

Sample Design Summary: TSVS 2024

1.1 Target Population

Number of persons aged 18 and over residing in the country: 63.166.343

Source and reference date: TurkStat 2023

1.2 Population Coverage

The sampling frame covers all persons aged 18 and over residing in the country. People living in institutions and social organizations were excluded from the sampling frame.

1.3 Summary of the Multistage Cluster Sample Design

262 geographical clusters (Primary Sampling Unit [PSU]) are selected from 26 NUTS-2 geographical sub-regions of Turkey. Each cluster consists of 100 blocks. 19 addresses are selected from each cluster. The gross number of addresses received from TurkStat is $262 \times 19 = 4978$. The sample is divided into two parts: the main sample and the reserve sample. For the main sample, 14 main addresses are randomly selected from each PSU with 19 addresses in total ($262 \times 14 = 3668$). In the last stage, one person aged 18 years and over is selected from each address according to the most recent birthday criterion. The remaining 5 addresses in each PSU constitute the reserve sample. The details of the reserve sample design are explained in section *1.5 Reserve Sample*.

1.4 Details of the Multistage Cluster Master Sample Design

First Sampling Stage

unit: 26 geographical sub-regions (NUTS-2 units) of Turkey

frame: Household address list identified by TSI

size: 262

strata: Explicit stratification. 26 Strata.

allocation: Proportionate to the adult 18 years+ population of the 26 geographical strata (see Appendix 1).

algorithm: Units selected proportionate to the number of addresses by way of a randomly selected starting point and fixed interval, after ordering within each stratum by the number of addresses.

Second Sampling Stage

unit: Addresses within each selected PSU/cluster
frame: Household address list identified by TSI
size: 14
strata: Not applicable
allocation: Equal-probability selection of 14 addresses from each PSU
algorithm: Second-stage units are selected by way of simple random sampling
Remarks: The same number of addresses were selected in each sampled PSU.

Third Sampling Stage

unit: Persons aged 18+ within each selected address
frame: Not applicable
size: 1
strata: Not applicable
allocation: Equal-probability selection of 1 person from each dwelling
algorithm: Last Birthday Technique, administered by the interviewer in the field.

Remarks: Quota sampling is prohibited in any part of the sampling procedure. Substitution of nonresponding, non-contactable, or non-accessible sampling units (such as houses, individuals, or apartment buildings) is also not permitted. For instance, if a selected respondent in a dwelling refuses to participate and another family member volunteers to do the interview instead, this is considered a 'substitution'. This will not be permitted.

Note: Each address is visited at least twice. If the respondent receives an appointment during the second visit for the survey to be conducted later, the third visit is carried out.

1.5 Reserve Sample

The reserve sample consists of 5 addresses randomly selected from each PSU. These addresses are defined as 5 batches, each containing one address within each of the 262 PSUs that comprise the reserve sample. These batches are ordered as batch 1, batch 2, ..., batch 5. The reserve sample size is $262 \times 5 = 1310$. If the participation rate in the main sample falls below 30%, the batches in the reserve sample are activated respectively.

Note: In the research conducted, there was no need to activate the reserve sample.

Appendix 1. The ratio of 26 Subregions to Total Population

| Level 1 (12 regions) | Level 2 (26 subregions) | Level 3 (81 provinces) | Province population | Total population | Proportion of regions by total population (%) | According to 262 PSUs |
|----------------------|-------------------------|------------------------|---------------------|------------------|---|-----------------------|
| İstanbul | İstanbul subregion | İstanbul | 11.861.621 | 11.861.621 | 18,78 | 49 |
| West Marmara | Tekirdağ subregion | Tekirdağ | 879.907 | 1.534.436 | 2,43 | 6 |
| | | Edirne | 346.317 | | | |
| | | Kırklareli | 308.212 | | | |
| | Balıkesir subregion | Balıkesir | 1.026.579 | 1.491.948 | 2,36 | 6 |
| | | Çanakkale | 465.369 | | | |
| Aegean | İzmir subregion | İzmir | 3.531.845 | 3.531.845 | 5,59 | 15 |
| | Aydın subregion | Aydın | 907.379 | 2.572.318 | 4,07 | 11 |
| | | Denizli | 816.616 | | | |
| | | Muğla | 848.323 | | | |
| | Manisa subregion | Manisa | 1.128.408 | 2.449.235 | 3,88 | 10 |
| | | Afyonkarahisar | 564.536 | | | |
| | | Kütahya | 460.259 | | | |
| Uşak | | 296.032 | | | | |
| East Marmara | Bursa subregion | Bursa | 2.419.715 | 3.323.259 | 5,26 | 14 |
| | | Eskişehir | 725.656 | | | |
| | | Bilecik | 177.888 | | | |
| | Kocaeli subregion | Kocaeli | 1.546.993 | 3.183.626 | 5,04 | 13 |
| | | Sakarya | 830.375 | | | |
| | | Düzce | 312.142 | | | |
| | | Bolu | 259.325 | | | |
| Yalova | 234.791 | | | | | |
| West Anatolia | Ankara subregion | Ankara | 4.447.327 | 4.447.327 | 7,04 | 18 |
| | Konya subregion | Konya | 1.689.614 | 1.887.880 | 2,99 | 8 |
| | | Karaman | 198.266 | | | |
| Mediterranean | Antalya subregion | Antayla | 2.042.872 | 2.619.780 | 4,15 | 11 |
| | | Isparta | 353.707 | | | |
| | | Burdur | 223.201 | | | |
| | Adana subregion | Adana | 1.629.682 | 3.055.196 | 4,84 | 13 |
| | | Mersin | 1.425.514 | | | |
| | Hatay subregion | Hatay | 1.064.200 | 2.224.051 | 3,52 | 9 |
| Kahramanmaraş | | 769.732 | | | | |

| | | | | | | |
|--------------------------|------------------------|-----------|-----------|-----------|------|---|
| | | Osmaniye | 390.119 | | | |
| Central Anatolia | Kırıkkale subregion | Kırıkkale | 224.506 | 1.248.602 | 1,98 | 5 |
| | | Aksaray | 314.619 | | | |
| | | Niğde | 276.839 | | | |
| | | Nevşehir | 241.018 | | | |
| | | Kırşehir | 191.620 | | | |
| | Kayseri subregion | Kayseri | 1.053.958 | 1.877.425 | 2,97 | 8 |
| | | Sivas | 499.228 | | | |
| Yozgat | | 324.239 | | | | |
| West Black Sea | Zonguldak subregion | Zonguldak | 475.474 | 852023 | 1,35 | 4 |
| | | Karabük | 207.857 | | | |
| | | Bartın | 168.692 | | | |
| | Kastamonu subregion | Kastamonu | 317.372 | 668.009 | 1,06 | 3 |
| | | Çankırı | 164.070 | | | |
| | | Sinop | 186.567 | | | |
| | Samsun subregion | Samsun | 1.062.650 | 2.216.806 | 3,51 | 9 |
| | | Tokat | 473.061 | | | |
| Çorum | | 413.416 | | | | |
| Amasya | | 267.679 | | | | |
| East Black Sea | Trabzon subregion | Trabzon | 638.643 | 2.157.710 | 3,42 | 9 |
| | | Ordu | 607.873 | | | |
| | | Giresun | 374.617 | | | |
| | | Rize | 277.115 | | | |
| | | Artvin | 140.424 | | | |
| | | Gümüşhane | 119.038 | | | |
| Northeast Anatolia | Erzurum subregion | Erzurum | 534.900 | 792.085 | 1,25 | 3 |
| | | Erzincan | 190.361 | | | |
| | | Bayburt | 66.824 | | | |
| | Ağrı subregion | Ağrı | 315.854 | 726.583 | 1,15 | 3 |
| | | Kars | 196.615 | | | |
| | | Iğdır | 143.016 | | | |
| | | Ardahan | 71.098 | | | |
| Central East Anatolia | Malatya subregion | Malatya | 553.689 | 1.279.042 | 2,02 | 5 |
| | | Elazığ | 450.758 | | | |
| | | Bingöl | 199.992 | | | |
| | | Tunceli | 74.603 | | | |
| | Van subregion | Van | 708.743 | 1.379.605 | 2,18 | 6 |
| | | Muş | 247.284 | | | |
| Bitlis | | 228.476 | | | | |

| | | | | | | |
|------------------------|------------------------|--------------|------------|------------|--------|-----|
| | | Hakkâri | 195.102 | | | |
| South East Anatolia | Gaziantep subregion | Gaziantep | 1.384.165 | 1.895.209 | 3,00 | 8 |
| | | Adıyaman | 405.940 | | | |
| | | Kilis | 105.104 | | | |
| | Şanlıurfa subregion | Şanlıurfa | 1.231.406 | 2.378.123 | 3,76 | 10 |
| | | Diyarbakır | 1.146.717 | | | |
| | Mardin subregion | Mardin | 551.012 | 1.512.599 | 2,39 | 6 |
| | | Batman | 403.288 | | | |
| | | Şırnak | 339.770 | | | |
| | | Siirt | 218.529 | | | |
| | | | | | | |
| | | TOTAL | 63.166.343 | 63.166.343 | 100,00 | 262 |