI | -13.96692 | 33.78725 | 6610927 |
| NGA | 7.25256 | 5.19312 | 6434254 |
| BEN | 6.44852 | 2.35566 | 6316350 |
| COD | -6.11643744500475 | 23.5958779098979 | 6005678 |
| IND | 19.23114 | 82.54826 | 5824936 |
| COD | -11.6619043034856 | 27.4669302351304 | 5612427 |
| IND | 24.48983 | 86.69902 | 5592109 |
| YEM | 13.83446 | 44.11469 | 5579323 |
| NGA | 9.92849 | 8.89212 | 5531181 |
| PHL | 11.2413551154316 | 125.006897023805 | 5411874 |
| IDN | -8.1779763193196 | 113.727987397055 | 5258061 |
| NGA | 7.32275 | 9.00108 | 5188505 |
| IND | 27.94822 | 80.77935 | 4677437 |
| IND | 24.03971 | 84.0658 | 4642042 |
| NGA | 6.85783 | 7.39577 | 4557003 |
| NGA | 11.67478 | 10.19069 | 4517119 |
| NPL | 27.01709 | 84.8808 | 4466898 |
| CHN | 27.30193 | 105.28627 | 4461922 |
| IND | 23.83877 | 78.73874 | 4228328 |
| COD | -5.89453706875533 | 22.46924502848 | 4190068 |
| IND | 26.64862 | 84.91656 | 3970382 |
| PAK | 32.58704 | 73.49123 | 3936580 |
| CHN | 27.31667 | 103.71667 | 3922462 |
| YEM | 15.05898 | 43.28731 | 3833721 |
| NGA | 12.45389 | 4.1975 | 3766904 |
| NGA | 12.99082 | 7.60177 | 3710732 |
| CMR | 5.9597 | 10.14597 | 3708589 |
| GIN | 9.73333 | -13.41667 | 3630608 |
| PAK | 29.99835 | 73.25272 | 3580341 |
| VNM | 18.6713354398531 | 105.674146157243 | 3517620 |
| ETH | 7.06667 | 37.7 | 3513118 |
| ETH | 11.13333 | 39.63333 | 3469782 |
| IND | 21.30868 | 76.23026 | 3428120 |
| NER | 13.42309 | 8.47485 | 3426855 |
| COD | -6.54211734870996 | 20.7174609043066 | 3351062 |
| ETH | 12.6 | 37.46667 | 3330271 |
| UKR | 48.023 | 37.80224 | 3317138 |
| PAK | 32.57756 | 71.52847 | 3289531 |
| NGA | 12.17024 | 6.66412 | 3261855 |
| NGA | 13.73064 | 5.29777 | 3219240 |
| NGA | 9.11972 | 4.8236 | 3178880 |
| PAK | 35.2547242780674 | 72.4611473747721 | 3144205 |
| NGA | 11.84692 | 13.15712 | 3118548 |
| COD | 0.474898346097583 | 29.455469045913 | 3077618 |
| COD | -1.41226377606027 | 28.8469798812038 | 3060201 |
| PAK | 30.04587 | 70.64029 | 3026586 |
| NGA | 7.44982506266187 | 6.3220885291261 | 2982437 |
| IND | 21.49266 | 86.93348 | 2934728 |
| ETH | 11.41667 | 37.16667 | 2920866 |
| HTI | 19.93984 | -72.83037 | 2773429 |
| CIV | 6.87735 | -6.45022 | 2763338 |
| COD | -7.92047491820044 | 26.8682642083657 | 2739824 |
| CIV | 6.13193 | -5.9506 | 2696756 |
| BFA | 11.17715 | -4.2979 | 2646304 |
| TZA | -6.16805238634045 | 39.2135328393123 | 2643518 |
| CMR | 9.9333 | 13.94671 | 2629661 |
| MEX | 16.75973 | -93.11308 | 2628027 |
| PRK | 39.9309754741706 | 127.626815849007 | 2623963 |
| NGA | 5.61455 | 7.81191 | 2616205 |
| ZMB | -12.95867 | 28.63659 | 2592770 |
| TZA | -3.41594762979761 | 36.6800863851188 | 2556924 |
| AFG | 34.42647 | 70.45153 | 2512219 |
| SOM | 2.03711 | 45.34375 | 2468409 |
| PAK | 35.2074 | 71.8768 | 2460986 |
| PHL | 8.96780074588814 | 125.552717511529 | 2430618 |
| PAK | 26.8236484611554 | 69.0866332891994 | 2428834 |
| PAK | 27.70323 | 68.85889 | 2367995 |
| CIV | 7.69385 | -5.03031 | 2343656 |
| KHM | 13.36179 | 103.86056 | 2335200 |
| PAK | 24.73701 | 69.79707 | 2324095 |
| ETH | 13.49667 | 39.47528 | 2307417 |
| PHL | 7.82209933737886 | 123.442575823906 | 2297063 |
| COD | 1.90072024373155 | 30.3818548875161 | 2277677 |
| ETH | 10.35 | 37.73333 | 2255223 |
| CHN | 25.09617 | 104.90639 | 2229284 |
| PAK | 25.76818 | 68.66196 | 2222122 |
| BGD | 23.0391 | 90.76808 | 2197737 |
| GHA | 4.89816 | -1.76029 | 2174318 |
| PAK | 26.73033 | 67.7769 | 2154995 |
| ETH | 6.03333 | 37.55 | 2145415 |
| RWA | -2.479 | 29.5564 | 2129192 |
| IND | 22.22496 | 84.86414 | 2115547 |
| IDN | 1.10885278312938 | 104.124807061961 | 2109928 |
| IDN | -1.64966438352937 | 103.576545383346 | 2107897 |
| TZA | -3.03288603919768 | 31.9565465620157 | 2097222 |