TurkStat Experience on Non-Traditional Data Sources for SDGs

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UNECE- Sixth Expert Meeting on Statistics for SDGs
5-6 May 2022

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Coordination of SDGs in Turkey

Presidency of the Republic of Turkey, Strategy and Budget Office

The national coordination authority of sustainable development in Turkey

- Five year development plans

- National Sustainable Development Commission

(is planned in the 11th National Development Plan covering 2019-2023 period)

- Voluntary National Reviews (VNRs – so far 2016, 2019)

- Thematic works with the line ministries, etc.

TurkStat

Coordination role on data and monitoring (global, regional, national)

- Statistics Law of Turkey

- Official Statistical Programme (OSP)

- Data dissemination and monitoring,

- Communication with international organizations

  - Data production bridge with the national data producers

  - Data validation requests

  - International and regional participation

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2021 Press Release

Sustainable Development Indicators Press Release

- Published on February 2, 2021

- Total **131** Indicators

  - Compiled from **19 i**nstitutions including TURKSTAT

  - 110 of them are produced as "**global indicator**" and 31 of them are produced as "**proxy indicator**"

57%

0   100%
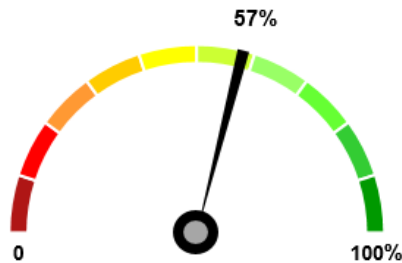
Indicator production ratio
(out of 231 single SDG indicators)

PRESS RELEASE

INFO REQUEST
Data Dissemination Group

ALO 124

info@tuik.gov.tr

RELEASE DATE: 02 February 2021
HOURS: 10:00
NUMBER: 37194

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Sustainable Development Indicators, 2010-2019

Within the framework of 2030 Agenda for Sustainable Development, adopted at the Sustainable Development Summit of United Nations which was held on 25 September 2015, 17 goals and 169 targets were determined. In order to monitor achieving the sustainable development goals and targets, an indicator set was constructed consisting of global indicators. The indicator set currently contains 231 global indicators.

Global indicators identified as currently available at national level and proxy indicators considered to be appropriate to measure relevant target are published with this press release as total 131 indicators together with definitions.

Relative at risk of poverty rate decreased by approximately 2.5 percentage point in 2010-2019 period

The at risk of poverty rate according to poverty threshold set at 50% of median equivalised household disposable income was realized as 14.4% in 2019 with an approximately 2.5 percentage point decrease compared to 2010 which was 16.9%. While in-work at risk of poverty rate of population was 17.9% in 2010, it decreased by 4.7 points in 2019 to 13.2%. The proportion of people at risk of poverty or social exclusion was 39.8% in 2019, decreased 25.9 percentage points from 65.7% in 2010.

Proportion of people at risk of poverty or social exclusion, 2010-2019

2010	(%)		(%)	2019
65.7		Total		39.8
70.8		<16 age		47.7
69.7		16-24 age		44.9
63.2		25-54 age		36.5
59.2		55+ age		32.9

Maternal mortality ratio and under-five mortality rate decreased

While maternal mortality ratio was 16.7 per hundred thousand live births in 2010, this ratio decreased to 13.1 in 2019.
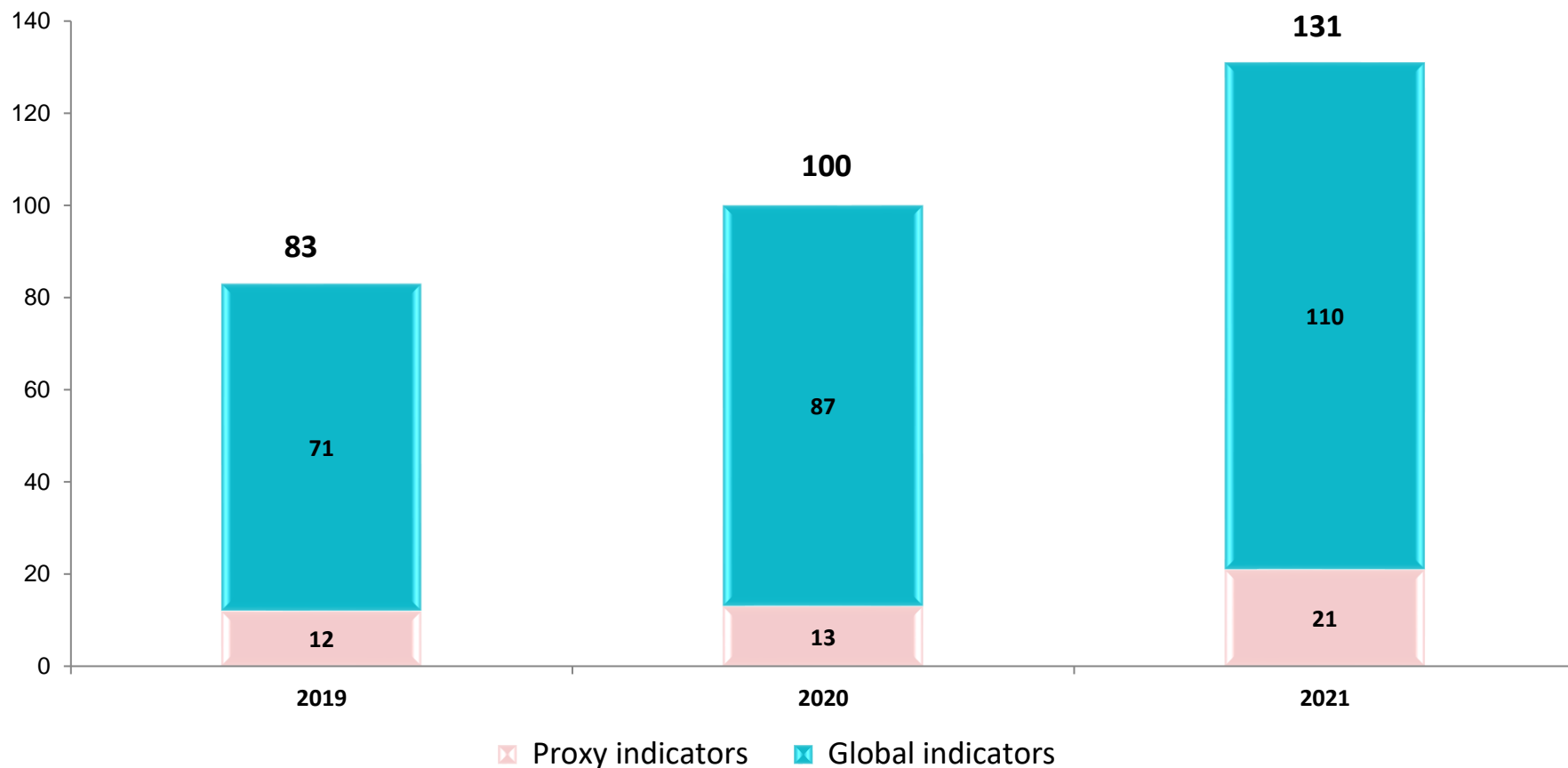
The under-five mortality rate was 11.2 in 2019, compared to 15.5 per thousand live births in 2010. In the same period, the neonatal mortality rate also decreased from 7.6 to 5.7 per thousand live births.

While the adolescent fertility rate per thousand women in the 15-19 age group was 33.8 in 2010, it was 16.7 in 2019.
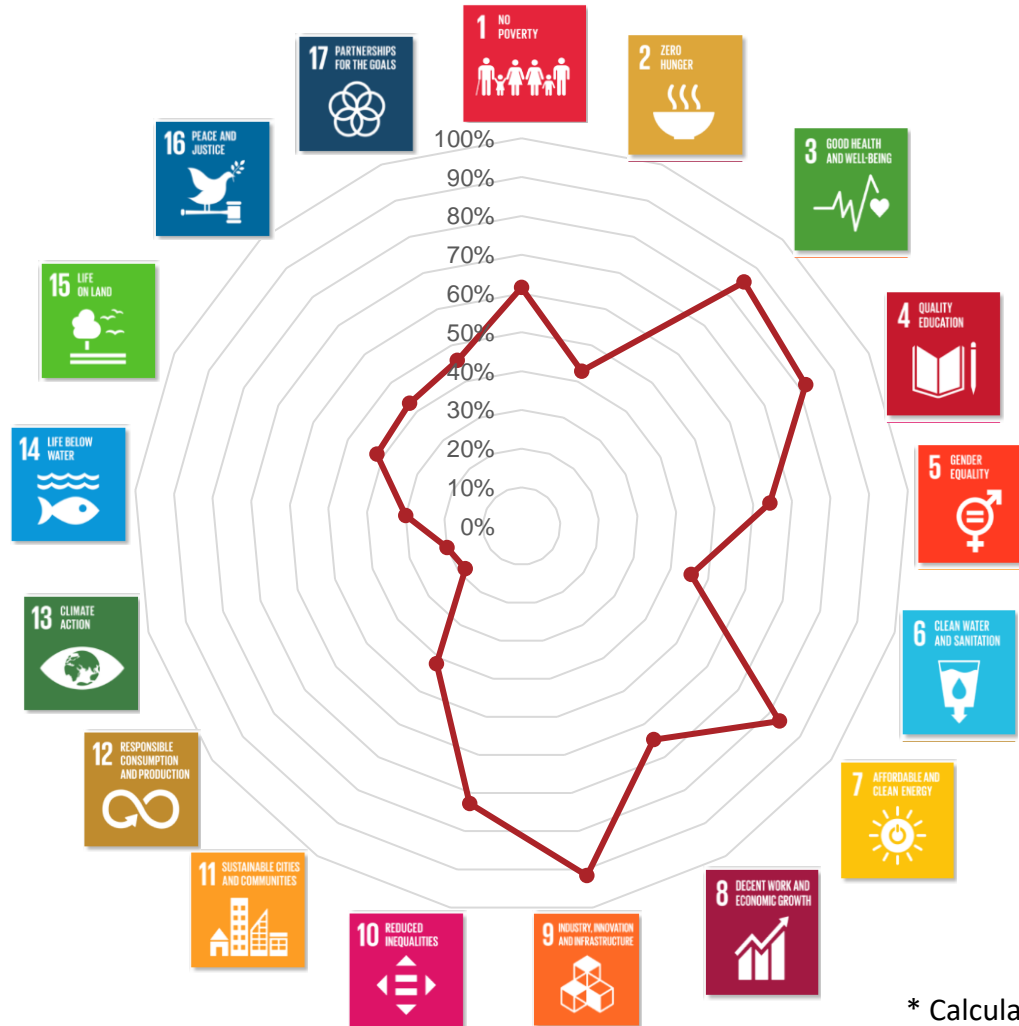
While the percentage of smokers aged 15 and over was 29.5% in 2010, it increased to 31.3% in 2019. In 2019, the percentage of tobacco smokers among males was approximately 2.5 times the ratio of tobacco smokers among females.

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Published SDG Indicators

Sustainable Development Indicators Press Releases in 2019, 2020 and 2021

	2019	2020	2021
Total	83	100	131
Global indicators	71	87	110
Proxy indicators	12	13	21

Legend: ▨ Proxy indicators   ▨ Global indicators

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Published SDG Indicators by Goals

* Calculated due to 231 single SDG indicators

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Disaggregations

Sustainable Development Indicators Press Releases in 2019, 2020 and 2021

Published Indicators and Disaggregations by Year

Legend: ■ Published disaggregated indicators ■ Published disaggregations

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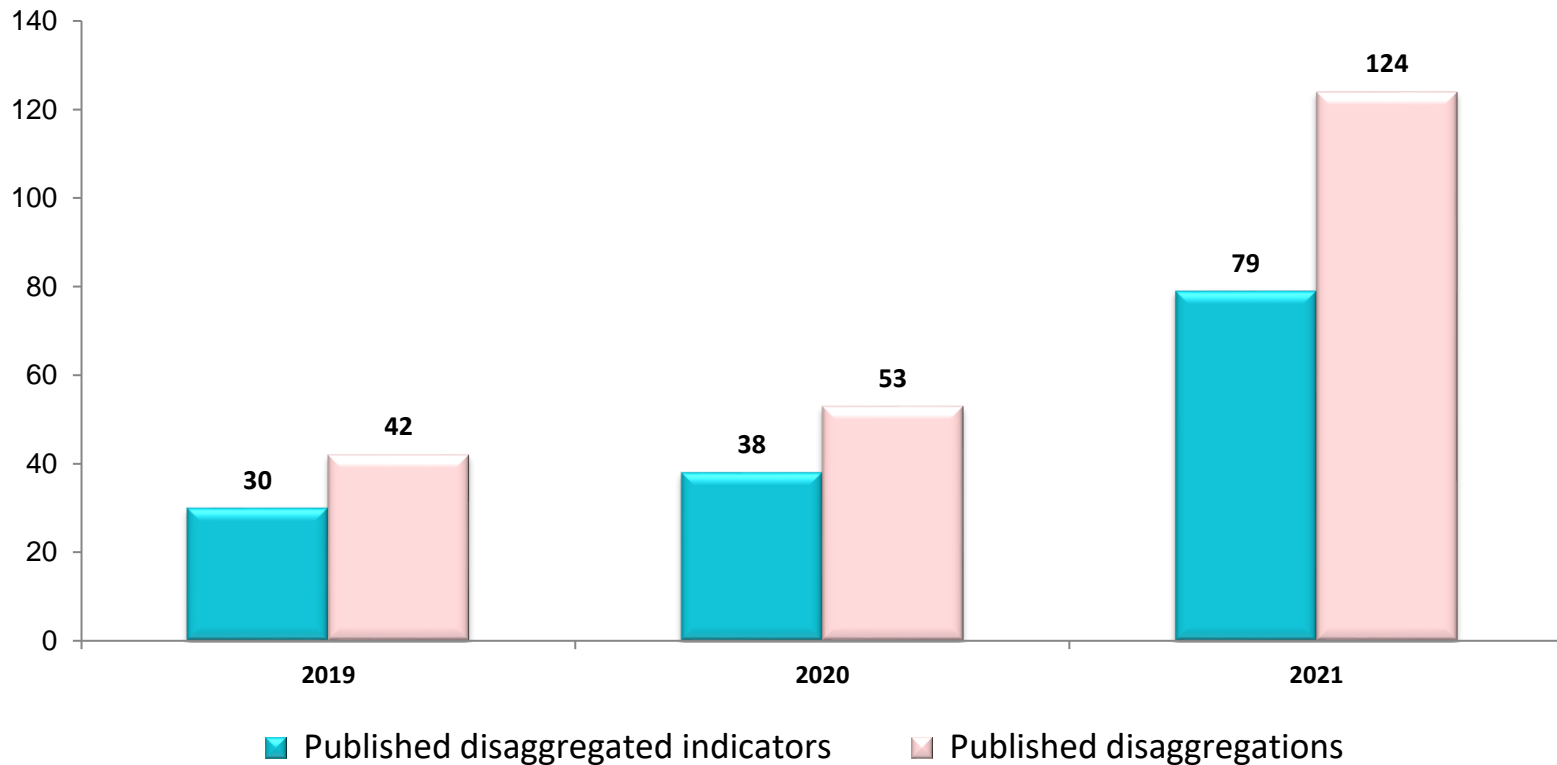
SDG Indicators Produced by Geographical Information Systems (GIS)

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11.2.1. Proportion of population that has convenient access to public transport

$$\text{Proportion of population that has convenient access to public transport (\%)} = \frac{\text{City population living 500 m away from bus stops, minibus and minibus routes, and 1 km away from Metro and sea transportation stops}}{\text{Total city population}} \times 100$$
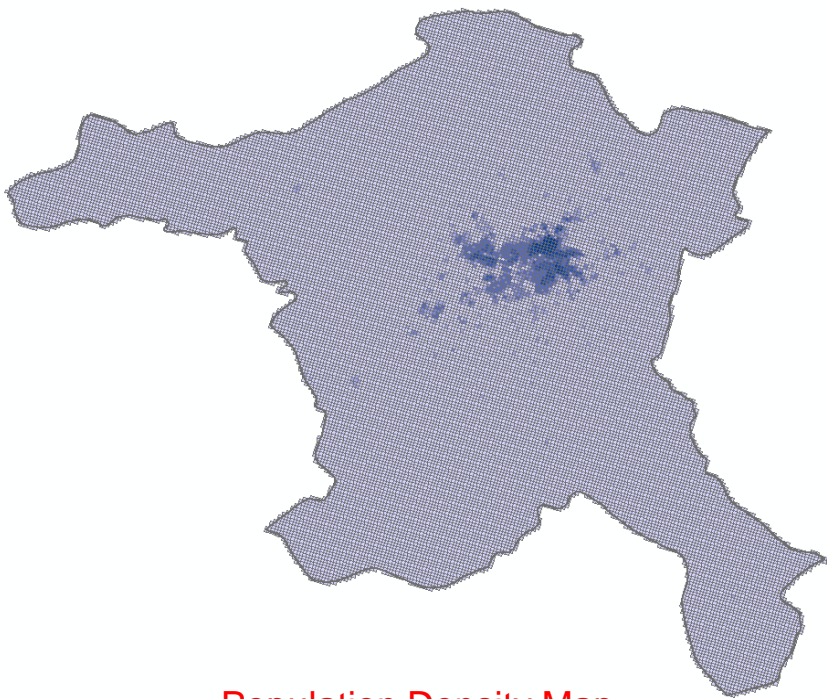
Data sources:

1. Ankara EGO Transportation Information System

2. İstanbul Open Data Portal

3. İzmir City Guide

4. Provincial borders (Map General Directorate, 2019)
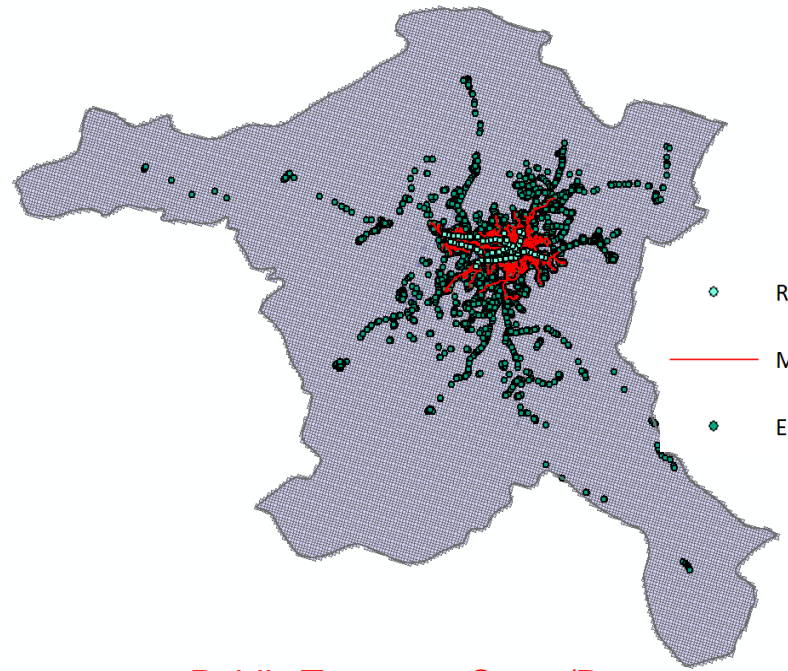
5. Population Density Grids, 2019

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11.2.1. Proportion of population that has convenient access to public transport

Methodology

1. Obtaining the population density map and public transport stops/routes for the provincial borders


Population Density Map

Public Transport Stops/Routes

Rail system

Minibus routes

EGO bus stops

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11.2.1. Proportion of population that has convenient access to public transport
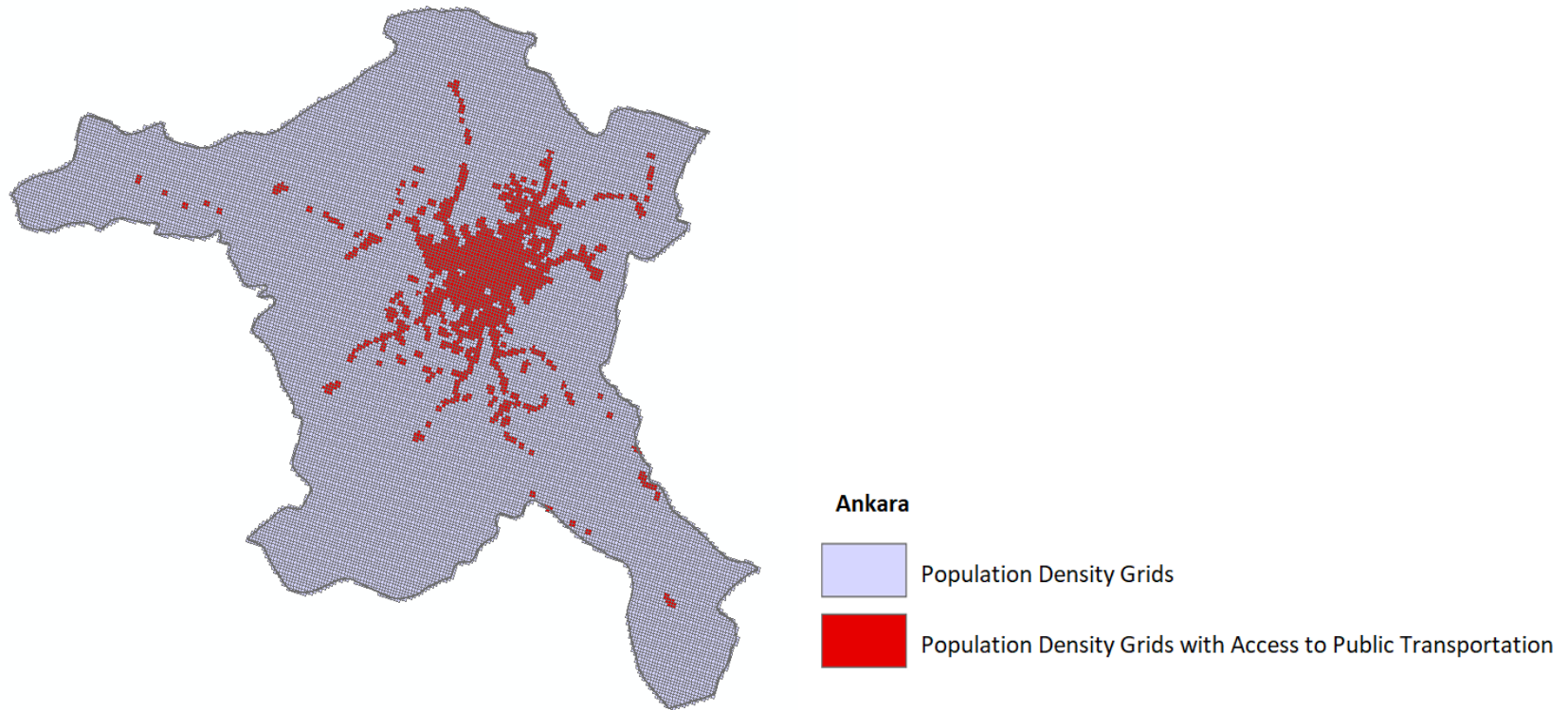
Methodology

2. Determination of population density grids at the distance considered accessible for public
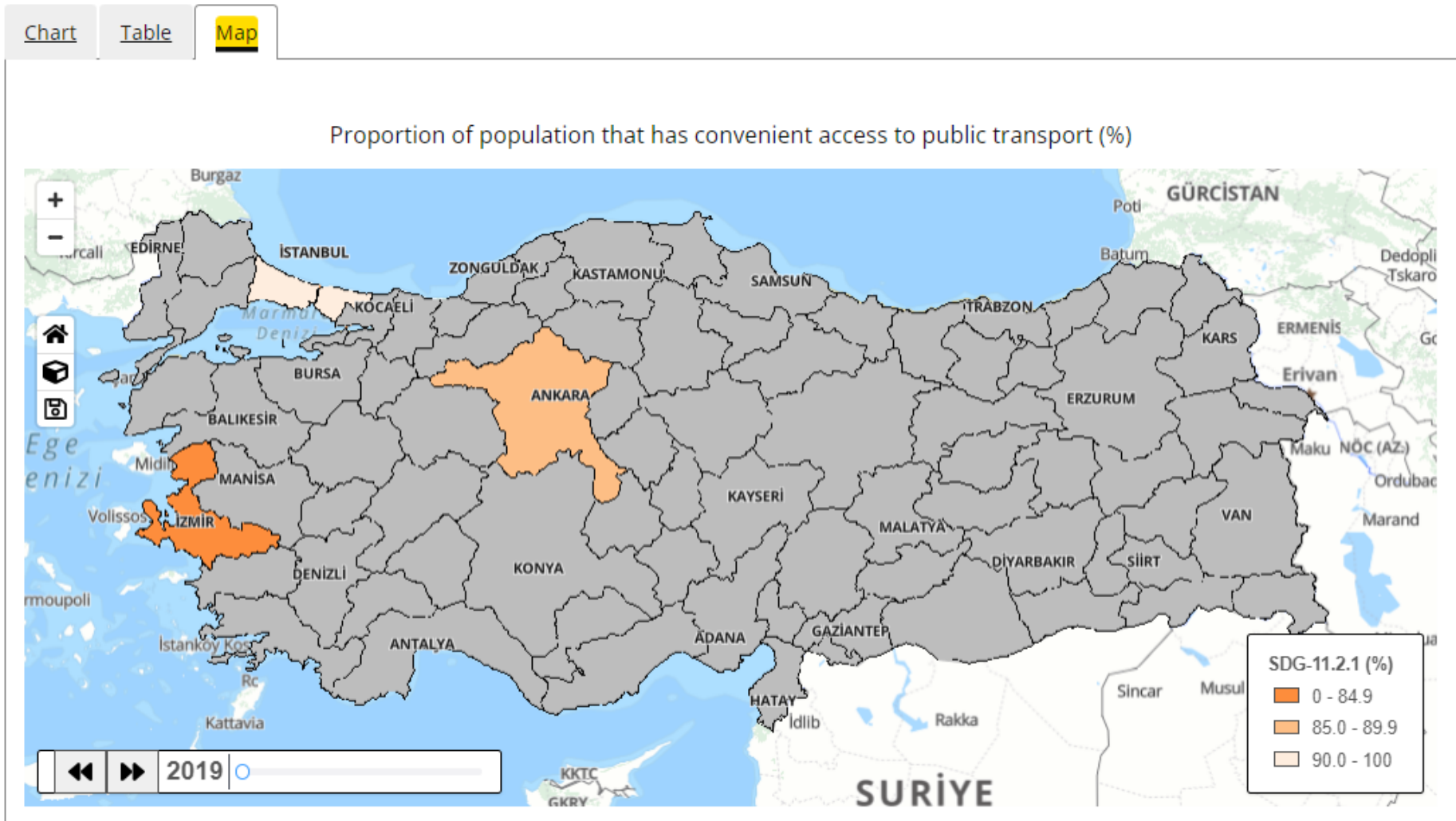
transport
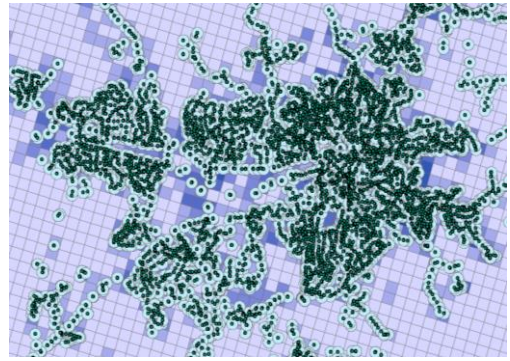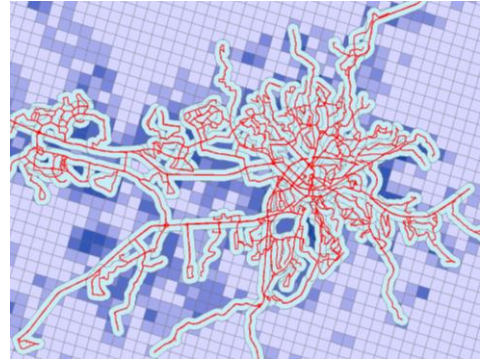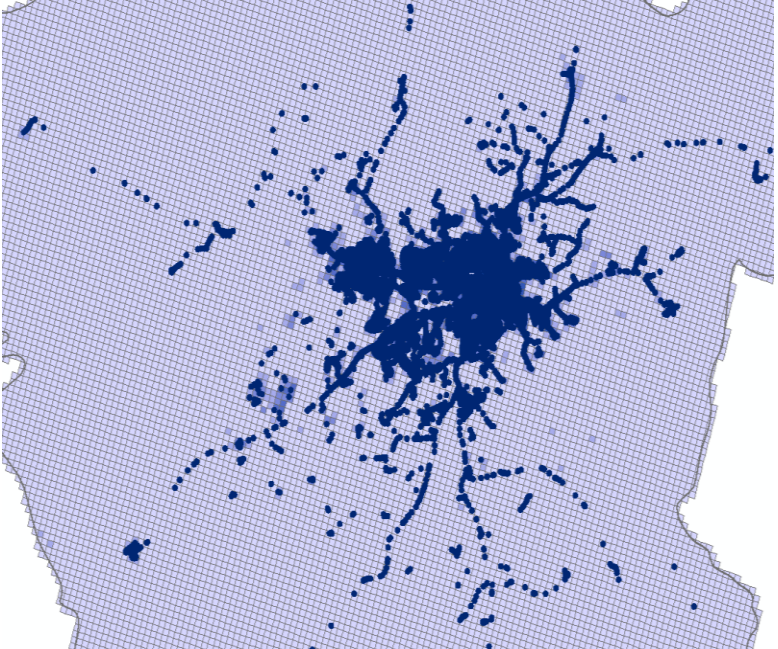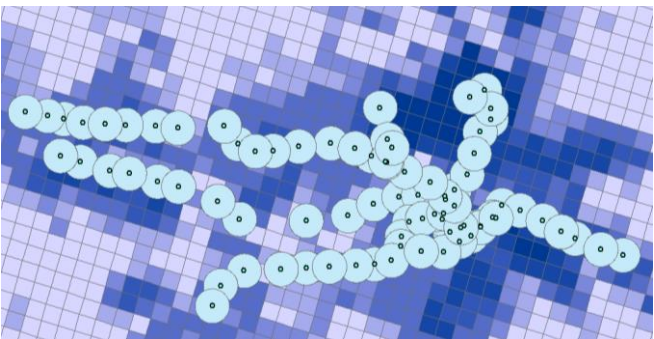
11.2.1. Proportion of population that has convenient access to public transport

Methodology

3. Calculating the ratio of the population with convenient access to public transportation to the total population

Ankara

Population Density Grids

Population Density Grids with Access to Public Transportation

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11.2.1. Proportion of population that has convenient access to public transport

Proportion of population that has convenient access to public transport (%)

SDG-11.2.1 (%)
- 0 - 84.9
- 85.0 - 89.9
- 90.0 - 100

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11.3.1. Ratio of land consumption rate to population growth rate

$$\text{SDG 11.3.1 indicator} = \frac{\text{Land consumption rate}}{\text{Population growth rate}}$$

$$\textbf{Land Consumption Rate i. e LCR} = \frac{Vpresent - Vpast}{Vpast} * \frac{1}{(t)}$$

Where: $V_{present}$ is total built up area in current year

V_{past} is total built up area in past year

t is the number of years between $V_{present}$ and V_{past} (or length in years of the period considered)

$$\textbf{Population Growth rate i.e. PGR} = \frac{LN(Pop_{t+n}/Pop_t)}{(y)}$$

Where

LN is the natural logarithm value

Pop_t is the total population within the urban area/city in the past/initial year

Pop_{t+n} is the total population within the urban area/city in the current/final year

y is the number of years between the two measurement periods

Data Sources:

1. COPERNICUS Land Classification Data (2015 and 2019)

2. Provincial borders (Map General Directorate, 2019)

3. Population Density Grids (2015 and 2019)

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11.3.1. Ratio of land consumption rate to population growth rate

Methodology

1. Determining the built up areas of provinces from COPERNICUS Land Cover data by selecting the building class with the class number 50
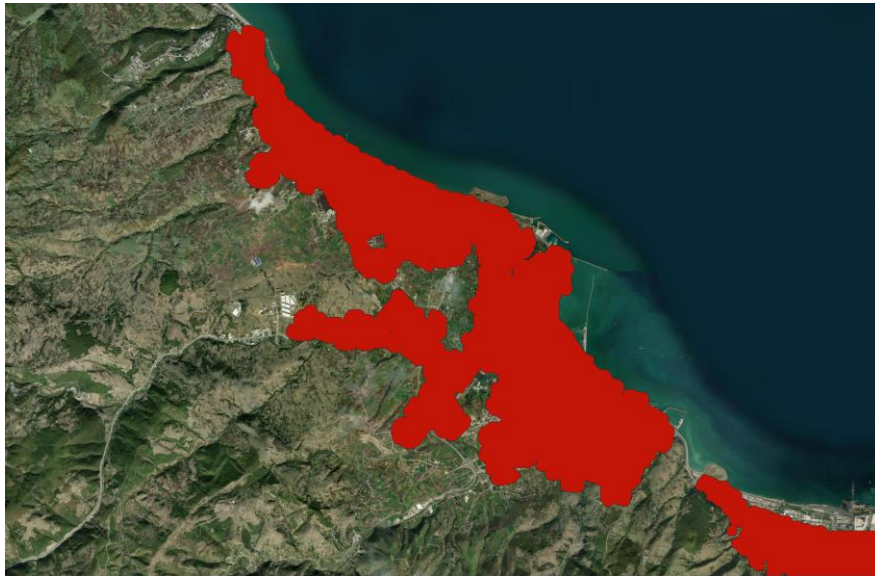

2015

2019
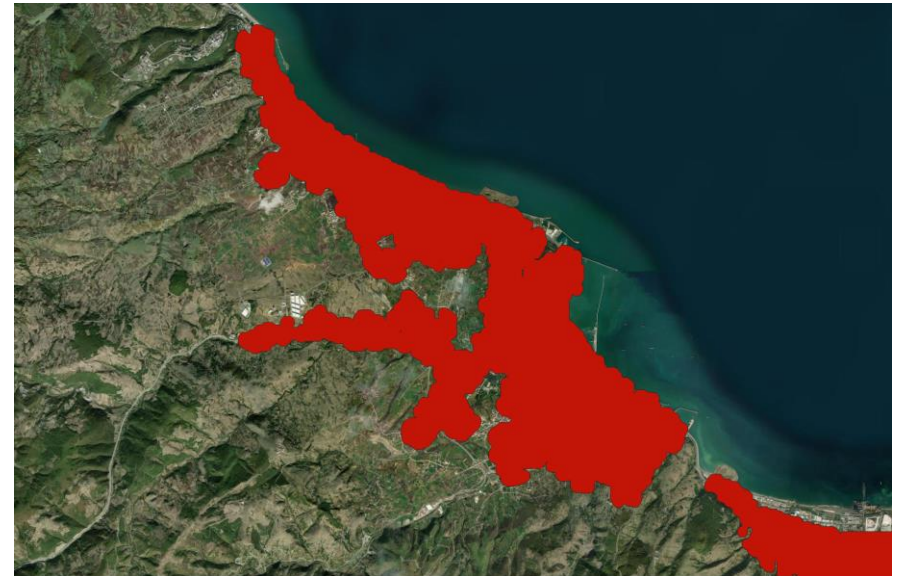
COPERNICUS- Built up areas of Samsun province

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11.3.1. Ratio of land consumption rate to population growth rate

Methodology

2. Processing the raster data obtained from COPERNICUS

3. Obtaining the urban extent data by using the method steps prepared by UN

2015

2019

Urban area of Samsun province

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11.3.1. Ratio of land consumption rate to population growth rate

Methodology

4. Overlapping the obtained urban area data and population density grids

5. Inclusion of the population data into urban extent by using spatial joint method

6. Calculation of the ratio of the land consumption rate to the population growth rate

2015

2019

Urban area of İstanbul

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11.7.1. Average share of the built-up area of cities that is open space for public use for all

$$\text{Average share of the built-up area of cities that is open space for public use for all (\%)} = \frac{\text{Land that is dedicated by cities for open public spaces} + \text{Land allocated to streets}}{\text{Total city area}} \times 100$$

Open public spaces

- Parks and green areas
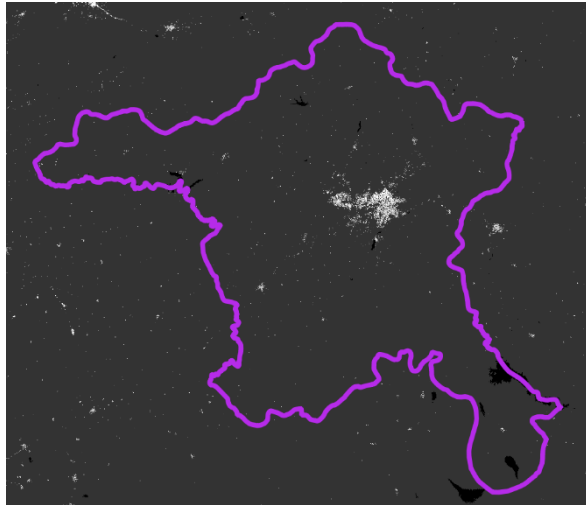- Recreation areas
- Playgrounds

- Avenues
- Squares
- Cemeteries

Data Sources:

1. Global Human Built-up And Settlement Extent (HBASE) Dataset From Landsat, v1 (2010)

2. Global Human Settlement Layer GHS_BUILT_LDSMT_GLOBE_R2018A

3. OpenStreetMap (2019)
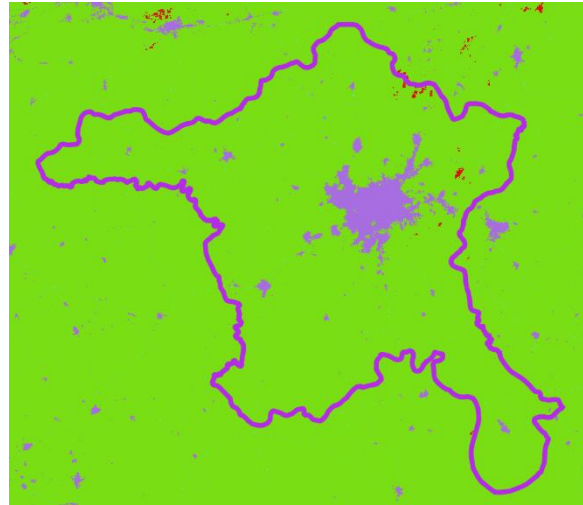
4. Provincial borders (Map General Directorate, 2019)

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11.7.1. Average share of the built-up area of cities that is open space for public use for all

Methodology

1. Determination of the urban area

| HBASE | GHSL | Urban Area |
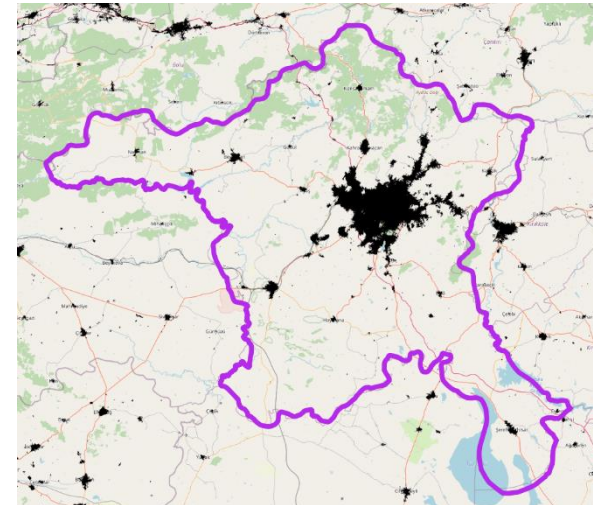
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11.7.1. Average share of the built-up area of cities that is open space for public use for all
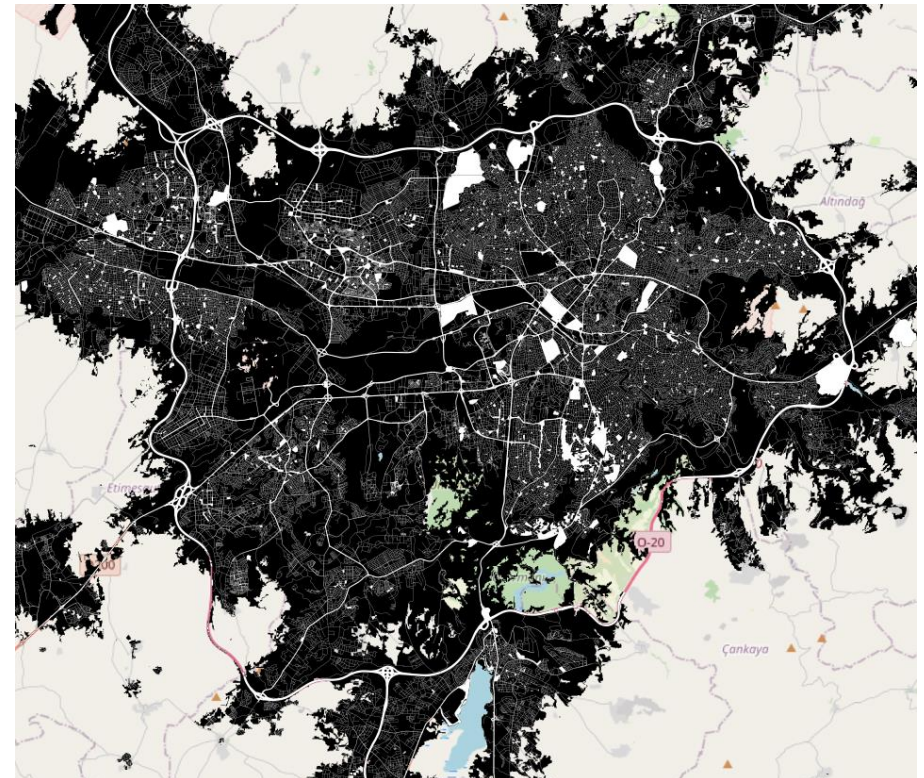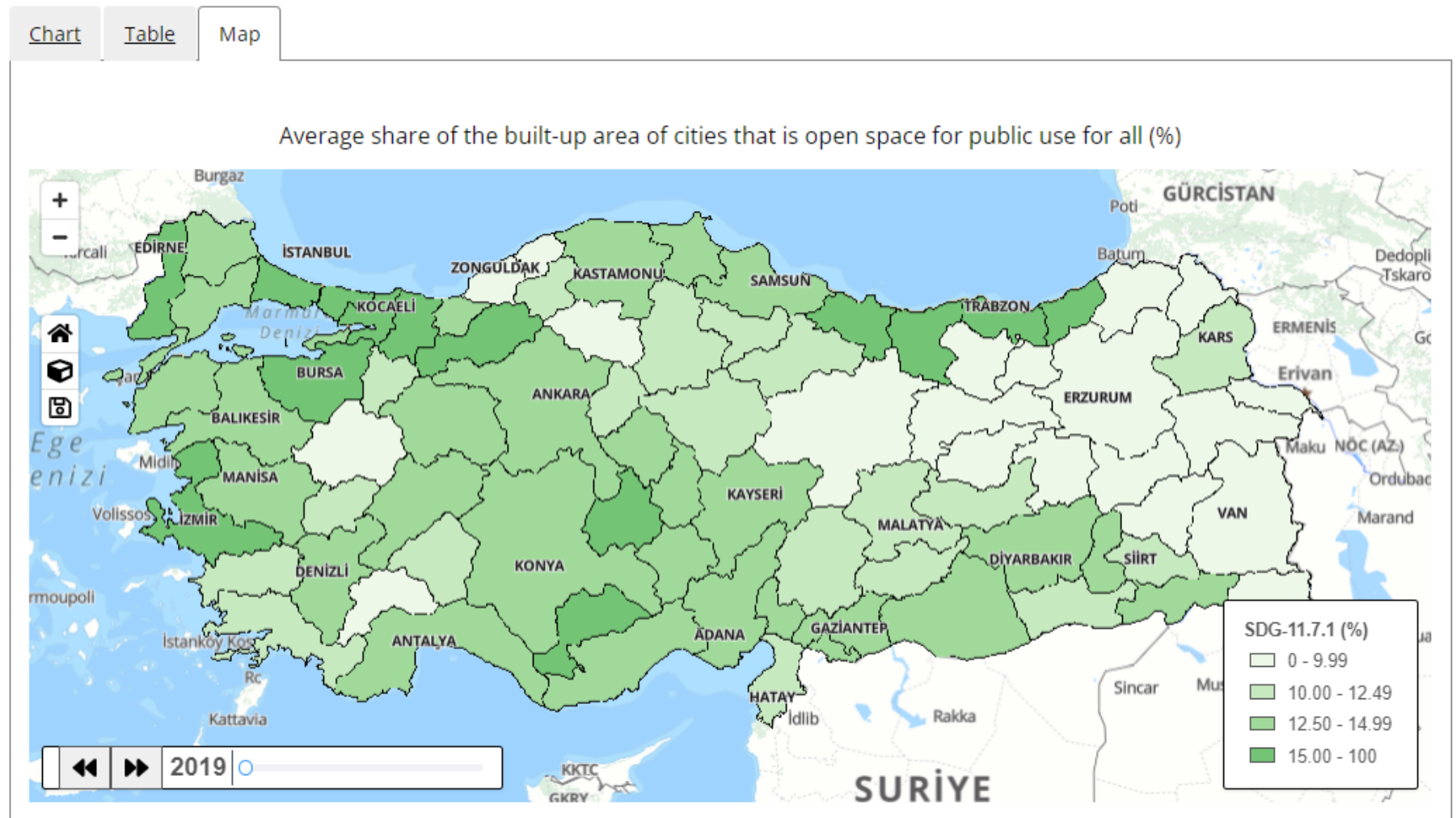
Methodology

2. Identification of the open spaces and streets for public use

3. Calculating the indicator by proportioning the areas

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11.7.1. Average share of the built-up area of cities that is open space for public use for all

Chart | Table | Map

Average share of the built-up area of cities that is open space for public use for all (%)

SDG-11.7.1 (%)
- 0 - 9.99
- 10.00 - 12.49
- 12.50 - 14.99
- 15.00 - 100

2019

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Thank you...

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