



# MUNICIPAL LIVEABILITY INDEX METHODOLOGY

### **METHODOLOGY**

**ISET Policy Institute has developed a detailed and salient "liveability" index for the municipalities of Georgia, with baseline year 2023**. The objective of the Index is to provide a credible, transparent, data-driven, and reliable tool for measuring local liveability progress across the municipalities and allow for benchmarking of the progress across the country.

The municipality liveability index developed by ISET Policy Institute measures liveability level across municipalities and comprehensive and multidimensional index covering four main domains: (1) Economy, Connectivity, Infrastructure, Services, (3) Demographics and Social Access, and (4) Local Governance and where Gender Equality, Local Governance incorporates the Local Self-Government Index as a key indicator.

The first publication of the ISET Municipal **Liveability Index** is in March 2025 covering 2023 as a baseline year and first year in the future time-series. The ISET Municipal Liveability Index combines four core domains: (1) Economy, (2) Connectivity, Services, infrastructure and Demography and Social Access, (4) Local Democracy and Gender Equality. Each domain is comprised of sub-domains (11 sub-domains in total), which include indicators (50 indicators in total) from national sources.

The methodology of the Municipal Liveability Index consists of the following phases:

# SELECTION, ACQUISITION AND PROCESSING OF INDICATORS

The index encompasses a variety of datasets, including (1) secondary data at the municipal level provided by different public institutions (such as Geostat, Ministry of Finance, The National Agency of Public Registry, Public Service Hall, etc.), (2) municipal data obtained from local authorities, (3) secondary data at the municipal level obtained from private sector (such as main private Banks, petrol providers, and electronics stores) and other sources (such as Google Map, IDFI). The data was subjected to comprehensive cleaning, and gaps or missing values were addressed through statistical imputation methods.

### CONSTRUCTION OF THE MUNICIPAL LIVEABILITY INDEX

Construction of the Municipal Liveability Index entails the following steps: (1) normalizing the indicators to a uniform scale unit; (2) indicators are aggregated at sub-domain level using weighted arithmetic mean, with the weights calculated based on the Principal Component Analysis (PCA); (3) sub-domains are aggregated at domain level using the arithmetic mean and weighted equally; (4) the index follows a weighting system where each domain contributes 25% to the overall score, ensuring a balanced representation of economic, social, infrastructural, and governance factors. The Municipal Liveability Index is rated on a scale from 0 to 100, where values closer to 100 are associated with higher liveability, while values closer to 0 indicate lower liveability level.

### Core Domain 1: Economy (weight: 25% of total)

CUR DOMAIN	INDICATOR	COLIDOR
SUB-DOMAIN	INDICATOR	SOURCE
Economic Activity	Value Added created by Cities and Municipalities (million GEL per 1000 person)	National Statistics Office of Georgia (Geostat)
	Investments in fixed assets by Municipalities (million GEL per 1000 person)	National Statistics Office of Georgia (Geostat)
	Employed persons by Cities and Municipalities per 1000 persons	National Statistics Office of Georgia (Geostat)
	Average monthly salary of employed persons by Municipalities (GEL)	National Statistics Office of Georgia (Geostat)
	Share of population in urban settlements %	National Statistics Office of Georgia (Geostat)
	Permissions granted for construction per 1000 population	National Statistics Office of Georgia (Geostat)
	Completed objects per 1000 population	National Statistics Office of Georgia (Geostat)
	Number of ports	Desk Research
	Budget expenditures (thousand GEL per 1000 population)	National Statistics Office of Georgia (Geostat); Ministry of Finance of Georgia
	Number of hotels and hotel-type establishments per 1000 population	National Statistics Office of Georgia (Geostat)
	Number of rooms in hotels and hotel-type establishments per 1000 population	National Statistics Office of Georgia (Geostat)
	Number of guests in hotels and hotel-type establishments per 1000 population	National Statistics Office of Georgia (Geostat)
	Number of employees in hotels and hotel-type establishments per 1000 population	National Statistics Office of Georgia (Geostat)
Social Vulnerability	Share of socially vulnerable persons per 1000 population	National Statistics Office of Georgia (Geostat)
	Old age dependency ratio (Share of population over 65 years old over the labor force)	National Statistics Office of Georgia (Geostat)

Core Domain 2: Connectivity, infrastructure and Services (weight: 25% of total)

SUB-DOMAIN	INDICATOR	SOURCE
Connectivity	Number of municipal transports per 1000 population	Municipalities, National Statistics Office of Georgia (Geostat)
	Distance to the nearest Airport (km)	Google Maps
	Number of railway stations per 1000 population	Georgian Railway
Services	Number of markets and fairs per 1000 population	National Statistics Office of Georgia (Geostat)
	Number of Justice Houses	Public Service Hall
	Number of bank branches (TBC, BOG, Liberty) per 1000 population	TBC Bank, Bank of Georgia, Liberty Bank
	Number of gas stations (Wissol, Gulf, Romepetrol, Lukoil, Socar) per 1000 population	Wissol, Gulf, Romepetrol, Lukoil, Socar
	Number of electronics stores (Elit Electronics, Megatechnica, Alta) per 1000 population	Elit Electronics, Megatechnica, Alta
	Number of trash cans per 1000 population	Municipalities
	Number of garbage trucks per trash can	Municipalities
Infrastructure	Access to gasification %	National Statistics Office of Georgia (Geostat)
	Access to clean water (water supply system in the apartment) %	National Statistics Office of Georgia (Geostat)

### Core Domain 3: Demography and Social Access (weight: 25% of total)

SUB-DOMAIN	INDICATOR	SOURCE
	Share of youth (15-24) over population	National Statistics Office of Georgia (Geostat)
Demography	Birth rate (number of births per 1000 population)	National Statistics Office of Georgia (Geostat)
	Share of population over 65 years old over population	National Statistics Office of Georgia (Geostat)
Healthcare	Number of hospital beds per 1000 population	National Statistics Office of Georgia (Geostat)
	Hospitals and medical centers per 1000 population	National Statistics Office of Georgia (Geostat)
	Number of healthcare personnel (doctors, nursing staff) per 1000 population	National Statistics Office of Georgia (Geostat)
	Number of doctor visits per 1000 population	National Statistics Office of Georgia (Geostat)
	Mortality rate of children under 5 years of age	National Statistics Office of Georgia (Geostat)
Education	Average number of children in public preschool and education institutions per teacher	National Statistics Office of Georgia (Geostat)

	Number of schools per 1000 population	National Statistics Office of Georgia (Geostat)
	Number of universities	National Assessment and Examinations Center (NAEC), National Statistics Office of Georgia (Geostat)
	Number of vocational education institutions	National Statistics Office of Georgia (Geostat)
	Area of parks as a share of the total area of the municipality	Municipalities, National Statistics Office of Georgia (Geostat)
Sports, Recreation and Culture	Sports facilities, infrastructure (fields, stadiums, swimming pools, etc.) per 1000 population	Municipalities, National Statistics Office of Georgia (Geostat)
	Number of theatre and museums	National Statistics Office of Georgia (Geostat)

## Core Domain 4: Local Democracy and Gender Equality (weight: 25% of total)

SUB-DOMAIN	INDICATOR	SOURCE
	Activity in national elections %	Election Administration of Georgia
	Number of political parties represented in the Local Council	Municipalities
Local Democracy	LSG Index	Institute for Development of Freedom of Information (IDFI)
	Election HHI Index 2024	Authors calculations based on Election Administration of Georgia Data
	Local Media	Communications Commission
	Representation of women in local self- government	Municipalities
Gender Equality	Share of businesses registered to women %	National Statistics Office of Georgia (Geostat)
	Share of real estate registered to women %	The National Agency of Public Registry (NAPR)

### LIVEABILITY MEASURED GLOBALLY

Liveability and development indices have become essential tools globally and nationally for evaluating and comparing the quality of life, municipal performance, and development outcomes across regions. At the global level, indices like the **Mercer Quality of Living Ranking** and the **Global Liveability Index** by the Economist Intelligence Unit (EIU) assess cities worldwide based on factors such as political stability, healthcare, education, infrastructure, and the cultural environment. The **Regional Multidimensional Poverty Index** of Sweden<sup>1</sup> offers a comprehensive framework for evaluating poverty through multiple dimensions, including health, education, employment, and access to essential resources.

Nationally, countries have adopted customized indices to address their specific development contexts. For instance, **North Macedonia's Municipal Development Index** assesses 80 municipalities using dimensions like (1) institutions, infrastructure and economy, (2) healthcare, education and social security, (3) culture, sport, safety and environment. Ukraine's **Rural Development Index** covers 24 regions, focusing on economic, social, infrastructural, demographic, employment factors. **India's Municipal Performance Index** evaluates 111 cities based on services, finances, planning, technology, and governance factors. In North America, the **Best States Ranking** in the U.S. and **Best Places to Live** in Canada utilize indicators like healthcare, economy, affordability, and environment quality. These indices play a vital role in guiding public policy, informing residents, and supporting evidence-based decision-making. They also aid in the effective allocation of resources and the development of strategic plans aimed at fostering sustainable and inclusive growth.

# LIVEABILITY INDEXES

INDEX/RANKING	LEVEL/COVERAGE	KEY FACTORS CONSIDERED
Municipal Development Index for	National, 80	Institutions, infrastructure, economy, healthcare,
North Macedonia (UNDP)	municipalities	education
		and social security, culture, sport, safety, environment
Rural Development Index for	National, 24 regions	Economic, social, infrastructural, demographic,
Territorial Units of Ukraine		employment
Municipal Performance Index in	National, 111 cities	Services, finances, planning, technology, governance
<u>India</u>		
Mercer Quality of Living Ranking	Global, 241 cities	Political stability, crime rates, healthcare quality,
	worldwide	education, infrastructure
Global Liveability Index (EIU)	Global, 173 cities	Stability, healthcare, culture and environment, education,
	worldwide	infrastructure
Best States ranking (U.S. News &	National, States	Healthcare, education, economy, infrastructure,
World Report, USA)		opportunity, fiscal stability, crime rate, natural
		environment
Best Places to Live (MoneySense,	National, 417 cities	Affordability, healthcare, economy, weather, crime rate
<u>Canada)</u>		
Regional Multidimensional Poverty	Global	Income poverty, employment, access to resources, food
Index (Sweden)		security, health, education, social protection
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<sup>&</sup>lt;sup>1</sup> **Sweden's Regional Multidimensional Poverty Index** served as an initial inspiration for the ISET Policy Institute in developing the Municipal Liveability Index for Georgia.