



# HIA Mapping Tools, Techniques and Tips: Using maps to illustrate how where we live, work, learn and play matter

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## WHY GEOGRAPHY MATTERS

- Where we live, work, play & learn matters
  - *Social determinants of health are 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 risks*
  - *Healthy People 2020*
- *How we travel between these places matters too!*
- “All politics is local.”
  - Former Speaker of the U.S. House of Reps Thomas “Tip” O’Neill

*Social determinants of health are 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 risks.*

([www.healthypeople.gov/2020/topics/objectives2020/overview.aspx?topicid=39](http://www.healthypeople.gov/2020/topics/objectives2020/overview.aspx?topicid=39))



## WHY MAPPING MATTERS

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- Maps can provide an immediately recognizable picture of where we live, work, play, learn and travel
- Maps have the potential to effectively communicate a lot of information in a relatively small space.
- “A picture is worth a thousand words.”  
(Arthur Brisbane)



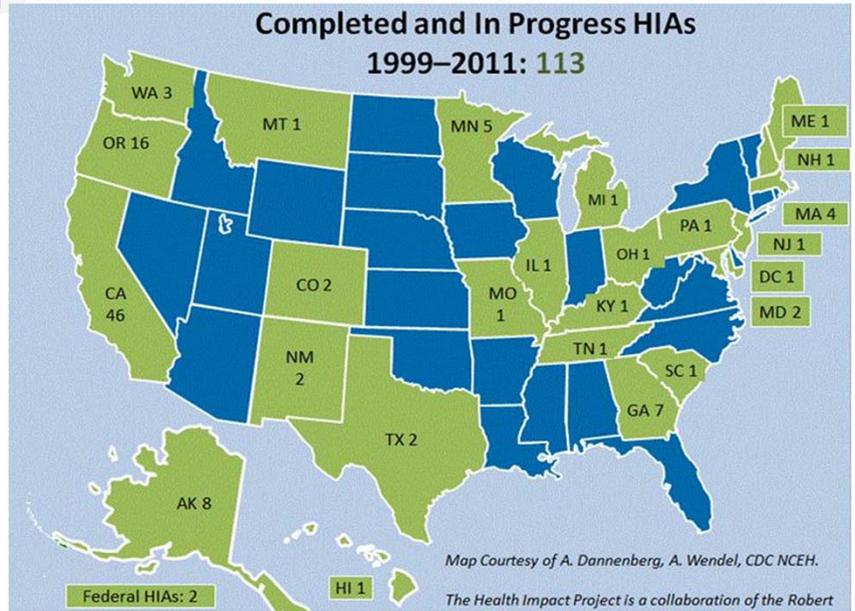
## MAPPING AND HIAs

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- Incorporating mapping into HIA Steps:
  - **Screening**
  - **Scoping**
  - **Assessment**
  - **Reporting**
  
- Won't address these HIA steps:
  - Developing Recommendations
  - Monitoring and Evaluation



## SCREENING (National View)

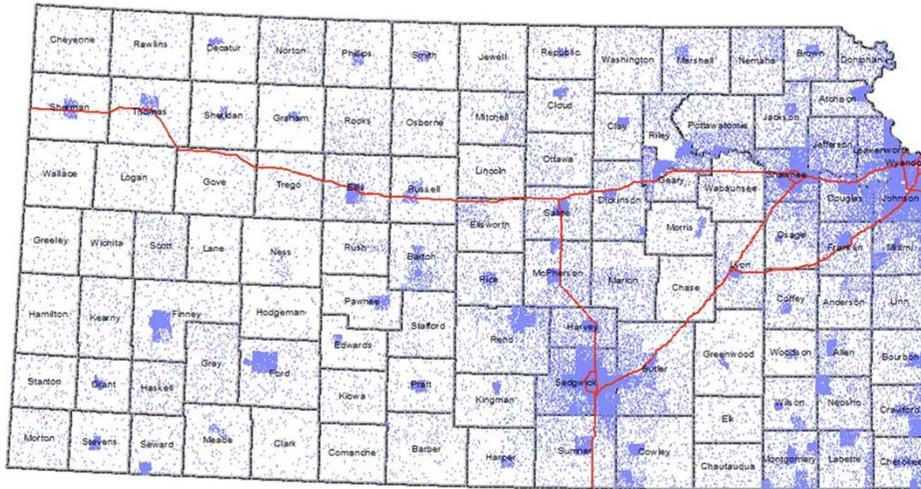


Before 2011, most HIA work was on the coasts with few in the Midwest and none in Kansas. This map helps illustrate where HIA work has occurred as well as areas where HIAs can be introduced.



## SCREENING (State View)

Dot Density Map of Population by Census Tract

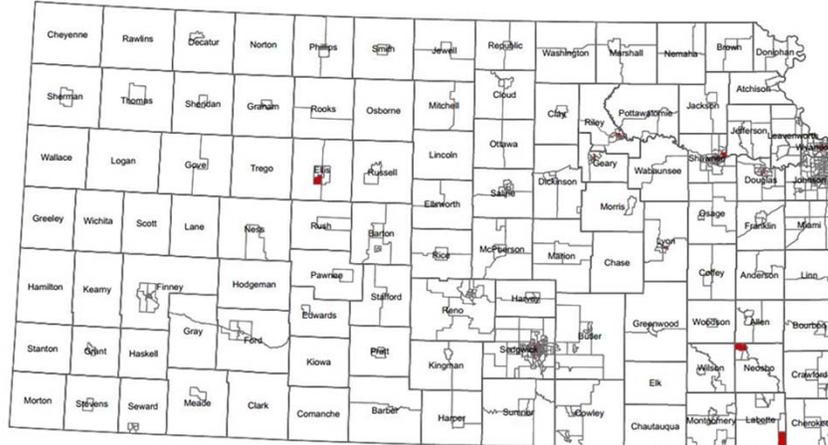


You can map total population and/or vulnerable populations. Dot density maps can provide more detailed information than shading of entire areas—i.e. cities or counties.



# SCREENING / SCOPING

Kansas Census Tracts  
Those With >30% of Population in Poverty Based on Federal Poverty Guidelines are Shown in Red



Zoom in to see the boundaries of Census Tracts in the Urban Areas

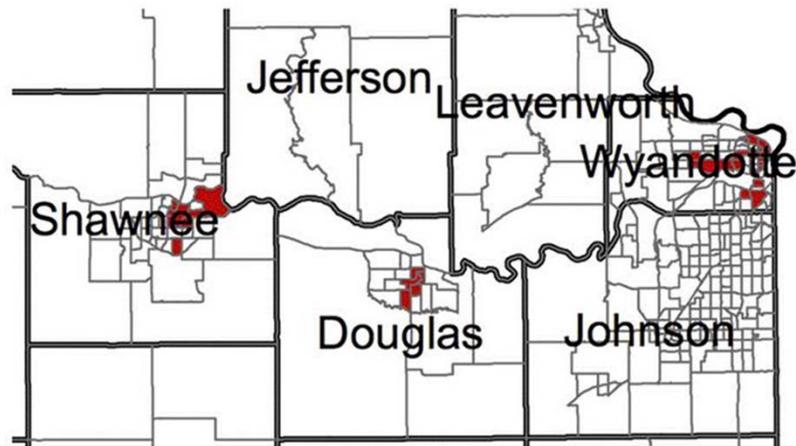
Maps can allow you to look at both the big / overall picture and...



## SCOPING

### Number of Kansas children in high-poverty areas triples since 2000

By KHI News Service on February 24, 2012



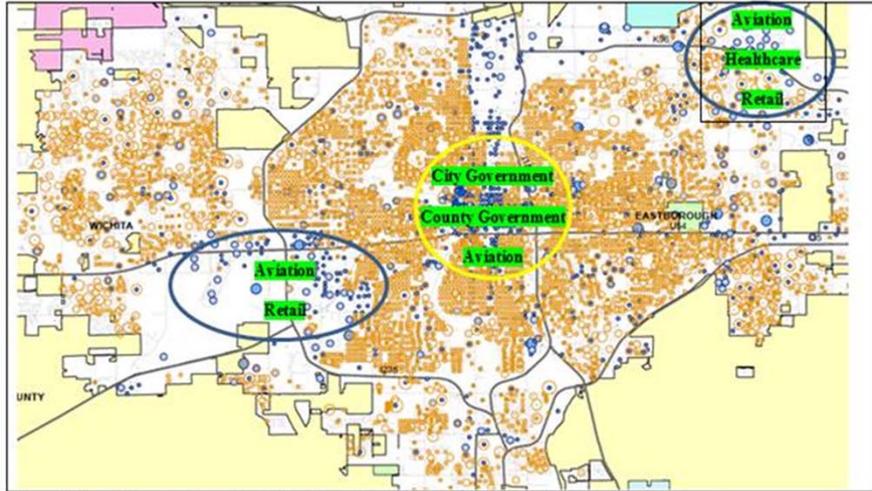
To help scope your project you may want to zoom in on particular geographic areas based on key population or demographic information.





# REPORTING

Figure 6. Where People Live and Work in Wichita



Legend: blue circles = concentration of jobs in the city; orange circles: Where Wichitans live  
Source: KHI analysis using On the Map from U.S. Census Bureau Center for Economic Studies, 2013.

Provide clear and concise legends, point out the salient point(s) you're making and include the data source(s).



## MAP TIPS & TECHNIQUES

- Provide reference points/ lines such as major highways so stakeholders can relate the map to where they live, work, play, & travel.
- Consider Good Graphic Design:
  - Limit Amount and Density of Data
  - Use colors, lines, shapes, and symbology (i.e. Highway markers) effectively
  - Include helpful context—i.e. zoom in enough to focus on an area of interest but not too far.
- Creating Maps as an Art—Be honest about the picture and underlying data



## MAP TIPS & TECHNIQUES (cont)

- Map Early and Often—Throughout HIA Process
- Start Simple and Add Data/ Layers incrementally
- If available, use professional mapping software or a mapping consultant
- Don't rule out mapping based on the HIA topic or lack of resources prematurely
- Find existing online maps then clip the relevant geography and layers

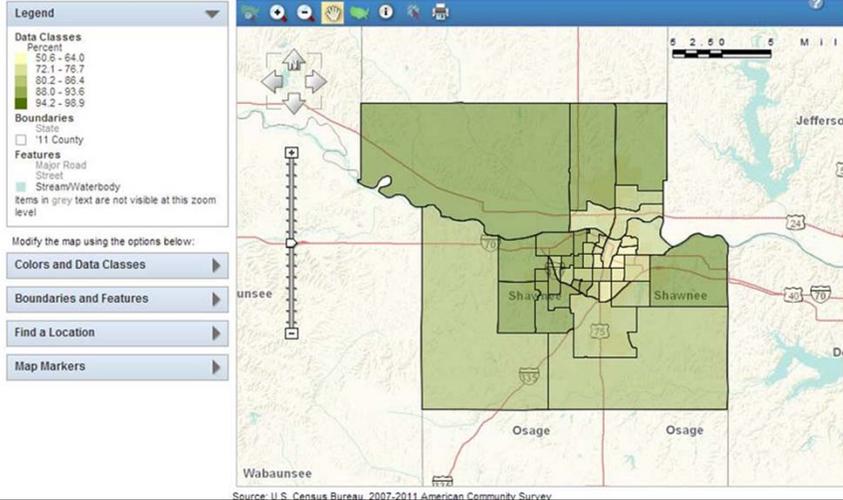
Maps are a great source for local data.



## MAP TIPS/TECHNIQUES: Find existing online maps then clip relevant geography and layers

Thematic Map of Total: Estimate; Percent high school graduate or higher  
Geography: by Census Tract

[View Table Notes](#)



<http://mdfoodsystemmap.org/map/>

<http://factfinder2.census.gov/faces/nav/jsf/pages/index.xhtml>



## MAPPING RESOURCES

### ■ Census Bureau (National and Local Data):

- Population & Demographic Data: <http://factfinder2.census.gov/faces/nav/jsf/pages/index.xhtml>
- Where People Live and Work: <http://onthemap.ces.census.gov/>
- Population Movement Data: <http://flowsmapper.geo.census.gov/flowsmapper/map.html>
- Language Use Data: [http://www.census.gov/hhes/socdemo/language/data/language\\_map.html](http://www.census.gov/hhes/socdemo/language/data/language_map.html)

### ■ Other Sites With National and Local Data:

- Civic/ Social, Economic, Education, Environment & Health Maps: <http://www.communitycommons.org/maps-data/>
- EPA Data Maps: <http://www.epa.gov/myenv/MyMap.html>
- Agricultural Data: <http://www.factoryfarmmap.org/#animal:all;location:US;year:2007>
- K-12 Education Data: <http://nces.ed.gov/surveys/sdds/ed/index.asp>
- BRFSS Data: <http://apps.nccd.cdc.gov/gisbrfss/default.aspx>



## MAPPING RESOURCES (Cont)

- Numerous State or Topic Specific Websites With Interactive Maps or Mapping Data Online, Some Examples:
  - AK BRFSS: <http://dhss.alaska.gov/dph/InfoCenter/Pages/ia/brfss/maps.aspx>
  - AZ Healthcare Designation Areas: <http://www.azdhs.gov/hsd/designations/>
  - CO County Health Profiles: <http://www.coloradohealthinstitute.org/data-repository/county>
  - MD Food System: <http://mdfoodsystemmap.org/map/>
  - KS BRFSS: <http://www.kdheks.gov/brfss/Expansion/index.html>
- Maps Don't Necessarily Turn Up in Google Searches. ☹
- More Interactive Maps Available Online Everyday ☺



## CONTACT INFORMATION

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