IPS BRASIL
ÍNDICE DE PROGRESSO SOCIAL

2025

QUALITY OF LIFE IN BRAZIL'S 5.570 MUNICIPALITIES

Imazon · AMAZÔNIA 2030 · Fundación Avina · ANATTÁ PESQUISA E DESENVOLVIMENTO · CENTRO DE EMPREENDEDORISMO DA AMAZÔNIA · SOCIAL PROGRESS IMPERATIVE

IPS BRASIL
ÍNDICE DE PROGRESSO SOCIAL

2025 BRAZIL SOCIAL PROGRESS INDEX

QUALITY OF LIFE IN BRAZIL'S 5.570 MUNICIPALITIES

Imazon · AMAZÔNIA 2030 · Fundación Avina · ANATTÁ PESQUISA E DESENVOLVIMENTO · CENTRO DE EMPREENDEDORISMO DA AMAZÔNIA · SOCIAL PROGRESS IMPERATIVE

2025 Brazil Social Progress Index

Authors: Melissa Wilm, Daniel Santos, Beto Veríssimo, Marcelo Mosaner, Ricardo Chaves Lima, Paulo Seifer, Sérgio Marangoni and Luana Coelho.

Leaders: Beto Veríssimo and Melissa Wilm.

Associate coordinators: Sérgio Marangoni, Marcelo Mosaner and Luana Coelho.

Technical Coordination: Daniel Santos, Ricardo Chaves Lima and Paulo Seifer.

Collaborators: Caio Coutinho, Caíque Silva, Gabriel Gonçalves, Ricardo Veríssimo, Ritaumaria Pereira, Stephanie Gadelha and Kim Campos.

Communication: Alexandre Mansur and Gustavo Nascimento, in collaboration with Ana Clara Caldas and Fernanda Costa.

Acknowledgments: Amazon Entrepreneurship Center - CEA (Raphael Medeiros, Manuele Lima and Agatha Vilhena), National Council of Justice - CNJ (Gabriel da Silveira Matos, Ana Aguiar and Gabriela Soares), Eneva (Flávia Heller, Rômulo Florentino and Elizabeth Teles), Independent Experts (Roberto Smeraldi, Adnan Demarchki and Diana Paes Cazetta), Itaú Foundation (Ana Inoue, Carla Chiamareli and Raquel Nonato), Roberto Marinho Foundation (João Alegria, Marcelo Bentes and Rosalina Soares), Hydro (Eduardo Figueiredo, Milene Maués and Eugênio Pantoja), Amazon Institute of People and the Environment - Imazon (Verônica Oki), Floresta Viva Institute (Rui Rocha), Igarapé Institute (Melina Risso, Robert Muggah and Ilona Szabó), Itaúsa Institute (Marcelo Furtado), Institute for Climate and Society - iCS (Maria Netto), MapBiomas Brazil (Tasso Azevedo, Julio Pedrassoli, Mayumi Hirye and Júlia Cansado), Brazil Federal Prosecution Office (MPF) (Ubiratan Cazetta), Not Another Boring Company (Arthur Leardini, Felipe Paradas and Alanna Berdine), O Mundo Que Queremos (Cássia Christie, Luna Galera and Bruna de Alencar), Health and Happiness Project – PSA (Caetano Scanavino, Luana Arantes, Fernanda Folster de Paula, Cynthia Oyakawa and Jussara Batista), Social Progress Imperative (Michael Green, Franklin Murillo, Luke Greeves, Jaime Garcia, Valeria Horton and Leilani Tapia), University of São Paulo - USP (Ricardo Abramovay) and Vale (Flávia Constant, Lívia Zandonadi and Letícia Verona).

Text editing: Marco Fontanella.

Cover: Cássia Christe and Geiber Dias.

Graphic Design and Printing: Luciano Silva.

IPS BRASIL
ÍNDICE DE PROGRESSO SOCIAL

Realization:

Imazon · Amazônia 2030 · Fundación Avina · Anattá Pesquisa e Desenvolvimento · Centro de Empreendedorismo da Amazônia · Social Progress Imperative

Partners:

MapBiomas · O Mundo que Queremos · Alegria · Instituto Floresta Viva · geoplus · Instituto Igarapé · pm21 · Fundação Roberto Marinho

Sponsors:

Fundação Itaú · Vale · skoll · Hydro · iCS · Instituto Itaúsa · Climate and Land Use Alliance · eneva

SUMMARY

INTRODUCTION

The Social Progress Index (SPI) is a tool that measures the social and environmental performance of territories at all geographical levels (countries, states, municipalities and even communities). The SPI is an index developed by the international non-profit Social Progress Imperative, which has been coordinating the annual publication of the index for 170 countries since 2014. There are also initiatives to develop the index on a sub-national scale in the European Union and in different countries such as Mexico, India, the United States of America and the United Kingdom. These initiatives were inspired by the Amazon SPI, pioneered by the Amazon Institute of People and the Environment (Imazon) in 2014. In 2024, again under the leadership of Imazon, SPI Brazil became the largest initiative ever carried out in the world to generate the index on a sub-national scale.

SPI Brazil 2025 is the second report released (the first was in 2024) covering all 5,570 Brazilian municipalities[1], its 26 states and the Federal District. The SPI Brazil is updated annually so that it is possible to compare the socio-environmental performance of municipalities over time. Measuring the social situation of municipalities on an annual basis is essential to capture changes and trends and contribute

[1] In addition to the SPI calculated for all 5,568 municipalities, our analysis also includes the federal capital Brasília (DF) and the district of Fernando de Noronha (PE), in accordance with IBGE's (2023) municipal classification.

to improving public policies and local public management.

The SPI has emerged to complement economic development measures, recognizing that economic growth alone, without social progress, often leads to environmental degradation, increased inequality and social conflicts. The SPI directly measures outcomes and has been used for strategic planning, evaluating programs and improving public policies. The index also serves as a compass to guide private social investments in municipalities.

The SPI Brazil 2025 is made up of 57 social and environmental indicators from public sources. These indicators have been aggregated into a general index with a score from 0 to 100. In turn, this general index is divided into indexes for three dimensions of social progress (Human Needs, Foundations of Wellbeing and Opportunity), and 12 components within the dimensions (Nutrition & Medical Care, Water & Sanitation, Housing, Safety, Basic Education, Information & Communications, Health, Environmental Quality, Rights & Voice, Freedoms & Choice, Inclusive Society and Advanced Education).

SPI Brazil reflects the diversity of a country of continental dimensions, revealing its socio-environmental situation on a municipal scale. Brazil, the 5th largest country in the world, is organized into a federation made up of 26 states, the Federal District and 5,570 municipalities. According to the Brazilian Institute of Geography and Statistics (IBGE) 2024 Population Estimates (EstimaPop)[2], the Brazilian population totals approximately 212.6 million inhabitants. Municipalities represent Brazil's smallest administrative units, which

> "The SPI directly measures **outcomes** and has been used for strategic planning, evaluating programs and improving public policies."

> "The SPI Brazil 2025 is made up of 57 social and environmental indicators from public sources."

[2] https://sidra.ibge.gov.br/pesquisa/estimapop/tabelas

have political, administrative and financial autonomy. The municipal sphere has important competencies such as basic sanitation, road infrastructure (including paving, signage, and maintenance), creation and conservation of squares and arborization, urban transportation and public lighting. The municipality also shares education, health and environmental services with other federal spheres (states and the Union).

Among the main results of the research, we highlight:

- Brazil achieved an average score (61.96) on a scale ranging from 0 to 100.
- Among the dimensions of the SPI Brazil 2025, Human Needs achieved the best overall average score (74.79). Foundations of Wellbeing scored 65.02, while Opportunity had the lowest result (46.07).
- Among the 12 components of the SPI Brazil 2025, Housing achieved the highest average score (87.74), while more than half of the components scored below 60. The lowest results were found in the Opportunity dimension: Rights & Voice (32.41), Advanced Education (47.39) and Inclusive Society (47.21).
- The Brazilian Amazon has the worst score for the Environmental Quality component. This is mainly due to accumulated deforestation and a concentration of associated Greenhouse Gas (GHG) emissions.
- The Health component shows weaknesses, especially in Brazil's wealthier regions such as the South and Southeast, expressed by high rates of obesity, suicide and noncommunicable chronic diseases mortality rate (such as circulatory and respiratory system diseases, neoplasms and diabetes).

- The Inclusive Society component reveals a country lacking gender and black parity in municipal councils and high rates of violence against minorities, while highlighting part of the Northeast region with the best results.
- Brazilian municipalities have been classified into nine groups (Tiers), which can be seen on the national map with the colors blue, yellow and red:
  - Group 1 (dark blue on the map), with the best results: 358 municipalities.
  - Group 2 (medium blue): 722 municipalities.
  - Group 3 (light blue): 839 municipalities.
  - Group 4 (light yellow): 883 municipalities.
  - Group 5 (dark yellow): 932 municipalities.
  - Group 6 (light orange): 801 municipalities.
  - Group 7 (dark orange): 612 municipalities.
  - Group 8 (light red): 328 municipalities.
  - Group 9 (dark red), with the lowest results: 95 municipalities.
- Group 1 comprised most of the capitals and a good number of the most populous municipalities (>200,000 inhabitants). On the other hand, municipalities in the lowest performing groups generally had a low population density and were far from large urban centers.

METHODOLOGY

Social Progress is defined by the Social Progress Imperative as “the capacity of a society to satisfy human needs, establish structures that guarantee quality of life for citizens and provide opportunities for all individuals to reach their full potential”. Based on this concept, the SPI is formulated based on four main principles:

Table 1. Principles of SPI.

SPI PRINCIPLES
• **Exclusively social and environmental indicators:** the objective of the SPI is to measure social and environmental progress directly, without including economic indicators.
• **Outcomes not inputs:** the SPI should measure the results that are important for people’s lives (outcomes), not the investments or efforts made (inputs).
• **Actionable:** SPI is used as a practical tool to help public officials, business leaders and civil society in the planning, implementation and evaluation of public policies and programs that accelerate social progress. To achieve that goal, we measure outcomes in a granular way that focuses on specific areas that can be implemented directly.
• **Holistic and relevant:** the aim of SPI is to measure socio and environmental progress in a holistic and broad way, encompassing all geographical regions such as countries, states, municipalities and even districts and communities within municipalities.

The structure of the SPI has three dimensions (Human Needs, Foundations of Wellbeing and Opportunity) and 12 components (Table 2). Each component answers a guiding question and is formed by three to six indicators. The Human Needs dimension shows whether the population’s essential needs are met. The Foundations of

Wellbeing dimension indicates whether there are structures that guarantee that individuals and communities can maintain or improve their wellbeing, and the Opportunity dimension indicates whether there are opportunities for all individuals to reach their full potential.

Table 2. Dimensions, components and guiding questions of SPI.

HUMAN NEEDS	FOUNDATIONS OF WELLBEING	OPPORTUNITY
Nutrition & Medical Care Do people have enough food to eat and are they receiving basic medical care?	**Basic Education** Do people have access to an educational foundation?	**Rights & Voice** Are people's rights as individuals protected?
Water & Sanitation Can people drink water and keep themselves clean without getting sick?	**Information & Communications** Can people freely access ideas and information from anywhere in the world?	**Freedom & Choice** Are people free to make their own life choices?
Housing Do people have adequate housing with basic utilities?	**Health** Do people live long and healthy lives?	**Inclusive society** Is no one excluded from the opportunity to be a contributing member of society?
Safety Do people feel safe?	**Environmental Quality** Does the environment support societal wellbeing?	**Advanced Education** Do people have access to the world's most advanced knowledge?

The choice of indicators for each component follows strict criteria following the SPI global methodology. The criteria for choosing indicators are: 1) being social or environmental; 2) measuring results (outcomes); 3) having a reliable and public source (secondary data); 4) being recent data (released less than 5 years ago); and 5) being available for all or almost all territories (95% - 100%). Among these criteria, the most difficult to achieve is the second, i.e. using only result indicators. Although input indicators were not used, some indicators of service access can be seen as a proxy for achieved outcomes. In addition, each indicator goes through a rigorous process of statistical analysis, from validating the quality and reliability of the data[3], to normalization (so the data is comparable).

The index ranges from 0 (lowest) to 100 (best) and corresponds to the arithmetic mean of the SPI results for the three dimensions. The score for each dimension, in turn, is the

[3] Kaiser-Meyer-Olkin (KMO) measure and Cronbach's Alpha were employed to validate the reliability of the Principal Component Analysis, following the SPI methodology (Harmacek et al., 2025).

arithmetic mean of the scores for each component. Finally, the component results are generated from the weights obtained between the indicators obtained through the Principal Component Analysis (PCA):

$$Component = \frac{(x - worst\ case)}{(best\ case - worst\ case)}$$

Where "x" is the gross value of the component for each municipality, while the best and worst cases refer to the maximum and minimum values of each indicator, among all the municipalities.

• SPI BRAZIL 2025 INDICATORS

SPI Brazil 2025 was calculated using 57 indicators (Table 3) sourced from official sources and research institutes, such as DataSUS, Sisvan/Ministry of Health, Ministry of Citizenship, National Sanitation Information System (SNIS), National Institute for Educational Studies and Research Anísio Teixeira (Inep), National Institute for Space Research (Inpe), National Council of Justice (CNJ), Brazilian Institute of Geography and Statistics (IBGE), Mapbiomas, Anatel, Unified Registry (CadÚnico), among others. The source and description of each indicator can be found in Annex 1 of this report.

A key advantage of the SPI over other social indices is its flexibility to adopt new indicators as necessary. For example, an indicator can lose its relevance and be replaced by a more appropriate one in the next edition of the SPI. If a new indicator offers historical data, the SPI can be recalculated retroactively, which allows for a comparison over time. In this way, the index remains current to measure social progress. Since the last edition of the SPI Brazil in 2024, five indicators were added in its structure (Ultra-processed food consumption, Response to social security cases, Response to family law cases, IVCAD - Vulnerability of families from the unified registry index, and Homeless families) and one was excluded (Child labor).

Table 3. SPI Brazil 2025 Indicators.

Human Needs	Foundations of Wellbeing	Opportunity
Nutrition & Medical Care **1.** Vaccination coverage (poliomyelitis) **2.** Hospitalizations for primary care sensitive conditions **3.** Ambulatory care sensitive mortality rates **4.** Infant mortality (less than 5 y.o.) **5.** Malnutrition	**Basic Education** **1.** Elementary school abandonment rates **2.** High school abandonment rates **3.** High school dropout rate **4.** High school age-grade gap **5.** IDEB - Index of development of basic education **6.** High school grade retention	**Rights & Voice** **1.** Access to human rights programs **2.** Public policy for minority groups **3.** Lawsuits clearance rate **4.** Response to family law cases **5.** Response to social security cases **6.** Lawsuits overload rate
Water & Sanitation **1.** Improved drinking water sources **2.** Basic sanitation service **3.** Water supply system **4.** Water loss in distribution networks	**Information & Communications** **1.** Mobile data coverage (4G/5G) **2.** Fix broadband subscription rate **3.** Mobile phone subscription rate **4.** Mobile service quality	**Freedom & Choice** **1.** Access to culture, leisure and sport **2.** Teenage pregnancy (<19 years) **3.** IVCAD - Vulnerability of families from the unified registry index **4.** Parks and squares in urban areas
Housing **1.** Solid waste recollection **2.** Adequate household electric lighting **3.** Households with adequate walls **4.** Adequate household flooring	**Health** **1.** Consumption of ultra-processed foods **2.** Life expectancy **3.** Mortality rates (15-50 y.o.) **4.** Noncommunicable chronic diseases mortality rate **5.** Obesity prevalence **6.** Suicide rates	**Inclusive Society** **1.** Homeless families **2.** Gender parity in city councils **3.** Parity of black people in city councils **4.** Violence against indigenous people **5.** Violence against women **6.** Violence against black people
Safety **1.** Youth homicide rate (15-29 y.o.) **2.** Women homicide rate **3.** Homicide rate (general population) **4.** Transportation mortality rates	**Environmental Quality** **1.** Urban green areas **2.** CO_2e *per capita* emissions **3.** Fire hotspots **4.** IVCM - Climate vulnerability index **5.** Deforestation (primary and secondary vegetation)	**Advanced Education** **1.** Employed population with tertiary education **2.** Employed women with tertiary education **3.** ENEM scores (national high school exam)

• HOW TO INTERPRET THE SPI BRAZIL RESULTS

The SPI Brazil results are presented through a municipal scorecard (Figure 1), allowing users to visualize the municipality's score (0-100) and its ranking compared to other municipalities in the country (x/5,570). The scorecard also shows the GDP *per capita* value and its ranking compared to others (x/5.570). This makes it possible to verify whether the result is equivalent, superior or inferior to what is expected within economic parameters.

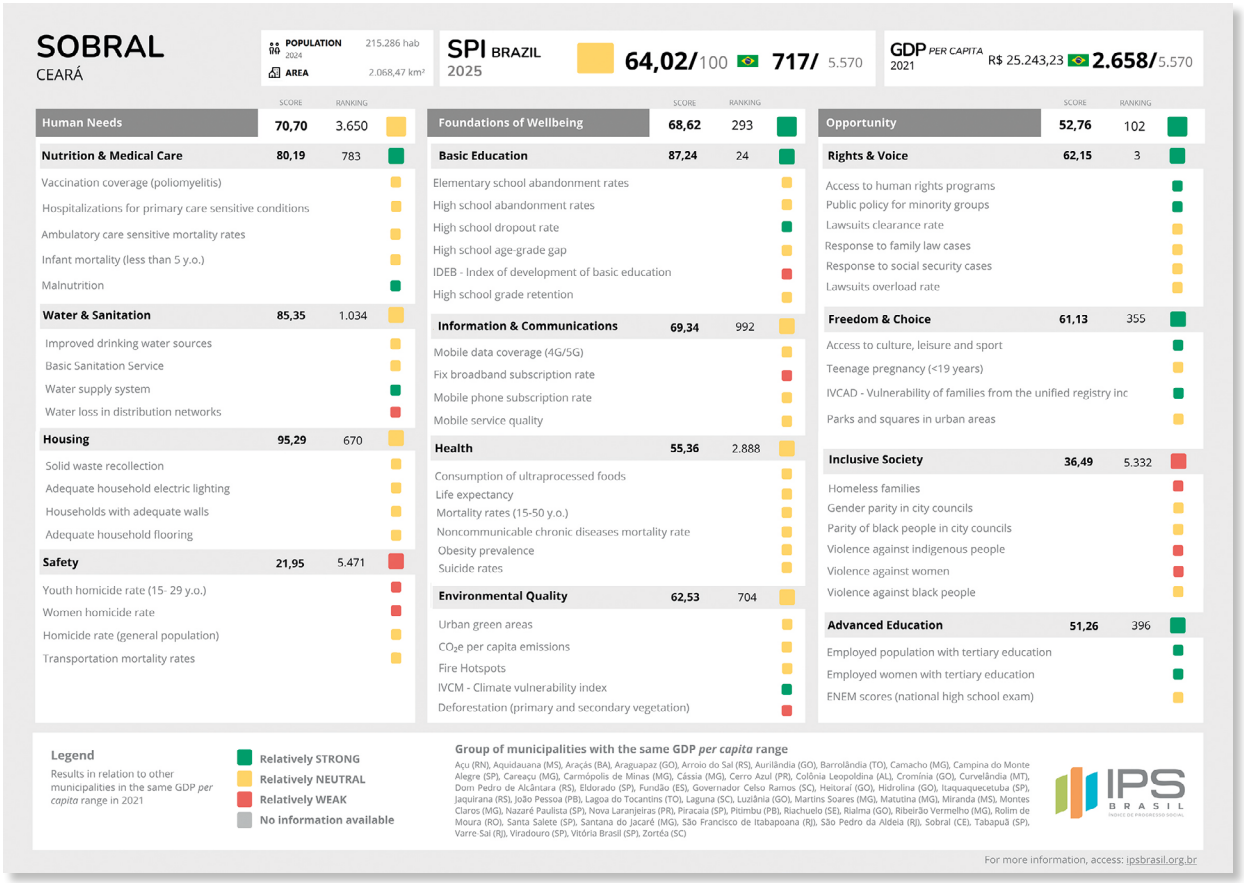
In turn, the colors (green, yellow and red) represents the municipality's performance in comparison with 49 other municipalities throughout Brazil that are in the same GDP *per capita* range[4].

The overall results for dimensions, components and indicators are also given a score (0-100), a ranking (x/5.570) and a green (relatively strong result), yellow (relatively neutral) or red (relatively weak) color when compared to other municipalities in the same GDP *per capita* range. When analyzing the SPI, it is essential to consider the tripod of results: score (from 0 to 100), comparison (x/5,570) and color (green, yellow and red).

"When analyzing the SPI, it is essential to consider the tripod of results: score (from 0 to 100), comparison (x/5,570) and color (green, yellow and red)"

[4] *Per capita* income can also be used for comparison, but this data is not updated annually for all municipalities in Brazil. The GDP *per capita* indicator (calculated from IBGE's Nominal GDP and the IPCA inflation index) from 2021 was used for the current analysis, even though it is an indicator that can be heavily influenced by external factors (such as large projects and investments) and the presence of businesses with locational rigidity such as industrial mining and hydroelectric plants.

Figure 1. The SPI Brazil 2025 Sobral (CE) Scorecard.



• NOTES OF CAUTION AND LIMITATIONS

There are important challenges in generating the SPI Brazil. The first is obtaining data on a municipal scale, considering Brazil's continental nature and the large number of municipalities. The second concerns the process of comparative analysis, i.e. how to compare municipalities with such different realities? One of the tools the SPI uses is the comparative analysis of SPI x GDP *per capita*, which makes it possible to generate a comparative performance system. The third challenge is to obtain indicators that fit the SPI criteria and fully answer the guiding questions for each component, especially for the Opportunity dimension. These are the SPI cautionary and limitations:

- The SPI uses secondary data sources that provide municipal averages, which limits analysis to the municipal level. This means the index cannot capture variations between neighborhoods or between rural and urban areas within the same municipality.

- The data from SPI Brazil does not necessarily reflect the specific social and cultural conditions of indigenous[5] and traditional people, be they quilombolas (Afro-Brazilian), extractive populations or others. This would require a specific SPI with primary data collection.
- Under-reporting of indicators is always a possibility, especially in the Safety and Health components. This reflects a structural problem common to any collection process on a municipal scale.
- In general, the municipalities located in the Brazilian Amazon[6] have a large territorial extension in contrast to the smaller municipalities in the other regions. This contrast creates a disproportionate visual effect, as the maps reflect the size of the territories and not the population density of each municipality.
- Finally, the SPI has a methodology that can be adapted to any geographical region. For example, Brazil scores 68.90 in the Global SPI 2025, while in the SPI Brazil 2025 it scores 61.96. This difference occurs because in calculating the Global SPI, the choice of indicators reflects the international context (using only indicators that are available in the vast majority of countries). In SPI Brazil, on the other hand, the selected indicators are compared only within the country itself.

[5] In the SPI Brazil 2025, Indigenous people are accounted for within the Inclusive Society component through the Violence Against Indigenous People indicator.

[6] The Brazilian Amazon region encompasses all states in Brazil's North region, plus Mato Grosso state from the Central-West region and approximately half of Maranhão state from the Northeast region.

RESULTS

The SPI Brazil 2025 achieved a score of 61.96 for the whole country[7]. Among the dimensions, **Human Needs** achieved a score of 74.79, **Foundations of Wellbeing** achieved 65.02 and **Opportunity** achieved only 46.07.

The 5,570 units of analysis were classified into nine groups according to the results obtained, presented in their respective color scales.

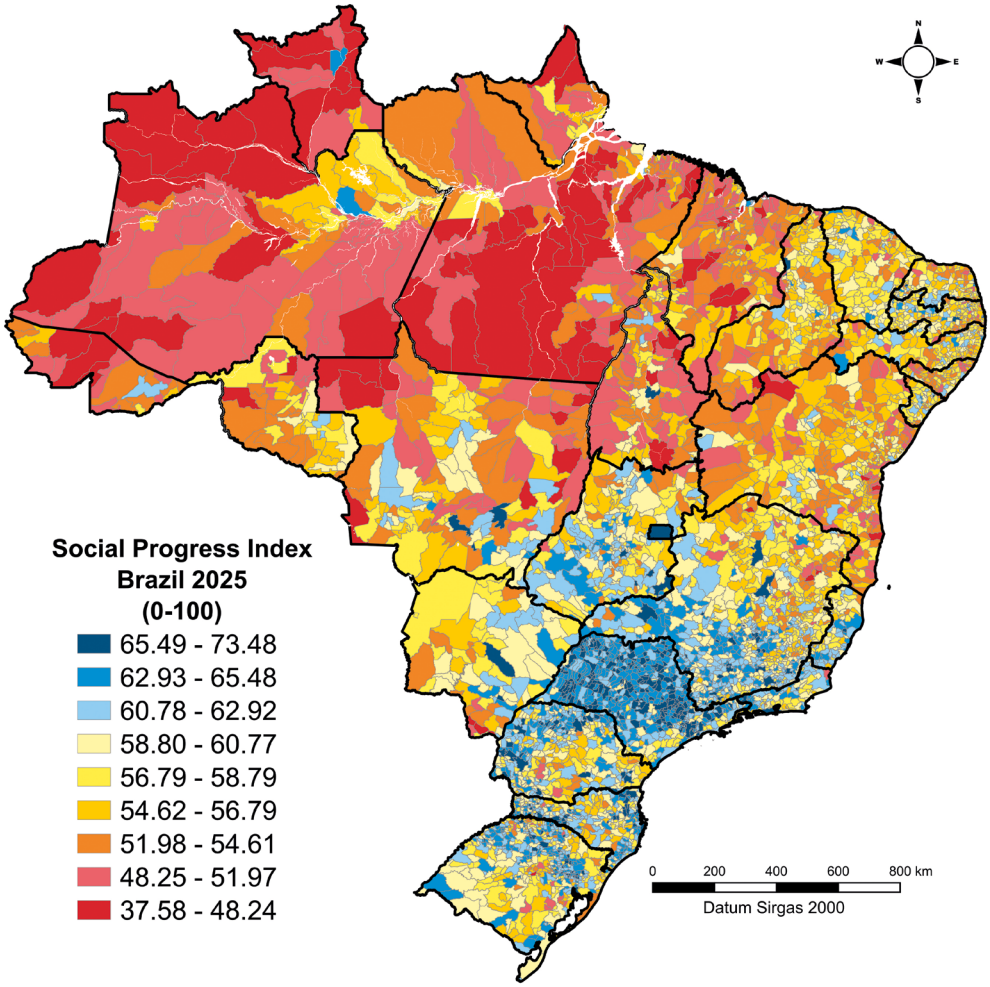


Figure 2. Results of the SPI Brazil 2025.

[7] The overall SPI Brazil 2025 score, including the three dimensions and 12 components for Brazil, was obtained from the weighted average between the SPI scores and IBGE's 2024 population estimates (EstimaPop).

• BRAZIL AT EACH LEVEL OF SOCIAL PROGRESS

Table 4. Main average scores and relevant data for each group of the SPI Brazil 2025.[8]

GROUP		1	2	3	4	5	6	7	8	9	Brazil
SPI BRAZIL		67.56	64.07	61.88	59.81	57.79	55.78	53.42	50.43	46.23	61.96
DIMENSIONS	Human Needs	81.00	77.77	75.63	73.12	69.50	67.16	64.29	59.21	52.72	74.79
	Foundations of Wellbeing	69.82	67.52	65.29	63.16	61.58	59.31	56.15	53.66	48.96	65.02
	Opportunity	51.87	46.91	44.73	43.14	42.28	40.88	39.83	38.41	37.00	46.07
MUNICIPALITIES BY GROUPS	Quantity	358	722	839	883	932	801	612	328	95	5.570
	Area (million km²)	156,898	378,499	558,939	750,151	948,276	1,004,721	1,511,911	1,585,937	1,601,999	8,497,332
	Area (% of country)	1.8%	4.5%	6.6%	8.8%	11.2%	11.8%	17.8%	18.7%	18.9%	100%
ESTIMATED POPULATION 2024 (INHABITANTS)	Number of inhabitants	64,687,158	38,880,738	29,966,484	22,004,381	21,552,152	15,126,101	11,222,589	6,619,886	2,524,261	212,583,750
	% of Brazil's total	30.4%	18.3%	14.1%	10.4%	10.1%	7.1%	5.3%	3.1%	1.2%	100%
TOTAL GDP 2021	R$ trillion	3.86	1.74	1.13	0.84	0.61	0.42	0.24	0.13	0.05	9.01
	% of Brazil's total	42.8%	19.3%	12.5%	9.4%	6.7%	4.6%	2.7%	1.4%	0.5%	100%
GDP *PER CAPITA* (R$/HAB.) 2021		59,627	44,818	37,676	38,317	28,215	27,498	21,657	19,099	18,563	42,393
CO_2e EMISSIONS 2023	Total (million tons)	721.4	190.9	187.4	208.6	247.7	243.4	347.8	313.6	276.9	2.737.9
	per capita (t CO_2e/inhab.)	11.2	4.9	6.3	9.5	11.5	16.1	31.0	47.4	109.7	12.9

Group 1 (dark blue on the map) comprises 358 municipalities with an average SPI Brazil of **67.56**. These municipalities cover 1.8% of Brazil's territory but are home to around 30.4% of the population and account for approximately 42.8% of the country's GDP. Most of Brazil's capitals are in this group. There are also municipalities with a population of less than 10,000 in this group - for example, Gavião Peixoto (SP), which achieved the best score in the SPI Brazil (**73.26**).

[8] Sources:
Area and number of municipalities: Digital Municipal Mesh and Territorial Areas 2023 (IBGE, 2023).
Municipal GDP *per capita*: refers to the Real GDP (at constant prices) calculated from the IBGE Nominal GDP (at current prices) (2023b), the implicit IPCA deflator (BCB, 2024), and IBGE's 2024 Population Estimates.
CO_2e emissions: from the System for Estimating Emissions and Removals of Greenhouse Gases (Seeg, 2024). *Per capita* CO2e emissions were obtained using IBGE's 2024 population estimates.

Group 2 (medium blue on the map) comprises 722 municipalities with an average SPI Brazil of **64.07**. These municipalities occupy almost 4.5% of the national territory, but are home to 18.3% of the Brazilian population and account for 19.3% of the country's GDP. Many municipalities with more than 100,000 inhabitants and some capital cities are in this group - for example, Manaus (AM), Fortaleza (CE) and São Luís (MA).

Group 3 (light blue on the map) comprises 839 municipalities with an average SPI Brazil of **61.88**. These municipalities occupy 6.6% of the country's territory, are home to 14.1% of the Brazilian population and account for 12.5% of the country's GDP. Four capitals are part of this group: Belém (PA), Maceió (AL), Rio Branco (AC) and Salvador (BA).

Group 4 (light yellow on the map) comprises 883 municipalities with an average SPI Brazil of **59.81**. These municipalities occupy 8.8% of the national territory, are home to around 10.4% of the population and account for only 9.4% of the country's GDP.

Group 5 (yellow on the map) comprises 932 municipalities with an average SPI Brazil of **57.79**. These municipalities occupy 11.2% of the national territory, are home to 10.1% of the Brazilian population and account for 6.7% of the country's GDP. It is the group with the largest number of municipalities, including two capitals, Macapá (AP) and Porto Velho (RO).

Group 6 (light orange on the map) comprises 801 municipalities with an average SPI Brazil of **55.78**. These municipalities occupy 11.8% of the national territory, are home to around 7.1% of the Brazilian population and account for just 4.6% of the country's GDP.

Group 7 (dark orange on the map) comprises 612 municipalities with an average SPI Brazil of **53.42**. These municipalities occupy 17.8% of the national territory, are home to just 5.3% of the Brazilian population and account for only 2.7% of the country's GDP.

Group 8 (light red on the map) comprises 328 municipalities with an average SPI Brazil of **50.43**. These municipalities occupy 18.7% of the national territory, are home to only 3.1% of the Brazilian population and account for only 1.4% of the country's GDP.

Finally, **Group 9** (dark red) comprises only 95 municipalities with a Brazil SPI Brazil of **46.23**. These municipalities occupy 18.9% of the national territory, are home to 1.2% of the population and account for just 0.5% of the country's GDP.

The municipalities in groups 1, 2 and 3 (in shades of blue on the map) are those with the best performance. Together, they represent approximately 34% of all Brazilian municipalities, occupy 13% of the national territory (approximately 1.1 million km²), are home to 63% of the Brazilian population (approximately 133 million inhabitants) and account for 74.7% of the country's GDP.

The municipalities in groups 4, 5 and 6 (in shades of yellow on the map) have an intermediate performance in social progress. Together, they represent approximately 47% of all Brazilian municipalities, occupy 32% of the national territory, are home to 28% of the Brazilian population (approximately 59 million inhabitants) and account for 20.7% of the country's GDP.

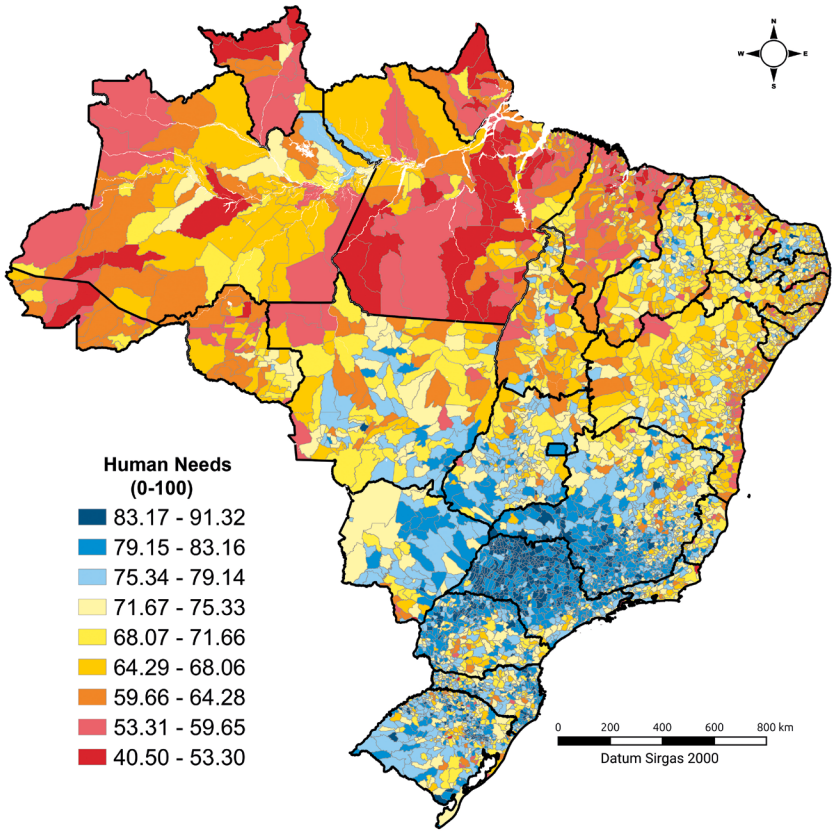
The municipalities in groups 7, 8 and 9 (shades of red on the map) have the lowest SPI Brazil averages. Together, they represent 19% of Brazil's municipalities, occupy 55% of the country's territory (4.7 million km²), are home to only 9% of the Brazilian population (approximately 20 million people) and account for about 4.6% of the country's GDP.

• SPI BRAZIL DIMENSIONS

The Human Needs dimension addresses components that portray what is most fundamental to living well and assesses a population's ability to survive with adequate food and basic medical care, quality water, sanitation conditions, housing and personal safety (Figure 3).

This dimension performed the best in the composition of the SPI Brazil 2025, with a score of **74.79**. The South, Southeast and part of the Central-West concentrated the best SPI scores.

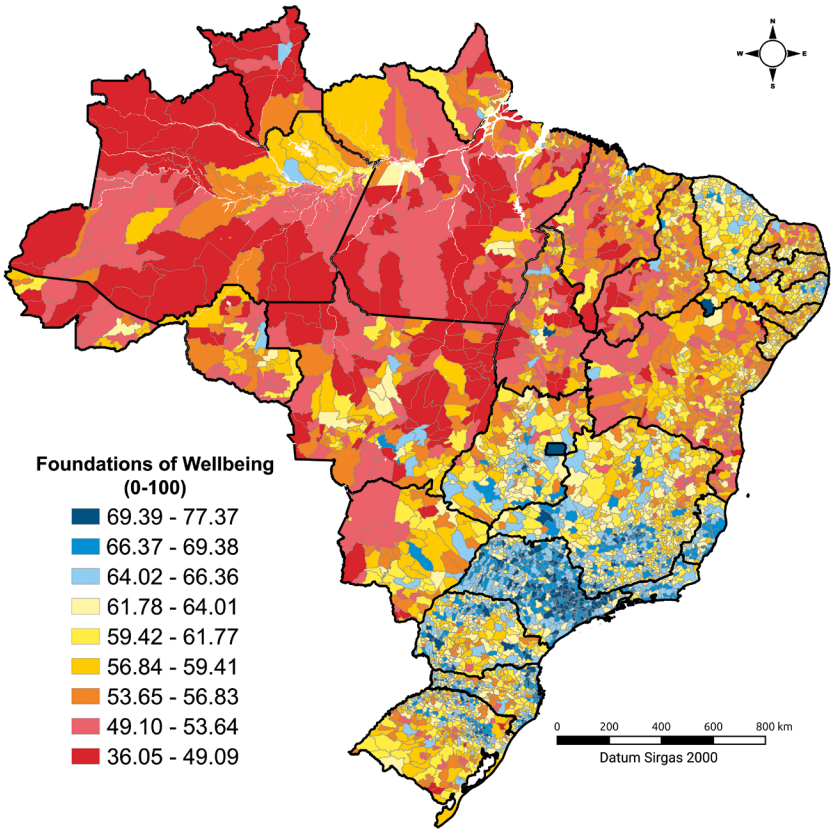
Figure 3. Human Needs Dimension - SPI Brazil 2025.



The Foundations of Wellbeing dimension has elements that allow us to identify whether there are effective conditions for increasing the quality of life of a population and measures the extent to which individuals can obtain basic education and information, freedom of expression and the benefits of a health system that allows for a long and healthier life. In addition, this dimension also measures the quality of the territory's environment, a fundamental component for current and future wellbeing (Figure 4).

This dimension obtained an average score of **65.02** in the SPI Brazil 2025. However, there was a discrepancy between municipalities and states, with the municipalities located in the Southeast region and in parts of Paraná and Santa Catarina standing out. On the other hand, there is a higher concentration of critical municipalities in the Brazilian Amazon and in the states of Piauí, Bahia and Mato Grosso do Sul.

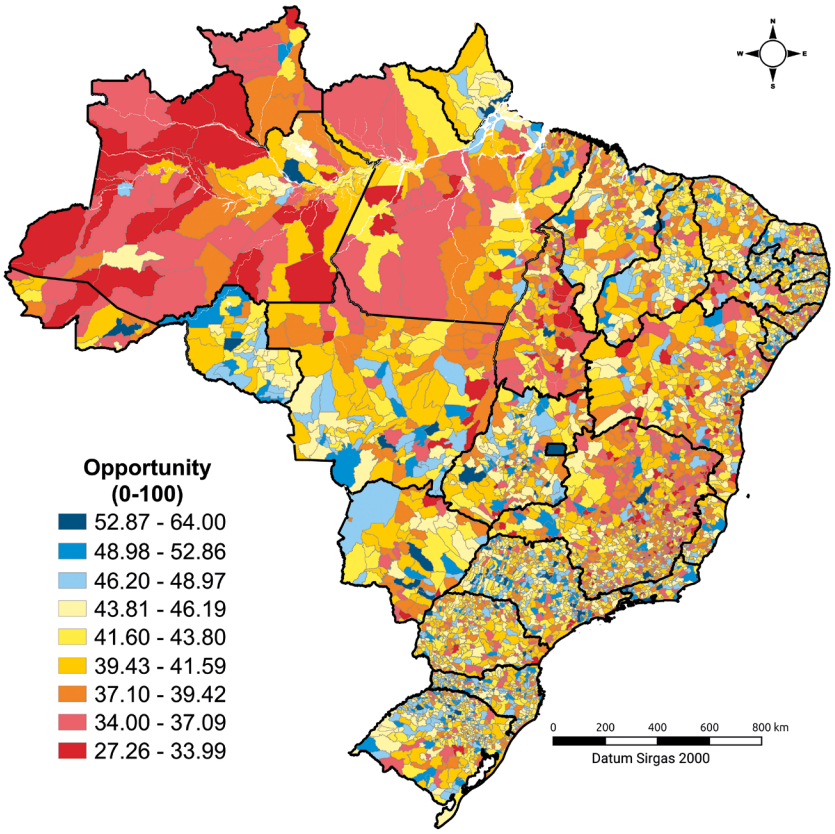
Figure 4. Foundations of Wellbeing Dimension - SPI Brazil 2025.



Finally, the Opportunity dimension measures whether there are structural conditions that can boost or hinder citizens' pursuit of social progress and individual growth. This dimension is traditionally the most difficult to measure in the SPI worldwide. This is because it involves issues that often cannot be fully measured - for example, those linked to personal freedom and choice or social inclusion - especially due to the lack of indicators at municipal level (Figure 5).

This dimension obtained an average score of only **46.07** in the SPI Brazil 2025. The municipalities with the best scores are mainly those with the highest population density.

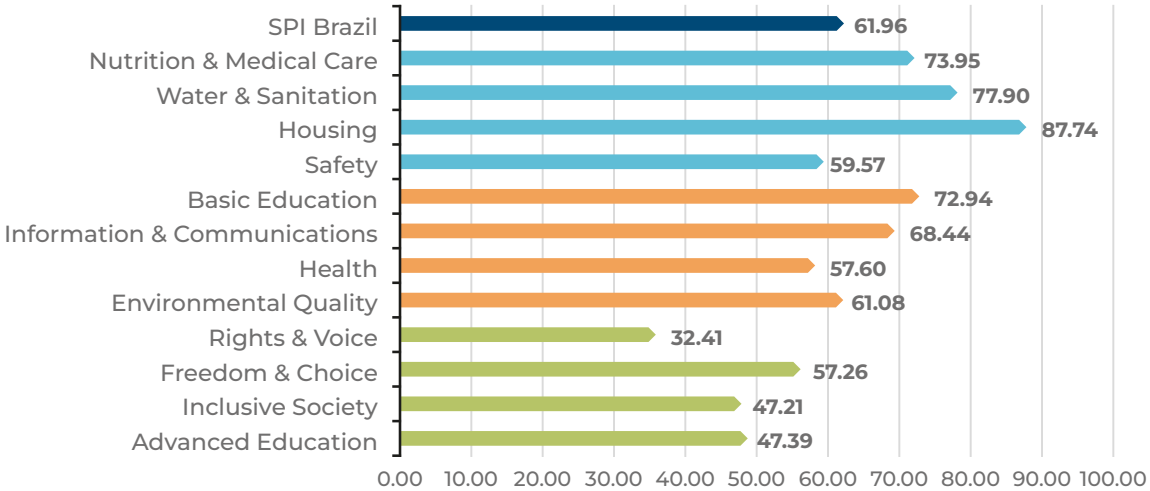
Figure 5. Opportunity Dimension - SPI Brazil 2025.



• SPI BRAZIL COMPONENTS

Among the components, the ones with the best overall average were Housing (87.74) and Water & Sanitation (77.90). On the other hand, the most critical were Rights & Voice (32.41) and Inclusive Society (47.21) (Figure 6).

Figure 6. Component Scores – SPI Brazil 2025.

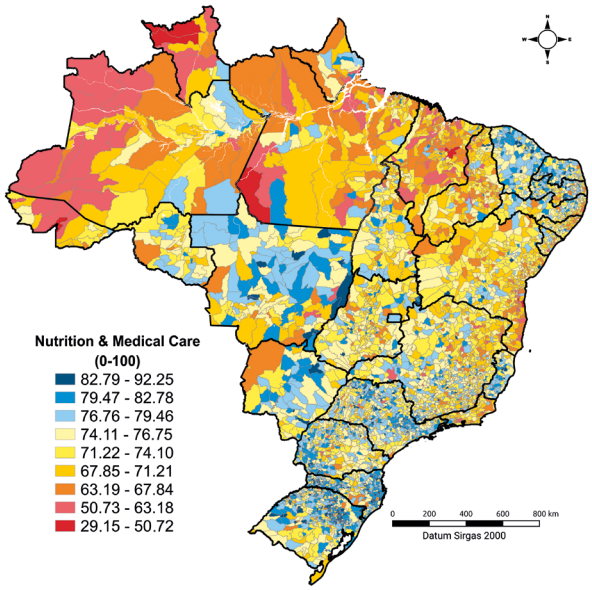


- **Nutrition & Medical Care**

The Nutrition & Medical Care component assesses whether people have enough to eat and receive basic medical care in the municipalities. The average score for this component in the country is 73.95, making it the third-highest scoring component in the SPI Brazil 2025.

Municipalities in Rio Grande do Sul lead the ranking of those with the best performance. On the other hand, municipalities in the Brazilian Amazon have the worst results.

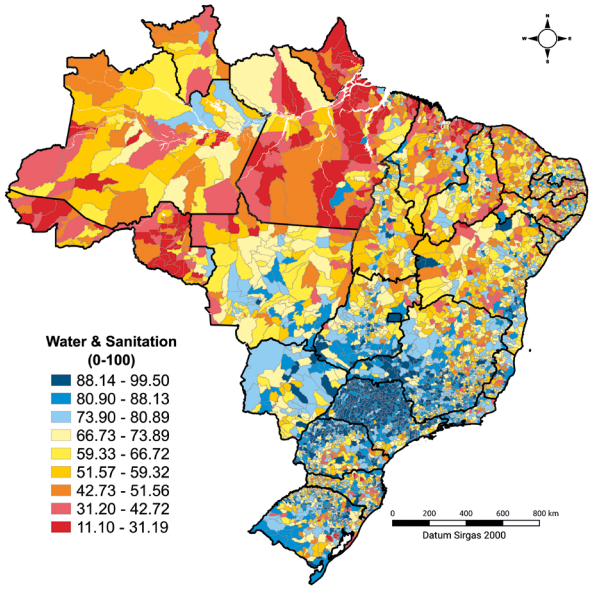
Figure 7. Nutrition & Medical Care Component - SPI Brazil 2025.



- **Water & Sanitation**

One of the portraits of inequality in the country is access to quality water and basic sanitation. The best results for this component are in the municipalities located in the South and Southeast regions, while the worst are concentrated in the Brazilian Amazon.

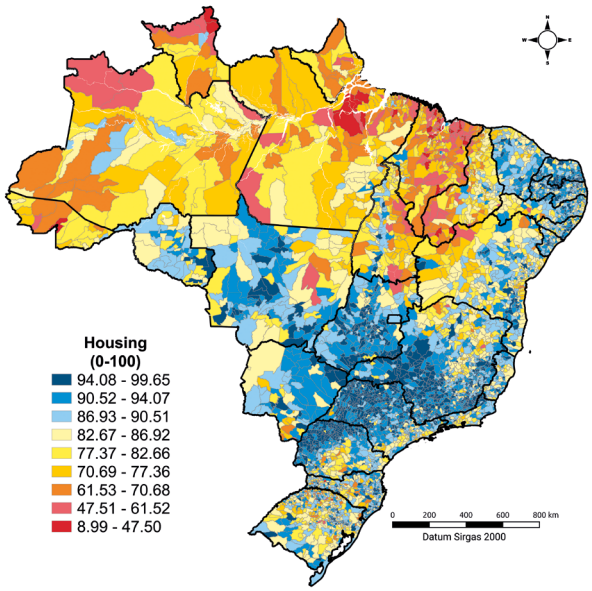
Figure 8. Water & Sanitation Component - SPI Brazil 2025.



- **Housing**

The Housing component assesses whether people have adequate housing with basic services and shows significant territorial inequalities in the country. The best results are in the South, Southeast and Central-West regions, especially in the north of Paraná, São Paulo and the south of Minas Gerais, as well as in some areas of the Northeast. The most critical performances are seen in the Brazilian Amazon, especially in the state of Maranhão.

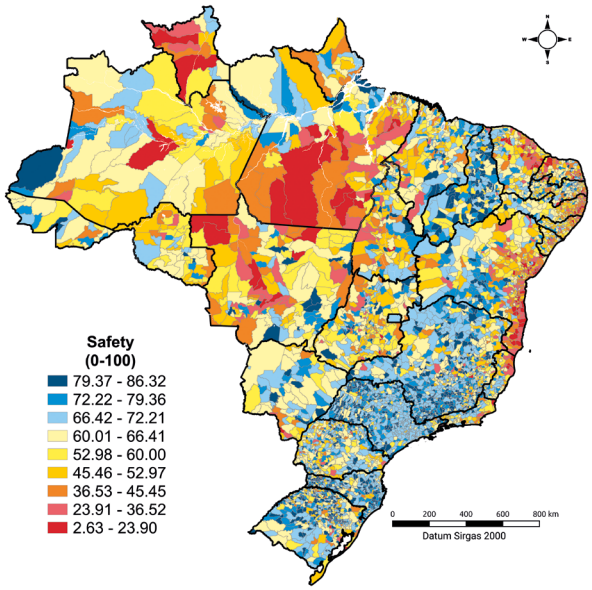
Figure 9. Housing Component - SPI Brazil 2025.



- **Safety**

Personal safety is one of the biggest challenges for social progress in Brazil. The situation is critical in the coastal municipalities of the Northeast region and in a large part of the Brazilian Amazon, and relatively better in the state of São Paulo.

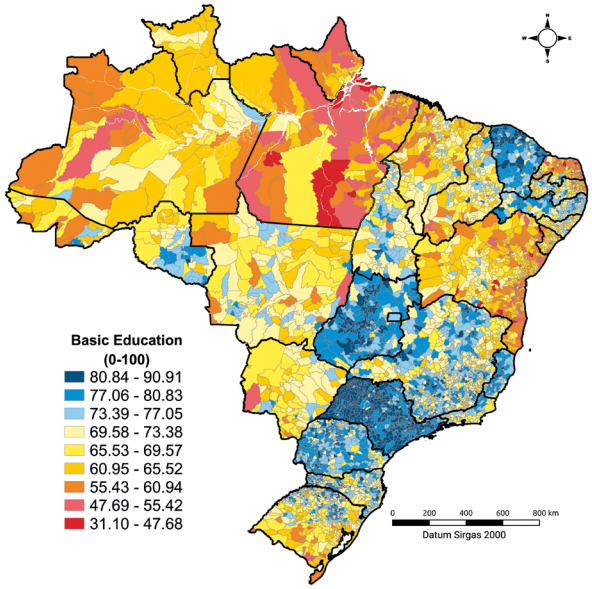
Figura 10. Safety Component - SPI Brazil 2025.



- **Basic Education**

Brazil has an extensive education system that ranges from early childhood education to higher education. However, despite the investments made over the years, the country still faces critical issues in the area of education, such as low quality, unequal access and regional disparities. For example, the best scores in the Basic Education component are in municipalities in the states of São Paulo, Ceará and Goiás. On the other hand, the municipalities located in the states of Pará and Bahia have the lowest scores in this component.

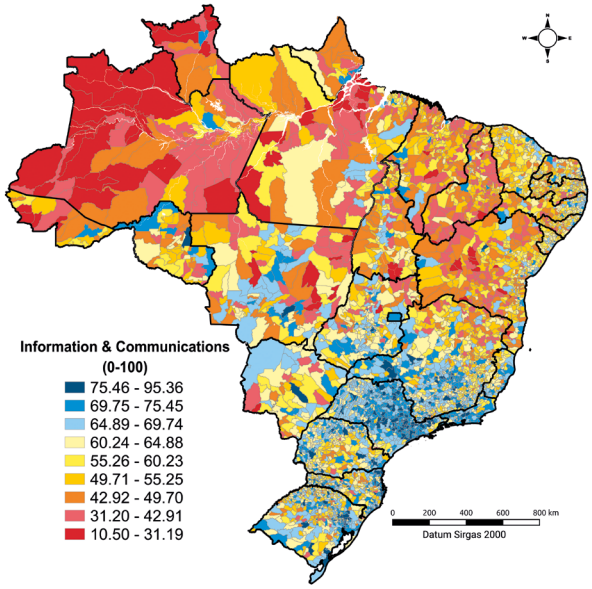
Figure 11. Basic Education Component - SPI Brazil 2025.



- **Information & Communications**

The municipalities with the best performance in the Information & Communications component are located mainly in the Southeast and South of the country. On the other hand, there is a greater deficit in this component in municipalities in the countryside of the Northeast region and in the Brazilian Amazon.

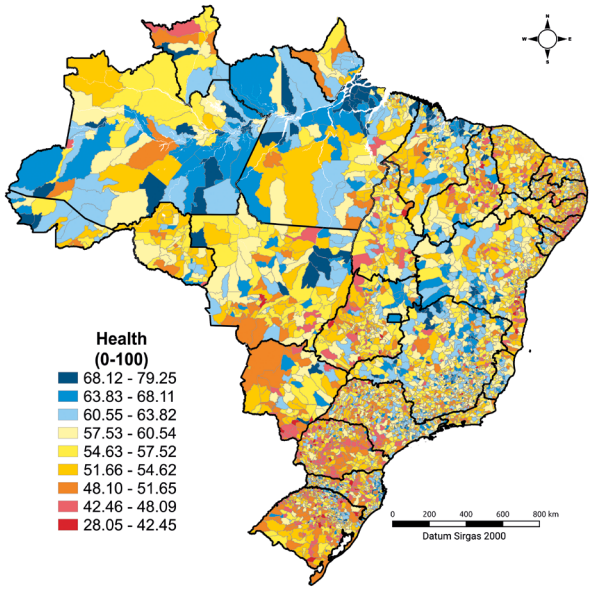
Figure 12. Information & Communications Component - SPI Brazil 2025.



- **Health**

The performance of the Health component reflects the performance of Brazilian municipalities in providing their inhabitants with the conditions for a healthy life. The municipalities of Minas Gerais and those located in parts of Bahia, Maranhão, Pará and Amazonas score best in this component. On the other hand, there are municipalities with lower scores, mainly in Rio Grande do Sul, Paraná, Mato Grosso do Sul and a large part of the Northeast region.

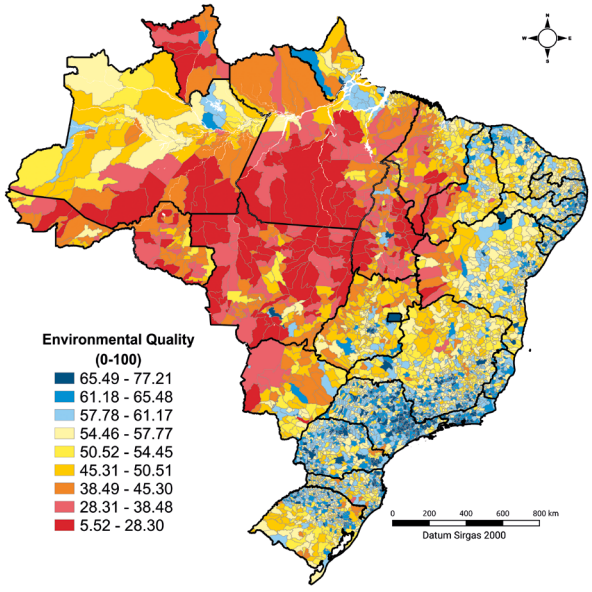
Figure 13. Health Component - SPI Brazil 2025.



- **Environmental Quality**

The Environmental Quality component shows more critical results in municipalities located in the arc of deforestation in the Brazilian Amazon. The states in this area are facing a significant loss of forest cover, suppression of secondary vegetation, significant greenhouse gas (GHG) emissions and insufficient green areas in urban centers. The component reveals a significant loss of original vegetation and suppression of vegetation in Rio Grande do Sul and northern Minas Gerais.

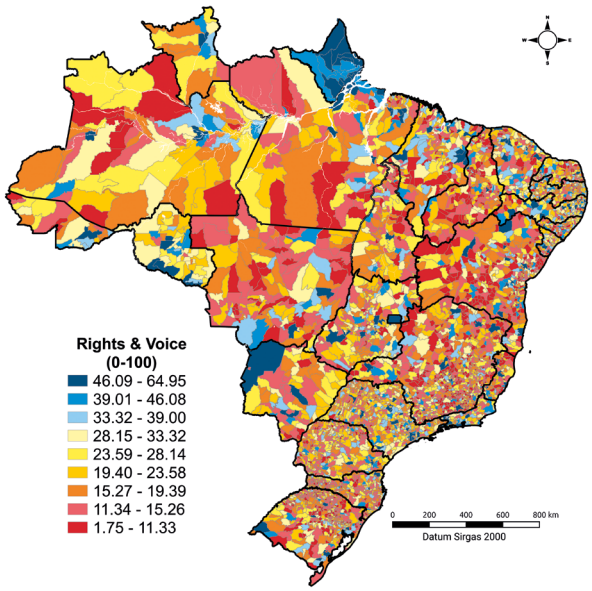
Figure 14. Environmental Quality Component - SPI Brazil 2025.



- **Rights & Voice**

This component shows that Brazil is lacking in the area of Rights & Voice, with municipalities that are close to each other and have significantly different performances. In general, capital cities and municipalities with a higher number of inhabitants, such as those that are county seats, achieved better results. In this component, the municipalities of Amapá stand out.

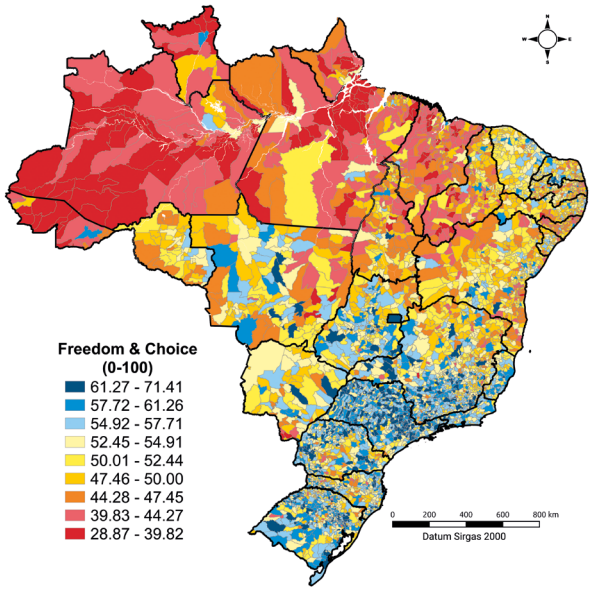
Figure 15. Rights & Voice Component - SPI Brazil 2025.



- **Freedom & Choice**

Blue spots in the South and Southeast are highlighted on the map, along with those regions with municipalities with higher housing densities or capital cities. Goiás and part of Mato Grosso also stand out positively, while the Brazilian Amazon performs worst.

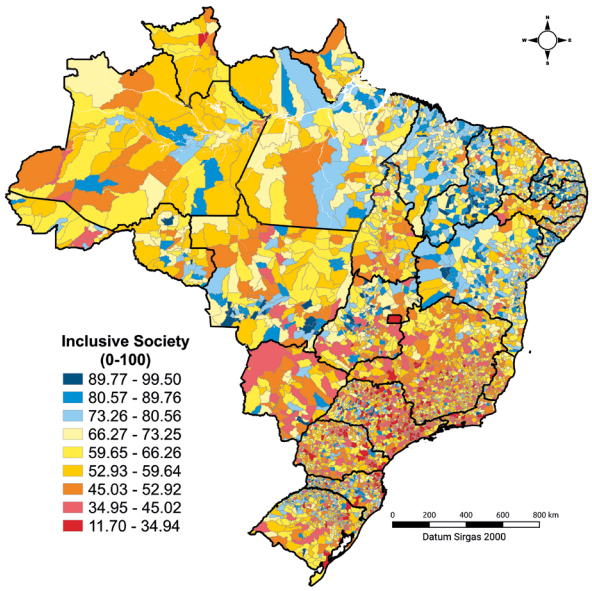
Figure 16. Freedoms & Choice Component - SPI Brazil 2025.



- **Inclusive Society**

The Inclusive Society component seeks to ensure that all individuals have equal access to opportunities and resources, regardless of their origin, race or gender. Municipalities in the Northeast region achieved the best performance. On the other hand, municipalities in the states of Rio de Janeiro and Paraná had the lowest scores. In general, capitals and municipalities with a higher housing density show worse results in this component.

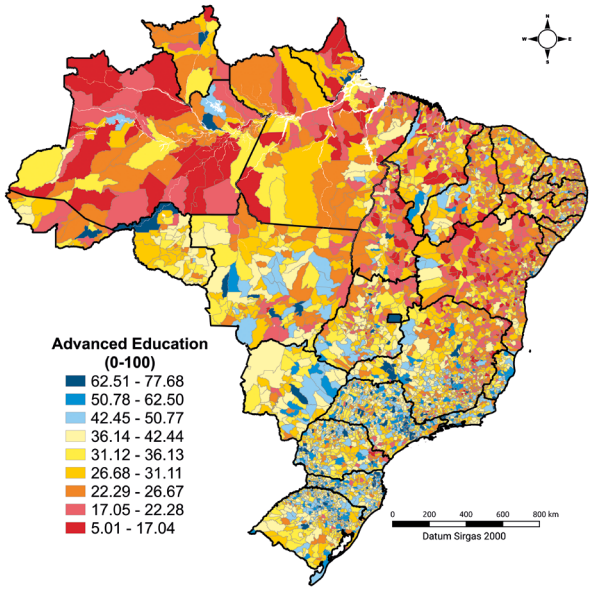
Figure 17. Inclusive Society Component - SPI Brazil 2025.



- **Advanced Education**

The Southeast region has the best performance, while the Brazilian Amazon and the Northeast are home to the municipalities with the most deficient performances. Municipalities with more inhabitants and capital cities generally excel in the Advanced Education component.

Figure 18. Advanced Education Component - SPI Brazil 2025.



• MUNICIPALITIES WITH THE BEST AND LOWEST PERFORMANCES

There was significant inequality in the distribution of social progress among Brazilian municipalities according to the SPI Brazil 2025. The ranking of the 20 municipalities with the best and worst performances in terms of SPI scores (Table 5) reveals a great contrast between the North - especially in the Brazilian Amazon, where most of the critical municipalities are concentrated - and the Southeast regions of Brazil, where the municipalities with the highest SPI scores are located.

Table 5. Scores of the 20 Brazilian municipalities with the best and worst performances in the SPI Brazil 2025, except for Fernando de Noronha (PE)

20 MUNICIPALITIES WITH THE BEST SCORES IN SPI BRAZIL 2025		
Municipality	**UF***	**SPI Brazil 2025**
Gavião Peixoto	SP	73.26
Gabriel Monteiro	SP	71.29
Jundiaí	SP	70.70
Águas de São Pedro	SP	70.51
Cândido Rodrigues	SP	70.26
Presidente Lucena	RS	70.07
Luzerna	SC	70.00
Pompéia	SP	69.99
Nova Lima	MG	69.91
Itupeva	SP	69.90
Curitiba	PR	69.89
Araraquara	SP	69.64
Campo Grande	MS	69.63
Barra Bonita	SP	69.60
Ribeirão Preto	SP	69.57
Jaguariúna	SP	69.49
Adamantina	SP	69.19
Votuporanga	SP	69.14
Brasília	DF	69.04
Louveira	SP	69.01

20 MUNICIPALITIES WITH THE LOWEST SCORE IN SPI BRAZIL 2025		
Municipality	**UF***	**SPI Brazil 2025**
Uiramutã	RR	37.59
Jacareacanga	PA	40.04
Amajari	RR	40.95
Bannach	PA	40.99
Alto Alegre	RR	41.07
Trairão	PA	42.08
Pacajá	PA	42.86
Portel	PA	43.25
São Félix do Xingu	PA	43.33
Anapu	PA	43.39
Cumaru do Norte	PA	43.55
Japorã	MS	43.98
Uruará	PA	44.19
Santa Rosa do Purus	AC	44.25
Feijó	AC	44.39
Santana do Araguaia	PA	44.55
São João do Araguaia	PA	44.57
Marajá do Sena	MA	44.92
Peritoró	MA	45.18
Santa Maria das Barreiras	PA	45.18

*UF stands for the federative unit, the equivalent of state

The federal units' capitals scored relatively better (shades of blue) in the SPI, except for Maceió, Porto Velho and Macapá. The five best capitals were Curitiba, Campo Grande, Brasília, São Paulo and Belo Horizonte (Table 6). Palmas is the best capital in the North region, while João Pessoa leads the ranking in the Northeast.

Table 6. Scores of the capitals in the SPI Brazil 2025 and their classification among the nine groups.

Capital Rankings	Capital	UF	SPI Brazil 2025	Tier
1	Curitiba	PR	69.89	1
2	Campo Grande	MS	69.63	1
3	Brasília	DF	69.04	1
4	São Paulo	SP	68.88	1
5	Belo Horizonte	MG	68.22	1
6	Goiânia	GO	68.21	1
7	Palmas	TO	68.18	1
8	Florianópolis	SC	67.91	1
9	João Pessoa	PB	67.00	1
10	Cuiabá	MT	66.73	1
11	Rio de Janeiro	RJ	66.13	1
12	Porto Alegre	RS	66.10	1
13	Teresina	PI	65.76	1
14	Aracaju	SE	65.73	1
15	Natal	RN	65.63	1
16	Vitória	ES	64.65	2
17	Fortaleza	CE	64.44	2
18	São Luís	MA	64.27	2
19	Boa Vista	RR	63.37	2
20	Recife	PE	63.33	2
21	Manaus	AM	63.19	2
22	Belém	PA	62.33	3
23	Rio Branco	AC	62.29	3
24	Salvador	BA	62.05	3
25	Maceió	AL	61.48	3
26	Macapá	AP	58.72	5
27	Porto Velho	RO	57.25	5

- **Population size categories**

According to the IBGE, Brazilian municipalities can be classified into six categories according to their population size[9]. By evaluating the results of the SPI Brazil 2025, considering these population cut-outs, we came up with a ranking of the 10 best and worst municipalities in five categories:

- Up to 5,000 inhabitants - 1,288 municipalities (Table 7)
- Between 5,000 and 20,000 inhabitants - 2,535 municipalities (Table 8)
- Between 20,000 and 100,000 inhabitants - 1,411 municipalities (Table 9)
- Between 100,000 and 500,000 inhabitants - 288 municipalities (Table 10)
- Over 500,000 inhabitants[10] - 48 municipalities (Table 11)

Table 7. Scores of the 10 Brazilian municipalities with up to 5,000 inhabitants [11] with the best and worst performances in the SPI Brazil 2025.

MUNICIPALITIES WITH UP TO 5,000 INHABITANTS IN SPI BRAZIL 2025					
TOP 10 PERFORMING MUNICIPALITIES			10 MUNICIPALITIES WITH THE LOWEST SCORE		
Municipality	UF	SPI Brazil 2025	Municipality	UF	SPI Brazil 2025
Gavião Peixoto	SP	73.26	Bannach	PA	40.99
Gabriel Monteiro	SP	71.29	Recursolândia	TO	45.46
Águas de São Pedro	SP	70.51	São Félix de Balsas	MA	46.11
Cândido Rodrigues	SP	70.26	Nova Nazaré	MT	46.78
Presidente Lucena	RS	70.07	Passa Sete	RS	47.34
Buritizal	SP	68.95	Canabrava do Norte	MT	48.14
Arco-Íris	SP	68.76	Itapiratins	TO	48.20
Ribeirão dos Índios	SP	68.57	Morro Cabeça no Tempo	PI	48.24
Turiúba	SP	68.56	Rio Sono	TO	48.26
São Francisco	SP	68.53	União do Sul	MT	48.31

[9] (1) Very small: up to 5,000 inhabitants;(2) Small: between 5,000 and 20,000 inhabitants;(3) Small-medium: between 20,000 and 100,000 inhabitants;(4) Medium: between 100,000 and 500,000 inhabitants;(5) Large: between 500,000 and 1 million inhabitants; and (6) Metropolises: those with over 1 million inhabitants.

[10] Considering large municipalities and metropolises.

[11] Except for Fernando de Noronha (PE)

Table 8. Scores of the 10 Brazilian municipalities with between 5,000 and 20,000 inhabitants with the best and worst performances in the SPI Brazil 2025.

MUNICIPALITIES BETWEEN 5,000 AND 20,000 INHABITANTS IN SPI BRAZIL 2025					
TOP 10 PERFORMING MUNICIPALITIES			10 MUNICIPALITIES WITH THE LOWEST SCORE		
Municipality	UF	SPI Brazil 2025	Municipality	UF	SPI Brazil 2025
Luzerna	SC	70.00	Uiramutã	RR	37.59
Lindóia	SP	68.94	Amajari	RR	40.95
Orindiúva	SP	68.90	Trairão	PA	42.08
Itaú de Minas	MG	68.47	Cumaru do Norte	PA	43.55
Picada Café	RS	68.43	Japorã	MS	43.98
Piacatu	SP	68.30	Santa Rosa do Purus	AC	44.25
Rafard	SP	68.25	São João do Araguaia	PA	44.57
Quintana	SP	68.21	Marajá do Sena	MA	44.92
Tupandi	RS	68.08	Santa Maria das Barreiras	PA	45.18
Águas da Prata	SP	68.01	Cajari	MA	45.27

Table 9. Scores of the 10 Brazilian municipalities with between 20,000 and 100,000 inhabitants with the best and worst performances in the SPI Brazil 2025.

MUNICIPALITIES BETWEEN 20,000 AND 100,000 INHABITANTS IN SPI BRAZIL 2025					
TOP 10 PERFORMING MUNICIPALITIES			10 MUNICIPALITIES WITH THE LOWEST SCORE		
Municipality	UF	SPI Brazil 2025	Municipality	UF	SPI Brazil 2025
Pompéia	SP	69.99	Jacareacanga	PA	40.04
Itupeva	SP	69.90	Alto Alegre	RR	41.07
Barra Bonita	SP	69.60	Pacajá	PA	42.86
Jaguariúna	SP	69.49	Portel	PA	43.25
Adamantina	SP	69.19	São Félix do Xingu	PA	43.33
Louveira	SP	69.01	Anapu	PA	43.39
Cornélio Procópio	PR	68.82	Uruará	PA	44.19
Engenheiro Coelho	SP	68.81	Feijó	AC	44.39
Pomerode	SC	68.79	Santana do Araguaia	PA	44.55
Osvaldo Cruz	SP	68.44	Peritoró	MA	45.18

Table 10. Scores of the 10 Brazilian municipalities with between 100 and 500 thousand inhabitants with the best and worst performances in the SPI Brazil 2025.

MUNICIPALITIES BETWEEN 100,000 AND 500,000 INHABITANTS IN SPI BRAZIL 2025					
TOP 10 PERFORMING MUNICIPALITIES			10 MUNICIPALITIES WITH THE LOWEST SCORE		
Municipality	UF	SPI Brazil 2025	Municipality	UF	SPI Brazil 2025
Jundiaí	SP	70.70	Altamira	PA	46.53
Nova Lima	MG	69.91	Breves	PA	47.62
Araraquara	SP	69.64	Itaituba	PA	48.58
Votuporanga	SP	69.14	Bragança	PA	50.86
Maringá	PR	68.84	Marabá	PA	51.38
São Carlos	SP	68.71	Japeri	RJ	52.87
Bauru	SP	68.71	Cametá	PA	52.99
Botucatu	SP	68.48	Castanhal	PA	53.17
Marília	SP	68.43	Bacabal	MA	53.30
São Caetano do Sul	SP	68.38	Abaetetuba	PA	53.46

Table 11. Scores of the 10 Brazilian municipalities with more than 500,000 inhabitants with the best and worst performances in the SPI Brazil 2025, except capitals.

MUNICIPALITIES WITH MORE THAN 500.000 INHABITANTS IN SPI BRAZIL 2025, EXCEPT CAPITALS					
TOP 10 PERFORMING MUNICIPALITIES			10 MUNICIPALITIES WITH THE LOWEST SCORE		
Municipality	UF	SPI Brazil 2025	Municipality	UF	SPI Brazil 2025
Ribeirão Preto	SP	69.57	Ananindeua	PA	56.19
Campinas	SP	68.74	Duque de Caxias	RJ	56.83
Uberlândia	MG	68.53	Belford Roxo	RJ	57.76
São Bernardo do Campo	SP	68.34	São Gonçalo	RJ	57.84
Joinville	SC	67.70	Jaboatão dos Guararapes	PE	58.52
Juiz de Fora	MG	67.37	Feira de Santana	BA	59.70
São José dos Campos	SP	67.14	Nova Iguaçu	RJ	60.16
Guarulhos	SP	67.10	Aparecida de Goiânia	GO	61.79
Londrina	PR	66.29	Campos dos Goytacazes	RJ	62.19
Sorocaba	SP	66.25	Serra	ES	64.53

• SPI BRAZIL 2025 FOR THE FEDERATIVE UNITS

The Federal District (1st), São Paulo (2nd) and Santa Catarina (3rd) stood out with the best scores in the state ranking , highlighted in dark blue on the map (Figure 19, Table 12). States in the Brazilian Amazon have the worst results, with Acre (25th), Maranhão (26th) and Pará (27th) topping the ranking. Paraíba stands out in the region and leads the social progress ranking among the states of the North and Northeast.

Figure 19. SPI Brazil 2025 results for the federal units.

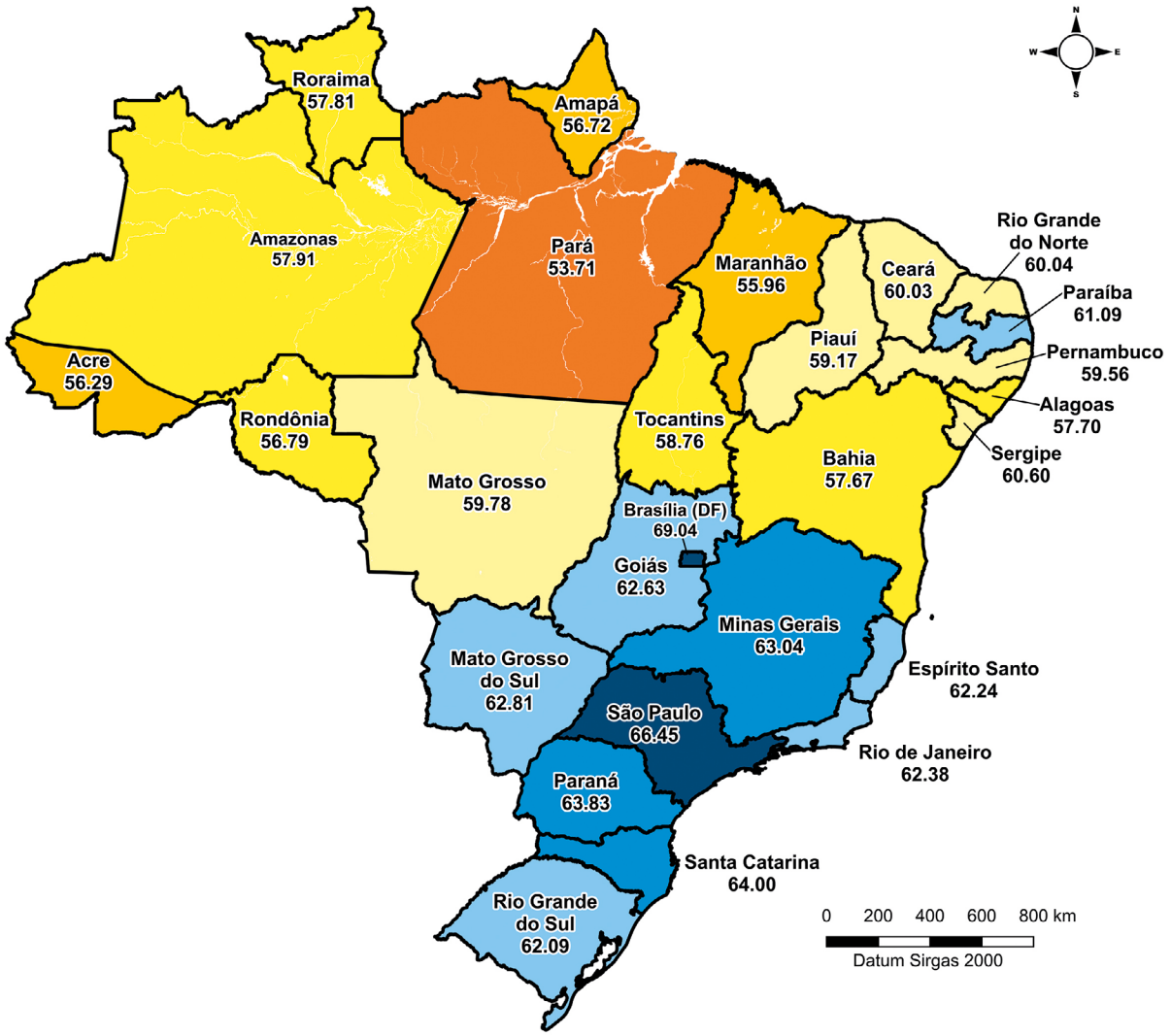
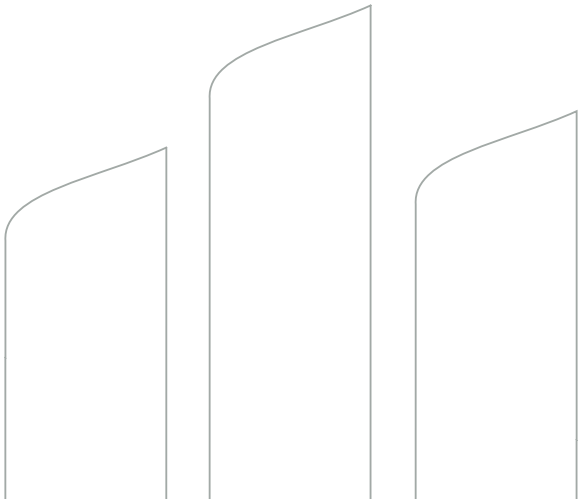


Table 12. SPI Brazil 2025 scores for the federal units.

#	UF	SPI Brazil 2025
1	Distrito Federal	69.04
2	São Paulo	66.45
3	Santa Catarina	64.00
4	Paraná	63.83
5	Minas Gerais	63.04
6	Mato Grosso do Sul	62.81
7	Goiás	62.63
8	Rio de Janeiro	62.38
9	Espírito Santo	62.24
10	Rio Grande do Sul	62.09
11	Paraíba	61.09
12	Sergipe	60.60
13	Rio Grande do Norte	60.04
14	Ceará	60.03
15	Mato Grosso	59.78
16	Pernambuco	59.56
17	Piauí	59.17
18	Tocantins	58.76
19	Amazonas	57.91
20	Roraima	57.81
21	Alagoas	57.70
22	Bahia	57.67
23	Rondônia	56.79
24	Amapá	56.72
25	Acre	56.29
26	Maranhão	55.96
27	Pará	53.71

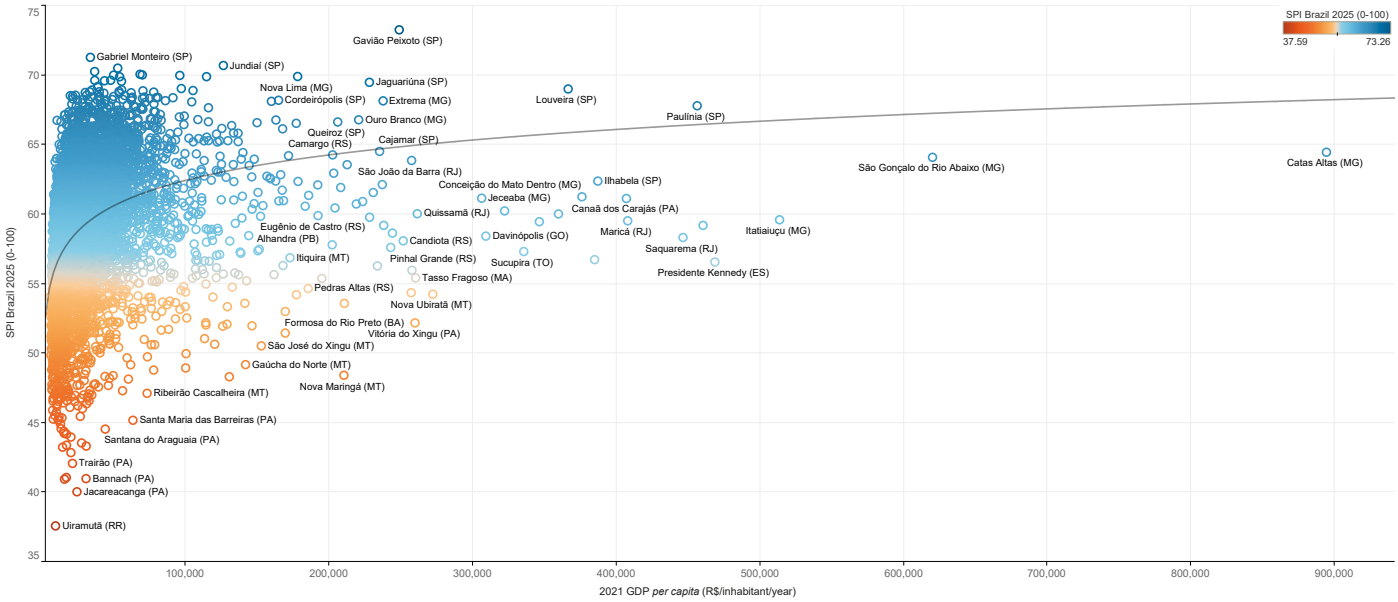


PROGRESS AND ECONOMIC DEVELOPMENT IN MUNICIPALITIES

Economic performance alone does not fully explain a municipality's social progress. The SPI is a tool that can help a territory to better understand the relationship between its socio-environmental progress and economic development, since it is possible to correlate the SPI with economic indicators. In SPI Brazil 2025, we chose to analyze the 2021 GDP *per capita*, but it is possible to make this same correlation with other economic indicators such as income *per capita* or specific investments in a territory.

The regression analysis based on the SPI Brazil 2025 and the GDP *per capita* 2021 (Figure 20) reveals a wide variation in results, especially for those municipalities with a GDP *per capita* of less than R$100,000. Among municipalities with lower GDP levels, there was a large variation in social progress results, i.e. even with a low GDP it is possible to achieve good scores in the SPI Brazil. These wide variations in results show that GDP *per capita* alone does not explain social progress.

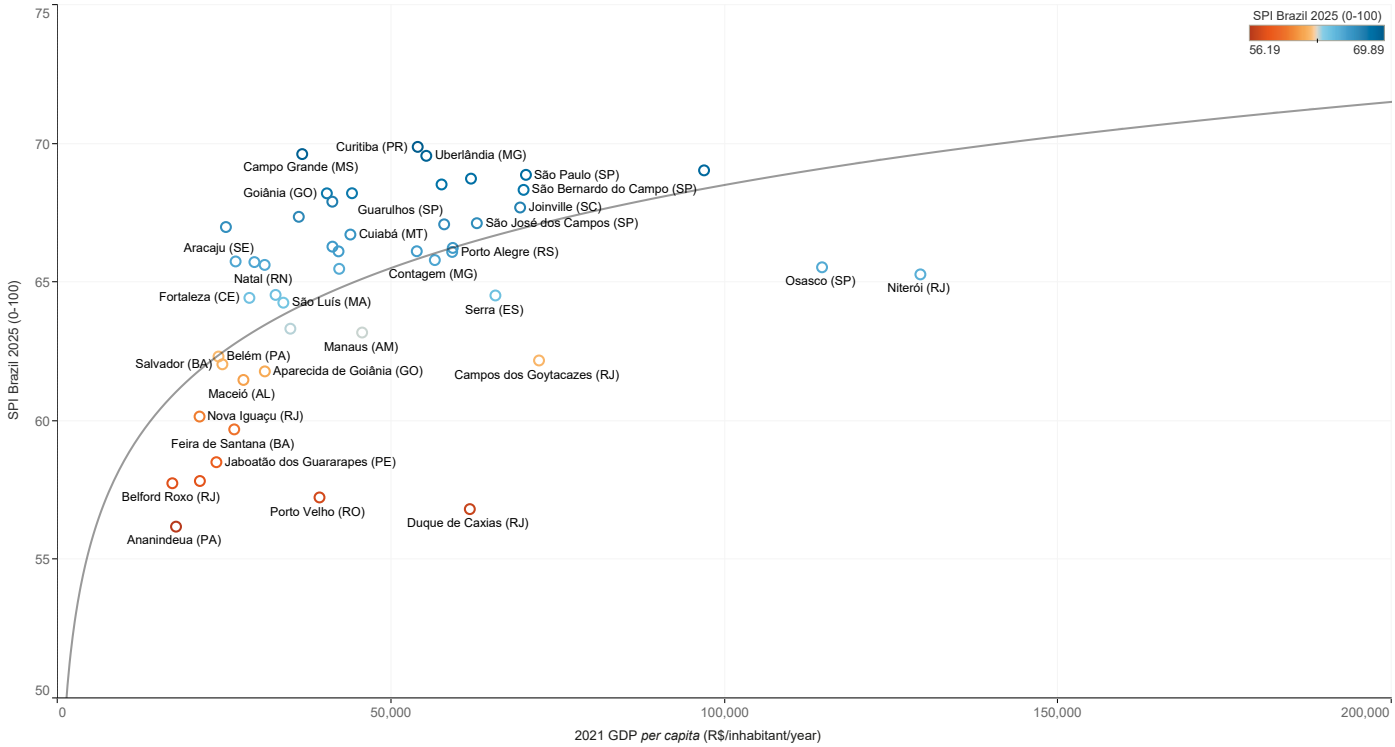
Figure 20. Relationship between SPI Brazil 2025 and GDP *per capita* 2021 of Brazilian municipalities.



> “...development itself does not necessarily represent social development in municipalities.”

When considering the population size categories, the correlation coefficient shows that economic development itself does not necessarily represent social development in municipalities. For example, we carried out a regression analysis of the SPI Brazil 2025 with the GDP *per capita* 2021 for the 48 municipalities with a population over 500,000 (Figure 21). This analysis reveals important contrasts between municipalities with similar GDP *per capita* but very different performances in the SPI Brazil 2025. For example, Duque de Caxias (RJ) has an SPI of 56.82 and Uberlândia (MG) has an SPI of 68.53.

Figure 21. Relationship between SPI Brazil 2025 and GDP *per capita* 2021 of Brazilian municipalities with more than 500,000 inhabitants.



For more information on SPI Brazil, visit: https://www.ipsbrasil.org.br

REFERENCES

Central Bank of Brazil (BCB). 2024. Citizen's calculator: IPCA Price Index. https://www3.bcb.gov.br/CALCIDADAO/jsp/index.jsp

Brazilian Institute of Geography and Statistics (IBGE). 2022. Digital Municipal Mesh and Territorial Areas 2022: Methodological note n. 01. Technical and legal information for the use of published data. https://www.ibge.gov.br/ geosencias/organizacao-do-territorio/estrutura-territorial/15761-areas-dos- municipios.html

Brazilian Institute of Geography and Statistics (IBGE). 2024. Projected population for 2024. https://www.ibge.gov.br

Brazilian Institute of Geography and Statistics (IBGE). 2023. Gross Domestic Product of Municipalities 2021. https://sidra.ibge.gov.br/ research/pib-munic/tables

Amazon Institute of People and the Environment (IMAZON). 2023. Social Progress Index for the Brazilian Amazon: Executive Summary. 4. ed. Belém: Imazon.

Greenhouse Gas Emissions Estimates System (SEEG). 2024a. Total gross CO_2e GWP-AR5 emissions by Brazilian municipalities. https:// seeg.eco.br/

Greenhouse Gas Emissions Estimates System (SEEG). 2024b. Analysis of greenhouse gas emissions and their implications for Brazil's climate goals. https://seeg.eco.br/wp-content/uploads/2024/02/ SEEG11-RELATORIO-ANALITICO.pdf

Social Progress Imperative. 2024. The 2024 Social Progress Index results. Washington, DC: Social Progress Imperative. https:// www.socialprogress.org

Harmacek, J., P. Krylova, and M. Htitich. 2025. AlTi Global Social Progress Index Data & Methodology. Social Progress Imperative. Washington, DC. https://www.socialprogress.org/methodology/

Wilm, M. et al. 2024. SPI Brasil: Social Progress Index: Quality of Life in Brazil's 5,570 municipalities. Belém: Imazon. https:// ipsbrasil.org.br/relatorios

ANNEX I: SOURCES AND INDICATORS OF SPI BRAZIL 2025

NUTRITION & MEDICAL CARE COMPONENT:

- **Vaccination Coverage (Poliomyelitis)** (% of target population). Source: Institute for Health Policy Studies (IEPS) using data from the Food and Nutrition Surveillance System (Sisvan)/Ministry of Health (https:// bit.ly/ieps-vac).
  - Definition: estimated polio vaccination coverage, considering the target population, i.e. children under 1 year old (injectable vaccine) and up to 4 years old (oral vaccine).

- **Hospitalizations for Primary Care Sensitive Conditions** (number of hospitalizations per 100,000 inhabitants). Sources: Institute for Health Policy Studies (IEPS), using data from the Hospital Information System (SIH), and TabNet Datasus (https://bit.ly/ieps-hosp);
  - Definition: rate of hospitalizations for Primary Care Sensitive Conditions (PCSC) per 100,000 inhabitants, carried out within the Unified Health System (SUS), considering the place of residence. The classification of primary care sensitive conditions is based on the list defined by the Ministry of Health (Ordinance No. 221/2018).

- **Ambulatory Care Sensitive Mortality Rates** (deaths per 100,000 inhabitants). Sources: IEPS, using data from the Mortality Information System (SIM), TabNet Datasus and 2010 Census (https://bit.ly/ieps-mort)
  - Definition: death rate per 100,000 inhabitants, considering place of residence and Primary Care Sensitive Conditions (PCSC), adjusted by age according to the 2010 Census reference population. The indicator expresses the intensity with which mortality from PCSCs affects a given population, without considering the influence of the local age group.

- **Infant Mortality (less than 5 y.o.)** (deaths per thousand live births). Source: Datasus/Ministry of Health, according to data on "deaths of children up to 5 years old" (https://bit.ly/44JkF0r) and "live births" (https://bit. ly/4eQtona);
  - Definition: Infant mortality rate (deaths of children under 5) per thousand live births. It estimates the risk of a live birth dying during the first five years of life, as specified by the Interagency Network of Information for Health (RIPSA).

- **Malnutrition** (% of population). Source: Sisvan/Ministry of Health (https://bit.ly/sisvan);
  - Definition: the population of all age groups who are below ideal weight, namely: children aged 0 - 10 (very low weight, low weight for age), adolescents (marked thinness for age), adults, the elderly and pregnant women (low weight). Data obtained from Sisvan's nutritional status monitoring records.

WATER & SANITATION COMPONENT:

- **Improved Drinking Water Sources** (% of households). Source: CadÚnico/Ministry of Development and Social Assistance, Family and Fight against Hunger (MDS) (https://bit.ly/3RT7B45);
  - Definition: percentage of families registered with CadÚnico living in households with an adequate water supply service, including a general distribution network.

- **Basic Sanitation Service** (% of households). Source: CadÚnico/MDS (https://bit.ly/4eIr6GB);
  - Definition: percentage of families registered in CadÚnico system living in households with adequate sewage collection services, including piped sewage systems and septic tanks.

- **Water Supply System** (% of population). Source: National Sanitation Information System (SNIS)/Ministry of Cities (https://bit.ly/45P1tQk);
  - Definition: total water supply service in relation to the population served, as reported by sanitation service providers, and the total resident population, as estimated by the Brazilian Institute of Geography and Statistics (IBGE).

- **Water Loss in Distribution Networks** (% of the volume of water supplied lost in distribution). Source: SNIS/Ministry of Cities (https:// bit.ly/45P1tQk);
  - Definition: index of water losses in the distribution network, reported by sanitation service providers.

HOUSING COMPONENT:

- **Solid Waste Recollection** (% of households). Source: CadÚnico/MDS (https://bit.ly/4bsWCp5);
  - Definition: percentage of families with households registered in the CadÚnico system with an adequate waste collection service (form of direct collection by the municipality's sanitation concessionaire).

- **Adequate Household Electric Lighting** (% of households). Source: CadÚnico/MDS (https://bit.ly/3xU5czn);
  - Definition: percentage of families registered in the CadÚnico system living with adequate household electric lighting (connected to the utility's electricity network with its own meter).

- **Households with Adequate Walls** (% of households). Source: CadÚnico/MDS (https://bit.ly/4574on3);
  - Definition: percentage of families registered in the CadÚnico system living in households whose walls are adequate (masonry or wood-framed).

- **Adequate Household Flooring** (% of households). Source: CadÚnico/MDS (https://bit.ly/3zm3wiv);
  - Definition: percentage of families registered in the CadÚnico system living in homes with suitable flooring (ceramic, carpet, cement or wood).

SAFETY COMPONENT:

- **Youth Homicide Rate (15-29 y.o.)** (deaths per 100,000 young people aged 15-29. Scored on a scale of 1-5: 1= 0| 2= 1.6 - 50.8| 3= 50.8 - 92.9| 4= 92.9 - 181| 5 > 161,1). Sources: Datasus/Ministry of Health, using data on "deaths from aggression in the 15-29 age group" (https://bit.ly/44JkF0r), and IBGE, using data on the "resident population in 2022 by age" (https://bit.ly/3VrvLot);
  - Definition: homicide rate of people in the youth age group (15-29 years). Youth homicide is defined as the deliberate killing of a person in this age group by another person.

- **Women Homicide Rate** (deaths per 100,000 women. Scored in a scale of 1-5: 1= 0| 2= 0.2 - 7.6| 3= 7.6 - 15.5| 4= 15.5 - 32.5| 5> 61). Sources: Datasus/Ministry of Health, using data on "deaths due to aggression against women" (https://bit.ly/44JkF0r), and IBGE, using data on the "resident population of women in 2022" (https://bit. ly/3VrvLot);
  - Definition: murder rate of women. Murder of women is defined as the deliberate killing of a female person by another person.

- **Homicide Rate General Population** (deaths per 100,000 inhabitants). Sources: Datasus/Ministry of Health, using data on "deaths from aggression" (https://bit. ly/44JkF0r), and IBGE, using data on the "resident population in 2022" (https://bit.ly/3VrvLot);
  - Definition: gross homicide rate in relation to the total population. Homicide is defined as the deliberate killing of a person by another person.

- **Transportation Mortality Rates** (deaths per 100,000 inhabitants. Scored on a scale of 1-5: 1= 0| 2= 0.2 - 25.4| 3= 25.4 - 44.1| 4= 44.1 - 86.1| 5> 86.1). Sources: Datasus/Ministry of Health, using data on "Transportation Mortality Rates" (https://bit.ly/44JkF0r), and IBGE, using data on the "resident population in 2022" (https://bit.ly/3VrvLot);
  - Definition: rate of deaths due to traffic accidents, defined as any accident involving a vehicle on public roads. Traffic accidents include water accidents and air transport accidents.

BASIC EDUCATION COMPONENT:

- **Elementary School Abandonment Rates** (% of students). Source: Instituto Nacional de Estudos e Pesquisas Educacionais Anísio Teixeira - Inep (https://bit. ly/4bDF4a4);
  - Definition: dropout rate for elementary school students, i.e. the act of the student dropping out or failing in the school year.

- **High School Abandonment Rates** (% of students). Source: Inep (https://bit.ly/4bDF4a4);
  - Definition: dropout rate for secondary school students, i.e. the act of the student dropping out or failing in the school year.

- **High School Age-Grade Gap** (% of students). Source: Inep (https://bit.ly/4bDF4a4);
  - Definition: age-grade distortion rate for secondary school students. Age-grade distortion is the educational indicator that makes it possible to monitor the percentage of students in each grade who are older than the expected age for the year in which they are enrolled.

- **High School Dropout Rates** (% of students). Source: Inep (https://bit.ly/3zuYAYK);
  - Definition: dropout rate for secondary school students. The dropout rate is the educational indicator that makes it possible to track the percentage of students in each grade who stop attending school from one year to the next, i.e. when they do not enroll the following year.

- **IDEB - Index of Development of Basic Education** (index 0-10). Source: Inep (https://bit.ly/3RWoqex);
  - Definition: Ideb is an indicator designed to measure the quality of education in schools. It is calculated from the school performance rate (pass rate) and the average performance in the tests administered by Inep. It comprises the average Ideb score in the final years and initial years of elementary school.

- **High School Grade Retention** (% of students). Source: Inep (https://bit.ly/4bDF4a4);
  - Definition: school failure for secondary school students, which is the percentage of students who fail the grade in that school year.

INFORMATION & COMMUNICATIONS COMPONENT:

- **Mobile Data Coverage (4G/5G)** (% of residents covered). Source: Anatel (https://bit.ly/45OzIax);
  - Definition: estimating mobile coverage involves the following variables: technologies, frequencies, location of stations, height and direction of antennas, transmitter power, buildings and terrain.

- **Fix Broadband Subscription Rate** (number of accesses/100 households). Source: National Telecommunications Agency (Anatel) (https://bit.ly/45OzIax);
  - Definition: density of accesses in service associated with the provision of the Multimedia Communication Service - SCM (fixed broadband) represented by the number of accesses in service per group of 100 households.

- **Mobile Phone Subscription Rate** (number of accesses/100 inhabitants). Source: Anatel (https://bit.ly/45OzIax);
  - Definition: density of accesses in operation (active chips) associated with the provision of the Personal Mobile Service - SMP (mobile telephony) represented by the number of accesses in operation per group of 100 inhabitants.

- **Mobile Service Quality** (% of drops or congestion). Source: Anatel (https://bit.ly/4cF7lOs);
  - Definition: measures the quality of the mobile internet service, expressed by the capacity of the network in relation to meeting the contracted benchmarks or values for the volume of data transmitted per second.

HEALTH COMPONENT:

- **Consumption of ultra-processed foods** (% of adolescent and adult population surveyed). Sources: Food and Nutrition Surveillance System - Sisvan (https://sisaps.saude.gov.br/sisvan/);
  - Definition: percentage of the adolescent and adult population who answered positively to the question "do you have a habit of consuming ultra-processed foods" in relation to the total population of these age groups who took part in the survey.

- **Life expectancy** (years). Sources: Institute for Applied Economic Research (Ipea), IBGE and United Nations Development Program (UNDP) (https://bit.ly/3RXePEu);
  - Definition: average number of years of life expected for a newborn, given the existing mortality pattern, in a specific geographical area during the reference year.

- **Mortality Rates (15-50 y.o.)** (deaths/100,000 inhabitants in the age group). Sources: Datasus/Ministry of Health, using data on "deaths in the age group" (https://bit.ly/44JkF0r), and IBGE, using data on the "resident population in 2022 in the age group" (https://bit.ly/3VrvLot);
  - Definition: number of deaths from any cause for every 100,000 people in each age group.

- **Noncommunicable Chronic Diseases Mortality Rate (CNCD)** (deaths per 100,000 inhabitants, adjusted by age group). Sources: Datasus/Ministry of Health, using data on "deaths from NCDs according to ICD-10" (https://bit.ly/44JkF0r), and IBGE, using data on the "resident population in 2022 by age group" (https://bit.ly/3VrvLot);
  - Definition: rate of deaths from NCDs per 100,000 inhabitants adjusted for age groups. NCDs are groups of diseases that are characterized by having an uncertain etiology, multiple risk factors, long latency periods, prolonged course and by being associated with functional impairments and disabilities such as cerebrovascular and cardio-vascular diseases, neoplasms, obesity, diabetes, hypertension, among others.

- **Obesity Prevalence** (% of population). Source: Sisvan/Ministry of Health (https://bit.ly/sisvan);
  - Definition: population of all ages that is obese according to the Body Mass Index (BMI).

- **Suicide Rates (deaths per 100,000 inhabitants).** Sources: Datasus/Ministry of Health, using data on "deaths by suicide according to ICD-10, Chapter X-70" (https://bit.ly/44JkF0r), and IBGE, using data on the "resident population in 2022" (https://bit.ly/3VrvLot);
  - Definition: suicide mortality rate. Corresponds to the number of deaths due to intentional self-harm.

ENVIRONMENTAL QUALITY COMPONENT:

- **Urban Green Areas** (% of vegetated area over urban area). Source: Mapbiomas (https://bit.ly/3XUPSgB);
  - Definition: corresponds to the percentage of vegetation area detected by the Sentinel-Beta collection (10m resolution) in the urban centers of municipalities in relation to the total urban area of each municipality defined by Mapbiomas. Vegetation within urbanized areas refers to large clumps of vegetation, excluding, for example, urban trees or landscaped areas.

- **CO_2e per capita emissions** (t CO2 and GWP-AR5 per capita, with data subjected to logarithmic transformation). Sources: System for Estimating Emissions and Removals of Greenhouse Gases (SEEG) (https://seeg. eco. br/) and IBGE, using data on the "resident population in 2022" (https://bit. ly/3VrvLot);
  - Definition: rate of total gross emissions of CO2e with ARP5 global warming potential (CO2and GWP-ARP5) in relation to the number of inhabitants in the municipality (tons CO2and per inhabitant).

- **Fire hotspots** (number of Fire hotspots per 10,000 inhabitants). Sources: National Institute for Space Research (INPE) (https://bit.ly/4eJmVu9) and IBGE, using data on the "resident population in 2022" (https://bit.ly/3VrvLot);
  - Definition: rate of Fire hotspots in the municipality's area in relation to 10,000 inhabitants. Heat spots from the AQUA_M-T satellites (morning and afternoon).

- **IVCM - Climate Vulnerability Index - IVCM** (index 0-100). Source: Votorantim Institute (https://bit.ly/4bsYiPn);
  - Definition: The IVCM is an index that considers the most urgent climate risks that could affect most Brazilian municipalities in the coming years: flooding, waterlogging and torrents; landslides; water risk (drought); fires; reduction/unviability of agricultural sectors and an increase in climate--related health problems.

- **Primary and Secondary Vegetation Suppression** (% of area suppressed). Source: Mapbiomas (https://bit.ly/3W8QzS4);
  - Definition: rate of deforestation (primary and secondary vegetation) resulting from Mapbiomas collection 9 in relation to the total area of the municipality.

RIGHTS & VOICE COMPONENT:

- **Access to Human Rights Programs** (Categorical (0 = no program, from 1= one program to 15= all programs in the area of human rights). Source: IBGE (https://bit.ly/3RTV6W0);
  - Definition: measures the existence and quantity of municipal public policy programs aimed at human rights. Example: policies to protect women victims of domestic violence, racial equality promotion, protection and care for direct and indirect victims of violence, etc.

- **Public Policy for Minority Groups** (Categorical (0 = no program, from 1 = one program to 11= there are actions for all minorities). Source: IBGE (https://bit.ly/3RTV6W0);
  - Definition: checks whether there are municipal public policies with actions for specific groups (children and adolescents, women, the elderly, the homeless, etc.).

- **Lawsuits Clearance Rate** (% of cases disposed of in relation to the number of new cases). Source: National Council of Justice (CNJ) (https://bit.ly/4cIBBHS);
  - Definition: reflects the capacity of the Judiciary System to process at least the same number of cases files, a situation where the indicator reaches a value equal to or greater than 100% (the higher above 100%, the better). Calculated based on the ratio between the number of cases resolved and the number of new cases filed within the same period in a state court, measured separately in the 1st and 2nd instance level.

- **Response to Family Law Cases** (average time in days until the first judgment of family court cases, with data subjected to logarithmic transformation). Source: CNJ (https://bit.ly/4cIBBHS);
  - Definition: corresponds to the average number of days elapsed between the filing of a legal action and the date of the initial judgment in family court cases, considering only the cases/proceedings judged in the 12 months preceding the reference period displayed.

- **Response to Social Security Cases** (average time in days until the first judgment of social security cases, with data subjected to logarithmic transformation). Source: CNJ (https://bit.ly/4cIBBHS);
  - Definition: corresponds to the average value of the number of days elapsed between the filing of a legal action and the date of the first judgment in social security cases, considering only the cases/procedures judged in the 12 months preceding the reference period displayed.

- **Lawsuits Overload Rate** (percentage of cases disposed of). Source: CNJ (https://bit.ly/4cIBBHS);
  - Definition: congestion rate of a state court, i.e. the ratio of resolved (closed) cases and unresolved cases (either because they are new or because they are pending). The higher the rate, the more difficult it is for the court to deal with its backlog of cases. It is calculated by dividing the backlog, i.e. the number of pending cases, by the sum of this backlog and resolved cases.

FREEDOMS & CHOICE COMPONENT:

- **Access to Culture, Leisure and Sport** (Categorical (0= no structure, from 1= minimum structure to 10= all structures)). Source: IBGE (https://bit.ly/45THLD9)
  - Definition: the existence in the municipality of events and equipment (library, theater, cultural center or stadium structures, etc.) to promote culture and sports for people in the municipality.

- ▸ **Teenage Pregnancy (<19 years)** (% of live births to mothers up to the age of 19 in relation to total live births). Source: Datasus/Ministry of Health. Live births (https://bit.ly/4eQtona);
  - Definition: rate of children and adolescents who have had children in relation to the total female population aged up to 19. Mother's age: under 10, 10 to 14, 15 to 19.

- **Index of Vulnerability of Families in the Unified Registry – IVCAD** (index 0-1). Source: CadÚnico (https://bit.ly/3REp7c5).
  - Definition: The Unified Registry Family Vulnerability Index (IVCAD) is an indicator proposed to measure the vulnerabilities of families enrolled in the Unified Registry. Through 40 indicators, 6 dimensions of vulnerability are summarized. Each of the 40 indicators used represents a condition of vulnerability. Whenever a family has a vulnerability, a value of "1" is assigned; otherwise, a value of "0" is assigned. A synthetic index is calculated for each dimension, representing the proportion of "1" values among the indicators. The average of the indices for each dimension results in the IVCAD value. Its value represents the average proportion of vulnerable indicators in the 6 dimensions. This index varies between "0" and "1" and the more vulnerable the family, the closer to "1" its result will be.

- **Parks and Squares in Urban Areas** (area of squares in hectares per 10,000 inhabitants). Sources: Mapbiomas (https://bit.ly/3XUPSgB) and IBGE, using data on the "resident population in 2022" (https://bit.ly/3VrvLot);
  - Definition: corresponds to the rate of the area of urban squares and parks (in hectares) in relation to the municipality's population.

INCLUSIVE SOCIETY COMPONENT:

- **Homeless families** (number of cases of at least one homeless family member per 10,000 families registered with CadÚnico). Source: CadÚnico (https://bit.ly/4jUjt1l).
  - Definition: corresponds to the rate of registered families with at least one homeless member in relation to the total number of families registered in the CadÚnico System. A homeless family is one that, living in extreme poverty, uses public places and degraded areas as a place to live and make a living, on a temporary or permanent basis, as well as shelters for temporary overnight stays or temporary housing, as defined in Decree No. 7,053, of December 23, 2009.

- **Gender Parity in City Councils** (0 - 1 (0= parity non-existent | 1= perfect parity)). Source: TSE (https://bit.ly/3RVkkmO);
  - · Definition: parity rate of women elected to municipal councils in relation to the percentage of the population of women in each municipality.

- **Parity of Black People in City Council** (0 - 1 (0= parity non-existent| 1= perfect parity)). Source: Superior Electoral Court - TSE ((https://bit.ly/3RVkkmO);
  - Definition: parity rate of black and brown people elected to municipal councils in relation to the percentage of the black and brown population in each municipality.

- **Violence against indigenous people** (number of cases per 10,000 indigenous people, with data subjected to logarithmic transformation). Sources: National Medical Care System (Sinam)-Datasus/Ministry of Health (https://bit. ly/4cK8B2D) and IBGE, using data on the "indigenous population in 2022" (https://bit.ly/4cjyre1);
  - Definition: rate of cases of any kind of violence against indigenous peoples.

- **Violence against women** (number of cases of violence per 100,000 women, with data subjected to logarithmic transformation). Sources: Sinam-Datasus/Ministry of Health (https://bit.ly/4cK8B2D) and IBGE, using data on the "resident population of women in 2022" (https://bit.ly/3VrvLot);
  - Definition: rate of cases of domestic, sexual and other types of violence against women.

- **Violence against black people** (number of cases of violence per 100,000 black people, with data subjected to logarithmic transformation). Sources: Sinam-Datasus/Ministry of Health (https://bit.ly/4cK8B2D) and IBGE, using data on the "population by color or race in 2022" (https://bit. ly/4byjSlJ);
  - Definition: rate of the number of cases of any type of violence against black people.

ADVANCED EDUCATION COMPONENT:

- **Employed population with Tertiary Education** (number of employees over 25 years old with higher education per thousand inhabitants). Sources: Annual Social Information Report - Ministry of Labor and Employment (Rais/MTE)_ (https://bit.ly/3RVDSI5) and IBGE, using data on the "resident population in 2022" (https://bit.ly/3VrvLot);
  - Definition: rate of the number of people over the age of 25 with higher education per thousand inhabitants over the age of 25.

- **Employed Women with Tertiary Education** (number of employed women over 25 years old per thousand women). Sources: Rais/MTE (https://bit.ly/3RVDSI5) and IBGE, using data on the "resident population in 2022" (https://bit.ly/3VrvLot);
  - Definition: number of women in active employment with higher education per thousand women over 25.

- **ENEM Scores (National High School Exam)** (200 - 1,000 points). Source: Inep (https://bit.ly/3zD1LgY);
  - Definition: corresponds to the median score of the National High School Exam (Enem) of all students in the municipality who took the exam in the year of completion. The scores of students who completed all the exams were considered.

IPS BRASIL
ÍNDICE DE PROGRESSO SOCIAL

Realization:

Imazon · AMAZÔNIA 2030 · Fundación Avina · ANATTÁ PESQUISA E DESENVOLVIMENTO · CENTRO DE EMPREENDEDORISMO DA AMAZÔNIA · SOCIAL PROGRESS IMPERATIVE

Partners:

MAPBIOMAS · O MUNDO que queremos · ALEGRIA · INSTITUTO FLORESTA VIVA · geoplus · INSTITUTO IGARAPÉ a think and do tank · pm21 · Fundação Roberto Marinho

Sponsors:

Fundação itaú · VALE · skoll · Hydro · iCS · INSTITUTO ITAÚSA · Climate and Land Use Alliance · eneva