

# Social Determinants of Health

# OBJECTIVES

1. Understand the definition of Social Determinants of Health.
2. Be able to state the Five-Domain Model of Social Determinants of Health.
3. Be able to state at least one (1) key issue of each of the domains.
4. Be able to state at least 3 resources available to address an identified area of need.

# **Social Determinants of Health**

Conditions in the environments in which people are born, live, learn, work, play, worship, and age that affect a wide range of health, functioning, and quality of life outcomes and risk.



# ECONOMIC STABILITY

- Employment
- Food Insecurity
- Housing Instability
- Poverty

# Economic Instability

## Employment

- Employment is directly correlated with a person's health, when the rate of unemployment increases, illness and premature death increases as well.
- Unemployed adults are most likely to delay or not receive needed medical care and prescriptions compared with employed adults.

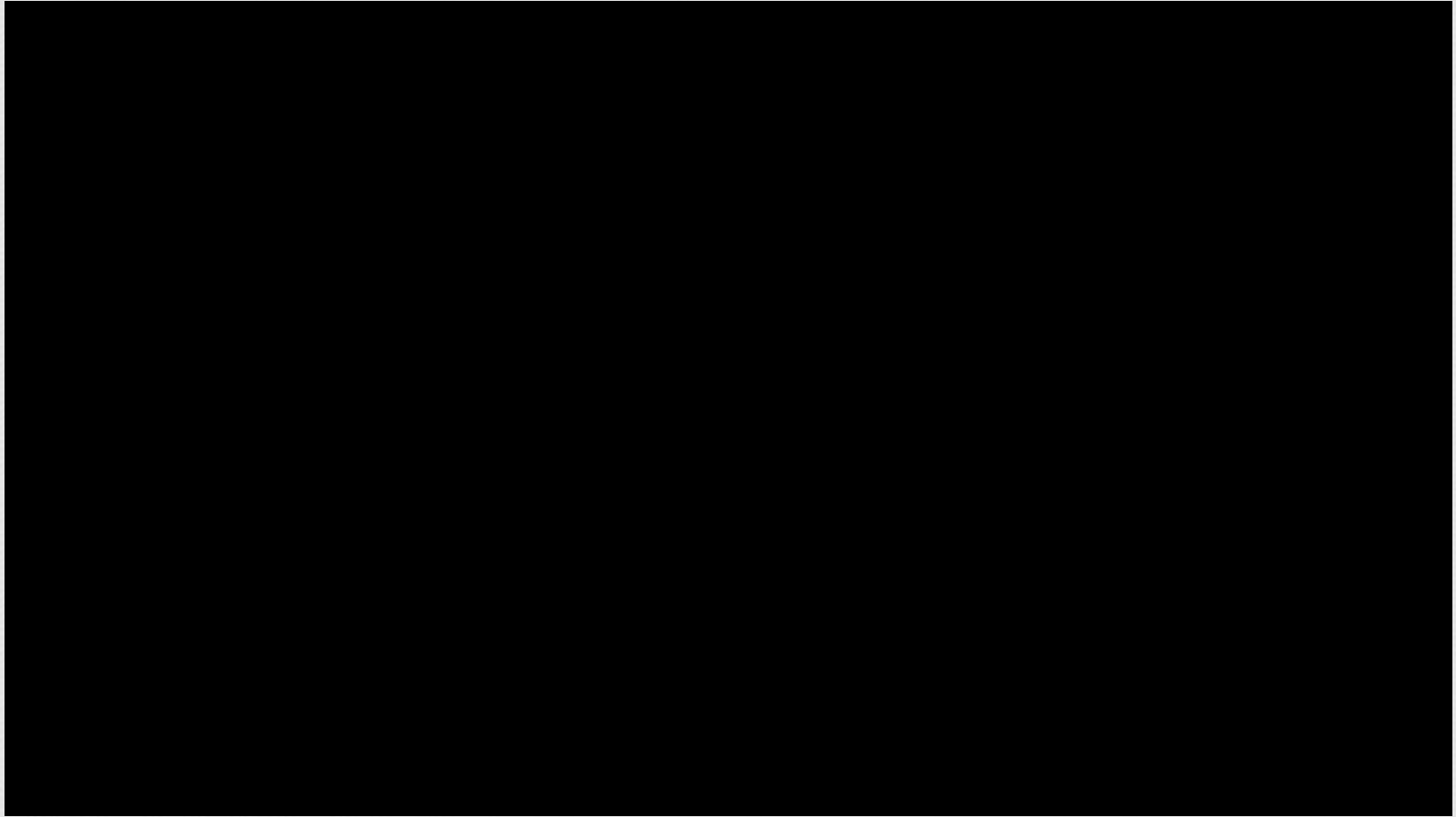


# Economic Instability

## Food Insecurity

The U.S. Department of Agriculture defines food insecurity as a lack of consistent access to enough food for an active, healthy life.

# Economic Instability Food Insecurity





# Economic Instability

## Housing Instability

- Lack of affordable options.
- Frequent moves due to lack of money or unsafe living conditions.
- Evictions.
- Homelessness.
- Staying with family or friends.
- Lack of privacy/Overcrowding.

# Economic Instability Poverty

## 2018 POVERTY GUIDELINES FOR THE 48 CONTIGUOUS STATES AND THE DISTRICT OF COLUMBIA

PERSONS IN FAMILY/HOUSEHOLD	POVERTY GUIDELINE
For families/households with more than 8 persons, add \$4,320 for each additional person.	
1	\$12,140
2	\$16,460
3	\$20,780
4	\$25,100
5	\$29,420
6	\$33,740
7	\$38,060
8	\$42,380

U.S Department of Health and Human Services January 2018

# Education

- Early Childhood Education and Development
- Language and Literacy
- High School Graduation
- Enrollment in Higher Education

# SOCIAL DETERMINANTS

## FACTORS THAT INFLUENCE YOUR HEALTH

**EDUCATION** Education and health are linked. People with better education are healthier. And with more education comes longer lives. Education is connected to:

### OPPORTUNITY



### BEHAVIOR

Education is linked to healthy behaviors. 21.7% of adults with high school diplomas smoke, vs. 5.4% of adults who also have graduate degrees.



### LIFE EXPECTANCY



### INCOME

More education means higher incomes.

Every additional year of schooling leads to an 11% increase in income.



### LITERACY



### EMPLOYMENT



Education means more employment.

People ages 25 and over who lack high school degrees have an 8% unemployment rate, vs. a 2.8% rate among people with bachelor's degrees.

### GRADUATION



Education means a longer life.

People who graduate from college live at least 5 years longer than people who don't finish high school.

The **NATION'S HEALTH**

A PUBLICATION OF THE AMERICAN PUBLIC HEALTH ASSOCIATION

[www.thenationshealth.org/sdoh](http://www.thenationshealth.org/sdoh)

# Health and Health Care

- Access to Health Care
- Access to Primary Care
- Health Literacy



# Neighborhood and Built Environment

- Access to Foods that Support Healthy Eating Patterns
- Quality of Housing
- Crime and Violence
- Environmental Conditions

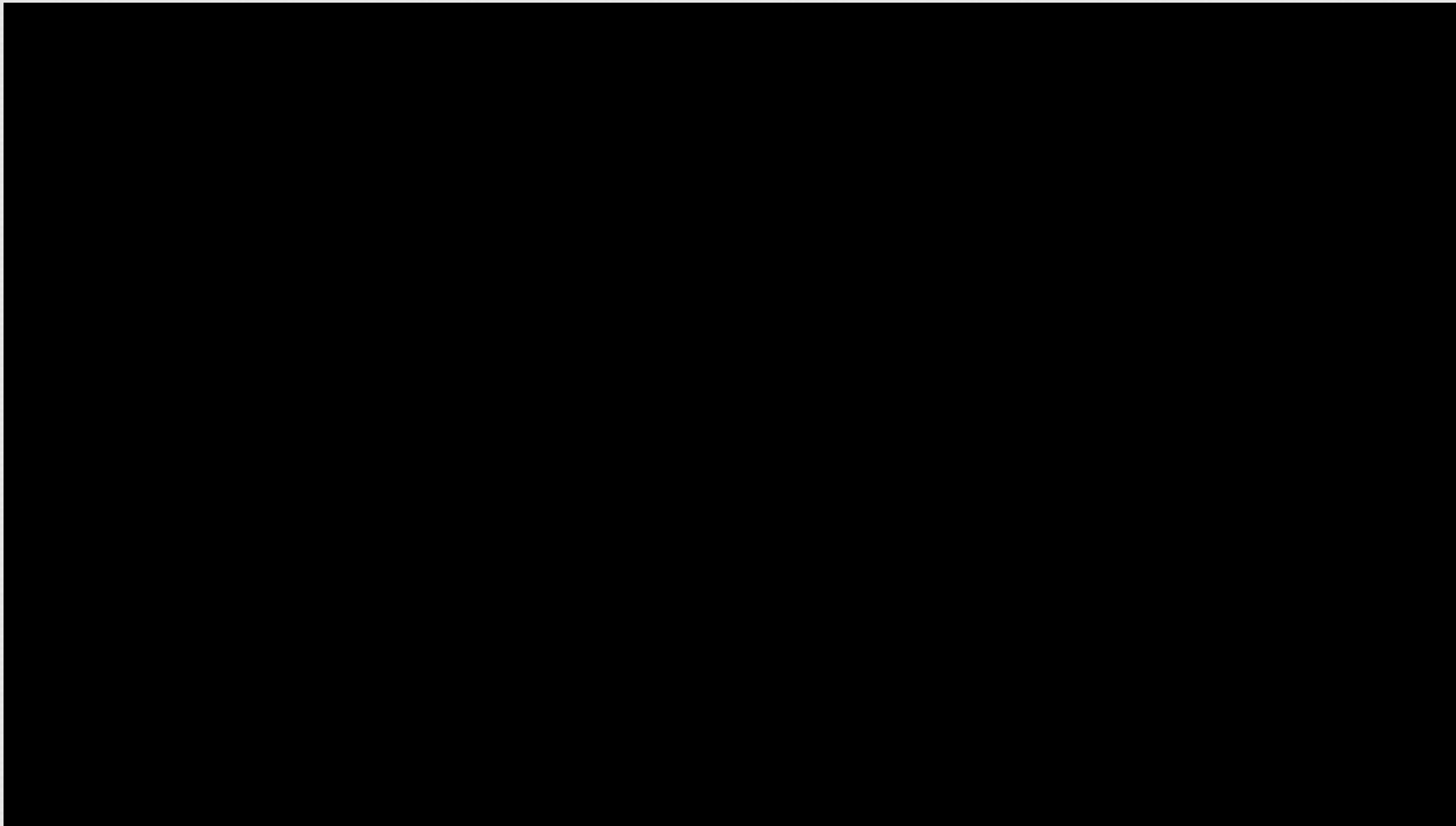


# Neighborhood and Built Environment Crime and Violence

- Violence can lead to premature death or cause non-fatal injuries.
- Victims of crime and violence may experience post traumatic stress syndrome or health related issues.

# Neighborhood and Built Environment Crime and Violence

- Children who live in homes and communities when violence occurs may develop behavioral and mental health issues.
- Property crimes can result in damage to the community.



# Neighborhood and Built Environment Environment Conditions

- Air Pollution
- Lead Poisoning
- Toxic Sites
- Locations of alcohol stores

# Social and Community Context

- Social Cohesion
- Civic Participation
- Discrimination
- Incarceration

# Resources to Address Social Determinants of Health

- Food Banks and Access to Healthy Foods
- Education/Tutoring Support
- After School Activities
- GED Programs
- Free Clinics
- Legal Aid
- 211
- Job Training
- Community Centers



“The most important five-digit number I need to predict your health status and wellbeing is your ZIP code, bar none. It’s not your cholesterol level or your blood pressure number or your age. The No. 1 health predictor is your ZIP code.”

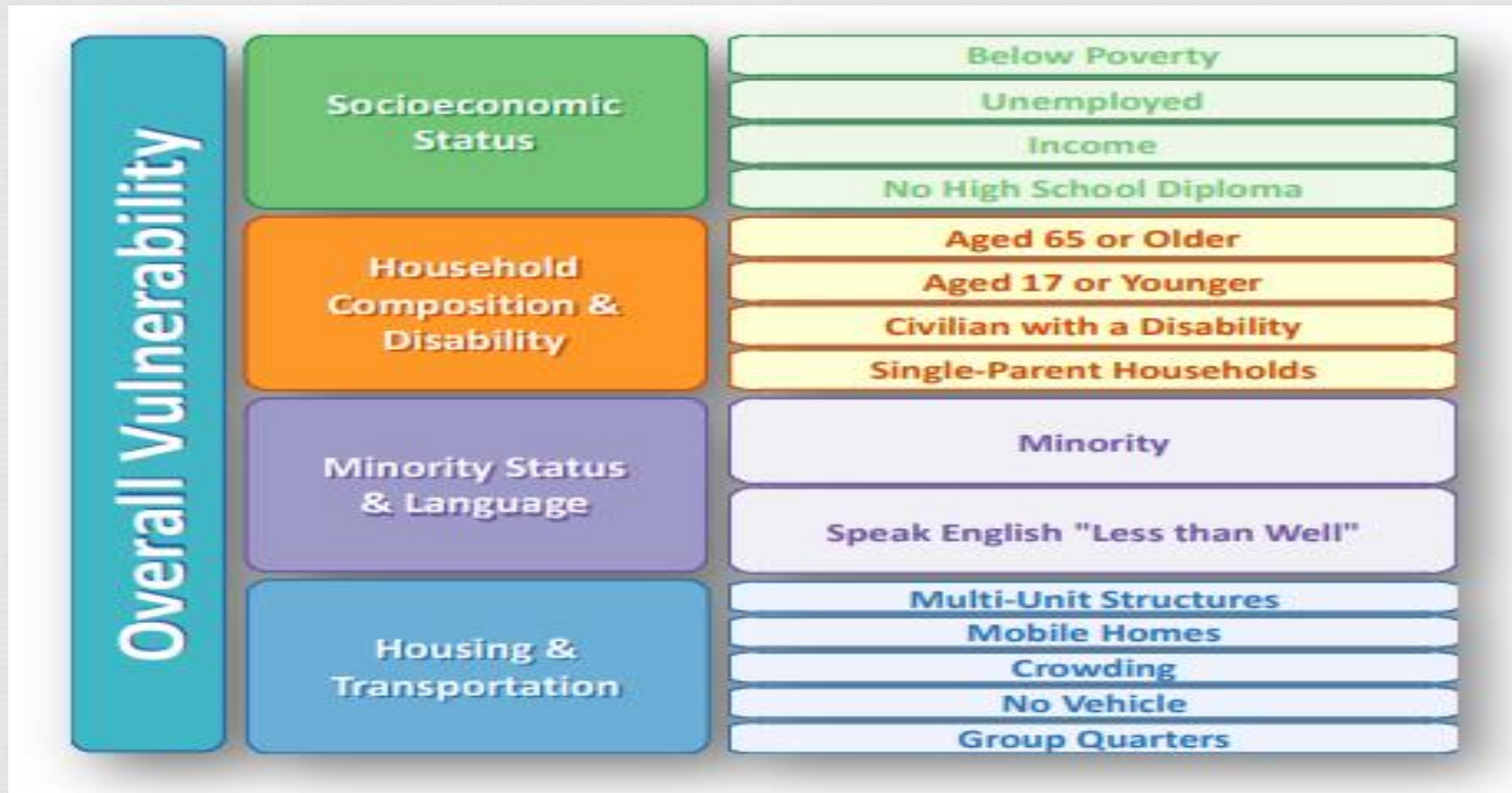
David Nash, MD, MBA, dean of the Jefferson College of Population Health

# SOCIAL VULNERABILITY INDEX

“Social vulnerability refers to the resilience of communities when confronted by external stresses on human health, stresses such as natural or human-caused disasters, or disease outbreaks. Reducing social vulnerability can decrease both human suffering and economic loss. “

Agency for Toxic Substances and Disease Registry

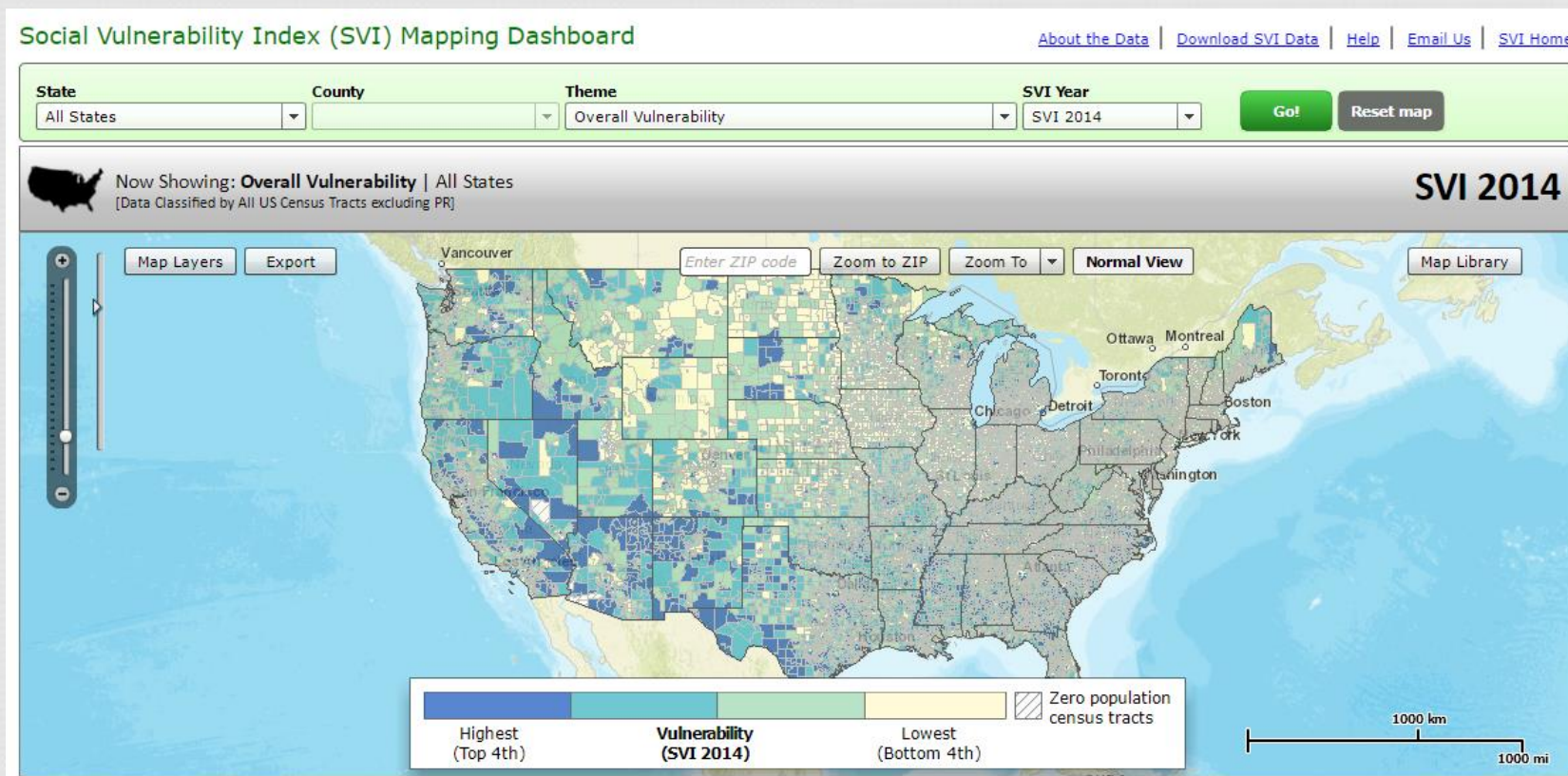
# The Social Vulnerability Index



CDC Agency for Toxic Substances & Disease Registry



# Social Vulnerability Index Mapping Dashboard



## Social Vulnerability Index (SVI) Mapping Dashboard

[About the Data](#) | [Download SVI Data](#) | [Help](#) | [Email Us](#) | [SVI Home](#)

State

County

Theme

SVI Year

All States

Overall Vulnerability

SVI 2014

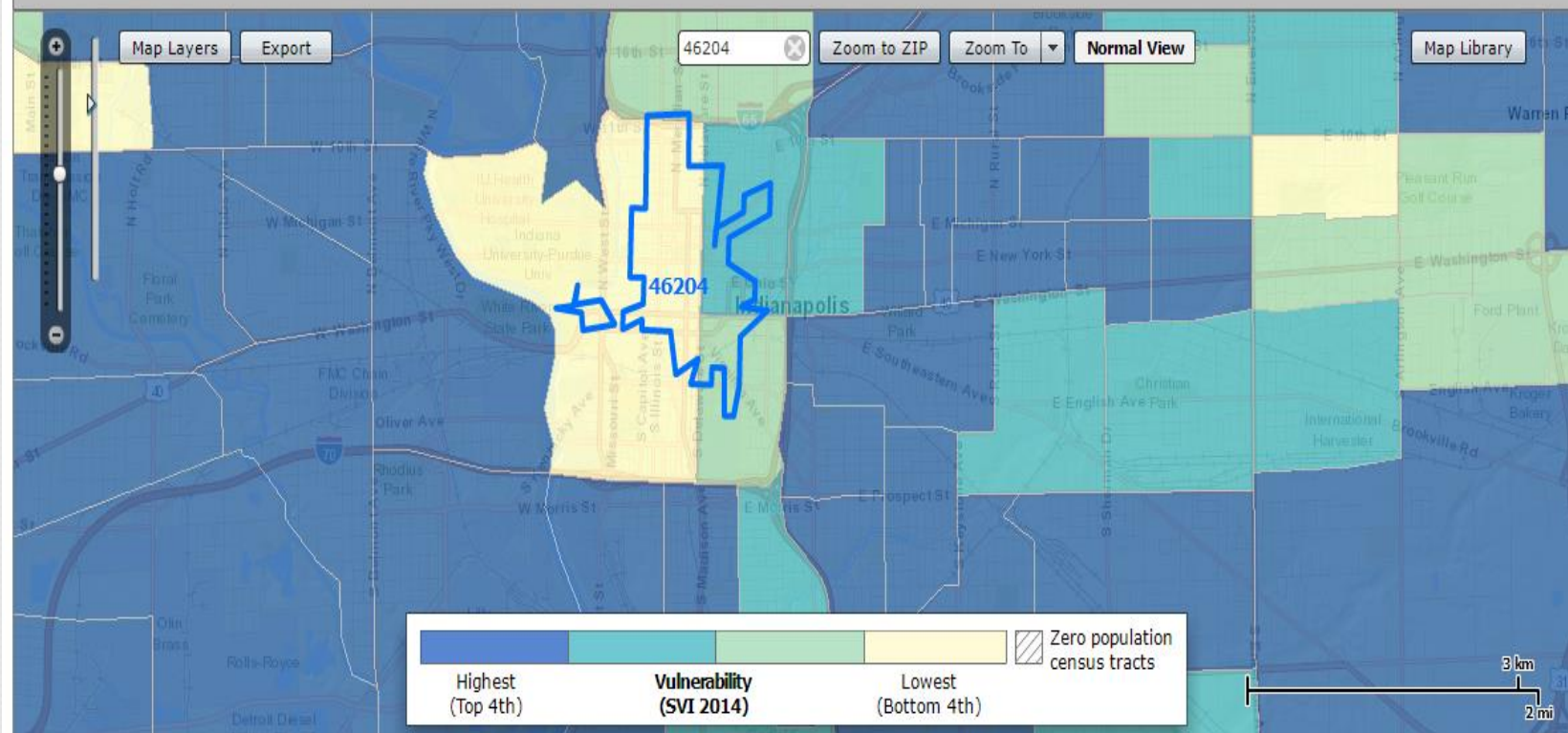
Go!

Reset map



Now Showing: **Overall Vulnerability** | All States  
[Data Classified by All US Census Tracts excluding PR]

SVI 2014





## Social Vulnerability Index (SVI) Mapping Dashboard

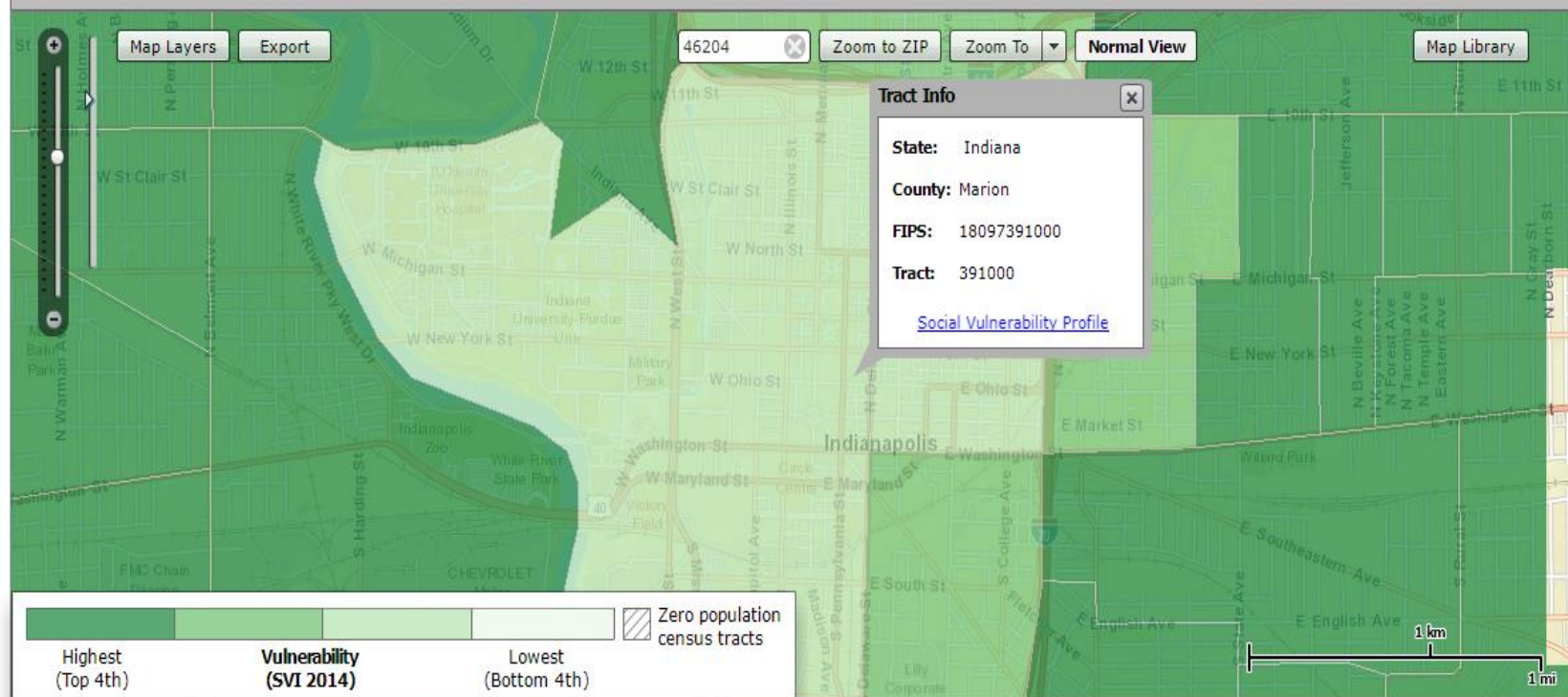
[About the Data](#) | [Download SVI Data](#) | [Help](#) | [Email Us](#) | [SVI Home](#)

State	County	Theme	SVI Year	<input type="button" value="Go!"/>	<input type="button" value="Reset map"/>
All States		Socioeconomic Theme	SVI 2014		



Now Showing: **Socioeconomic Theme** | All States  
[Data Classified by All US Census Tracts excluding PR]

### SVI 2014





## Socioeconomic Theme

Measure	Number	Number MOE	Percentage	Percentage MOE	Percentile Rank (among all US tracts)	SVI Flags
Persons below poverty estimate, 2010-2014 ACS	1,216	307	31.7%	6.6%	87 <sup>th</sup>	No
Civilian (age 16+) unemployed estimate, 2010-2014 ACS	232	131	8.2%	4.3%	47 <sup>th</sup>	No
Per capita income estimate, 2010-2014 ACS*	\$35,246	\$5,514			21 <sup>st</sup>	No
Persons (age 25+) with no high school diploma estimate MOE, 2010-2014 ACS	165	69	5.6%	2.3%	22 <sup>nd</sup>	No
<b>SOCIOECONOMIC DOMAIN SUMMARY</b>					44 <sup>th</sup>	0

\* Per capita income is the average income per person in each tract. Unlike the other variables for which a high percentage indicates potentially higher social vulnerability, a higher per capita income is associated with lower social vulnerability.

## Social Vulnerability Index (SVI) Mapping Dashboard

[About the Data](#) | [Download SVI Data](#) | [Help](#) | [Email Us](#) | [SVI Home](#)

State:  County:  Theme:  SVI Year:

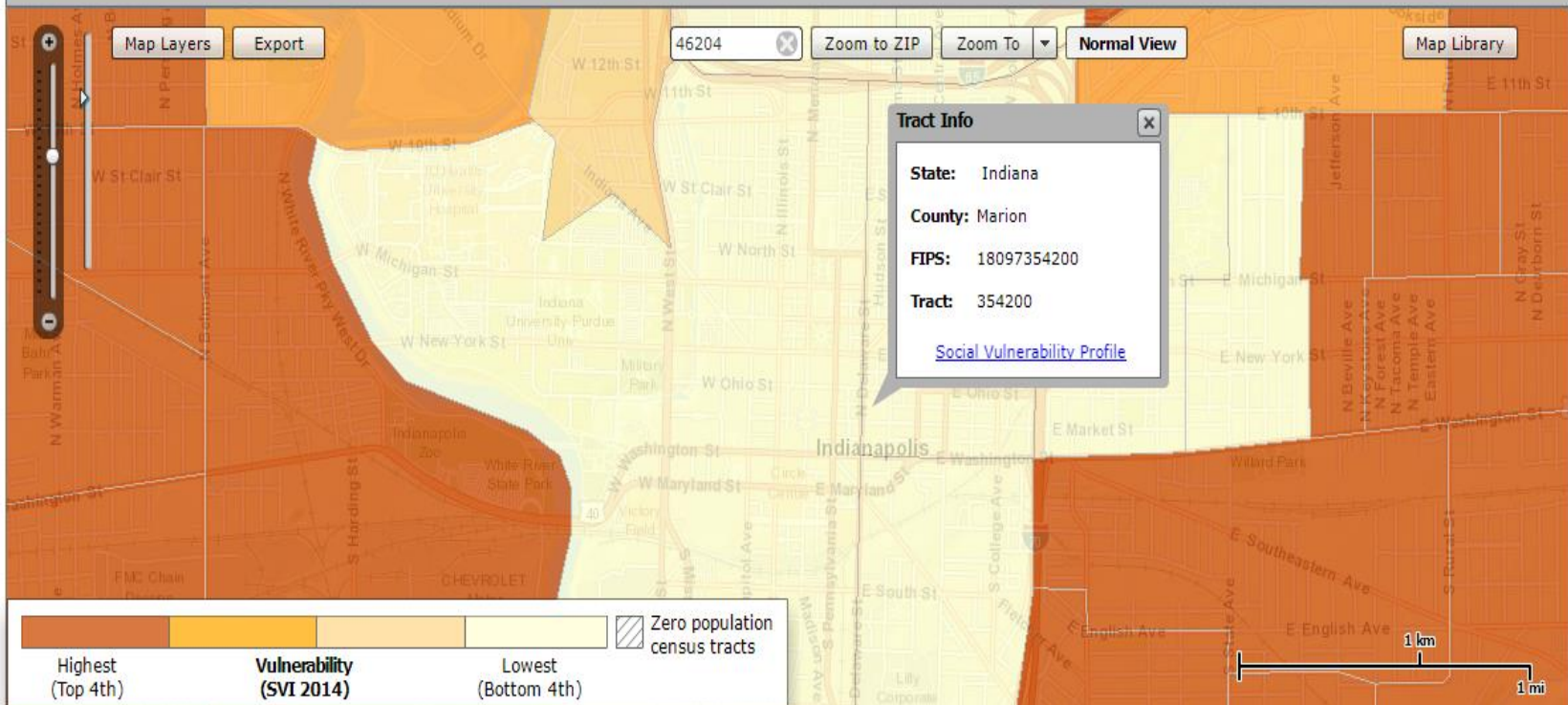
Go!

Reset map



Now Showing: **Household Composition/Disability Theme** | All States  
[Data Classified by All US Census Tracts excluding PR]

SVI 2014



## Household Composition/Disability Domain

Measure	Number	Number MOE	Percentage	Percentage MOE	Percentile Rank (among all US tracts)	SVI Flags
Persons aged 65 and older estimate, 2010-2014 ACS	557	136	9.0%	2.5%	21 <sup>st</sup>	No
Persons aged 17 and younger estimate, 2010-2014 ACS	240	169	3.9%	169.0%	1 <sup>st</sup>	No
Civilian noninstitutionalized population with a disability estimate, 2010-2014 ACS	682	192	13.3%	3.6%	57 <sup>th</sup>	No
Single parent household with children under 18 estimate, 2010-2014 ACS	80	73	2.3%	2.1%	7 <sup>th</sup>	No
<b>HOUSEHOLD COMPOSITION/DISABILITY DOMAIN SUMMARY</b>					4 <sup>th</sup>	0



## Social Vulnerability Index (SVI) Mapping Dashboard

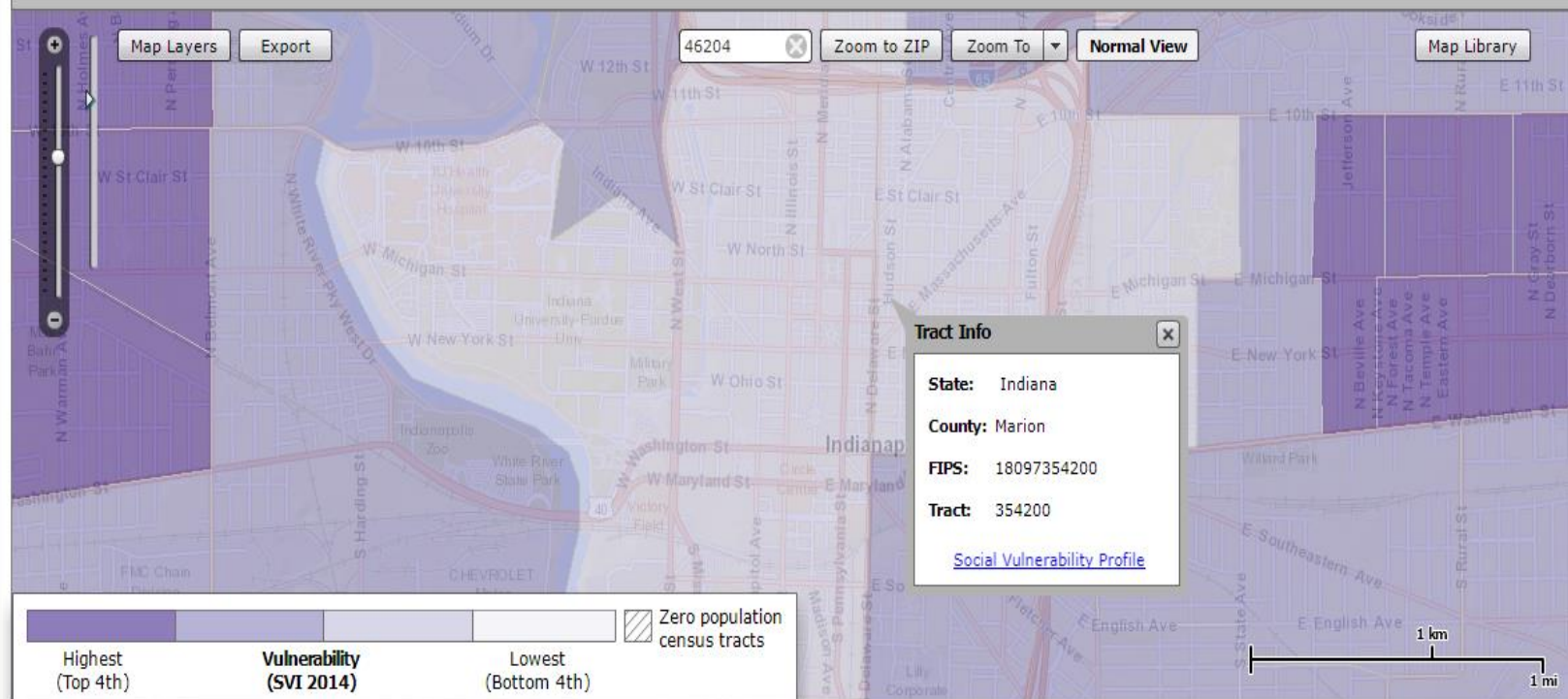
[About the Data](#) | [Download SVI Data](#) | [Help](#) | [Email Us](#) | [SVI Home](#)

State	County	Theme	SVI Year	<input type="button" value="Go!"/>	<input type="button" value="Reset map"/>
All States		Minority Status/Language Theme	SVI 2014		



Now Showing: **Minority Status/Language Theme** | All States  
[Data Classified by All US Census Tracts excluding PR]

**SVI 2014**

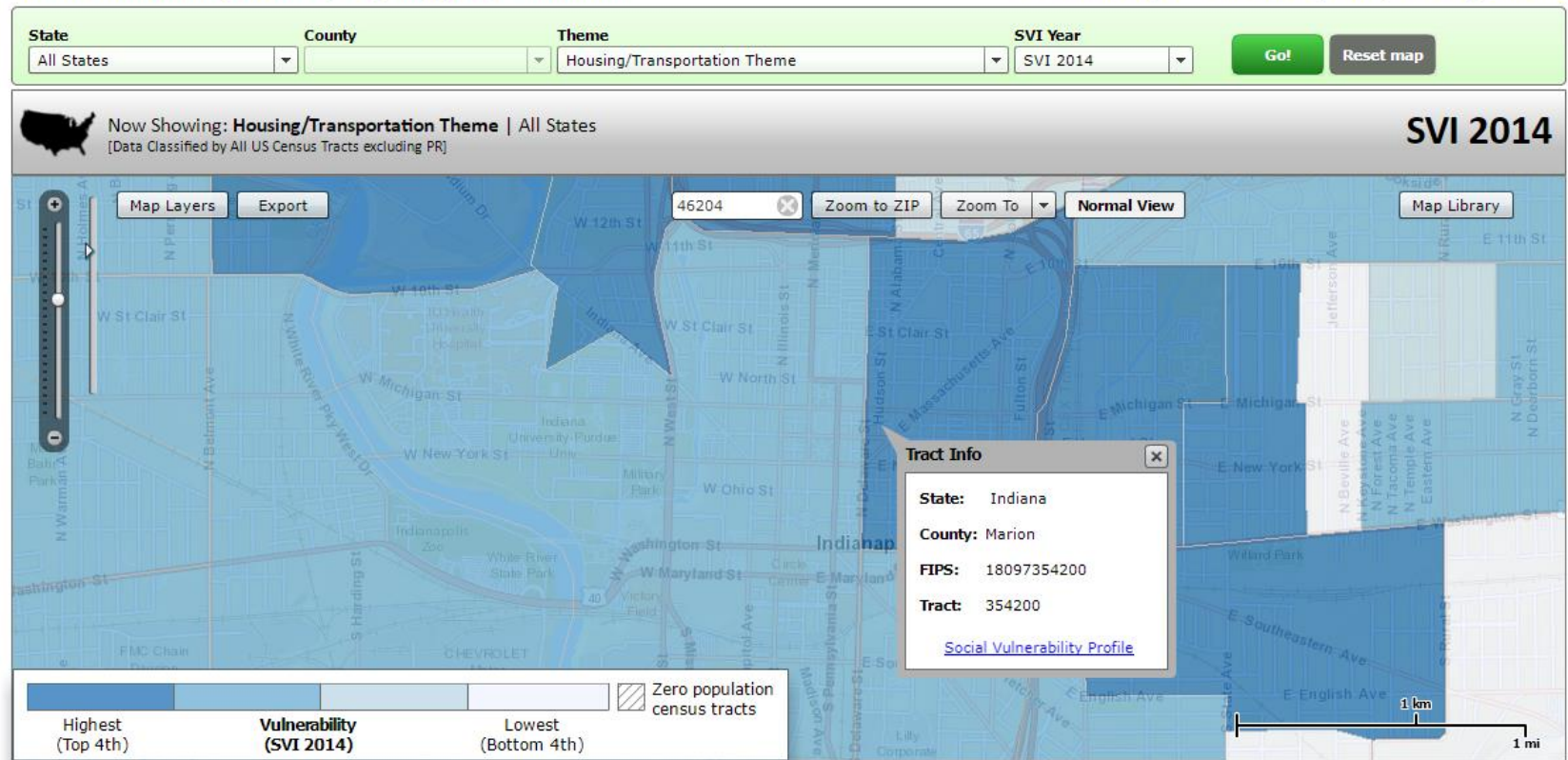


## Minority Status/Language Theme

Measure	Number	Number MOE	Percentage	Percentage MOE	Percentile Rank (among all US tracts)	SVI Flags
Minority (all persons except white, non-Hispanic) estimate, 2010-2014 ACS	2,072	733	33.6%	11.5%	56 <sup>th</sup>	No
Persons (age 5+) who speak English "less than well" estimate, 2010-2014 ACS	24	67	0.4%	1.1%	29 <sup>th</sup>	No
<b>MINORITY STATUS/LANGUAGE DOMAIN SUMMARY</b>					42 <sup>nd</sup>	0

## Social Vulnerability Index (SVI) Mapping Dashboard

[About the Data](#) | [Download SVI Data](#) | [Help](#) | [Email Us](#) | [SVI Home](#)





## Housing/Transportation Theme

Measure	Number	Number MOE	Percentage	Percentage MOE	Percentile Rank (among all US tracts)	SVI Flags
Housing in structures with 10 or more units estimate, 2010-2014 ACS	2,863	222	73.9%	5.2%	97 <sup>th</sup>	Yes
Mobile homes estimate, 2010-2014 ACS	53	84	1.4%	2.2%	56 <sup>th</sup>	No
At household level, more people than rooms estimate, 2010-2014 ACS	18	33	0.5%	1.0%	25 <sup>th</sup>	No
Households with no vehicle available estimate, 2010-2014 ACS	839	200	24.5%	5.0%	90 <sup>th</sup>	Yes
Persons in institutionalized group quarters estimate, 2010-2014 ACS	1,234	424	20.0%	6.6%	97 <sup>th</sup>	Yes
<b>HOUSING/TRANSPORTATION DOMAIN SUMMARY</b>					96 <sup>th</sup>	3

## Additional Data

Measure	Number	Number MOE	Percentage	Percentage MOE
Uninsured in the total civilian noninstitutionalized population estimate, 2010-2014 ACS	872	268	17.0%	5.2%
Estimated daytime population, LandScan 2012	13,478			

# Social Vulnerability Index Mapping

<https://svi.cdc.gov/map.aspx>

# Questions

# References

- Coleman-Jensen A, Gregory C, Singh A. Household food security in the United States in 2013. Washington: USDA Economic Research Service; 2014. Report No.: ERR-29.
- Carlson SJ, Andrews MS, Bickel GW. Measuring food insecurity and hunger in the United States: Development of a national benchmark measure and prevalence estimates. J Nutr. 1999;129(2):510S-516S.
- Economic Instability A Social Determinant of Health 2013 Kansas Behavioral Risk Factor Surveillance System.
- Healthy People 2020, [HealthyPeople.gov](http://HealthyPeople.gov)
- Robert Wood Johnson Foundation