

Davidson County, TN Community Health Needs Assessment 2019

Friday, January 11, 2019

Welcome

David Posch, *Executive Vice President Population Health, Vanderbilt University Medical Center*

Fahad Tahir, *FACHE, President and Chief Executive Officer, Ascension Saint Thomas Midtown Hospital, Ascension Saint Thomas West Hospital*



Davidson County – Health Priorities



Sanmi Areola, Ph. D., Interim Director of Health

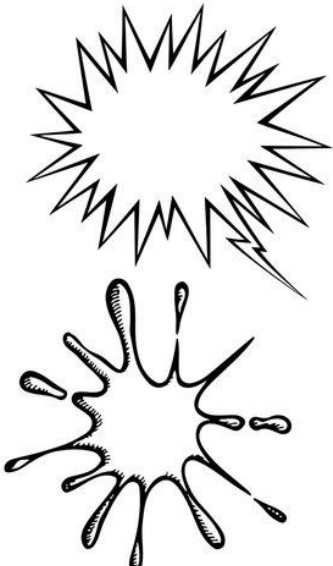
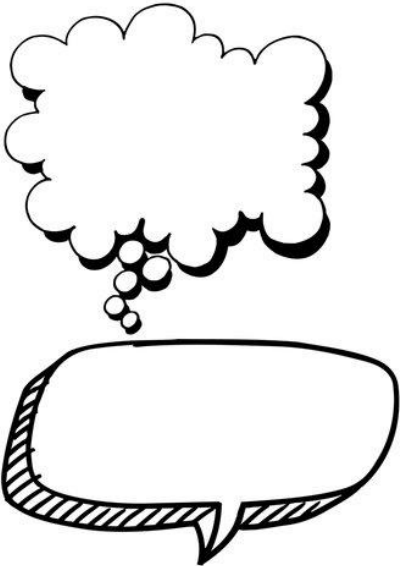
Why Are We Here?

- Saint Thomas Health and Vanderbilt Medical Center conduct needs assessment tri-annually, requirement for non-profit hospitals
- Metro Public Health Department conducts assessments for Public Health Accreditation
- TODAY: Review findings of the current(2019) community health assessments
- Collectively identify strategic issues
- Health systems: Implementation Strategy
- All: Community Health Improvement Plan

Agenda

- Review Findings
 - Community Health Status (Data)
 - Local Public Health System Assessment
 - Community Input
 - Forces of Change Assessment
- Identification of Strategic Health Issues
- Voting and Brainstorming
- Community Mosaic

LOGISTICS



Community Engagement

- Values and intentionality early on
- Feedback and engagement at many levels
 - Healthy Nashville Leadership Council
 - Core Group
 - Community Input (CTSA)
 - Community Health Status Assessment



A Healthier Community

Vision

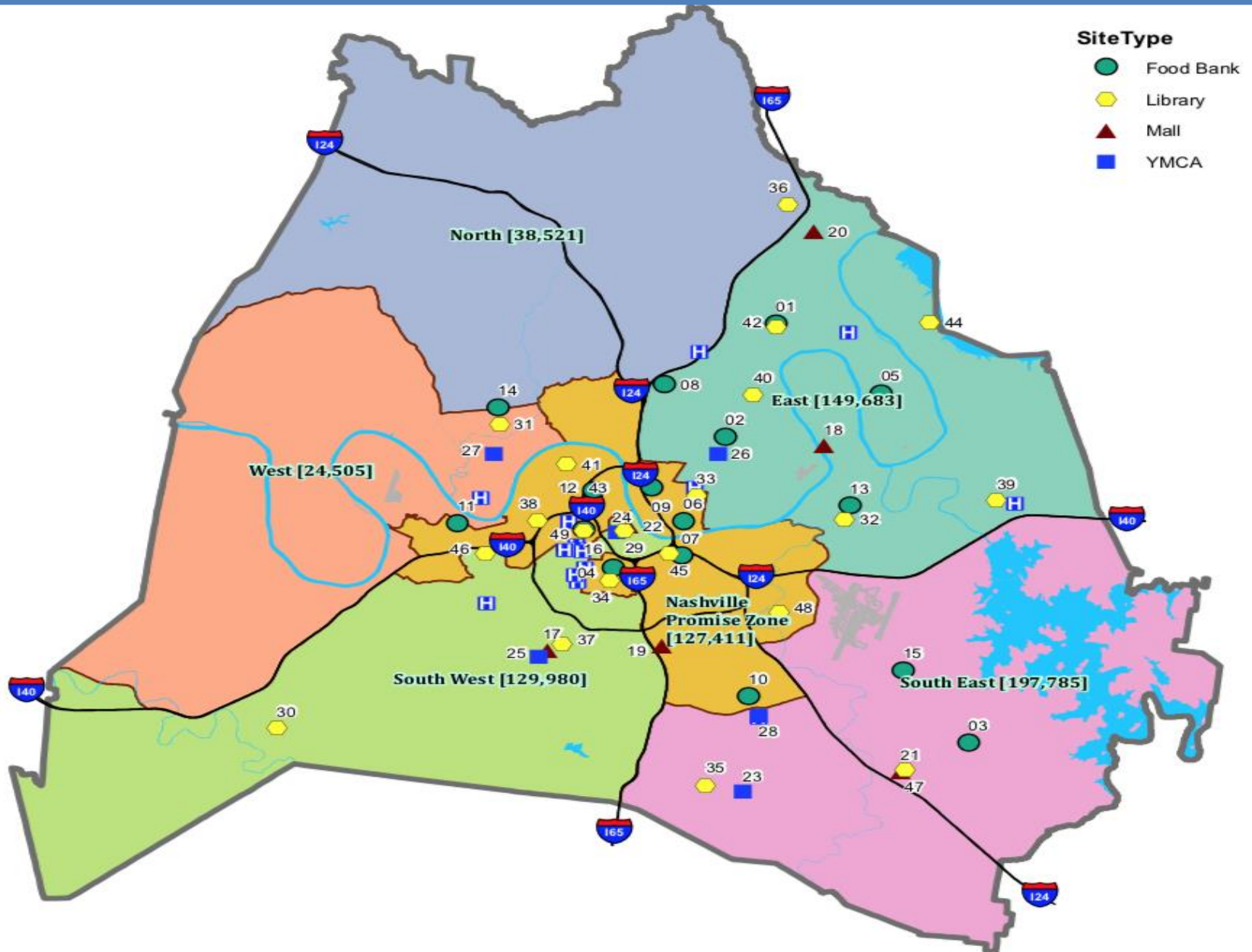
“A healthy Nashville has a culture of compassion and well-being where all people belong, thrive and prosper.”

2018 MAPP Vision

Community Engagement

- Varied methods and approaches for gathering input from the community
- Input from over 500 individuals
- Special attention to underserved, low-income, minority populations

Community Engagement



With Appreciation

- Healthy Nashville Leadership Council
- Core Group and Committees
- Community members
 - Interviewees, listening session, surveys
- Metro Public Library-Hadley Park
- Metro Parks Community Centers
 - Elizabeth Park
 - Hartman Park
- Outreach Base Nashville
- Salahadeen Center
- Building Lives Foundation
- UT College of Social Work
- Gresham Smith
- Student team members:
 - Meharry Medical College
 - Vanderbilt

Health Equity Lens

“Health equity is both the absence of systemic obstacles and the creation of opportunities for all to be healthy.”

Health Assessment Equity Lens

- Strategic focus on low-income, minority, and vulnerable populations
- Include populations outside of Nashville urban core
- Include “health equity categories” in data collection methodology
- Gathering data in multiple languages

Factors that support health:



Health Equity Lens

“Health equity is both the absence of systemic obstacles and the creation of opportunities for all to be healthy.”

Equality



Equity



4 Assessments



Community Health Status



Local Public Health System



Community Input



Forces of Change

As you listen today...

- Write down issues, needs and priorities emerging from the data (solo)
- Work with your tablemates to prioritize (group)
- Voting!



Findings from Data Review

Data Review Methods

- Used publicly available data
- Indicators, considered
 - Recommendations of
 - Catholic Health Association
 - Centers for Disease Control and Prevention
 - National Association of City and County Health Officials
- Initial Review of 800+ indicators
- 100 indicators

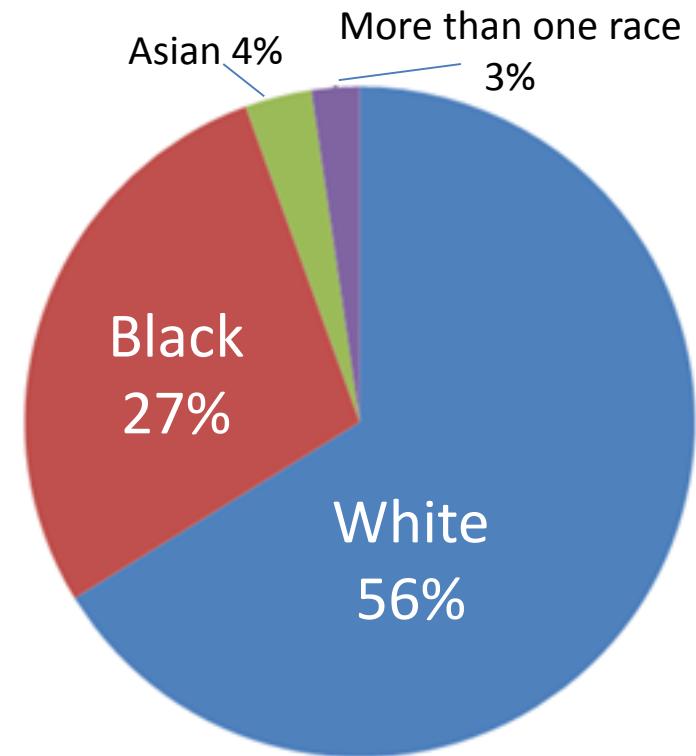
Indicator Categories

- Demographics
- Socioeconomic Status
- Social Determinants of Health Inequities
- Access to Health Care
- Behavioral Risk Factors
- Morbidity & Mortality
- Maternal & Child Health
- Mental Health
- Environmental Factors
- Infectious Disease

Demographics: Davidson County

2017 Population Estimate: 691,243

	Davidson	TN	USA
Population, % change from 2013-2017	10.3%	5.8%	5.5%
Persons under 18 years	21.1%	22.4%	22.6%
Persons 65 years and over	11.9%	16.0%	15.6%
Female persons, percent	51.8%	51.2%	50.8%
Language other than English spoken at home	16.8%	7.0%	21.3%
Persons below poverty level	14.6%	15.0%	12.3%
Persons per square mile	1243.3	153.9	87.4

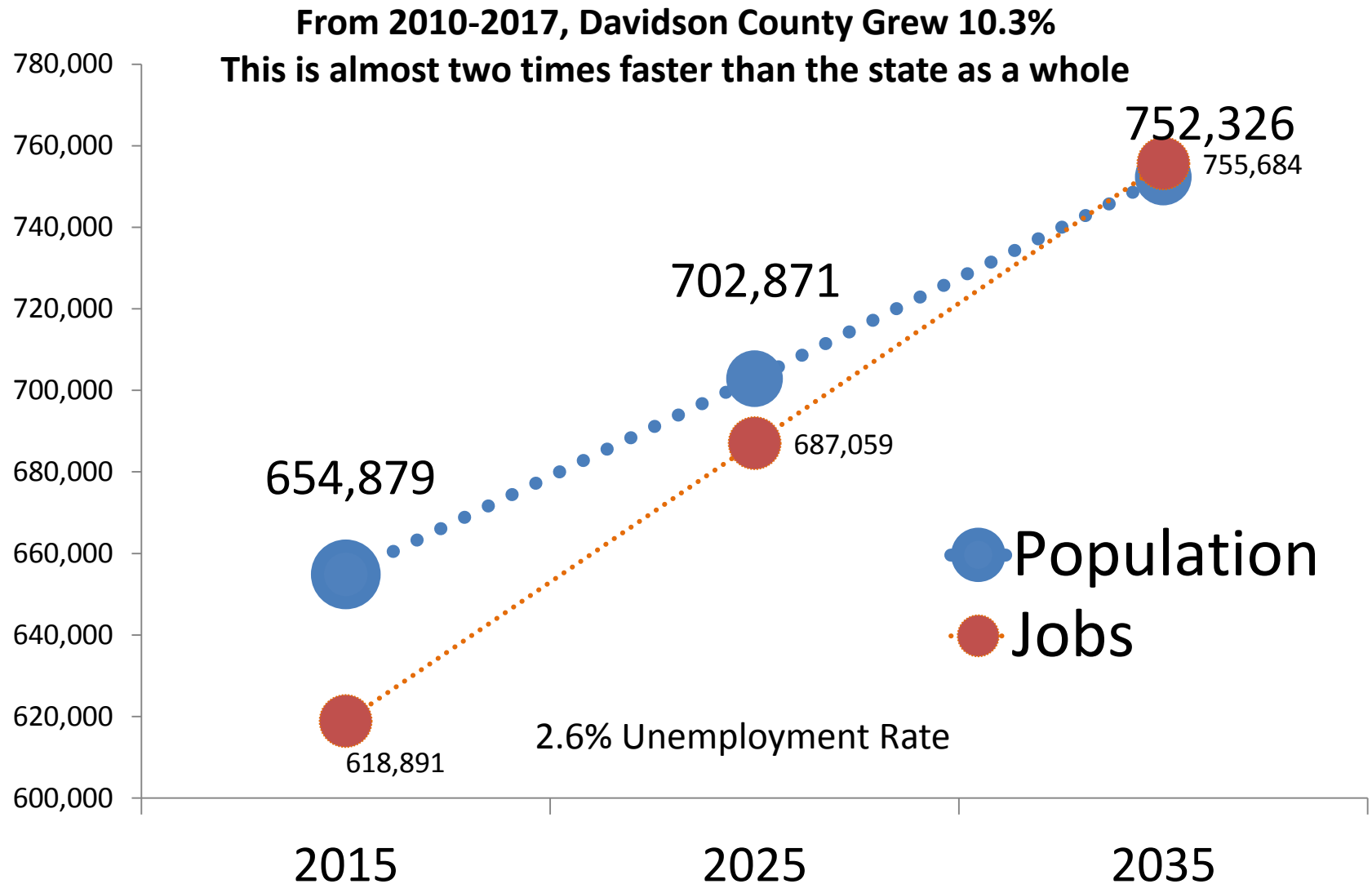


Hispanic Ethnicity = 10%

Projected Population and Job Growth (2015, 2025, 2035)

Davidson

Demographic /
Socioeconomic



Source: Nashville Metro Planning Organization. (2019) *Growth Trends & Forecasts Regional Profile*. Retrieved Mar 2018 from <http://www.nashvillempo.org/growth/>

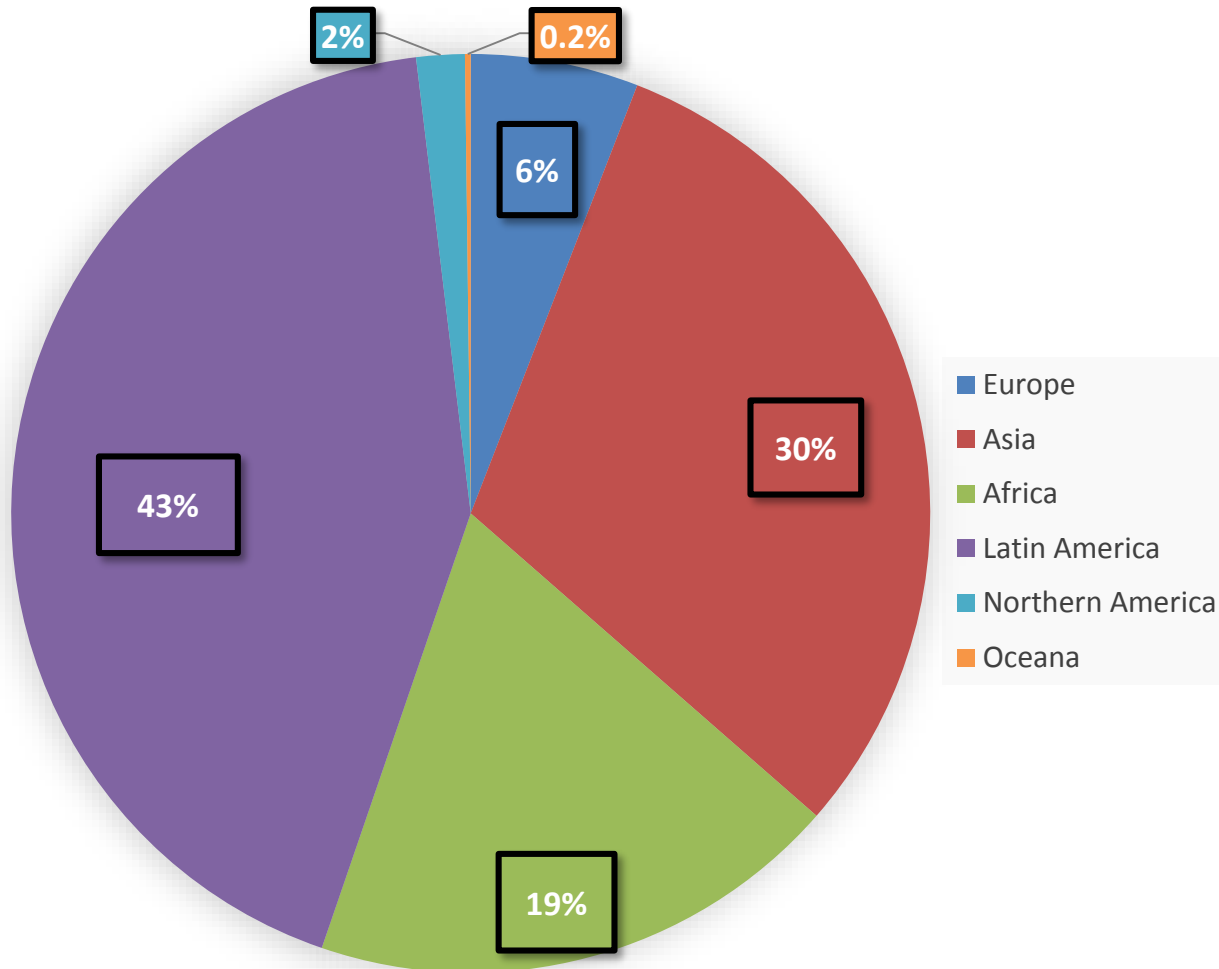
Source: US Census Bureau. (2018). *Quickfacts, 2017 American Community Survey*. Retrieved from

<https://www.census.gov/quickfacts/fact/table/davidsoncountytennessee,US/PST045218>

World Region of Birth of Foreign Born

84,672 residents of Davidson County are Foreign Born.

Percent, Region of Birth



16.8% speak
language other
than English at
home

8.8% of
population speak
English less than
“Very Well”

People in Poverty By Census Tract

Davidson

Demographic /
Socioeconomic

Davidson Co. 16.9%

Tennessee 16.7%

United States 14.6%

Percent in Poverty

Legend

Data Classes

Percent

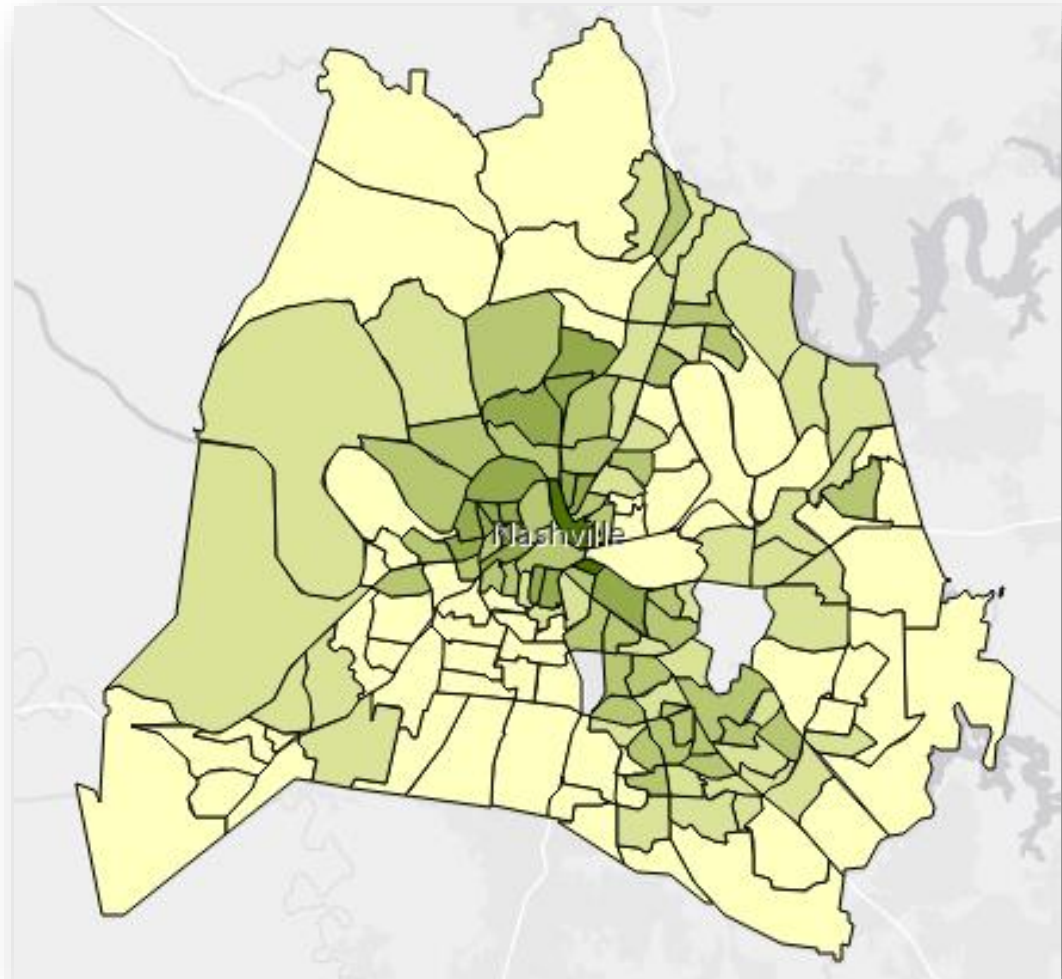
0.0 - 10.9

11.4 - 20.2

20.8 - 31.6

35.1 - 55.6

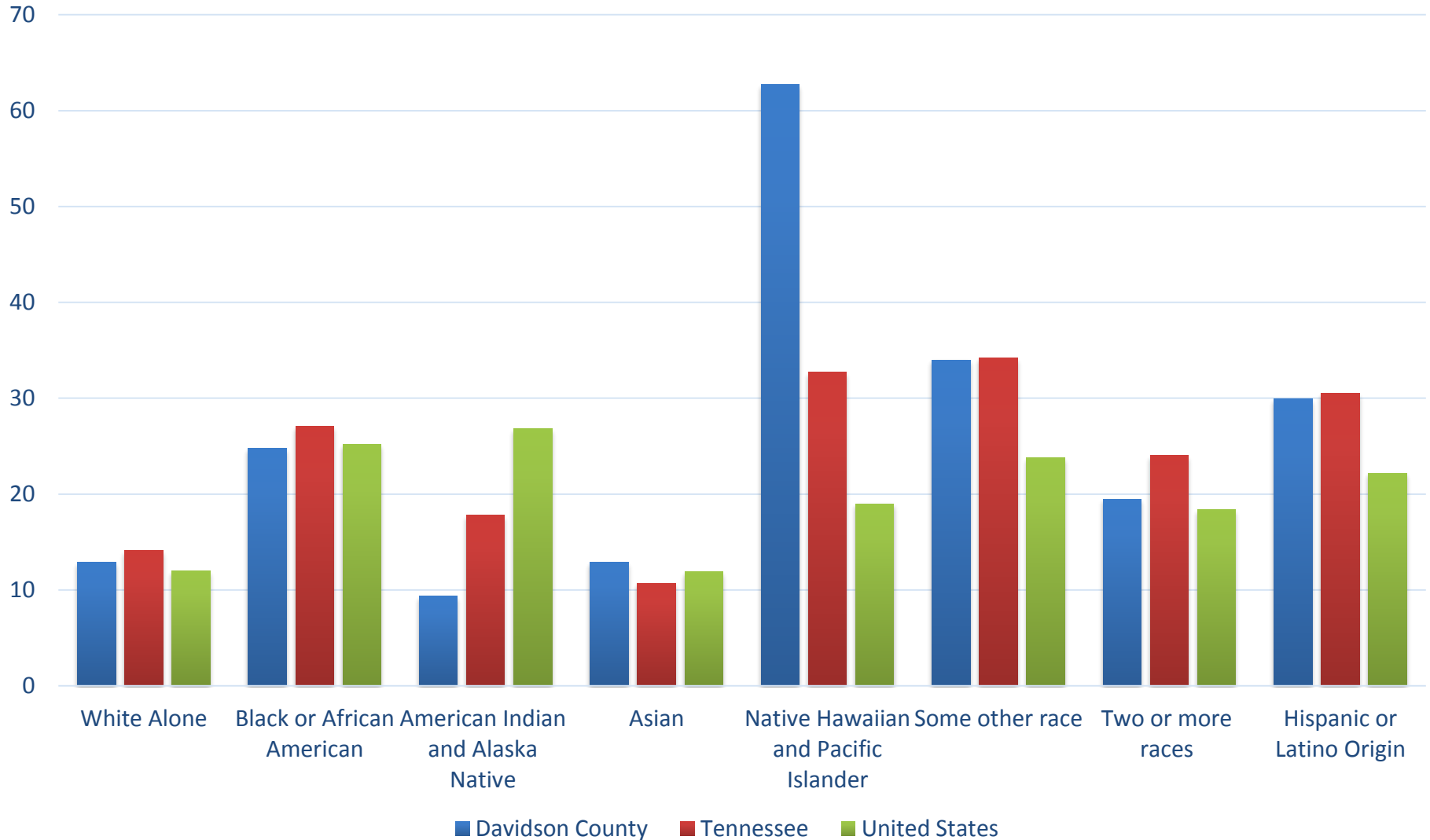
77.2 - 78.7



People Living Below Poverty Level By Race / Ethnicity – 2013-2017

Davidson

Demographic /
Socioeconomic

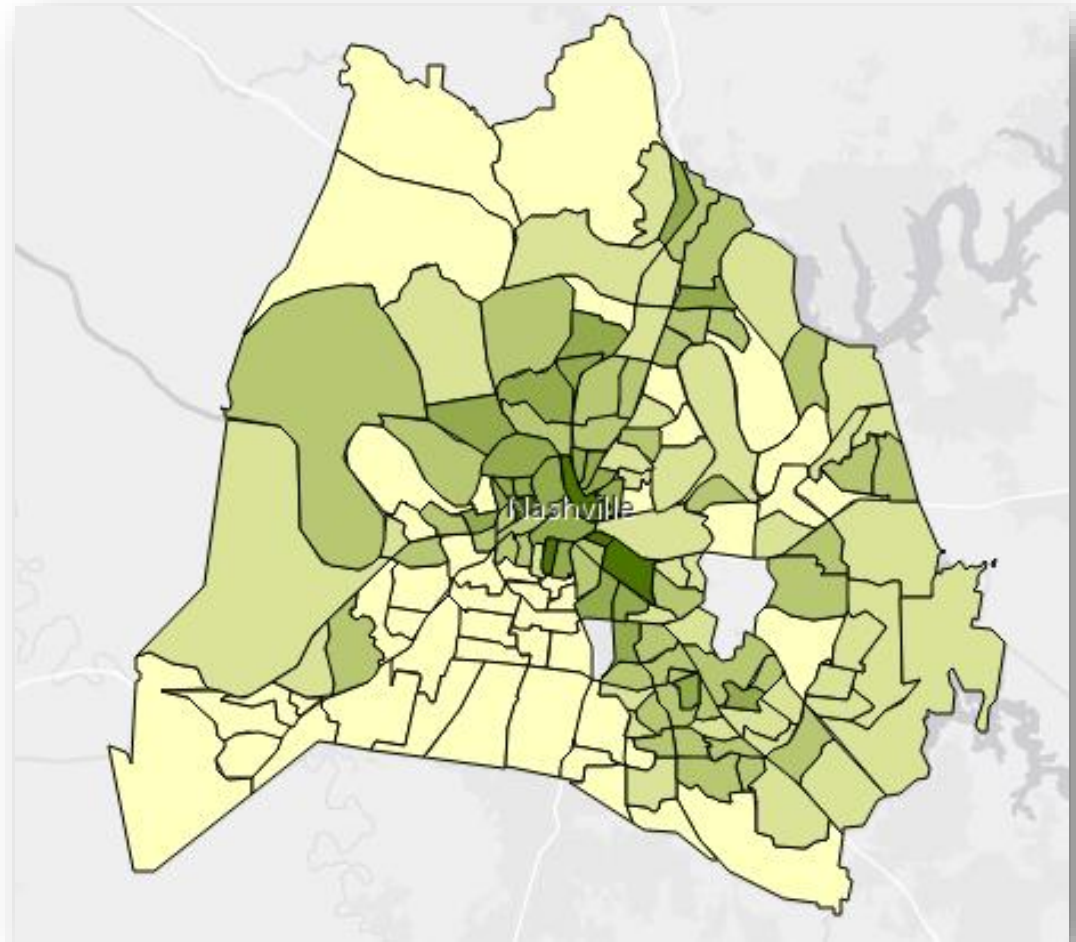
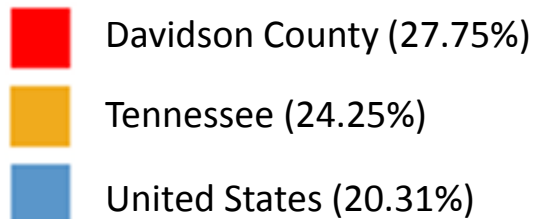
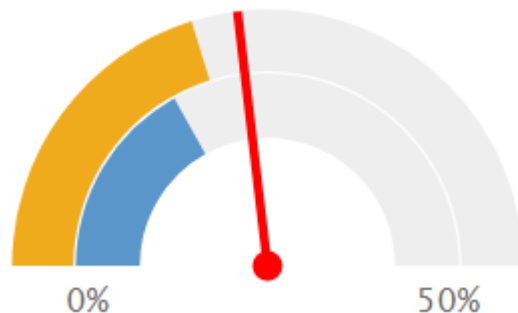


Children in Poverty

Total # of Children Living in Poverty

- Davidson County: 39,701
- Tennessee: 357,310
- United States: 14,710,785

Percent Population Under Age 18 in Poverty



Source: Community Commons. (2019). *Poverty-Children Below 100% FPL*. Retrieved in May 2018 from <https://engagementnetwork.org/assessment/>

Source: US Census Bureau. (2018). *Poverty Status in the Past 12 Months, 2017 American Community Survey*.

Retrieved from https://factfinder.census.gov/faces/tableservices/jsf/pages/productview.xhtml?pid=ACS_17_5YR_S1701&prodType=table

Population with No High School Diploma

(25yrs and older)

Davidson

Demographic /
Socioeconomic

Davidson Co. 11.98%

Tennessee 13.48%

United States 12.69%

Percent without HS Diploma

Legend

Data Classes

Percent

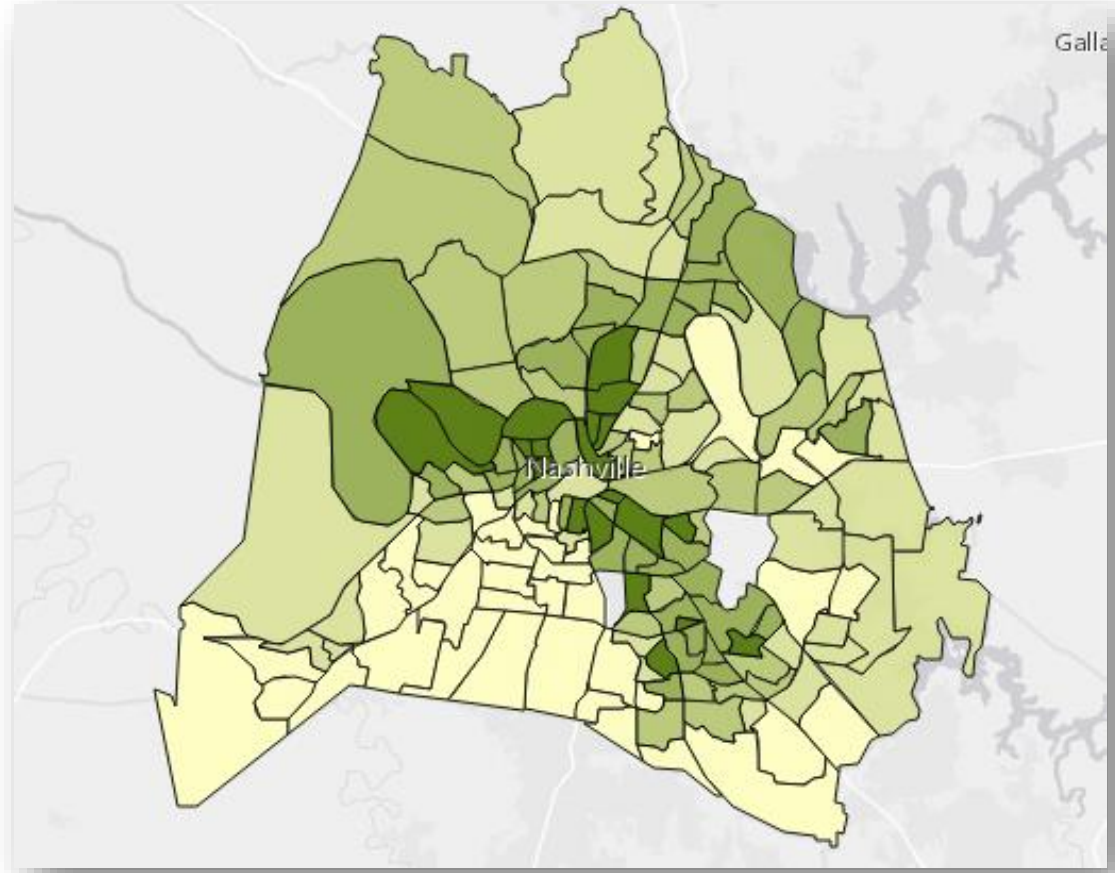
0.0 - 3.1

3.3 - 6.7

7.0 - 10.4

10.5 - 14.8

15.3 - 23.9



Source: Community Commons. (2019). *Education – No High School Diploma*. Retrieved in January 2019 from <http://engagementnetwork.org/assessment/>

Source: US Census Bureau. (2018). *Educational Attainment, 2017 American Community Survey*.

Retrieved from https://factfinder.census.gov/faces/tableservices/jsf/pages/productview.xhtml?pid=ACS_17_5YR_S1501&prodType=table

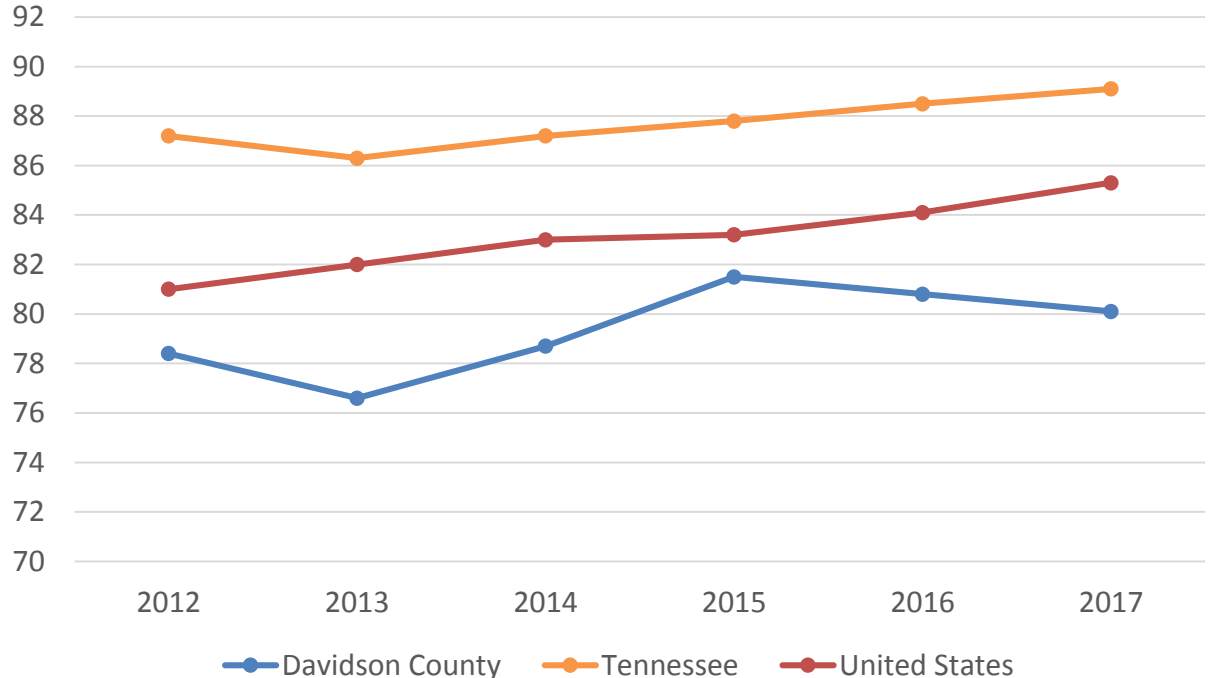
Graduation Rates

89.1%
2017

84%
2017

80.1%
2017

Graduation Rates, 2012-2017

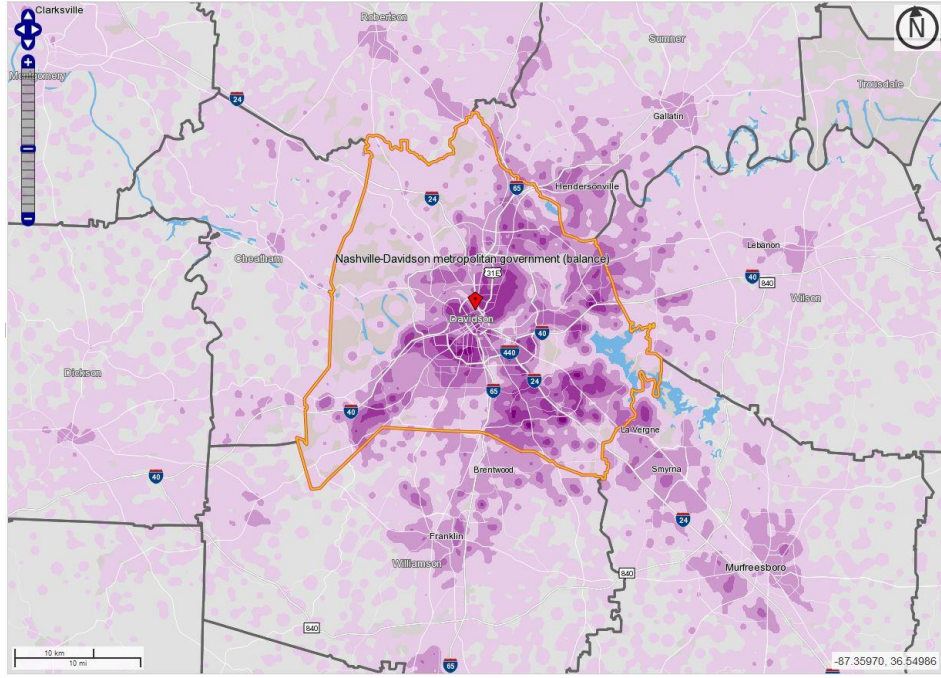
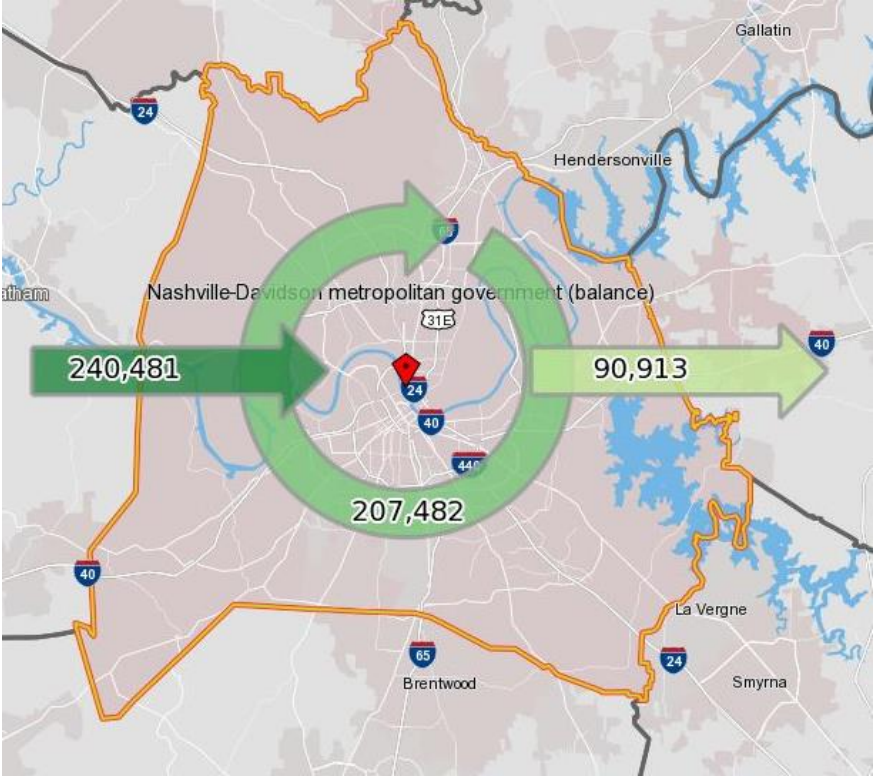


Source: The Annie E. Casey Foundation KIDS COUNT. (2017). *Graduation Rates*. Retrieved from <https://datacenter.kidscount.org/data/tables/8738-high-school-graduation>
Source: Nationa State Center for Education Statistics. (2018). *Graduation Rates*. Retrieved from http://nces.ed.gov/ccd/tables/ACGR_2010-11_to_2012-13.asp

Employment

97%
employed

618,891
Jobs in Davidson County

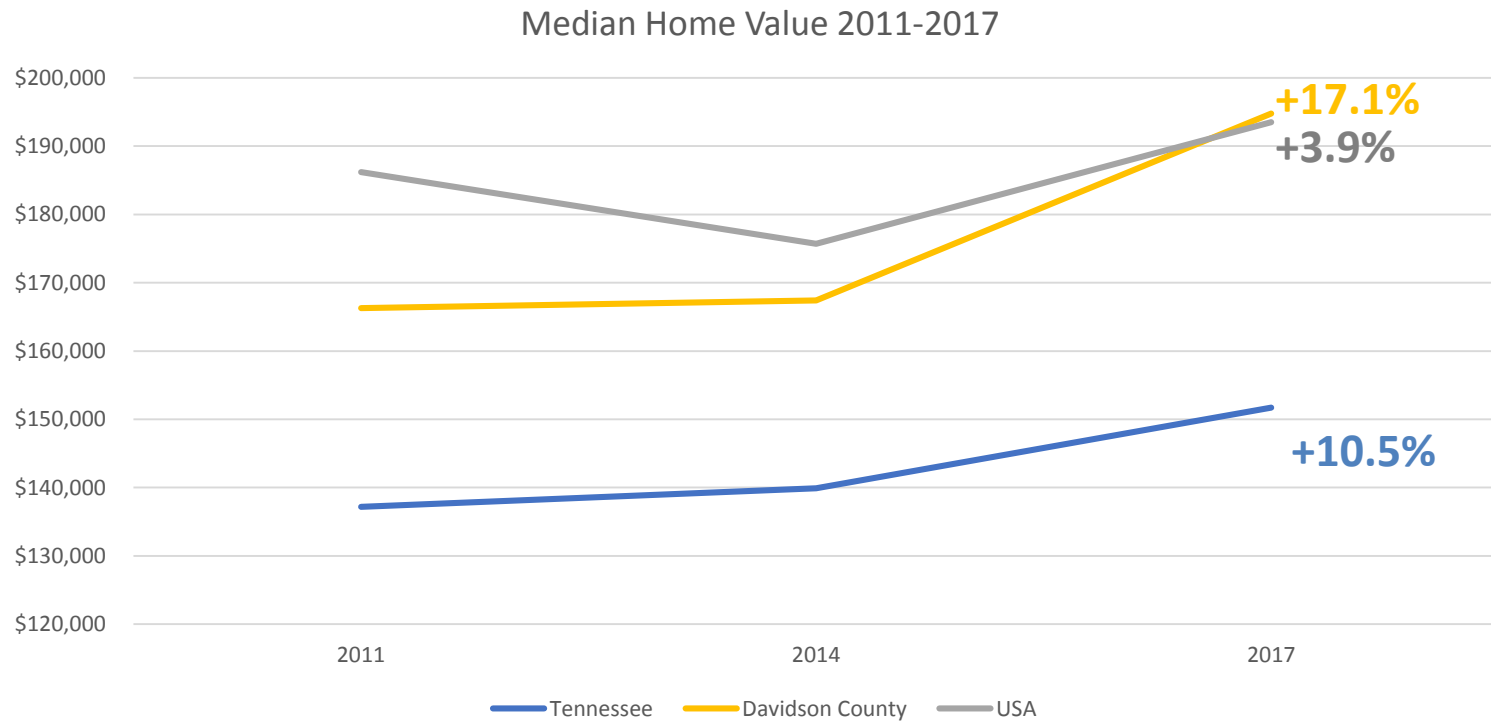


Source: Nashville Metro Planning Organization. (n.d.) *Population & Employment Forecast for the Nashville Area MPO*. Retrieved from <http://www.nashvillempo.org/growth/>
Source: U.S Census Bureau, Center for Economic Studies. (2018) *OnTheMap (Employment)*. Retrieved on November 12, 2018 from <http://onthemap.ces.census.gov/>

- County is experiencing rapid growth including increase in diversity
- 87% have high school education
- 17% live in poverty; 29% of children living in poverty
- Rates of poverty and education vary by place and race

Social Determinants of Health Inequities

Housing – Owners



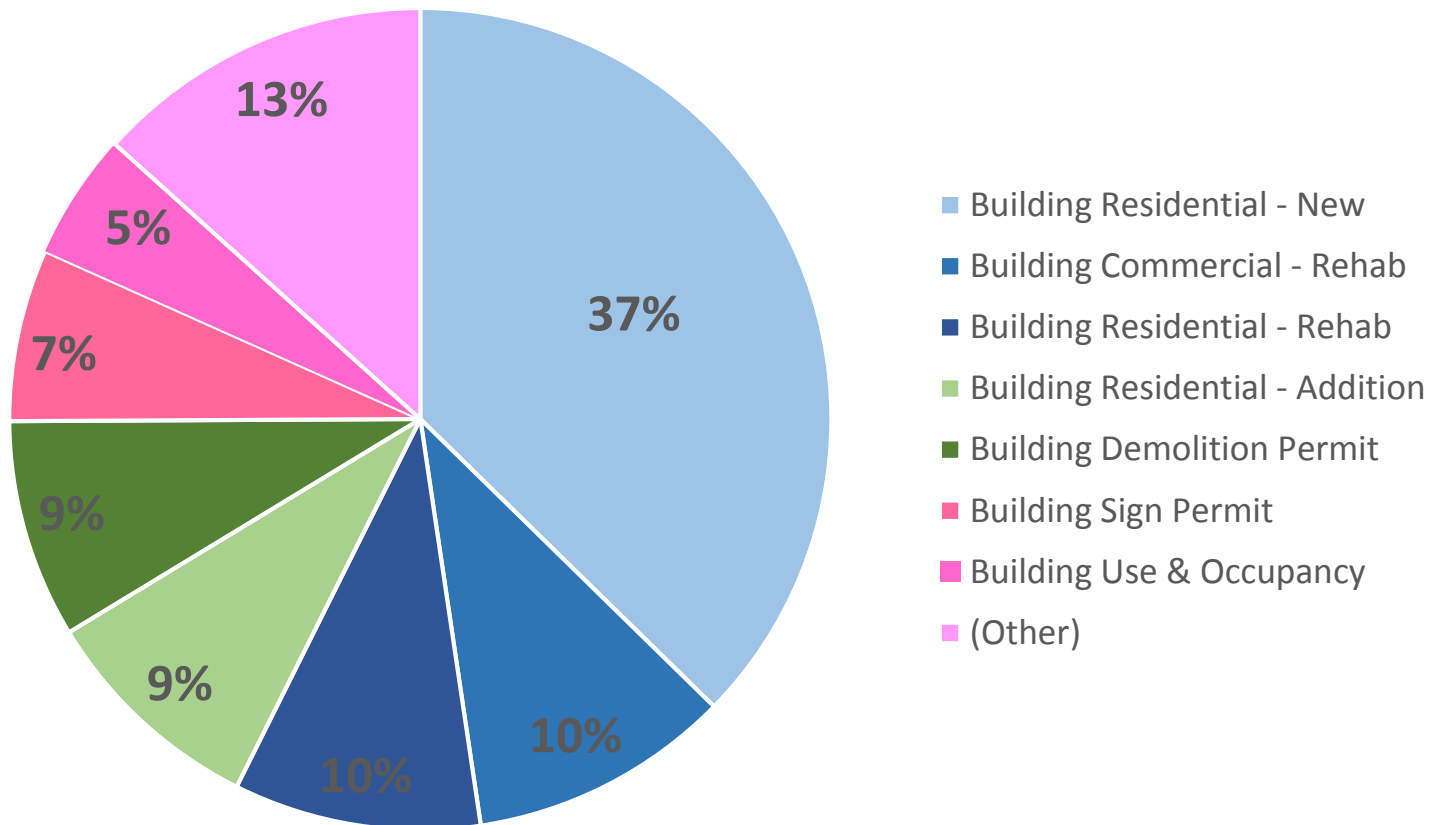
- 54.4% of households are owner-occupied
- 28.2% of those homeowners are cost burdened

Source: US Census Bureau (2018). *Median Value (Dollars), 2011, 2014, 2017 American Community Survey 5-year Estimates*. Retrieved from: <https://factfinder.census.gov/>

Source: US Census Bureau (2018). *Selected Housing Characteristics, 2011, 2014, 2017 American Community Survey 5-year Estimates*. Retrieved from: <https://factfinder.census.gov/>

Building Permits

Building Permits by Type in Davidson County - Last 3 Years



Homelessness

January 2018

Davidson

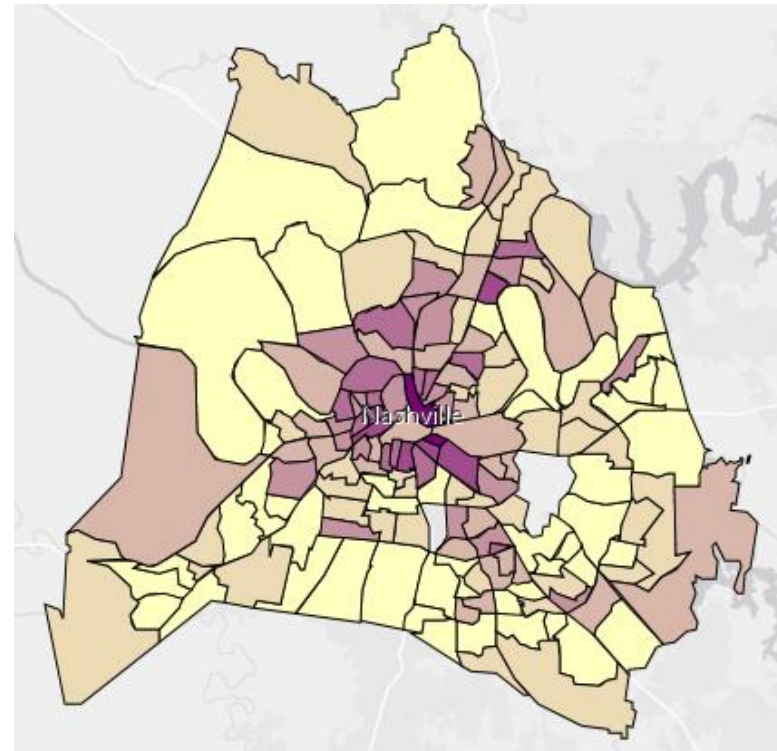
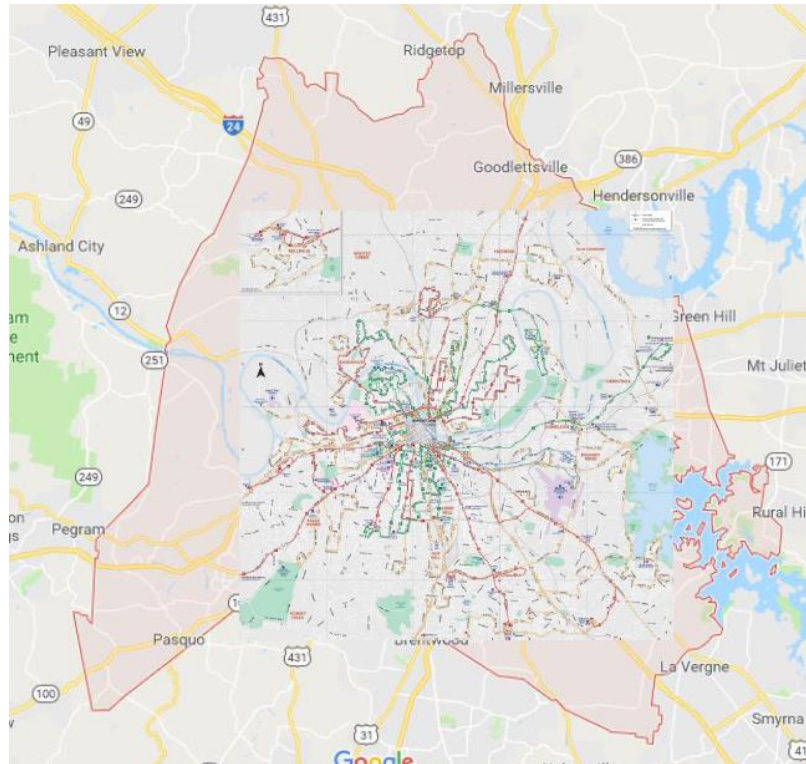
Social
Determinants



Source: Metropolitan Development and Housing Agency. (2018). *Nashville-Davidson County, TN CoC 2018 Point-in-Time Count Data*. Retrieved from http://www.nashville-mdha.org/wp-content/uploads/2016/09/2018-PIT-Release-Data-Sheet_Final_04.20.2018.pdf

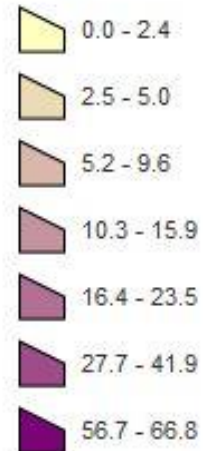
Source: Metropolitan Development and Housing Agency. (2018). *Results of 2018 Point in Time (PIT) Count Released*. Retrieved from: <http://www.nashville-mdha.org/2018/04/18/results-of-2018-point-in-time-pit-count-released-2/>

Transportation



Legend

Data Classes Percent



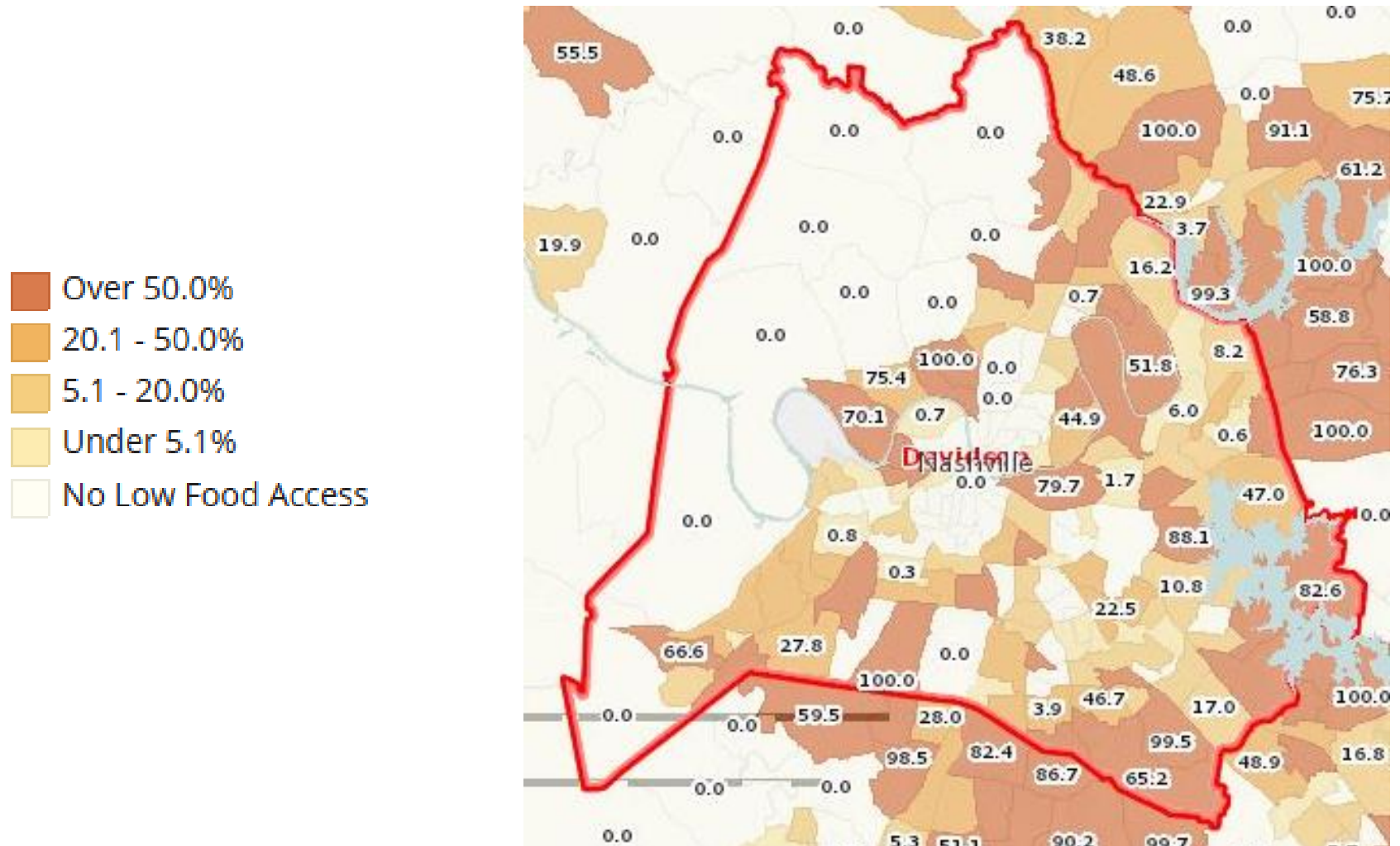
Source: U.S. Census Bureau. (2018). *Selected Housing Characteristics, American Community Survey 2017 5-year Estimates*. Retrieved from <https://factfinder.census.gov/faces/nav/jsf/pages/index.xhtml#none>

Source: University of Wisconsin Population Health Institute. (2018). *Driving alone to work*. Retrieved from <http://www.countyhealthrankings.org/app/tennessee/2018/measure/factors/67/map>

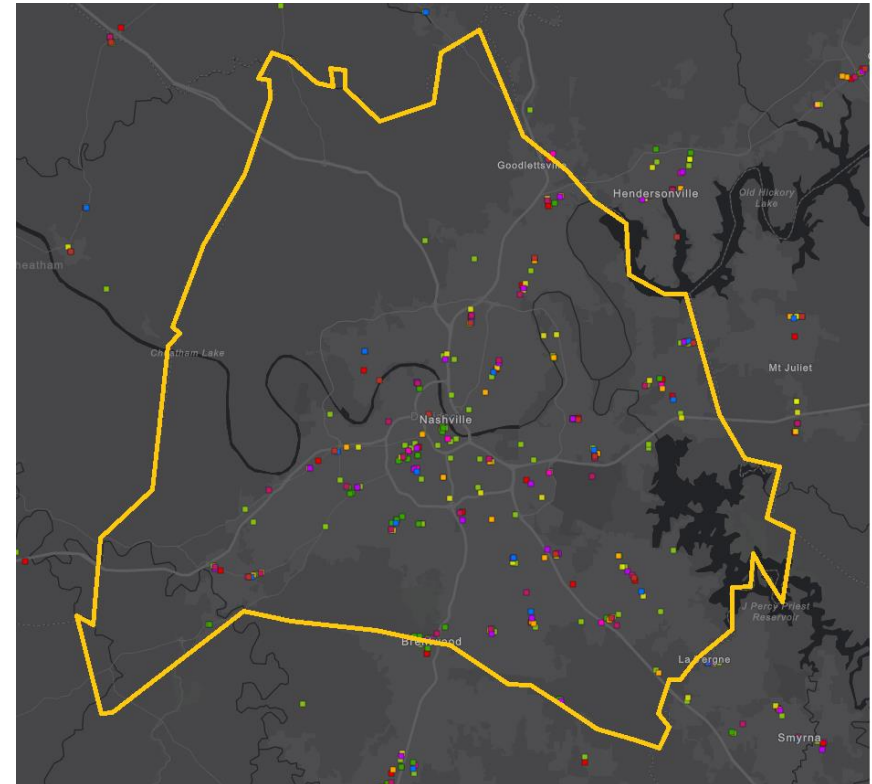
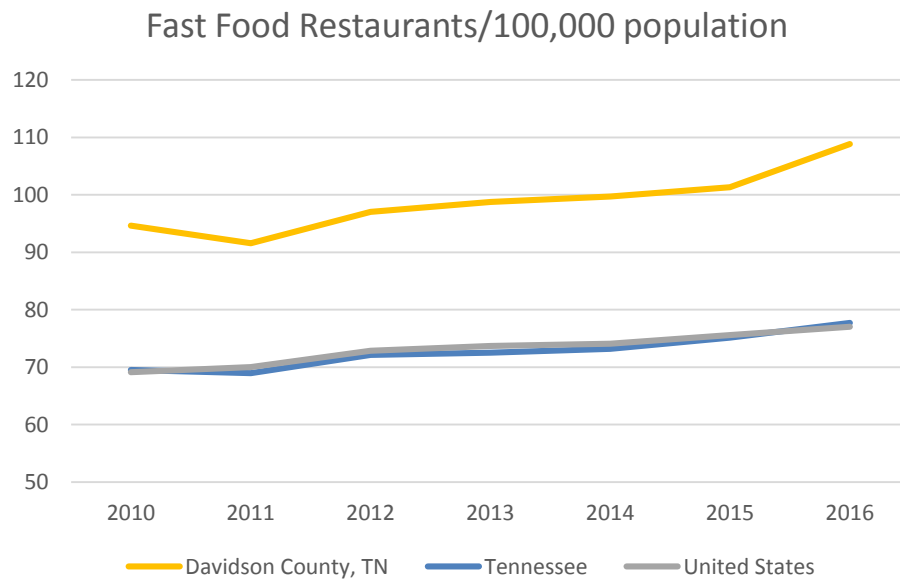
Source: U.S. Census Bureau. (2018). *Commuting Characteristics by Sex, American Community Survey 2017 5-year Estimates*. Retrieved from <https://factfinder.census.gov/faces/nav/jsf/pages/index.xhtml#none>

Source: U.S. Department of Transportation (n.d.) *Transportation and Health Indicators*. Retrieved June 1, 2018 from <https://www.transportation.gov/transportation-health-tool/indicators>

Fresh Food Access



Fast Food Access

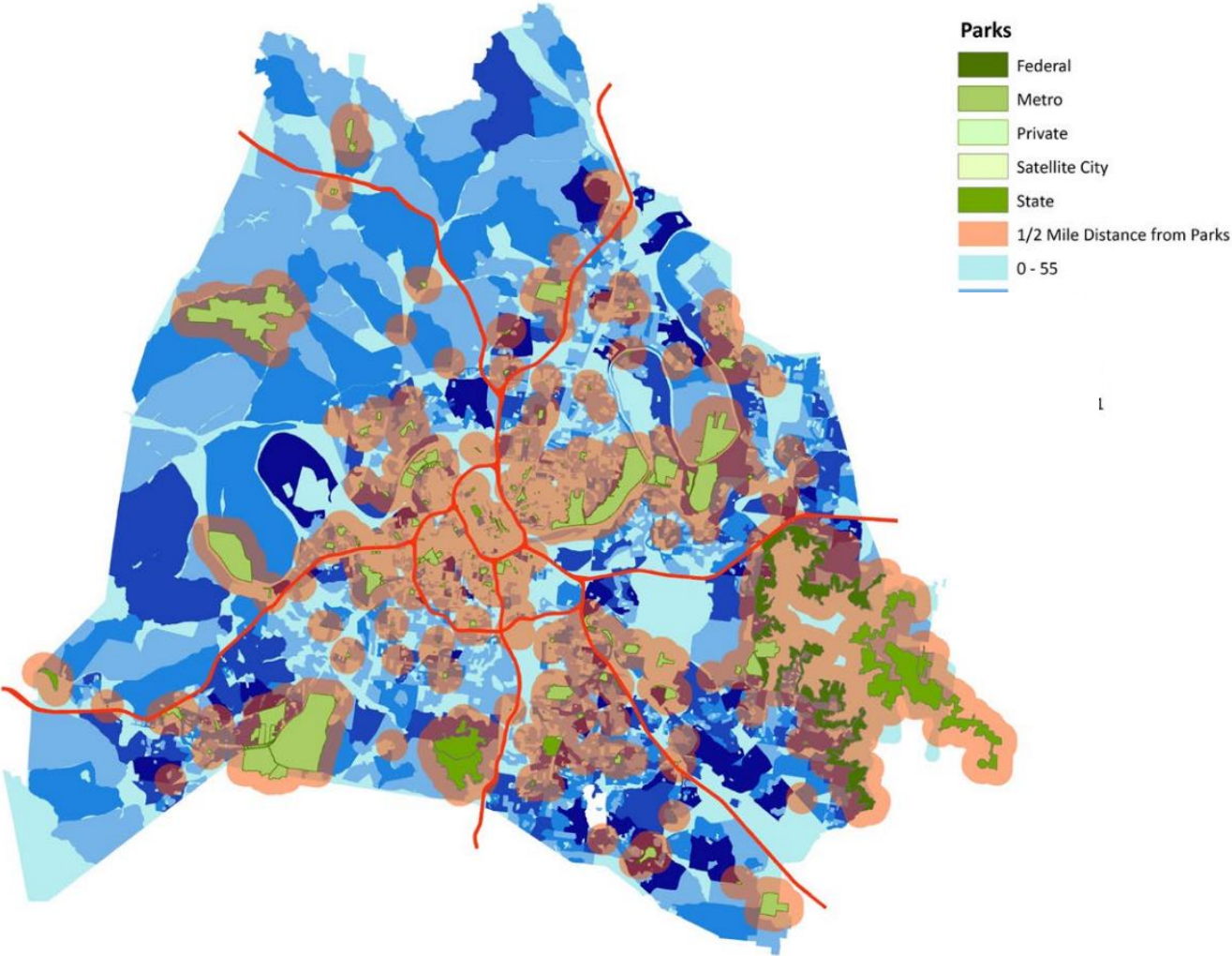


Source: Community Commons. (2019). *Fast Food Restaurants, Rate per 100,000 population by year, 2010-2016*. Retrieved December 28, 2018 from <https://www.communitycommons.org/board/chna>

Source: Esri. (2017). *Fast Food Nation: Mapping the Top Ten Chains*. Retrieved from <http://storymaps.esri.com/stories/2017/fast-food-nation/>

Parks Access

40%
Live within 1/2
mile of a park



Source: Vick, J. & Thomas-Trudo, S. (2014). Community Health Profile 2014 . Metro Nashville Public Health Department, Division of Epidemiology and Research

Source: National Recreation and Park Association. (n.d.). Parks & Recreation in Underserved Areas: A Public Health Perspective. Retrieved from

https://www.nrpa.org/uploadedFiles/nrpa.org/Publications_and_Research/Research/Papers/Parks-Rec-Underserved-Areas.pdf

Source: Metro Government of Nashville & Davidson County, Tennessee. (2018). Nashville's Parks. Retrieved January 9, 2019 from <https://www.nashville.gov/Parks-and-Recreation/Parks.aspx>

<https://www.nashville.gov/Parks-and-Recreation/Parks.aspx>

Summary

- Home values and rents have risen sharply over the last several years
- Many (especially renters) are burdened by housing costs
- It is difficult for many in our community to access healthy food
- Rate of fast food establishments remains high

Access to Health Care

Insurance Coverage – Adults

Uninsured Adults



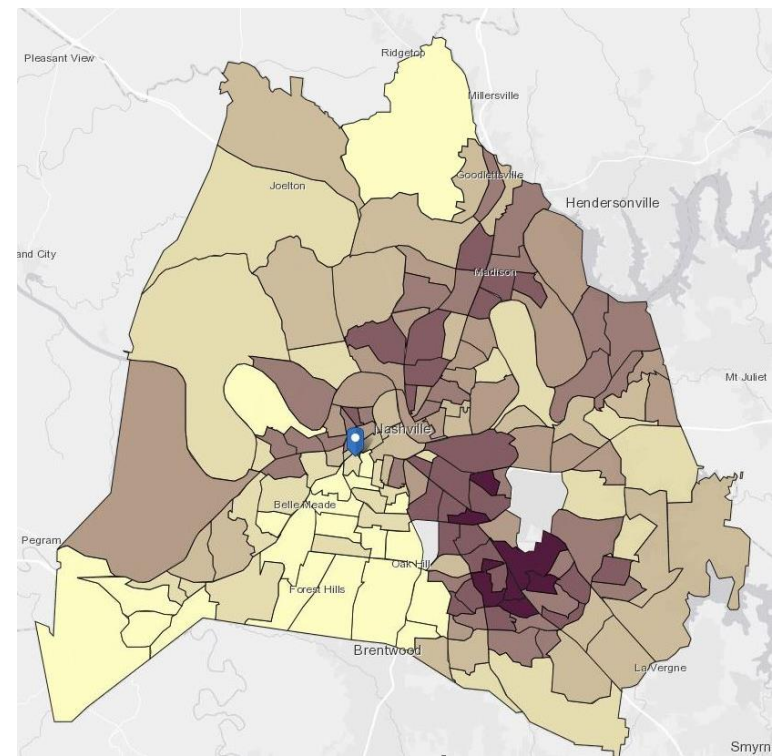
14.8%



15.9%



17.8%



Data Classes

Percent

0.0 - 6.0

6.9 - 10.9

11.1 - 14.7

15.1 - 19.8

20.3 - 26.5

26.8 - 35.0

37.0 - 61.0

Source: Office of Disease Prevention and Health Promotion. (2014). *Access to Health Services*. Retrieved November 15, 2018 from

<https://www.healthypeople.gov/2020/topics-objectives/topic/Access-to-Health-Services>

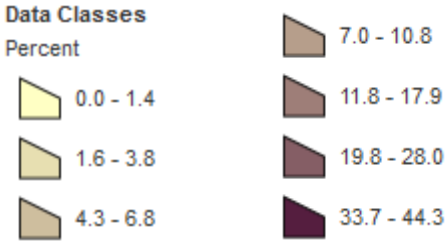
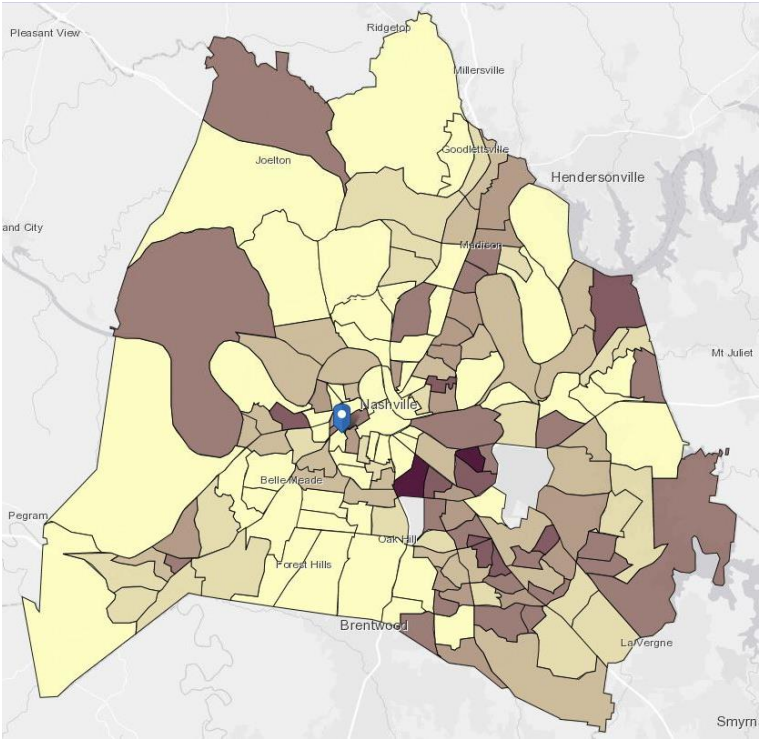
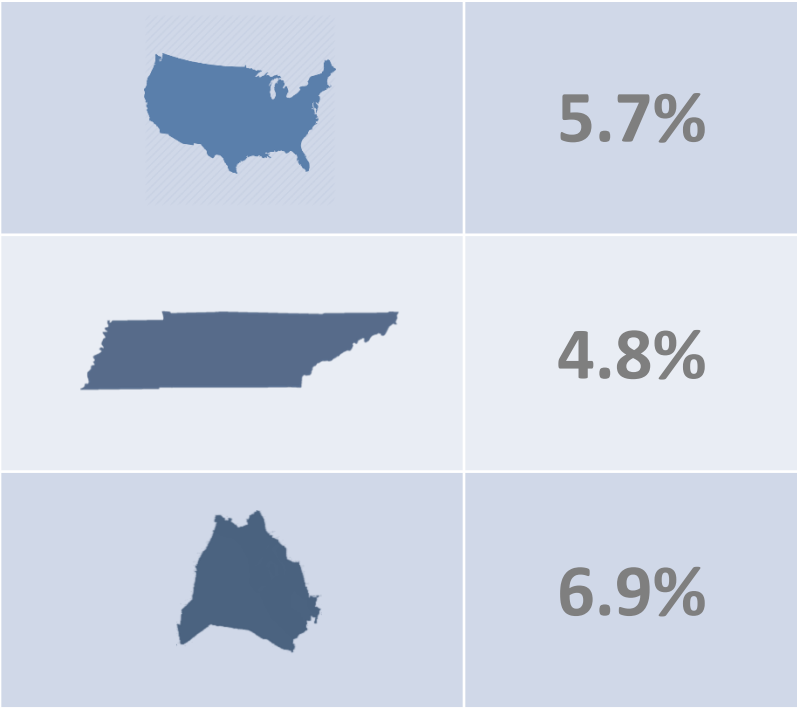
Source: U.S. Census Bureau. (2019). *Selected Characteristics of Health Insurance Coverage in the United States, American Community Survey 2017 5-year Estimates*. Retrieved from <https://factfinder.census.gov/faces/nav/jsf/pages/index.xhtml>

Source: Henry J. Kaiser Family Foundation. (2019). *The Uninsured and the ACA: A Primer - Key Facts about Health Insurance and the Uninsured amidst Changes to the Affordable Care Act*. Retrieved January 9, 2019 from

<https://www.kff.org/uninsured/report/the-uninsured-a-primer-key-facts-about-health-insurance-and-the-uninsured-under-the-affordable-care-act/>

Insurance Coverage – Children

Uninsured Children

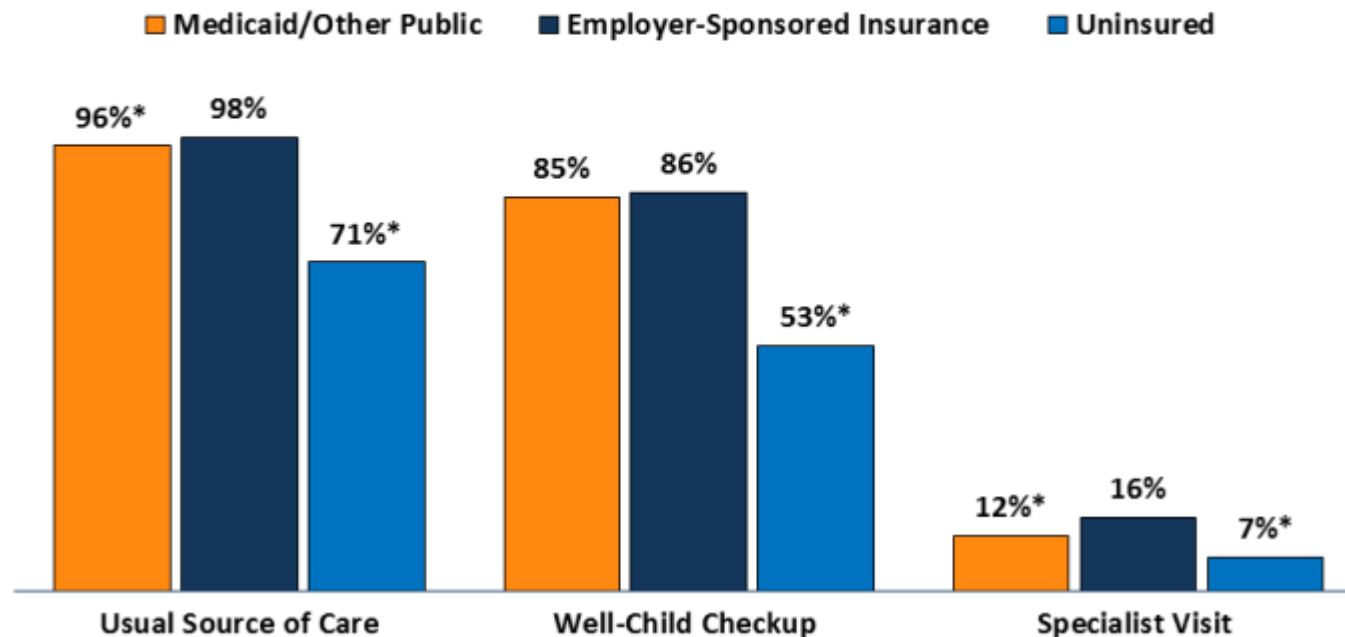


Source: U.S. Census Bureau. (2019). *Selected Characteristics of Health Insurance Coverage in the United States, American Community Survey 2017 5-year Estimates*. Retrieved from <https://factfinder.census.gov/faces/nav/jsf/pages/index.xhtml>




Source: Henry J. Kaiser Family Foundation. (2017). *Key Issues in Children’s Health Coverage*. Retrieved January 9, 2019 from <https://www.kff.org/medicaid/issue-brief/key-issues-in-childrens-health-coverage/>

Insurance Coverage – Children

Access to Care for Children by Health Insurance Status, 2015



Provider Ratios

	Primary Care Providers	Dentists	Mental Health Providers
	1:1088	1:1324	1:359
	1:1382	1:1892	1:742
	1:1030	1:1280	1:330

- **13.9% of Davidson population lives in a designated Health Professional Shortage Area**

Source: University of Wisconsin Population Health Institute. (2018). *Primary care physicians*. Retrieved from <http://www.countyhealthrankings.org/app/tennessee/2018/measure/factors/4/map>

Source: University of Wisconsin Population Health Institute. (2018). *Dentists*. Retrieved from <http://www.countyhealthrankings.org/app/tennessee/2018/measure/factors/88/map>

Source: University of Wisconsin Population Health Institute. (2018). *Mental health providers*. Retrieved from <http://www.countyhealthrankings.org/app/tennessee/2018/measure/factors/62/map>

Source: University of Wisconsin Population Health Institute. (2018). *Mental health providers*. Retrieved from <http://www.countyhealthrankings.org/explore-health-rankings/what-and-why-we-rank/health-factors/clinical-care/access-to-care/mental-health-providers>

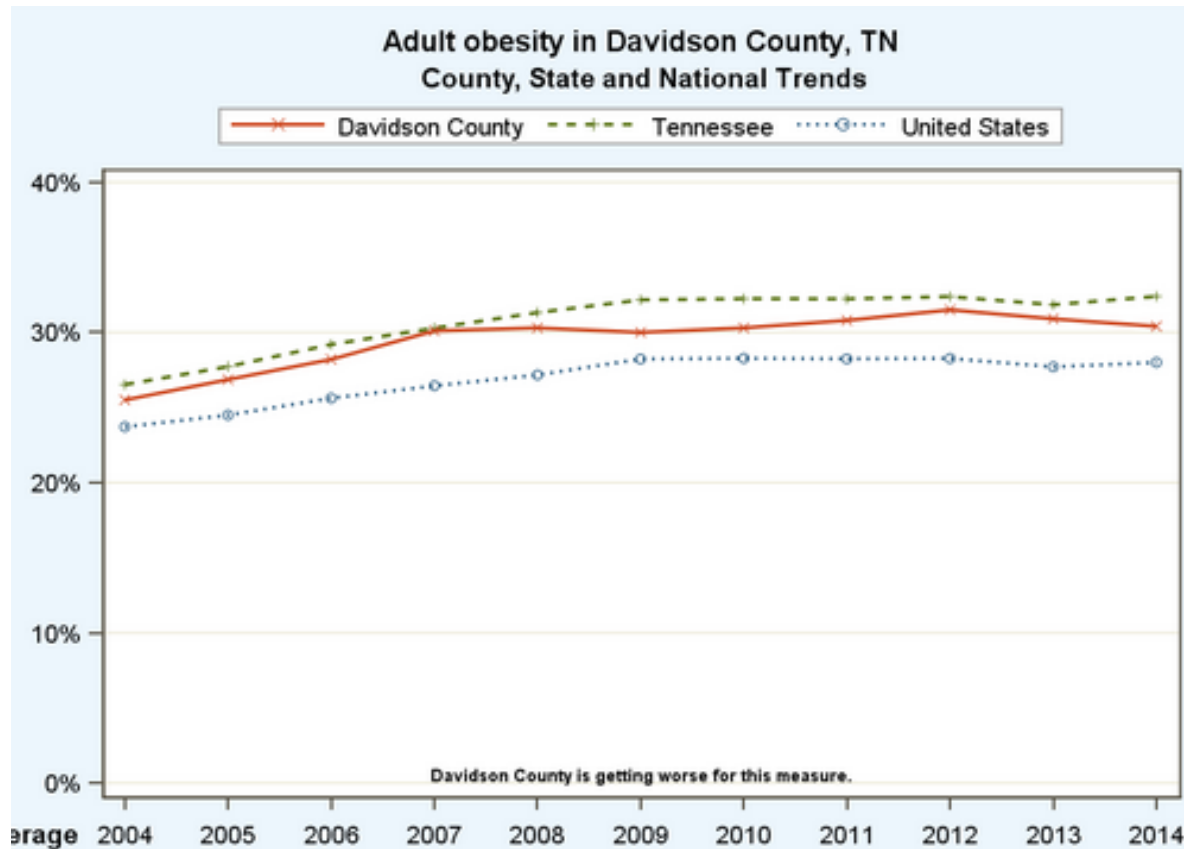
Source: Henry J. Kaiser Family Foundation. (2019). *Providers & Service Use Indicators: Health Professionals Shortage Areas*. Retrieved January 9, 2019 from <https://www.kff.org/state-category/providers-service-use/health-professional-shortage-areas/>

Summary

- Uninsured rates higher than state and nation, and concentrated in certain geographies through county
- Health Professions Shortage Areas areas are present within county

Behavioral Risk Factors

Obesity – Adult



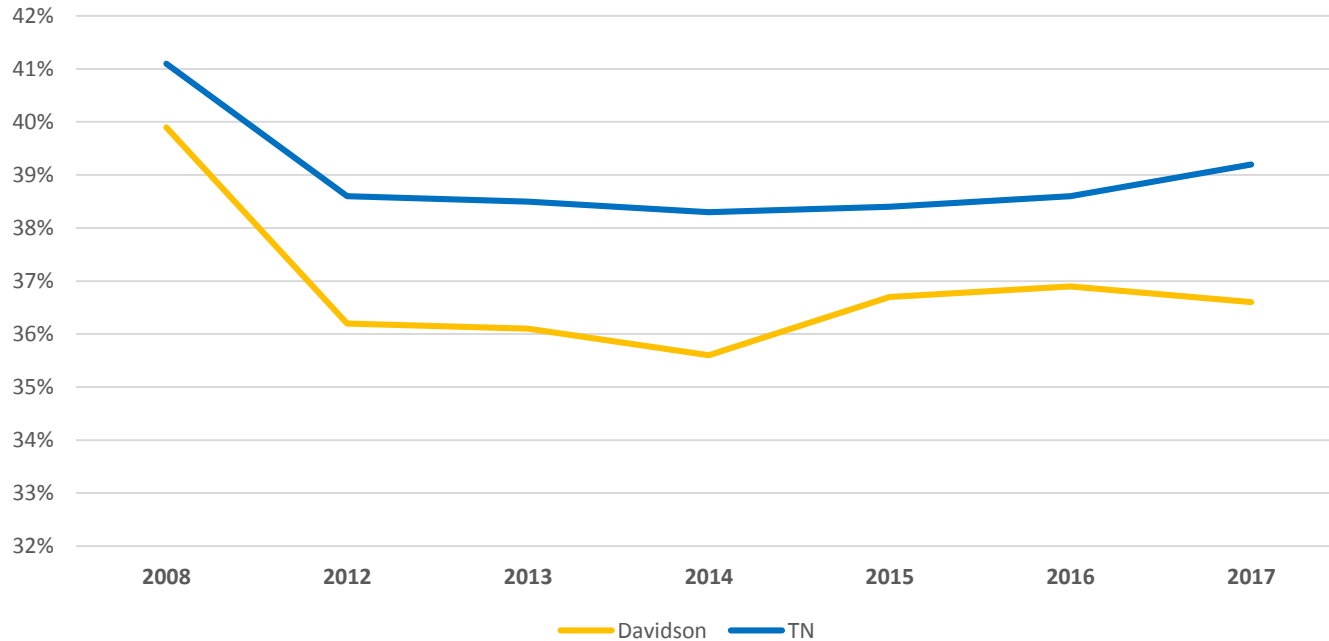
- In Davidson County, 26% of adults 20+ report doing no leisure-time physical activity in last month

Source: University of Wisconsin Population Health Institute. (2018). *Adult obesity*. Retrieved from <http://www.countyhealthrankings.org/app/tennessee/2018/measure/factors/11/map>

Source: University of Wisconsin Population Health Institute. (2018). *Physical inactivity*. Retrieved from <http://www.countyhealthrankings.org/app/tennessee/2018/measure/factors/70/map>

Obesity – Youth

Public School Students Measured as Overweight or Obese 2008-2017



Source: Kids Count Data Center, CDC.



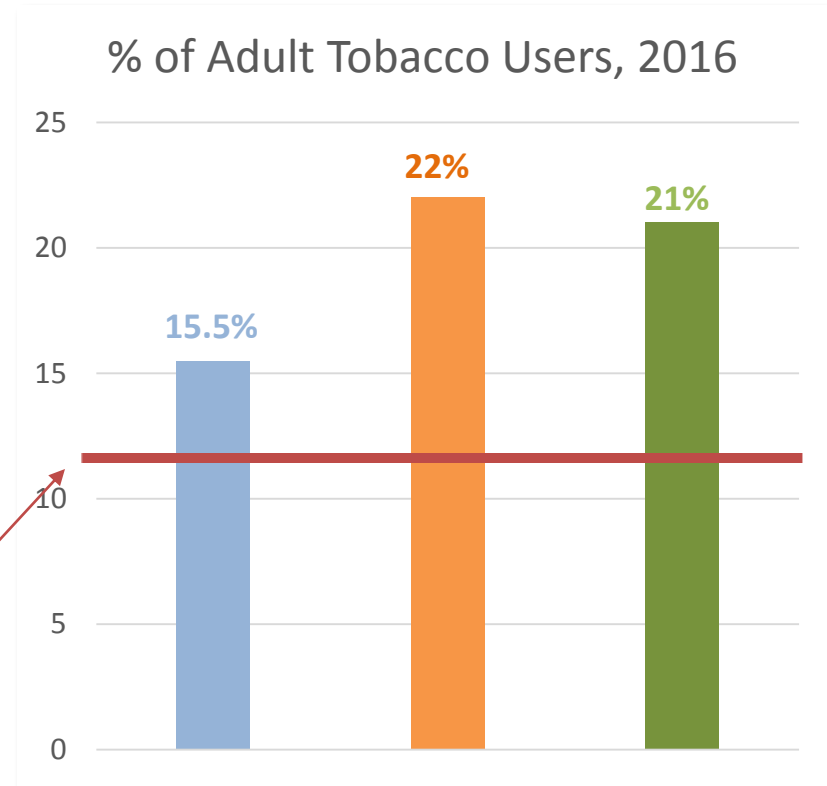
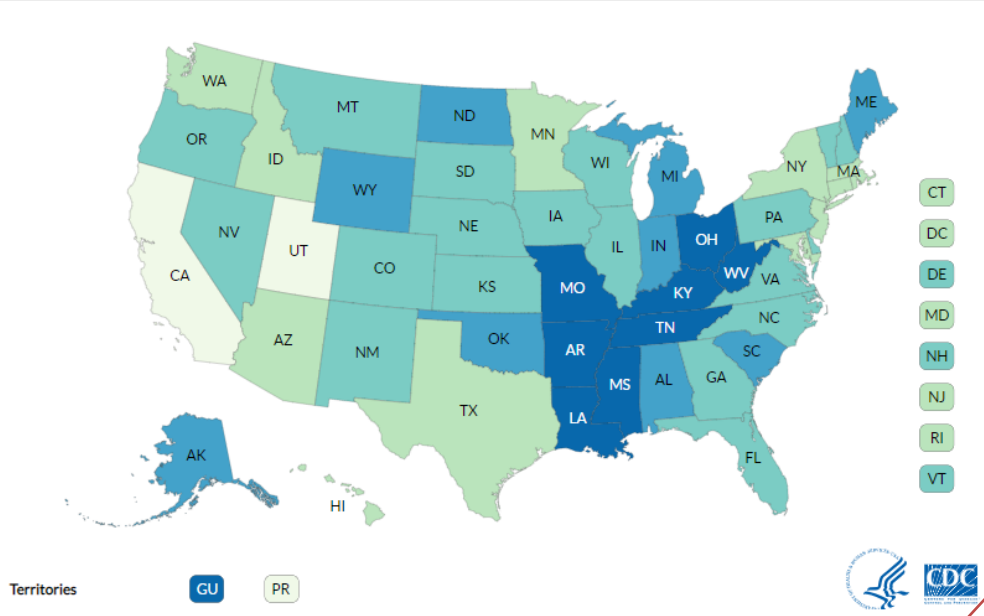
- 60% of Tennessee high schoolers did not receive the recommended amount of weekly exercise (60 minutes, 5 days per week)
- Almost 17% of Tennessee high schoolers did not receive 60 minutes of physical activity on one day

Source: The Annie E. Casey Foundation Kids Count Data Center. (2019). *Public school students measured as overweight or obese in Tennessee*. Retrieved 01/09/2019 from <https://datacenter.kidscount.org/data/tables/8705-public-school-students-measured-as-overweight-or-obese?loc=44&loct=5#detailed/5/6420-6514/false/871,870,573,869,36,868,35/any/17473>

Source: Centers for Disease Control and Prevention. (2018). *Adolescent and School Health, 2017 YRBSS Results*. Retrieved from <https://www.cdc.gov/healthyyouth/data/yrbs/results.htm>

Smoking – Adult

Current Cigarette Use Among Adults (Behavior Risk Factor Surveillance System) 2016



12%

Healthy People 2020 Target



Source: Office of Disease Prevention and Health Promotion. (2014). *Tobacco Use*. Retrieved January 8, 2019 from <https://www.healthypeople.gov/2020/topics-objectives/topic/tobacco-use>
Source: University of Wisconsin Population Health Institute. (2018). *Adult Smoking, 2018 County Health Rankings*. Retrieved from <http://www.countyhealthrankings.org/app/tennessee/2018/measure/factors/9/map>
Source: Centers for Disease Control and Prevention. (2018). *Map: Current Cigarette Use Among Adults (Behavior Risk Factor Surveillance System) 2017*. Retrieved January 8, 2019 from <https://www.cdc.gov/statesystem/cigaretteuseadult.html>

Alcohol Use

Davidson

Behavioral
Risk Factors



Excessive Drinking	27%	14%	18%
Alcohol-impaired driving deaths	28%	28%	29%
Alcohol dependence	7%	5.8%	7%
% of admissions to treatment for alcohol abuse	34%	42%	45%

Source: University of Wisconsin Population Health Institute. (2018). *2018 County Health Rankings, Excessive Drinking*. Retrieved from <http://www.countyhealthrankings.org/app/tennessee/2018/measure/factors/49/map>

Source: University of Wisconsin Population Health Institute. (2018). *2018 County Health Rankings, Excessive Drinking*. Retrieved from <http://www.countyhealthrankings.org/app/tennessee/2018/measure/factors/134/map>

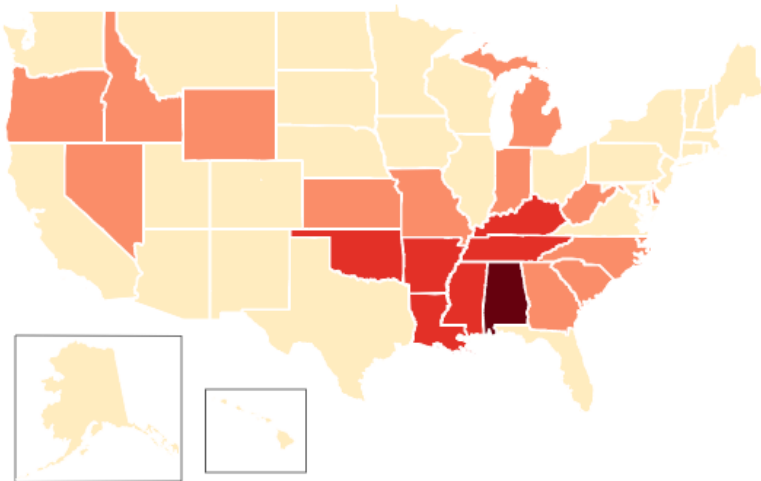
Source: The TN Department of Mental Health and Substance Abuse Services. (2017). *2017 TN Behavioral Health County and Region Services Data Book*. Retrieved from https://www.tn.gov/content/dam/tn/mentalhealth/documents/DPRF_BH_county_region_service_data_book_9-2017_FINAL.pdf

Source: TN Department of Mental Health and Substance Abuse Services. (2016) *TN Epidemiological Profile of Alcohol and Drug Misuse*. Retrieved from https://www.tn.gov/content/dam/tn/mentalhealth/documents/Tennessee_Epidemiological_Profile_of_Alcohol_and_Drug_Misuse_and_Abuse.pdf

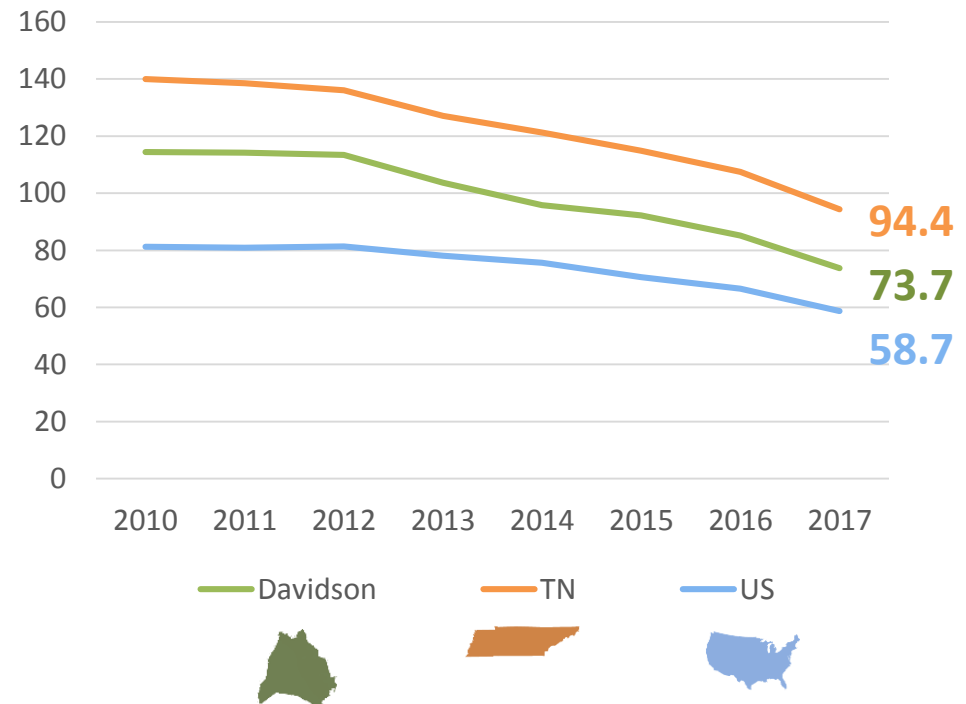
Substance Abuse

Opioid Prescribing Rates Per 100 Persons (2017)

1. Alabama – 107.2
2. Arkansas -105.4
3. Tennessee – 94.4



Opioid Prescription Rates Per 100 Persons (2010-2017)

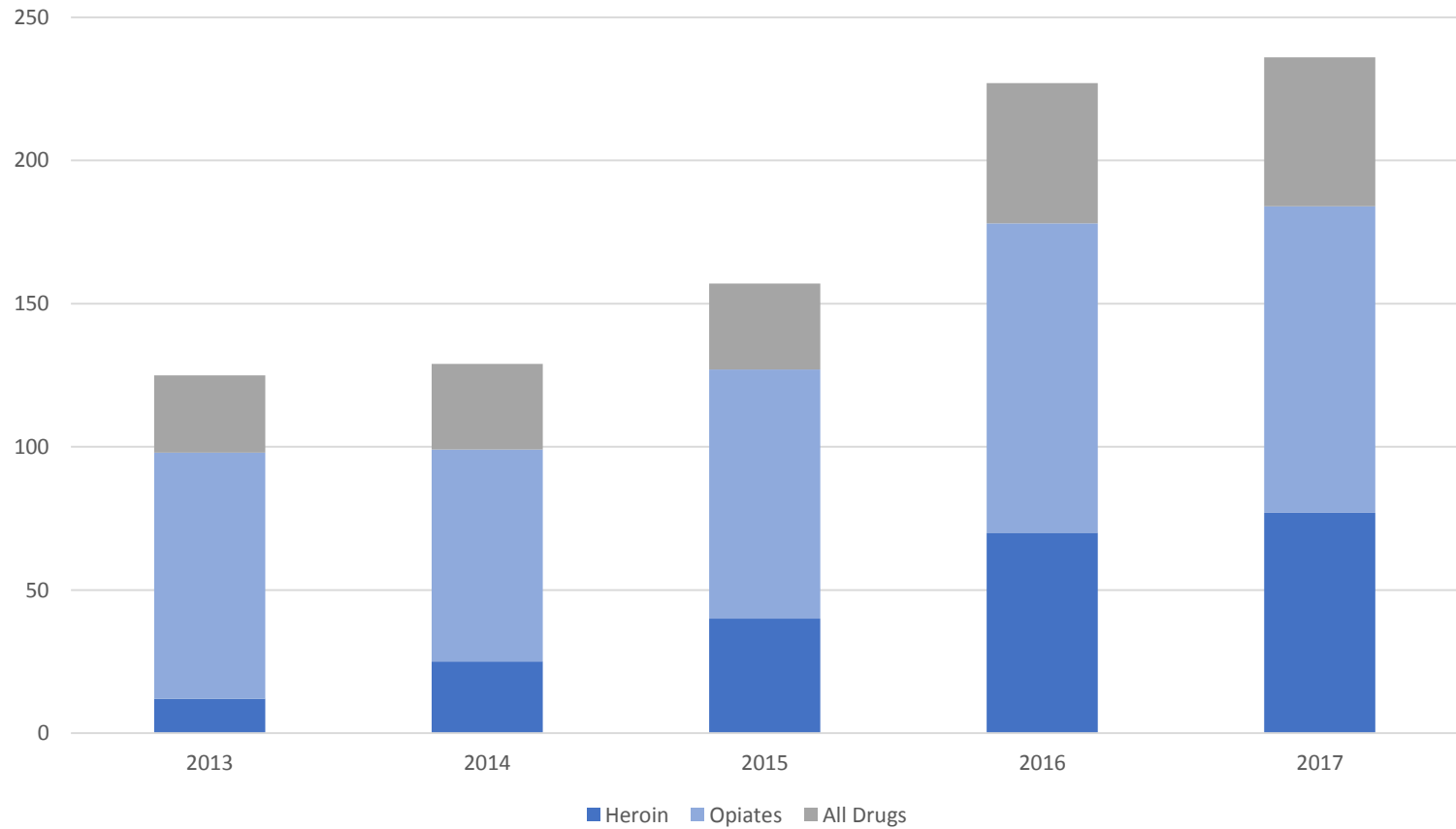


Substance Abuse

Davidson

Behavioral
Risk Factors

Davidson County Drug Overdose Deaths



Summary

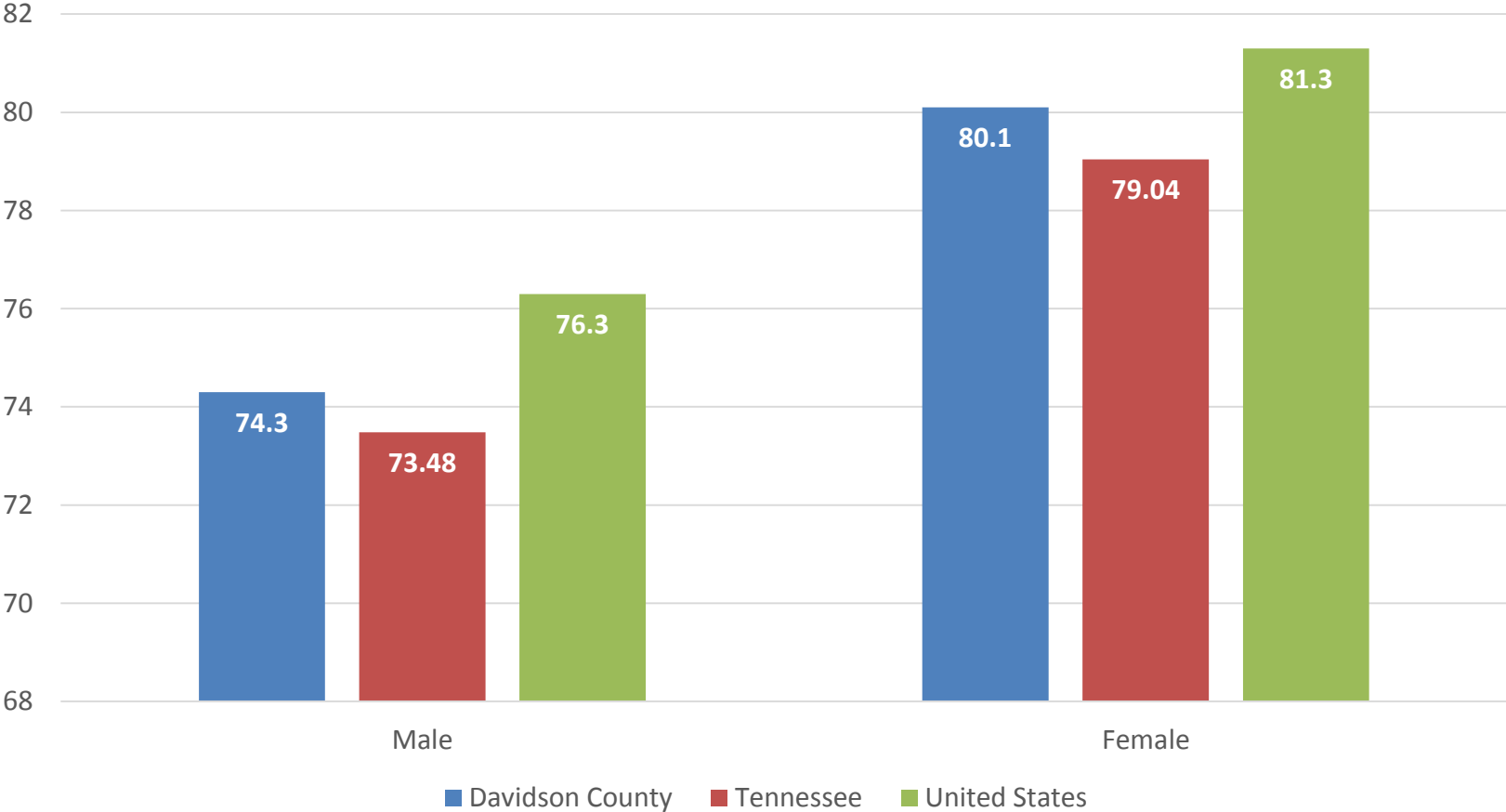
- Smoking rate remains higher than HP2020 target
- Around 30% of Davidson County adults are obese and many physically inactive
- Youth overweight and obesity rate is around 36% and many students don't receive enough physical activity
- Opioid prescribing rates are declining but Davidson still higher than national average at 73.7 per 100 persons

Morbidity & Mortality

Life Expectancy

Life Expectancy **77.3 Years**

By Gender



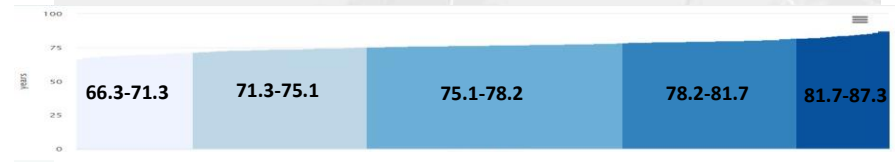
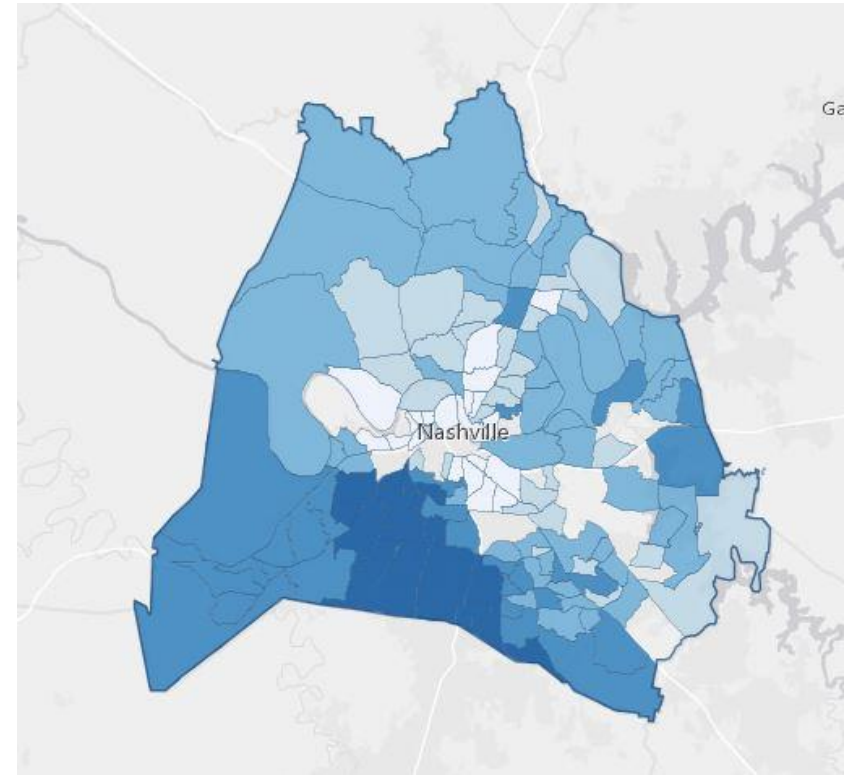
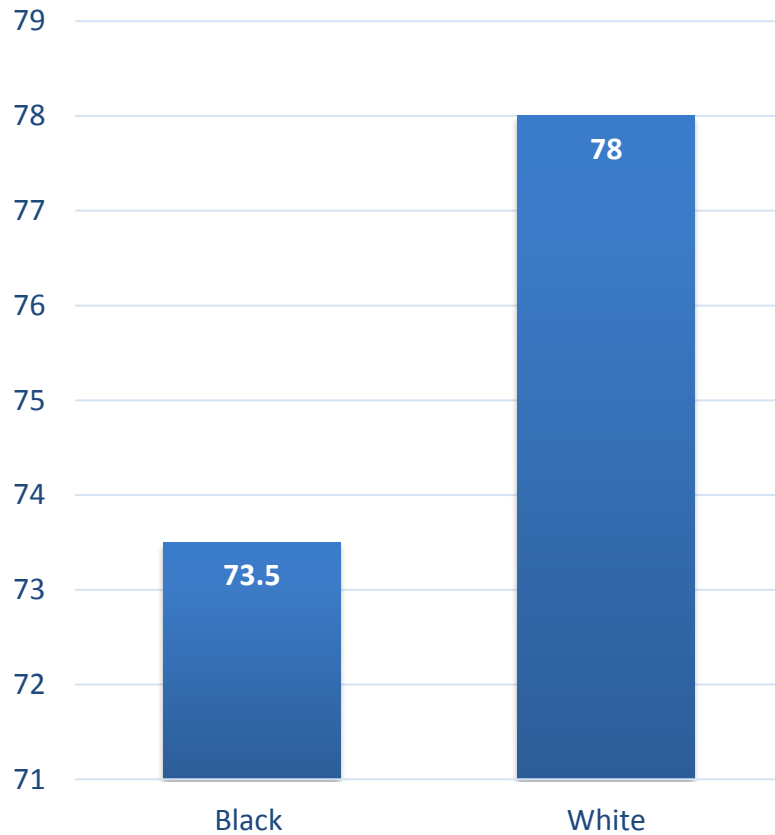
Source: Healthy Nashville. (2019). *Life Expectancy*. Retrieved January 2019 from <http://www.healthynashville.org/indicators/index/view?indicatorId=8195&localeType=4>

Life Expectancy

Life Expectancy

77.3 Years

By Race

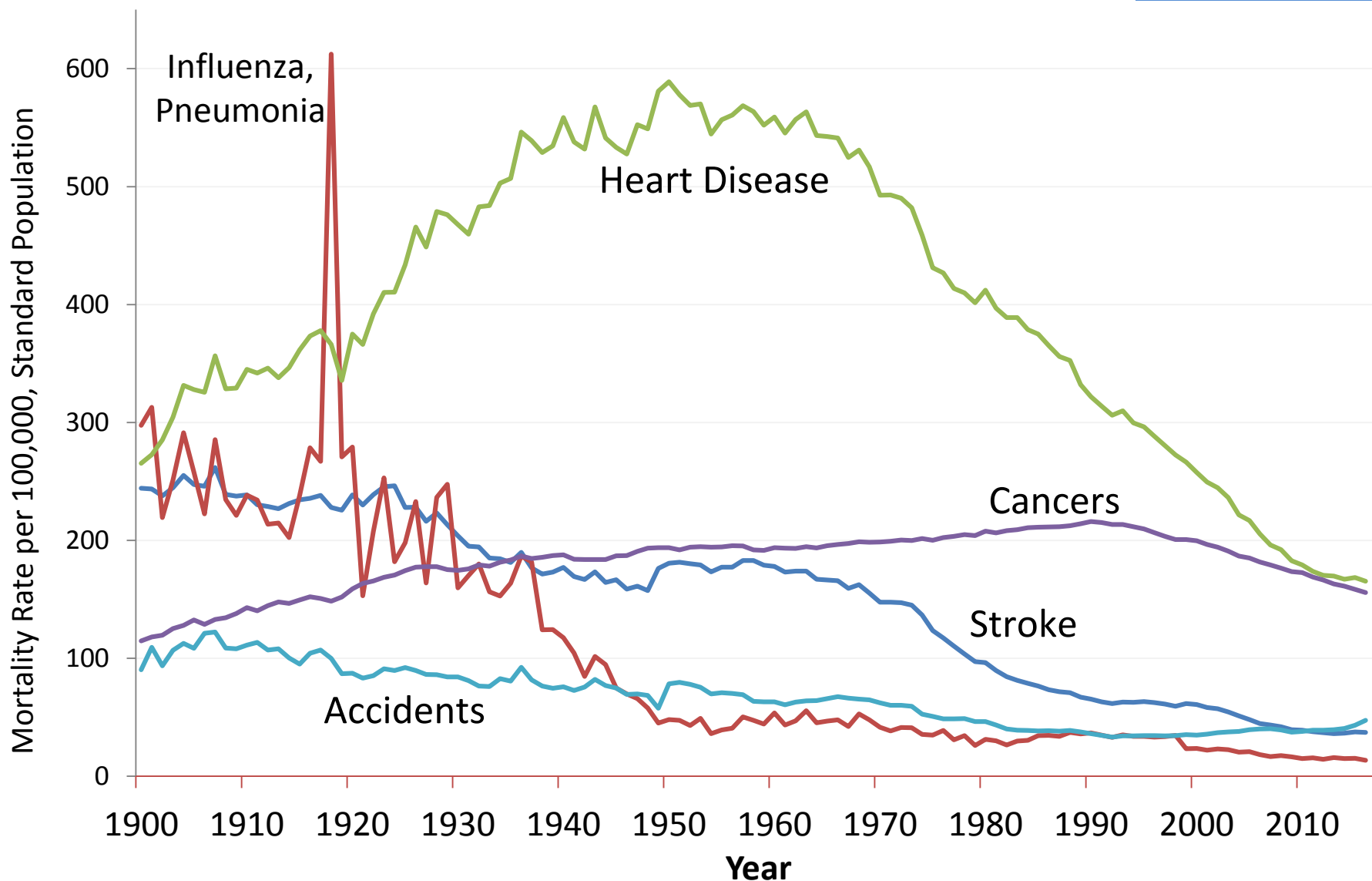


Causes of Death: USA, 1900-2016

Davidson

Morbidity /
Mortality

Age adjusted Death Rates for Selected Major Causes of Death



Source: Centers for Disease Control and Prevention. (2018). *National Vital Statistics System: Mortality Tables*.

Retrieved November 2018 from https://www.cdc.gov/nchs/nvss/mortality_tables.htm

Percentage of Deaths, Davidson County 2016

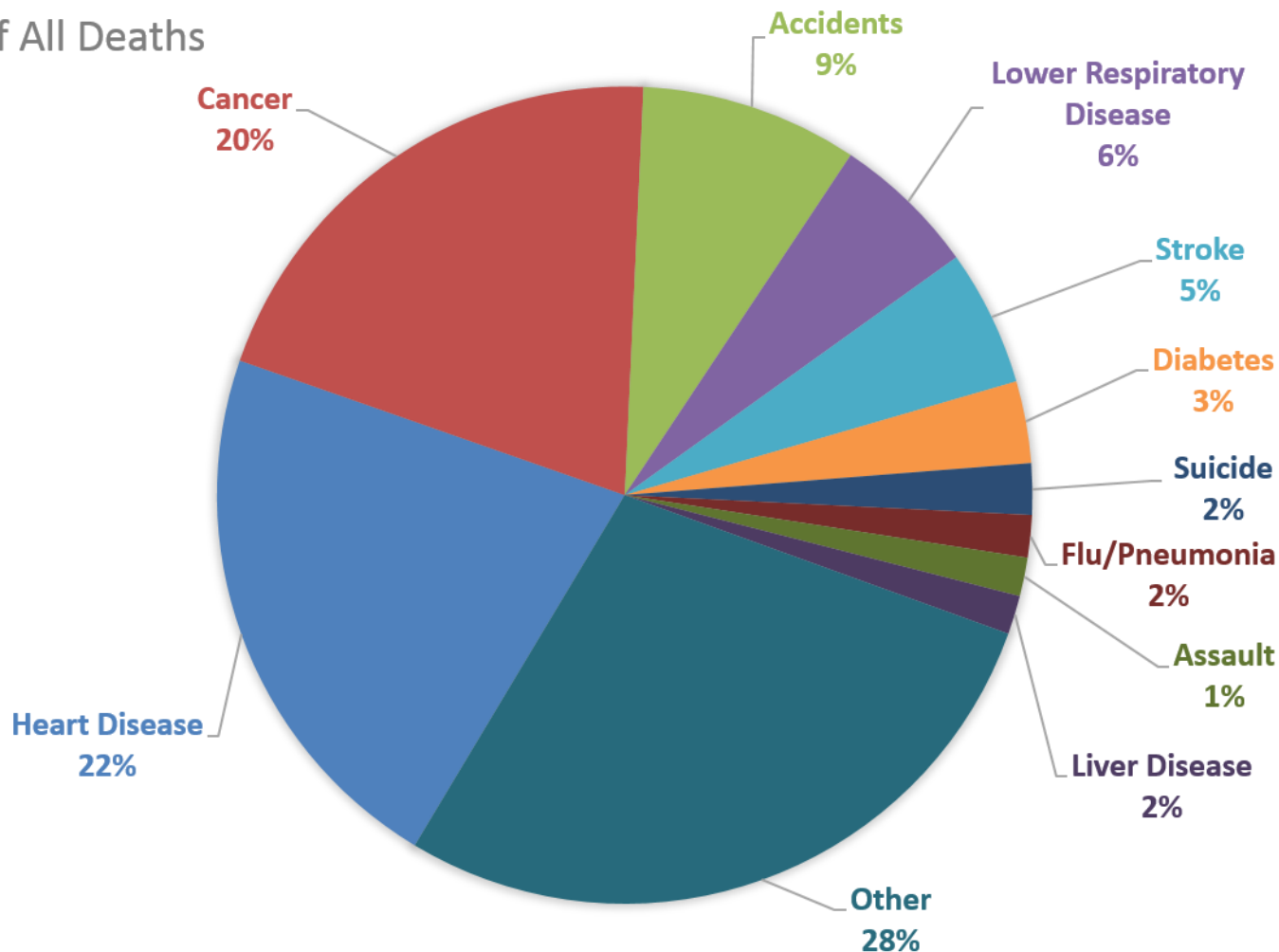
Davidson

Morbidity /
Mortality

5430 Total Deaths

71.9% Top 10 Leading Causes

Percentage of All Deaths



Chronic Disease Davidson County

Davidson

Morbidity /
Mortality

10.4%

Adults aged 18+ diagnosed
with **Diabetes**



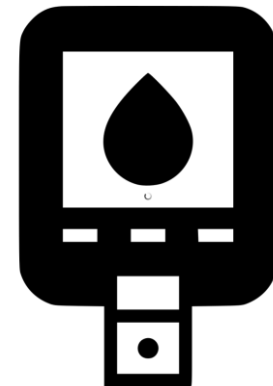
32.9%

Adults aged 18+ diagnosed
with **High Blood Pressure**



35.6%

Adults aged 18+ diagnosed
with **High Cholesterol**

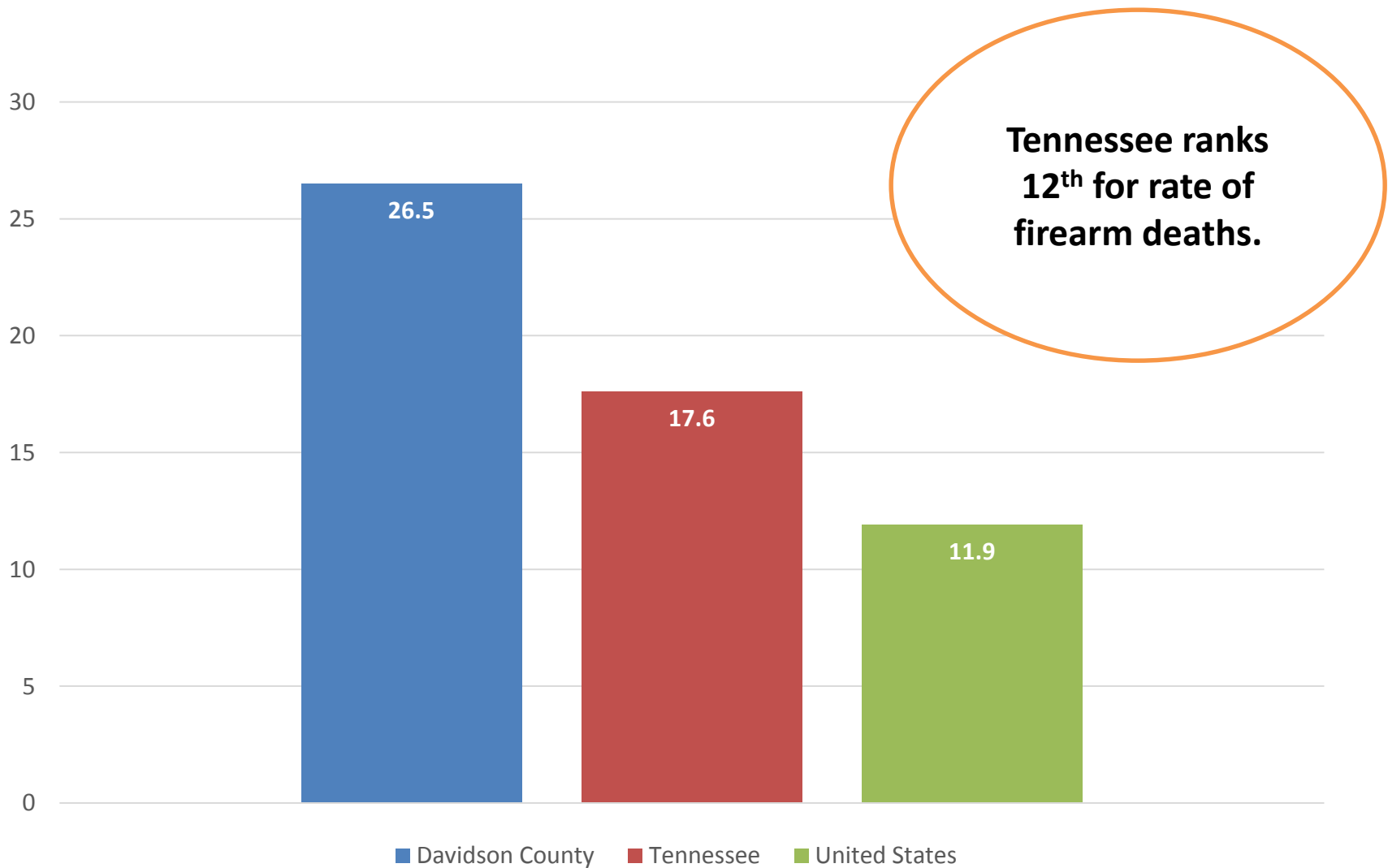


Source: Healthy Nashville. (2019). *Adults with Diabetes 2015*. Retrieved December 2018 from <http://www.healthynashville.org/indicators/index/view?indicatorId=81&periodId=234&localeId=139291>
Source: Healthy Nashville. (2019). *High Blood Pressure Prevalence 2015*. Retrieved December 2018 from <http://www.healthynashville.org/indicators/index/view?indicatorId=253&localeId=139291>
Source: Healthy Nashville. (2019). *High Cholesterol Prevalence: Adults 18+ 2015*. Retrieved December 2018 from <http://www.healthynashville.org/indicators/index/view?indicatorId=5677&localeId=139291>

Homicide Mortality Rate 2016; 15-24 years

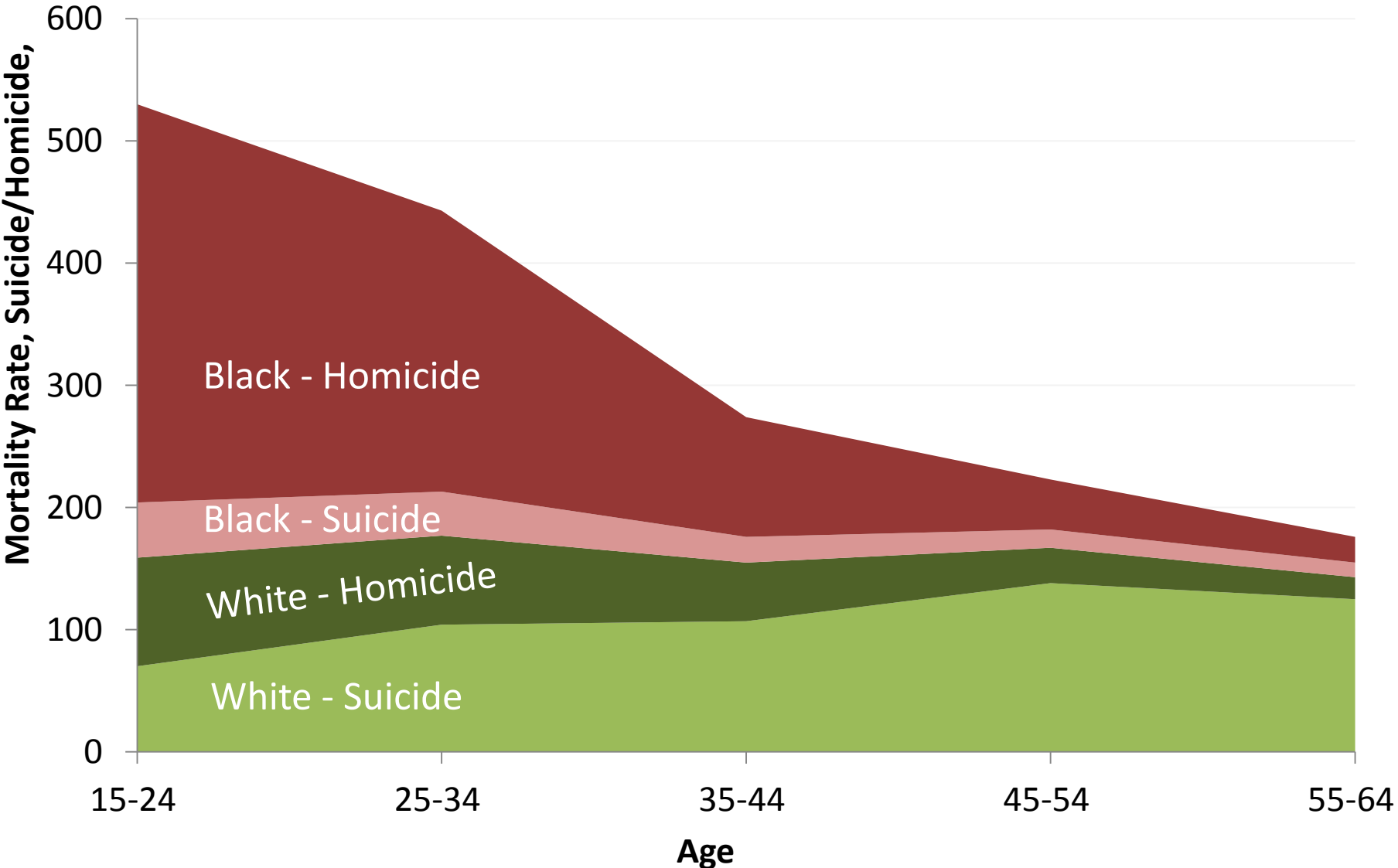
Davidson

Morbidity /
Mortality



Cumulative Death Rate: Suicide/Homicide

Davidson County, by Race, Age (1999-2017)



Source: Centers for Disease Control and Prevention: CDC Wonder. (2018). CDC Wonder. Retrieved May 2018 from <https://wonder.cdc.gov/>

Summary

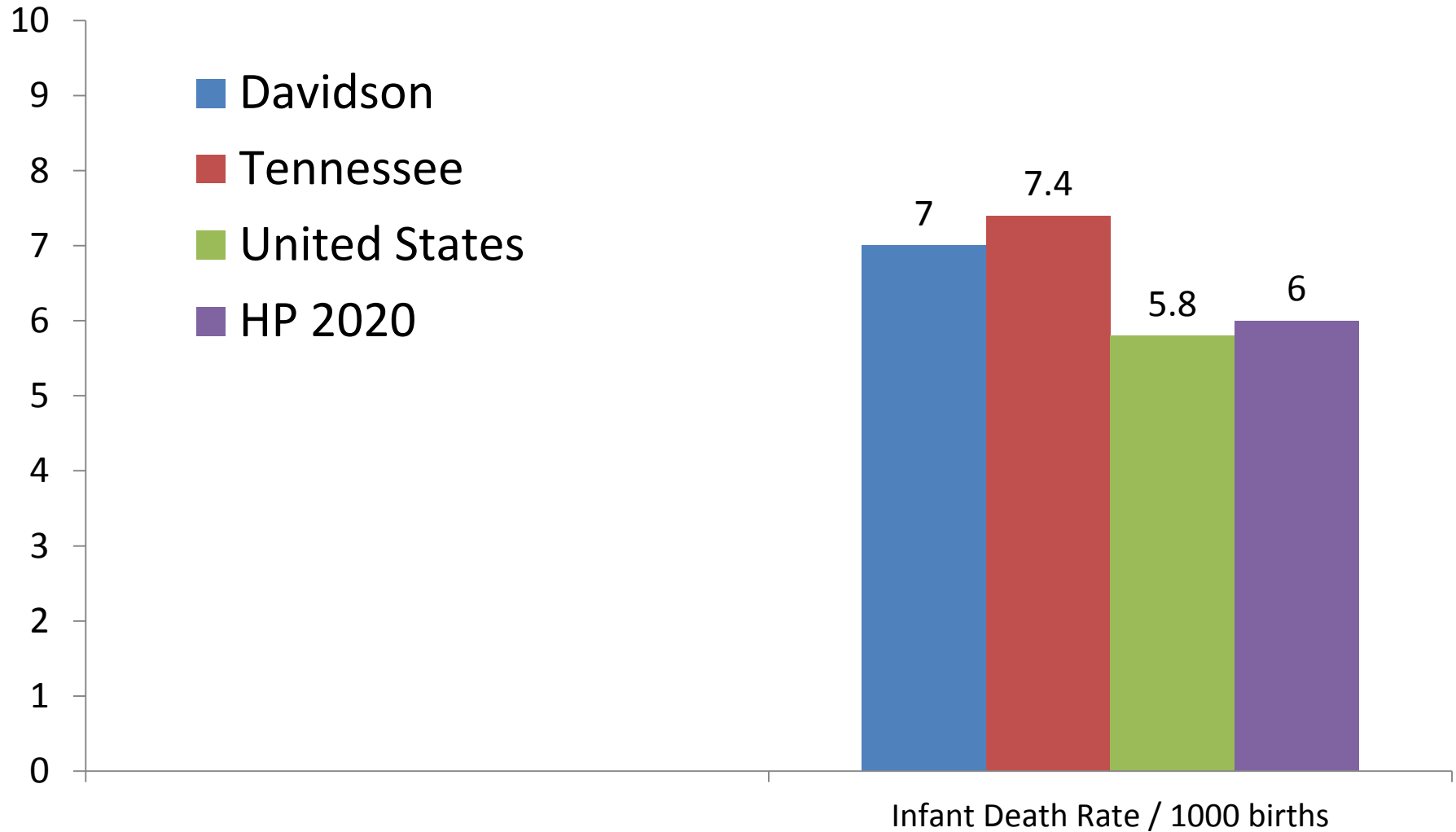
- Life expectancy is 77.3 and varies by race, place, and gender
- Cancer and heart disease remain the leading causes of death with 42% of all deaths
- Chronic illnesses that drive the leading causes of death are diabetes, high blood pressure, and high cholesterol
- County homicide death rate due to firearms far exceeds both State and National rates.

Maternal & Child Health

Birth Outcomes 2017

Davidson

Maternal &
Child Health

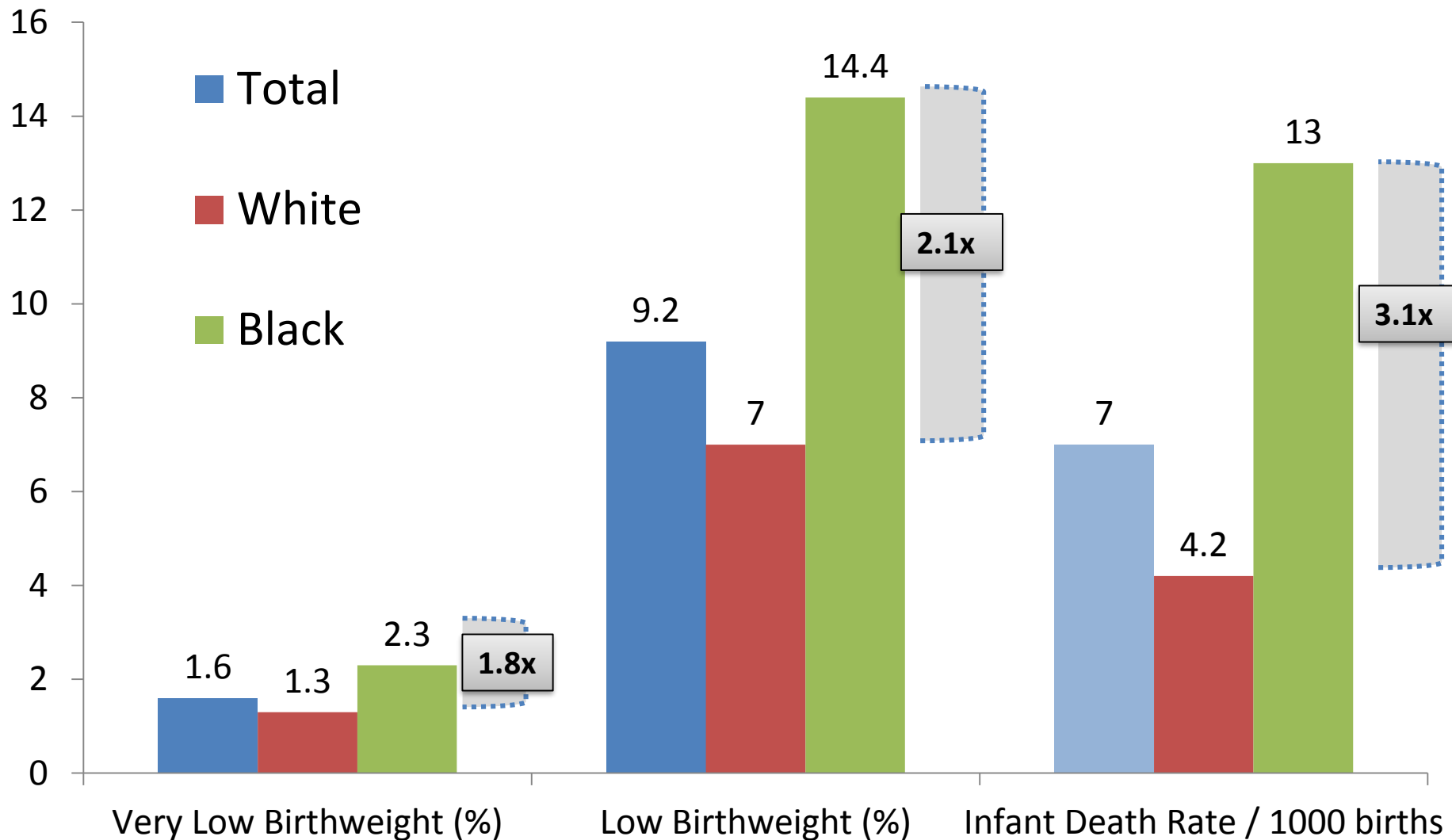


Birth Outcomes

Davidson

Maternal &
Child Health

Racial Disparities In Davidson County (2017)

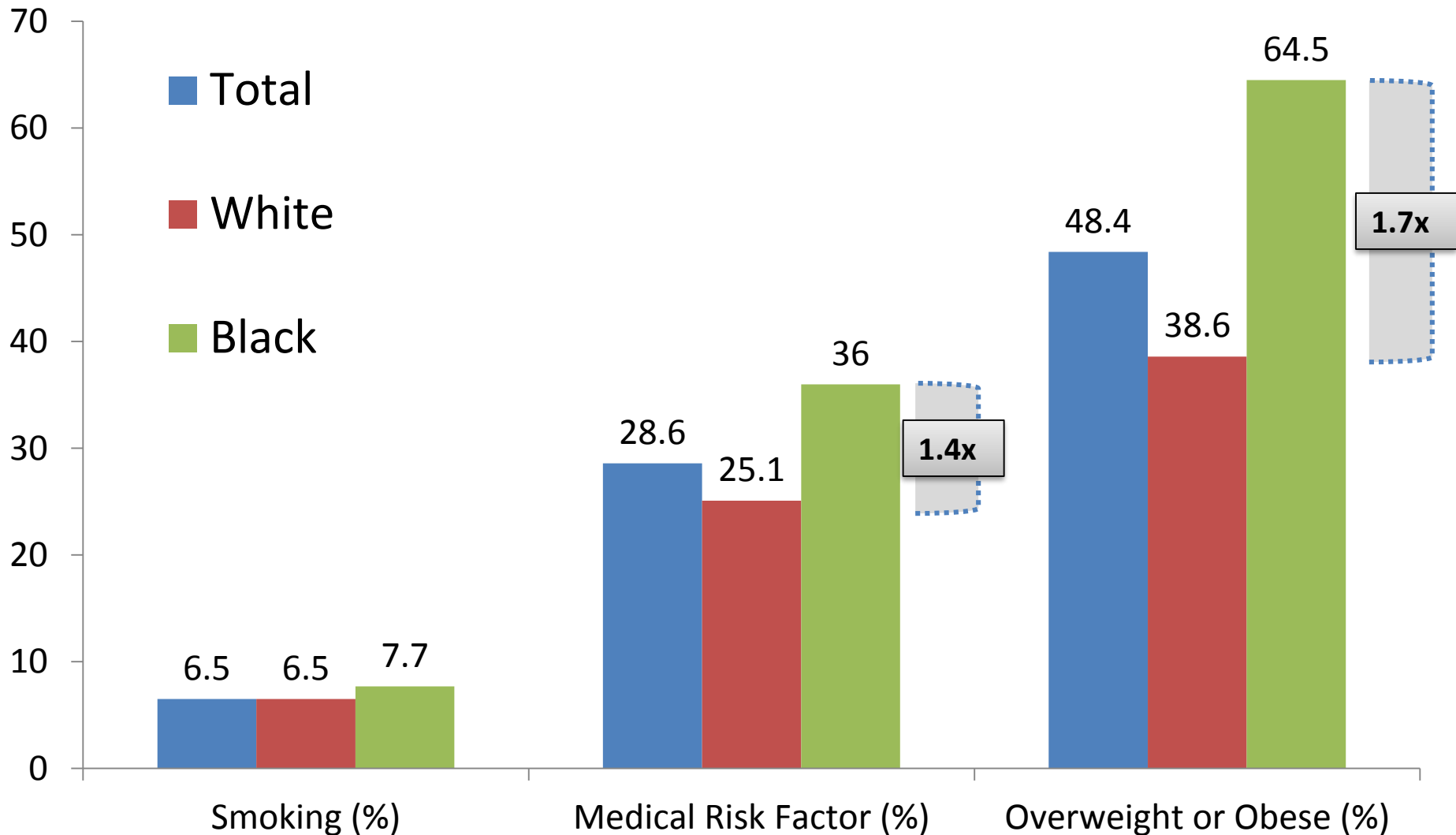


Maternal Risk Factors

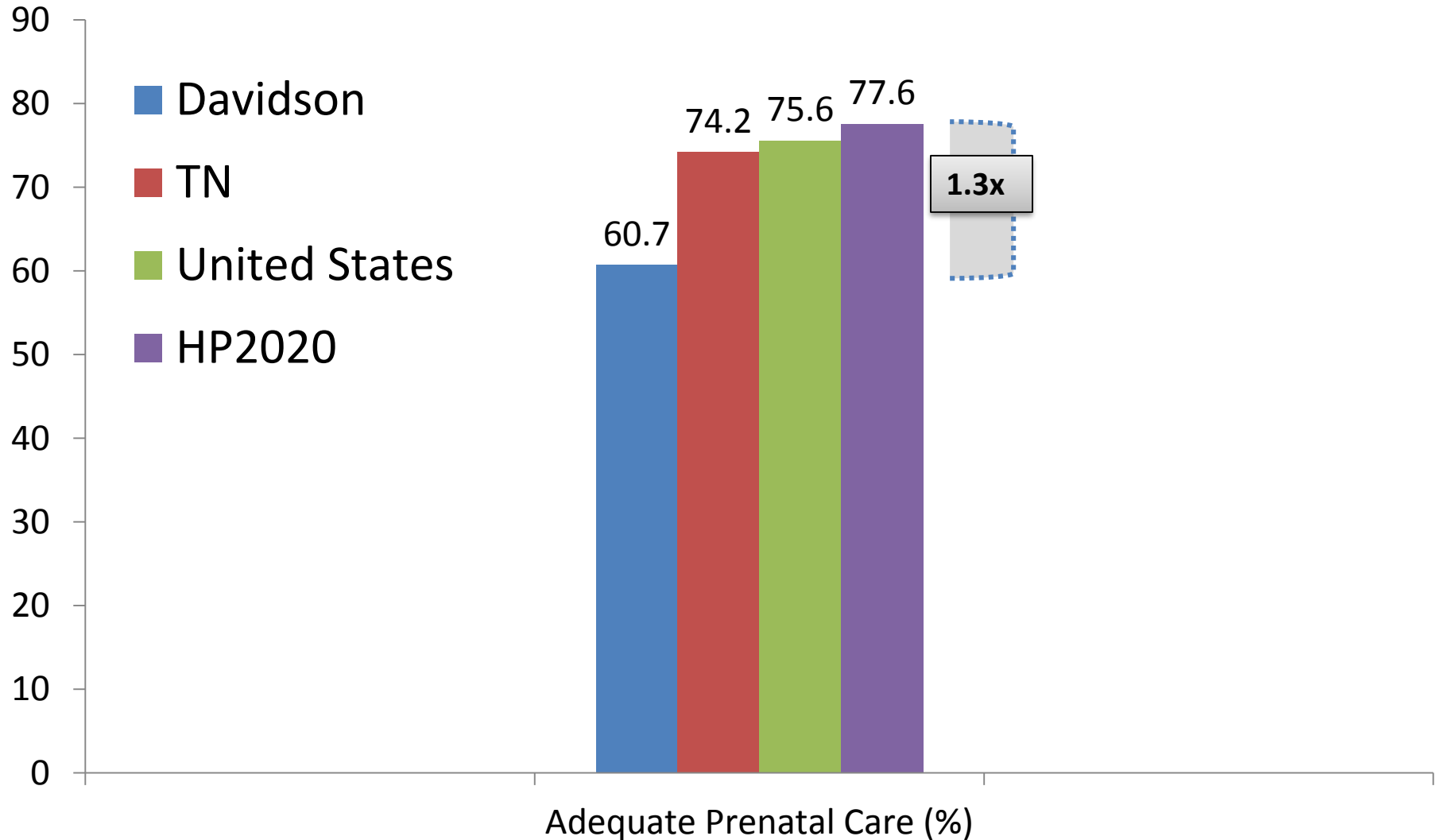
Racial Disparities In Davidson County (2016)

Davidson

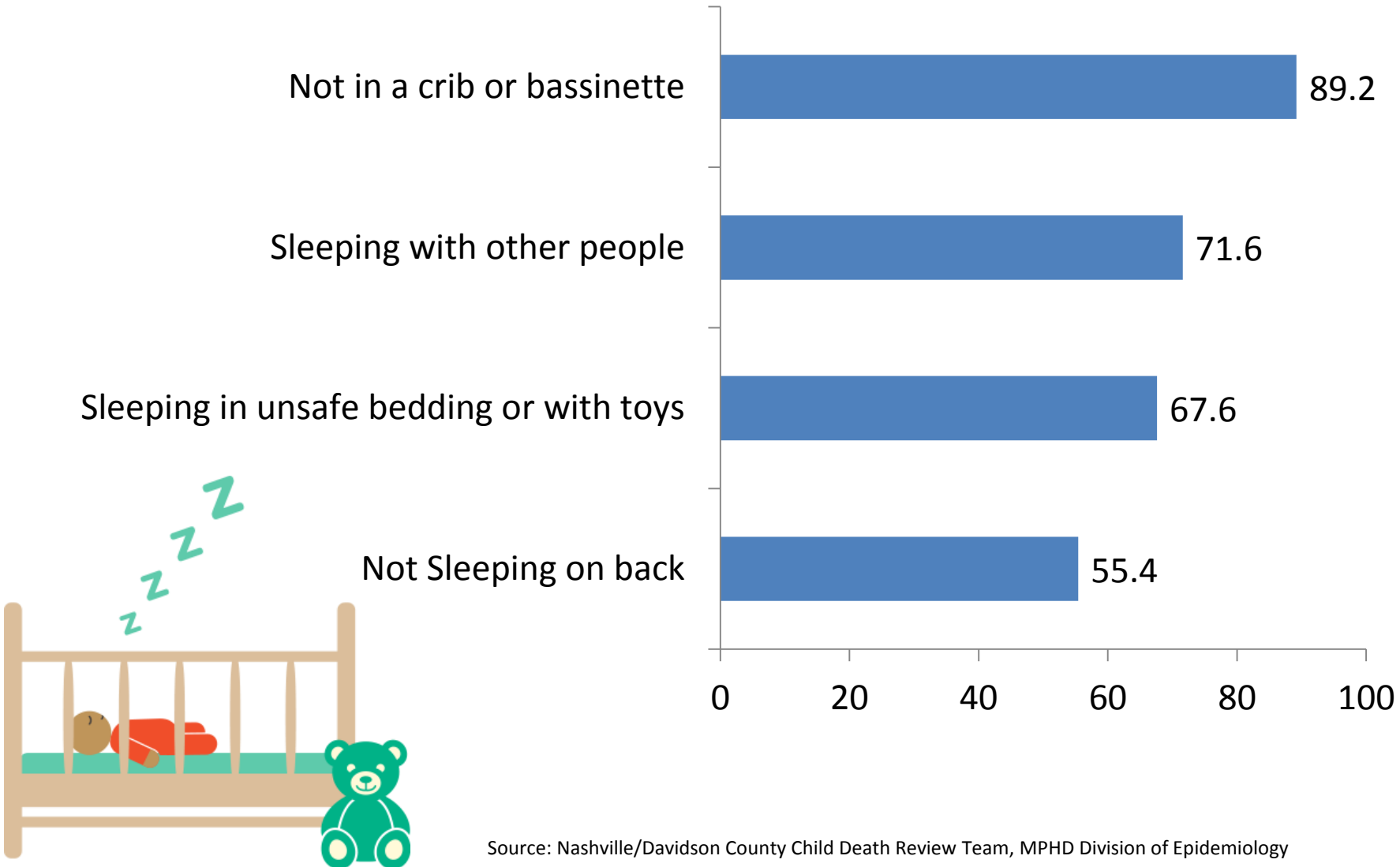
Maternal &
Child Health



Adequacy of Prenatal Care (2016)



% Factors Involved in Sleep-Related Infant Deaths, 2012-2016

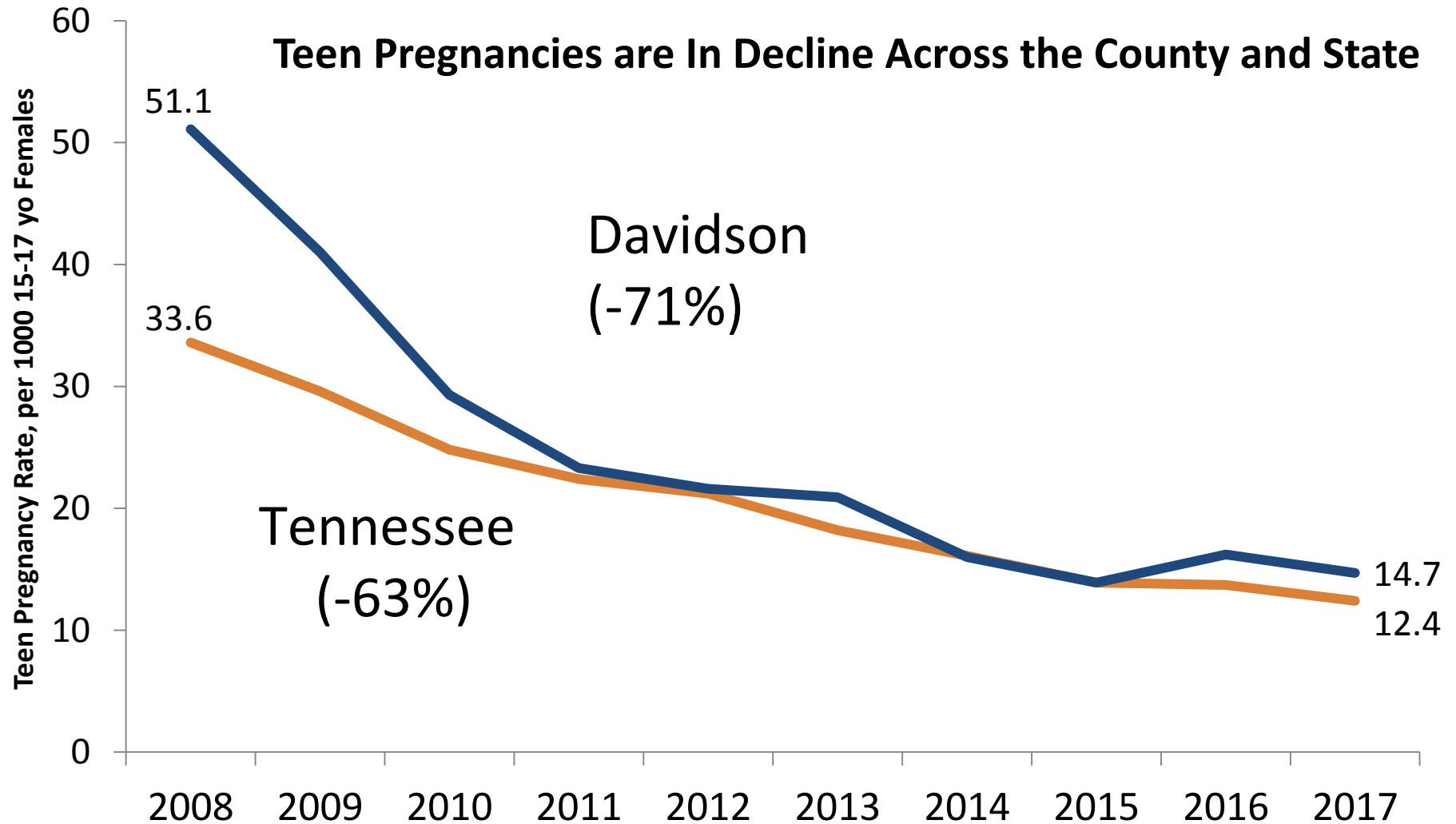


Source: Nashville/Davidson County Child Death Review Team, MPHD Division of Epidemiology

Teen Pregnancy Rates; Ages 15-17, Trend: 2008-2017

Davidson

Maternal &
Child Health



Summary

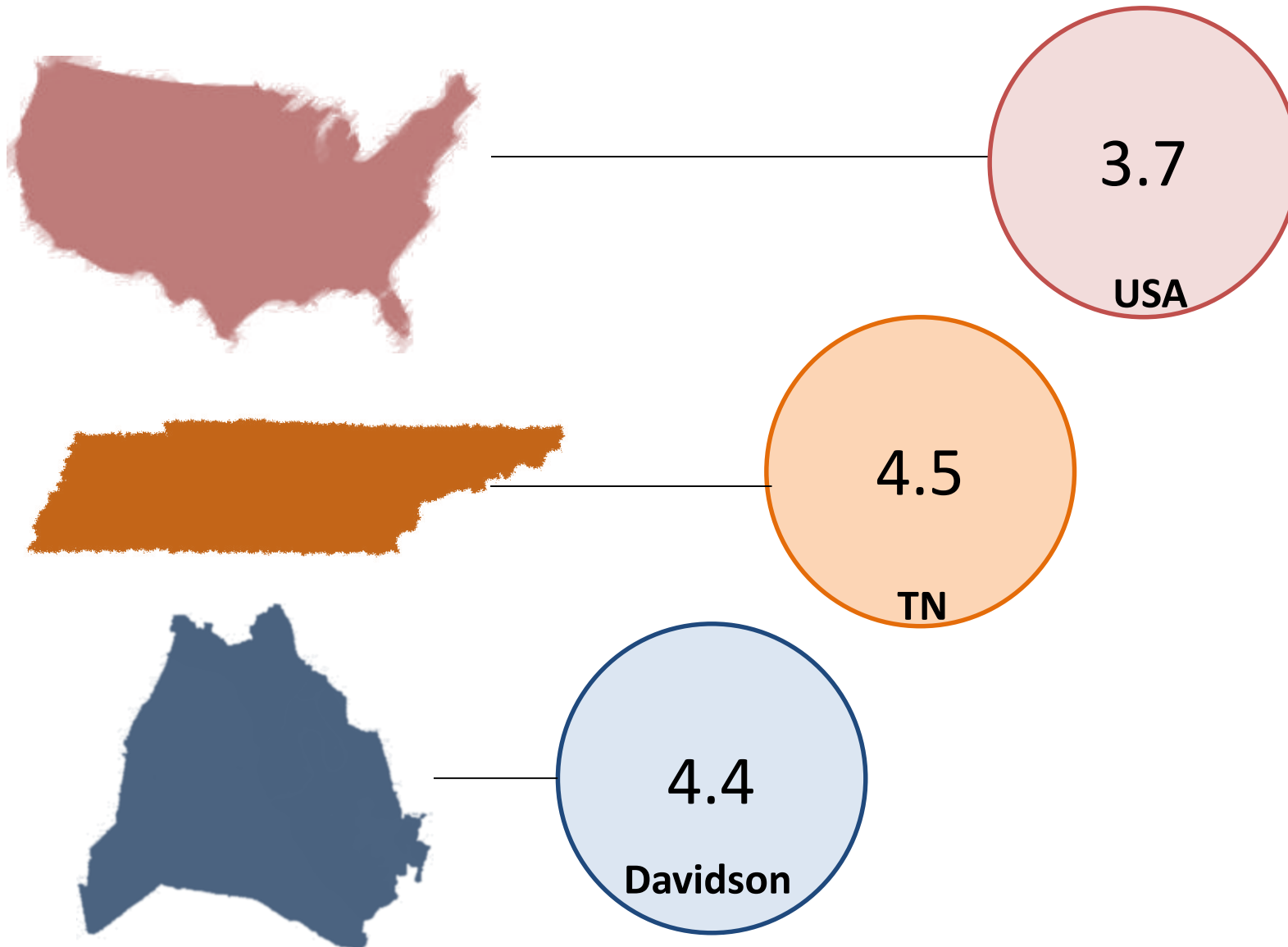
- Infant mortality rates and other poor birth outcomes are high
- Mothers in Davidson County have a high proportion of risk factors that could negatively impact birth outcomes
- Compared to the United States, fewer mothers are receiving adequate prenatal care
- A quarter (25%) of infant deaths are sleep-related and preventable
- Teen birth rates continue to decline

Mental Health

Poor Mental Health Days last 30 days 2016

Davidson

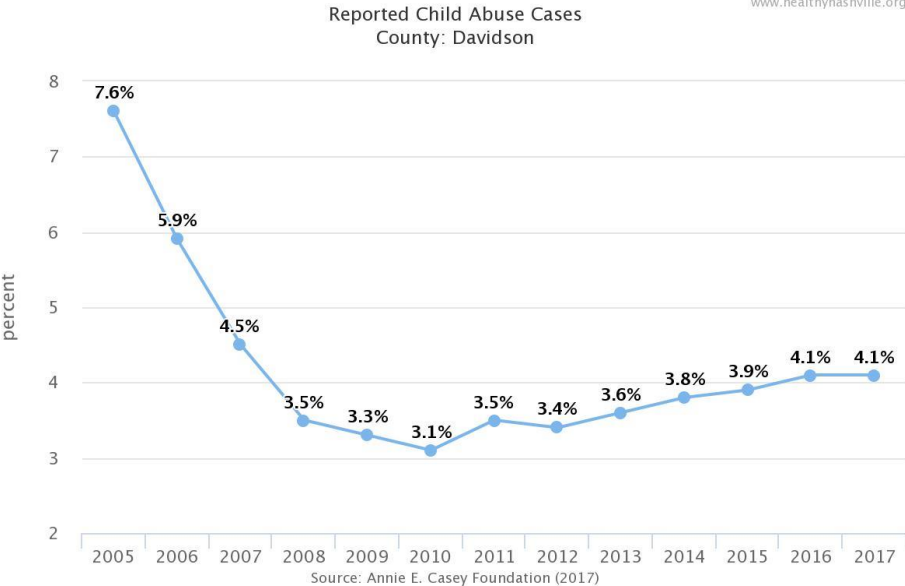
Mental
Health



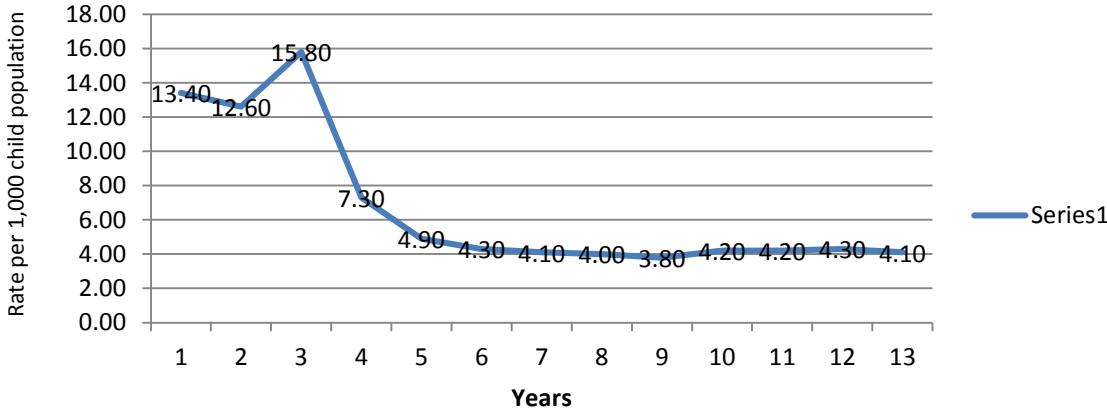
Source: County Health Rankings & Roadmaps (2018)

Retrieved from <http://www.countyhealthrankings.org/app/tennessee/2018/rankings/davidson/county/outcomes/overall/snapshot>

Child Abuse Cases



Substantiated Child Abuse Cases



Source: Tennessee Commission on Children and Youth. Annie E. Casey Foundation, KIDS COUNT Data Center (2017) Retrieved from <https://datacenter.kidscount.org> Healthy Nashville. Annie E. Casey Foundation. (2017) Retrieved from <http://www.healthynashville.org/indicators/index/view?indicatorId=2694&localeId=2498>

Adverse Childhood Experiences (ACEs) 2015-2016

Davidson

Mental
Health

2015

# ACEs	% (TN)
0	48%
1	20%
2	11%
3	7%
4 (or more)	14%

2016

# ACEs	% (TN)
0	39%
1	22%
2	12.2%
3	9.3%
4 (or more)	17.5%

Source:

Tennessee Commission on Children and Youth KIDS COUNT State of the Child in Tennessee 2016

Retrieved from <https://www.tn.gov/content/dam/tn/tccy/documents/kc/kc-soc16/kc-soc16.pdf>

Tennessee Commission on Children and Youth KIDS COUNT State of the Child in Tennessee 2017 Retrieved from <https://www.tn.gov/tccy/kc/tccy-kcsoc1.html>

Summary

“Evidence has shown that

mental disorders

are strongly related to the occurrence of many chronic diseases, including

diabetes, cancer, cardiovascular disease, asthma, and obesity

and many risk behaviors for chronic disease; such as,

physical inactivity, smoking, excessive drinking, and insufficient sleep.”

- Centers for Disease Control, Mental Health Basics

Environmental Health

Air Quality Standards

A Snapshot of Air Quality Standards in Davidson County

<i>Pollutant</i>	<i>Level</i>	<i>Standard</i>	<i>Levels in Davidson County</i>
Carbon Monoxide (CO)	9 ppm over 8 hours or 35 ppm over 1 hour	Not to be exceeded more than once per year	Typically, we average 1 ppm
Nitrogen Dioxide (NO ₂)	100 ppb	98 th percentile of 1-hour daily max concentrations, averaged over 3 years	Ranges from 10-20 ppb
Ozone (O ₃)	0.7 ppb	Annual fourth-highest daily max 8-hour concentration, averaged over 3 years	3 exceedance days in 2016, none for other years from 2013 to 2017
Sulfur Dioxide (SO ₂)	75 ppb over 1 hour	99 th percentile of 1-hour daily max concentrations, averaged over 3 years	Davidson County has minimum detectable levels

Overall, air quality in Davidson County meets the National Ambient Air Quality Standards (NAAQS) for most pollutants in most recent years

Air Pollution and Lung Disease

Davidson

Environmental
Health

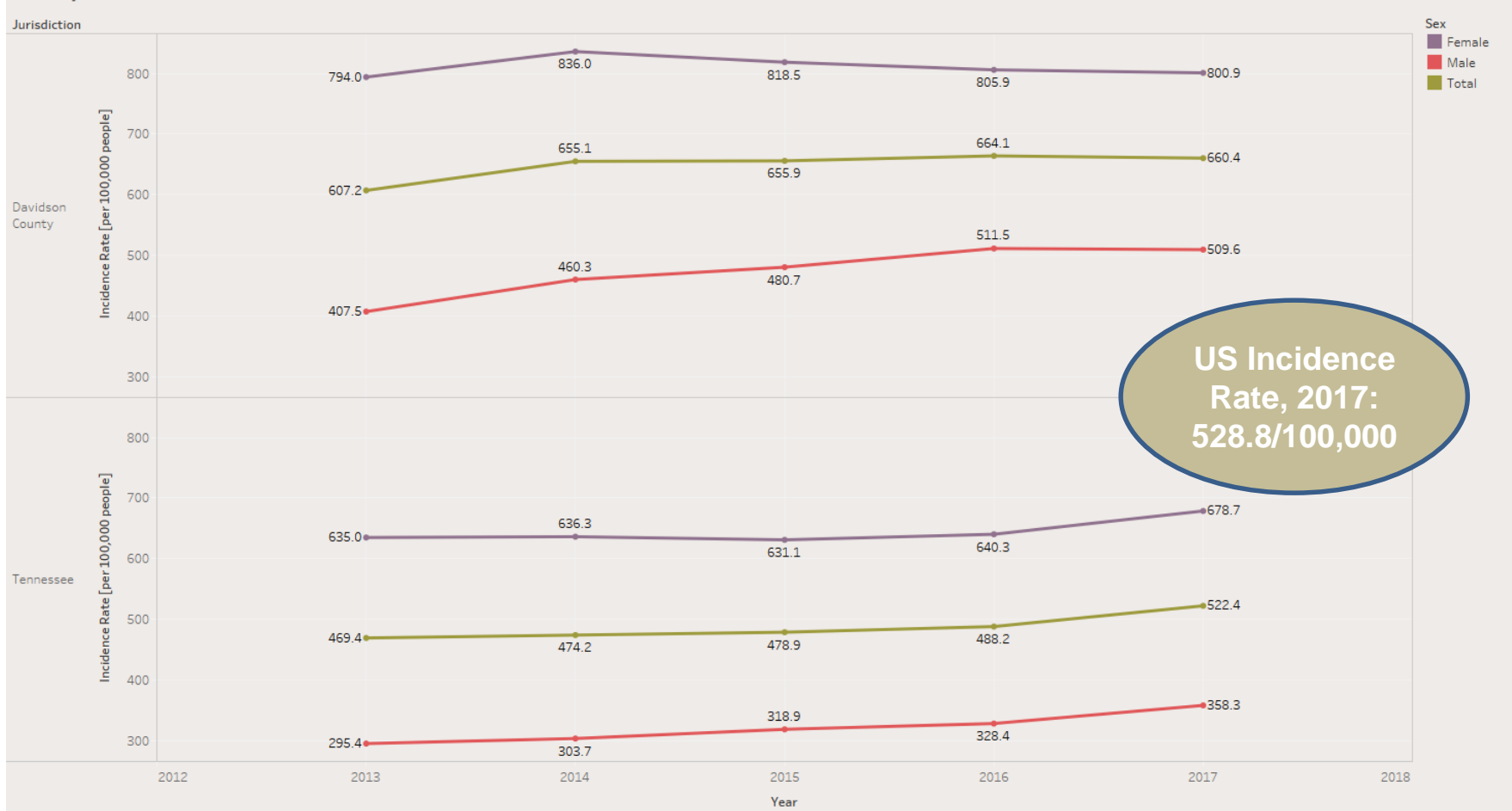
Estimated Number Suffering from Lung Disease Davidson County		
	2015	2018
Pediatric Asthma	11,560	14,217
Adult Asthma	38,622	59,206
COPD	43,488	49,095
Lung Cancer	510	515

Infectious Disease

Chlamydia

- In general, STDs have been on the rise
- Younger people between the ages of 15 and 29 are disproportionately affected
- The three notifiable STDs can all facilitate the transmission of HIV

Chlamydia Incidence Rates in Nashville and Tennessee, 2013-2017



Gonorrhea

Gonorrhea Incidence Rates in Nashville and Tennessee, 2013-2017



US Incidence
Rate, 2017:
171.9/100,000

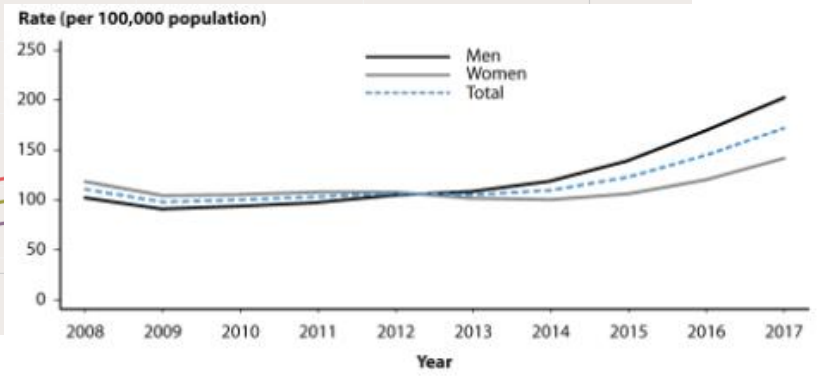


Figure 18. Gonorrhea – Rates of Reported Cases by Sex, United States, 2008-2017

Metro Public Health Department. (2018). [Gonorrhea Incidence Rates in Nashville and Tennessee, 2013-2017]. Patient Reporting Investigating Surveillance Manager (PRISM). Retrieved from <https://prism.health.tn.gov/prism/Home.aspx>
Centers for Disease Control and Prevention. (2018). [Figure 18. Gonorrhea-Rates of Reported Cases by Sex, United States, 2008-2017]. National Electronic Telecommunications System for Surveillance (NETSS). Available from <https://www.cdc.gov/std/stats17/gonorrhea.htm>

Syphilis

Syphilis Incidence Rates in Nashville and Tennessee, 2013-2017

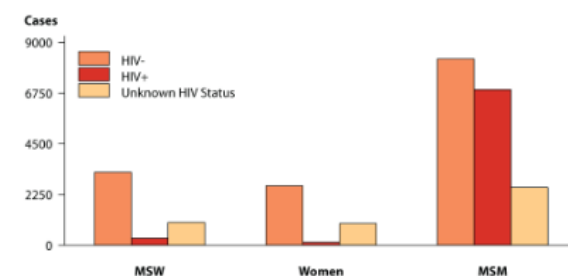
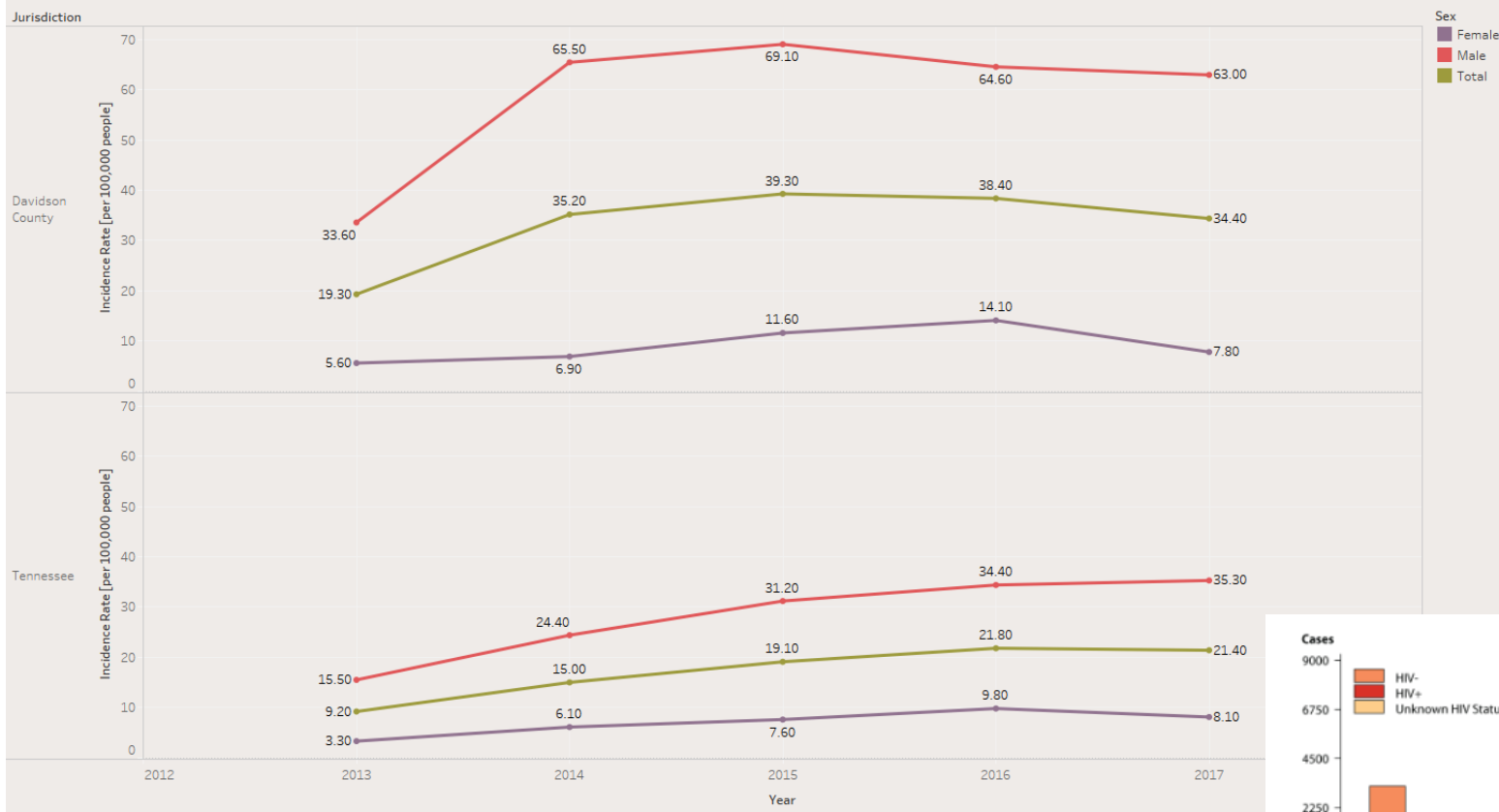


Figure 46. Primary and Secondary Syphilis — Reported Cases by Sex, Sexual Behavior, and HIV Status, United States, 2017

Metro Public Health Department. (2018). [Syphilis Incidence Rates in Nashville and Tennessee, 2013-2017]. Patient Reporting Investigating Surveillance Manager (PRISM).

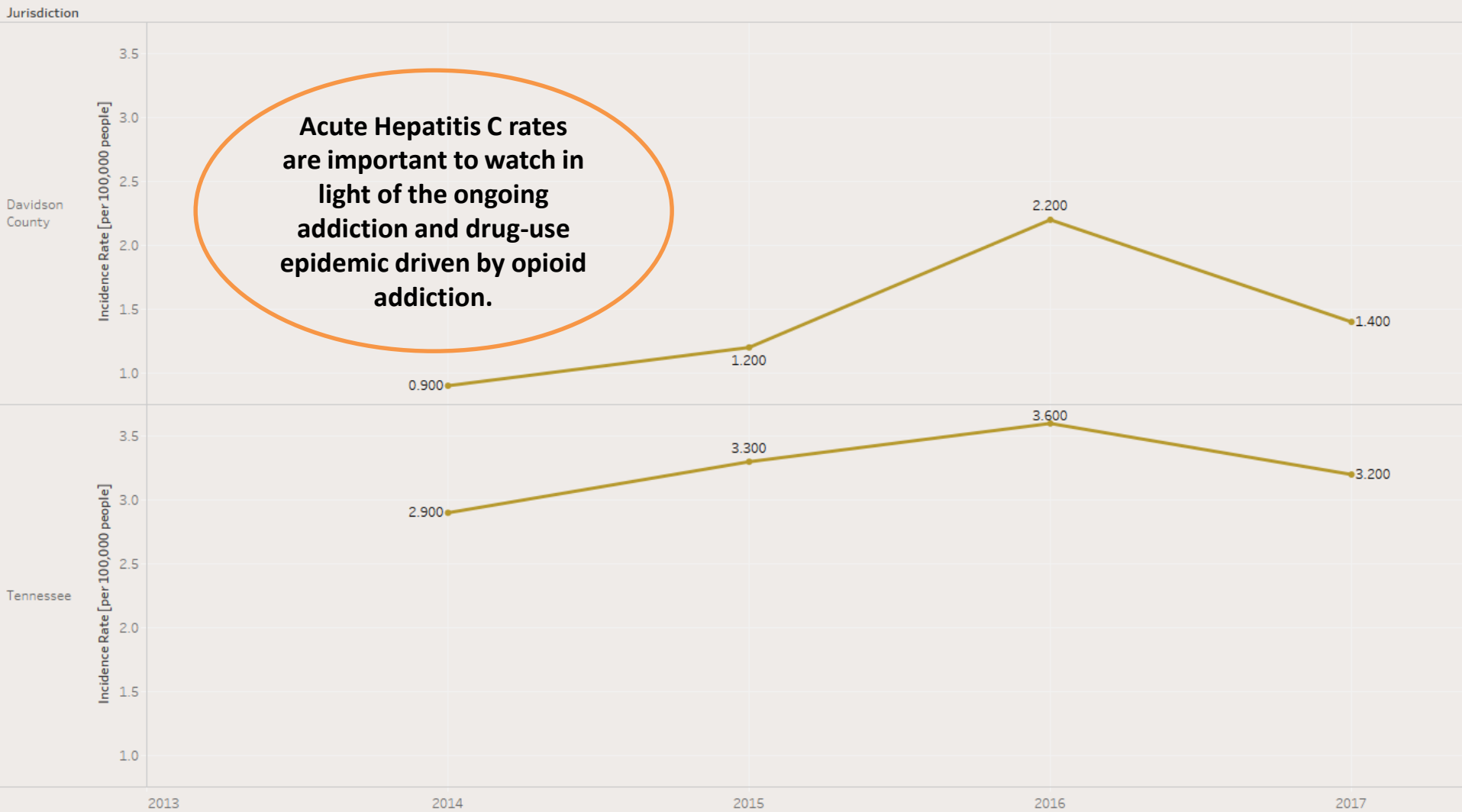
Retrieved from <https://prism.health.tn.gov/prism/Home.aspx>

Centers for Disease Control and Prevention. (2018). [Figure 46. Primary and Secondary Syphilis — Reported Cases by Sex, Sexual Behavior, and HIV Status, United States, 2017].

National Electronic Telecommunications System for Surveillance (NETSS). Available from <https://www.cdc.gov/std/stats17/Syphilis.htm>

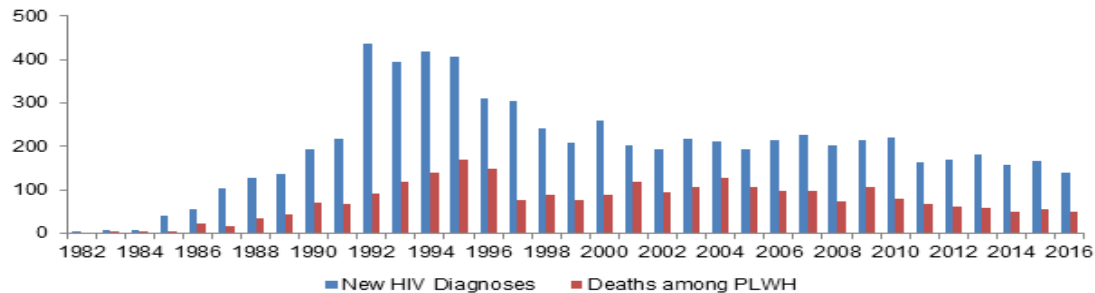
Hepatitis C (Acute)

Acute Hepatitis C Incidence Rates in Nashville and Tennessee, 2014-2017



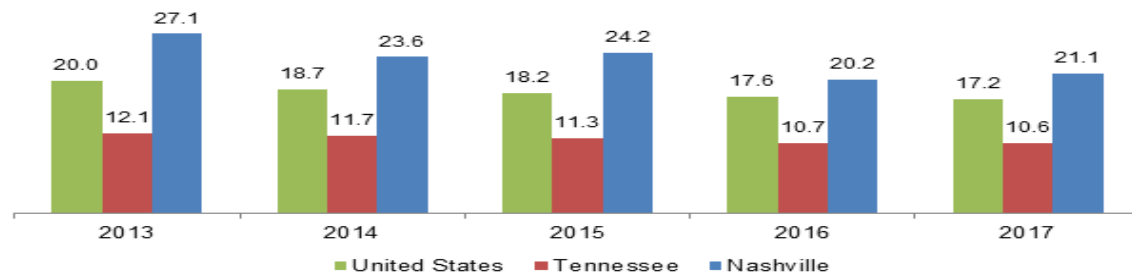
HIV/AIDS

Figure 1. Number of New HIV Diagnoses and Deaths among People Living with HIV (PLWH) - Nashville, 1982-2016



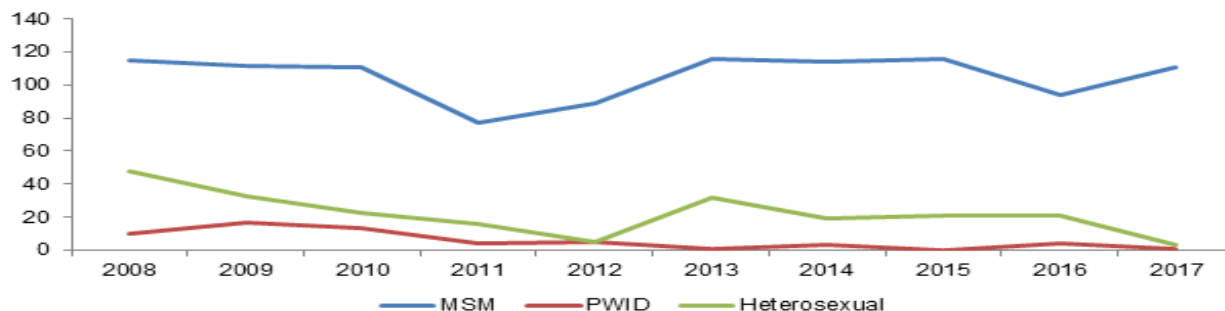
**New infections
and deaths
among PLWH are
decreasing**

Figure 2. Rate of New HIV Diagnoses - United States, Tennessee, and Nashville, 2013-2017



**Davidson County
still has a higher
incidence rate
than TN and US**

Figure 3. Number of New HIV Diagnoses by Transmission Risk - Nashville, 2008-2017



**New infections
are largely
driven by MSM
transmission**

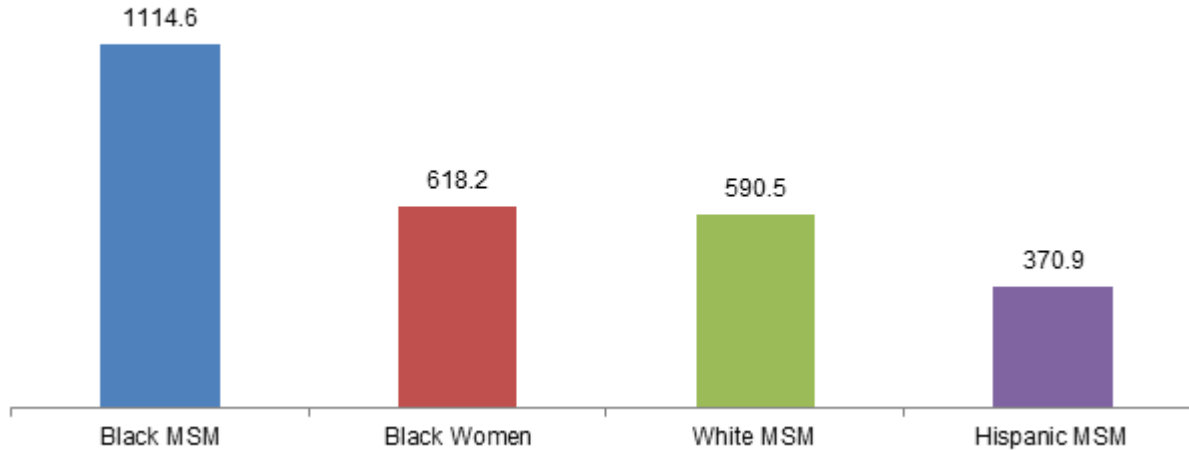
Metro Public Health Department. (2018). [Figure 1. Number of New HIV Diagnoses and Deaths among People Living with HIV (PLWH)-Nashville, 1982-2016]. Ryan White Part A Nashville Transitional Grant Area 2018 Needs Assessment. Nashville, TN: US.

Metro Public Health Department. (2018). [Figure 2. Rate of New HIV Diagnoses-United States, Tennessee, and Nashville, 2013-2017]. Ryan White Part A Nashville Transitional Grant Area 2018 Needs Assessment. Nashville, TN: US.

Metro Public Health Department. (2018). [Figure 3. Number of New HIV Diagnoses by Transmission Risk-Nashville, 2008-2017]. Ryan White Part A Nashville Transitional Grant Area 2018 Needs Assessment. Nashville, TN: US.

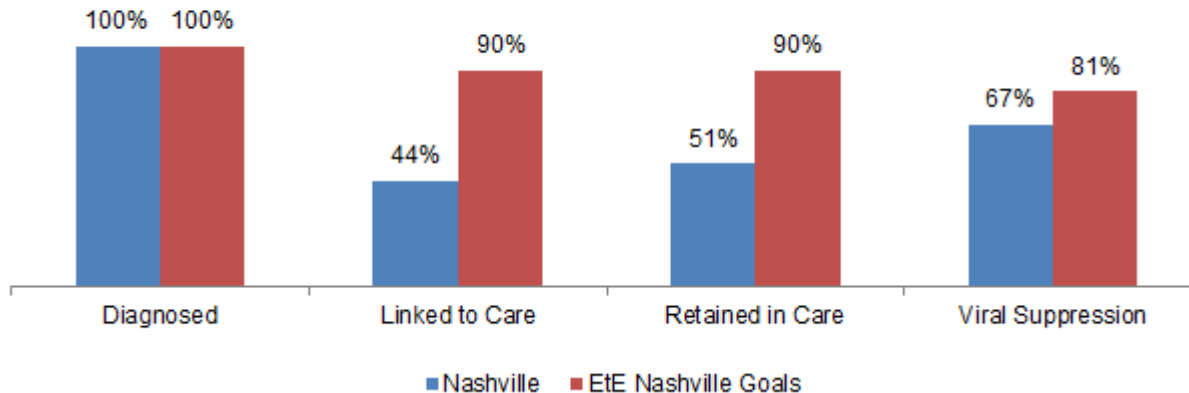
HIV/AIDS

Figure 5. Rates of PLWH among Priority Populations – Nashville, 2017



Prevalence is highest among Black MSM in Nashville

Figure 4. HIV-related Health Outcomes - Nashville, 2016



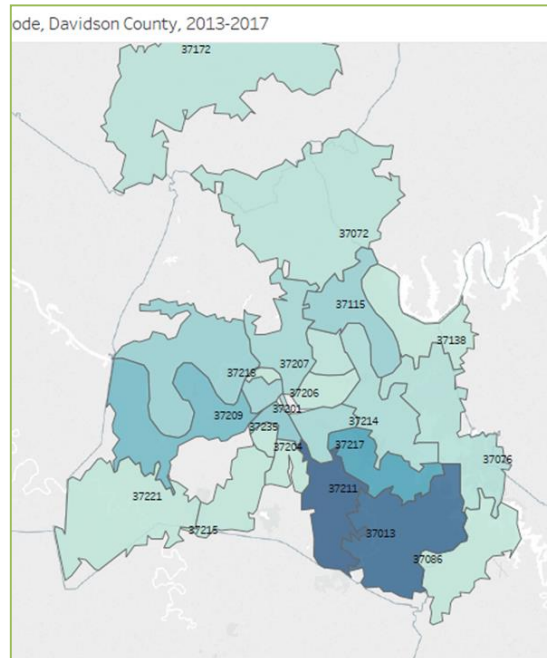
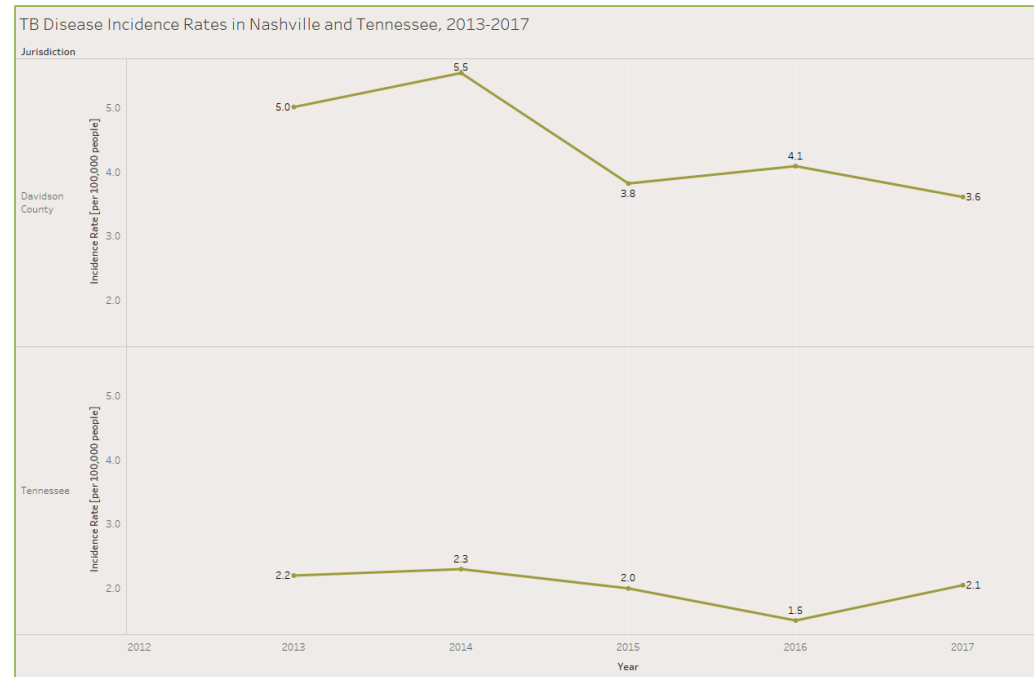
Nashville falls below all national rates and benchmarks for HIV health outcomes.

Metro Public Health Department. (2018). [Figure 5. Rates of PLWH among Priority Populations-Nashville, 2017]. *Ryan White Part A Nashville Transitional Grant Area 2018 Needs Assessment*. Nashville, TN: US.

Metro Public Health Department. (2018). [Figure 4. HIV-related Health Outcomes-Nashville, 2016]. *Ryan White Part A Nashville Transitional Grant Area 2018 Needs Assessment*. Nashville, TN: US.

Tuberculosis

Between 2013 and 2017, Asians accounted for the highest stratified incidence rate in Davidson County.



Davidson County TB cases are spatially clustered in South Nashville.

Metro Public Health Department. (2018). [TB Disease Incidence Rates in Nashville and Tennessee]. Nationally Notifiable Disease Surveillance System (NNDSS)-Based System (NBS).

Retrieved from <https://nbsproduction.tn.gov/nbs/HomePage.do?method=loadHomePage>

Metro Public Health Department. (2018). [Case Frequency by Zipcode, Davidson County, 2013-2017]. Nationally Notifiable Disease Surveillance System (NNDSS)-Based System (NBS).

Retrieved from <https://nbsproduction.tn.gov/nbs/HomePage.do?method=loadHomePage>

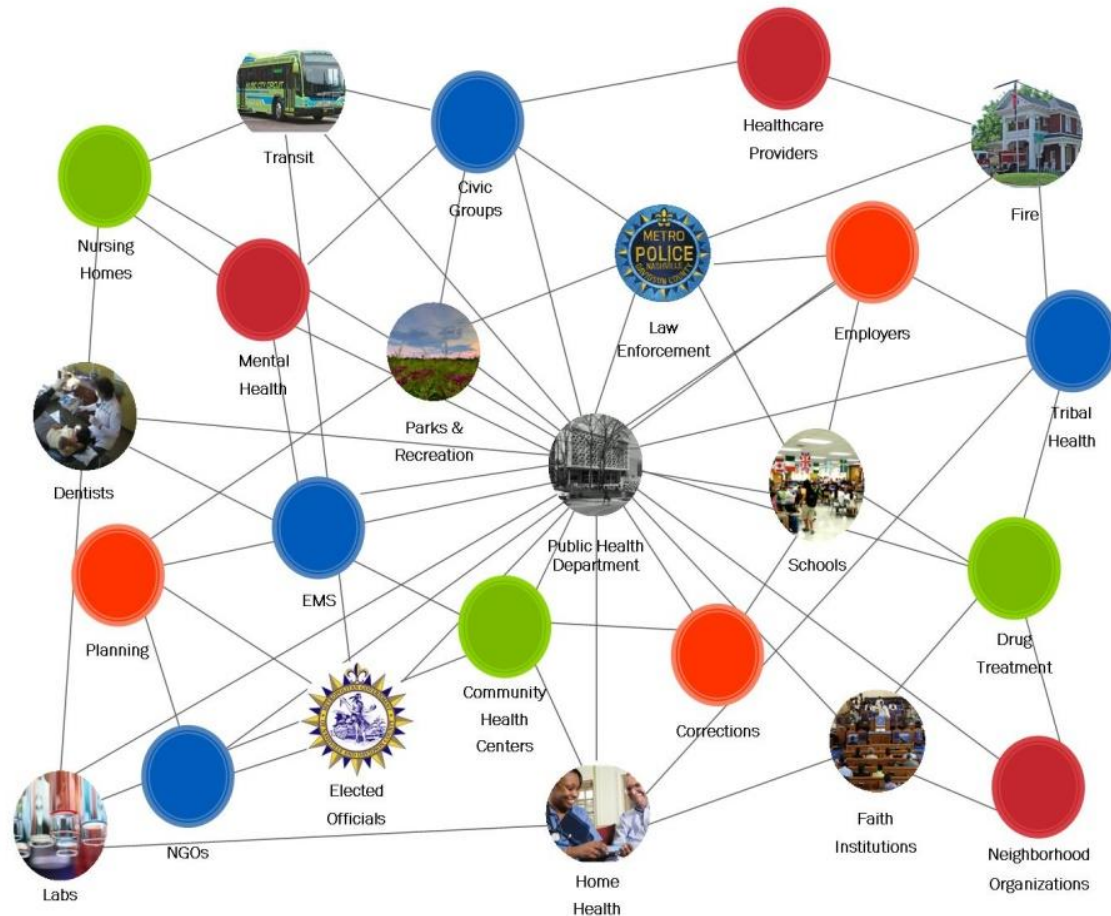
Summary

- STDs have been on the rise, especially among the younger population 15-29 years
- Locally, new HIV diagnoses have steadily decreased
- Racial disparities are encountered in the HIV population
- Davidson County's rates of TB are higher than Tennessee as a whole

Local Public Health System Assessment

Local Public Health System Assessment Background

In 2018, our assessment composed of 67 participants across 40+ organizations that make up the local public health system.



Local Public Health System Assessment Background



This assessment answers the following two questions:

1. What are the activities and capacities of our local public health system?
2. How well are we providing the **10 Essential Public Health Services** in Nashville?

Local Public Health System Assessment Methods

1. Monitor health status to identify community health problems.
2. Diagnose and investigate health problems and health hazards in the community.
3. Inform, educate, and empower people about health issues.
4. Mobilize community partnerships to identify and solve health problems.
5. Develop policies and plans that support individual and community health efforts.

Local Public Health System Assessment Methods

6. Enforce laws and regulations that protect health and ensure safety.
7. Link people to needed personal health services and assure the provision of health care when otherwise unavailable.
8. Assure a competent public health and personal health care workforce.
9. Evaluate effectiveness, accessibility, and quality of personal and population-based health services.
10. Research for new insights and innovative solutions to health problems.

Local Public Health System Assessment Methods

Table 1. Summary of Assessment Response Options

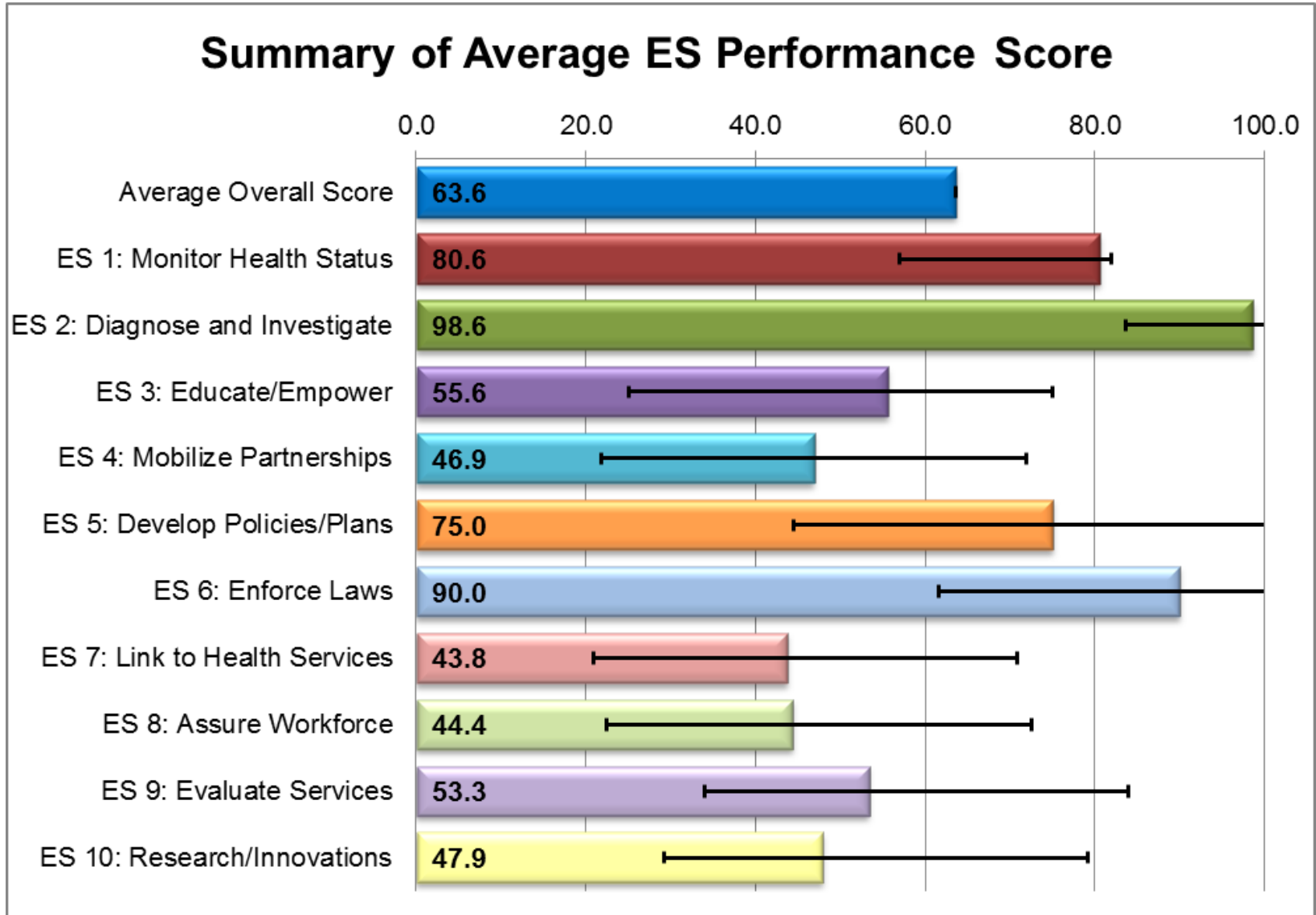
Optimal Activity (76-100%)	Greater than 75% of the activity described within the question is met.
Significant Activity (51-75%)	Greater than 50%, but no more than 75% of the activity described within the question is met.
Moderate Activity (26-50%)	Greater than 25%, but no more than 50% of the activity described within the question is met.
Minimal Activity (1-25%)	Greater than zero, but no more than 25% of the activity described within the question is met.
No Activity (0%)	0% or absolutely no activity.

Local Public Health System Assessment Methods

ESSENTIAL SERVICE 7: Link People to Needed Personal Health Services and Assure the Provision of Health Care when Otherwise Unavailable

7.1	Model Standard: Identification of Personal Health Service Needs of Populations <i>At what level does the local public health system:</i>	
7.1.1	Identify groups of people in the community who have trouble accessing or connecting to personal health services?	75
7.1.2	Identify all personal health service needs and unmet needs throughout the community?	50
7.1.3	Defines partner roles and responsibilities to respond to the unmet needs of the community?	25
7.1.4	Understand the reasons that people do not get the care they need?	75

Local Public Health System Assessment Findings



Local Public Health System Assessment Findings

Frequently Cited Strengths

- Active coalitions and strong work plans
- Robust network of providers and non-profits provide services
- Many organizations that offer training and education
- Many organizations follow same documentation process

Frequently Cited Challenges

- Data deficit
- Lack of resources, space, funding and personnel
- Lack of tracking referrals
- Critical partners missing in some areas of community health improvement process

Frequently Cited Opportunities

- Develop an inventory of available registries
- Focus on prevention-based efforts
- Increase transportation efforts/services with system we have
- Leverage the use of technology to communicate better in community

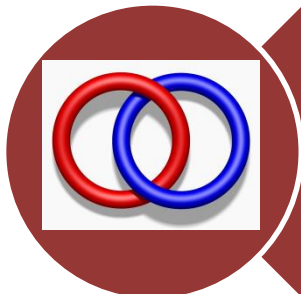
Local Public Health System Assessment Summary



Our community ecosystem ***shows strength and expertise*** in diagnosing what's wrong, enforcing regulations, and developing plans and policies.



Our community ***shows significant progress*** in educating and empowering the public about health and also evaluating our own progress with programs.



Our community ***could get better*** in the areas of linking folks to care, coordination of care, building the next generation of public health leaders, and using research and innovation efforts more effectively.

Community Input

Systematic Review

Purpose of Systematic Review

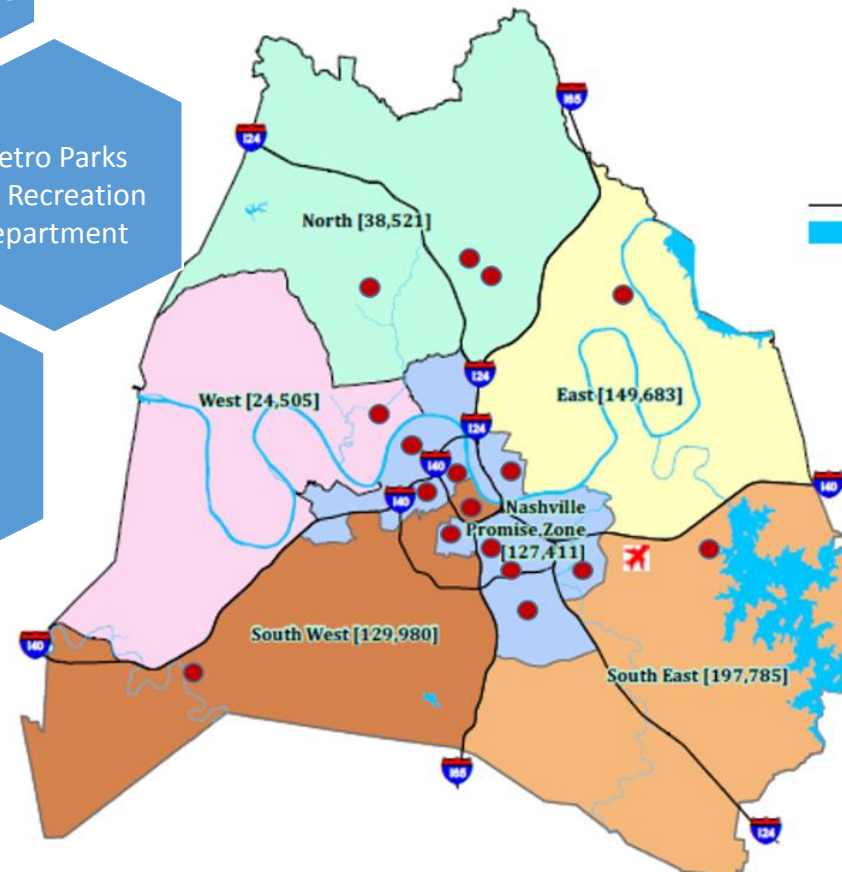
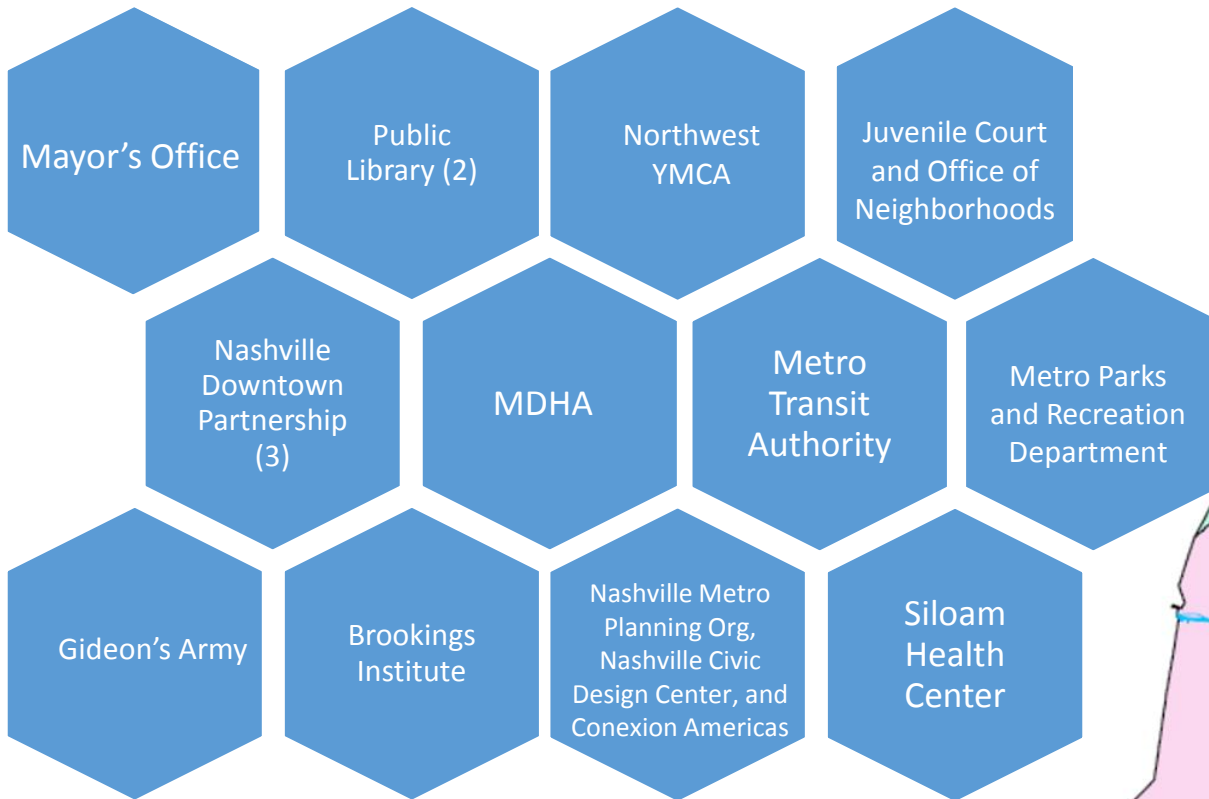
- Examine existing reports relevant to community health and healthcare in Davidson County
- Summarize existing reports using health equity as a framework

Systematic Review Methods

- Reviewed 21 existing reports from 2013-2018
- Identified target geography and population(s) for each report
- Summarize health topics discussed
- Organized information into “health equity categories”
- Determine reoccurring themes

Systematic Review Results

Reports:



Systematic Review Results

Health Equity Categories	# of Reports
Community Safety and Security	14
Economic Security and Financial Resources	9
Livelihood Security and Employment	9
Transportation	9
School Readiness and Educational Attainment	8
Environmental Quality	7
Adequate, Affordable, and Safe Housing	7
Availability and Utilization of Quality Medical Care	5
Civic Involvement	5

Systematic Review Results: Davidson County Top Themes

Health Topics:

1. Affordable Housing

2. Community Coordination

3. Transportation

- Economic Stability
- Social Isolation and Racial Segregation
- Neighborhood Services
- Health Care Access and Affordability
- Available Social Services and Access
- Mental and Physical Disabilities
- Obesity
- Active Lifestyle
- Medications
- Aging Populations
- Youth Violence
- Mass Transit System
- Policing Practices
- Education
- Built Environment
- Community Health Resources
- Community Strengthening and Visioning
- Sleep Habits
- Barriers to Care
- Mortality rates
- Causes of Death
- Smoking
- Air Pollution
- Accidents
- Social Determinants
- Public Safety
- Cleanliness
- Walkability/Exercise Opportunities
- Health Food Access

Interviews with Community Informants

Interview Methods

- Interviewed 23 community representatives and leaders with:
 - Focus on the broad interests of the community
 - Serving low-income, minority or underserved populations
- Sectors represented include: public health, government/public sector, health care, education, faith community, non-profits, academia, business
- Interviews conducted in pairs with an interviewer and a recorder

Interview Methods (cont.)

- Interview protocol included all open-ended questions
- Focused on community assets, issues/concerns, obstacles to addressing concerns and priorities:
 - Assets
 - Community Concerns
 - Health/Health Care Concerns
 - Barriers/Challenges
 - Magic Wand
- Interview data entered in REDCap
- Thematic analysis conducted using teams of four reviewers

“What do you think are your community’s strongest assets?”

‘I think the spirit across the community is one of helpfulness, and of wanting to do better’

- **Community**
- **Healthcare**
- **Resources/Collaborative Work**

“What would you say are the top three issues specific to health or health care that you are most concerned about in your community?”

‘We are the only country where you could end up bankrupt if you get sick’

‘As our population ages, we need to have more programs that can treat individuals who are aging, mentally ill, and having multiple chronic issues’

- **Insurance/Affordability**
- **Equity**
- **Lifestyle/Behaviors**

“What do you think are the obstacles or challenges to addressing these issues?”

‘The national scale and systemic nature of many of these issues makes them hard to address at the local level. Small safe spaces can be created, but it is hard to overcome the overarching issues’

‘Lack of awareness of health issues/symptoms and then not seeking care because of failure to recognize an issue’

- **Financial**
- **Community Disconnect**
- **Health Literacy**

“If you had a magic wand, what top initiatives would you implement in your community in the next three years?”

‘Regardless of payor, people get access to services that fit their need’

‘Radically expand community organizing and peer support networks (connect to people in a real way)’

- **Collaboration/coordination**
- **Access to Healthcare**
- **Social Determinants**

“Based on your experience, what are the top three issues that you are most concerned about in your community (Probe: think broadly, beyond health)?”

‘Gaps are too broad, rich get richer, poor get poorer’

‘Integration is important in terms of continuity of care’

- **Vulnerable Populations**
- **Growth**
- **Care Coordination**



Interview Cross-Cutting Themes

- **Refugees/Bilingual issues**
- **Regional Issues**
- **Vulnerable Populations**

Community Listening Sessions

Listening Session Methods

- Topics explored include quality of life, community assets, obstacles or challenges, priorities
- Six listening sessions
- Moderated and co-moderated by partners
- Demographic survey
- Thematic analysis conducted using team of four reviewers

Listening Session Demographic Information (n=58)

- 65% Female
- 27% Hispanic/Latino
- 41% Black or African American, 27% White, 22% Other
- 43% language other than English spoken in the home
- 17% High School Diploma or less
- 41% Uninsured & Medicaid/Medicare, 44% Insured

Quality of Life

Changes

- **Population growth**
- **Education**
 - **Local government**
- **Traffic**
- **Safety**

Improvements

- **Employment and training**
- **Access to affordable care (Physical & Mental)**
 - **Basic Needs**
 - **Education**
 - **Safety**
 - **Resources**
- **Social Networks and Social Support**

Community Assets

Strong community dynamic

- Social support and neighborhood networks
- Community involvement
- Civic engagement

Resource availability

- Community centers
- Faith community

Built environment

- Parks, universities, museums
- Tourism industry

Cultural diversity



Obstacles and Challenges

Community Obstacles and Challenges



Priorities

*If You Had a
Magic
Wand.....*

Health care access

Education

Community Leadership

The Village

Housing

Training and skill development

Accessible resources

Prevention

Listening Session Summary

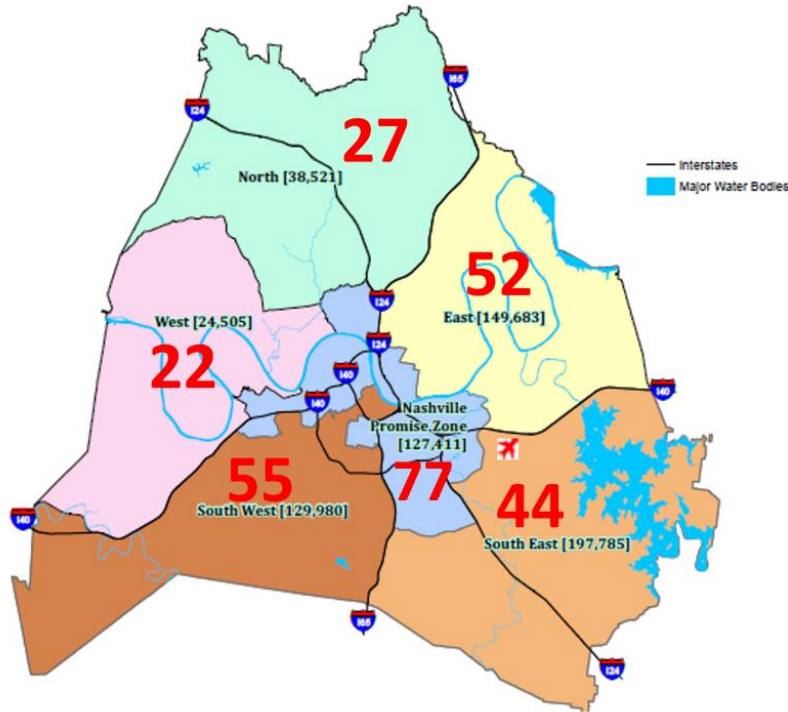
- Training and employment opportunities
- Housing
- Safety
- Resources
- Community cohesion
- Education
- Population growth
- Equity

Community Survey

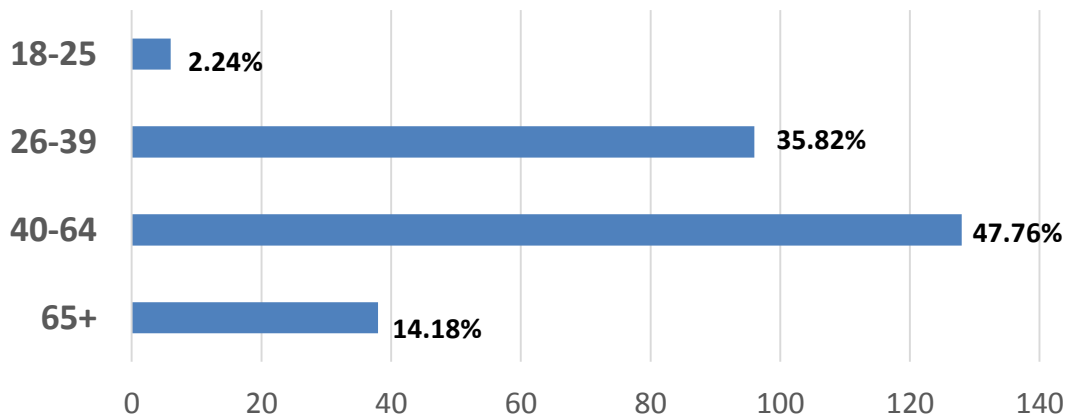
Survey Methods

- Focused on community assets, issues/concerns, future goals for the community
- Open and closed-ended questions
- Adapted from Kansas City Health Department and MAPP with input from committee focused on community input
- Translated into Spanish
- Piloted
- Distributed electronically via health system networks, health department networks, community networks
- Thematic analysis conducted using team of four reviewers
- Demographics analyzed in Excel

Survey Demographics (n=277)

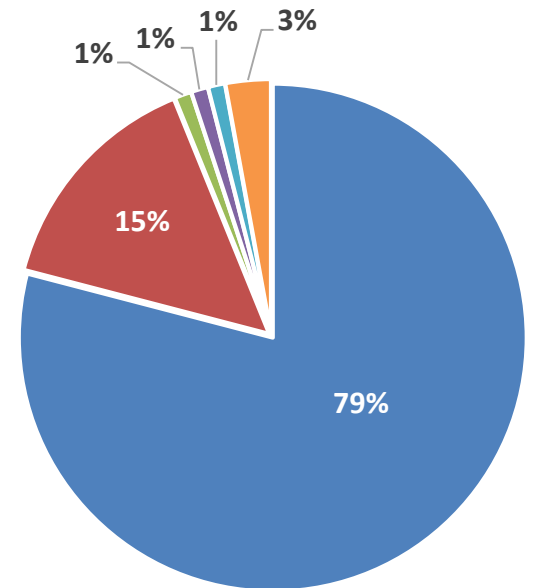


Age of Survey Respondents



Race of Survey Respondents

- White
- African American
- American Indian/Alaska Native
- Asian
- Pacific Islander
- Other



“What do you love about your neighborhood?”



“What keeps you up at night?”



1. Crime, violence and safety concerns

2. Affordability, displacement, and related social issues

3. Traffic problems and lack of adequate public transportation

“What do you hope for the next generation?”



1. Caring, Connectedness, and Civility

2. Alternative transit, traffic concerns, and walkability

3. Green Space and Parks

“Was there anything else you wanted to share?”

1. Issues with managed city growth and concerns about preserving community character

2. Concerns about public transit

3. Advancing health equity and being more inclusive as a city

Survey Cross-Cutting Themes

Concerns for the aging population

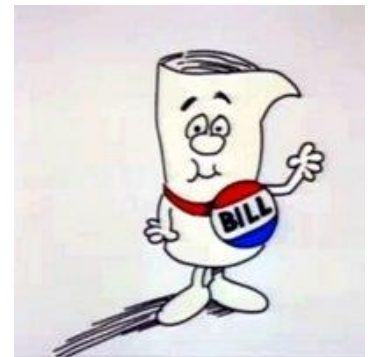
Public school quality

"For all" - issues concerning equity

Forces of Change Assessment

Forces of Change Assessment Background

The Forces of Change assessment focuses on identifying forces such as legislation, technology, and other impending changes that could or will affect community health.



Forces of Change Assessment Background

The assessment answers these two questions:

1. What is occurring or might occur that affects the health of our community or the local public health system?
2. What specific threats or opportunities are generated by these occurrences?

Forces of Change Assessment Methods

- Used secondary data to guide the facilitation
 - 100 Resilient Cities data
- 20 participants from 16 community organizations
- Worked in small groups (4-5); identified 26 high priority trends or forces through facilitation and prioritization process

Forces of Change Identified

SOCIAL	ECONOMIC	POLITICAL/LEGAL	TECHNOLOGICAL	ENVIRONMENTAL
Fragmented safety net	Budget incongruent with growth (Tax base)	Political climate	Technological displacement	Disease Outbreak
Institutional racism	Lack of affordable healthcare	Increased hate crimes	Cyber Attack	Hazardous Materials release
Increased Psychological Trauma	Lack of affordable housing	Affordable Care Act policy changes	Impact of Social Media	
Increased population	Pronounced poverty	Police-Community relations		
Food insecurity	Impact of chronic disease	Threats to Immigrants		
Homelessness		School to prison pipeline		
Insufficient Transportation				
Gentrification				
Substance Abuse/Lack of mental				

Forces of Change Summary

Frequently Cited Opportunities

- Examine revenue streams
- Prevention-based approaches (investments, diversion programs)
- Importance of diversity of thought in solving system-wide problems

Frequently Cited Threats

- Institutional stress
- Increased costs
- Isolation
- Inefficient expenditures
- Individuals stop looking for services at all
- Loss of trust in gov't + community systems

Frequently Cited Partnerships

- Public/private
- Systems-based
- Schools
- Philanthropic organizations
- Places of worship
- “People living the experience”

Forces of Change Summary

By understanding and preparing for these Forces of Change, the Davidson County community can act to ward off or reduce threats as well as take advantage of opportunities to protect and improve community health.



Thank you / Questions

Limitations: Primary and Secondary Data

- All sources:
 - Bias
 - Generalizability
 - Language/cultural barriers
- Secondary data:
 - Source variability
 - Benchmarking
- Time, time, time

Identify Strategic Issues

- Step 1: Write down 3 Health Issues that you consider high priority based on the data presented today
- Step 2: Discuss your thoughts with your tablemates
 - Which issues are similar?
 - How can these issues be consolidated?
 - What are the outliers, if any?
 - What guidance can the PEARL test provide?
- Step 3: Consolidate similar issues into up to 3 “buckets” for your table. Write issues (up to 3) on the stickies provided.

Break

Electronic Voting



Electronic Voting

Survey Link

or

Scan the QR Code

- Enter the following in your web browser
redcap.vanderbilt.edu/surveys
- Survey Access Code:
MJ3EC9L4T



Davidson County Identified Strategic Issues

EQUITY

- Access & Coordination of Resources
- Meeting Basic Needs & Social Determinants
- Access & Affordability of Healthcare
- Mental Health & Toxic Stress

Brainstorming

Based on one of the Identified strategic issues, please answer the following questions:

1. After 3 years, what does success look like for this need?
2. What organizations are already working on issues related to this need? Who are the potential collaborators?

Community Mosaic

Evaluation

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Thank you to all!!