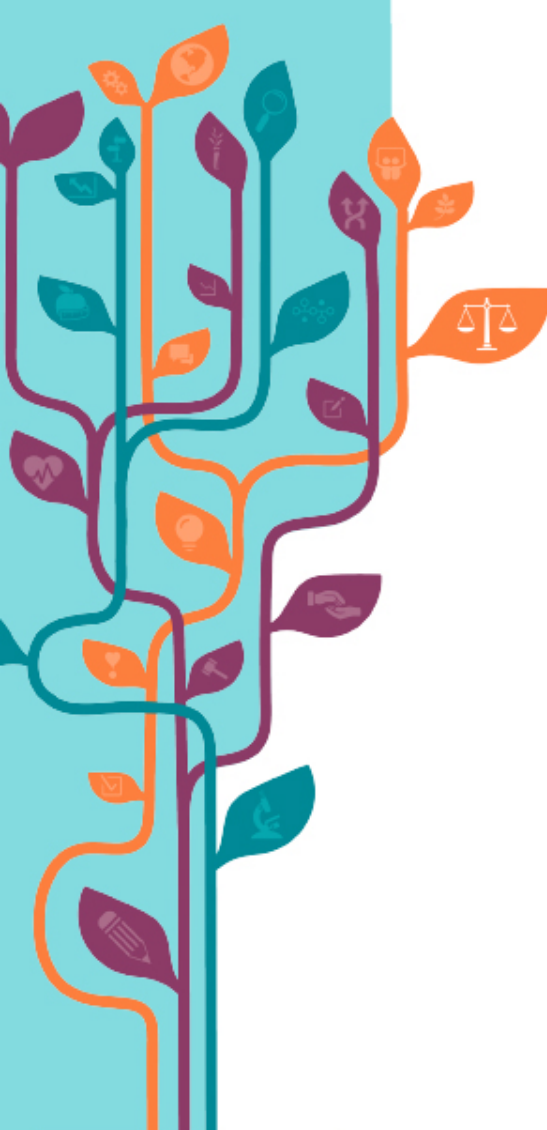




Cultivating A Culture OF Health Equity

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Seeing is Believing: Patterns of Life Expectancy, Poverty, Equity & Health in Shelby County TN

Lilian Ogari and David Sweat
Office of Epidemiology and Infectious Diseases
Shelby County Health Department

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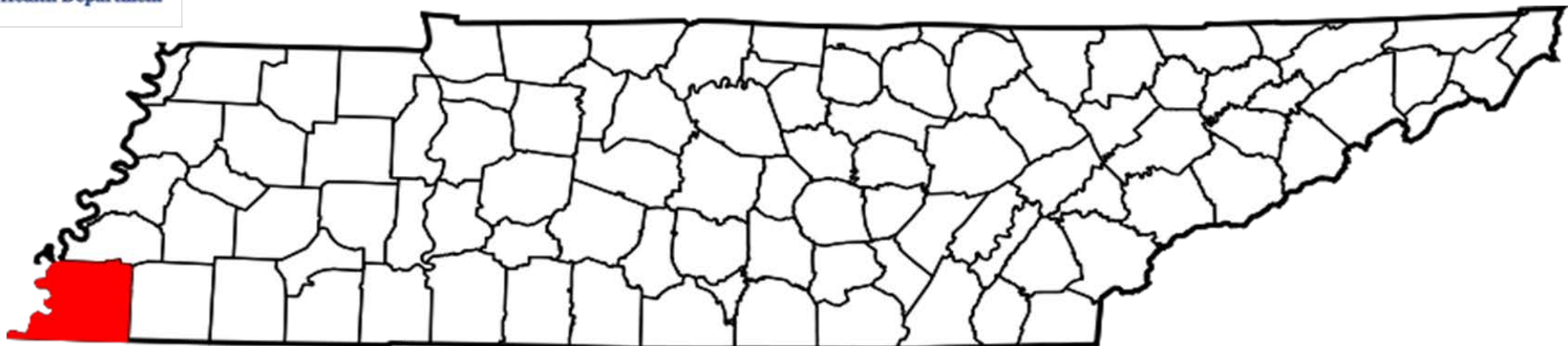
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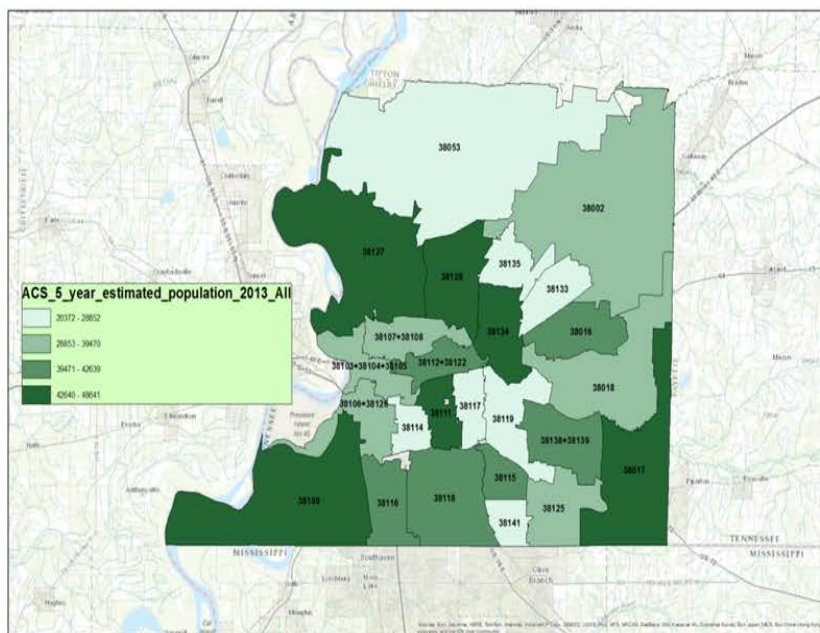
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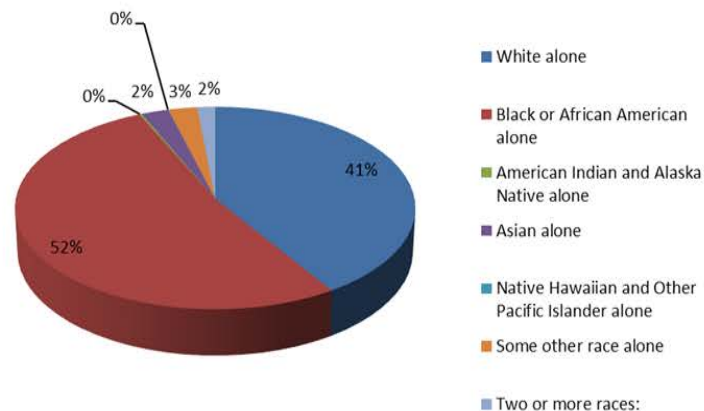
ABOUT SHELBY COUNTY TN



Population Distribution in Shelby County TN, 2013



Race Distribution in Shelby County TN 2013





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Quick Facts About Shelby County

- ❖ Shelby County's Population ~ 940,000.
- ❖ ~7500 people die in Shelby County each year.
- ❖ 33 Zip Codes in Shelby County
- ❖ Sub-County data analyzed at Zip Code Level due to DUA agreement with TDH
- ❖ ZCTA's and Zip Codes very similar geographically



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Calculating Life Expectancy

using Zip Code level Data.

Get Data!

- Deaths- Vital statistics data : Obtained from State Health Department through DUA or Data request.
- Population- Census data, ACS, ESRI or local source.

Organize Data

- Deaths- Aggregated by 19 age groups, Zip Codes & sex: arrange data
- Population- Aggregated by 19 age groups, ZCTA & sex : arrange data

Age groups

Area

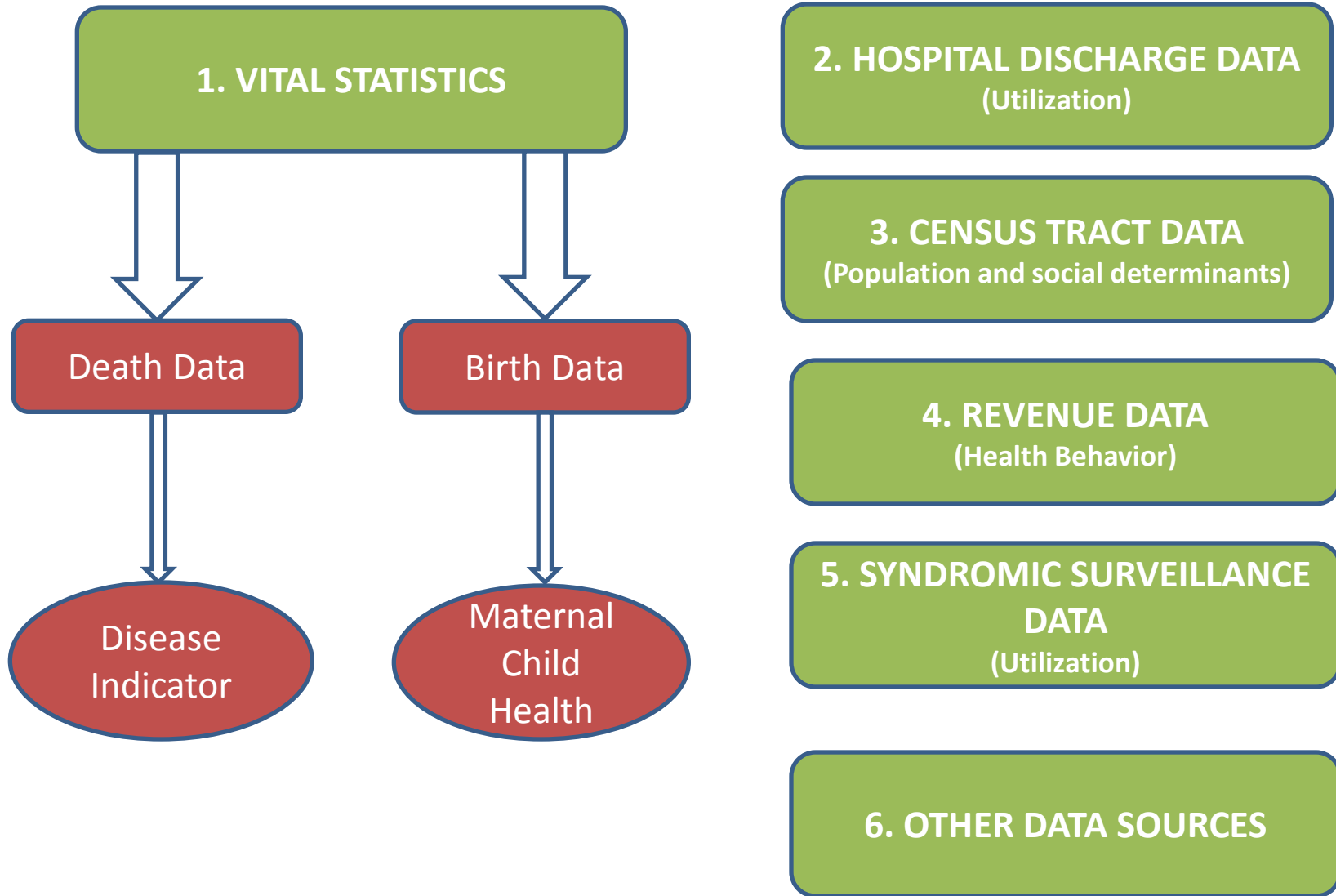
Calculation of LE

- SEPHO Tool
- Age Adjusting tool*

Map

- Arc GIS
- Others

TARGET DATA SETS

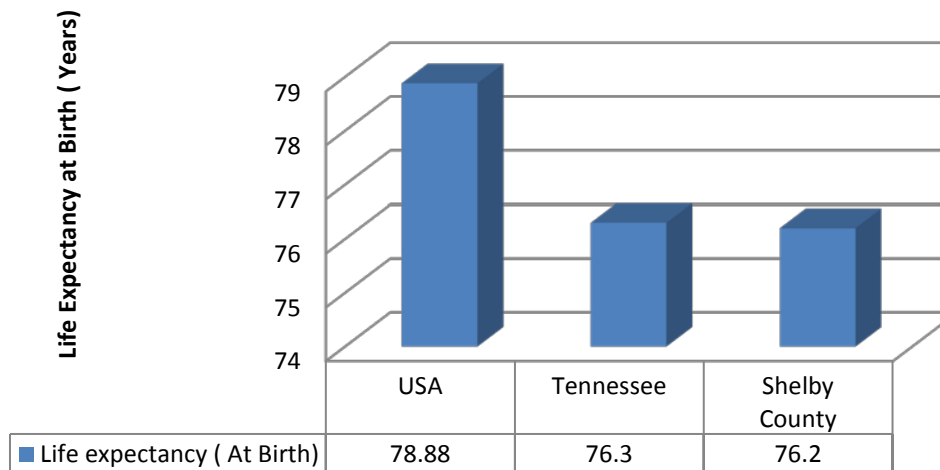




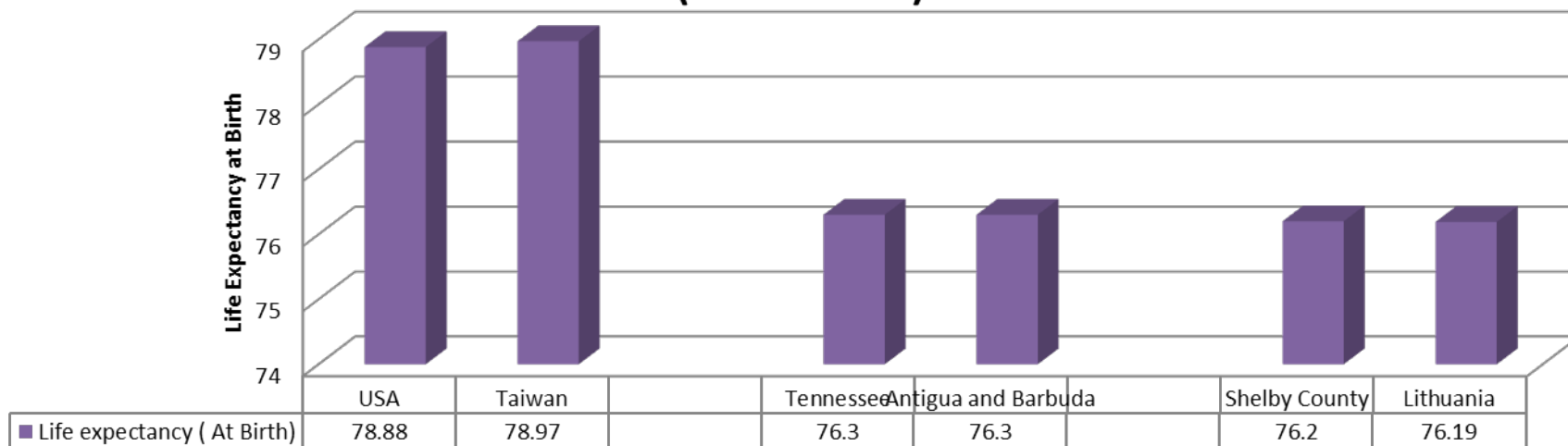
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Comparison of LE 2013 (Country, State, County)



Comparison of LE 2013 (US vs World)

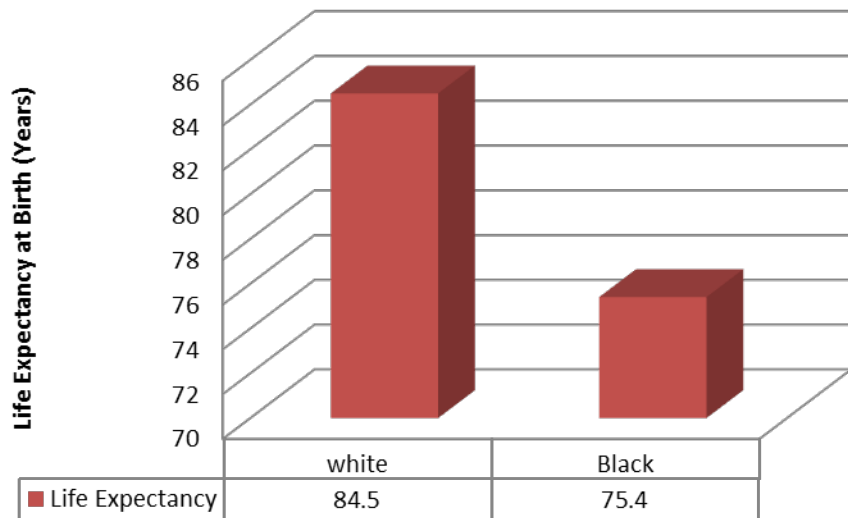


Data Source for World LE: www.geoba.se

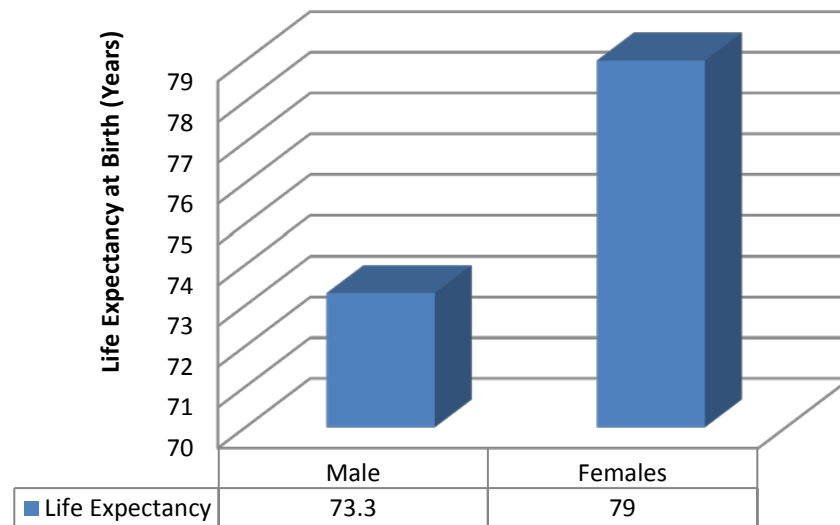
Data Source for USA and States: <http://kff.org/state-category/health-status/life-expectancy/>

Data Source for local LE: Office of Epidemiology and Infectious Diseases, Shelby County Health Department.

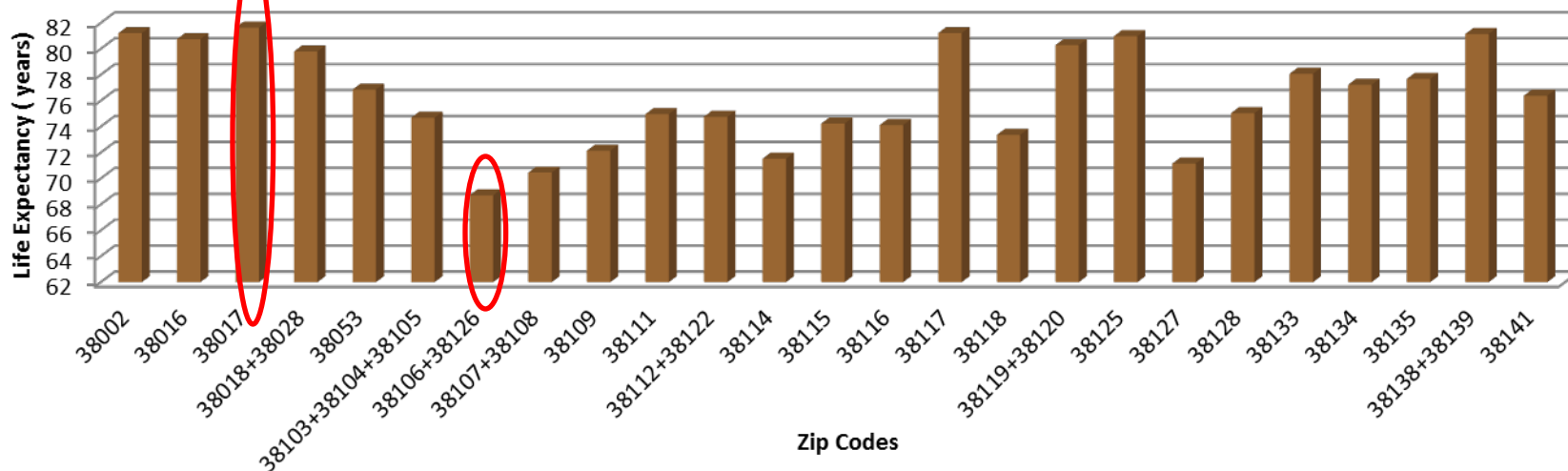
Life Expectancy in Shelby County by Race (2013)



Life Expectancy in Shelby County by Sex (2013)



Life expectancy at Birth in Shelby County TN

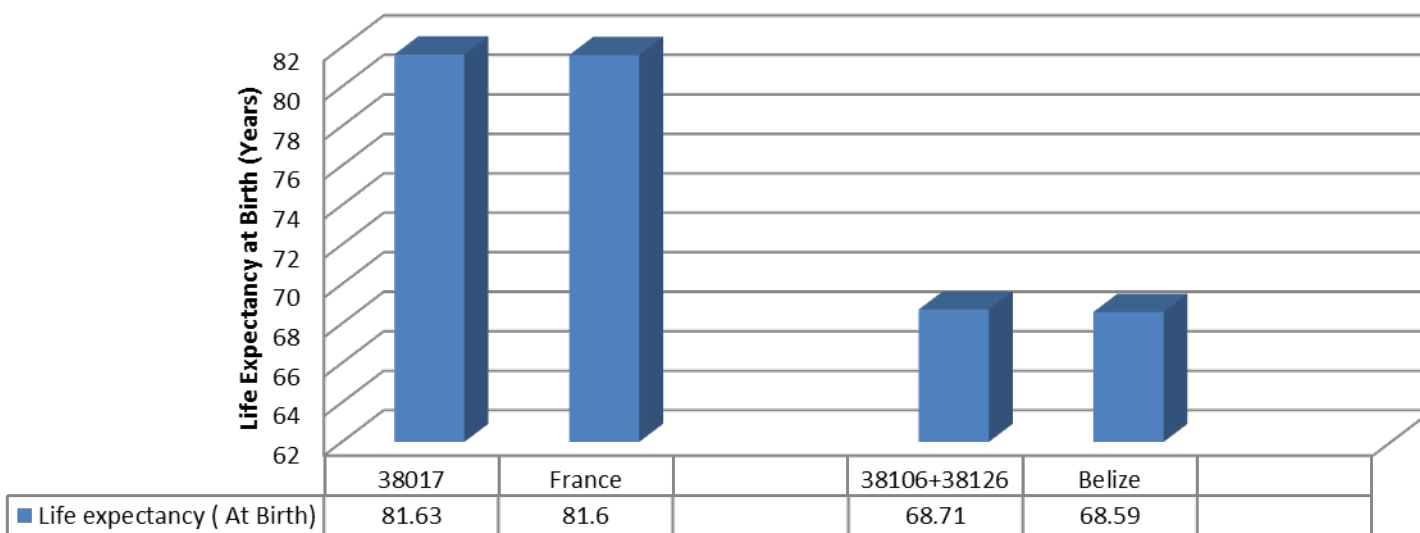




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Comparison of LE (Shelby County Zip vs World) 2013



Data Source for World LE: www.geoba.se

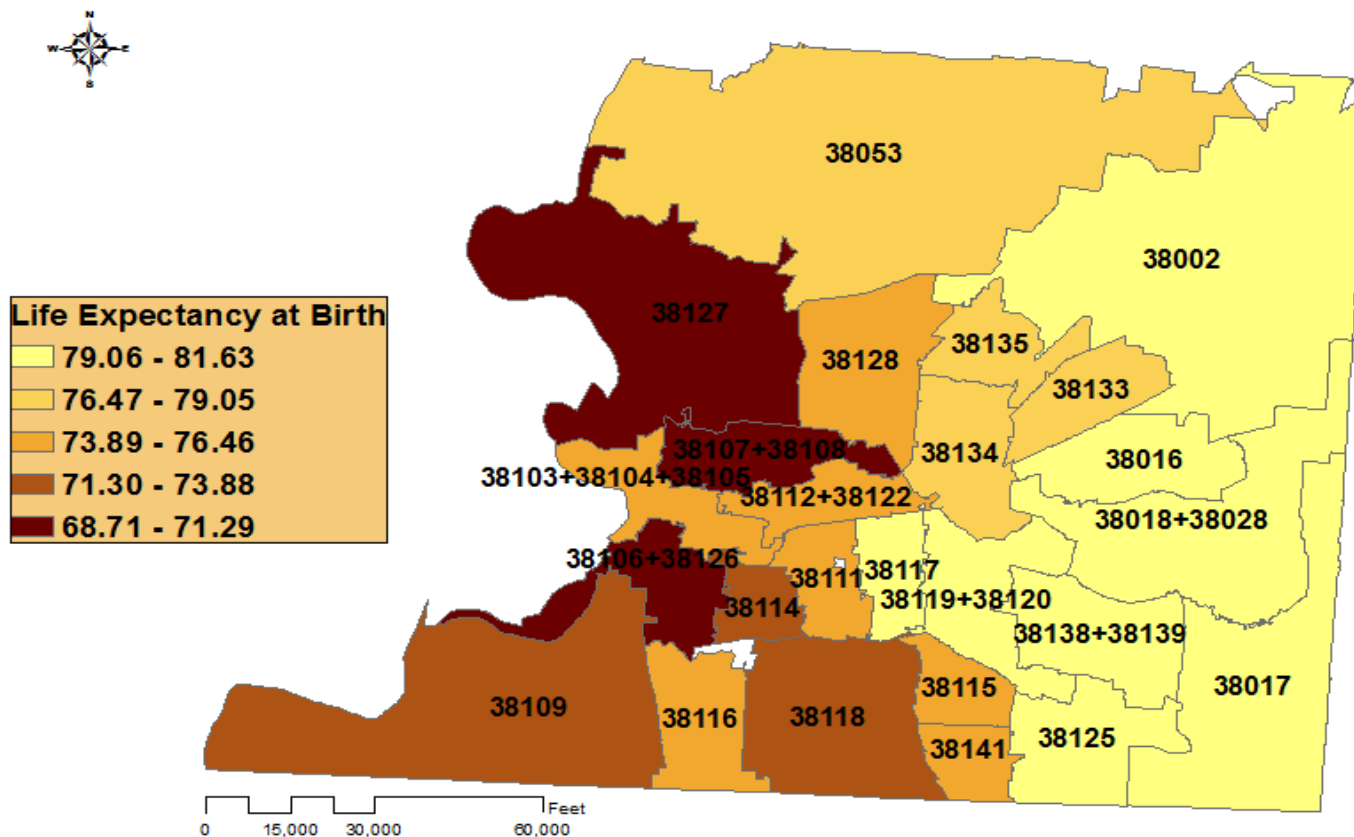
Data Source for local LE: Office of Epidemiology and Infectious Diseases, Shelby County Health Department.



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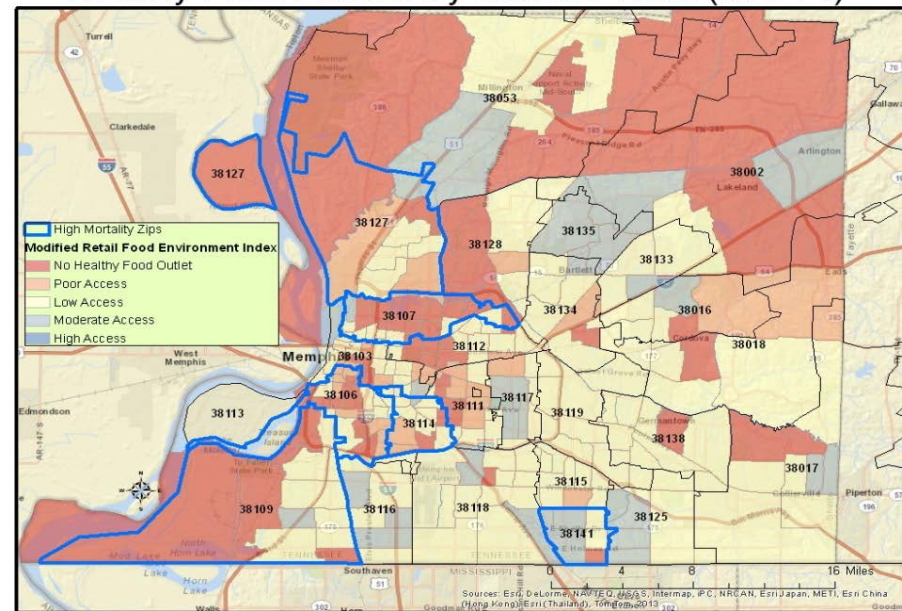
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Life Expectancy at Birth in Shelby County TN 2009-2013





Healthy Food Access by Census Tract (mRFEI)

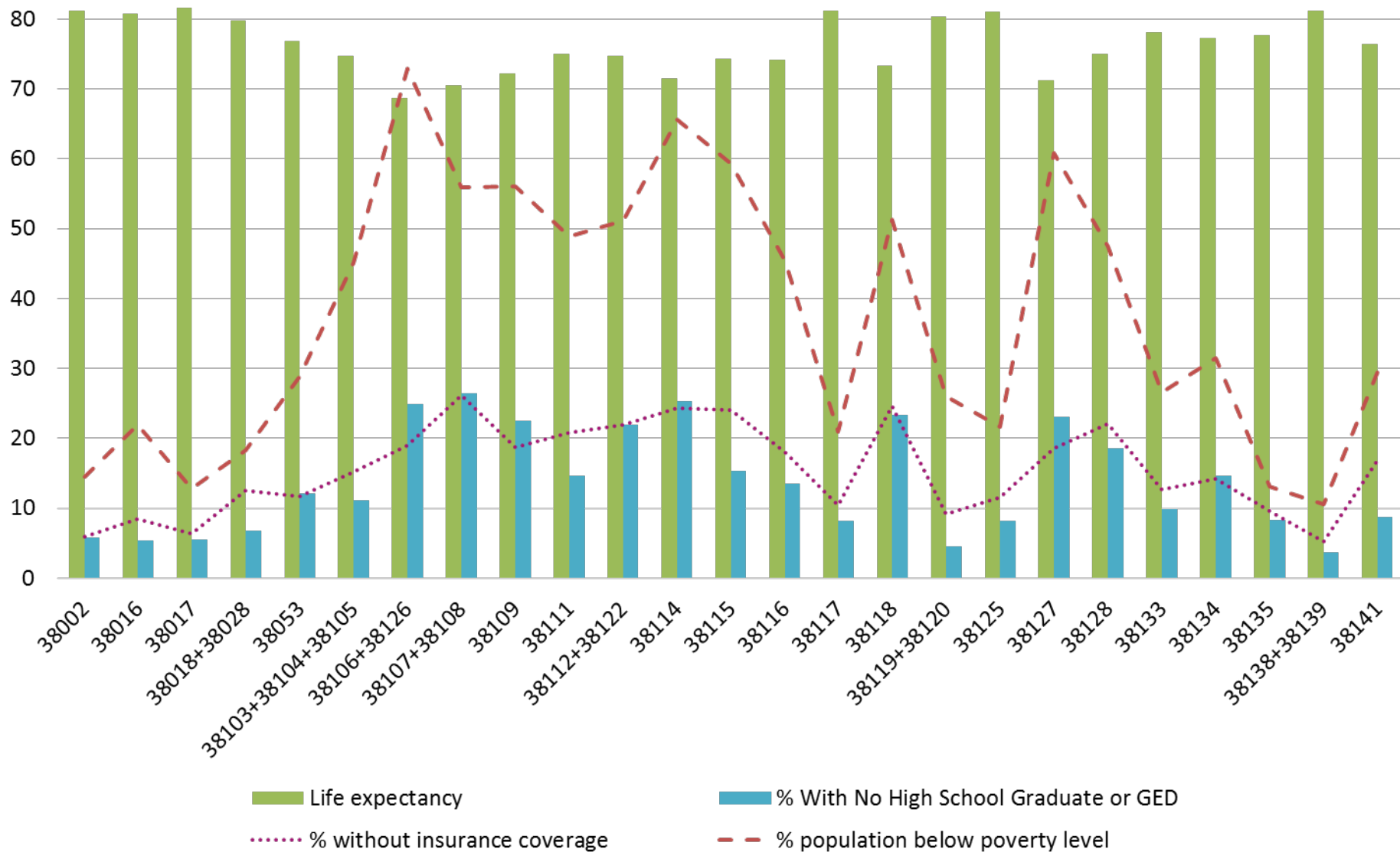




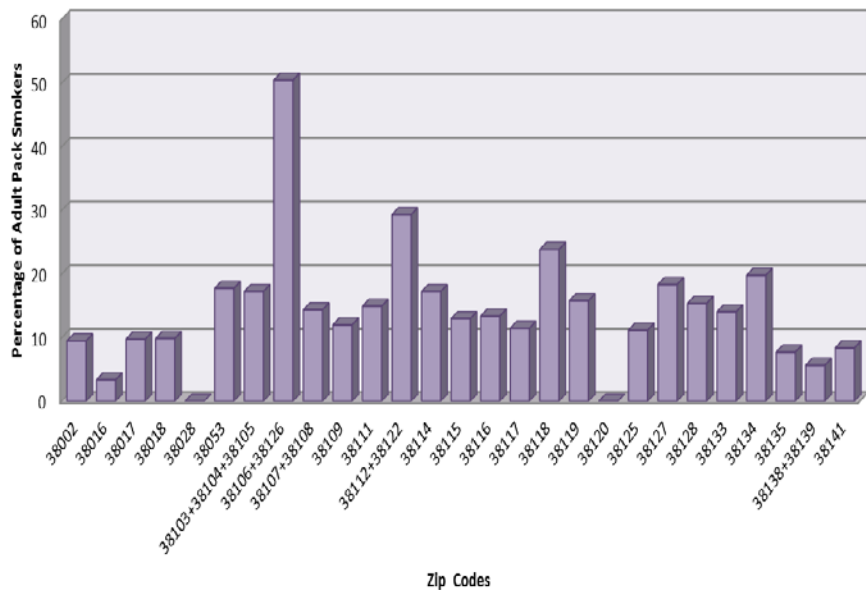
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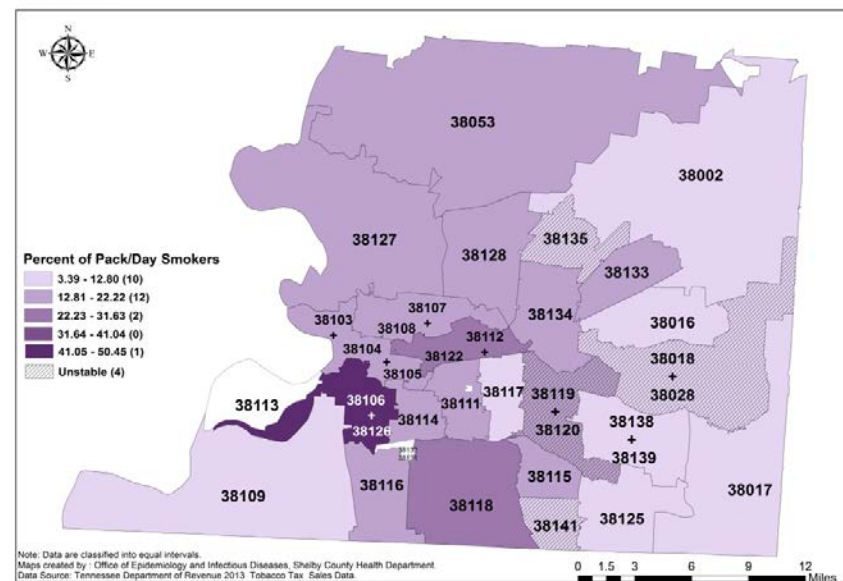
Life Expectancy vs Social Determinants in Shelby County TN (2009-2013)



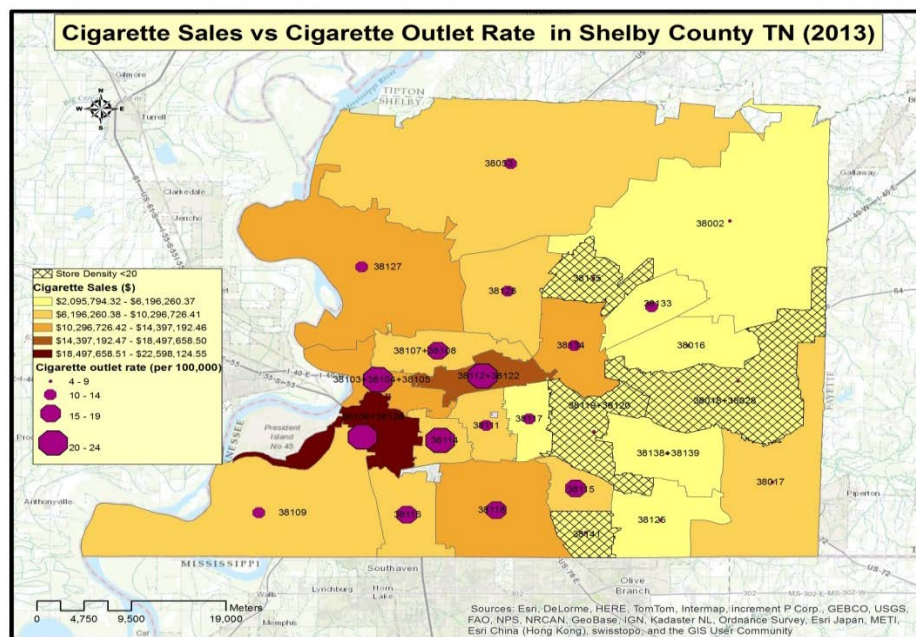
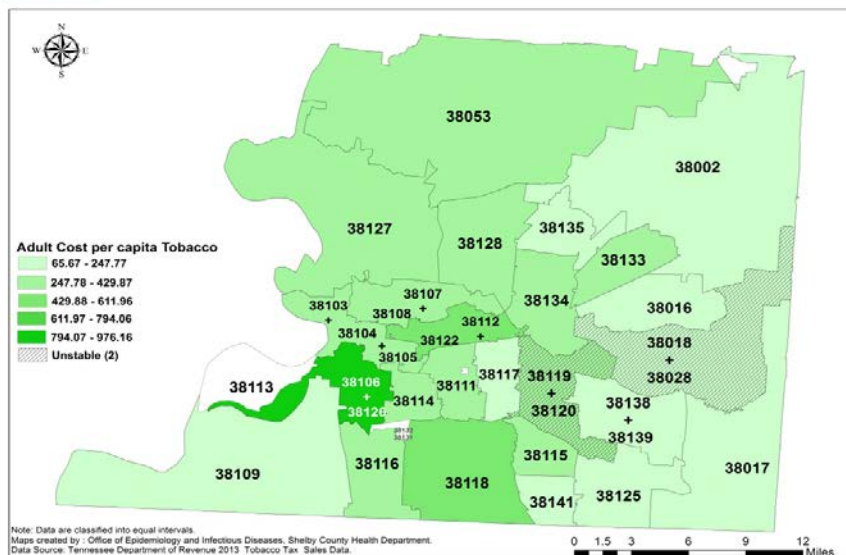
% of Adult pack/day smokers in Shelby County Tennessee



Percent of Adult Pack/Day Smokers in Shelby County, TN-2013



Cigarette Sales per capita in Shelby County, TN -2013 (Adults Only)

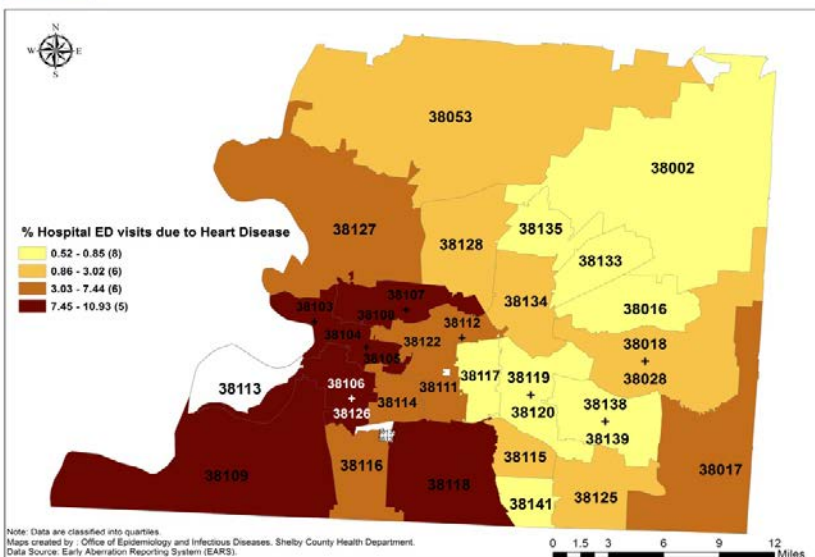


Maps created by : Office of Epidemiology and Infectious Diseases, Shelby County Health Department.

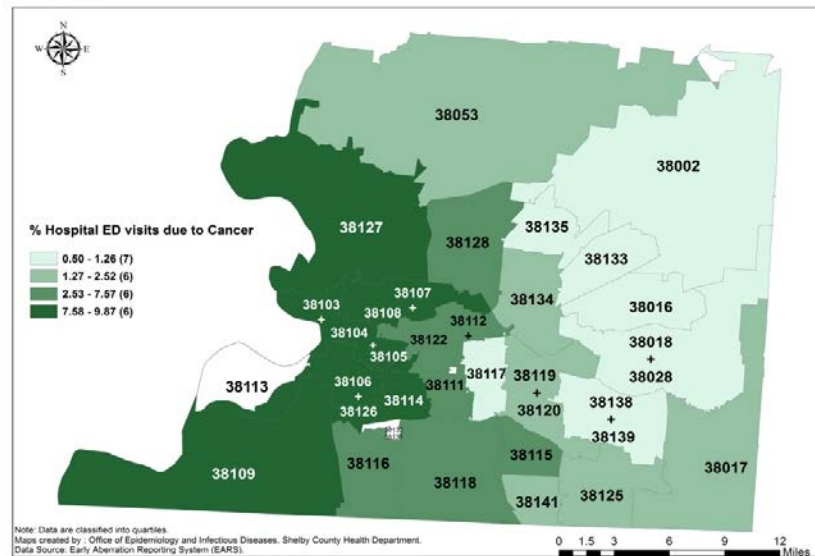
Data Source: Tennessee Department of Revenue 2013 Tobacco Tax Sales Data.



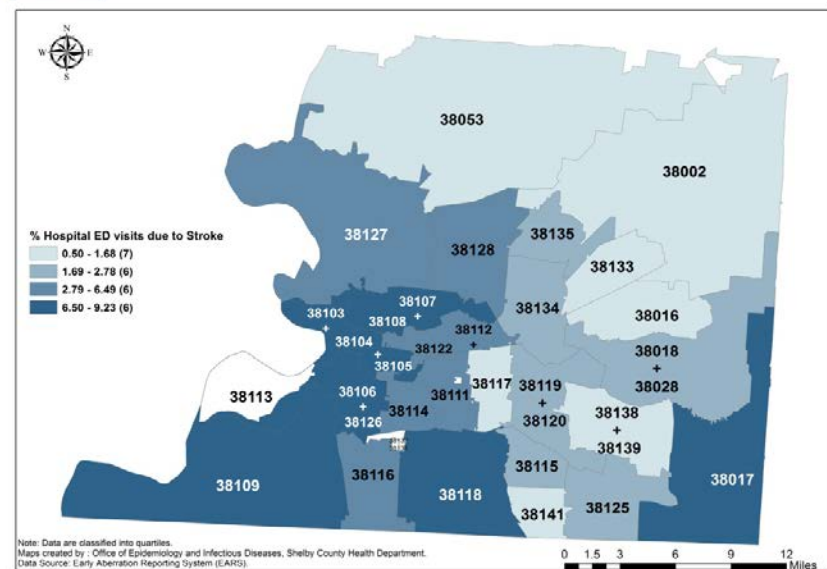
Percent ED visits due to Heart Disease in Shelby County, 2007-2014



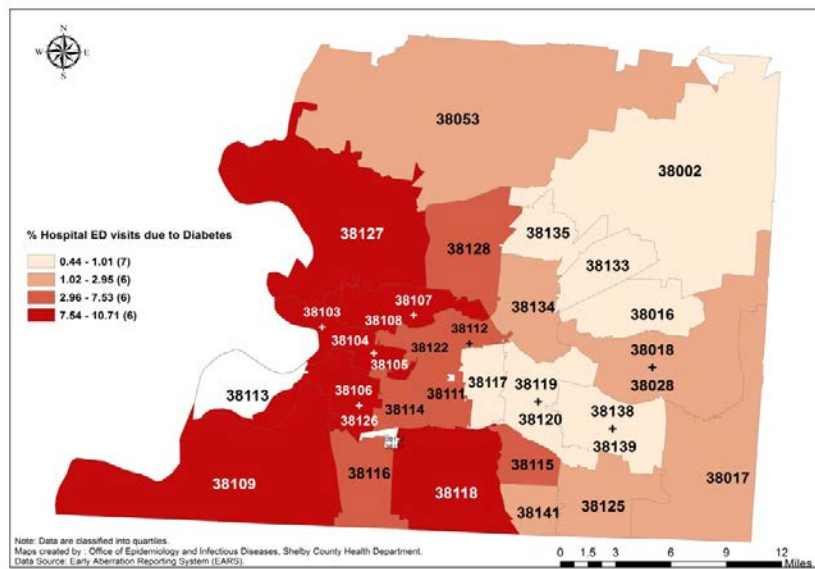
Percent ED visits due to Cancer in Shelby County, 2007-2014



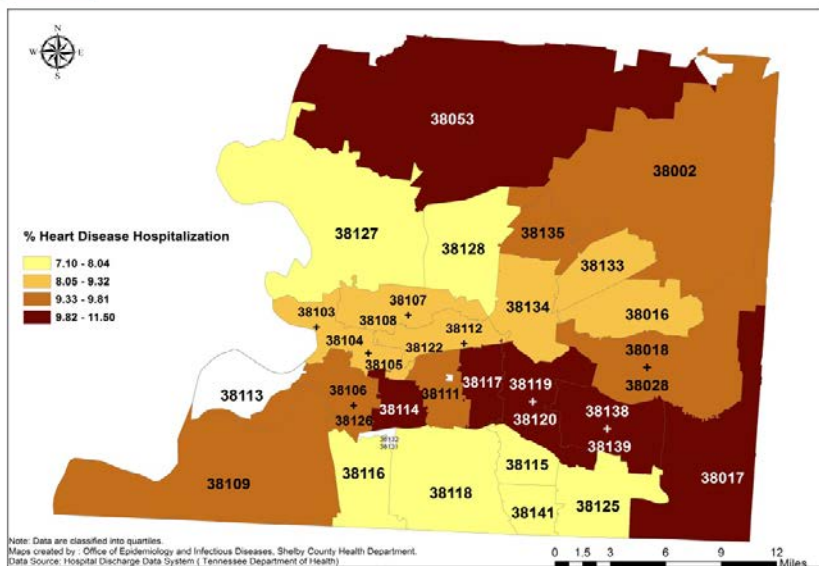
Percent ED visits due to Stroke in Shelby County, 2007-2014



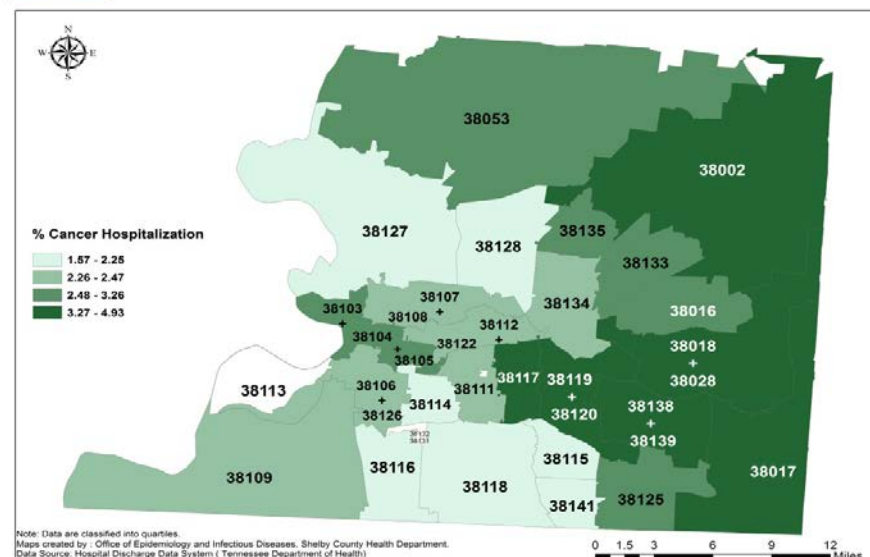
Percent ED visits due to Diabetes in Shelby County, 2007-2014



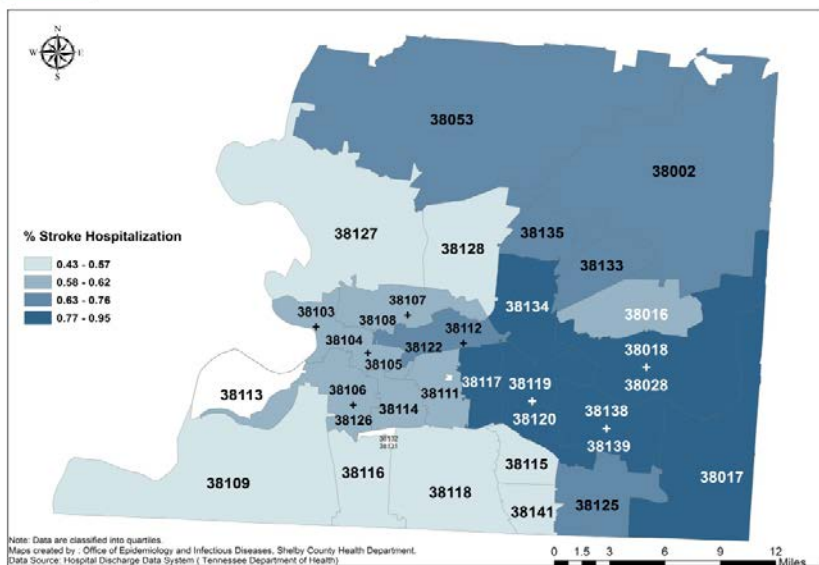
Percent of Total Heart Disease Inpatient Hospitalization in Shelby County, 2009-2013



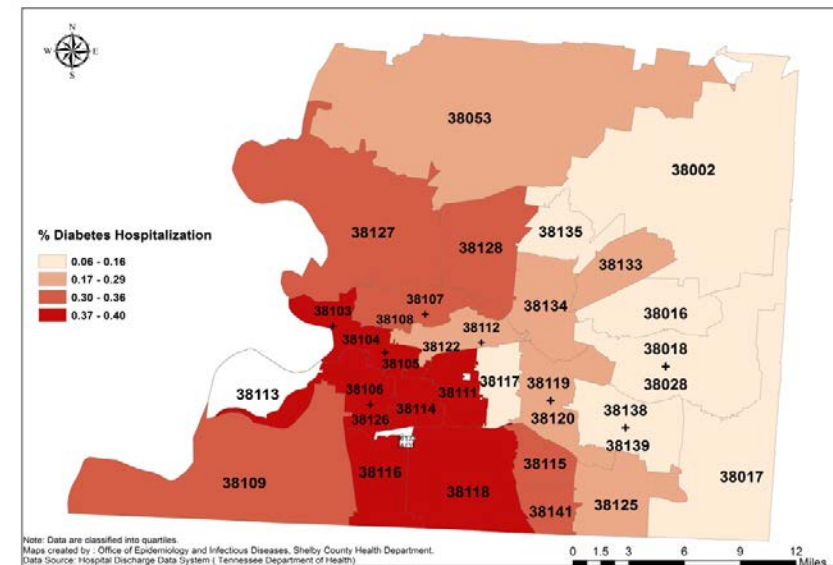
Percent of Total Cancer Inpatient Hospitalization in Shelby County, 2009-2013



Percent of Total Stroke Inpatient Hospitalization in Shelby County, 2009-2013

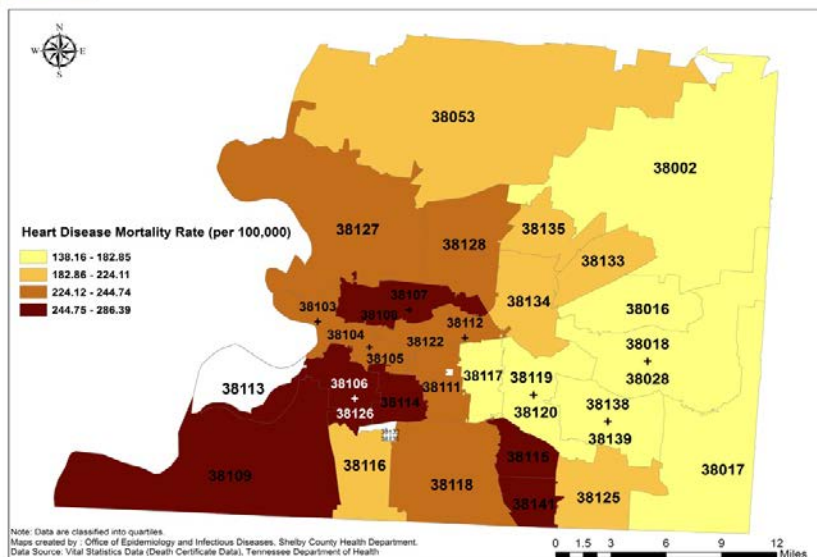


Percent of Total Diabetes Inpatient Hospitalization in Shelby County, 2009-2013

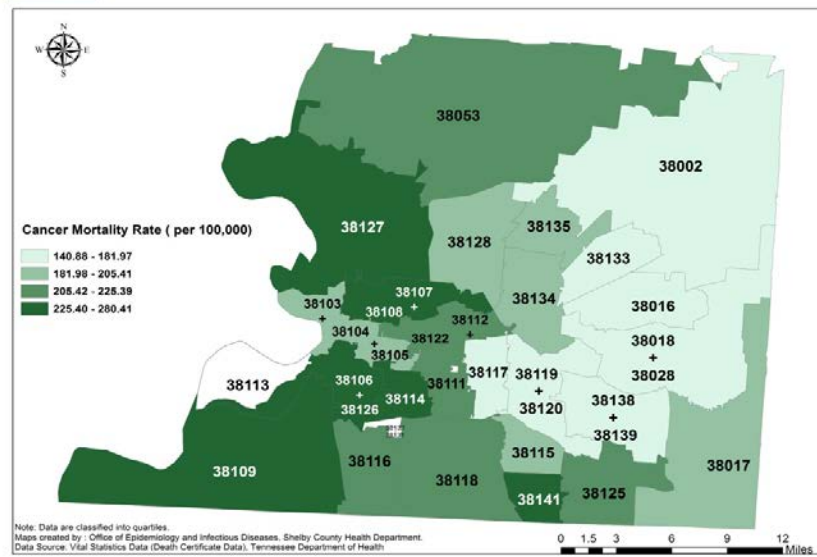




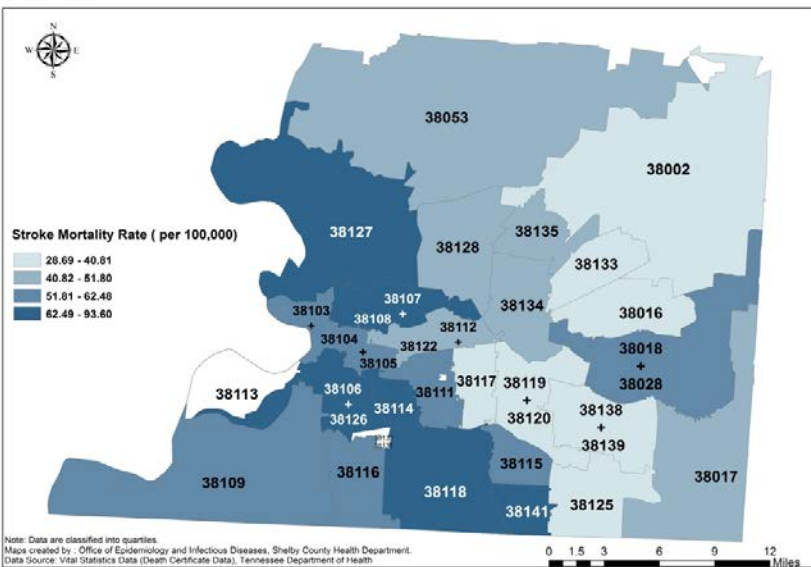
Heart Disease Mortality Rate by Zipcode Shelby County, 2009-2013



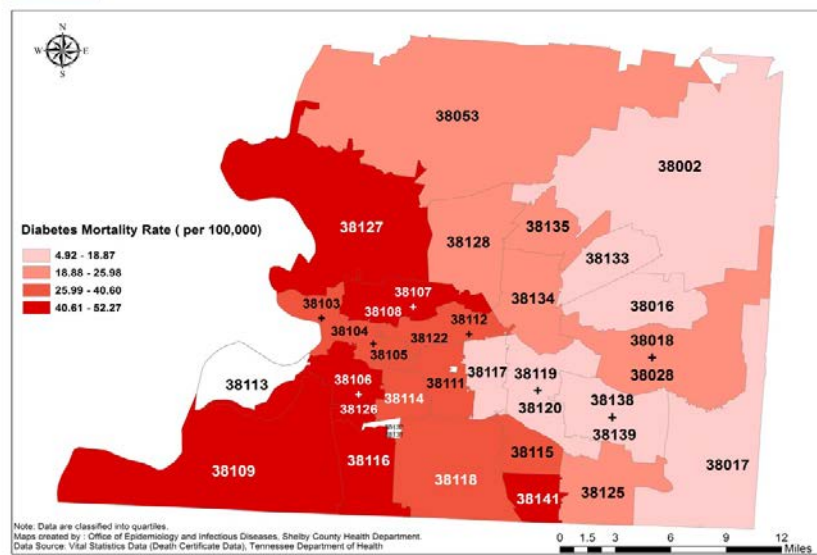
Cancer Mortality Rate by Zipcode Shelby County, 2009-2013



Stroke Mortality Rate by Zipcode Shelby County, 2009-2013



Diabetes Mortality Rate by Zipcode Shelby County, 2009-2013





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CONCLUSION

- ❖ Sub-County analysis can be a powerful approach to understanding the variable distribution and determinants of disease in your jurisdiction.
- ❖ Only you can determine the right units for your SCALE analysis.
- ❖ Various data streams including SCALE are required to identify areas of need.
- ❖ This type of analysis will enable local agencies to be more effective in targeting limited resources to areas with greatest need within the County.

Contact Information

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