

SURVEY on BUILDING AND DWELLING CHARACTERISTICS

Online Training Course on 'Conducting a Census Based on Administrative Records'



4-5th July 2022, Ankara (Online)

TURKISH STATISTICAL INSTITUTE
Demographic Statistics Department

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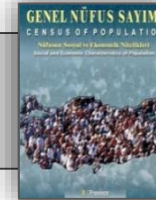
Alper ACAR,
Expert

Mehmet Şaban UCARI,
Expert

Content

DAY 1

✓ **HISTORY OF POPULATION CENSUSES (1927-2000) &
DATA SOURCES FOR POPULATION STATISTICS**



✓ **ADDRESS BASED POPULATION REGISTRATION SYSTEM (2007-2021-...)
CURRENT POPULATION FIGURES**



✓ **2011 POPULATION and HOUSING CENSUS**



DAY 2

✓ **LEGAL BASE**



✓ **2021 POPULATION and HOUSING CENSUS**
"POPULATION CHARACTERISTICS DATABASE (PCDB)" (for census and beyond)



☀ **SURVEY ON BUILDING & DWELLING CHARACTERISTICS**

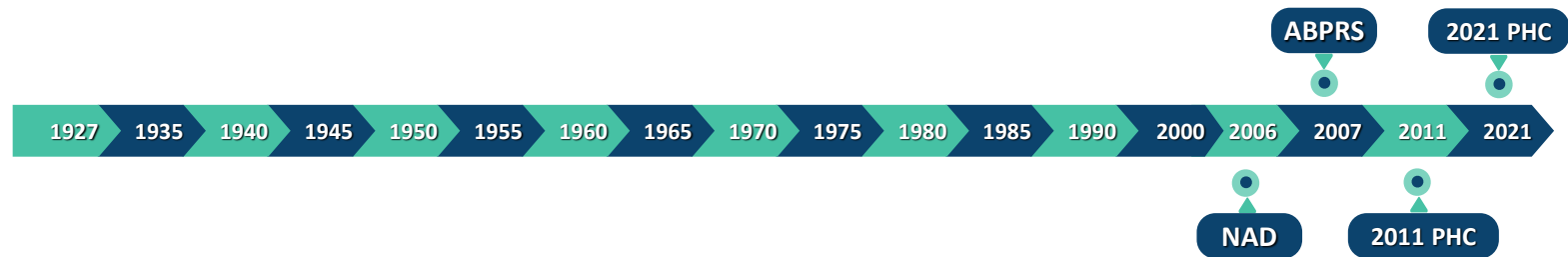


QUALITY ASSURANCE



1. Introduction

- 14 Traditional Census 1927-2000
- National Address Database, 2006
- Combined Census, 2011
- No single and complete «Building and Dwelling Registers» in Türkiye



2.1 Attempt to Establish Register Sytem

- TurkStat's policy and activities in accordance with the goal of producing **more timely, less costly, more useful and annual population statistics**
- Eurostat's goal of producing census variables annually in the post-2024 period
- In this motivation, TurkStat tried to establish a building database called Building and Dwelling Registration System(BDRS)



2.3 Importance of Building and Dwelling Registers

- Essential component of a register based census
- Specific statistics:
 - Distribution of buildings and dwellings by main characteristics (number of floors, number of rooms, material of construction, water and electricity installation status.)
 - Number of occupied and unoccupied dwellings
- Producing statistics from a central database similar with ABPRS that is continuously updated at minimal cost
- Providing input for related statistics (housing, construction etc.)
- Establishing a base for national surveys



2.3 Importance of Building and Dwelling Registers

- Determining level of development based on building/ dwelling characteristics
- Producing more detailed and functional statistics by linking the special population groups with the characteristics of the dwellings
- Providing accurate and reliable information for disaster and emergency management, municipality, taxation, city planning, construction planning and impact assessment.
- Earthquake! Number of buildings at risk of earthquake and the size of population under risk...





Building and Dwelling Registration System Studies

- Meetings with stakeholder institutions
 - Disaster and Emergency Management Authority (AFAD)
 - Housing Development Administration (TOKİ)
 - Ministry of Environment and Urbanization
 - General Directorate Of Civil Registration and Nationality
 - Ministry of Energy and Natural Resources
 - Presidency of Strategy and Budget
- Establishment of a special working group (GIS, IT Expert)
- Municipality visits
- Survey on Building and Dwelling Registers of Municipalities
- Determination of variables
- A pilot study on a province municipality (Afyonkarahisar) to test the current situation
- Developing an inventory for possible data sources





Data Sources for Building and Dwelling Registration System

- Address registers (NAD and SARS)
- Building permits (municipalities)
- Property tax records (municipalities)
- Urban Information Systems (municipalities)
- Land Registry and Cadastre Information System-Deed Records (TAKBIS)
- Compulsory Earthquake Insurance Records (DASK)
- Rental Income Declarations (Ministry of Finance, Revenue Administration)
- Other (subscription records of natural gas, water supply and electricity)





National Address Database (NAD)

- Unique codes for localities, quarters, streets, buildings and all kind of independent units in the building (dwelling, office etc.)
- Link with PR
- Type of the building (residential, non-residential, governmental)
- Type of the address/living quarter (residence, office, school, student dormitory, hotel, nursing home etc.)



Spatial Address Registration System (SARS)

Spatial Address Registration System was created to integrate the address information in textual attributes in the NAD with geographical coordinates (spatial dimension)

- Ministry of Interior
- Spatial data (X,Y coordinates)
- Number of floors in the building





Building Permits

- ☐ Held by municipalities
- ☐ Various information on the permit form and attached documents (architectural project, static project, etc.):
 - Main characteristics of the building (floor space, number of rooms/floors/dwellings and type of dwelling, etc.)
 - Installations in the buildings (piped water, waste water, piped gas, electricity, hot water, type of heating and main type of energy used, etc.)
 - Existence of car parking, coal cellar, shelter and pool
 - Load-bearing system of the building, curtain wall material



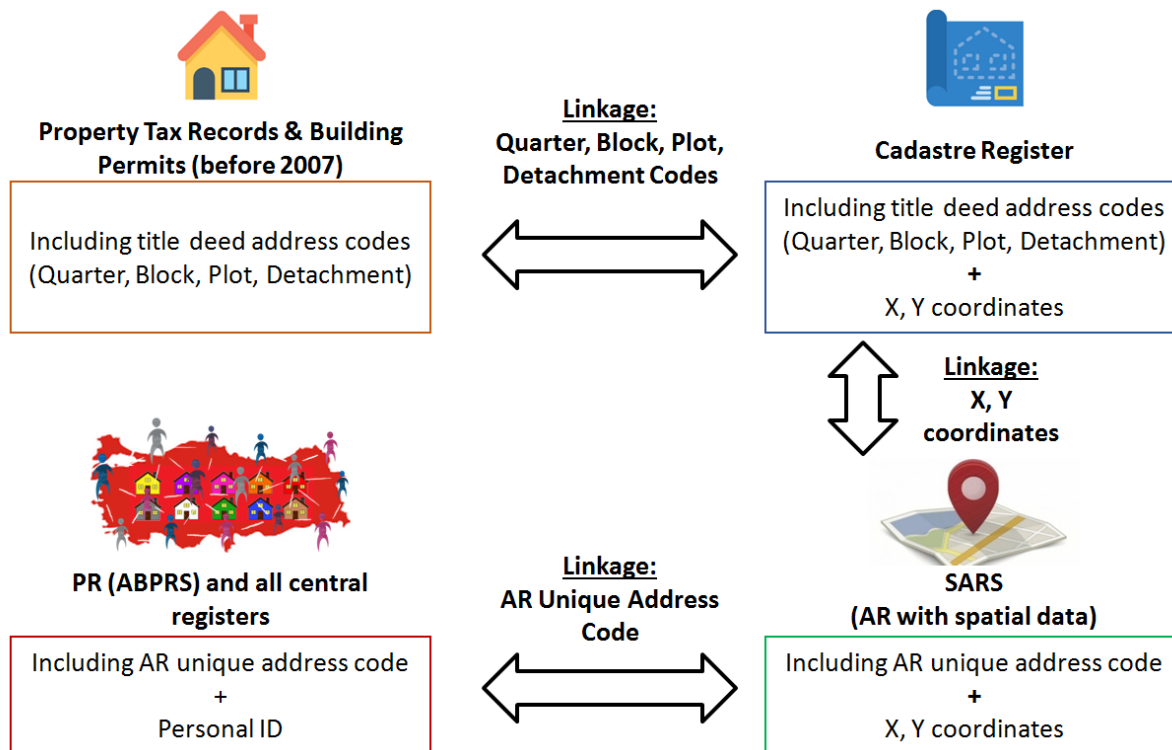


Property Tax Records

- ☐ Held by municipalities
- ☐ **Content:**
 - Owner of the property (with ID)
 - Uses “title deed address codes (Blocks, Plots and Detachments)” mainly but some municipalities introduced unique address codes (AR) to their records
 - Building land area
 - Construction material
 - Construction class (luxury, first, second, etc.)
 - Type (residence, workplace, warehouse, factory, hospital, etc.)
 - Construction completion date and acquisition date



How to Link?



Building and Dwelling Registration System Variables


☐ For Population and Housing Census:

- Core variables
- Non-core variables
- Expectations of stakeholders are taken into consideration.

☐ Variables are evaluated in terms of

- ☐ Necessity and need
- ☐ Producibility
- ☐ Sustainability





Challenges to establish Building and Dwelling Registration System

Spatial Address Registration System

- Not contains dwelling features
- Not completed yet

Building Permits

- Undercoverage
- Paper based,
- Different formats
- Not centralized
- Not contains unique key

Property Tax Records

- Upon the declaration of citizens
- Unreported dwellings.

Deed Records

- Undercoverage
- Paper based,
- Different formats
- Not contains unique key



Building and Dwelling Registration System **cannot** be established because of;

- Insufficient data sources
- Different data formats
- Unique key for matching sources
- Lack of declaration
- Bureaucratic reasons



3. Survey

❑ In Türkiye, there is no single and complete (all requested attributes for all units) administrative data source available for the statistics on buildings and dwellings.

❑ Setting up a registration system for buildings and dwellings has been one of the institutional targets of TurkStat.

- However, establishing a such a registration system will take time. It is obvious that the planned registration system will not be available during census period.

❑ To solve those problems, a **Survey on Building and Dwelling Characteristics, 2021** was carried out by TurkStat in order to eliminate the lack of administrative registers in this area.



3.1 Purpose of Survey

There is no database with sufficient information on buildings and dwellings in our country.

Therefore, “Survey on Building and Dwelling Characteristics” was conducted for basic information on building and dwelling characteristics that cannot be obtained from existing administrative registers and are needed within the scope of 2021 PHC.



3.2 Legal Base of Survey

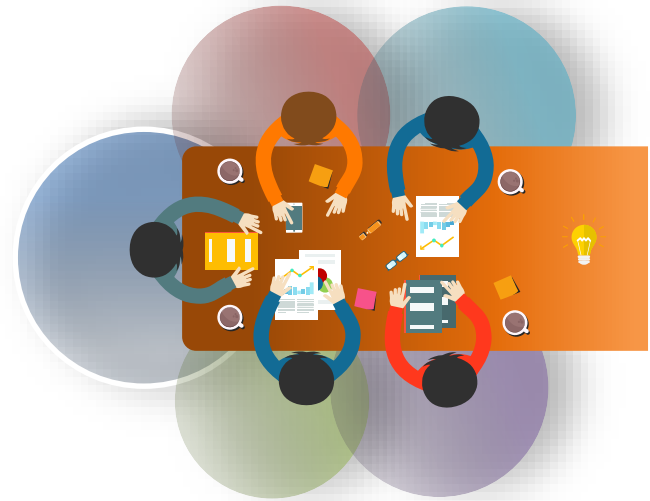
In Turkey, no need law for census.

- Turkish Statistical Law No. 5429
- Official Statistics Program for 2017-2021



3.3 Details of Survey

- Conducted Pilot Study in December 2020
- October 2021 to March 2022
- Sample size 306.615 dwellings



3.3 Details of Survey

- 11 questions (totally 19 with sub-questions)
under 2 sections "building" and "dwelling"
- Estimated 80-145 enumerators for survey
- Survey duration is 6 min. on average



3.4 Building Variables on Questionnaire



1		Number of floors	Non-Core	Non-Core
2		Number of residences/workplaces	Non-Core	Non-Core
3		Availability of elevator	Non-Core	Non-Core
4		Availability of parking	Non-Core	Non-Core
5		Building construction year	Core	Core



3.5 Dwelling Variables on Questionnaire



1		Property status	Core	Core
2		Number of rooms	Core	Core
3		Kitchen availability and number	Non-Core	Core
4		Facility of dwelling	Core	Core
5		Heating system	Core	Core
6		Fuel used for heating	Non-Core	Non-Core

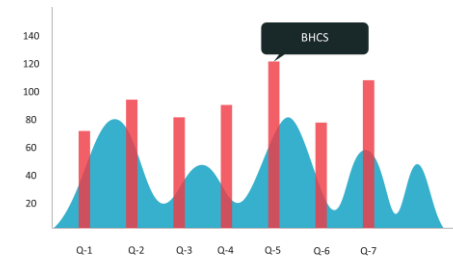
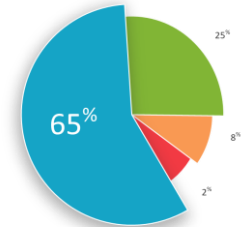
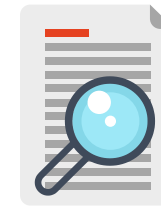


3.6 Analysis on Survey

The analysis program, which created the data compiled with the CATI method, was analysed with around 50 edit rules.

The compiled data compared with;

- Spatial Address Registration System
- Building Permits

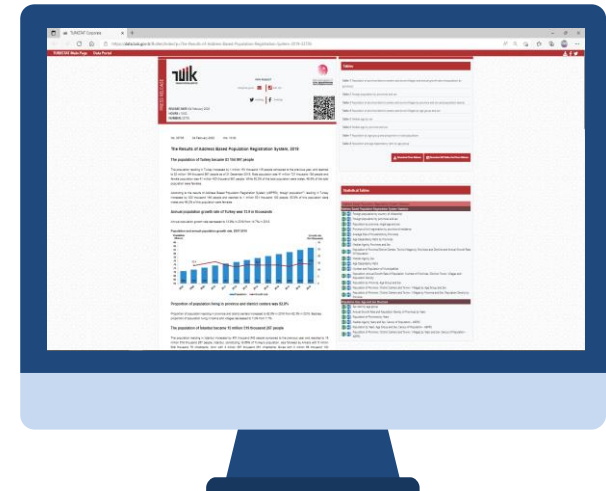


3.7 Dissemination

The results of the survey are planned to be shared with the public within the scope of 2021 PHC.



Last quarter of 2022
with press release





Questions?
Comments?



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