NEIGHBORHOOD FINANCIAL HEALTH (NFH) INDEX: SOURCES AND METHODOLOGY

NEIGHBORHOOD FINANCIAL HEALTH (NFH) GOALS AND INDICATORS

Goal	Priority	Indicator	Definition
1. ACCESS TO AFFORDABLE, HIGH-QUALITY FINANCIAL SERVICES	Primary	Bank/Credit Union-to-Nonbank Ratio	Ratio of banks/credit unions to check cashers/pawnshops
		Bank/Credit Union Density	Number of bank and credit union branches per 10,000 residents
	Secondary	IDNYC Acceptance	Percentage of bank and credit union branches that accept IDNYC as primary ID
		Mortgage Origination by Race	Racial/ethnic mix of mortgage loans originated in the past year
		Bank/Credit Union Utilization	Percentage of residents with a bank or credit union account
	Tertiary	Affordable Products	Percentage of bank and credit union branches offering checking accounts that meet the requirements of New York's basic banking law
		Mobile Banking Utilization	Percentage of residents who used mobile banking in the past year
2. ACCESS TO AFFORDABLE, HIGH-QUALITY GOODS AND SERVICES	Primary	Access to Groceries	Supermarket square footage per 100 residents
	Secondary	Child Care Capacity	Percentage of 3- and 4-year-olds enrolled in early education programs
		Health Care Access	Percentage of adults who did not receive needed medical care in the past year
	Tertiary	Cost of Transportation	Average (mean) amount of money spent monthly on transportation per household
		Cost of Transportation	Percentage of median household income spent on transportation
		Journey to Work Time	Average (mean) travel time to work in minutes
3. ACCESS TO QUALITY JOBS AND INCOME SUPPORTS	Primary	Job Training and Placement Support	Number of job training and placement programs per 10,000 unemployed residents
		Jobs with Health Insurance	Percentage of the population that has private health insurance through a current or former employer or union
	Secondary	Labor Force Participation	Percentage of noninstitutionalized residents age 16 or older who are employed or looking for work
		Job Quality	Median income of neighborhood residents (with 5 or more years housing tenure)
		Educational Attainment	Percentage of high school students who graduate on time (within 4 years)
	Tertiary	Public Benefits Utilization	Percentage of people eligible for SNAP[1] who receive the benefit
		Tax Credit Utilization	Percentage of eligible Tax Units claiming EITC[2]
		Adults with High School Diploma	Percentage of adults with a high school degree

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[1] Supplemental Nutrition Assistance Program (SNAP).
[2] Earned Income Tax Credit (EITC).

Goal	Priority	Indicator	Definition
4. STABLE HOUSING AND CAPACITY TO LIMIT FINANCIAL SHOCKS	Primary	Ability to Borrow at Low Cost	Percentage of residents with a prime credit score
		Housing Stability	Percentage of rental housing units that are under regulatory protection
	Secondary	Health Insurance Access	Percentage of residents with health insurance
		Rent Burden	Percentage of households that pay more than 30% of income on rent
		Severe Rent Burden	Percentage of households that pay more than 50% of income on rent
	Tertiary	Home Foreclosures	Number of pre-foreclosure notices issued per 1,000 1-4 family homes and condominium units
		Financial Counseling	Full-time equivalent counselors per 100,000 residents aged 18-64
5. OPPORTUNITIES TO BUILD ASSETS AND PLAN FOR THE FUTURE	Primary	Homeownership Opportunity	Percentage of housing units that are owner-occupied
		Neighborhood Tenure	Percentage of residents who have lived in their homes for 10 or more years
	Secondary	Minority and Women-Owned Business Enterprise (M/WBE)	Number of NYC certified M/WBEs per 100,000 residents
		Retirement Security	Median income-to-poverty line ratio of residents aged 65 and older
		Community Efficacy	Number of community and public institutions per 10,000 residents
	Tertiary	Small Business Employment Opportunity	Percentage of jobs in small businesses (less than 20 employees)
		Participatory Budgeting	Percentage of eligible residents casting a vote in most recent participatory budgeting cycle

DATA SOURCES FOR NEIGHBORHOOD FINANCIAL HEALTH (NFH) INDICATORS

GOAL 1: ACCESS TO AFFORDABLE, HIGH-QUALITY FINANCIAL SERVICES

Bank/Credit Union-to-Nonbank Ratio
Bank branch data was retrieved from the Federal Deposit Insurance Corporation's Summary of Deposits, June 30, 2018.

Check casher locations were retrieved from the New York State Department of Financial Services, November 2018.

Pawnshop locations were retrieved from NYC Open Data, "Legally Operating Businesses" table, March 2019.

Credit union branch data was retrieved from National Credit Union Administration, November 2018.

Bank/Credit Union Density
Bank branch data was retrieved from the Federal Deposit Insurance Corporation's Summary of Deposits, June 30, 2018.

Credit union branch data was retrieved from National Credit Union Administration, November 2018.

Population data was retrieved from U.S. Census American Community Survey 2012-2016 5-year Estimates via the American Fact Finder.

IDNYC Acceptance
Bank and credit union acceptance information was retrieved from the NYC Mayor's Office of Immigrant Affairs, March 2019.

Mortgage Origination by Race
Home Mortgage Disclosure Act, 2017, Consumer Financial Protection Bureau.

Bank/Credit Union Utilization
Urban Institute, "Where Are the Unbanked and Under-banked in New York City", Caroline Ratcliffe, Signe-Mary McKernan, Emma Kalish, and Steven Martin (September 2015).

Affordable Products
Affordable product data at bank branches derived from banks offering accounts that meet NY Basic Banking requirements in New York City Comptroller, "Take It to the Bank: A New Yorker's Guide to Affordable Checking Options." (2015).

Affordable product data at credit unions based on desk research and phone surveys of New York City credit unions performed by NYC Department of Consumer and Worker Protection Office of Financial Empowerment (OFE) staff in 2018.

NY Basic Banking product requirements can be found at:
https://www.dfs.ny.gov/consumers/banking_money/basic_bank_accounts

Mobile Banking Utilization
Retrieved from ESRI (Environmental Systems Research Institute) Finances Market Potential report, 2018.

GOAL 2: ACCESS TO AFFORDABLE, HIGH-QUALITY GOODS AND SERVICES

Access to Groceries
Data on supermarket square footage provided by the NYC Department of City Planning and the NYC Mayor's Office of Food Policy.

Population data retrieved from U.S. Census American Community Survey 2012-2016 5-year Estimates via the American Fact Finder.

Child Care Capacity
Derived from Citizens Committee for Children of New York: Status of NYC Children Early Education Enrollment, 2017.

Health Care Access
Data was retrieved from NYC Department of Health and Mental Hygiene's NYC Community Health Profiles, 2018.

Cost of Transportation
Transportation expenditure estimate and median household income are derived from ESRI's (Environmental Systems Research Institute) Household Budget Expenditures report, 2018.

Journey to Work Time
U.S. Census American Community Survey 2012-2016 5-year Estimates via NYC Planning Population FactFinder.

GOAL 3: ACCESS TO QUALITY JOBS AND INCOME SUPPORTS

Job Training and Placement Support
Job training and placement sites derived from three data sources:

> NYC Department of Small Business Services Workforce1 Centers, September 2018.
> NYC Employment and Training Coalition members provided in September 2018.
> NYC Open Data "NYCHA Resident Jobs Programs and Training" data set retrieved September 2018.

Unemployment data retrieved from U.S. Census American Community Survey 2012-2016 5-year Estimates via the American Fact Finder.

Jobs with Health Insurance
U.S. Census Public Use Microdata Sample for individuals, 2012-2016 5-year Estimates.

Labor Force Participation
U.S. Census Public Use Microdata Sample for individuals, 2012-2016 5-year Estimates.

Job Quality
U.S. Census Public Use Microdata Sample for individuals, 2012-2016 5-year Estimates.

Educational Attainment
Retrieved from NYC Department of Education 2016-2017 Graduation Outcomes for the 2013 cohort via NYC Open Data.

Public Benefits Utilization

Civis Analytics estimates for the Robin Hood Foundation of the EITC and SNAP eligible populations at the Public Use Microdata Area (PUMA) level for NYC. Report published July 15, 2016 using 2013 American Community Survey data for EITC and 2014 American Community Survey data for SNAP. Special thanks to the Robin Hood Foundation for their support with this data.

Tax Credit Utilization

Civis Analytics estimates for the Robin Hood Foundation of the EITC and SNAP eligible populations at the Public Use Microdata Area (PUMA) level for NYC. Report published July 15, 2016 using 2013 American Community Survey data for EITC and 2014 American Community Survey data for SNAP. Special thanks to the Robin Hood Foundation for their support with this data.

Adults with High School Diploma

U.S. Census American Community Survey 2012-2016 5-year Estimates via NYC Planning Population FactFinder.

GOAL 4: STABLE HOUSING AND CAPACITY TO LIMIT FINANCIAL SHOCKS

Ability to Borrow at Low Cost

Data from 2017 purchased by OFE from Urban Institute, derived from Experian.

Housing Stability

Microdata from New York City 2017 Housing and Vacancy Survey.

Health Insurance Access

U.S. Census American Community Survey 2012-2016 5-year Estimates via NYC Planning Population FactFinder.

Rent Burden and Severe Rent Burden

U.S. Census American Community Survey 2012-2016 5-year Estimates via NYC Planning Population FactFinder.

Home Foreclosures

Data from NYU Furman Center – CoreData.nyc 2017.

Financial Counseling

Based on OFE analysis of all free financial counseling and coaching provided by nonprofit and government organizations available in each community district in 2018.

Population numbers retrieved from U.S. Census American Community Survey 2012-2015 5-year Estimates via the American Fact Finder.

GOAL 5: OPPORTUNITIES TO BUILD ASSETS AND PLAN FOR THE FUTURE

Homeownership Opportunity

U.S. Census American Community Survey 2012-2016 5-year Estimates via NYC Planning Population FactFinder.

Neighborhood Tenure

U.S. Census American Community Survey 2012-2016 5-year Estimates via NYC Planning Population FactFinder.

Minority and Women-Owned Business Enterprise
Certified Minority- and Women-owned Business Enterprises (M/WBEs) retrieved from NYC Open Data, September 2018.

Population data pulled from U.S. Census American Community Survey 2012-2016 5-year Estimates via the American Fact Finder.

Retirement Security
U.S. Census Public Use Microdata Sample for individuals, 2012-2016 5-year Estimates.

Community Efficacy
OFE analysis of community and public institutions data derived from National Center for Charitable Statistics IRS Business Master File of Tax-Exempt Entities for August 2016, using National Taxonomy of Exempt Entities to determine community-efficacy related institutions.

Population data pulled from U.S. Census American Community Survey 2012-2016 5-year Estimates via the American Fact Finder.

Small Business Employment Opportunity
Derived from U.S. Census Bureau's Longitudinal Employer-Household Dynamics Origin-Destination Employment Statistics Workplace Area Characteristics, 2015.

Participatory Budgeting
Participatory Budgeting vote counts for the 6th cycle of voting (2016-2017) courtesy of the New York City Council.

Population data pulled from U.S. Census American Community Survey 2015 5-year Estimates via the American Fact Finder.

METHODOLOGY FOR NEIGHBORHOOD FINANCIAL HEALTH (NFH) INDEX

INDEXING THE FIVE GOALS FOR FINANCIALLY HEALTHY NEIGHBORHOODS

The intent of the Neighborhood Financial Health Indicators is to provide a holistic perspective on the financial health of each community district that is more useful for diagnostic and prescriptive purposes than a narrow focus on several independent data points. The NYC Department of Consumer and Worker Protection Office of Financial Empowerment (OFE) considers the relationships between indicators and goals within a given community district and between community districts to be as important as the values of the indicators themselves in understanding the financial health of neighborhoods.

To render relationships, patterns, and trends more apparent, OFE synthesized the indicators through a ranking and indexing system. As with any method for summarizing information, OFE's ranking and indexing system inevitably smooths over some distinctions within the data while emphasizing others. OFE strove to reduce as much as possible any of this distortion by testing several ranking and indexing systems. OFE ultimately decided on an indexing methodology that relies on z-scoring (a measure of a given value's relative distance from the mean within a given data set) to normalize indicator values and compare across neighborhoods.

The bullets below describe in detail how OFE assigned its indices and ranks for each indicator and goal.

- For each indicator, the value of the indicator for each community district is normalized by assigning a z-score according to this formula: $Z_{CD, I} = (X_{CD, I} - \mu_I) / \delta_I$, where:

  - $Z_{CD, I}$ is the z-score for community district CD for indicator I
  - $X_{CD, I}$ is the value of indicator I for community district CD
  - μ_I is the mean value for indicator I
  - δ_I is the standard deviation for indicator I

- To produce a goal score for each community district, the z-scores of each indicator associated with the goal in question are summed together for each community district.

- To produce an index score for a given goal, the goal score of each community district is evaluated according to this formula: $IS_{CD, G} = [(X_{CD, G} - min_G) / (max_G - min_G)]*10$, where:

  - $IS_{CD, G}$ is the index score for community district CD for goal G
  - $X_{CD, G}$ is the goal score for community district CD for goal G
  - min_G is the minimum goal score of all community districts for goal G
 - max_G is the maximum goal score of all community districts for goal G

  This method is a variation on "min-max" normalization and returns a range of index scores from 0 to 10.

- For each indicator, community districts are ranked according to standard competition ranking, such that the most desirable indicator value is ranked first and the least desirable ranked last. For some indicators, the most desirable value corresponds to the highest value. For others, it corresponds to the lowest value.

- For each goal, community districts are ranked according to standard competition ranking by their respective goal scores, such that the community district with the highest goal score is ranked first and the one with the lowest is ranked last.

- Rankings are not considered in any of the scoring or indexing calculations; they are produced only to give a quick reference for where a given community district falls relative to other community districts for a given indicator or goal.

Neighborhood Financial Health (NFH) Index Example: Brooklyn Community District 3
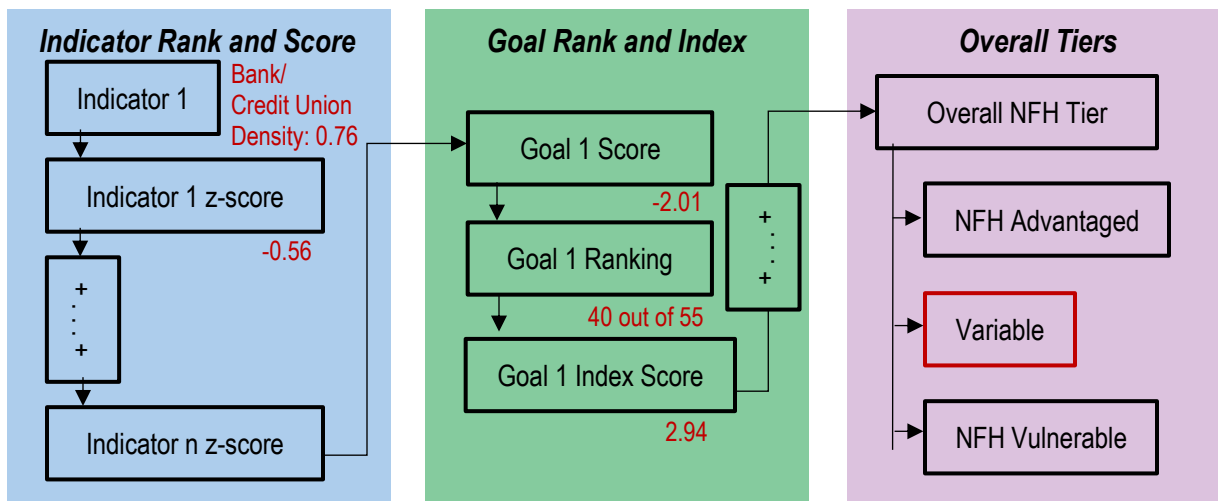
MAPPING THE NEIGHBORHOOD FINANCIAL HEALTH INDEXES

On the Neighborhood Financial Health (NFH) Index Map, each map of the five different goals for financially healthy neighborhoods divides the neighborhoods by terciles—top third, middle third, bottom third—of NFH Index scores.

The overall NFH Advantages and Vulnerabilities map displays those neighborhoods that:

- rank in the top third of scores for at least four of five NFH goals (NFH Advantaged neighborhoods);
- rank in the bottom third of scores for at least four of five NFH goals (NFH Vulnerable neighborhoods);
- do not meet either criterion (Variable neighborhoods).