



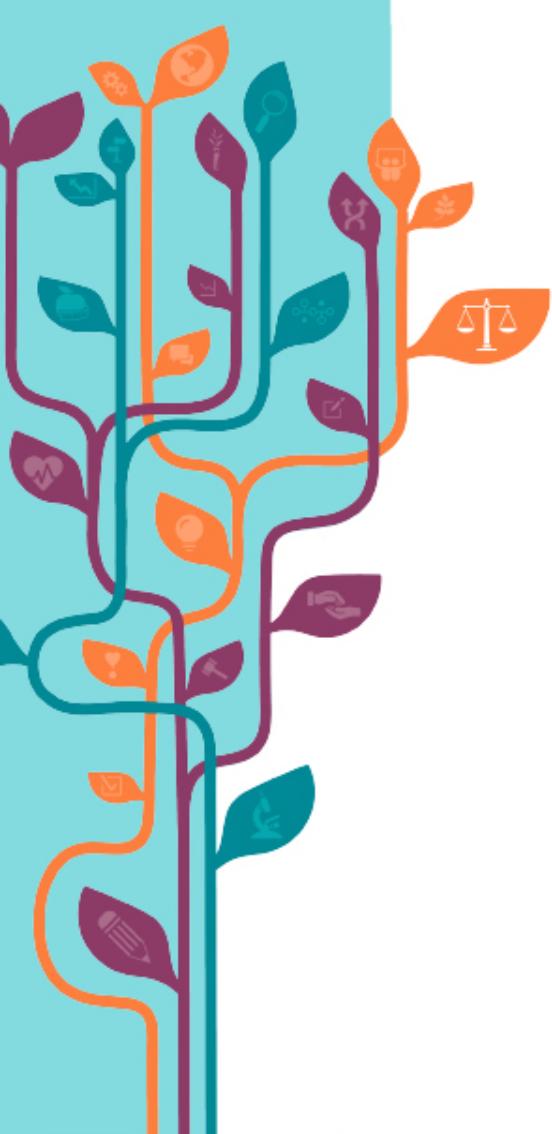
# Cultivating A Culture of Health Equity

**NACCHO  
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2016**

JULY 19-21 ■ PHOENIX, ARIZONA ■ [NACCHOANNUAL.ORG](http://NACCHOANNUAL.ORG)



**Public Health**  
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Shelby County Health Department



# 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

**NACCHO  
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2016**

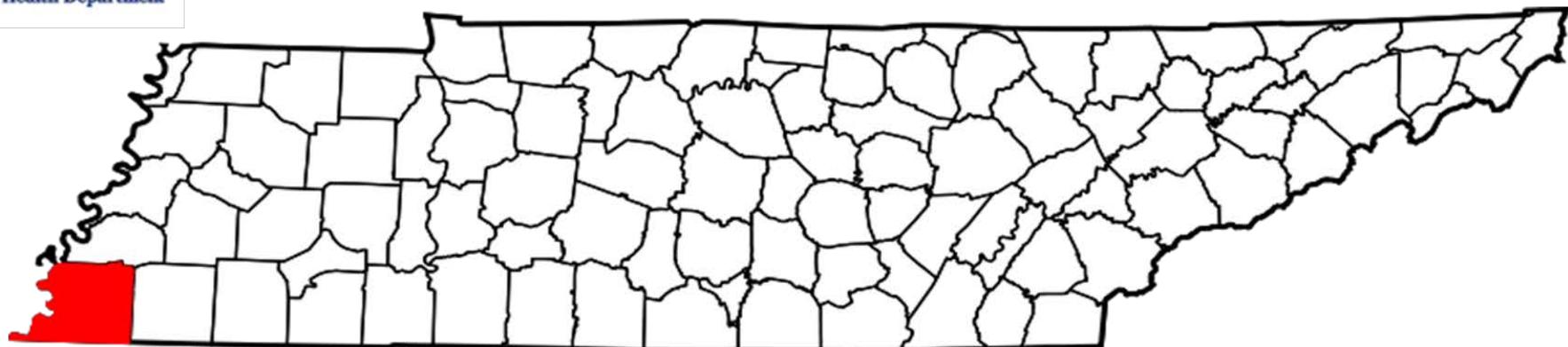
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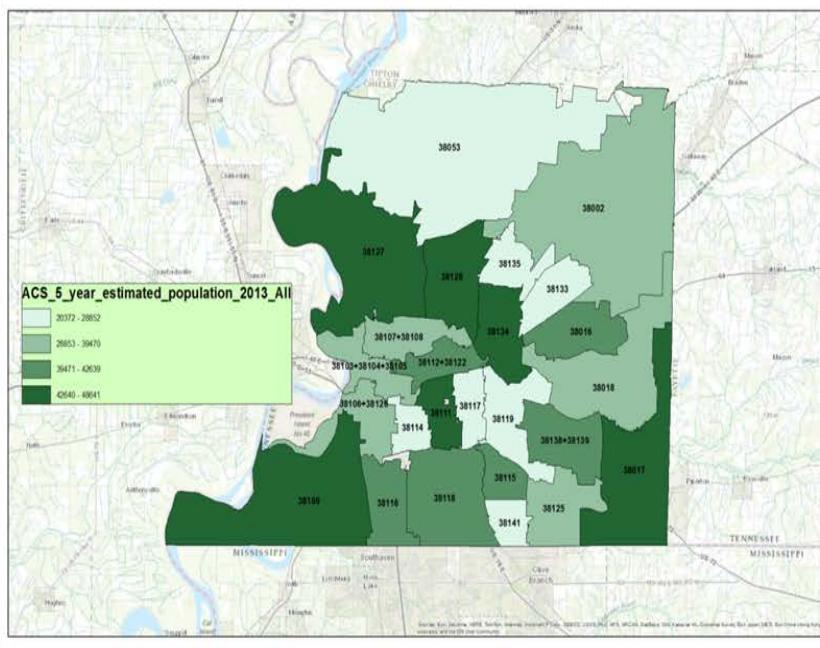
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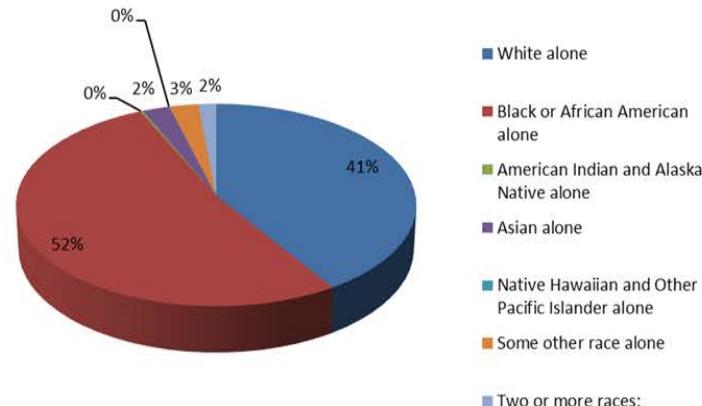
# ABOUT SHELBY COUNTY TN



Population Distribution in Shelby County TN, 2013



Race Distribution in Shelby County TN 2013





# 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



# 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 →  Age groups
- Population- Aggregated by 19 age groups, ZCTA & sex : arrange data →  Area

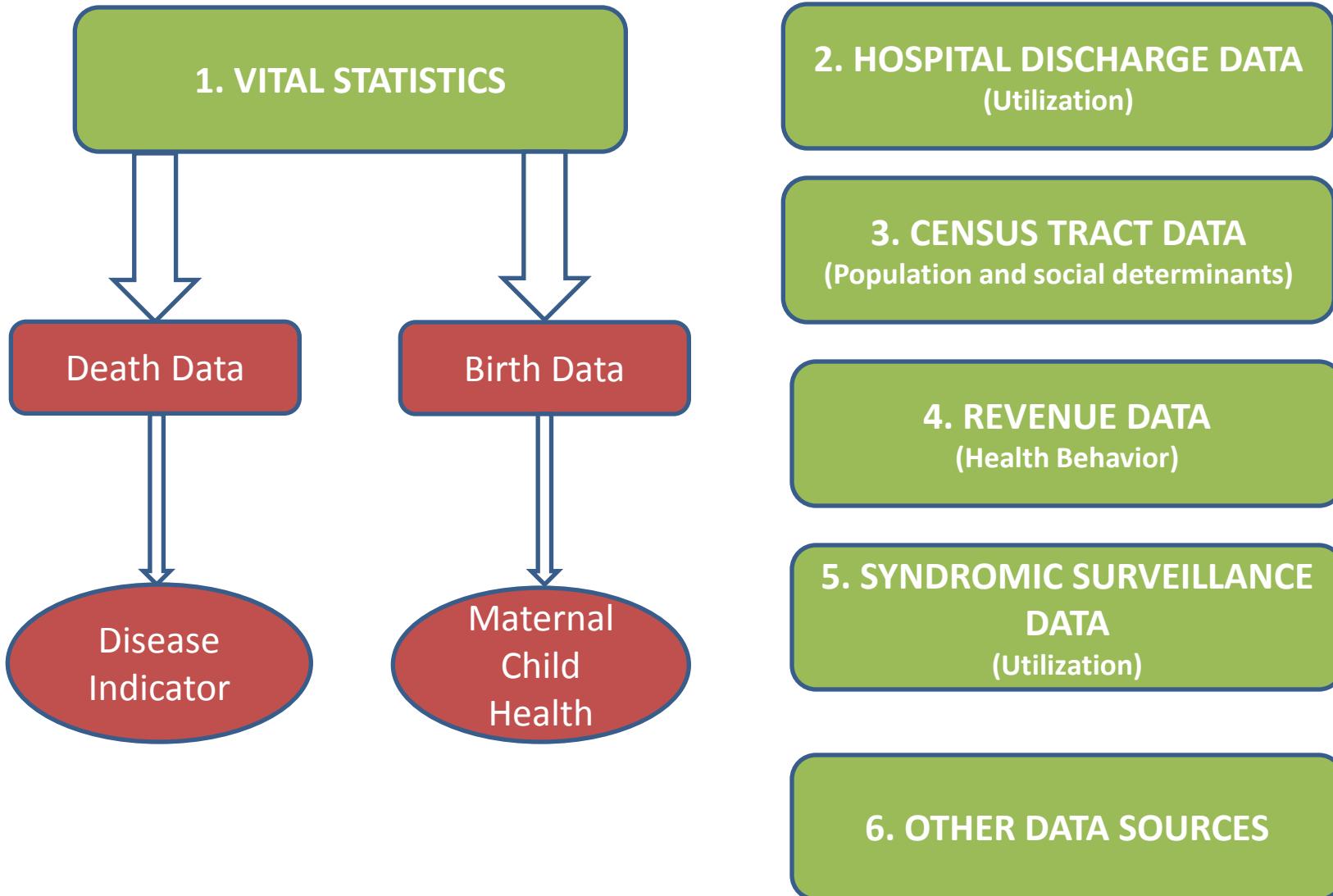
Calculation of LE

- SEPHO Tool
- Age Adjusting tool\*

Map

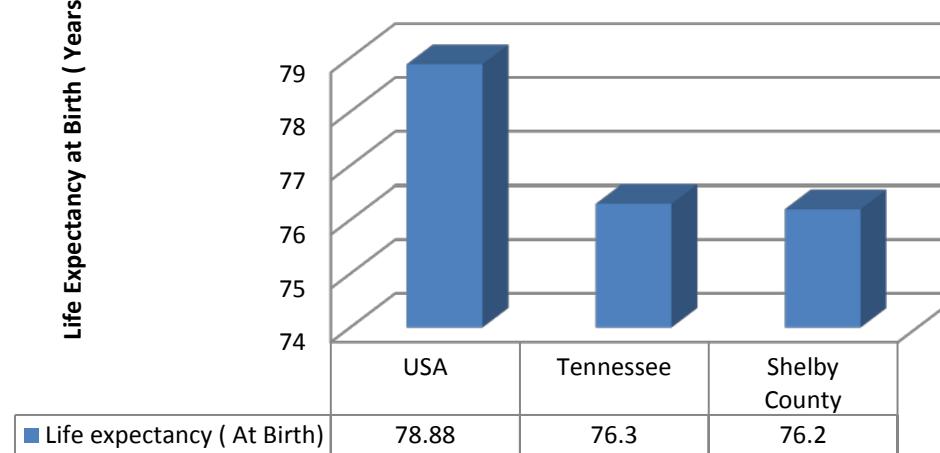
- Arc GIS
- Others

# TARGET DATA SETS

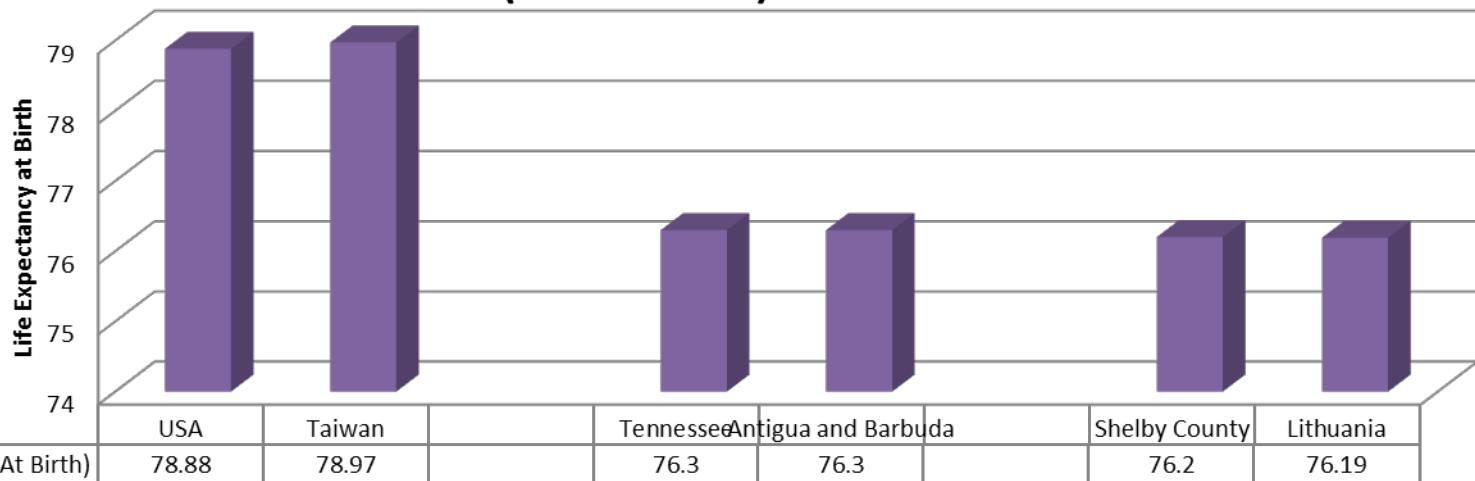




## Comparison of LE 2013 (Country, State, County)



## Comparison of LE 2013 (US vs World)

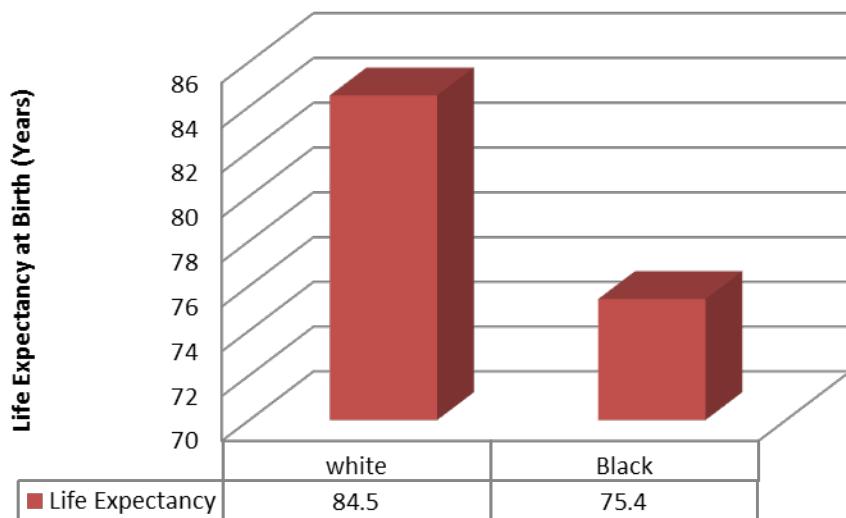


Data Source for World LE: [www.geoba.se](http://www.geoba.se)

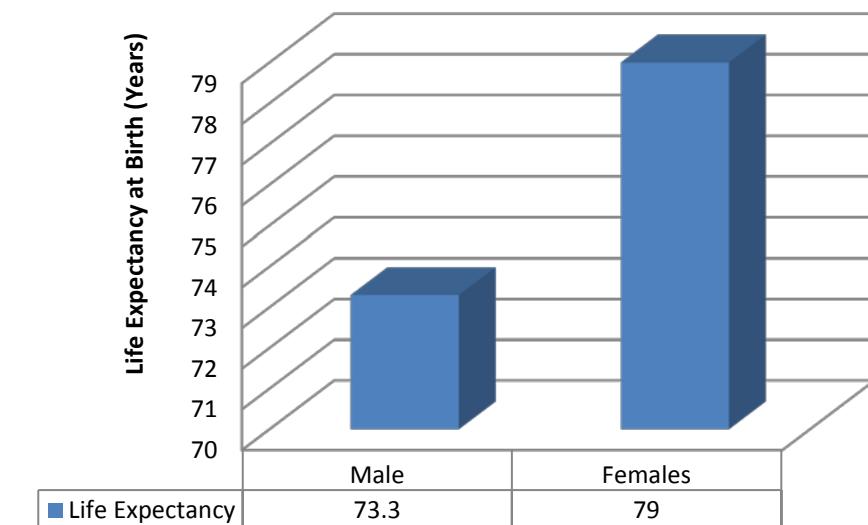
Data Source for USA and States: <http://kff.org/state-category/health-status/life-expectancy/>

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

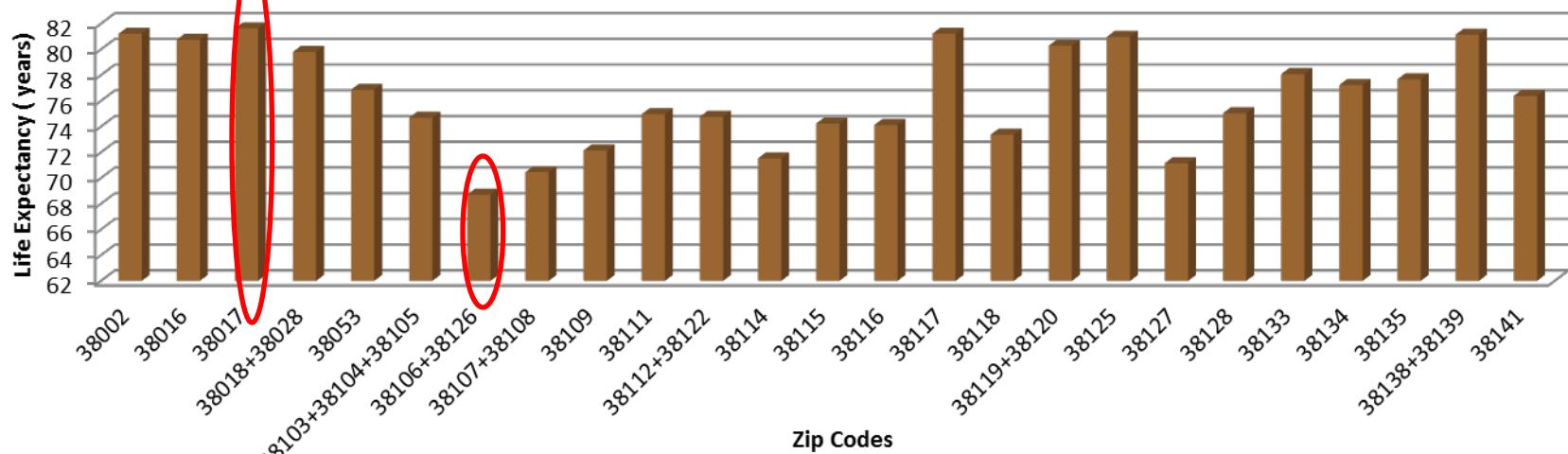
## Life Expectancy in Shelby County by Race (2013)



## Life Expectancy in Shelby County by Sex (2013)

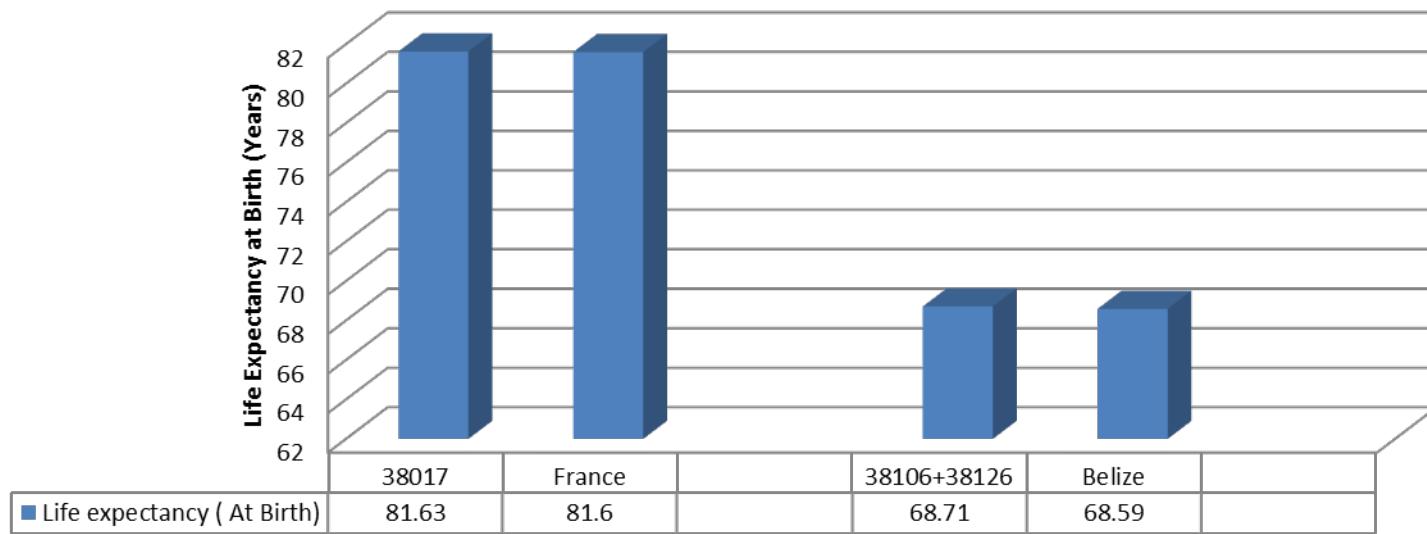


## Life expectancy at Birth in Shelby County TN



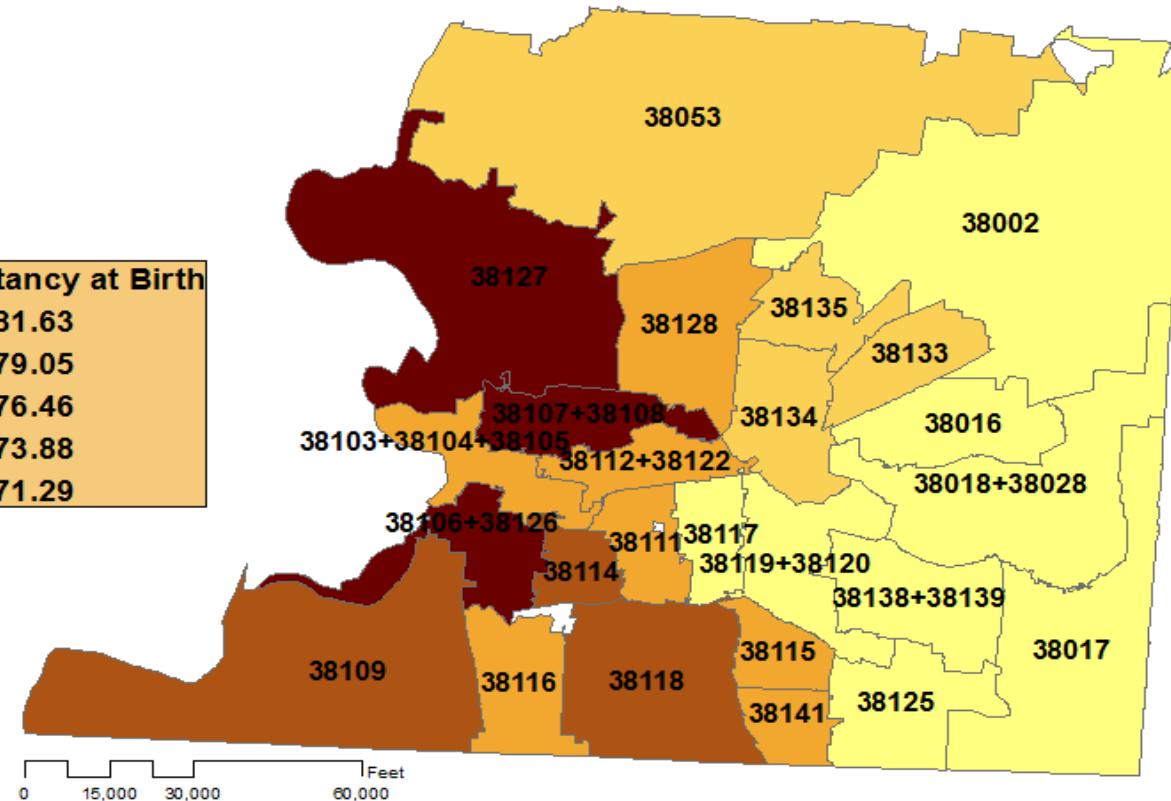
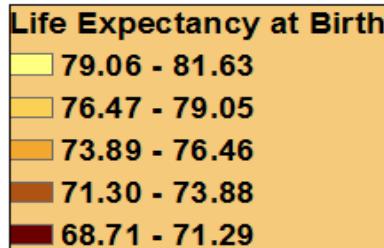


## Comparison of LE (Shelby County Zip vs World) 2013





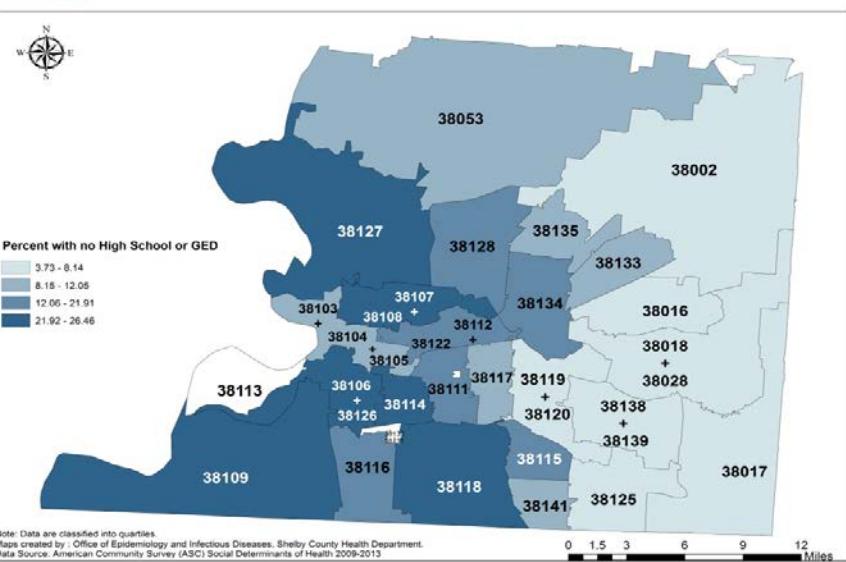
## Life Expectancy at Birth in Shelby County TN 2009-2013



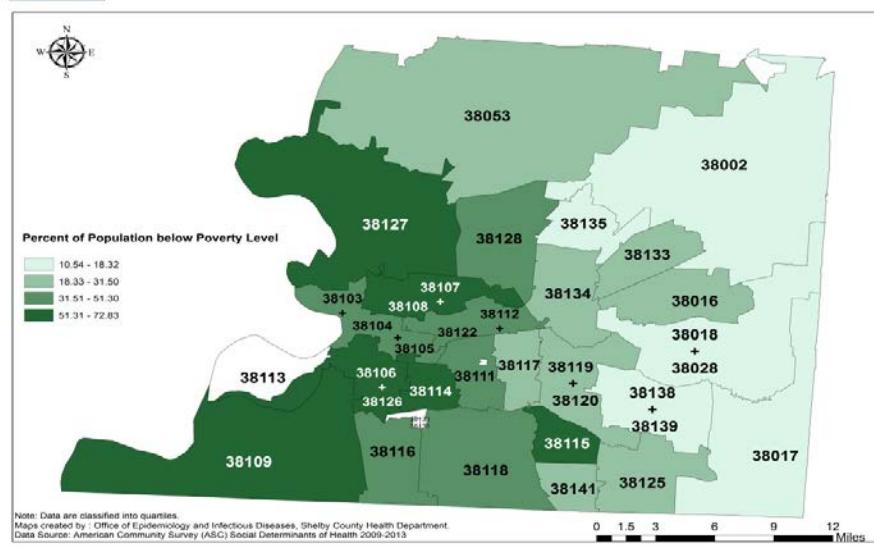
0 15,000 30,000 60,000 Feet



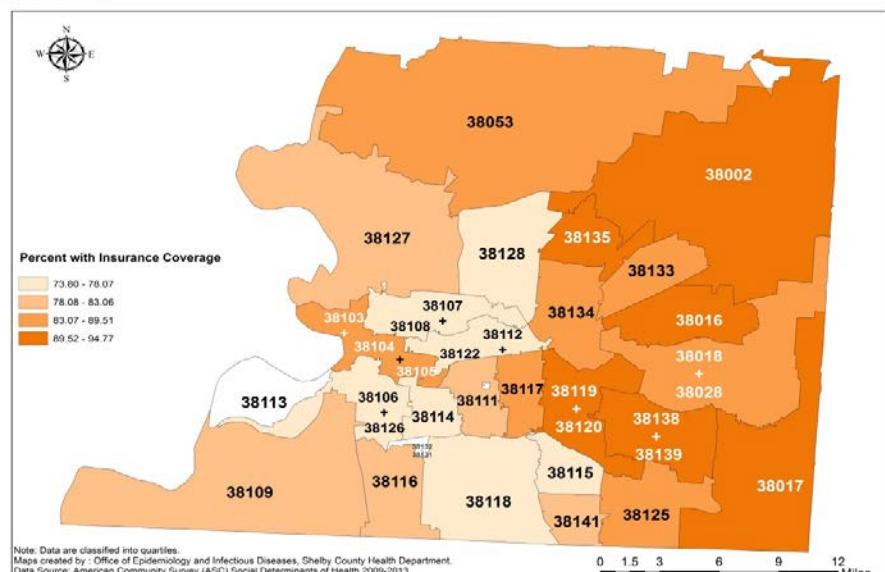
### Percent of Population without High School or GED in Shelby County, 2009-2013



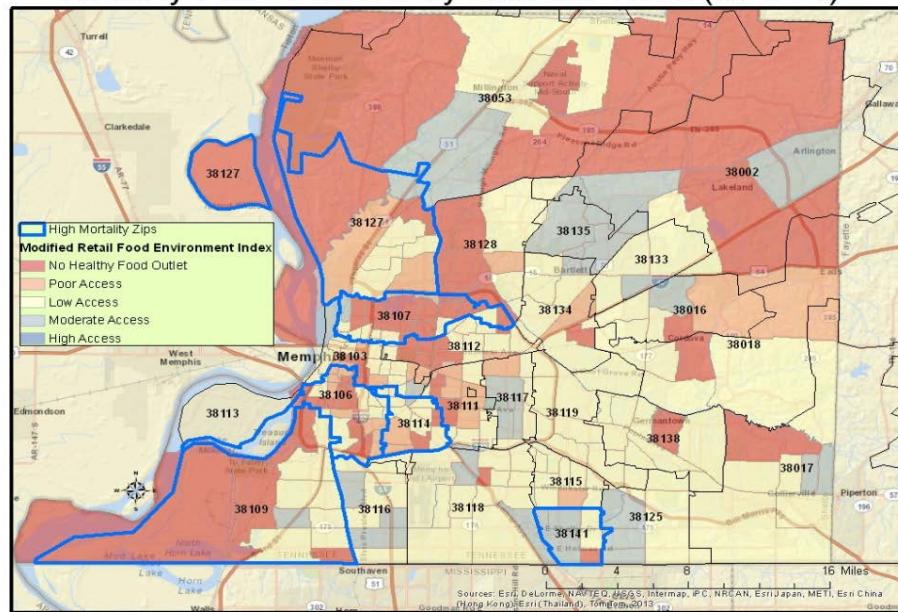
### Percent of Population below Poverty Level in Shelby County, 2009-2013



### Percent of Population with Health Insurance Coverage in Shelby County, 2009-2013

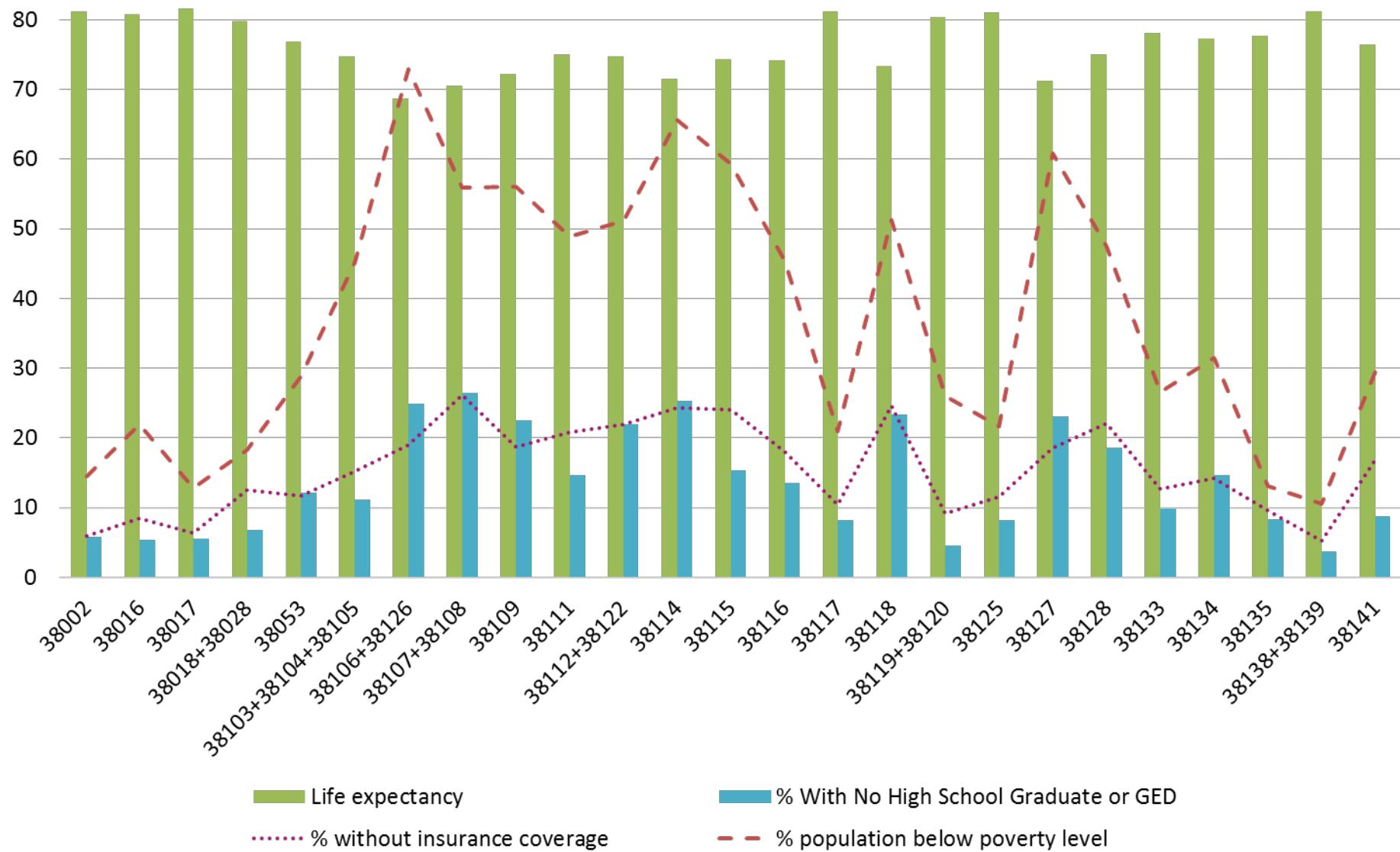


### Healthy Food Access by Census Tract (mRFEI)

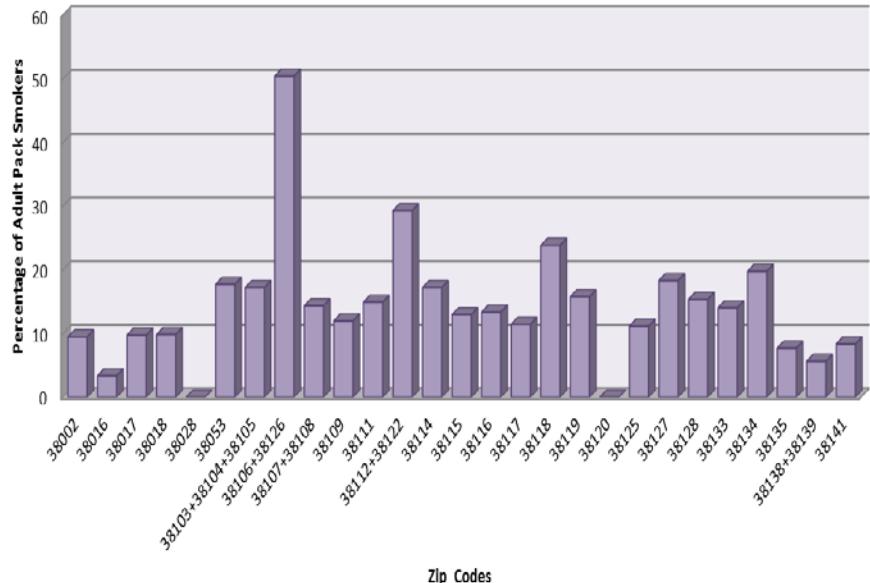




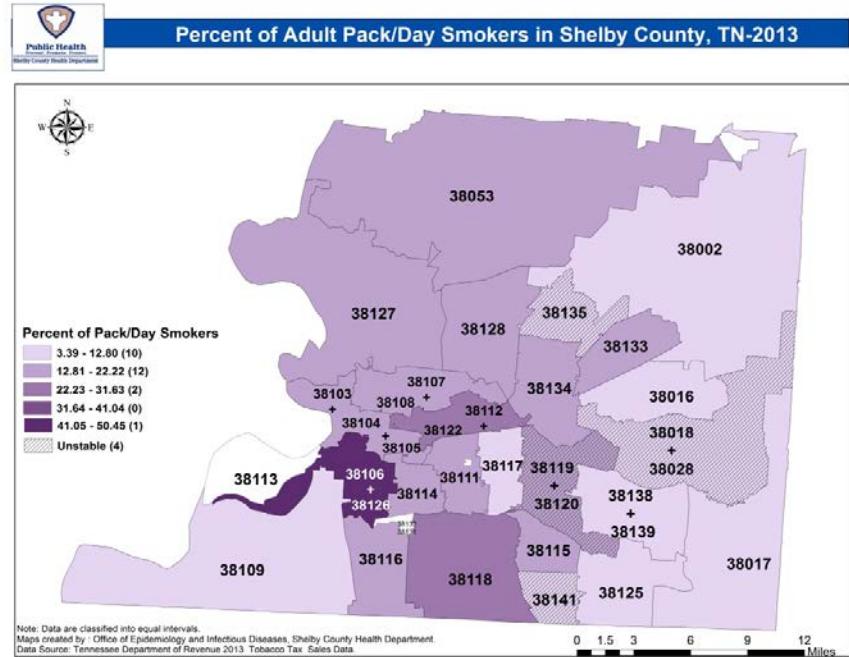
## Life Expectancy vs Social Determinants in Shelby County TN (2009-2013)



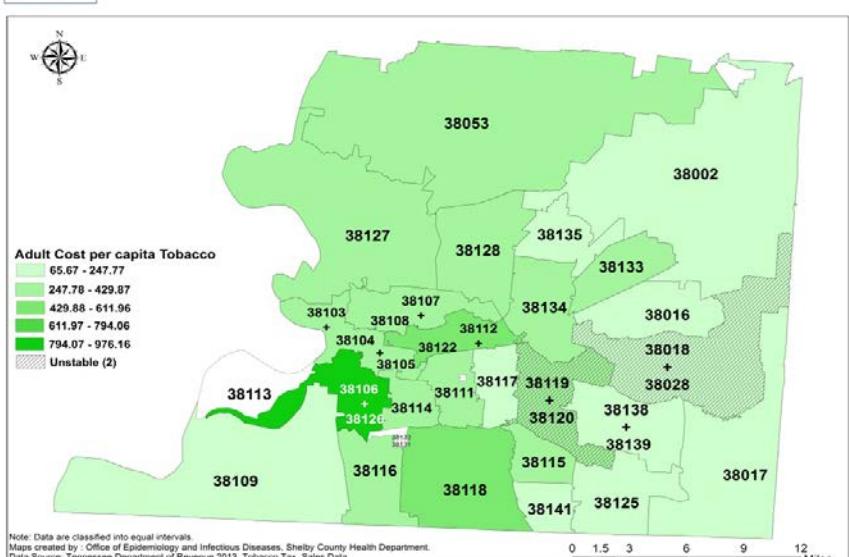
## % of Adult pack/day smokers in Shelby County Tennessee



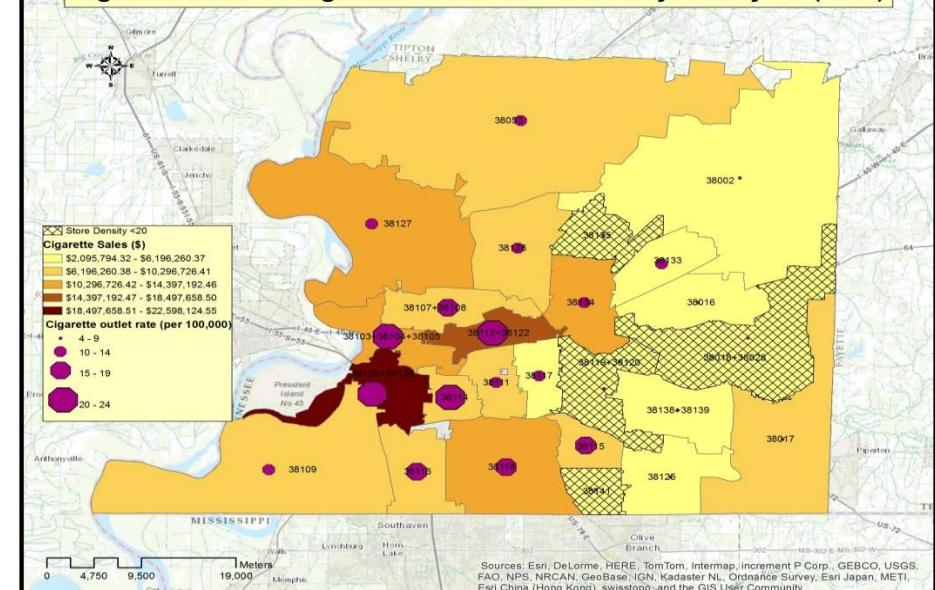
## Percent of Adult Pack/Day Smokers in Shelby County, TN-2013



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



## Cigarette Sales vs Cigarette Outlet Rate in Shelby County TN (2013)

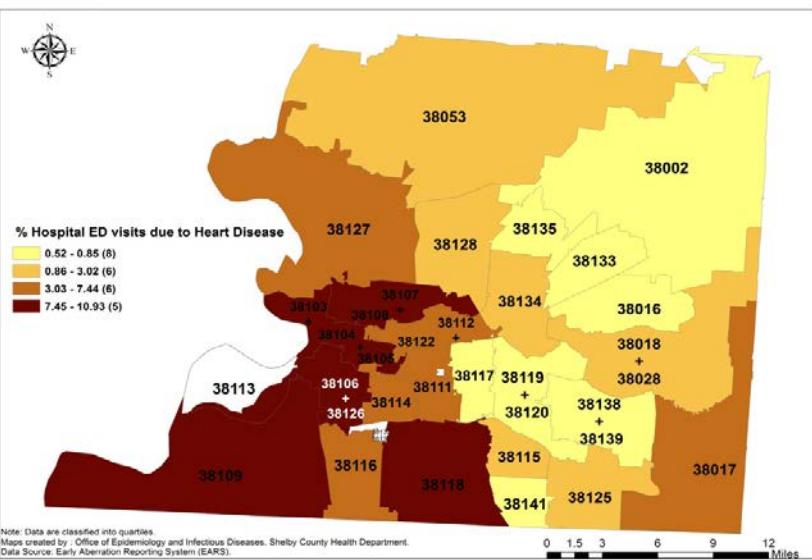


Maps created by : Office of Epidemiology and Infectious Diseases, Shelby County Health Department.

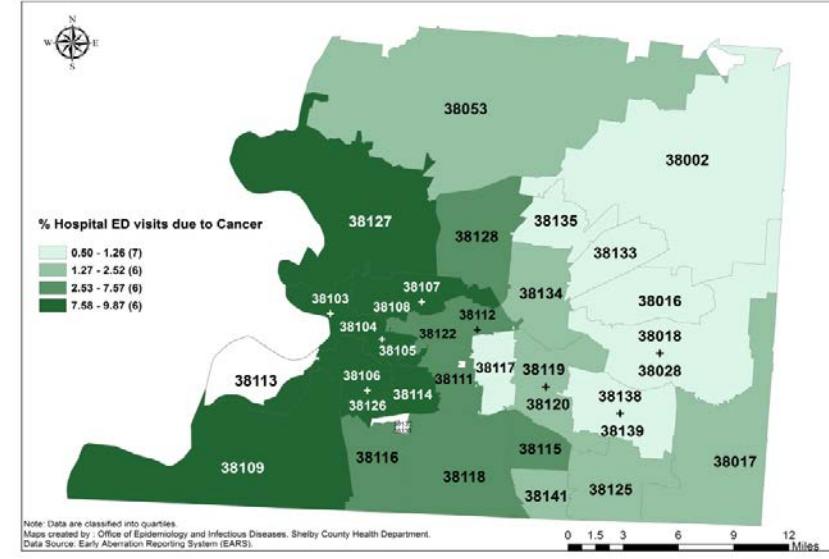
Data Source: Tennessee Department of Revenue 2013 Tobacco Tax Sales Data.



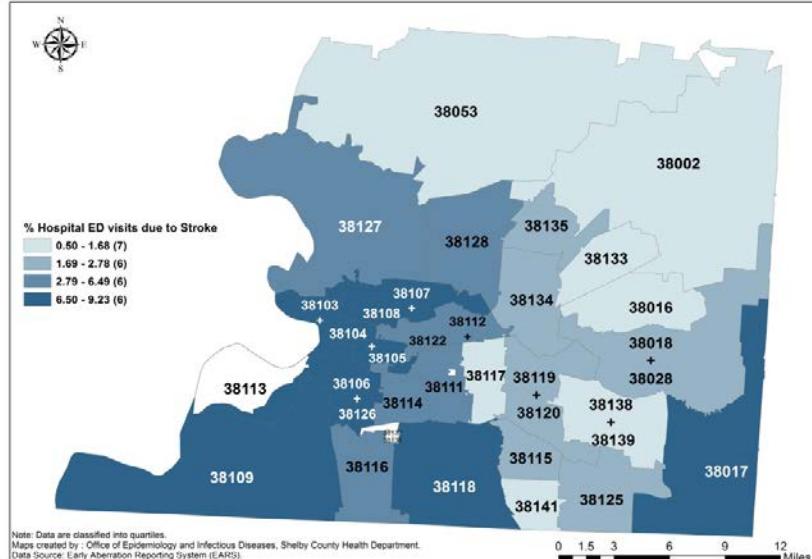
### Percent ED visits due to Heart Disease in Shelby County, 2007-2014



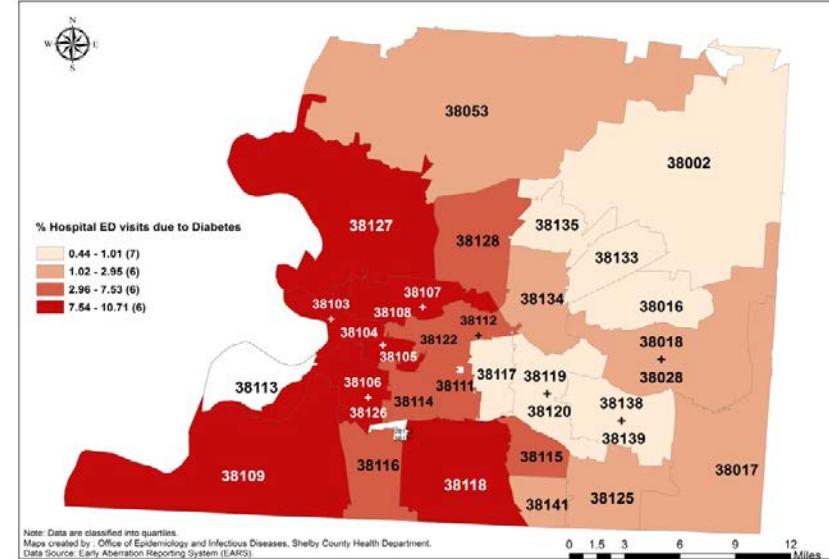
### Percent ED visits due to Cancer in Shelby County, 2007-2014



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

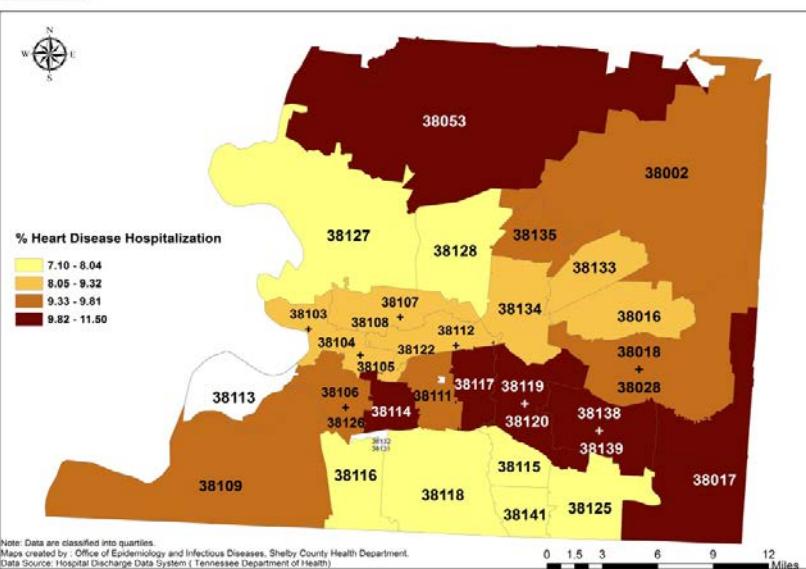


### Percent ED visits due to Diabetes in Shelby County, 2007-2014

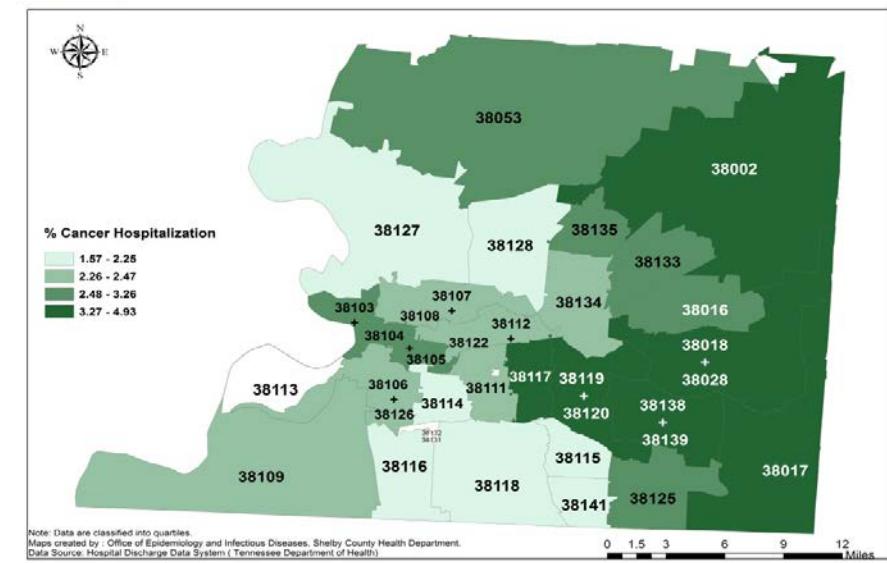




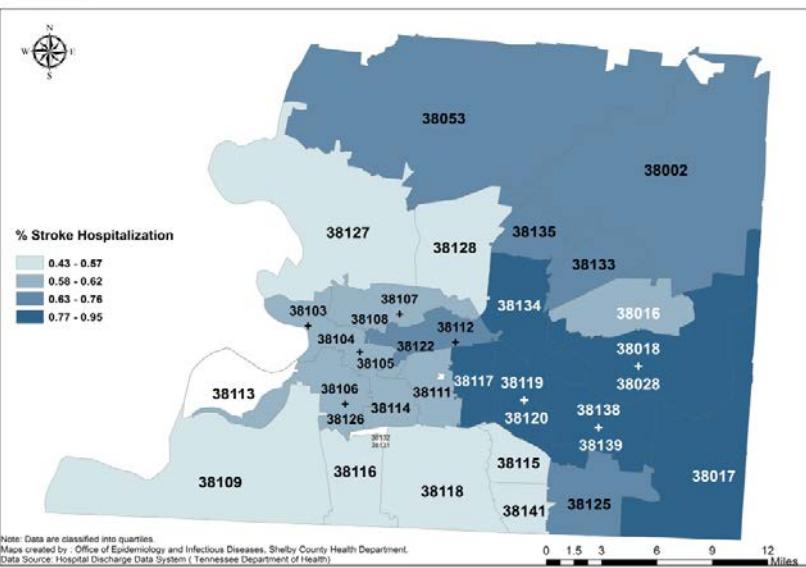
### Percent of Total Heart Disease Inpatient Hospitalization in Shelby County, 2009-2013



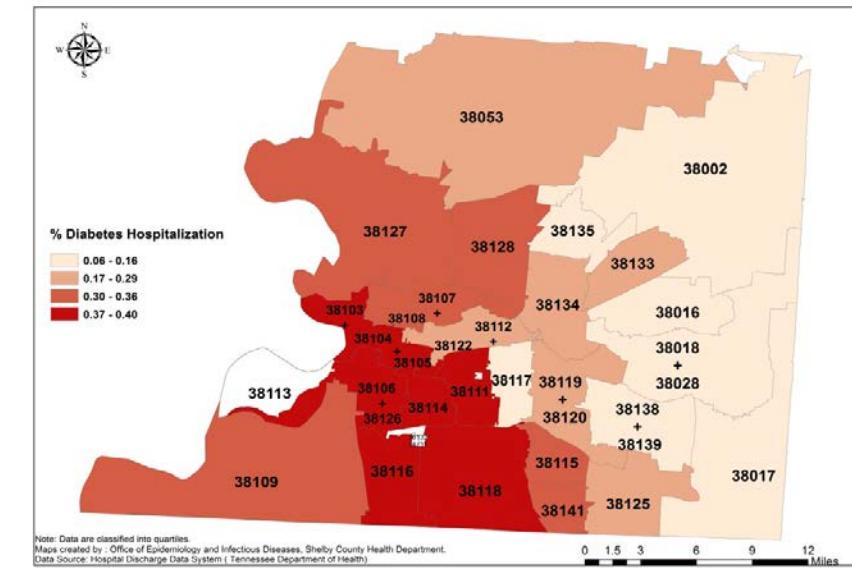
### Percent of Total Cancer Inpatient Hospitalization in Shelby County, 2009-2013



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

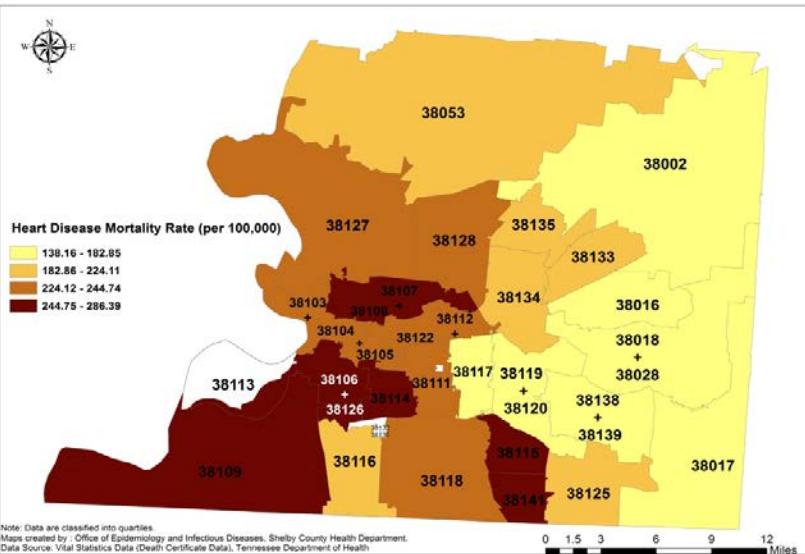


### Percent of Total Diabetes Inpatient Hospitalization in Shelby County, 2009-2013

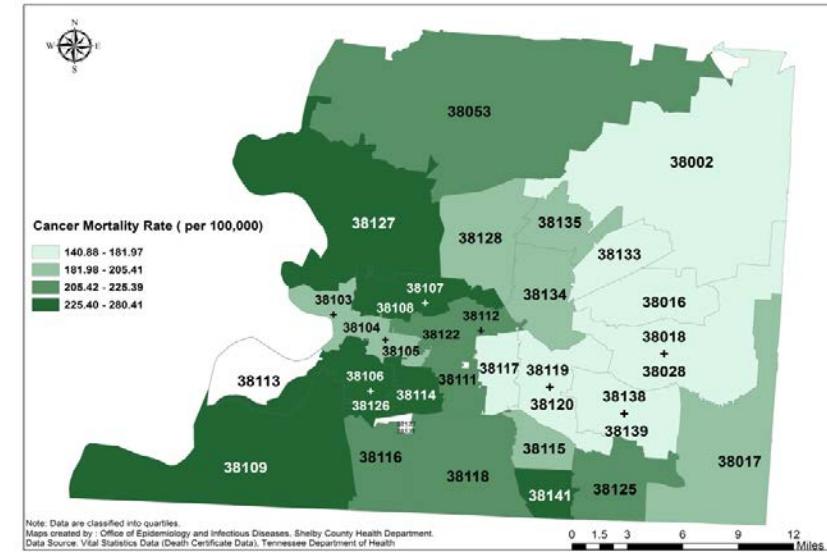




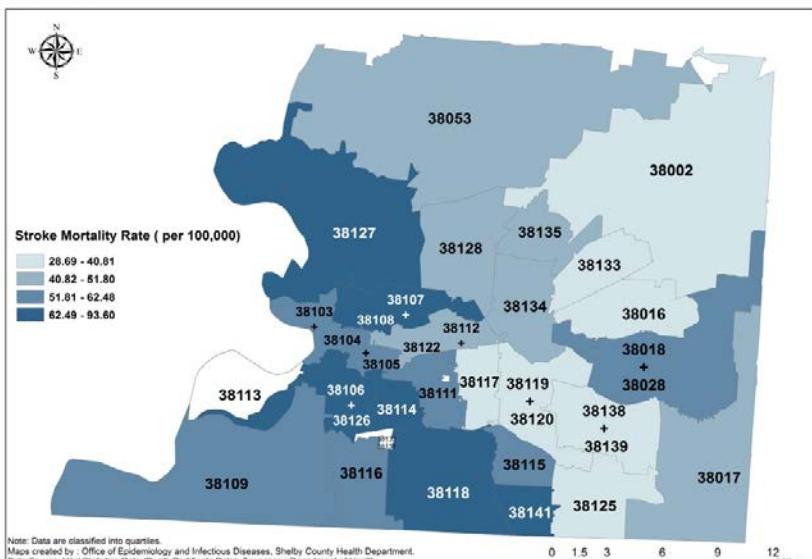
### Heart Disease Mortality Rate by Zipcode Shelby County, 2009-2013



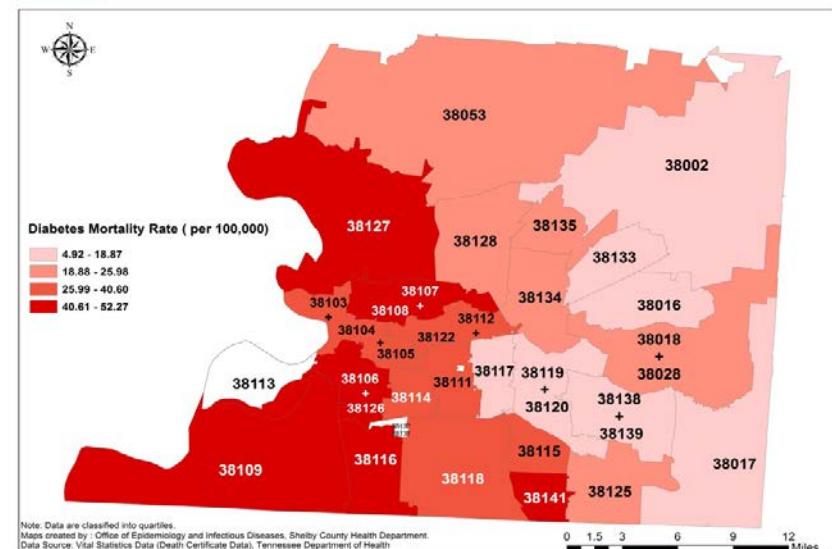
### Cancer Mortality Rate by Zipcode Shelby County, 2009-2013



### 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

David Sweat MPH.

Chief of Epidemiology and Infectious Diseases  
Office of Epidemiology and Infectious Diseases  
Shelby County Health Department

Email: [David.Sweat@shelbycountytn.gov](mailto:David.Sweat@shelbycountytn.gov)

Phone: 901-222-9229

Lilian Ogari PhD., MPH.

Chronic Disease Epidemiologist  
Office of Epidemiology and  
Infectious Diseases

Shelby County Health Department

Email:  
[lilian.ogari@shelbycountytn.gov](mailto:lilian.ogari@shelbycountytn.gov)

Phone: 901-222-9236

