Inclusive Growth Score™ Methodology v1.1

INTRO

The Inclusive Growth Score™ is a public-access, web-based service that enables users to learn about measures of inclusion and growth within census tracts across the United States. The Score is a means by which users can benchmark existing levels of inclusion and growth within census tracts, and by which they can measure whether actions, policies, and investments increased or decreased measures of inclusive growth.

The map presents an Inclusive Growth Score™ for each census tract. The Score is based on 18 metrics from multiple data sources, including census data, firmographic data from 3rd parties, and anonymized and aggregated Mastercard transaction data (see DATA SOURCES for more details). The Score ranks a given census tract in comparison to census tracts across the country, within the same state, and the same level of urbanization as measured by the USDA Urban-Rural Continuum (see BENCHMARKING for more details). The higher a census tract’s Inclusive Growth Score™, the greater the composite parts of inclusion and growth (see SCORE METHODOLOGY for more details).

SCORE METHODOLOGY

The Inclusive Growth Score™ is composed of three pillars: Place, Economy, and Community. Pillars are composed of Growth (level of change) and Inclusion (rate/distribution) metrics. The measures of Growth provide detailed views into how communities are changing over time. While measures of inclusion are static figures speaking to the accessibility of resources or community assets. For more details on which metrics classify as Growth and Inclusion, please see PILLARS / METRICS below.

The Inclusive Growth Score, Pillars, and underlying metrics are transformed into percentile ranks (0-100) relative to a user selected base (see BENCHMARKING for more details). To calculate the ranks, all census tracts are rank ordered.

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according to the metric value. The Score is calculated by taking the tract’s relative position, divided by the total number of tracts in the benchmark, and multiplied by 100. An illustrative example of the calculation –

Track 1, Metric A’s rank = 500  
Total number of tracts in Track 1’s State = 1000  
Score = 500/1000 * 100 = 50

The average score, as in the illustrative example above, is 50. Per metrics, the distribution of values varies greatly. Across the 18 metrics powering the Inclusive Growth Score, some metrics have even distributions, wide variation, and tight distribution (see HISTOGRAMS for additional context).

The Place, Economy, and Community Pillar values are the average value of the pillar’s six metrics. The average of the metric percentiles across the three pillars (Place, Economy, and Community) produces the Inclusive Growth Score. Scores are distributed equally on the map into 5 equal color bins from red (lowest score) to green (highest score). Each color bin has an equal (1/5th) number of census tracts represented.

For Inclusion metrics the Score follows the ranking calculation detailed above. For Growth metrics, the score is a weighted average of the ranking in the base year (2017) and the ranking in the recent year.

\[
\text{Growth} = \frac{2}{3} \times \text{Rank for Base Year} + \frac{1}{3} \times \left( \frac{(\text{Recent Year - Prior Year})}{\text{Prior Year}} \right)
\]

The weighting of the base year helps account for magnitudes of growth based on census tracts varying ‘starting points’ during the base year (2017). For example, census tracts with very little commerce will exhibit high magnitudes of growth (on the scale of +100%) as the starting level of commerce is so small, whereas more commerce heavy tracts will likely show slower progression. This calculation enables a measure of relative improvement, with a common anchor used for each new year of data available.
For each of the 18 metrics, there is a Score as well as the underlying data, presented in the units of the measure.

The Inclusive Growth Score is constructed to deliver a yearly release. For metrics with missing years, data is pulled from the adjacent prior year. For ACS survey metrics, multi-year aggregation is applied to normalize the survey data and scores applied to the year following the latest survey date. For Mastercard data, metrics reflect the year selected.

BENCHMARKING

Within the platform, the ‘Compare With’ functionality enables three calculations of the Score: USA, State, Urban – Rural. The Score ranks a given census tract in comparison to census tracts across the country, within the same state, and the same level of urbanization as measured by the USDA Urban-Rural Continuum.

The USDA Urban – Rural Continuum is a scale of 1 through 9 measuring the population size and metro designation of each county in the US.¹

- 1: Metro - Counties in metro areas of 1 million population or more,
- 2: Metro - Counties in metro areas of 250,000 to 1 million population,
- 3: Metro - Counties in metro areas of fewer than 250,000 population,
- 4: Nonmetro - Urban population of 20,000 or more, adjacent to a metro area
- 5: Nonmetro - Urban population of 20,000 or more, not adjacent to a metro area
- 6: Nonmetro - Urban population of 2,500 to 19,999, adjacent to a metro area
- 7: Nonmetro - Urban population of 2,500 to 19,999, not adjacent to a metro area
- 8: Nonmetro - Completely rural or less than 2,500 urban population, adjacent to a metro area

• 9: Nonmetro - Completely rural or less than 2,500 urban population, not adjacent to a metro area

Note: Puerto Rican census tracts only have the state benchmark (relative to Puerto Rico) figures for Spend Growth and Growth in Spending per Capita metrics.
DATA SOURCES

Mastercard – Mastercard is a leading global payments & technology company that connects consumers, businesses, merchants, issuers & governments around the world. The Inclusive Growth Score includes insights based on Mastercard’s anonymized and aggregated transaction and merchant location data.

Leading POI (point of interest) data providers for firmographic data – POI providers have vital information on owner diversity and commercial diversity not publicly available or present in Mastercard’s aggregated and anonymized transaction data.

TPL – The Trust for Public Land (TPL) is a U.S. nonprofit organization with a mission to "create parks and protect land for people, ensuring healthy, livable communities for generations to come."

PAD – The U.S. Geological Survey Protected Areas Dataset (PAD) is America’s official national inventory of U.S. terrestrial and marine protected areas that are dedicated to the preservation of biological diversity and to other natural, recreation and cultural uses, managed for these purposes through legal or other effective means. The Inclusive Growth Score limits PAD location that are Open Access, used to supplement the Trust for Public Land dataset.

HUD – The United States Department of Housing and Urban Development (HUD) is a Cabinet department in the Executive branch of the United States federal government. The Inclusive Growth Score uses HUD’s Labor Force Engagement Index.

ACS – The American Community Survey (ACS) is the premier source for information about America’s changing population, housing and workforce. The Inclusive Growth Score uses several data points from ACS including percentage of affordable housing and internet access.

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FFIEC – The Federal Financial Institutions Examination Council (FFIEC) is a formal U.S. government interagency body composed of five banking regulators that is "empowered to prescribe uniform principles, standards, and report forms to promote uniformity in the supervision of financial institutions". The Inclusive Growth Score leverages a metric on the change in number of business loans.
PILLARS / METRICS

PLACE
Housing, infrastructure, and the built environment

NET OCCUPANCY – Growth Metric
Percentage growth in population of renter and owner-occupied housing units
Source: ACS 5-Year, Table B25008

RESIDENTIAL REAL ESTATE VALUE – Growth Metric
Percentage growth of value of residential real estate
Source: ACS 5-Year, Table B25082

ACRES OF PARK LAND – Inclusion Metric
Percentage of designated tract land area that is park land
Source: Trust for Public Land, PAD-US

AFFORDABLE HOUSING – Inclusion Metric
Percentage of renter and owner-occupied housing units where monthly costs are lower than 30 percent of income
Source: ACS 5-Year, Table B25106

INTERNET ACCESS – Inclusion Metric
Percentage of households with an internet subscription
Source: ACS 5-Year, Table B28011

TRAVEL TIME TO WORK – Inclusion Metric
Percentage of workers with travel time to work under 35 minutes
Source: ACS 5-Year, Table B08303
ECONOMY
Business growth, jobs, and spending

NEW BUSINESSES – Growth Metric
Percentage growth of net new businesses based on anonymized and aggregated location data
Source: Mastercard

SPEND GROWTH – Growth Metric
Percentage growth of spending based on anonymized and aggregated indexed transaction data
Source: Mastercard

SMALL BUSINESS LOANS – Growth Metric
Percentage growth of the number of small business loans
Source: FFIEC

MINORITY/WOMEN OWNED BUSINESSES – Inclusion Metric
Percentage of Minority or women-owned businesses out of all businesses
Source: Commercial Data Provider, Mastercard

LABOR MARKET ENGAGEMENT INDEX – Inclusion Metric
Index representing the combined employment, labor force participation, and percentage with bachelor’s degree
Source: HUD

COMMERCIAL DIVERSITY – Inclusion Metric
Percentage of business types represented as a percentage of total possible business types
Source: POI Provider
COMMUNITY
Economic and social conditions

PERSONAL INCOME – Growth Metric
Percentage growth of per capita income
Source: ACS 5-Year, Table B19301

GROWTH IN SPENDING PER CAPITA – Growth Metric
Percentage growth of average spend per person based on anonymized and aggregated indexed transaction data
Source: Mastercard

GINI COEFFICIENT – Inclusion Metric
Gini coefficient of income inequality (lower coefficient denotes lower inequality) represented through a percentage
Source: ACS 5-Year, Table B19083

EARLY EDUCATION ENROLLMENT – Inclusion Metric
Percentage of population under the age of five enrolled in early education programs
Source: ACS 5-Year, Tables B14001, B01001

FEMALE ABOVE POVERTY – Inclusion Metric
Percentage of females living above the poverty
Source: ACS 5-Year, Table B17001

HEALTH INSURANCE COVERAGE – Inclusion Metric
Percentage of the eligible population with health insurance coverage
Source: ACS 5-Year, Table B27020
HISTOGRAMS
Per metric, the histograms represent the distribution of raw values (percent) and the distribution of rank scores (score)

PLACE: Housing, infrastructure, and the built environment

NET OCCUPANCY – Growth Metric

RESIDENTIAL REAL ESTATE VALUE – Growth Metric
ACRES OF PARK LAND – Inclusion Metric

AFFORDABLE HOUSING – Inclusion Metric

INTERNET ACCESS – Inclusion Metric
TRAVEL TIME TO WORK – Inclusion Metric

ECONOMY: Business growth, jobs, and spending

NEW BUSINESSES – Growth Metric

SPEND GROWTH – Growth Metric

Histograms not available
SMALL BUSINESS LOANS – Growth Metric

MINORITY/WOMEN OWNED BUSINESSES – Inclusion Metric

LABOR MARKET ENGAGEMENT INDEX – Inclusion Metric
COMMERCIAL DIVERSITY – Inclusion Metric

COMMUNITY: Economic and social conditions
PERSONAL INCOME – Growth Metric

GROWTH IN SPENDING PER CAPITA – Growth Metric

*Histograms not available*
GINI COEFFICIENT – Inclusion Metric

EARLY EDUCATION ENROLLMENT – Inclusion Metric

FEMALE ABOVE POVERTY – Inclusion Metric
HEALTH INSURANCE COVERAGE – Inclusion Metric

HEALTH INSURANCE COVERAGE percent 2019

HEALTH INSURANCE COVERAGE score 2019

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