

Supplementary material

The Social Progresso Index measures human development based on indicators of health, education, sanitation, urban mobility, access to telephone technologies, child labor, culture, and political participation, as shown in Chart 1. The indicator is an adaptation of the data pertaining to the Gross Domestic Product (GDP), with a more comprehensive approach to issues that influence quality of life (of a socioenvironmental nature), measuring human development multidimensionally [21].

Chart 1: Components of the Social Progress Index (SPI) in the city of Rio de Janeiro, Brazil, 2010 to 2019.

Indicator	Sources	Year	Indicator	Sources	Year
Infant mortality rate	DATASUS	2019	Literacy	ANA	2016
Low birthweight	DATASUS	2019	Quality of basic education, primary school	IDEB	2019
Maternal mortality	DATASUS	2019	Quality of basic education, secondary school	IDEB	2019
Pediatric hospitalizations for respiratory conditions	SMS	2019	High school dropout rate	INEP	2018
Mortality from chronic noncommunicable diseases	DATASUS	2019	Mobile or hardline telephone access	IBGE	2010
Dengue incidence	DATASUS	2019	Internet access	IBGE	2010
TB and HIV mortality	DATASUS	2019	Selective solid waste collection	Comlurb	2019
Homicides by police	ISP	2019	Degradation of green areas	IPP	2019
Teenage pregnancy	DATASUS	2019	Urban mobility	ITDP	2019
Homicides of young blacks	ISP	2019	Mean commuting time	PDTU	2012
Homicide rate	ISP	2019	Political participation	TSE	2016/2018
Access to running water	IBGE	2010	Child labor	Cadunico	2018
Access to sewage disposal	IBGE	2010	Cultural access index	SMC	2017
Access to bathrooms	IBGE	2010	Violence against women	ISP	2019
Persons living in favelas without sites and services	IPP	2019	Family vulnerability	IBGE	2010
Access to electricity	IBGE	2010	Persons with university education	IBGE	2010
Overcrowded housing	IBGE	2010	Blacks and indigenous persons with university education	IBGE	2010
Muggings	ISP	2019	Enrollment in higher education	IBGE	2010

Notes: DATASUS: Information Technology Department of the Unified Health System; SMS: Rio de Janeiro Municipal Health Department; ISP: Public Security Institute; IBGE: Brazilian Institute of Geography and Statistics (census bureau); ANA: National Literacy Assessment (Ministry of Education); IDEB: Basic Education Development Index; INEP: National Institute for Studies and Research; Comlurb: Rio de Janeiro Municipal Urban Cleaning Company; ITDP: Brazilian Institute for Transportation and Development Policies; PDTU: Greater Rio de Janeiro Master Plan for Urban Transportation; TSE: Superior Electoral Court; Cadunico: Unified Social Benefits Registry; SMC: Rio de Janeiro Municipal Cultural Department.

The Social Development Index (SDI) aims to summarize situations related to households and their residents, with a focus on income and education [22].

Chart 2: Components of the Social Development Index (SDI) in the city of Rio de Janeiro, Brazil, 2010 to 2019

Indicator	Source	Year	Indicator	Source	Year
% households with running water	Population Census	2010	% illiteracy from 10 to 14 years of age	Population Census	2010
% households with adequate sewage disposal	Population Census	2010	Per capita household income in times the minimum wage	Population Census	2010
% households with adequate garbage collection	Population Census	2010	% households with per capita household income of one minimum wage or less	Population Census	2010
Number of bathrooms per resident	Population Census	2010	% households with per capita household income greater than 5 times the minimum wage	Population Census	2010

Source: Instituto Pereira Passos, 2023