

Economic Hardship Index

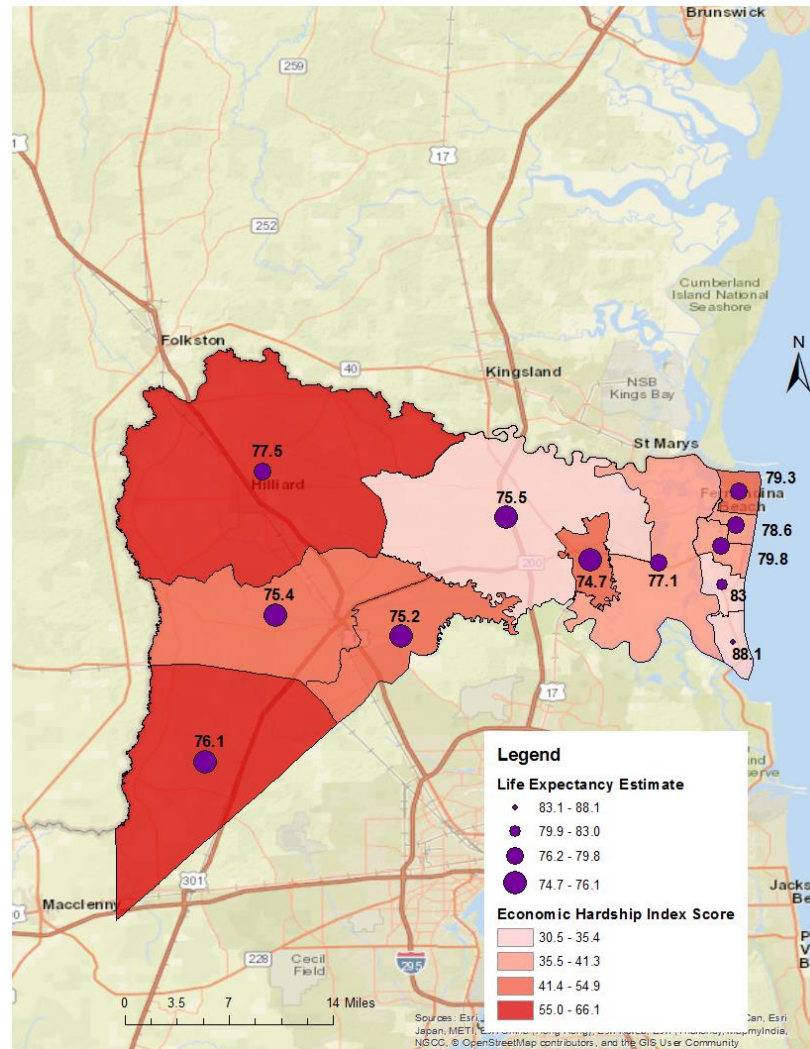
EHI

EHI Approach

- ▶ The EHI score is the average of the following six variables that have been standardized on a scale from 0 to 100:
 - ▶ Unemployment
 - ▶ Dependency
 - ▶ Education
 - ▶ Income
 - ▶ Crowded housing
 - ▶ Poverty
- ▶ Data represent several aspects SDOHs and are available from American Community Survey

Life Expectancy and EHI

Nassau County



American FactFinder

The screenshot displays the American FactFinder web application. The browser address bar shows the URL: <https://factfinder.census.gov/faces/nav/jsf/pages/searchresults.xhtml?refresh=t>. The page header includes the United States Census Bureau logo and navigation links: MAIN, COMMUNITY FACTS, GUIDED SEARCH, ADVANCED SEARCH, and DOWNLOAD CENTER. A search bar at the top right contains the text "KANSAS" and a magnifying glass icon. Below the header, a blue banner reads: "Search - Use the options on the left (topics, geographies, ...) to narrow your search results".

On the left side, under "Your Selections", there are four categories: "Topics (age, income, year, dataset, ...)", "Geographies (states, counties, places, ...)", "Race and Ethnic Groups (race, ancestry, tribe)", and "Industry Codes (NAICS industry, ...)". A red arrow points to the "Geographies" category. Below these categories, a section titled "Search using the options below:" lists the same four categories with expandable arrows.

The main content area shows search results: "Search Results: 1-25 of 248 tables and other products match 'Your Selections'". A "per page: 25" dropdown is visible. Below this, a "Refine your search results:" section includes input fields for "topic or table name" and "state, county or place (optional)", a "GO" button, and radio buttons for "topics", "race/ancestry", "industries", and "occupations".

Below the refinement section, a "Selected:" area shows a list of items with checkboxes. A "download selected items" button is present. To the right of the list, a "Show results from:" dropdown is set to "All available years".

The main table displays search results with columns: ID, Table, File or Document Title, Dataset, and About. The table lists 25 results, all from the "2013 American Housing Survey". The first few rows are:

ID	Table, File or Document Title	Dataset	About
C-00-AH	Seasonal and Vacant Characteristics - All Housing Units (NATIONAL)	2013 American Housing Survey	?
C-00-AH-M	Seasonal and Vacant Characteristics - All Housing Units (SELECTED METROPOLITAN AREAS)	2013 American Housing Survey	?
C-01-AH	General Housing Data - All Housing Units (NATIONAL)	2013 American Housing Survey	?
C-01-AH-M	General Housing Data - All Housing Units (SELECTED METROPOLITAN AREAS)	2013 American Housing Survey	?
C-01-AO	General Housing Data - All Occupied Units (NATIONAL)	2013 American Housing Survey	?

At the bottom of the page, a JavaScript alert message is visible: "javascript:openBatchDownload(batchDownloadConfirmation)".

Search - Use the options on the left (topics, geographies, ...) to narrow your search results

Your Selections

Search using...

Program:
American Housing Survey

clear all selections and
start a new search

load search | save search

Search using the options below:

Topics

(age, income, year, dataset, ...)

Geographies

(states, counties, places, ...)

Race and Ethnic Groups

(race, ancestry, tribe)

Industry Codes

(NAICS industry, ...)

EEO Occupation Codes

(executives, analysts, ...)

Search Results: 1-25 of 248 tables and other products match "Your Selections"

Select Geographies

CLOSE X

List

Name

Address

Map

Select geographies to add to Your Selections

Select from: ☒ most requested geographic types ☐ all geographic types

Select a geographic type:

-- select a geographic type --

Didn't find your geographic type? Click the 'all geographic types' radio button above, or try the Name, Address or Map geography search options instead.

Search - Use the options on the left (topics, geographies, ...) to narrow your search results

Your Selections

Search using...

Program:
American Housing Survey

clear all selections and
start a new search

load search | save search

Search using the options below:

Topics

(age, income, year, dataset, ...)

Geographies

(states, counties, places, ...)

Race and Ethnic Groups

(race, ancestry, tribe)

Industry Codes

(NAICS industry, ...)

EEO Occupation Codes

(executives, analysts, ...)

Search Results: 1-25 of 248 tables and other products match 'Your Selections'

Select Geographies

List Name Address Map

Enter a geography name or use the Geography Filter Options below:

Shelby County Tennessee

GO

Your Geography Filters

'Your Geography Filters' is empty

Geography Filter Options

Geographic Type

Nation (1)

American Housing Survey Area (54)

Summary Level

Include in results:

- ☒ All geographies
- ☐ Individual geographies
- ☐ Groups of geographies

☐ Show Geographic Components
(e.g., urban, rural)

Search using FIPS code:

Select geographies to add to Your Selections

Select from:

☒ most requested geographic types ☐ all geographic types ☐ individual blocks

Geography Results: 1-25 of 55

per page: 25

Selected: Add Check All Clear All Reset Sort

Geography Name	Geography Type	About
☐ United States	United States	i
☐ Anaheim-Santa Ana, CA AHS Area	American Housing Survey Area	i
☐ Atlanta-Sandy Springs-Marietta, GA AHS Area	American Housing Survey Area	i
☐ Austin-Round Rock, TX AHS Area	American Housing Survey Area	i
☐ Baltimore, MD AHS Area	American Housing Survey Area	i
☐ Birmingham-Hoover, AL AHS Area	American Housing Survey Area	i
☐ Boston, MA AHS Area	American Housing Survey Area	i

Search - Use the options on the left (topics, geographies, ...) to narrow your search results

Your Selections

Search using...

Program:
American Community Survey

[clear all selections and start a new search](#)

[load search](#) | [save search](#)

Search using the options below:

Topics

(age, income, year, dataset, ...)

Geographies

(states, counties, places, ...)

Race and Ethnic Groups

(race, ancestry, tribe)

Industry Codes

(NAICS industry, ...)

EEO Occupation Codes

(executives, analysts, ...)

Search Results: 1-25 of 70,307 tables and other products match 'Your Selections'

Select Geographies

List Name Address Map

Enter a geography name or use the Geography Filter Options below:

GO

Your Geography Filters

Search:

Shelby County, Tennessee

[clear all filters](#)

Geography Filter Options

Geographic Type

- County (1)
- School District (3)
- City or Town (1)
- Township/Census County Division (14)
- Census Tract (273)
- Block Group (1)
- ZIP Code/Zip Code Tabulation Area (1)
- Summary Level
- Within County
- Within Congressional District
- Within School District
- Type of County

Include in results:

- ☒ All geographies
- ☐ Individual geographies
- ☐ Groups of geographies

☐ Show Geographic Components

Select geographies to add to Your Selections

Select from:

- ☒ most requested geographic types
- ☐ all geographic types
- ☐ individual blocks

Geography Results: 1-25 of 294

per page: 25

Selected: [Add](#) [Check All](#) [Clear All](#) [Reset Sort](#)

Geography Name	Geography Type	About
☐ Shelby County, Tennessee	County	i
☐ All Places fully within/partially within Shelby County, Tennessee	Place within State	
☐ All County Subdivisions within Shelby County, Tennessee	County Subdivision	
☐ District 1, Shelby County, Tennessee	County Subdivision	i
☐ District 2, Shelby County, Tennessee	County Subdivision	i
☐ District 3, Shelby County, Tennessee	County Subdivision	i
☐ District 4, Shelby County, Tennessee	County Subdivision	i
☐ District 5, Shelby County, Tennessee	County Subdivision	i
☐ District 6, Shelby County, Tennessee	County Subdivision	i
☐ District 7, Shelby County, Tennessee	County Subdivision	i
☐ District 8, Shelby County, Tennessee	County Subdivision	i
☐ District 9, Shelby County, Tennessee	County Subdivision	i
☐ District 10, Shelby County, Tennessee	County Subdivision	i

Search - Use the options on the left (topics, geographies, ...) to narrow your search results

Your Selections

Search using...

Program:
American Community Survey

[clear all selections and start a new search](#)

[load search](#) | [save search](#)

Search using the options below:

Topics

(age, income, year, dataset, ...)

Geographies

(states, counties, places, ...)

Race and Ethnic Groups

(race, ancestry, tribe)

Industry Codes

(NAICS industry, ...)

EEO Occupation Codes

(executives, analysts, ...)

Search Results: 1-25 of 70,307 tables and other products match "Your Selections"

Select Geographies

[CLOSE](#)

List

Name

Address

Map

Enter a geography name or use the Geography Filter Options below:

GO



Your Geography Filters

Search:

Shelby County, Tennessee

Geographic Type:

ZIP Code/ZCTA

[clear all filters](#)

Geography Filter Options

No filters are available

Include in results:

☒ All geographies

☐ Individual geographies

☐ Groups of geographies

☐ Show Geographic Components
(e.g., urban, rural)

Search using FIPS code:

Select geographies to add to Your Selections

Select from:

☒ most requested geographic types ☐ all geographic types ☐ individual blocks

Geography Results: 1-1 of 1

per page: 25

1 Selected: [Add](#) [Check All](#) [Clear All](#) [Reset Sort](#)

1

	Geography Name	Geography Type	About
☒	5-Digit ZIP Code Tabulation Areas fully within/partially within Shelby County, Tennessee	5-Digit ZCTA	

1 Selected: [Add](#) [Check All](#) [Clear All](#) [Reset Sort](#)

1

Search - Use the options on the left (topics, geographies, ...) to narrow your search results

Your Selections

Search using...

Program:
American Community Survey

clear all selections and
start a new search

load search | save search

Search using the options below:

Topics

(age, income, year, dataset, ...)

Geographies

(states, counties, places, ...)

Race and Ethnic Groups

(race, ancestry, tribe)

Industry Codes

(NAICS industry, ...)

EEO Occupation Codes

(executives, analysts, ...)

Search Results: 1-25 of 70,307 tables and other products match "Your Selections"

Select Geographies

CLOSE X

List Name Address Map

Enter a geography name or use the Geography Filter Options below:

GO ?

Your Geography Filters

Search:
Shelby County, Tennessee

Geographic Type:
ZIP Code/ZCTA

clear all filters

Geography Filter Options

No filters are available

Include in results:

- ☒ All geographies
- ☐ Individual geographies
- ☐ Groups of geographies

☐ Show Geographic Components
(e.g., urban, rural)

Search using FIPS code:

Select geographies to add to Your Selections

Select from:

☒ most requested geographic types ☐ all geographic types ☐ individual blocks

Geography Results: 1-1 of 1

per page: 25

1 Selected: Add Check All Clear All Reset Sort

Geography Name	Geography Type	About
☒ All 5-Digit ZIP Code Tabulation Areas fully within/partially within Shelby County, Tennessee	5-Digit ZCTA	

1 Selected: Add Check All Clear All Reset Sort

Search - Use the options on the left (topics, geographies, ...) to narrow your search results

Your Selections

Search using...

Program:
American Community Survey

[clear all selections and start a new search](#)

[load search](#) | [save search](#)

Search using the options below:

Topics

(age, income, year, dataset, ...)

Geographies

(states, counties, places, ...)

Race and Ethnic Groups

(race, ancestry, tribe)

Industry Codes

(NAICS industry, ...)

EEO Occupation Codes

(executives, analysts, ...)

Search Results: 1-25 of 70,307 tables and other products match "Your Selections"

Select Geographies

[CLOSE](#)

List Name Address Map

Enter a geography name or use the Geography Filter Options below:

GO



Your Geography Filters

Search:
Shelby County, Tennessee

Geographic Type:
ZIP Code/ZCTA

[clear all filters](#)

Geography Filter Options

No filters are available

Include in results:

- ☒ All geographies
- ☐ Individual geographies
- ☐ Groups of geographies

☐ Show Geographic Components
(e.g., urban, rural)

Search using FIPS code:

Select geographies to add to Your Selections

Select from:

☒ most requested geographic types ☐ all geographic types ☐ individual blocks

Geography Results: 1-1 of 1

per page: 25

1 Selected: [Add](#) [Check All](#) [Clear All](#) [Reset Sort](#)

1

Geography Name	Geography Type	About
☒ All 5-Digit ZIP Code Tabulation Areas fully within/partially within Shelby County, Tennessee	5-Digit ZCTA	

1 Selected: [Add](#) [Check All](#) [Clear All](#) [Reset Sort](#)

1

Secure | <https://factfinder.census.gov/faces/nav/jsf/pages/searchresults.xhtml?refresh=t#none>

MAIN COMMUNITY FACTS GUIDED SEARCH **ADVANCED SEARCH** DOWNLOAD CENTER

Search - Use the options on the left (topics, geographies, ...) to narrow your search results

Your Selections

Search using...

Search: unemployment ✕

Program: American Community Survey ✕

5-Digit ZCTA

All 5-Digit ZIP Code Tabulation Areas fully within/partially within Shelby County, Tennessee ✕

[clear all selections and start a new search](#)

[load search](#) | [save search](#)

Search Results: 1-14 of 14 tables and other products match 'Your Selections' per page: 25 ▼

Refine your search results: ?

☒ topics ☐ race/ancestry ☐ industries ☐ occupations

Selected: ?

★ - Suggested search results for *unemployment* Show results from: All available years ▼ All available programs ▼

ID	Table, File or Document Title	Dataset	About
S2101	★ VETERAN STATUS	2016 ACS 5-year estimates	i

Calculating EHI

► $X = ((Y - Y_{\min}) / (Y_{\max} - Y_{\min})) * 100$

Where: X = standardized value of component variable (for example, unemployment rate) for each area to be computed.

Y = unstandardized value of component variable for each area

Y_{min} = the minimum value for Y across all area

Y_{max} = the maximum value for Y across all area

► **For example:**

Zip Code A has unemployment rate of 35%

Minimum unemployment rate across all Zip Codes is 5%

Maximum unemployment rate across all Zip Codes is 70%

Hardship Index (HI) for Unemployment (X) = $((35 - 5) / (70 - 5)) * 100$

EHI Income

▶ $X = ((Y - Y_{\max}) / (Y_{\min} - Y_{\max})) * 100$

▶ **For example**

Zip Code A has average income of \$40,000

Minimum income across all Zip Codes \$15,000

Maximum income across all Zip Codes \$100,000

EHI for income (X) = $((40,000 - 100,000) / (15,000 - 100,000)) * 100$

Calculating in Excel

► $\text{function}(x) = (x - \min(x)) / (\max(x) - \min(x)) * 100$

Example for Range of 398 variables

$\text{=(A2-MIN(A\$2:A\$398))/(MAX(A\$2:A\$398)-MIN(A\$2:A\$398))*100}$

Income: Example for Range of 398 variables

$\text{=(A2-MAX(A\$2:A\$398))/(MIN(A\$2:A\$398)-MAX(A\$2:A\$398))*100}$

Final EHI Score

- ▶ Average of the standardized ratios of all six component variables
- ▶ Higher value indicating higher hardship