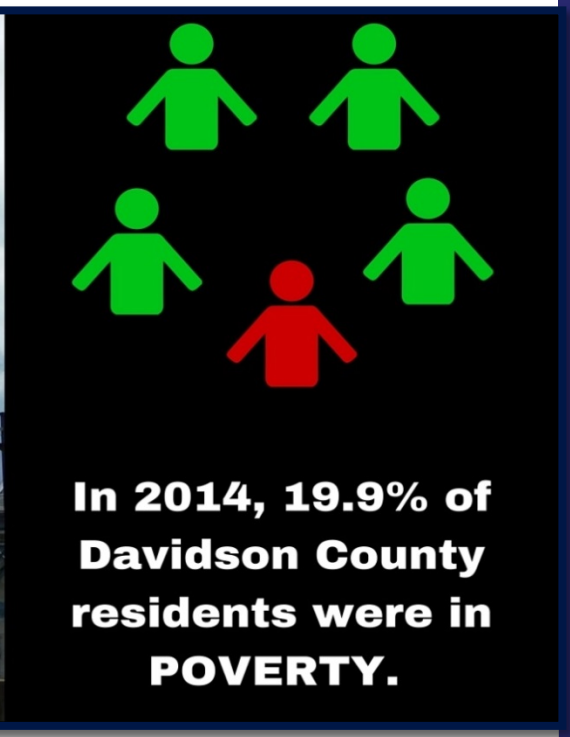
2015 Community Needs Evaluation

7th Annual Edition



METROPOLITAN GOVERNMENT OF NASHVILLE & DAVIDSON CTY

METROPOLITAN SOCIAL SERVICES

PLANNING, COORDINATION & SOCIAL DATA ANALYSIS

Metropolitan Social Services

800 Second Avenue North, Nashville, Tennessee 37201

615-862-6458 – Direct Services

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If you have not participated in a survey about the Community Needs Evaluation during 2016, we would very much appreciate it if you could participate in this short survery.

Survey results will be used to improve reports and presentations.

Thank you.

To participate in the survey, please click on this link:

https://www.surveymonkey.com/r/SYDMRNH

Metropolitan Social Services

MSS Executive Director
Renee Pratt

Board of Commissioners
Pastor William Harris, Chair
Dr. Frank Boehm
Betty Johnson
Steve Meinbresse

Special thanks to Research Advisors for the Community Needs Evaluation

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Paul Speer, Associate Professor, Vanderbilt Peabody College
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Dan Cornfield, Professor of Sociology, Vanderbilt University (Research Advisor 2009-2013)

Acknowledgements

Metropolitan Social Services acknowledges with gratitude the assistance it received from many individuals and organizations in developing the 2015 Community Needs Evaluation.

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2015 COMMUNITY NEEDS EVALUATION

METROPOLITAN SOCIAL SERVICES – PLANNING & COORDINATION-SOCIAL DATA ANALYSIS

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ONLINE RESOURCES

- Previous Community Needs Evaluations - http://www.nashville.gov/Social-Services/Planning-And-Coordination/Community-Needs.aspx
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- Issue Papers and Reports - http://www.nashville.gov/Social-Services/Planning-And-Coordination/Resource-Guides-and-Reports.aspx
- Newsletters - http://www.nashville.gov/Social-Services/Newsletters-and-Videos.aspx
- Metropolitan Social Services - http://www.nashville.gov/Social-Services.aspx

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Message from the Metropolitan Social Services Commission

Pastor William Harris, Board Chair

With the 2015 Community Needs Evaluation, Metropolitan Social Services provides its 7th annual report on data that has been collected and analyzed. This data provides current and objective information to demonstrate social, demographic and socioeconomic trends.

The 2015 Community Needs Evaluation report uses a broad approach to describe complex factors related to poverty and unmet needs, including sections on Food & Nutrition, Health & Human Development, Housing & Neighborhoods, Aging & Disability and Workforce & Economic Opportunity. Because of increasing scientific evidence about the damaging effects of poverty on children, this year's evaluation includes a new subsection in the Health & Human Development section, *Consequences of Poverty in Childhood and Beyond.*

Beginning in 2009, the Community Needs Evaluation has provided a systematic document to describe existing and projected unmet social/human service needs in Davidson County. It uses data from national sources (U. S. Census Bureau, U. S. Bureau of Labor Statistics, etc.) and local sources (Grassroots Community Survey collected since 2009, United Way's 2-1-1 data collected since 2007 and data from Nashville's new Financial Assistance Coalition) reflect economic and social disparities in Davidson County. This is the 5th year in which Evidence-Based Practices have been included. Current and objective data, along with identified Evidence-Based Practices, can be used to intentionally develop and provide the most effective services that have been proven to work.

Special thanks are due the work of the Metro Social Services Executive Director, Renee Pratt, Planning & Coordination/Social Data Analyst Director Dinah Gregory, and Social Data Analysts Abdelghani Barre, Lee Stewart, Julius Witherspoon and Joyce Hillman. The Metro Social Services Board of Commissioners is pleased to share this document with Davidson County. Questions or comments may be emailed to MSSPC@nashville.gov.

Sincerely,

William Harris

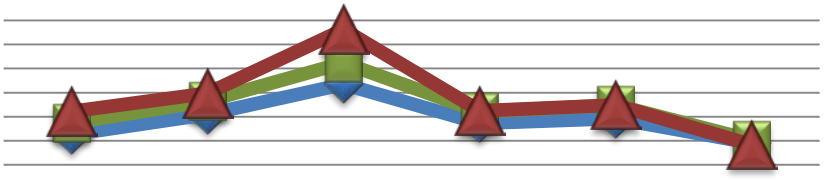
Board Chair
Metropolitan Social Services

Status of Davidson County

With 129,057 of Davidson County residents living in poverty during 2014, there were many people struggling to meet their basic needs. Davidson County's poverty rate of 19.9% is higher than the 18.3% rate for Tennessee and the 15.5% rate for the United States. The chart below uses data from the 2014 American Community Survey from the U. S. Census Bureau and shows that Davidson County's poverty was higher than the Tennessee rate and the U.S. for all families, all people, people under age 18, people age 18 and over and people age 18-64. (The poverty guideline for one person is $11,770, $15,930 for two, $20,090 for three, etc.)

Chart 1: Poverty Rates by Categories

U. S., Tennessee, Davidson County, 2014



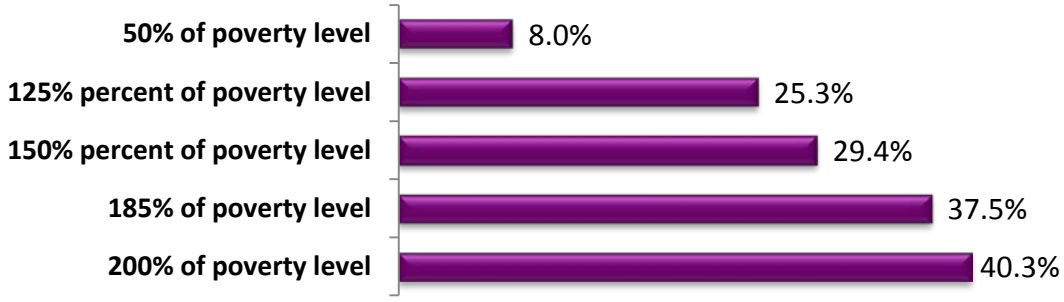
	All families	All people	Under 18 years	18 years and over	18 to 64 years	65 years and over
United States	11.3%	15.5%	21.7%	13.6%	14.6%	9.5%
Tennessee	13.7%	18.3%	26.2%	16.0%	17.4%	10.1%
Davidson County	16.1%	19.9%	33.1%	16.2%	17.4%	9.2%

Source: 2014 American Community Survey

In addition to those who are in poverty, 51,971 (8.0%) Nashvillians live at 50% or half of the poverty guideline, which would be the equivalent of less than $5,885 for one, $7,965 for two, $10,045 for three, etc. Thousands of others live just above the poverty level, with more than 190,582 people living at 150% of poverty. The chart shows the percent of Davidson County's population by level of poverty. This level of disparity is staggering when compared with the Davidson County per capita income of $29,346, the median household income of $47,993 or the mean household income of $69,919.

Chart 2: Percent of Population by Level of Poverty

Davidson County, 2014

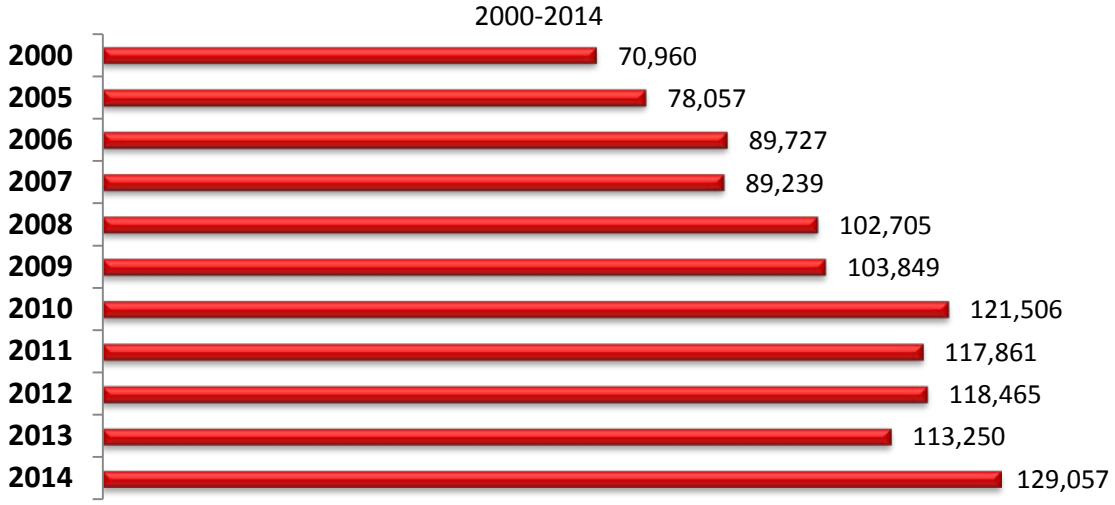


Source: 2014 American Community Survey

The unemployment rate has decreased but many jobs pay such low wages that workers remain in poverty. Davidson County had 352,415 civilian employed residents in 2014, with half who earned less than $28,296. Although the 2014 American Community Survey estimates the Davidson County unemployment rate at 6.4% for the overall population, it is far higher among those with particular demographic and social characteristics. For example, it is 10.2% for people without a high school education, 12.5% for Black or African Americans, 14.4% for people with a disability, 16.3% for those ages 20-24 and 30.1% for people ages 16-19.

The number of people and the percent of poverty have increased significantly since 2000. Chart 3 reflects the increase in the number of Davidson County residents who live in poverty. In 2000, the poverty rate was 13.0%, compared to 14.2% in 2005 and 19.9% in 2014.

Chart 3: Number of Davidson County Residents in Poverty by Year

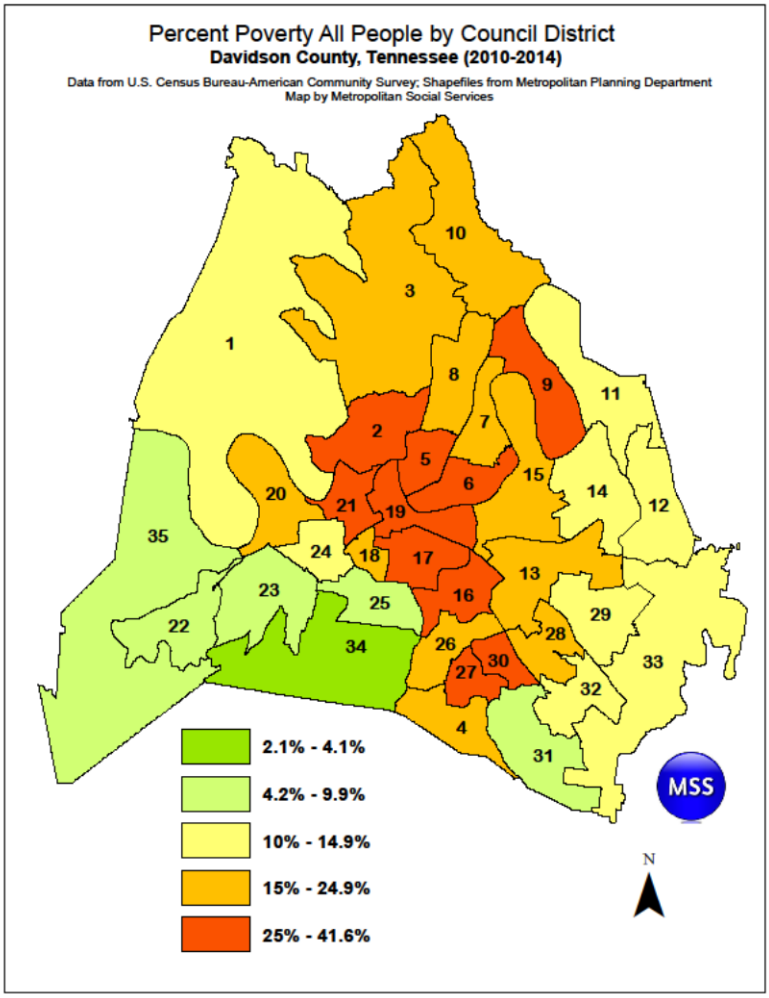


Source: U.S. Census Bureau

Throughout the 2015 Community Needs Evaluation, information is provided about Davidson County residents who experience economic distress. Specific demographic, social and geographic characteristics are related to poverty, with a few examples of the disparate levels of poverty shown below. The table shows who was more likely to be poor in Davidson County, based on data from the 2014 American Community Survey. For example, a person who did not receive a high school education is more than 6 times as likely to be in poverty as someone who had a bachelor's degree or higher.

Characteristic	Percent in Poverty
Bachelor's degree or higher	5.3%
65 years and over	9.2%
White	13.7%
People in families	18.6%
All people	19.9%
Black or African American	31.8%
Under 18 years	33.1%
Less than high school graduate	33.8%
People with a disability	35.1%
Hispanic or Latino origin (of any race)	36.1%
Single mothers with children under age 5	47.0%

Just as the level of poverty varies by individual characteristics, poverty also varies by geographic location within Davidson County. Red areas have more than 25% of residents who live in poverty and orange areas have 15.0%-24.9% of residents who live in poverty.



Methodology

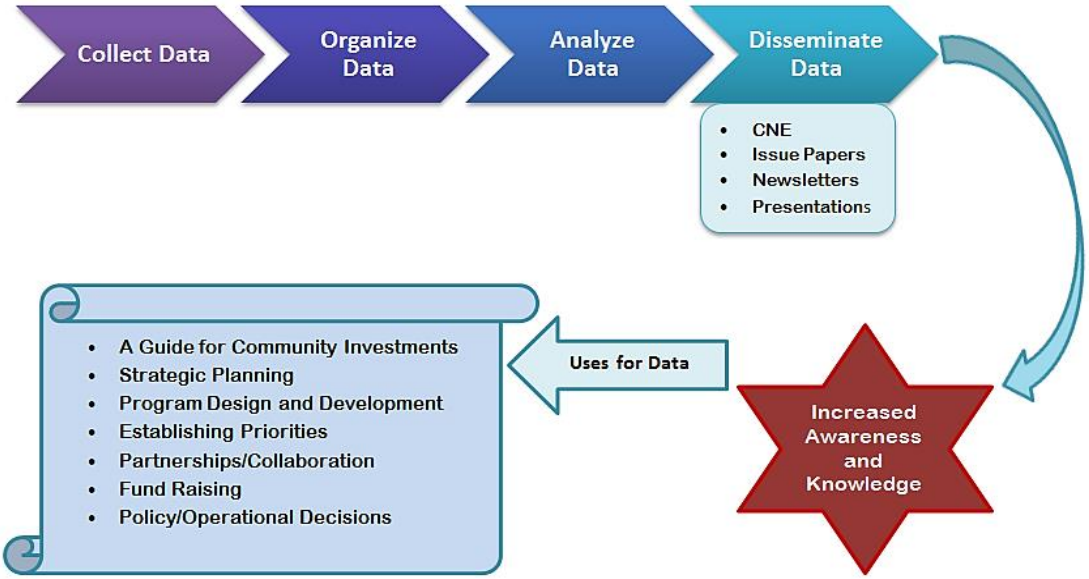
The Metropolitan Charter assigns Metro Social Services (MSS) the duty of making social investigations, engaging in study and research regarding the cause of financial dependency and methods of treating such dependency. Metropolitan Social Services-Planning & Coordination gathers and analyzes social data and reports on poverty and related issues through its annual Community Needs Evaluations, issue papers, newsletters, social media, presentations and consultations.

The Metropolitan Social Services' produces the Community Needs Evaluations to increase awareness about Davidson County residents, with demographic, social and socioeconomic data and data about unmet need in the areas of Aging & Disability, Food & Nutrition, Health & Human Development, Housing & Neighborhoods and Workforce & Economic Opportunity. The need in Nashville is great and it takes many organizations working together to address these issues.

This increased knowledge can provide guidance for the public and private funding sources and policy makers for social/human service needs in Nashville. Some organizations have already used previous editions of the Community Needs Evaluation to increase their awareness and understanding of the people they serve and their potential service recipients, to provide staff training and community outreach, to provide information that facilitates interagency collaboration, for funding applications and reports, as well as strategic planning and program development.

MSS increases the awareness of poverty, identifies current and emerging social/human service needs and disseminates information. Data can be a powerful tool that can result in better decisions. The availability of current, objective and relevant data is available to help policy makers, funders and service providers create an effective and coordinated social/human service delivery system for Davidson County.

No organization can do it all and no organization can do it alone. Improving the system of social/human services for people in need requires the coordinated efforts of multiple entities. The effectiveness of a planning, coordination and implementation strategy depends on the engagement of local, state and federal agencies, along with nonprofit organizations, working together in a concerted manner. This process provides Davidson County with the opportunity to make lasting and meaningful improvements in the way services are provided to persons in need.



The 2015 Community Needs Evaluation provides information about issues similar to those covered in previous editions: Food and Nutrition, Health and Human Development, Housing and Neighborhoods, Aging & Disability and Workforce and Economic Opportunity. The Health & Human Services portion includes a subsection on *Consequences of Poverty in Childhood and Beyond*, which describes the profound ways in which poverty can impair future physical, cognitive and social development, educational level and income of children.

The needs evaluation again contains updated data about the demographic, social and socioeconomic trends in the U. S., Tennessee and Davidson County. As noted in previous editions, there are other issues related to quality of life that are beyond the scope of this evaluation, including education, crime and justice, domestic violence and others.

Primary Data

For the seventh year, primary research was conducted through a Grassroots Community Needs Survey administered in Davidson County, to customers at specific social/human service programs. From 2009 through 2015, more than 7,700 respondents participated in the survey to identify the greatest unmet needs in Davidson County. Data from the Grassroots Community Survey is discussed in each relevant section of this evaluation.

- The first Grassroots Community Survey was conducted in 2009 with customers of the Tennessee Department of Human Services (Davidson County Office), Catholic Charities, the Nashville Career Advancement Center, Second Harvest Food Bank, Siloam Family Health Center, the Metropolitan Action Commission, and Metropolitan Social Services, with 1,737 respondents.

- In 2010, the same Grassroots Community Needs Survey was administered to participants of the Volunteer Income Tax Assistance sites, operated by the Nashville Alliance for Financial Independence (an initiative of United Way), with 1,787 respondents. (This survey was completed prior to Davidson County's May 2010 flood.)

- In 2011, the Grassroots Survey was slightly modified to add questions about Health and Neighborhood Development. It was conducted primarily with customers of the Tennessee Department of Human Services (Davidson County Office) and with some residents at Urban Housing Solutions, with a total of 768 respondents.

- In 2012, the Grassroots Survey was administered to 475 customers from a variety of social service organizations, including Catholic Charities of Tennessee, The Next Door, Siloam Clinic, Goodwill Industries, Conexion Americas, McGruder Family Resource Center, Christian Women's Job Corps, the Opportunities Industrialization Center, Metropolitan Action Commission and Metropolitan Social Services.

- The 2013 Grassroots Community Survey was conducted with 1,729 participants of the Volunteer Income Tax Assistance sites, operated by the Nashville Alliance for Financial Independence (an initiative of United Way).

- The 2014 Grassroots Community Survey was conducted with 360 customers from social service organizations, including Goodwill Industries, Habitat for Humanity, Metro Nashville Health Department, Nashville CARES and Project Return.

- In 2015, the 852 Grassroots Community Survey participants were participants in programs of the Metropolitan Action Commission.

Secondary Data

The tables, charts, and narrative descriptions in this evaluation reflect a wide range of demographic, economic, social, and other characteristics of Davidson County. Data was compiled from the U.S. Census Bureau, particularly the 2014 American Community Survey and the 2010-2014 American Community Surveys 5-year Summary, as well as from other government and private research sources.

American Community Surveys, both annual and multiyear, are estimates, based on samples of the population and have varying margins of error, as specified by the Census Bureau. The Census Bureau indicates that the longer

reporting periods provide more accurate and reliable information than the annual information. However, annual data is more useful to demonstrate trends over time.

The 5-year ACS summaries included the geographic areas smaller than county level, so these are used in maps comparing data across 35 Metropolitan Council Districts and 161 census tracts in Davidson County.

Data from the Current Population Survey (CPS) of the U. S. Census Bureau was also used. The Supplemental Poverty Measure data from the CPS was used, which compared the official poverty measure with the supplemental poverty measure.

New data products are regularly released by the U. S. Census Bureau and other agencies, and future updates of this report will include data as it becomes available. Additional information is available online and more will be added when available. All Census data includes a margin of error, which varies by the type of data. The U. S. Census Bureau identifies on the margin of error for specific data. The margins of error are not included in the Community Needs Assessment and are available online from the U. S. Census Bureau in each table and dataset.

The Local Studies and Information section demonstrates the types of unmet needs in Nashville, using data from a variety of sources. As in past years, United Way's 2-1-1 data, Grassroots Community Survey data and Metro Social Services program services data was used.

The combined local data and the data from the U.S. Census and other sources suggest a continuing unmet need for financial assistance for basic needs, particularly rental payments and utility bills. In addition, many people are underemployed at low-wage, low-skill jobs and need specific training and employment services.

Demographic and Social Profile

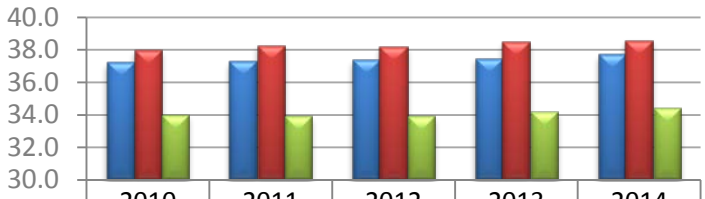
This section includes demographic and social data from the U.S. Census Bureau, focusing on Davidson County and comparative data for the U.S. and Tennessee. Single year data comes from the 2014 American Community Survey, while most multi-year data comes from the 2010-2014 American Community Survey 5-Year Summary.

Demographic Profile

Davidson County's population in 2014 was 668,347, compared to 658,602 in 2013, 648,295 in 2012, 635,475 in 2011 and 628,133 in 2010, and 569,891 in 2000.

Chart 1: Median Age by Location

U.S., Tennessee, Davidson County, 2010-2014



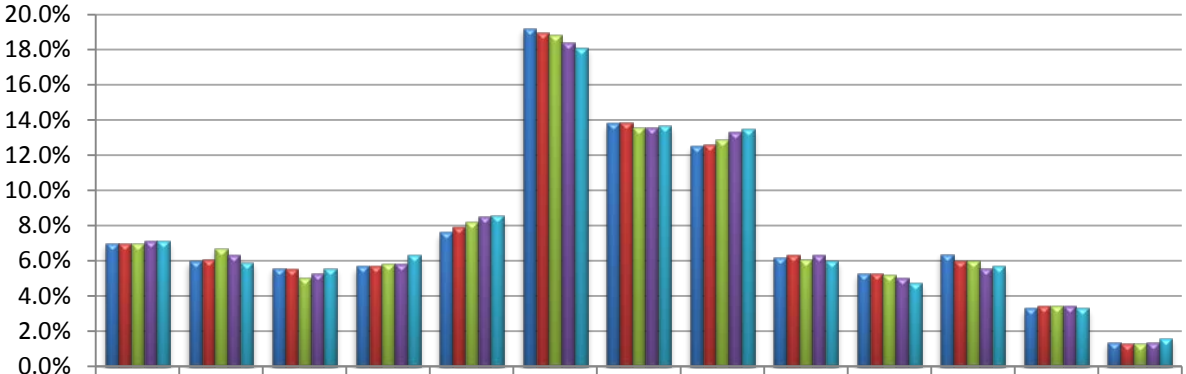
	2010	2011	2012	2013	2014
U.S.	37.2	37.3	37.4	37.5	37.7
Tennessee	38.0	38.3	38.2	38.5	38.6
Davidson County	34.0	33.9	33.9	34.2	34.4

As shown in Chart 1, the median age in Davidson County has been consistently younger than the U.S. and Tennessee from 2010 through 2014.

Source: U.S. Census Bureau, 2010-2014 American Community Survey

Chart 2 shows that the age distribution of Davidson County residents remained consistent from 2010-2014.

Chart 2: Percent by Age Category
Davidson County, 2010-2014

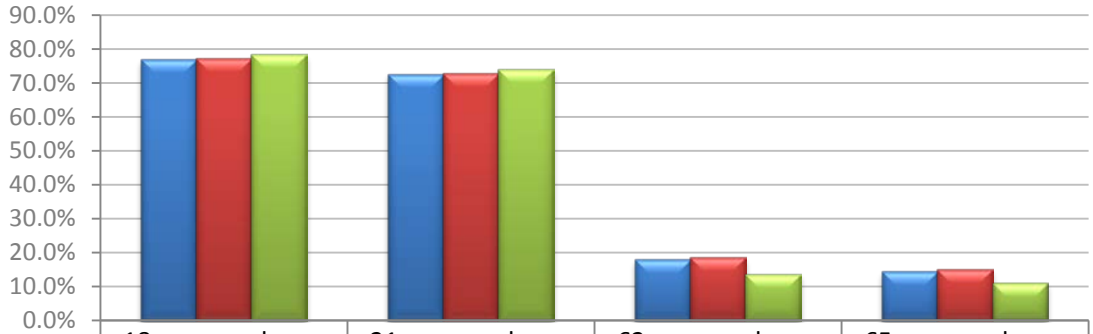


	Under 5 years	5 to 9 years	10 to 14 years	15 to 19 years	20 to 24 years	25 to 34 years	35 to 44 years	45 to 54 years	55 to 59 years	60 to 64 years	65 to 74 years	75 to 84 years	85 years and over
2014	7.0%	6.0%	5.6%	5.7%	7.6%	19.2%	13.8%	12.5%	6.2%	5.3%	6.4%	3.3%	1.4%
2013	7.0%	6.1%	5.5%	5.7%	7.9%	19.0%	13.9%	12.6%	6.3%	5.3%	6.0%	3.4%	1.3%
2012	7.0%	6.7%	5.0%	5.8%	8.2%	18.8%	13.6%	12.9%	6.1%	5.2%	6.0%	3.4%	1.3%
2011	7.1%	6.3%	5.3%	5.8%	8.5%	18.4%	13.6%	13.3%	6.3%	5.0%	5.6%	3.4%	1.4%
2010	7.1%	5.9%	5.6%	6.3%	8.6%	18.1%	13.7%	13.5%	6.0%	4.7%	5.7%	3.3%	1.6%

Source: U.S. Census Bureau, 2010-2014 American Community Survey

The percent of people in the age categories in Chart 3 is similar for ages 18 and over and 21 and over. However, the percentage of people over age 62 and age 65 is slightly lower in Davidson County than in the U.S. and Tennessee.

Chart 3: Age Categories by Location
U.S., Tennessee, Davidson County, 2014

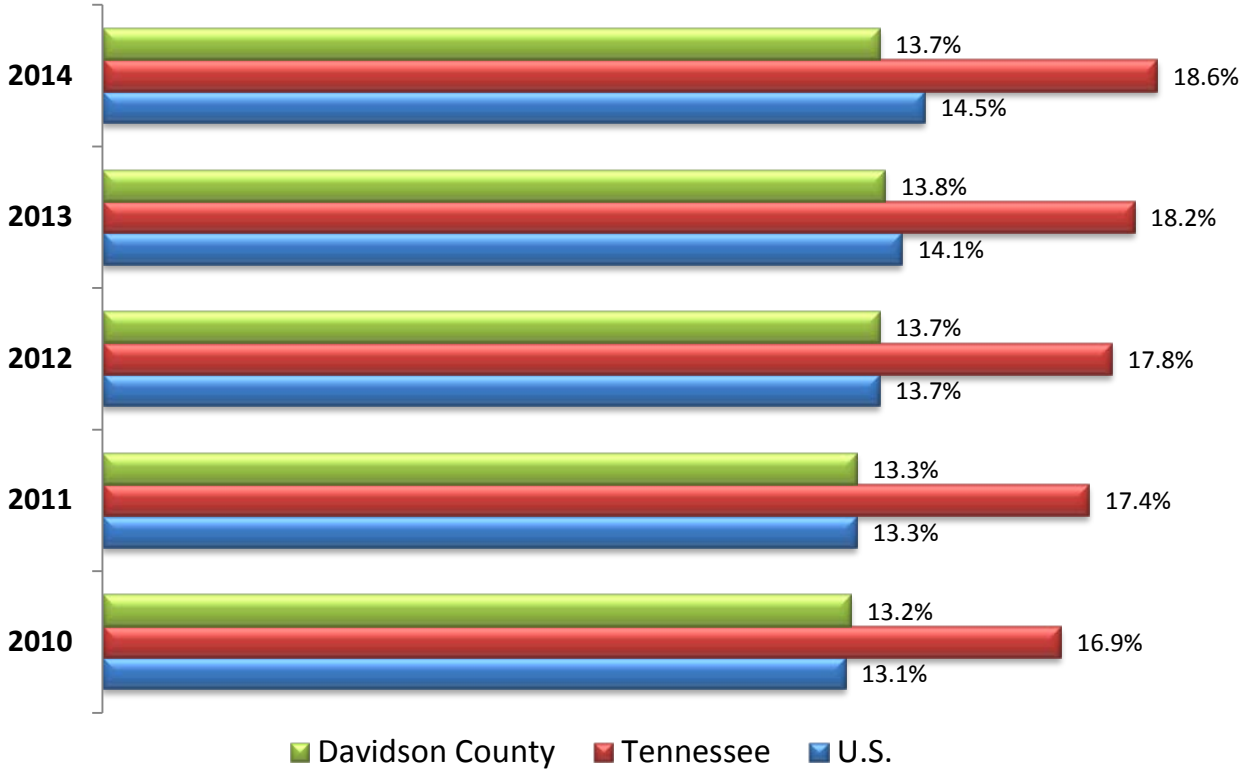


	18 years and over	21 years and over	62 years and over	65 years and over
United States	76.9%	72.7%	17.9%	14.5%
Tennessee	77.2%	73.0%	18.6%	15.1%
Davidson County	78.5%	74.1%	13.7%	11.1%

Source: U.S. Census Bureau, 2014 American Community Survey

Chart 4 indicates the percentage of people who are age 65 and over by location. Davidson County had a slightly lower percent of those 65 and above than the U.S., while the percentage for Tennessee was higher through the period 2010 through 2014.

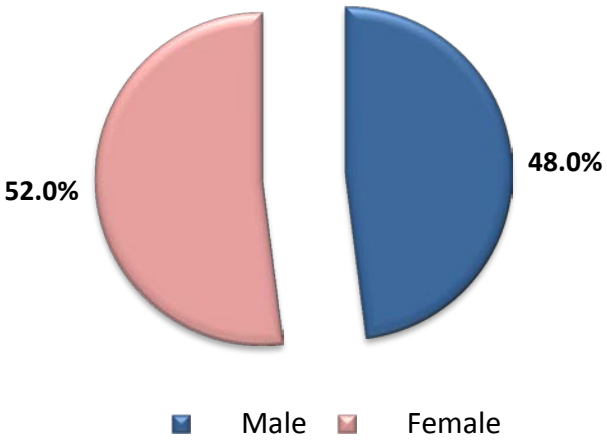
Chart 4: Percent Age 65 and Over by Location
U.S, Tennessee, Davidson County, 2010-2014



Source: U.S. Census Bureau, 2010-2014 American Community Survey

Chart 5 shows that in Davidson County, the female population comprised 52%, slightly more than males at 48%, for 2014.

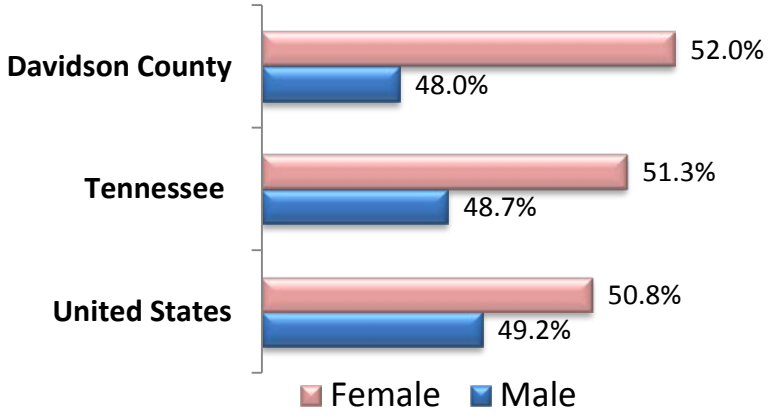
Chart 5: Gender
Davidson County, 2014



Source: U.S. Census Bureau, 2014 American Community Survey

Chart 6: Gender by Location

U.S., Davidson County, Tennessee, 2014



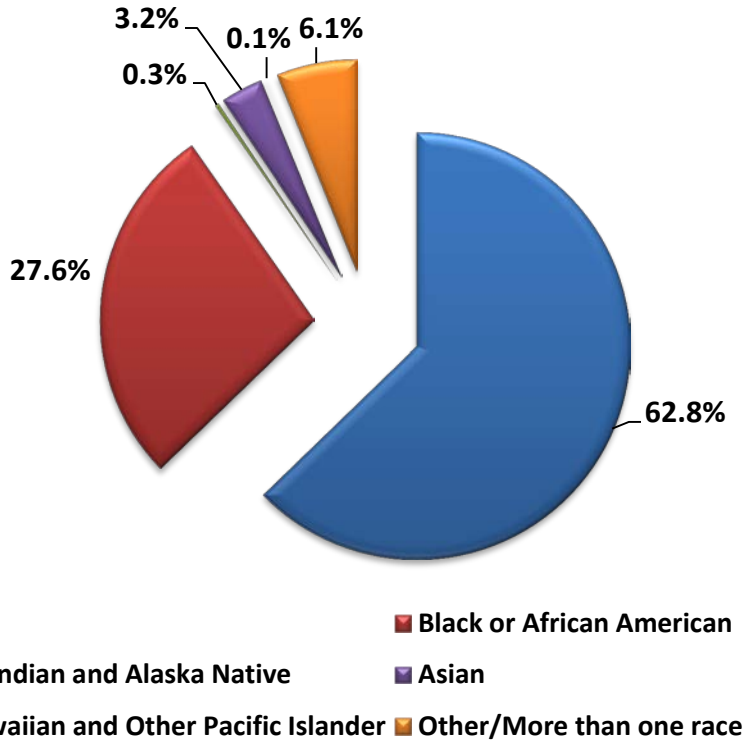
As shown in Chart 6, the percentage of females was higher also in Tennessee and the United States in 2014.

Source: U.S. Census Bureau, 2014 American Community Survey

Chart 7 reflects the racial composition of Davidson County in 2014. The proportion has remained steady for the period 2010 through 2014, with the range for White as 61.3%-62.8%. The range for Black or African American was 27.5%-28.0%. The next largest category of Other/More than one race ranged from 6.1%-7.8% during that time period.

Chart 7: Percent by Race

Davidson County, 2014



Source: U.S. Census Bureau, 2014 American Community Survey

Chart 8: Percent by Race by Location

U.S., Tennessee, Davidson County, 2014

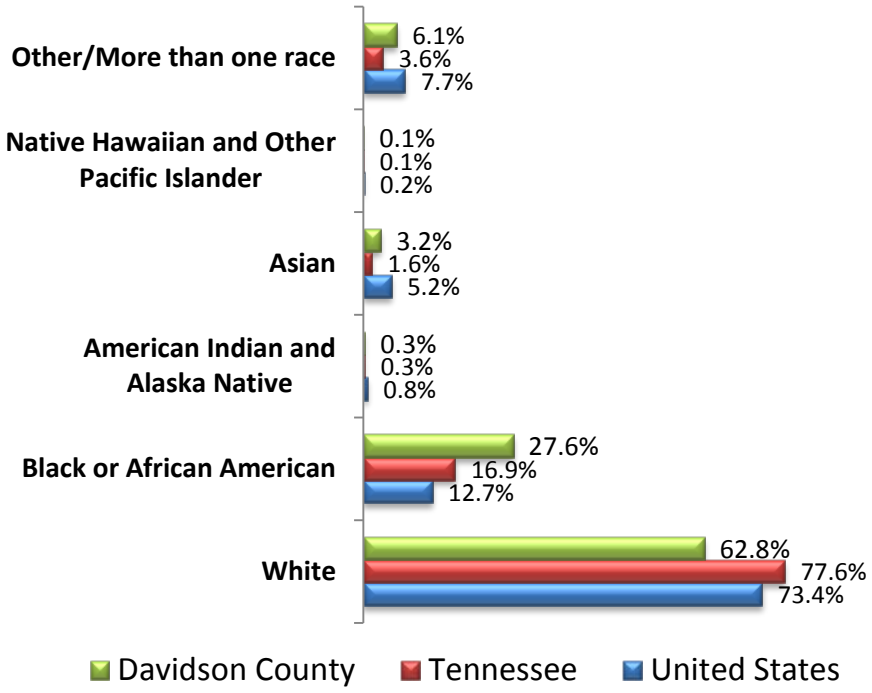
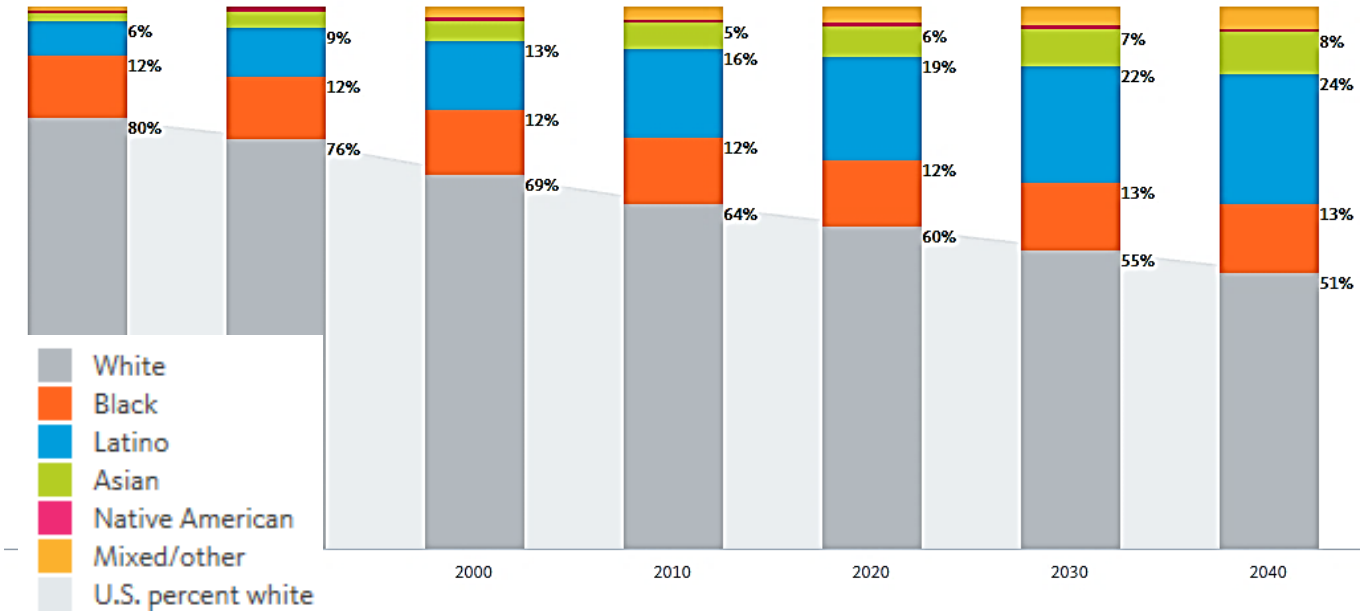


Chart 8 shows the percent of people by race in the U.S., Tennessee and Davidson County in 2014.

The data indicates that Davidson County's population of Black or African American is larger than for Tennessee and more than twice the number for the United States.

Source: U.S. Census Bureau, 2014 American Community Survey

The National Equity Atlas provided this graphic to show the changes in the racial/ethnic composition of the United States over time, from 1980 to a projection for 2040.

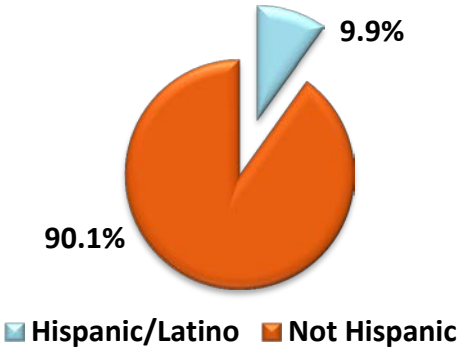


Census Bureau; Woods & Poole Economics, Inc.

Chart 9 indicates that 9.9% of Davidson County is Hispanic. This percent has remained the same for the past four years.

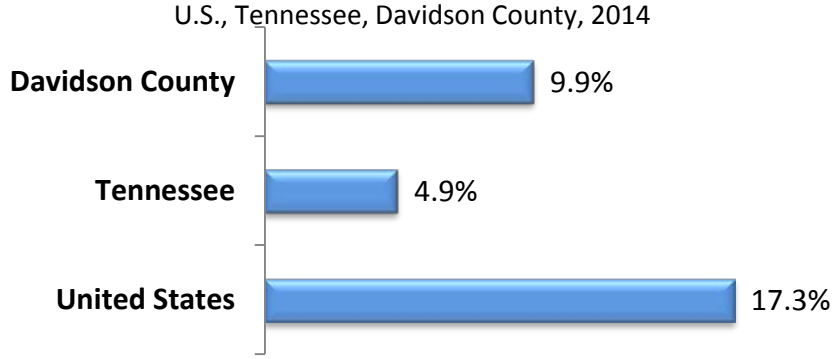
Source: U.S. Census Bureau, 2014 American Community Survey

Chart 9: Percent by Ethnicity
Davidson County, 2014



As shown in Chart 10, Davidson County has about twice the percentage of Hispanics than for Tennessee, but has a significantly smaller percent than the U.S.

Chart 10: Percent Hispanic/Latino by Location
U.S., Tennessee, Davidson County, 2014



Source: U.S. Census Bureau, 2014 American Community Survey

Social Profile

This section includes social data from the U.S. Census Bureau, focusing on Davidson County and comparative data for the U.S. and Tennessee. Single year data comes from the 2014 American Community Survey, while most multi-year data comes from the 2010-2014 American Community Survey 5-Year Summary.

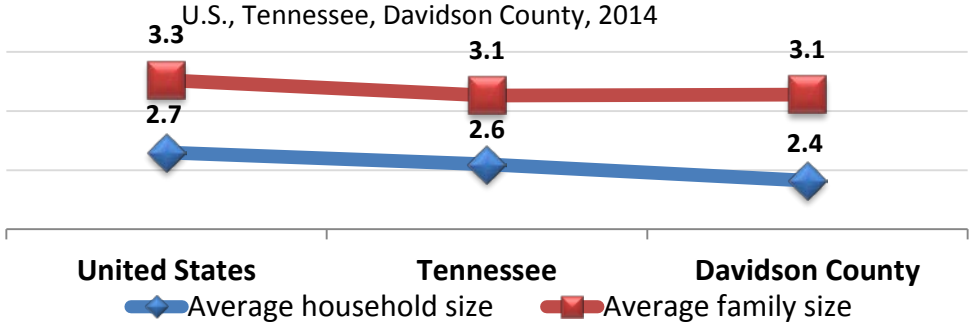
Definitions

- **Family households** are maintained by householders who are in a family but can also include subfamily members or other persons living there.
- **Households** include all persons who live in the housing unit, whether family or not.
- **Nonfamily households** include people who live alone or live with people who are not related.

In 2014, Davidson County had 267,952 households. Chart 11 shows that the average household size and family size is slightly smaller in Davidson County than for the U.S. The average family size in Davidson County is the same as Tennessee but smaller than the U.S.

Chart 11: Average Household, Family Size

U.S., Tennessee, Davidson County, 2014

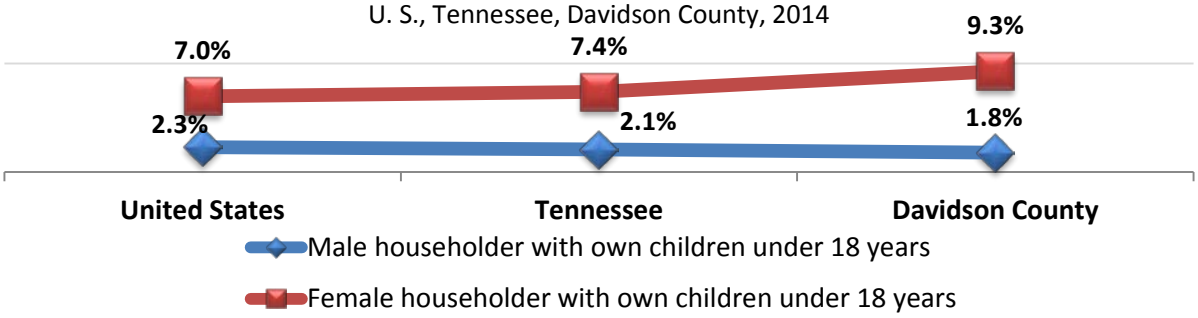


Source: U.S. Census Bureau, 2014 American Community Survey

Chart 12 shows that among Davidson County households, the female households with minor children (9.3%) are more prevalent than male households (1.8%) with minor children. The pattern of more female householders with minor children was also reflected in Tennessee and U.S. data.

Chart 12: Male and Female Householders with Minor Children

U. S., Tennessee, Davidson County, 2014

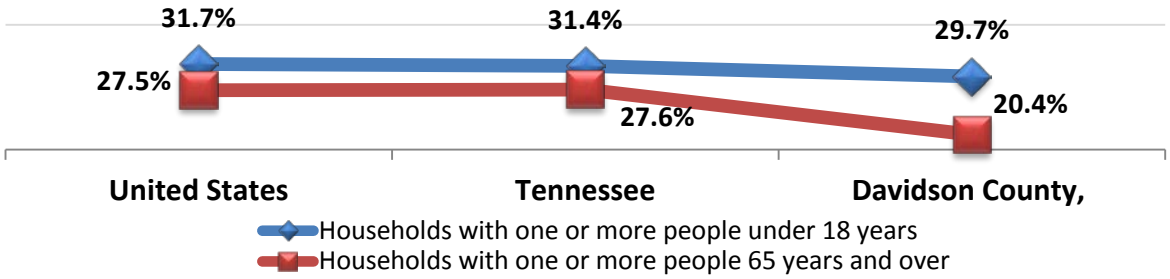


Source: U.S. Census Bureau, 2014 American Community Survey

Chart 13 indicates that the percent of households that have one or more people under age 18 was 29.7%, slightly below the percent for the U.S. and Tennessee. However, the percent of households in Davidson County (20.4%) was much lower than for the U.S. and Tennessee.

Chart 13: Households With Under 18, Over 65 Ages

U. S., Tennessee, Davidson County, 2014

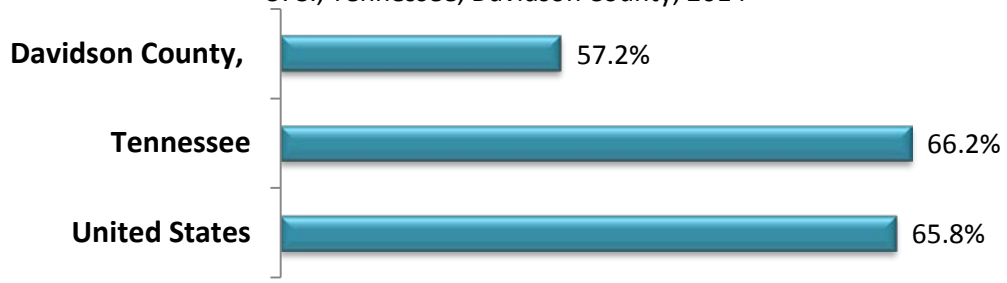


Source: U.S. Census Bureau, 2014 American Community Survey

As indicated in Chart 14, the percent of family households is lower in Davidson County than in the U.S. and Tennessee.

Chart 14: Percent of Family Households

U. S., Tennessee, Davidson County, 2014

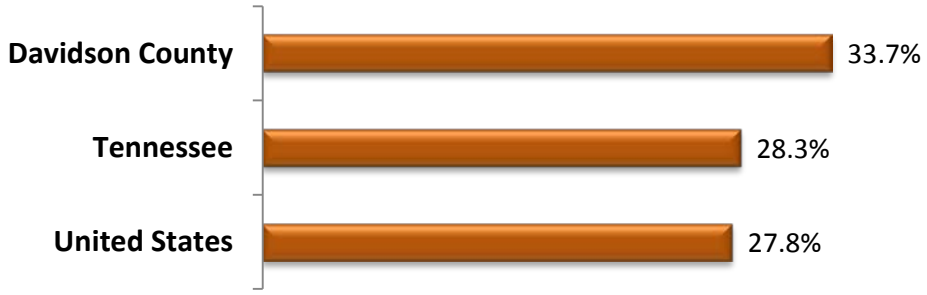


Source: U.S. Census Bureau, 2014 American Community Survey

Davidson County's percent of nonfamily householders living alone was slightly higher at 33.7% than for the U.S. and Tennessee, as shown in Chart 15.

Chart 15: Nonfamily Householder Living Alone

U.S., Tennessee, Davidson County, 2014

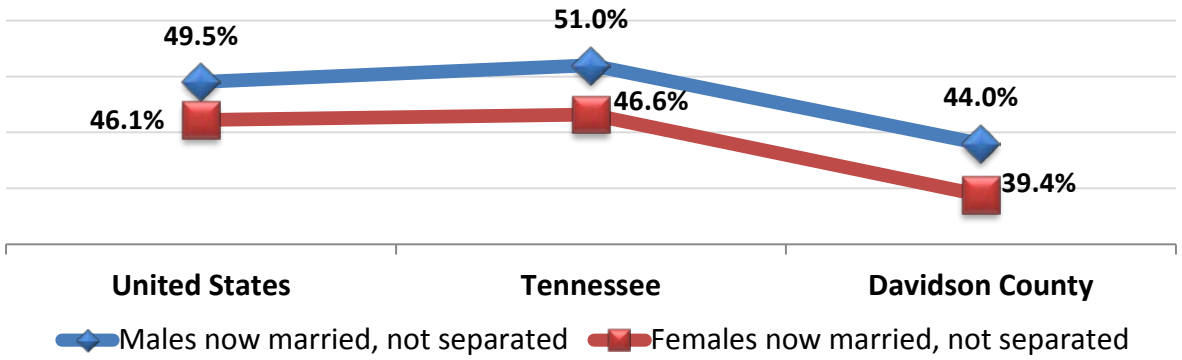


Source: U.S. Census Bureau, 2014 American Community Survey

Chart 16 shows the percent of married males and females. In the U.S., Tennessee and Davidson County, females were less likely to be married in 2014 than males.

Chart 16: Percent of Married Males/Females by Gender

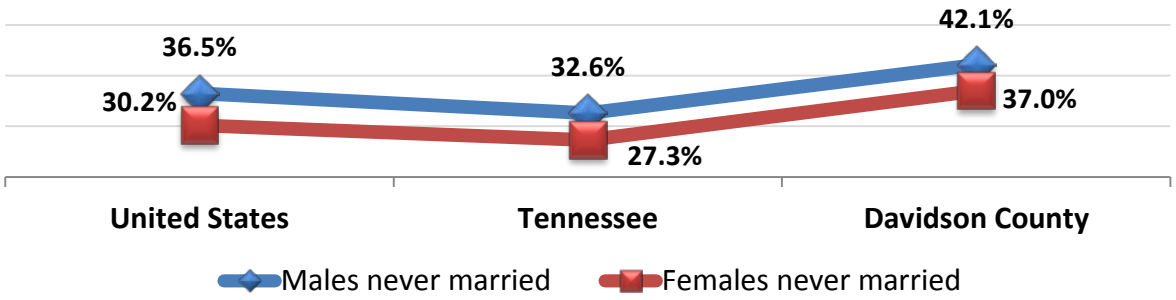
U.S., Tennessee, Davidson County, 2014



Source: U.S. Census Bureau, 2014 American Community Survey

Chart 17 indicates that in the U.S., Tennessee and Davidson County, the percent of males who were never married was higher than for females. The percent of both never married males and females was higher in Davidson County than for the U.S. and Tennessee.

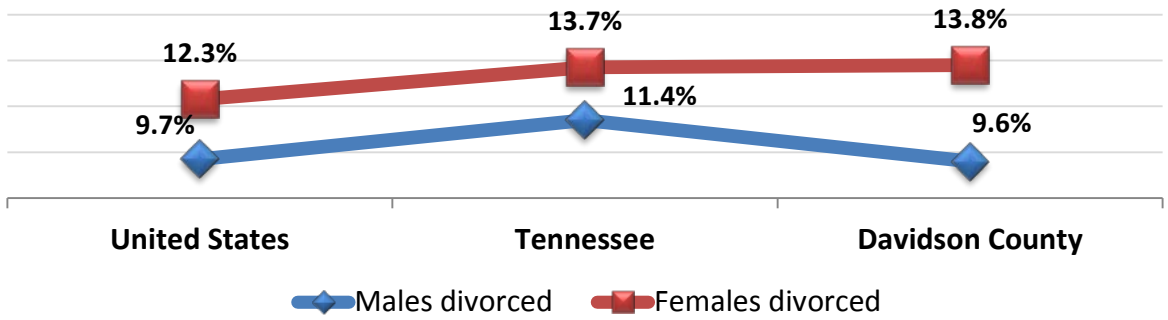
Chart 17: Percent of Never Married Males/Females
U.S., Tennessee, Davidson County, 2014



Source: U.S. Census Bureau, 2014 American Community Survey

As shown in Chart 18, the percent of females who have been divorced was higher than for males in the U.S., Tennessee and Davidson County.

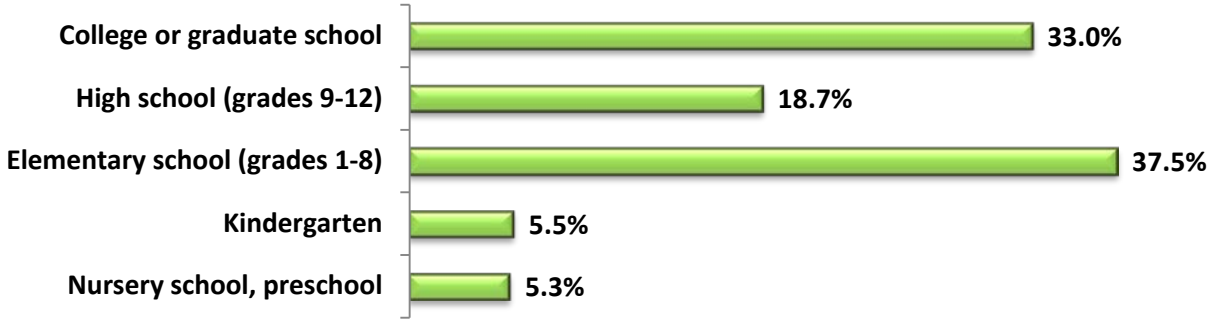
Chart 18: Percent of Divorced Males/Females
U.S., Tennessee, Davidson County, 2014



Source: U.S. Census Bureau, 2014 American Community Survey

Chart 19 indicates that in 2014, the percent of people enrolled in school was highest among Grades 1-8/Elementary School at 37.5% and second highest in College or Graduate School at 33.0%.

Chart 19: Percent of School Enrollment by Grade
Davidson County, 2014

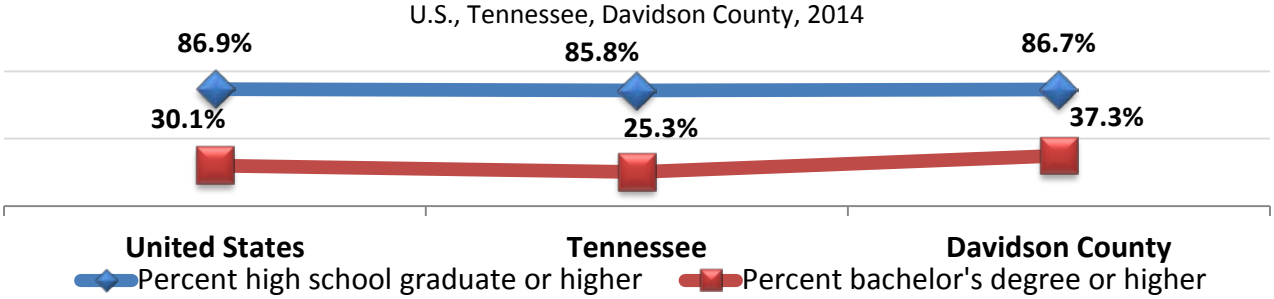


Source: U.S. Census Bureau, 2014 American Community Survey

Chart 20 shows the percent of people who are high school graduates or higher and those who have a bachelor's degree or higher. The percent of people with at least a bachelor's degree was higher in Davidson County at 37.3% than either the U.S. (30.1%) or Tennessee (25.3%).

Chart 20: Percent High School Graduate, Bachelor's Degree or Higher

U.S., Tennessee, Davidson County, 2014

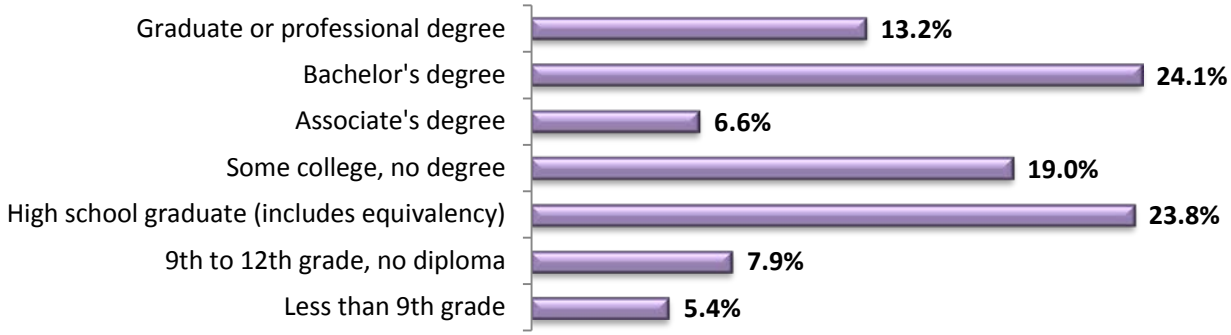


Source: U.S. Census Bureau, 2014 American Community Survey

Chart 21 reflects the level of educational attainment for Davidson County's population age 25 and over for 2014, with 23.8% of high school graduates or equivalent, 24.1% with a bachelor's degree and 13.2% with a graduate or professional degree. However, 13.3% do not have a high school diploma or equivalent.

Chart 21: Educational Attainment-Population Age 25 and Over

Davidson County, 2014

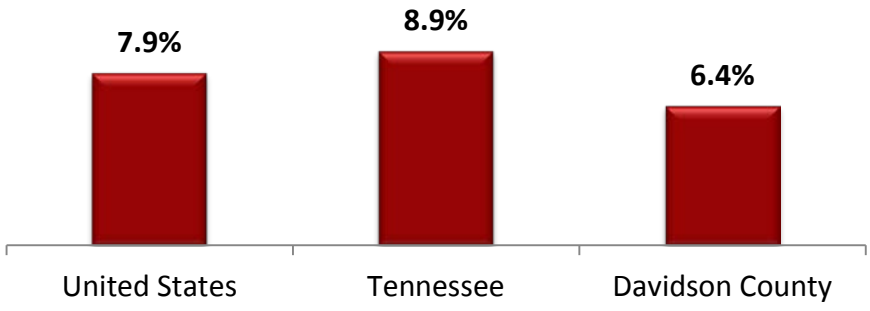


Source: U.S. Census Bureau, 2014 American Community Survey

Chart 22 shows the percentage of civilian veterans age 18 and over, indicating that there was a smaller percent for Davidson County than for the U.S. and Tennessee.

Chart 22: Percent of Civilian Veterans-18 and Over

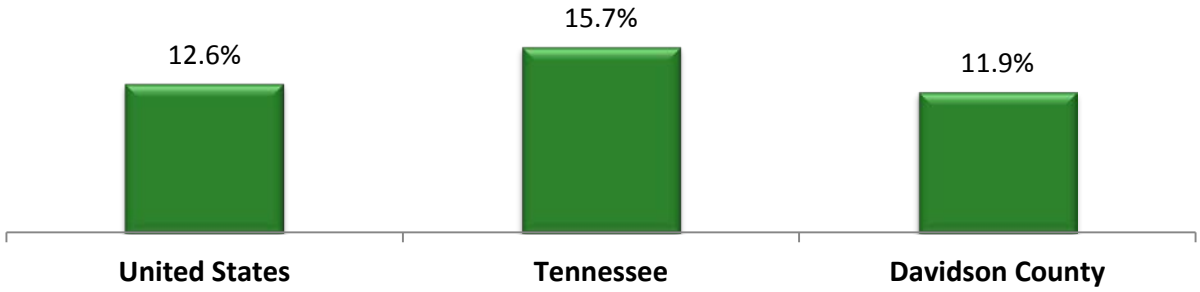
U.S., Tennessee, Davidson County, 2014



Source: U.S. Census Bureau, 2014 American Community Survey

Chart 23 shows the percent of the civilian noninstitutionalized population with a disability. It indicates that Davidson County's 11.9% was lower than for the U.S. and for Tennessee.

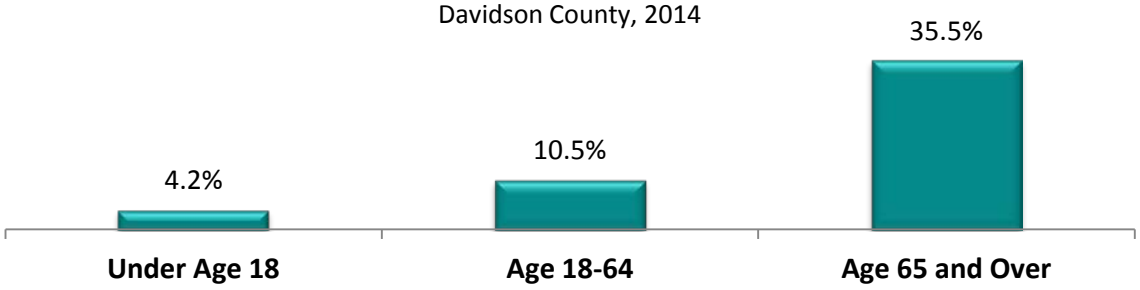
Chart 23: Percent with a Disability-Civilian Noninstutionalized Population
U.S., Tennessee, Davidson County, 2014



Source: U.S. Census Bureau, 2014 American Community Survey

As shown in Chart 24, the percent with a disability increases significantly for people age 65 and over, compared to younger age categories.

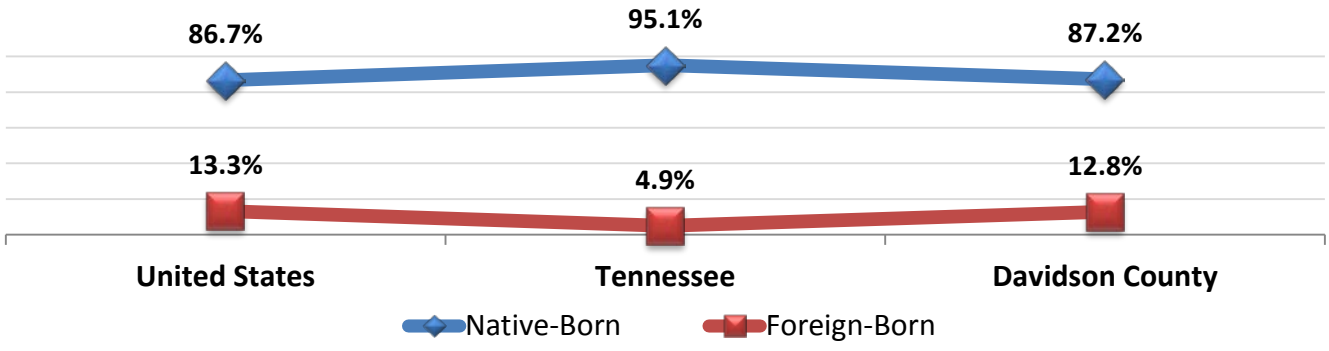
Chart 24: Percent with a Disability by Age Category
Davidson County, 2014



Source: U.S. Census Bureau, 2014 American Community Survey

The percent of foreign-born residents in Davidson County was slightly lower than for the U.S. and somewhat higher than for Tennessee, as indicated in Chart 25. However, there were almost seven times as many native-born persons as there are foreign-born persons in Davidson County.

Chart 25: Percent of Native-Born/Foreign Born
U.S., Tennessee, Davidson County, 2014

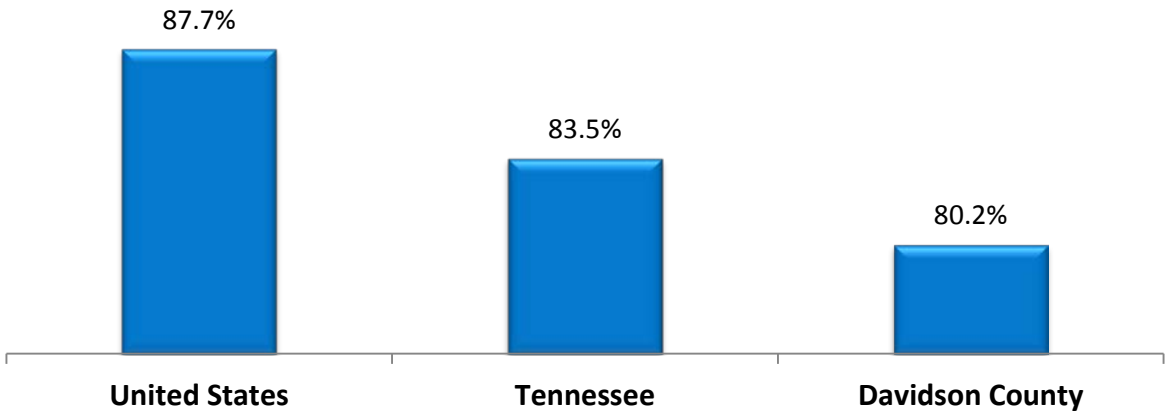


Source: U.S. Census Bureau, 2014 American Community Survey

Chart 26 indicates the percent of the foreign-born population who entered before 2010. Davidson County's percent at 80.2% was slightly lower than Tennessee's 83.5% and 87.7% for the U.S.

With all percent's being over 80%, clearly the majority of foreign-born residents entered before 2010.

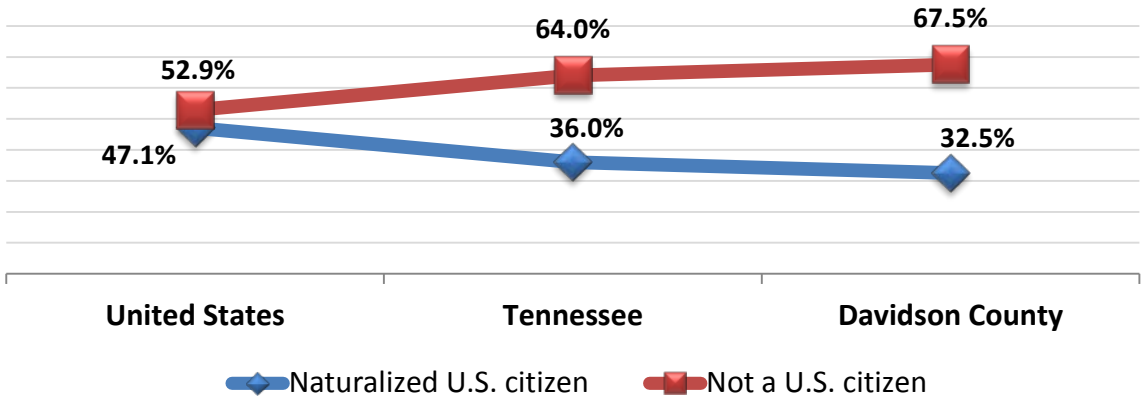
Chart 26: Percent of Foreign-Born Residents Who Entered before 2010
U.S., Tennessee, Davidson County, 2014



Source: U.S. Census Bureau, 2014 American Community Survey

About 12.8% of the Davidson County population was foreign-born. Among the 85,738 Foreign-Born residents of Davidson County, 32.5% of those were naturalized U.S. citizens, as shown in Chart 27.

Chart 27: Percent of Foreign-Born Residents by Citizenship
U.S., Tennessee, Davidson County, 2014

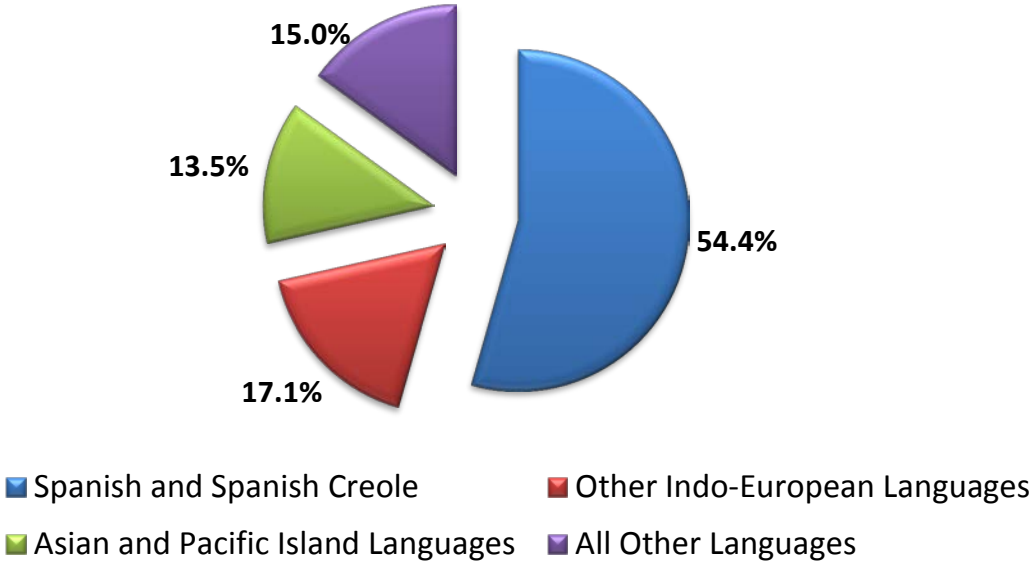


Source: U.S. Census Bureau, 2014 American Community Survey

In 2009-2013 (latest data available at publication), the U.S. Census Bureau reported that 84.5% of the Davidson County population age 5 and over speak English at home. The remaining 91,873 speak a variety of other languages. Chart 28 shows that 54.4% speak Spanish or Spanish Creole; 17.1% speak other Indo-European

languages (including French, German, Russian, Persian and other languages); 13.5% speak Asian and Pacific Island Languages (including Vietnamese, Chinese, Korean, Laotian and other Asian languages); and 15.0% who speak a variety of other languages (primarily Arabic and African languages).

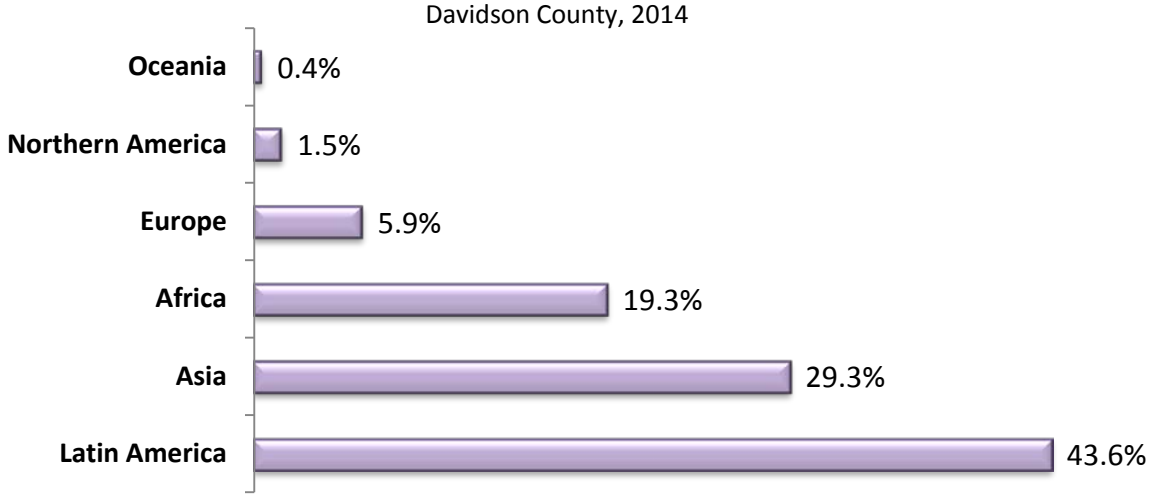
Chart 28: Percent of Languages Spoken at Home Other Than English
Davidson County, 2009-2013



Source: U.S. Census Bureau, 2009-2013 American Community Survey

Chart 29 indicates that the largest world region for the foreign-born population was Latin America at 43.6%, followed by Asia at 29.3%. This pattern was consistent with the U.S. and Tennessee.

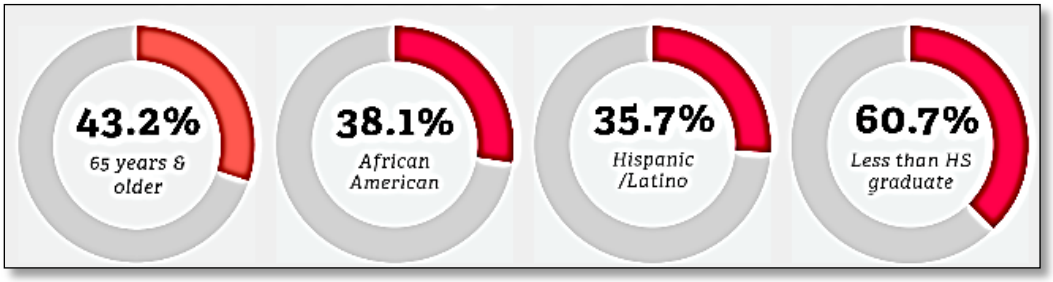
Chart 29: World Region of Foreign-Born
Davidson County, 2014



Source: U.S. Census Bureau, 2014 American Community Survey

According to EveryoneOn, a nonprofit organization working to provide high-speed, low-cost internet services and computers to unconnected Americans, "Low-income and minority Americans disproportionately find themselves on the wrong side of the digital divide.

It noted that the three top reasons people do not use the internet are: 1) they do not believe it is relevant; 2) they do not know how to use the technology; and 3) they find it unaffordable. The graphic shows how some characteristics are related to lack of internet use.

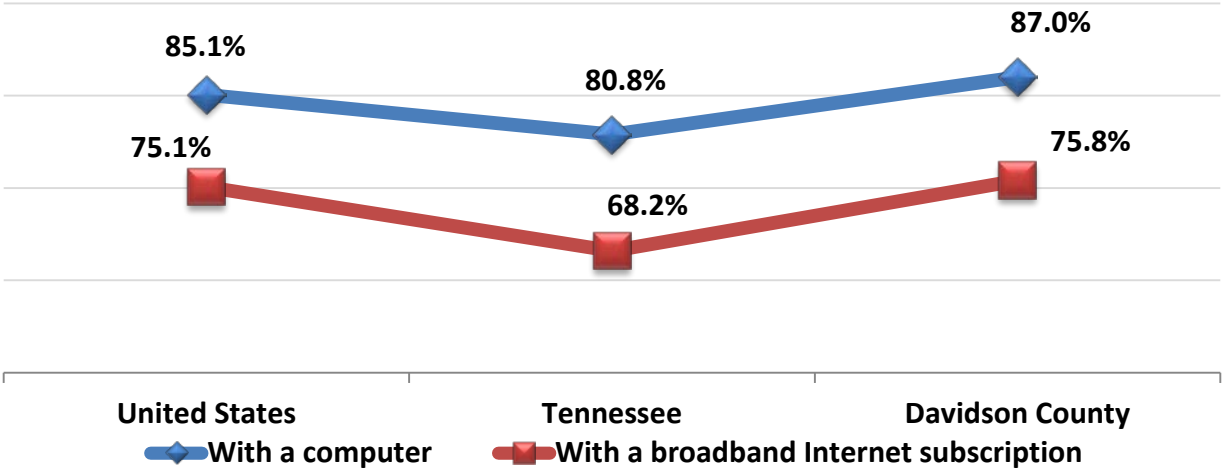


http://everyoneon.org/digital-divide/

In *Computer and Internet Use in the United States,* the U. S. Census Bureau described the importance of computers and high-speed internet connections, in terms of schoolwork, finding jobs, accessing health care information, etc.
http://www.census.gov/content/dam/Census/library/publications/2014/acs/acs-28.pdf

Chart 30 shows that Davidson County had a higher percent of households with both a computer and with a broadband internet subscription than the U.S. and Tennessee. It noted that household computer and internet use were more common in homes with certain characteristics, including relatively young householders, Asian householders, White householders, high-income households, metropolitan areas and where householders had relatively high levels of educational attainment.

Chart 30: Percent of Households with a Computer/Broadband Internet
U.S., Tennessee, Davidson County, 2014

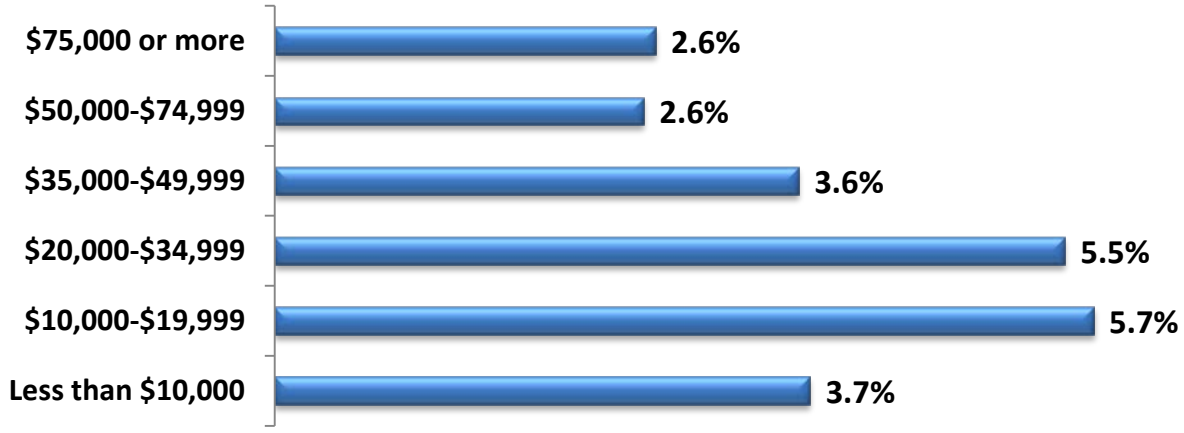


Source: U.S. Census Bureau, 2014 American Community Survey

IN 2014, Davidson County had 34,800 households (13.0%) of 62,546 people who did not have a computer. There were 30,834 households (11.5%) that did not have a broadband internet subscription. An estimated 75,720 people did not have internet access.

Chart 31 shows the relationship between internet access and household income. Among households with income less than $20,000, 9.4% did not have any internet, compared to 2.6% of households with income about $75,000.

Chart 31: Percent Without Internet by Household Income Category
Davidson County, 2014



The **Nashville Area Chamber of Commerce** develops reports designed to continue the Nashville region's focus on building prosperity.

Nashville Region's Vital Signs reports on indicators to identify emerging issues, including housing & community, prosperity & affordability, transit & transportation, healthy living, economy & workforce, education & learning, arts & culture, safety & criminal justice and community engagement & regional leadership.
http://www.nashvillechamber.com/docs/default-source/pdfs/vital_signs_2015_web.pdf?sfvrsn=2

Datascape 2015 was created for the Leadership and Transit Study Mission and provides comparative data for Salt Lake County. It includes information about education, economic factors, the labor force, exports, health, housing and other issues.
http://www.nashvillechamber.com/docs/default-source/research-center-studies/nashville-datascape-2015.pdf?sfvrsn=4

Socioeconomic Profile

The Socioeconomic Profile incorporates a number of economic indicators related to income and poverty status that can affect the quality of life for Davidson County residents. The data shows that for some characteristics, the resulting elevation in poverty can be dramatic.

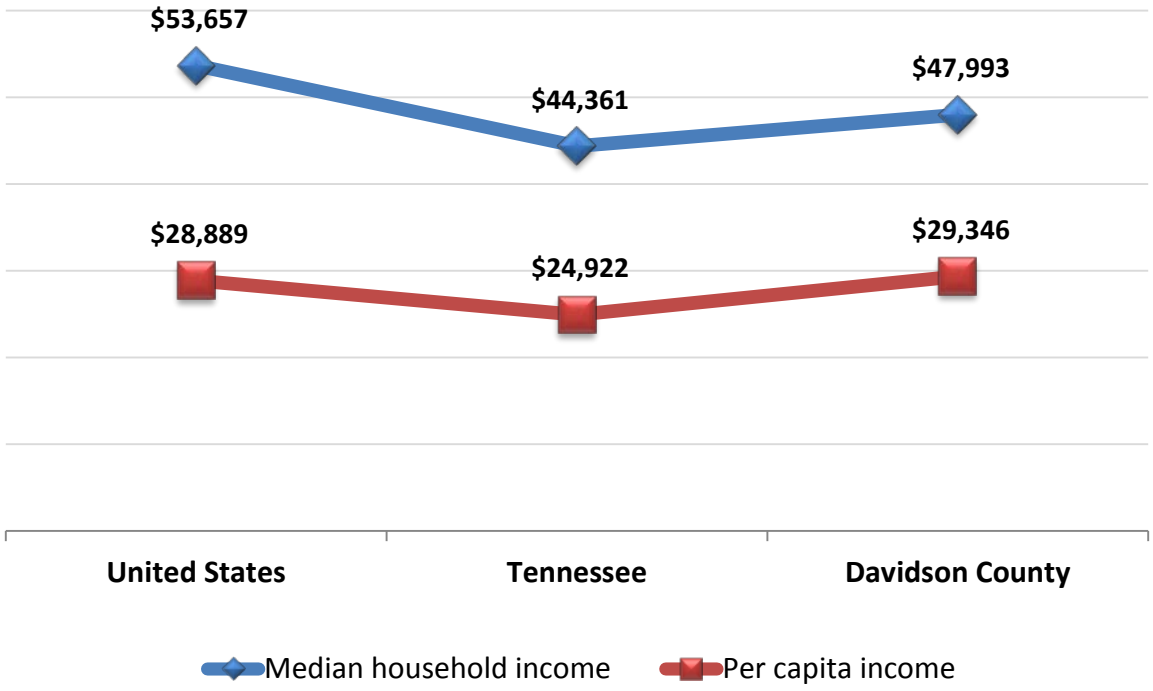
Most of the data is from the U.S. Census Bureau, which adjusts data for income and benefits for inflation.

Income

Chart S-1 reflects the median income and per capita income for the U.S., Tennessee and Davidson County for 2014. It indicates that the per capita income is higher in Davidson County than for Tennessee and the U.S., the $47,993 median income for Davidson County is higher than Tennessee's at $44,361 but lower than the U.S. at $53,567.

Chart S-1: Median Household and Per Capita Income

U.S., Tennessee, Davidson County, 2014

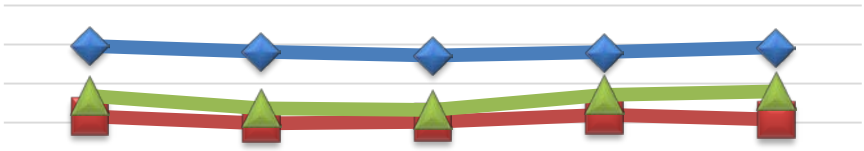


Source: U.S. Census Bureau, 2014 American Community Survey

Davidson County's median household income is above that for Tennessee and has been consistently lower than for the U.S. each year. There has been slight fluctuation and Davidson County's 2014 median household income is slightly higher than in previous years.

Chart S-2 compares the median household income for the U.S., Tennessee and Davidson County for 2010-2014. The chart shows that the U.S. median income is higher than Tennessee for each of the five years.

Chart S-2: Median Household Income
U.S., Tennessee, Davidson County, 2014

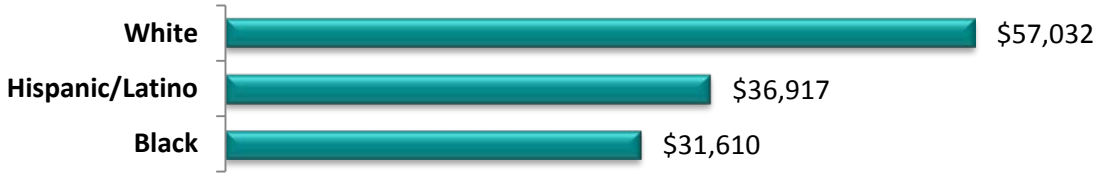


	2010	2011	2012	2013	2014
United States	$53,836	$53,098	$52,586	$53,059	$53,657
Tennessee	$44,769	$43,879	$44,099	$45,003	$44,361
Davidson County	$47,404	$45,811	$45,609	$47,551	$47,993

Source: U.S. Census Bureau, 2010-2014 American Community Survey

Chart S-3 shows that the median income in Davidson County by race/ethnicity was significantly higher for the white population at $57,032 than either the Black population at $31,610 or the Hispanic/Latino population at $36,917.

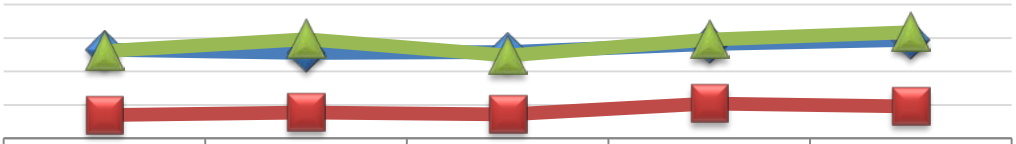
Chart S-3: Median Income by Selected Race/Ethnicity
Davidson County, 2014



Source: U.S. Census Bureau, 2014 American Community Survey

As indicated in Chart S-4, Davidson County's per capita income has been similar to that for the U.S. each year, with both considerably higher than for Tennessee. For each geographic area, per capita income has been consistent across the 5-year period. During the five-year period, Davidson County's 2014 per capita income was highest in 2014.

Chart S-4: Per Capita Income
U.S., Tennessee, Davidson County, 2014

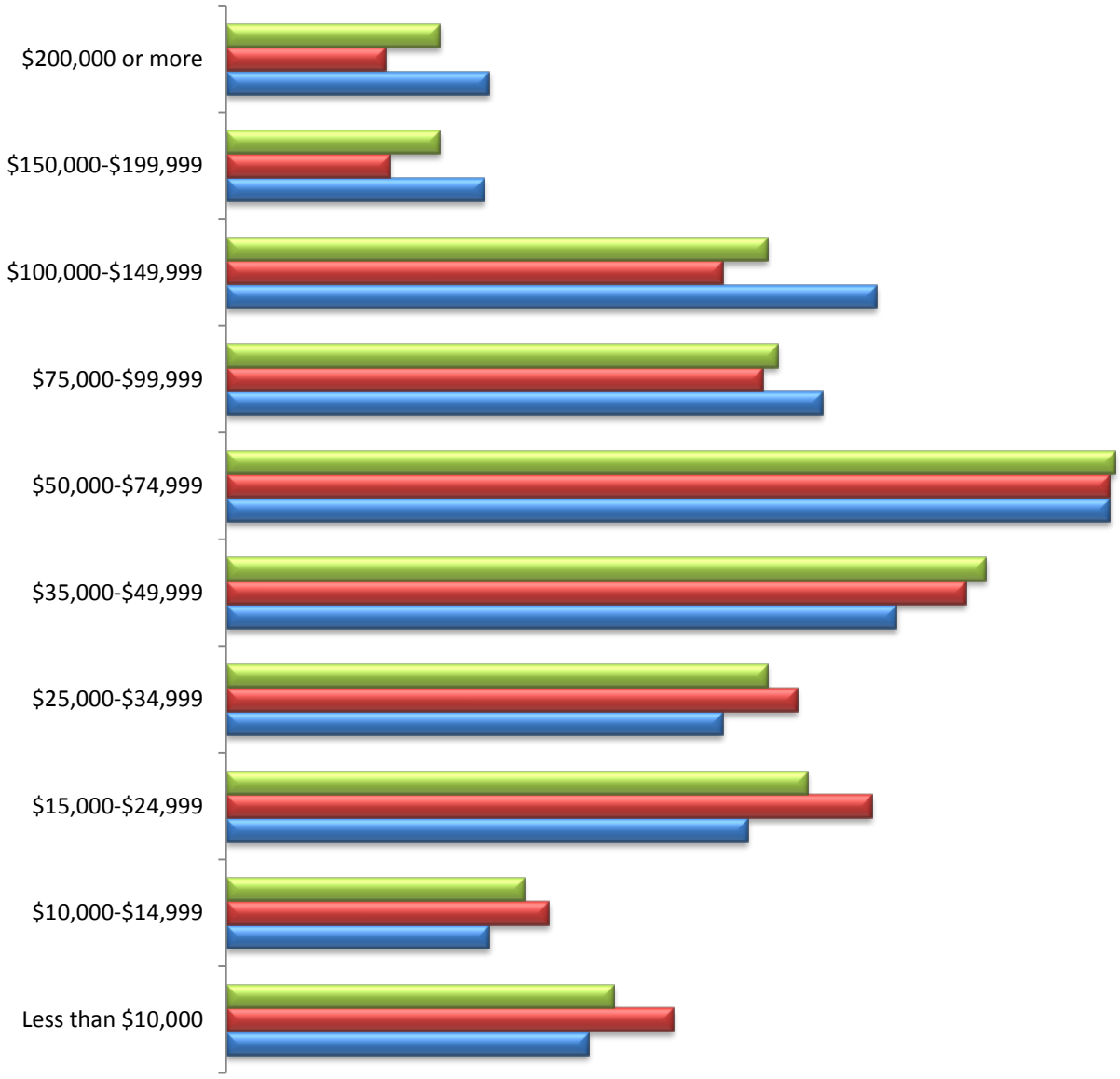


	2010	2011	2012	2013	2014
United States	$28,296	$28,115	$28,169	$28,645	$28,889
Tennessee	$24,391	$24,548	$24,429	$25,082	$24,922
Davidson County	$28,224	$28,927	$27,959	$28,905	$29,346

Source: U.S. Census Bureau, 2010-2014 American Community Survey

As shown in Chart S-5, 25.5% of Davidson County's households have incomes less than $25,000 per year, the equivalent of an estimated 68,328 households (out of 267,952 total households in Davidson County). About 19.5% of Davidson County households have incomes of more than $100,000 per year, or an estimated 52,251 households.

Chart S-5: Percent of Household Income by Category
U.S., Tennessee, Davidson County, 2014

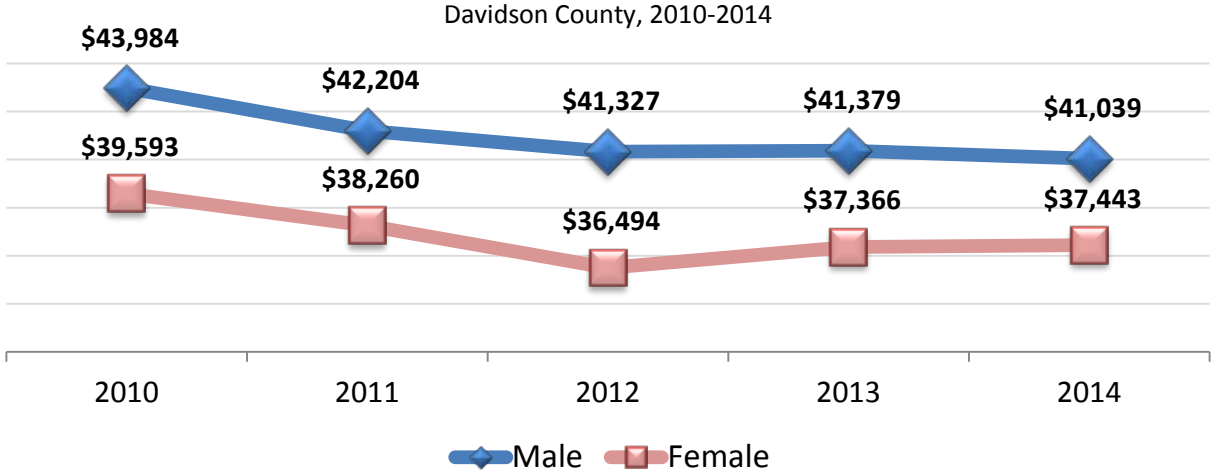


	Less than $10,000	$10,000-$14,999	$15,000-$24,999	$25,000-$34,999	$35,000-$49,999	$50,000-$74,999	$75,000-$99,999	$100,000-$149,999	$150,000-$199,999	$200,000 or more
Davidson County	7.8%	6.0%	11.7%	10.9%	15.3%	17.9%	11.1%	10.9%	4.3%	4.3%
Tennessee	9.0%	6.5%	13.0%	11.5%	14.9%	17.8%	10.8%	10.0%	3.3%	3.2%
United States	7.3%	5.3%	10.5%	10.0%	13.5%	17.8%	12.0%	13.1%	5.2%	5.3%

Source: U.S. Census Bureau, 2014 American Community Survey

Chart S-6 compares the male and female median earnings for year-around, full-time workers in Davidson across a 5-year period. Each year, the male earnings are higher than female earnings. In addition, for both male and female, income for 2010 was higher than for subsequent years.

Chart S-6: Median Earnings Full-Time, Year-Round Workers, by Gender
Davidson County, 2010-2014



Source: U.S. Census Bureau, 2010-2014 American Community Survey

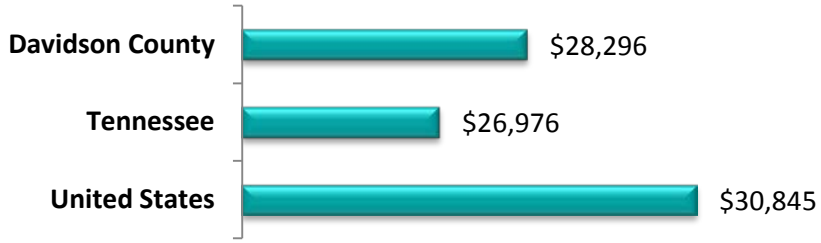
As shown in Chart S-7, the median income in 2014 for all workers was $28,296, below the U.S. at $30,845 and above Tennessee's at $26,976. In addition, the Social Security Administration calculates the national average wage index (wages, tips, etc.) that are subject to federal income taxes (reported on W-2 Forms). The formula includes contributions to deferred compensation plans and includes some distributions from such plans (if they subject to income taxes). In the U.S., the percentage of wage earners received these amounts:

- 23.0% of wage earners had wages below $9,999.99
- 38.1% of wage earners had wages below $19,999.99
- 50.0% of wage earners had wages below $28,251.21 (U.S. median wage)
- 75.4% of wage earners had wages below $54,999.99

https://www.ssa.gov/cgi-bin/netcomp.cgi?year=2014

Chart S-7 shows that the median earnings for all workers was lower in Davidson County than for the U.S., with Tennessee even lower, with half of Davidson County workers earning less than $28,296.

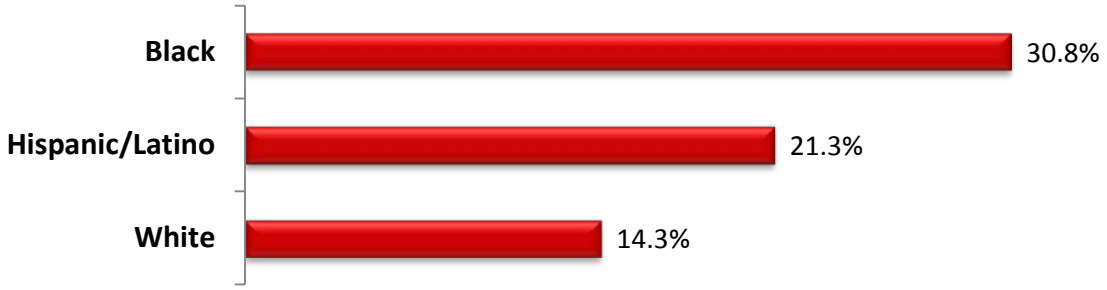
Chart S-7: Median Earnings for All Workers
U.S., Tennessee, Davidson County, 2014



Source: U.S. Census Bureau, 2014 American Community Survey

Chart S-8 shows that the Black population was twice as likely to have incomes below $25,000 than the white population, with the Hispanic/Latino population between the two.

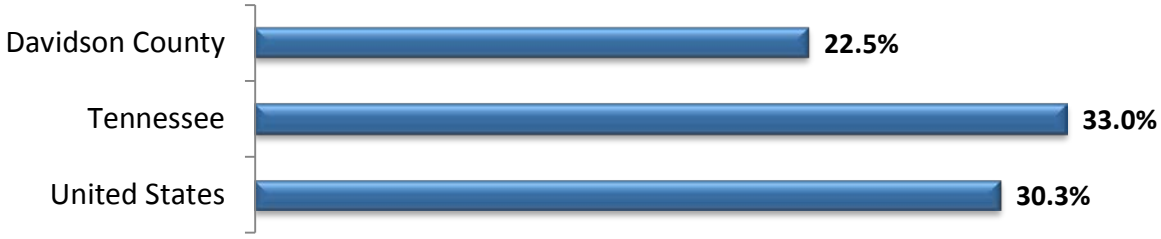
Chart S-8: Percent with Incomes Below $25,000 by Selected Race/Ethnicity
Davidson County, 2014



Source: U.S. Census Bureau, 2014 American Community Survey

As reflected in Chart S-9, the percent of households receiving Social Security benefits (22.5%) is considerably lower than for Tennessee (33.0%) and the U.S. (30.3%). This may be related to data described in the Demographic and Social Profile section that Davidson County's median age is younger and that there is a smaller percent of Davidson County residents who are age 65 and over (Davidson County-11.1%; Tennessee-15.1%, U.S.-14.5% for 2014).

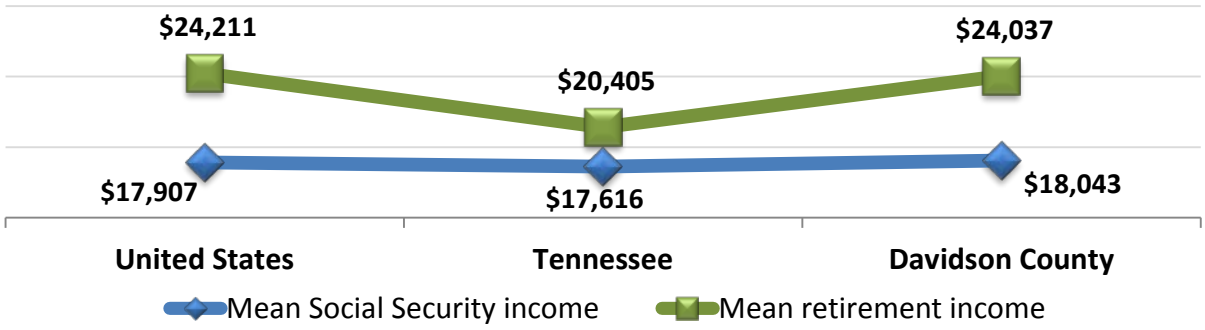
Chart S-9: Percent of Households with Social Security Benefits
U.S., Tennessee, Davidson County, 2014



Source: U.S. Census Bureau, 2014 American Community Survey

Chart S-10 shows that the mean Social Security income is consistent across Davidson County, Tennessee and the U.S. However, the mean retirement income is similar in Davidson County and the U.S. but lower in Tennessee.

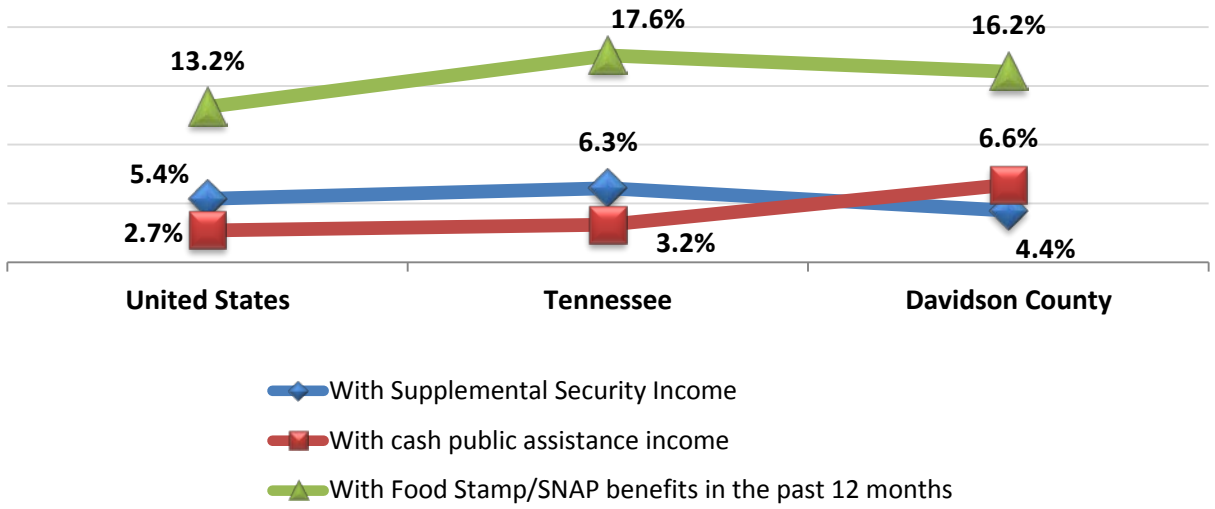
Chart S-10: Household Mean Income-Social Security and Retirement
U.S., Tennessee, Davidson County, 2014



Source: U.S. Census Bureau, 2014 American Community Survey

Chart S-11 reflects the percent of households with either Supplemental Security Income (SSI), cash public assistance income or Food Stamp/SNAP benefits. The percentage of households with SNAP benefits is significantly higher than the percentage of households that receives either cash public assistance income or SSI.

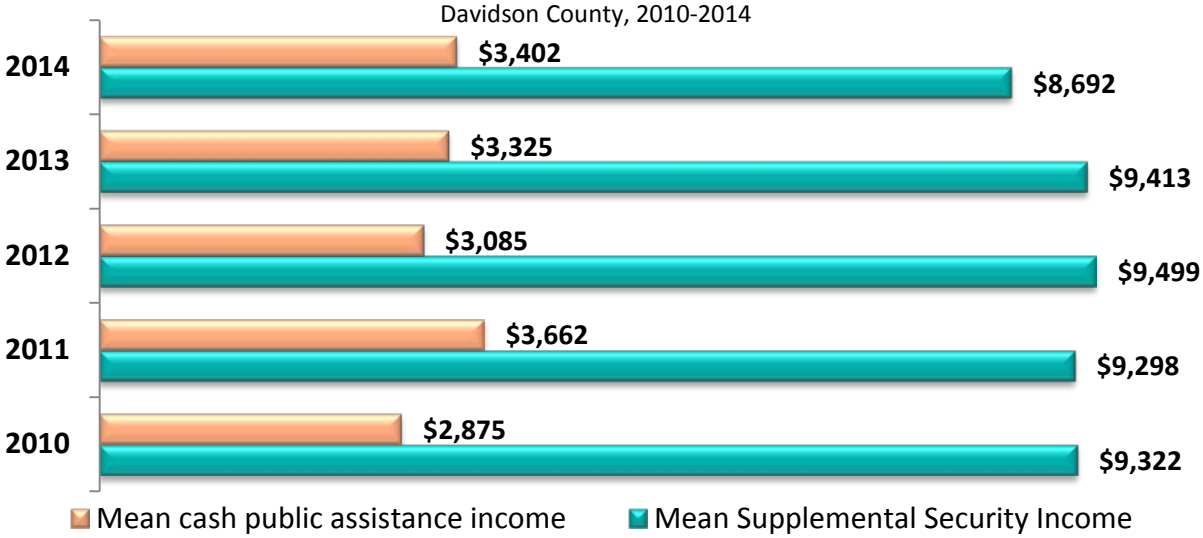
Chart S-11: Percent with Supplemental Security Income, Cash Public Assistance Income and Food Stamps/SNAP in the Past 12 Months
U.S., Tennessee, Davidson County, 2014



Source: U.S. Census Bureau, 2014 American Community Survey

As shown in Chart S-12, the mean annual income from cash public assistance has slightly fluctuated over the past five years, and was slightly less in 2014 at $3,402 than in 2011 at $3,662. SSI annual income was lower in 2014 at $8,682 than 2010-2013.

Chart S-12: Mean Income-Supplemental Security Income (SSI) and Cash Public Assistance
Davidson County, 2010-2014



Source: U.S. Census Bureau, 2014 American Community Survey

Poverty

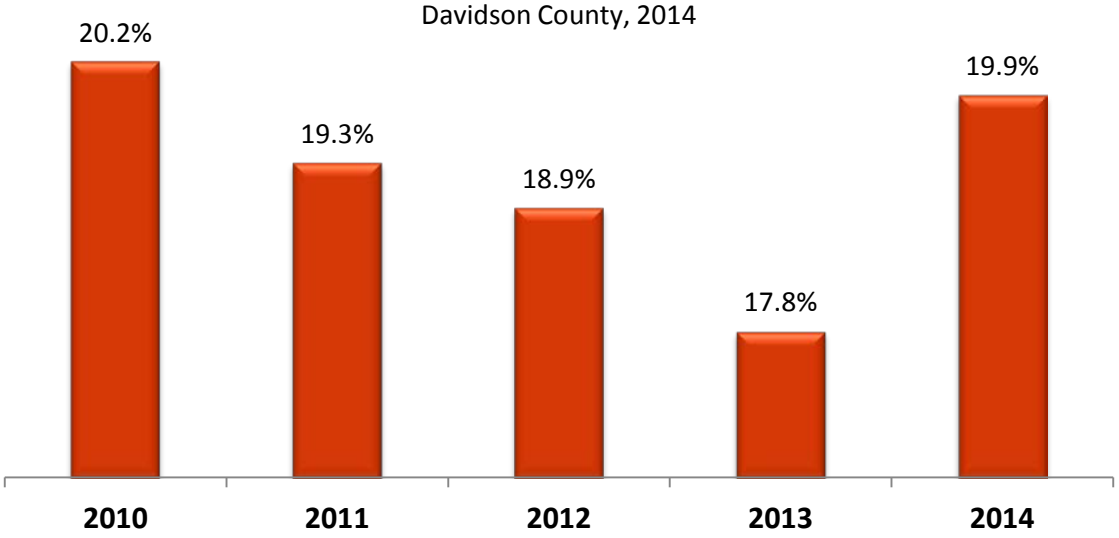
Each year, the U.S. Census Bureau updates the poverty threshold, a statistical measure used to estimate the number of people in poverty. Poverty thresholds since 1973 are available online. Poverty thresholds are the same across the entire U.S. https://www.census.gov/hhes/www/poverty/data/threshld/

Poverty guidelines are simplified and are very similar to the threshold. Each year, the U.S. Department of Health and Human Services (HHS) develops the guidelines. The guidelines are the administrative measure used by the federal government to determine eligibility for various programs. The 48 contiguous states have poverty guidelines that are the same, with Alaska and Hawaii having slightly different guidelines. The table below shows the 2015 Federal Poverty Guidelines for the continental U.S. Federally funded programs use the poverty guideline (or percentage multiples, such as 125%, 150%, etc.) to determine eligibility for means tested programs (HHS, Agriculture, Energy, Labor, and others).

# in Household	Federal Poverty Guideline
1	$11,770
2	$15,930
3	$20,090
4	$24,250
5	$28,410
6	$32,570
7	$36,730
8	$40,890

Chart P-1 reflects the percent of all people in poverty in Davidson County for the years 2010 through 2014. At 19.9%, the poverty rate is almost as high as its recent peak at 20.2% in 2010.

Chart P-1: Percent in Poverty-All People
Davidson County, 2014

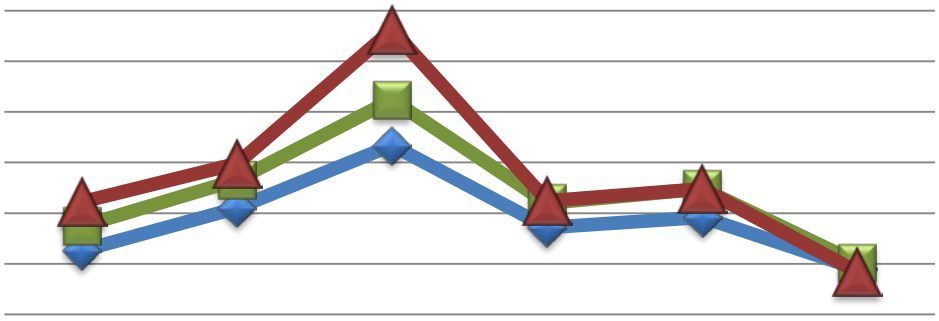


Source: U.S. Census Bureau, 2010-2014 American Community Survey

Chart P-2 shows the poverty rates by family and age categories, with Davidson County having higher poverty rates than Tennessee and the U.S. for every category except for people age 65 and over, and for 18-64 years is the same as Tennessee and higher than the U.S. The 2014 Davidson County population for which poverty status is determined was 648,013 for 2014, with 129,057 in poverty.

Chart P-2: Poverty Rates by Categories

U. S., Tennessee, Davidson County, 2014



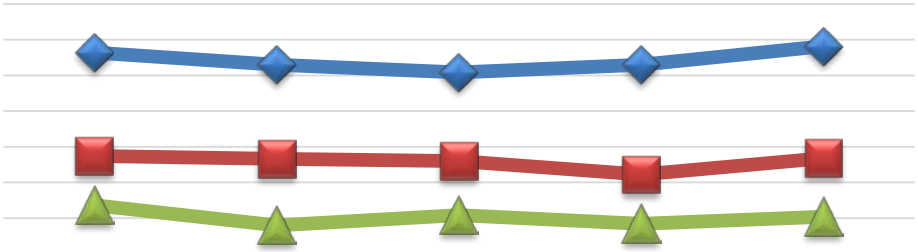
	All families	All people	Under 18 years	18 years and over	18 to 64 years	65 years and over
United States	11.3%	15.5%	21.7%	13.6%	14.6%	9.5%
Tennessee	13.7%	18.3%	26.2%	16.0%	17.4%	10.1%
Davidson County	16.1%	19.9%	33.1%	16.2%	17.4%	9.2%

Source: U.S. Census Bureau, 2014 American Community Survey

As shown in Chart P-3, across multiple years, a significantly higher percent of people under age 18 are in poverty than in other age groups. The 2014 poverty rate for people under 18 was 33.1%, almost twice as high as for those ages 18-64 and more than three times as high as for those 65 and over.

Chart P-3: Percent in Poverty by Age Category

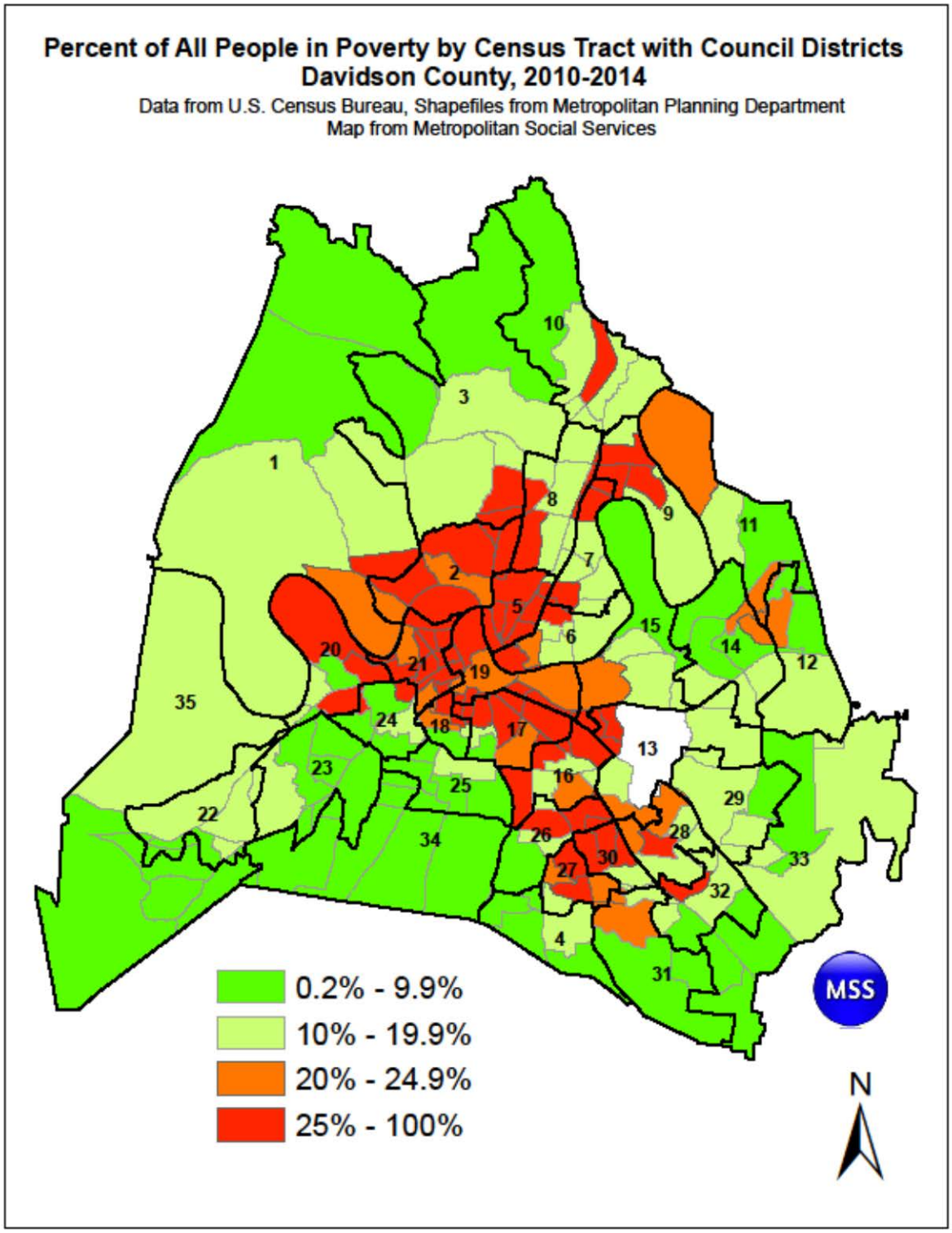
Davidson County, 2014

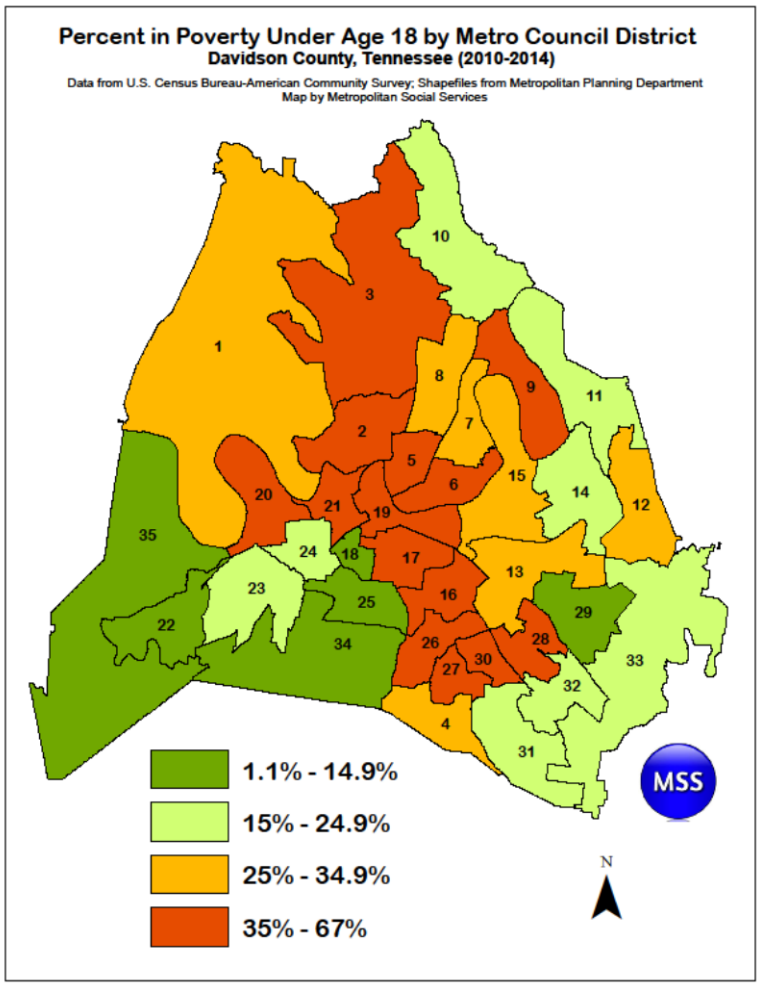


	2010	2011	2012	2013	2014
Under 18 years	32.2%	30.5%	29.4%	30.5%	33.1%
18 to 64 years	17.7%	17.3%	17.0%	15.1%	17.4%
65 years and over	10.8%	8.0%	9.4%	8.2%	9.2%

Source: U.S. Census Bureau, 2014 American Community Survey

The map below reflects the percent of poverty by Census Tracts in Davidson County from 2010-2014, with the Metro Council Districts also shown. The areas in red have at least 25% of the population who lived in poverty. There are 161 Census Tracts in Davidson County.





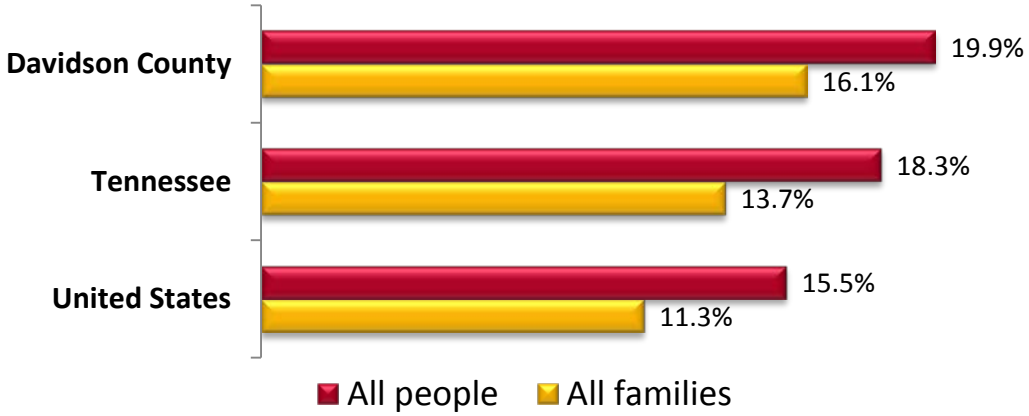
The map at left shows the percent of minor children in poverty by Council Districts from 2010-2014.

The areas in red have at least 35% of the people under age 18 who lived in poverty, with areas in orange having 25-34.9%.

Chart P-4 shows the percent in poverty is higher for all people (individually, without regard for household/family structure) than for all families (household related by blood or marriage). Poverty for all people and all families was higher in Davidson County than in Tennessee and the U.S.

P-4: Percent in Poverty-All People/All Families

U.S., Tennessee, Davidson County, 2014



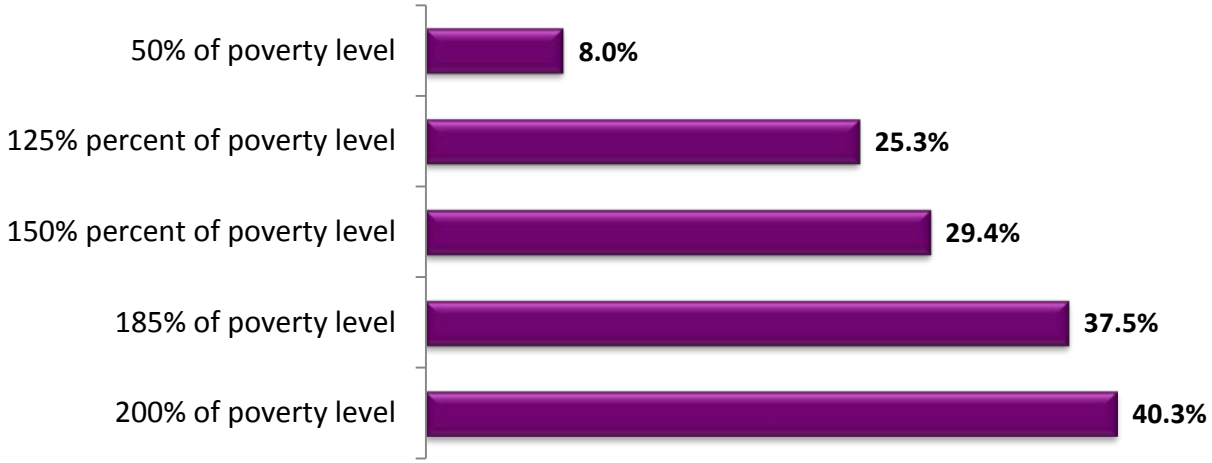
Source: U.S. Census Bureau, 2014 American Community Survey

Chart P-5 shows the percent of the population that lives under multipliers of the defined poverty guideline. Of the Davidson County population of 648,013 for whom poverty status is determined, 8.0% (51,981) live on half or less of the amount designated as the poverty level. Half (50%) of poverty would involve living on an extremely low income – less than $5,900 per year for one person, about $7,900 for two people, $10,045 for three and $12,125 for four.

The individuals who live at 200% of the poverty rate or less (twice the poverty rate or less) make up 40.3%, or 261,151 Davidson County Residents.

Chart P-5: Percent of Population by Level of Poverty

Davidson County, 2014

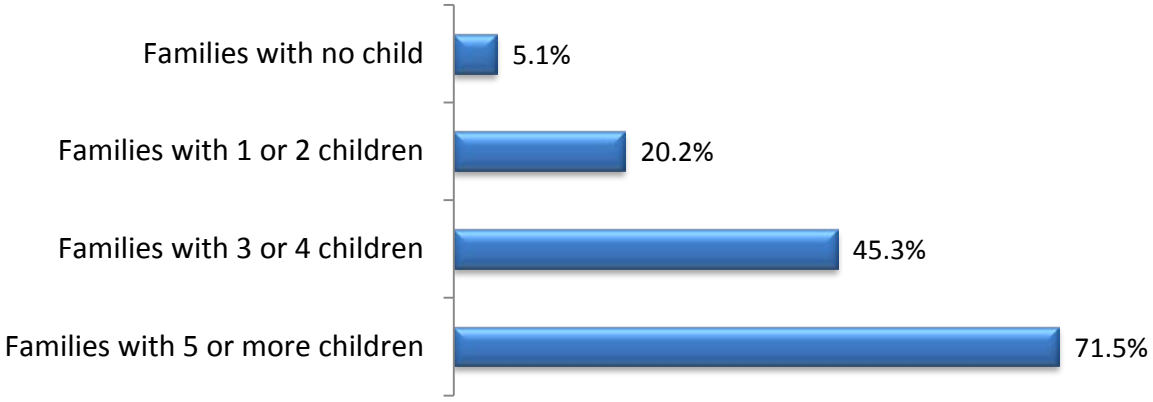


Source: U.S. Census Bureau, 2014 American Community Survey

Chart P-6 shows that the number of children in a family increases the likelihood that the family would be in poverty. For families with no children, the rate of poverty is 5.1% compared with 71.5% for families with five or more children.

Chart P-6: Family Poverty by Number of Children

Davidson County, 2014

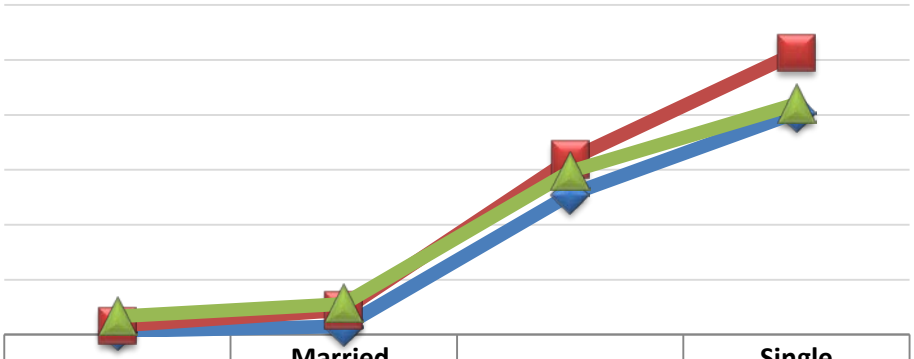


Source: U.S. Census Bureau, 2014 American Community Survey

Chart P-7 shows the percent of poverty in households by marital status and with children under age 5. The married couple families have the lowest rate of poverty in Davidson County, Tennessee and the U.S., with a slightly higher percent among married couples with a child under age 5. The percent is significant for single mother households and highest for single mothers with a child under age 5.

Chart P-7: Percent in Poverty by Household Structure and Children Under Age 5

U.S., Tennessee, Davidson County, 2014



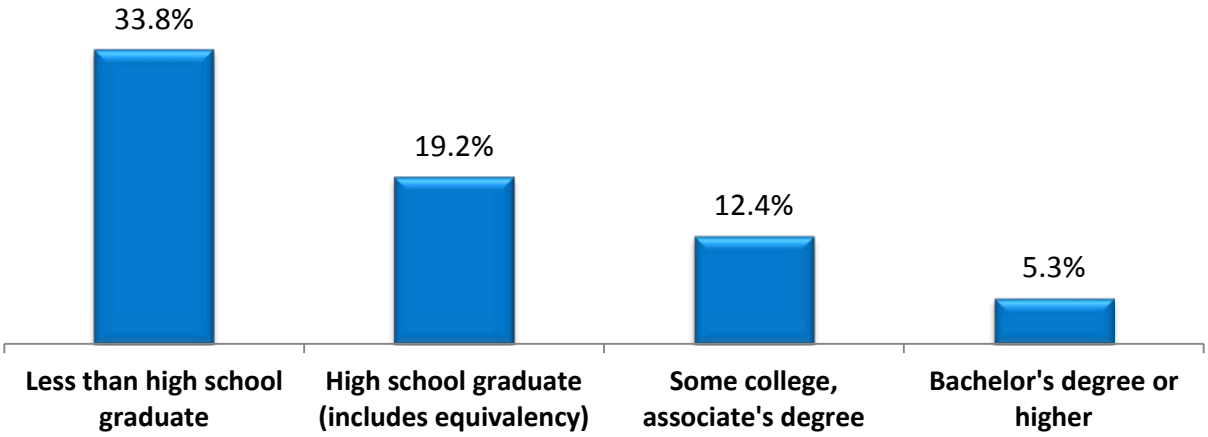
	Married couple families	Married with children under age 5	Single mother households	Single mother with under age 5 years
United States	5.6%	6.5%	30.5%	45.4%
Tennessee	6.6%	9.5%	36.9%	56.3%
Davidson County	8.3%	10.6%	34.7%	47.0%

Source: U.S. Census Bureau, 2014 American Community Survey

Chart P-8 reflects the percent of people in poverty by level of educational attainment. Higher poverty rates are associated with lower levels of education. The rate of poverty for people who have less than a high school education at 33.8% is more than six times as high as for those who have a bachelor's degree or higher (5.3%). Out of Davidson County's over age 25 population of 449,301 have less than a high school education.

Chart P-8: Percent in Poverty Over Age 25 by Educational Attainment

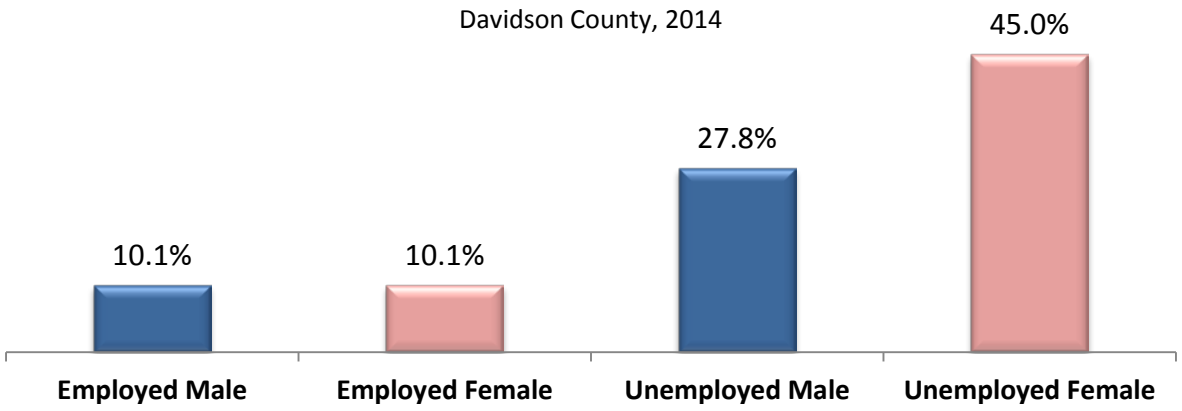
Davidson County, 2014



Source: U.S. Census Bureau, 2014 American Community Survey

As shown in Chart P-9, the rate of poverty for employed males is the same as for employed females. However, the poverty rate for unemployed females is significantly higher at 45.0% than for unemployed males at 27.8%.

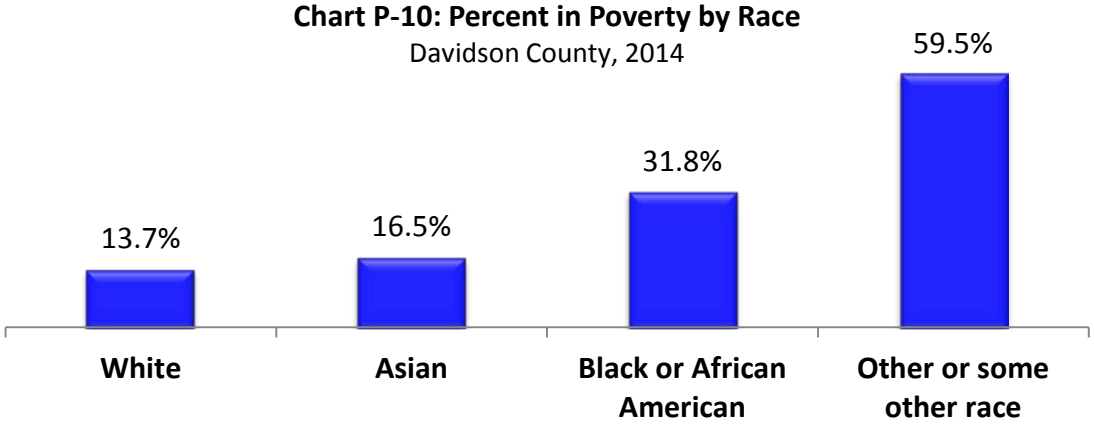
Chart P-9: Percent in Poverty by Gender and Employment Status Over Age 16
Davidson County, 2014



Source: U.S. Census Bureau, 2014 American Community Survey

As shown in Chart P-10, the poverty rate for other or some other race was much higher than for any individual race. The rate for Black or African Americans was 31.8%, more than four times the rate for White and almost twice as high as for Asians. Because of the small sample size, the U. S. Census Bureau did not estimate the rate of poverty for American Indian/Alaskan Native or for Native Hawaiian/Other Pacific Islander.

Chart P-10: Percent in Poverty by Race
Davidson County, 2014



Source: U.S. Census Bureau, 2014 American Community Survey

Chart P-11 shows that the native-born population was less likely to be in poverty than the foreign-born population.

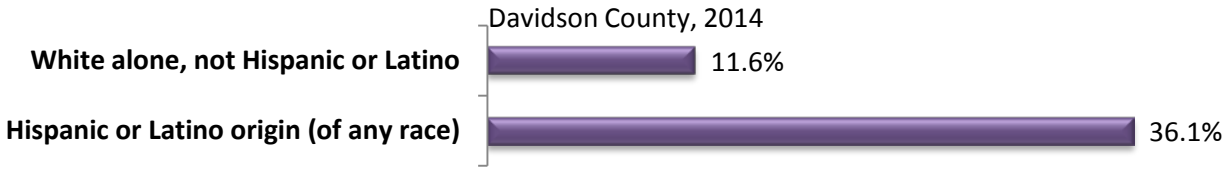
Chart P-11: Percent in Poverty by Nativity
Davidson County, 2014

Source: U.S. Census Bureau, 2014 American Community Survey

Chart P-12 shows that the poverty rate for Hispanics at 36.1% is more than three times as high as the 11.6% poverty rate for white non-Hispanics.

Chart P-12: Percent in Poverty by Ethnicity

Davidson County, 2014

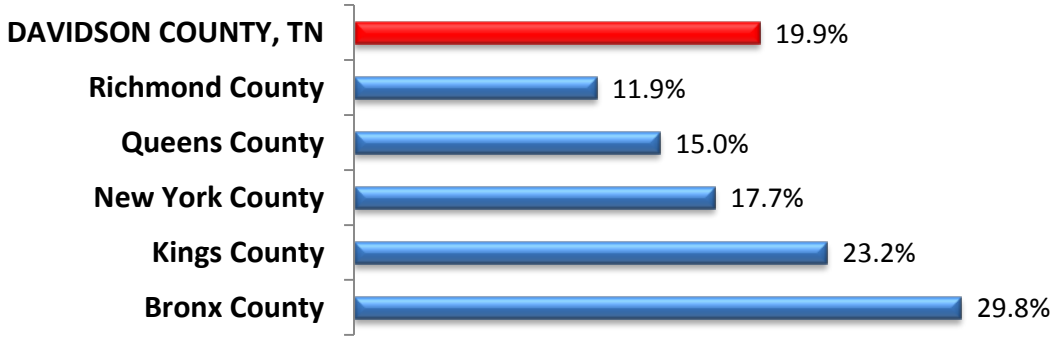


Source: U.S. Census Bureau, 2014 American Community Survey

Chart P-13 shows that the poverty rate in Davidson County for 2014 was higher than three of the five boroughs in New York City.

Chart P-13: 2014 Poverty Rate for All People

Counties in New York City, NY; Davidson County, TN, 2014

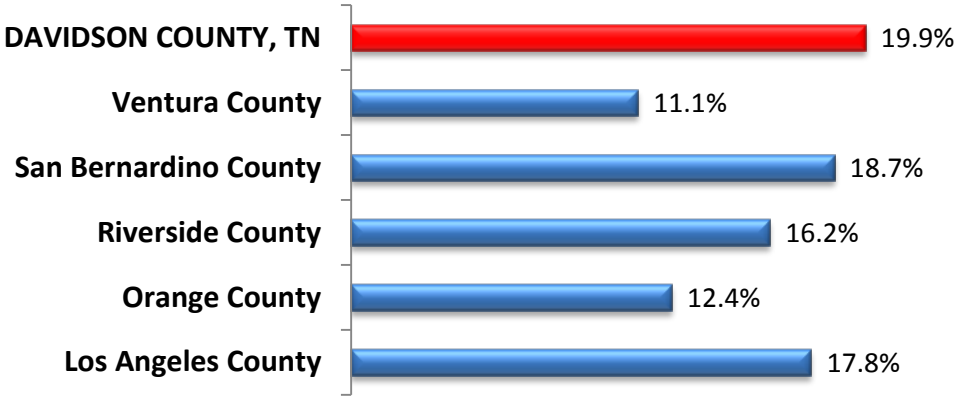


Source: U.S. Census Bureau, 2014 American Community Survey

Chart P-14 shows that the poverty rate in Davidson County for 2014 was higher than each of the five counties in the Los Angeles Area.

Chart P-14: 2014 Poverty Rate for All People

Counties in Greater Los Angeles, CA; Davidson County, TN



Source: U.S. Census Bureau, 2014 American Community Survey

The table summarizes the poverty rates described throughout the Socioeconomic Profile section. The area highlighted in green are the characteristics related to poverty rates lower than that for all people.

The area highlighted in orange shows the characteristics for which poverty was higher than for all people.

Characteristic	Percent in Poverty - Davidson County
Families with no child	5.1%
Bachelor's degree or higher	5.3%
65 years and over	9.2%
White	13.7%
Asian	16.5%
People in families	18.6%
ALL PEOPLE	19.9%
Families with 1 or 2 children	20.2%
Foreign-born	24.9%
Unemployed Male	27.8%
Black or African American	31.8%
Under 18 years	33.1%
Less than high school graduate	33.8%
People with a disability	35.1%
Hispanic or Latino origin (of any race)	36.1%
Unemployed Female	45.0%
Families with 3 or 4 children	45.3%
Single mothers with children under age 5	47.0%
Families with 5 or more children	71.5%

Source: 2014 American Community Survey

The table below summarizes the poverty rate for all people across a variety of geographic areas.

It shows that at 19.9%, Davidson County's poverty rate is higher than the U.S., Tennessee, most of the larger counties in Tennessee, all counties in Greater Los Angeles and most counties in New York City.

Where are people likely to be poor?	In Poverty - All People
Ventura County - Greater LA	11.1%
Richmond County - NYC	11.9%
Orange County - Greater LA	12.4%
Montgomery County, TN	13.8%
Queens County -NYC	15.0%
United States	15.5%
Hamilton County, TN	15.8%
Riverside County - Greater LA	16.2%
New York County - NYC	17.7%
Los Angeles County - Greater LA	17.8%
Knox County, TN	17.8%
Tennessee	18.3%
Sullivan County, TN	18.6%
San Bernardino County - Greater LA	18.7%
DAVIDSON COUNTY, TN	**19.9%**
Madison County, TN	21.4%
Shelby County, TN	22.9%
Kings County - NYC	23.2%
Bronx County - NYC	29.8%

Local Information

This section contains data collected in the Grassroots Community Survey by Metropolitan Social Services from 2009 through 2015, 2-1-1 call center data compiled by United Way of Metropolitan Nashville since 2007 and direct services customer data for the 2014-2015 fiscal year.

It is important to note that data from the MSS Front Desk Survey, United Way's 2-1-1 Call Line and the MSS Grassroots Community Survey is consistent. Each source identified the need for assistance with housing costs and utility payments.

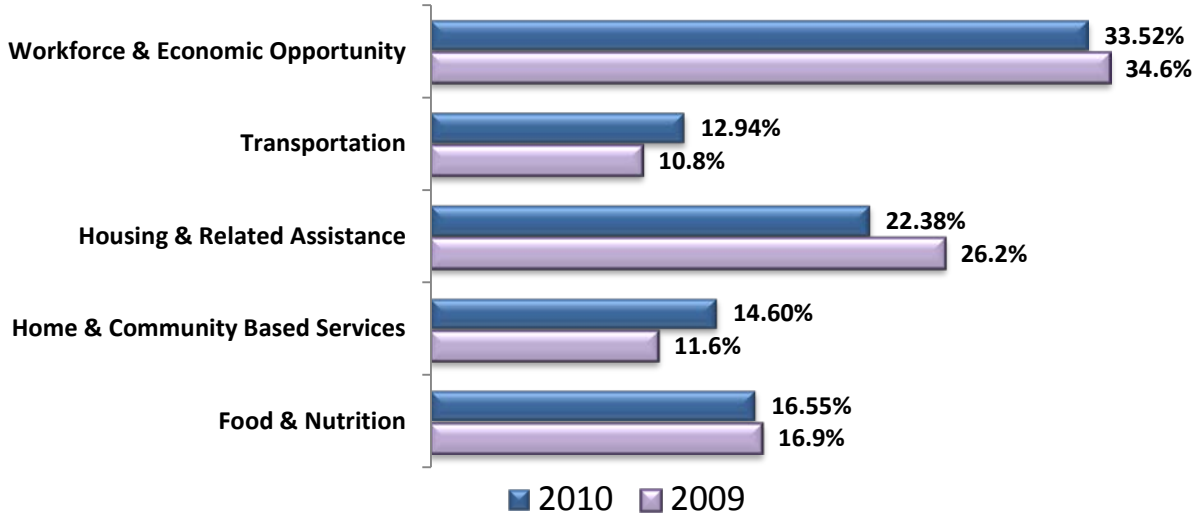
Grassroots Community Survey

Beginning in 2009, as part of each annual Community Needs Evaluation, a Grassroots Community Survey has been conducted among clients of organizations that serve those who are in need (described in the Methodology Section). During the seven years the survey has been conducted, more than 7,700 people participated in the Grassroots Community Survey. A series of questions asked respondents to identify the overall greatest need, as well as subcategories in each of those needs.

The surveys in 2009 and 2010 included five needs, while the 2011, 2012. 2013, 2014 and 2015 surveys expanded to include eight needs. Each topical section of the Community Needs Evaluation reports on the questions specific to those sections. In 2009 and 2010, Workforce and Economic Opportunity was the most frequently identified unmet need, as reflected in Chart L-1. Within that category for both years, the top two most frequently identified needs were for Help Finding a Job/Job Placement and Job Training.

Chart L-1: Greatest Unmet Need

Grassroots Community Survey, 2009-2010



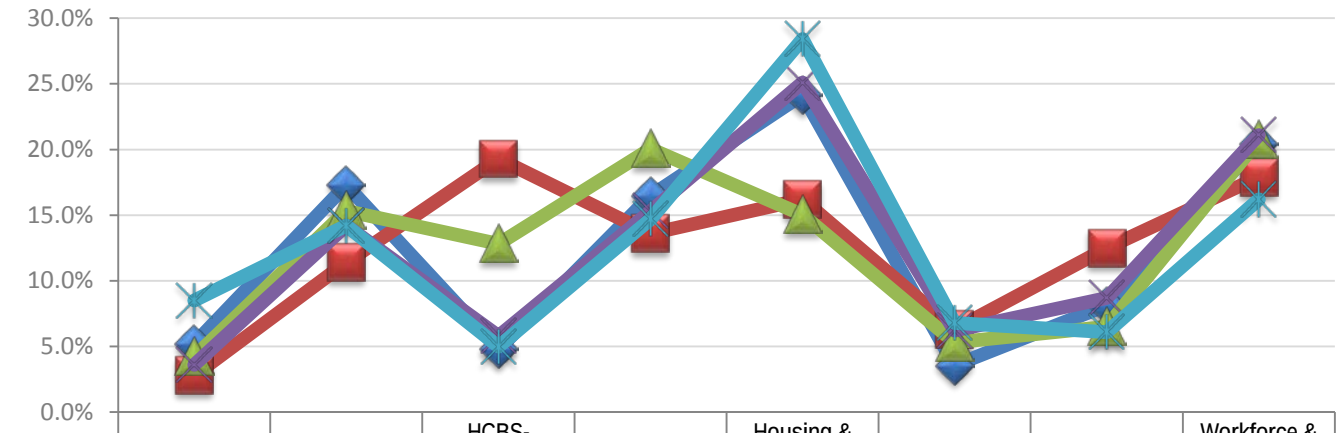
Source: MSS Grassroots Community Survey, 2009-2010

For the 2011, 2012, 2013, 2014 and 2015 Grassroots Community Surveys, more categories were added from which respondents were asked to identify the greatest unmet need. The chart below shows that most years,

Housing & Related Assistance and Workforce & Economic Opportunity trended high as the "largest gap between the services now available and what is needed."

Greatest Gap in Services

Grassroots Community Survey, 2011-2015



	Child Care	Food & Nutrition	HCBS-Seniors/Adults	Health	Housing & Related Assistance	Neighorhood Development	Transportation	Workforce & Economic Opportunity
2011	5.2%	17.3%	4.8%	16.5%	24.2%	3.5%	8.1%	20.4%
2012	2.8%	11.4%	19.3%	13.6%	16.2%	6.3%	12.5%	17.9%
2013	4.2%	15.3%	12.8%	20.0%	15.0%	5.3%	6.5%	20.7%
2014	3.6%	14.2%	5.8%	15.3%	25.1%	6.2%	8.7%	21.1%
2015	8.5%	14.2%	5.0%	14.7%	28.4%	6.8%	6.1%	16.2%

Additional questions identified the specific services needed within each of the five areas and these are described in other sections of this needs evaluation. The greatest unmet needs in 2015 were found to be:

- Food & Nutrition – Food Boxes/Food Pantries, followed by Food Stamps.
- Health – Basic Health Care-Uninsured/Underinsured has been significantly higher than other categories in 2011 through 2014.
- Home & Community Based Services – Help Paying for Child Care (that has alternated as the top need with Homemaker Services for Elderly or Disabled People each year since 2009).
- Housing – Section 8 Vouchers, followed closely by Emergency Shelter, although Help with Rent Payments and Help Paying Utility Bills were more often identified for other years.
- Neighborhood Development – Crime Prevention/Safety ranked much higher than other needs each year since 2011.
- Workforce & Economic Opportunity – Help Finding a Job/Job Placement has ranked highest each year from 2009 through 2014.

Because the Grassroots Community Survey was first conducted in 2009, there is no data to compare from before the recession began at the end of 2007. Despite moderate economic recovery after the recession, the continued consistency with which consumers identify gaps and services and unmet needs suggests that for those with lower incomes, recovery from the recession may not have extended into those with limited means.

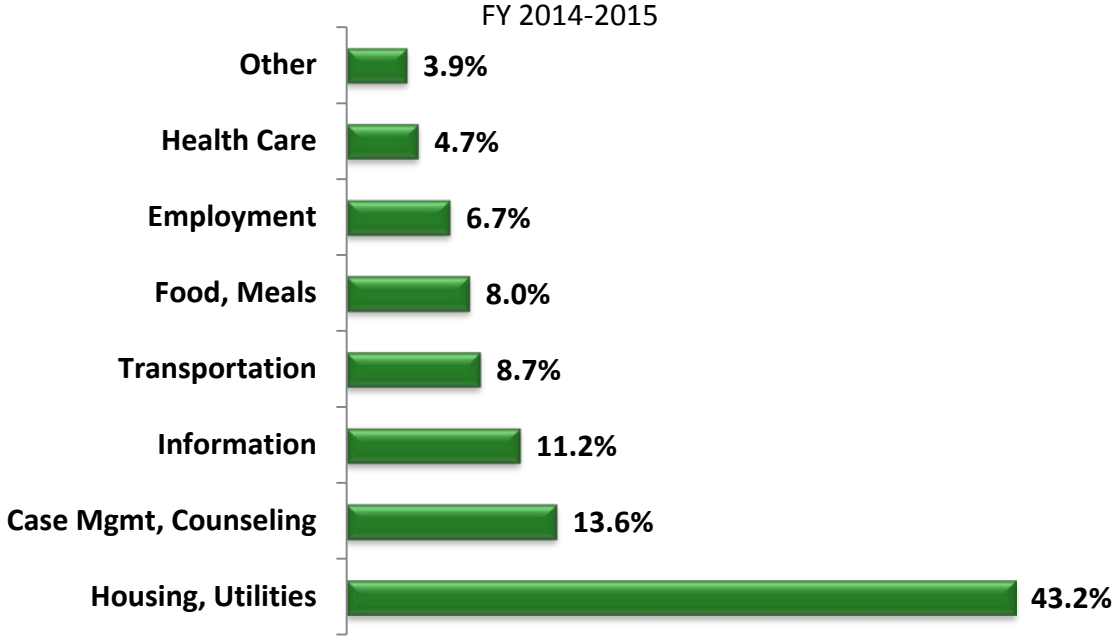
Metropolitan Social Services Direct Services Customer Data

Front Desk Survey

From July 1, 2014 through June 30, 2015, people who visited Metropolitan Social Services to request assistance were asked to identify their needs through a voluntary and anonymous survey. Chart FD-1 reflects the frequency that customers identified their primary need. During that time period, 43.2% of needs identified were for housing and utility assistance. That pattern is consistent with the 41.4% of needs reported in the previous Community Needs Evaluation for the period July 1, 2013 through June 30, 2014.

Chart FD-1: Needs Identified by Customers at MSS Front Desk

FY 2014-2015



Metropolitan Social Services provides a range of services for Davidson County residents who are in need. These services promote positive change for individuals and families during times of crisis and economic hardship. Metropolitan Social Services is guided by a 7-member Social Services Board of Commissioners. This independent, voluntary commission is appointed by the Mayor and is confirmed by the Metropolitan Council, with Board members appointed to 5-year terms.

Services include Information & Referral, Counseling, Case Management, Homeless Services, Senior Nutrition, Homemaker Services and Burial/Cremation Services.

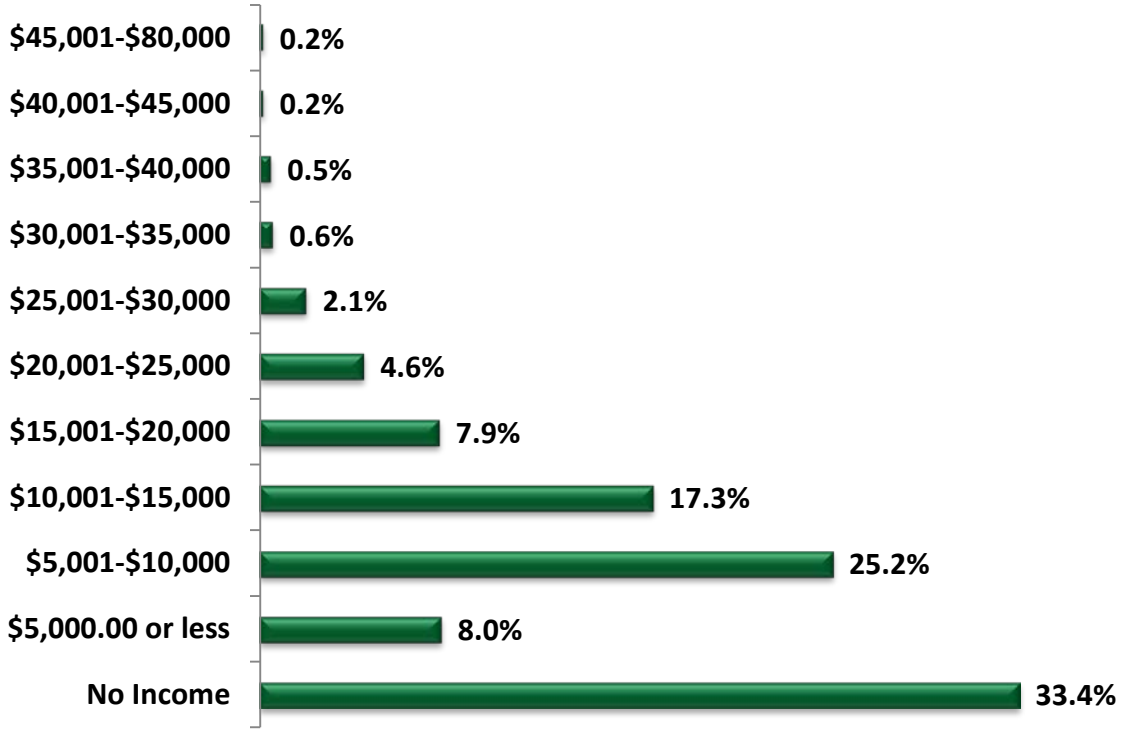
This section includes data on the 6,258 customers served by Metro Social Services from July 1, 2014 through June 30, 2015, with the number of people served in each program, using data from the MSS customer database:

Family Support	**4,263**
Nutrition-Congregate	**819**
Nutrition-Home Delivered	**523**
Nutrition-Supplements	**330**
Homemaker Services-Adult	**158**
Homemaker Services-Children (Households)	**32**
Burial-Traditional	**102**
Burial-Cremation	**31**

Chart SS-1 shows the income levels for customers served through the MSS Family Support Program, with 84.0% having incomes below $15,000.

Chart SS-1: Income Categories for MSS Customers

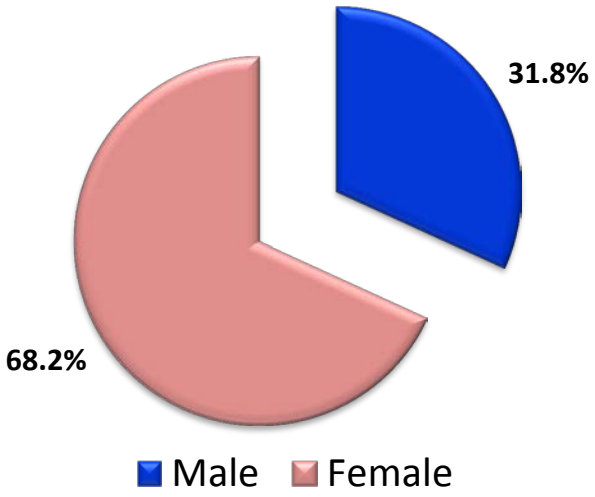
FY 2014-2015



Source: Metropolitan Social Services

Chart SS-2 shows that 68.2% customers in the Family Support Program were female.

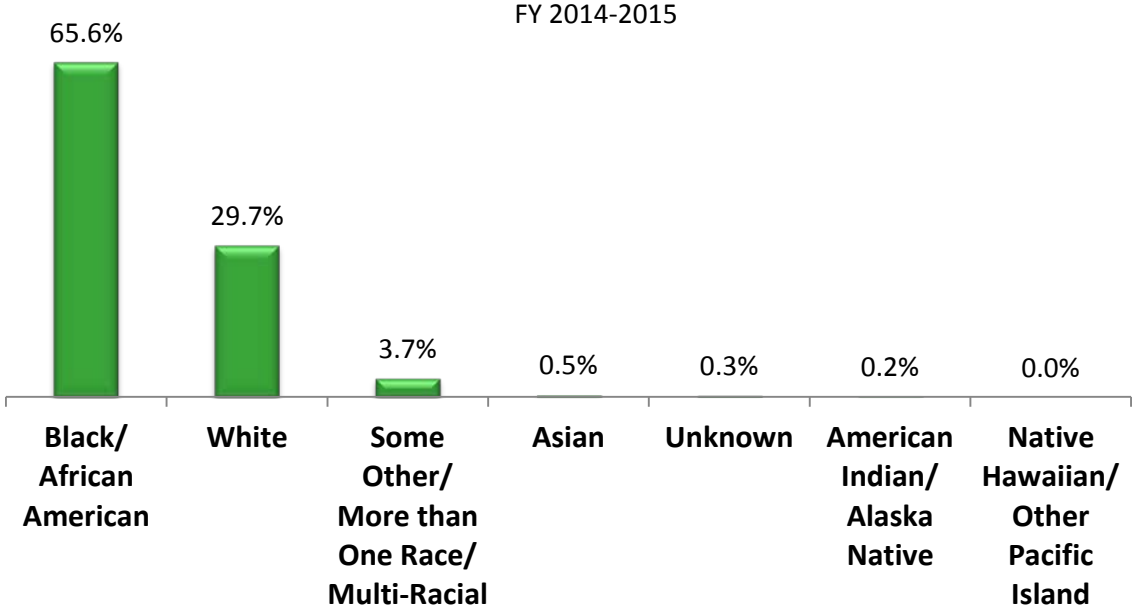
Chart SS-2: MSS Customers by Gender
FY 2014-2015



Source: Metropolitan Social Services

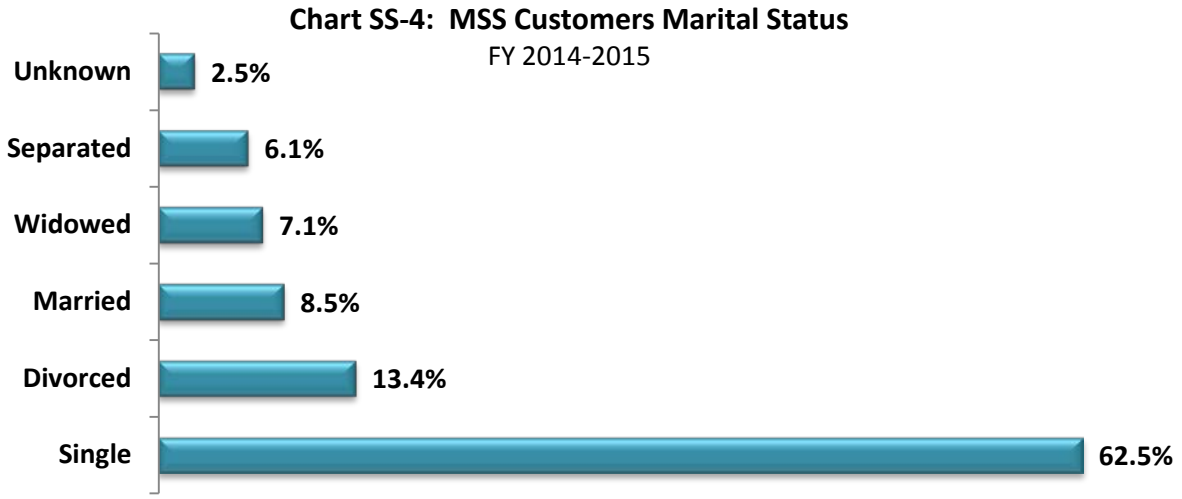
Chart SS-3 shows the racial distribution of Family Support Services customers, with 65.6% being Black or African American.

Chart SS-3: MSS Customers by Race
FY 2014-2015



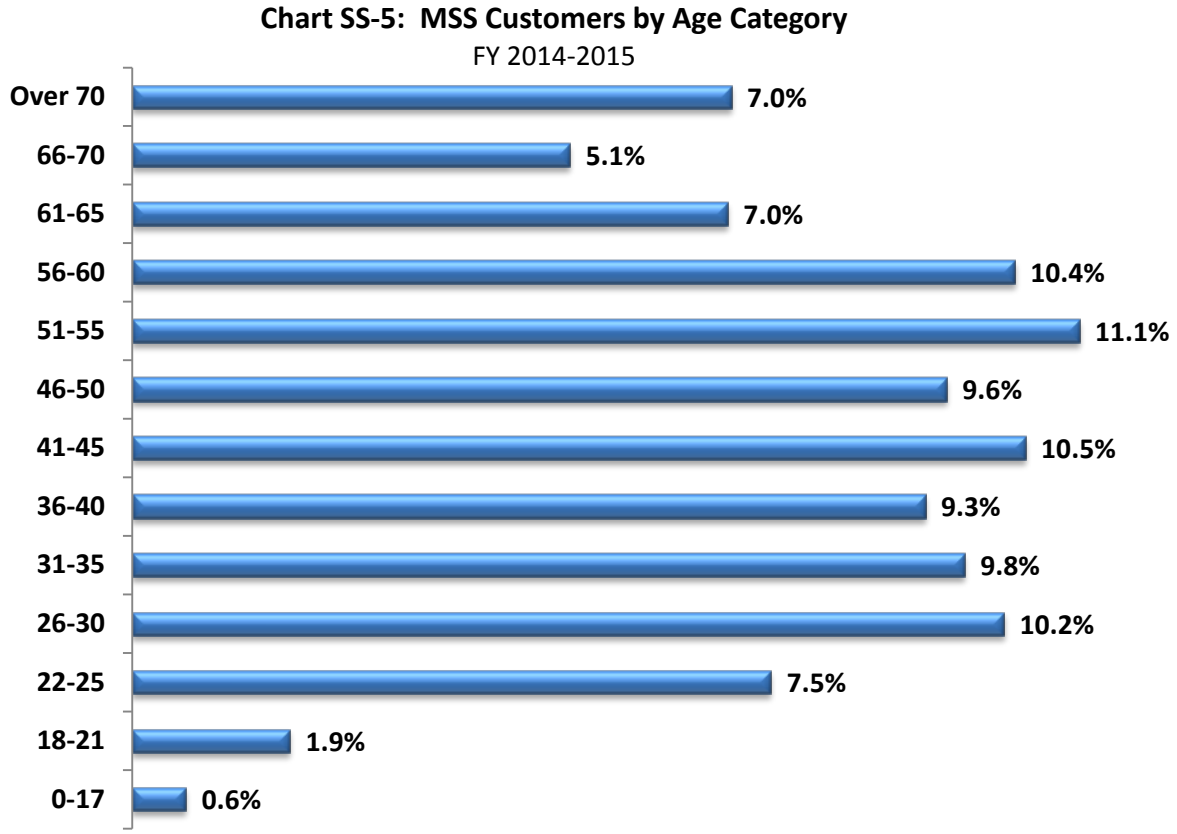
Source: Metropolitan Social Services

Chart SS-4 shows that most customers in the Family Support Program are single (62.5%).



Source: Metropolitan Social Services

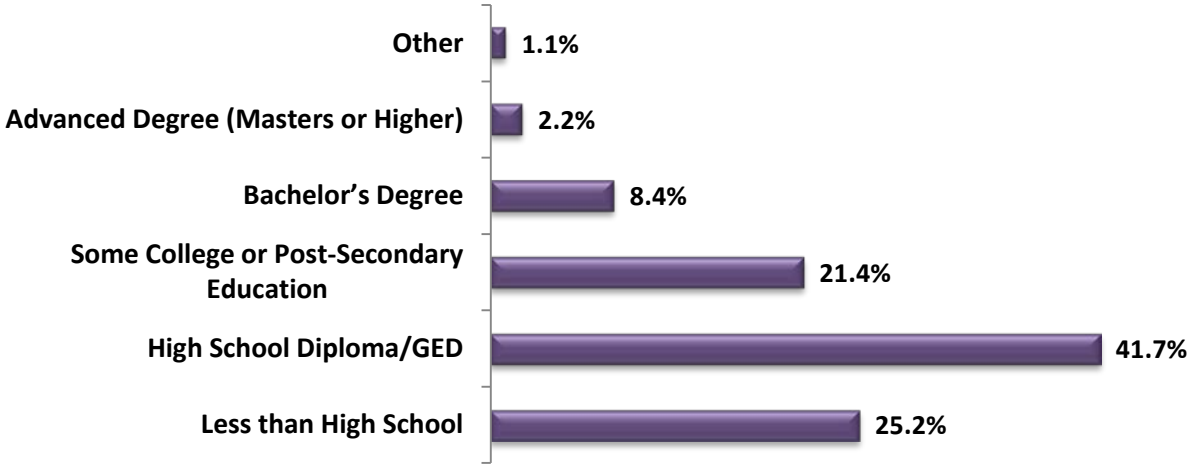
Chart SS-5 shows the age categories of customers in the Family Support Services Program, with the largest percent ages 51-55 followed closely by 41-45 and 56-60.



Source: Metropolitan Social Services

The Educational Attainment levels for MSS Family Support Services customers are shown in Chart SS-6, with ¾ of customers having at least a high school education.

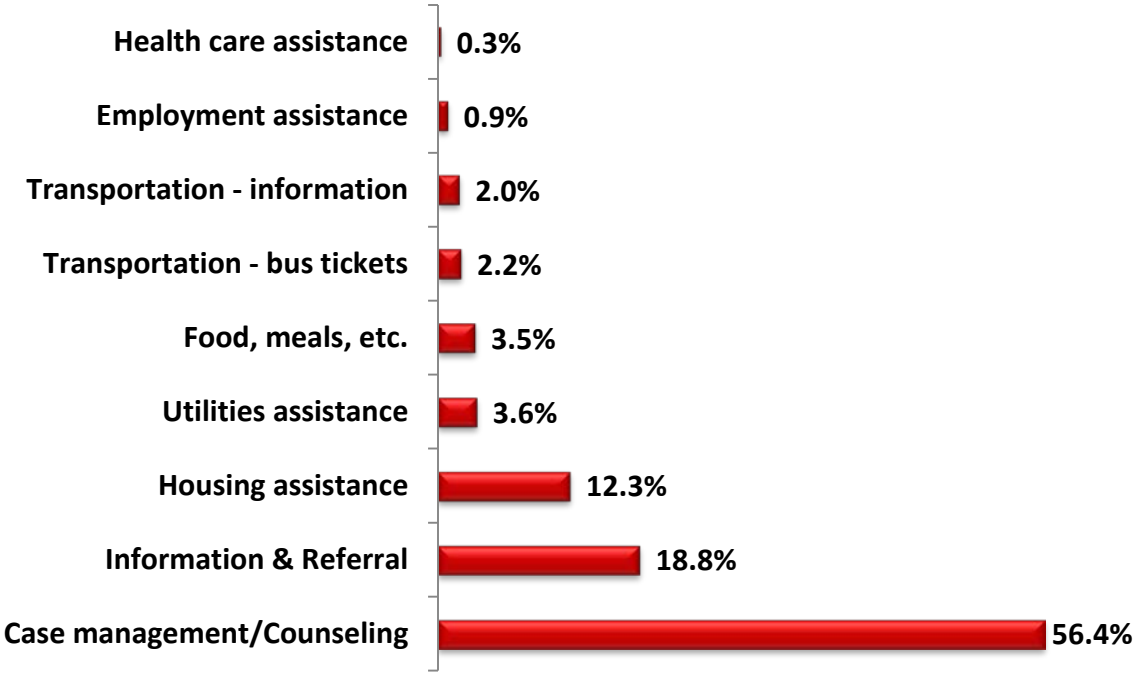
Chart SS-6: MSS Customers Educational Attainment
FY 2014-2015



Source: Metropolitan Social Services

Chart SS-7 shows the categories of need identified by Family Support Services customers, with most receiving case management/counseling services.

Chart SS-7: MSS Customers by Need
FY 2014-2015

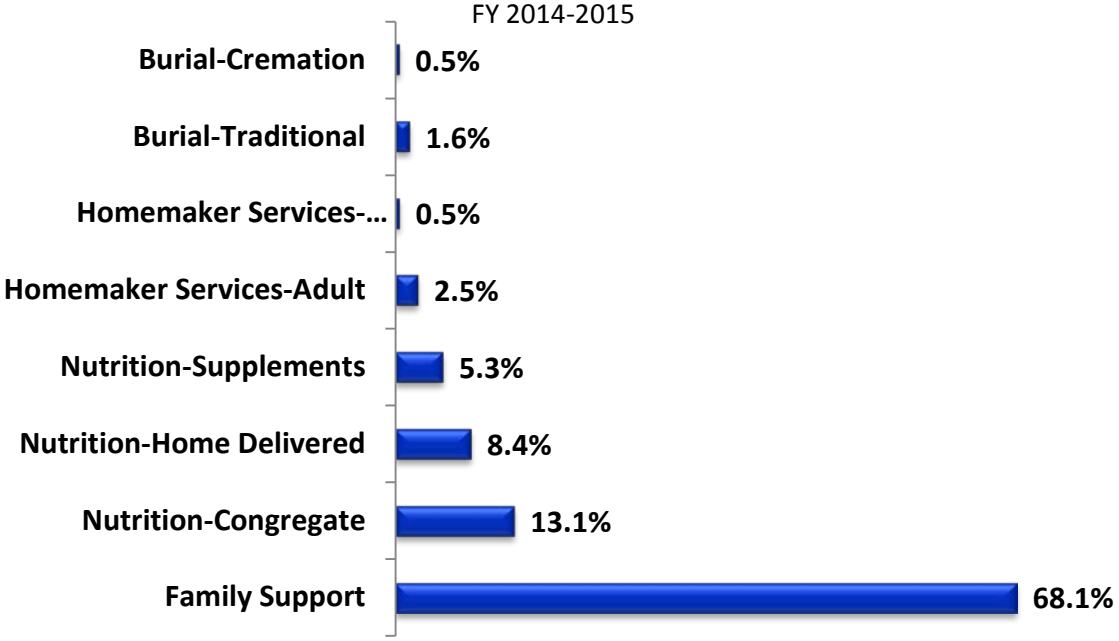


Source: Metropolitan Social Services

Chart SS-8 shows the distribution of customers served across the MSS direct service programs. The largest number is in the congregate nutrition program.

Chart SS-8: Percent of MSS Customers by Program

FY 2014-2015



Source: Metropolitan Social Services

United Way of Metropolitan Nashville 2-1-1

United Way is working to advance the common good by focusing on Education, Financial Stability and Health. Research indicates that these are the building blocks for a good life – a quality education that leads to a stable job, enough income to support a family through retirement, good health and safe living conditions.

United Way's goal is to create long-lasting changes – pathways toward independence and stability – that prevent problems from happening in the first place.

United Way's 2-1-1 Helpline provides information and referral for community services in Davidson County and across Middle Tennessee 7 days a week, 24-hours a day. 2-1-1 was developed by United Way of Metropolitan Nashville and its partners in 2004. 2-1-1 serves as a central point of information for individuals and organizational representatives to identify specific resources to help meet their needs.

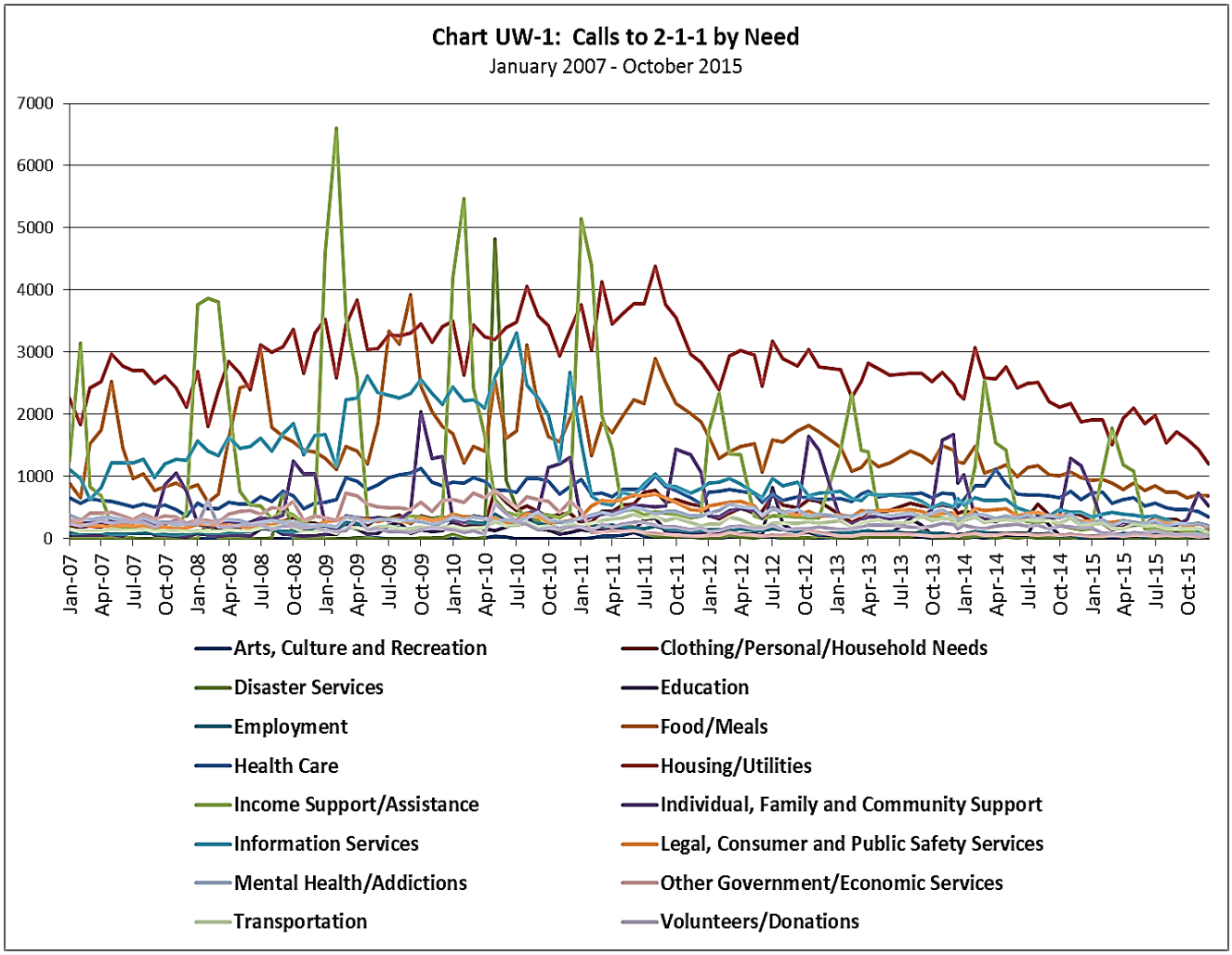
For more information about 2-1-1: http://uw211.org

2-1-1 continues to track needs identified by clients and referrals made to organizations that could provide assistance.

Below is a list of categories of needs with descriptions about each.

Category	Resources Included
Arts, Culture, and Recreation	Camps, computer and technology classes, cooking classes, parks, recreational facilities
Clothing/Personal/Household Needs	Appliances, clothing, diapers, furniture
Disaster Services	Disaster relief/recovery organizations, FEMA
Education	Adult education, local school boards, Head Start, GED, school supplies
Employment	Career centers, training and employment programs
Food/Meals	Food pantries, SNAP/Food Stamps, Meals on Wheels, WIC
Health Care	Dental care, glasses, health insurance, hospitals, public health, sliding-scale clinics
Housing	Affordable housing, homebuyer counseling, mortgage and rent assistance, temporary shelter, transitional housing
Income Support/Assistance	Credit counseling, Free tax preparation (VITA), Medicaid/TennCare, Social Security, TANF, Unemployment
Individual, Family and Community Support	Adult day programs, Adult Protective Services, case management, Children's Protective Services, holiday assistance programs, parenting classes
Information Services	2-1-1 providers, 3-1-1, government hotlines, libraries, specialized information and referral
Legal, Consumer and Public Safety Services	9-1-1, child support assistance/enforcement, driver licenses, legal services, police
Mental Health/Addictions	Crisis intervention, domestic violence hotlines, mental health facilities
Other Government/Economic Services	Public works, waste management
Utility Assistance	Discounted telephone service, utility assistance
Transportation	Gas money, medical appointment transportation, travelers assistance
Volunteers/Donations	Donation pickups, volunteer opportunities

Chart UW-1 shows the calls to 2-1-1 by the needs identified by callers from January 2007 through October 2015. Overall, the peak of calls was during the Great Recession and the slow recovery that followed.

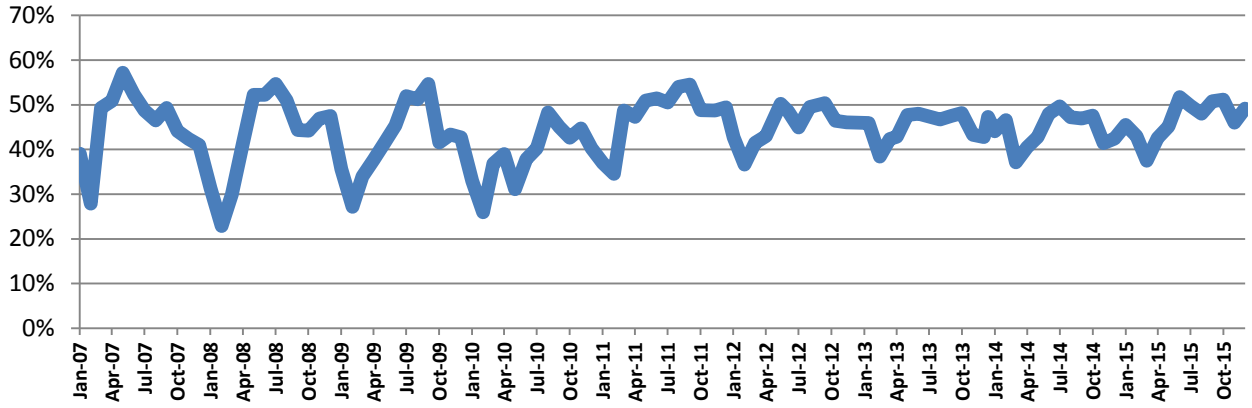


Source: United Way of Metropolitan Nashville

Basic need calls to 2-1-1 requested assistance with food, housing and utilities. The percent of basic call as a percentage of all needs is shown in Chart UW-2.

Chart UW-2: Basic Needs as a Percent of All Needs by Month

January 2007 - October 2015

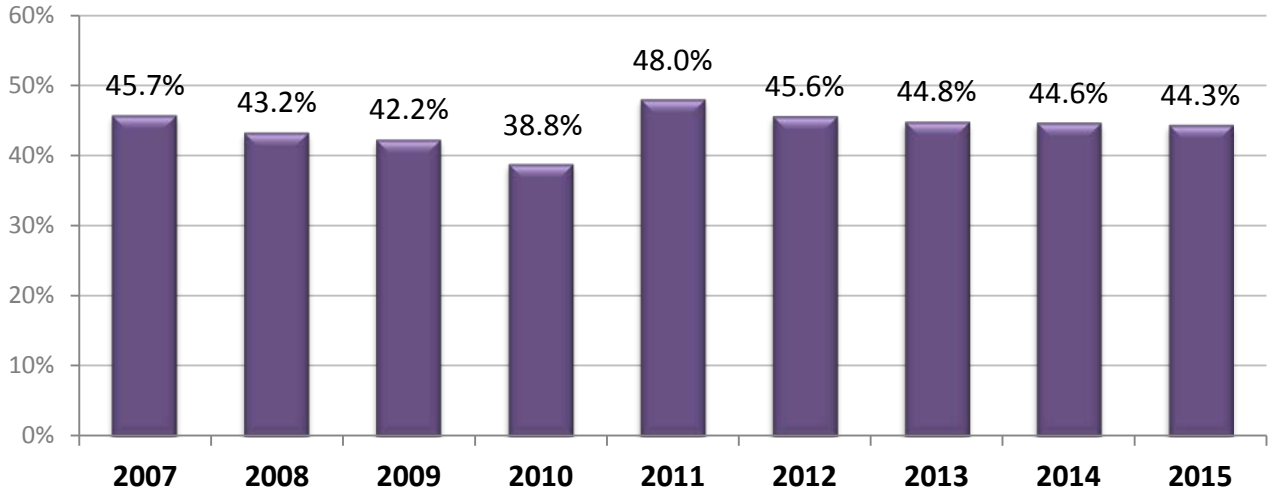


Source: United Way of Metropolitan Nashville

Chart UW-3 shows the percent of basic needs as a percent of all calls by yearly totals. During the nine-year period (2007-2015), an average of 44.2% of calls were for basic needs. This ranged from a low of 39% in 2010 to a high of 48% in 2011. It is likely that the percent was lower in 2010 because Nashville's flood occurred year, and a high volume of calls were related to disaster services.

Chart UW-3: Basic Needs as a Percent of All Needs by Year

2007-2015

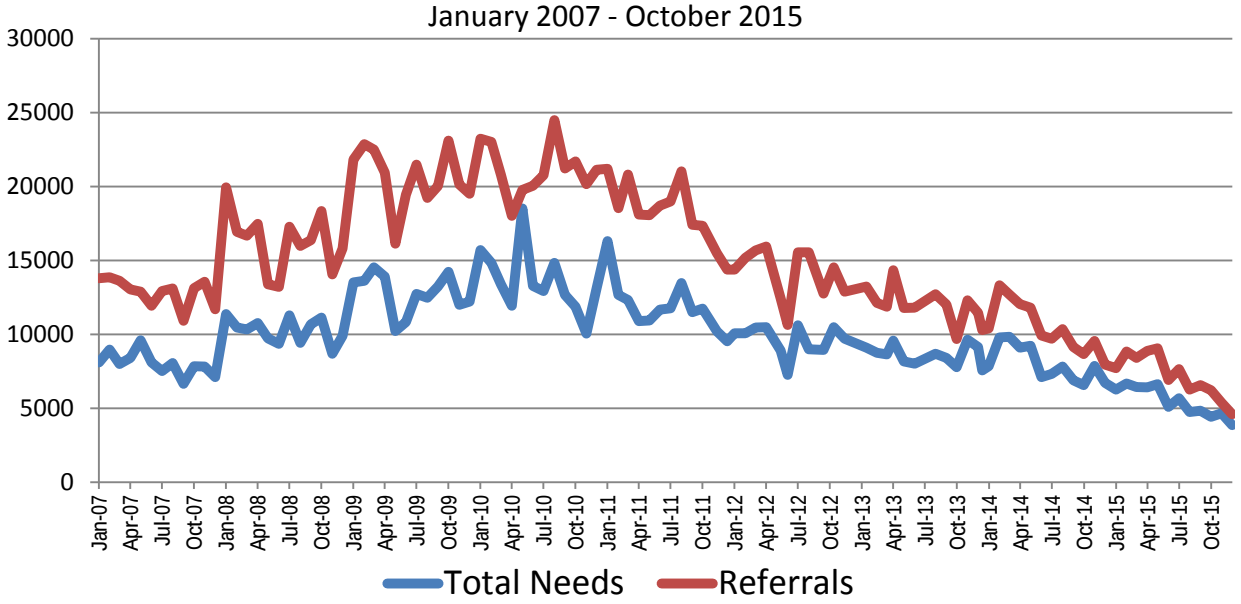


Source: United Way of Metropolitan Nashville

Chart UW-4 reflects the numbers of calls received and the number of referrals made each month since January 2007. The peak in calls followed the May 2010 Nashville flood and to a lesser extent the Great Recession that began at the end of 2007 and ended in 2009, followed by a lengthy recovery period.

Chart UW-4: Calls to 2-1-1, by Needs and Referrals

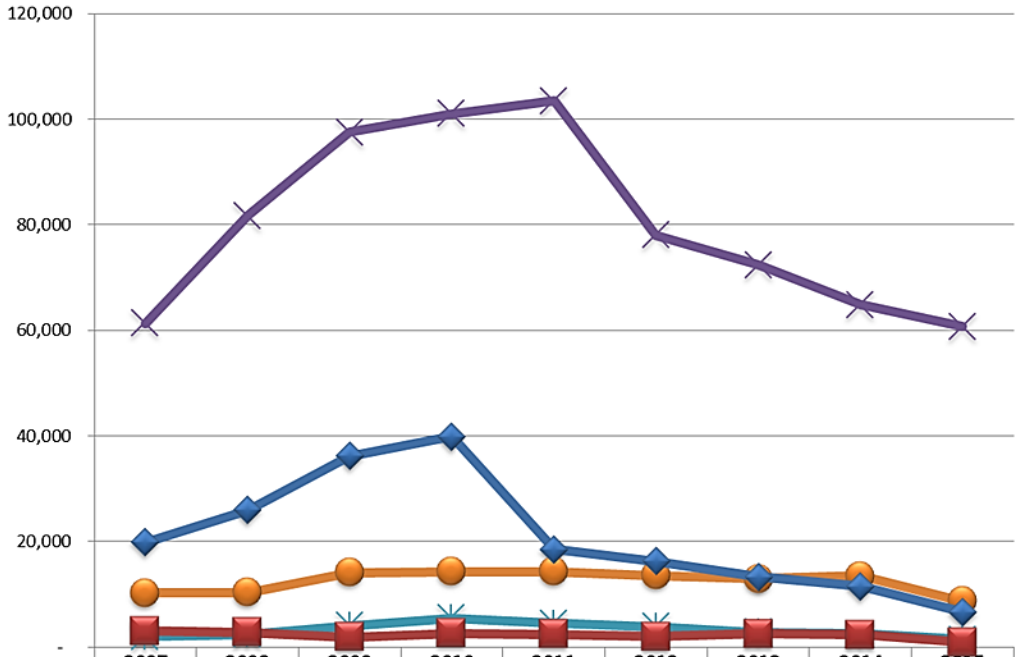
January 2007 - October 2015



Source: United Way of Metropolitan Nashville

Chart UW-5 shows the top six categories for calls from 2007 through 2015, with assistance with Housing/Utilities the most frequently identified need every year. For most of those years, the need for Food/Meals was identified second most frequently.

Chart UW-5: 2-1-1 Calls, Top 5 Categories
2007-2015

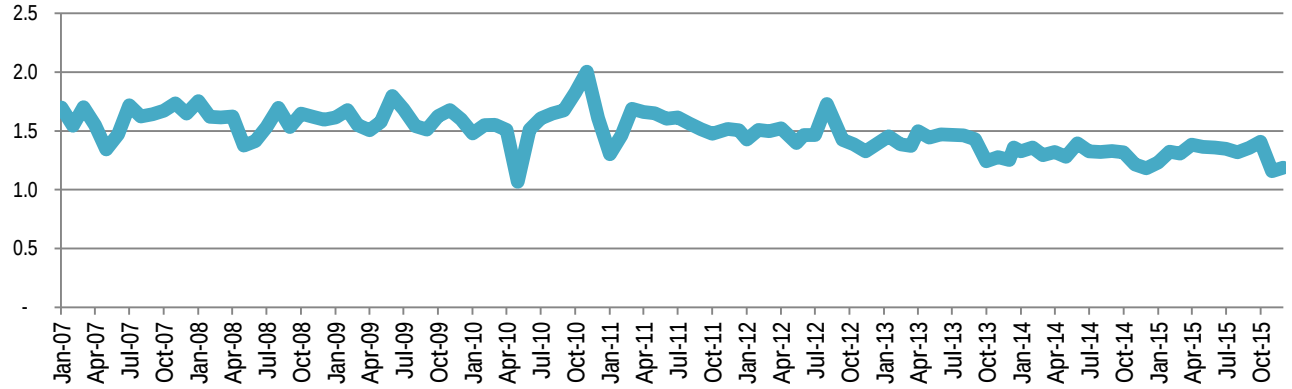


	2007	2008	2009	2010	2011	2012	2013	2014	2015
Basic Needs	61,313	81,725	97,467	101,050	103,395	78,047	72,407	64,830	60,702
Education & Employment	1,982	2,424	3,991	5,440	4,487	3,809	2,788	2,533	1,440
Health	10,199	10,276	14,104	14,237	14,306	13,506	12,961	13,472	8,671
Other referral lines & Govt Services	19,805	25,948	36,200	39,876	18,454	16,278	13,282	11,447	6,668
Volunteering & Donations	3,016	2,809	1,856	2,611	2,442	2,007	2,461	2,336	909

Source: United Way of Metropolitan Nashville

Chart UW-5 shows the number of referrals made per need identified from January 2007-October 2015. The typical number has averaged around 1.5 referrals per need, peaking at about 2 referrals per need shortly after Nashville's flood.

Chart UW-5: Referrals Per Need
2007-2015



Source: United Way of Metropolitan Nashville

Aging & Disability

Key Findings

- Many Americans, especially older adults are not financially prepared for retirement, with almost 20% of persons age 55-64 having no savings or pension. In addition, 1/3 of working age adults have no pension or savings in preparation for retirement, so that as more people reach retirement age they will be less able to meet their needs.

- Using the Supplemental Poverty Measure, a greater number of older adults are in poverty than identified by Official Poverty Measure. Supplemental poverty measures account for out-of-pocket medical expenses that are generally higher for older persons and persons who have disabilities.

- Social Security benefits are the primary source of income for many older adults. The average Social Security benefit in 2015 was $1,328 a month or $15,936 per year. The Social Security Administration recently announced there would not be a cost of living increase in 2016 for beneficiaries.

- Tennessee is one of three states with the highest percentages of persons with a disability. Mississippi and Alabama have higher prevalence of persons with disabilities. Southern states had higher percentages of persons with a disability than states in the Midwest or west.

- Enrollment in Home and Community Based Services continues to increase in TennCare Choices. Since TennCare Choices implementation, funding and enrollment in nursing home care has steadily declined.

- The age-related conditions of Alzheimer's disease and other dementias will increase significantly during the coming years unless a medical intervention is discovered for prevention or treatment. Alzheimer's and related dementias are the 6th leading cause of death for people over age 65 in Tennessee.

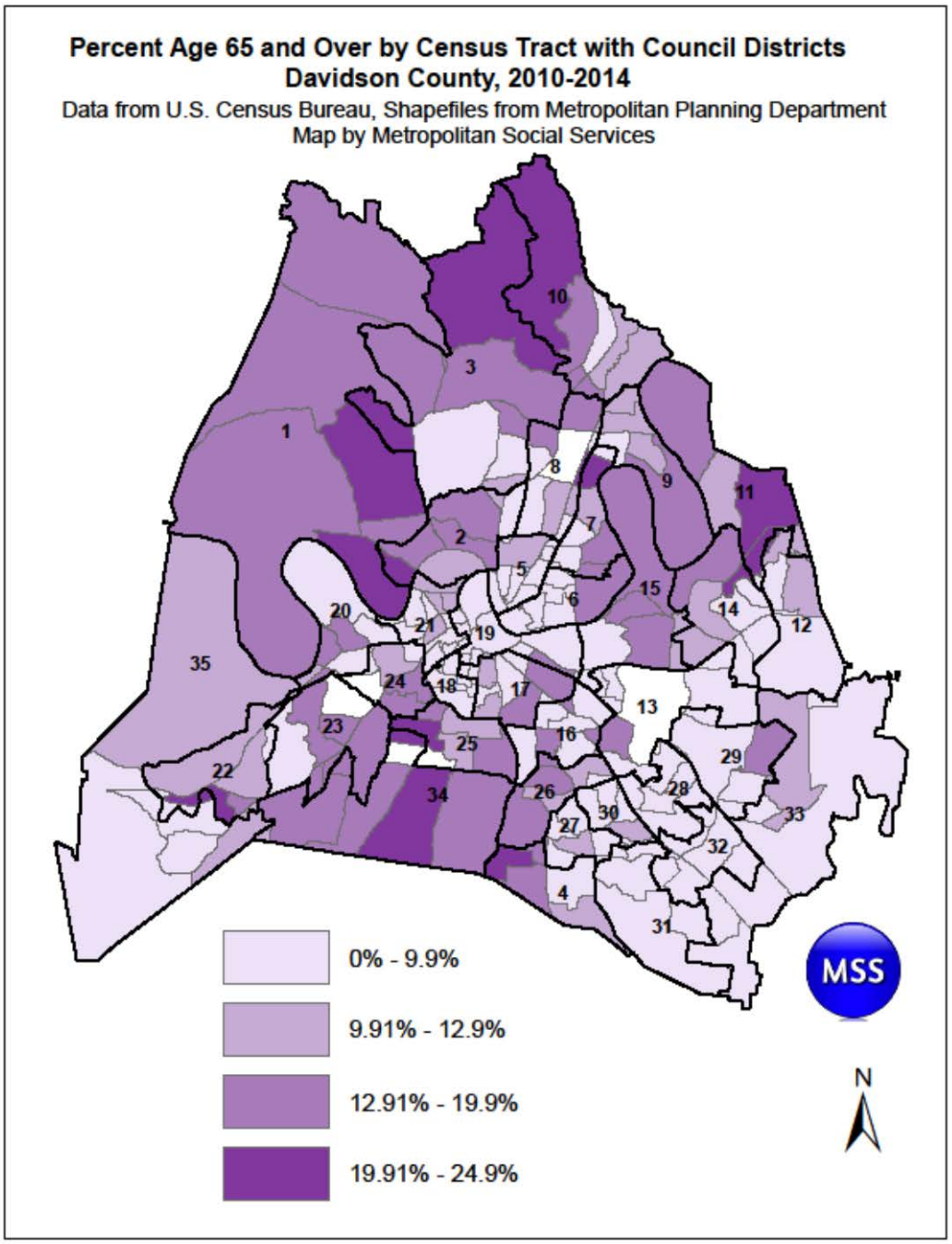
- Falls are a major cause of injuries in older adults. Over a million older adults fall each year resulting in increase in emergency room visits, higher medical costs and more hospitalizations. Many falls are caused by lower body weakness, ambulatory difficulties, balance, vision problems and foot pain.

- Elder abuse affects one in ten older adults. Elder abuse includes physical, emotional, verbal and sexual assault. Financial exploitation of older adults is increasing. Federal, state and local policies and strategies are being developed to address the issues related to elder abuse and financial exploitation.

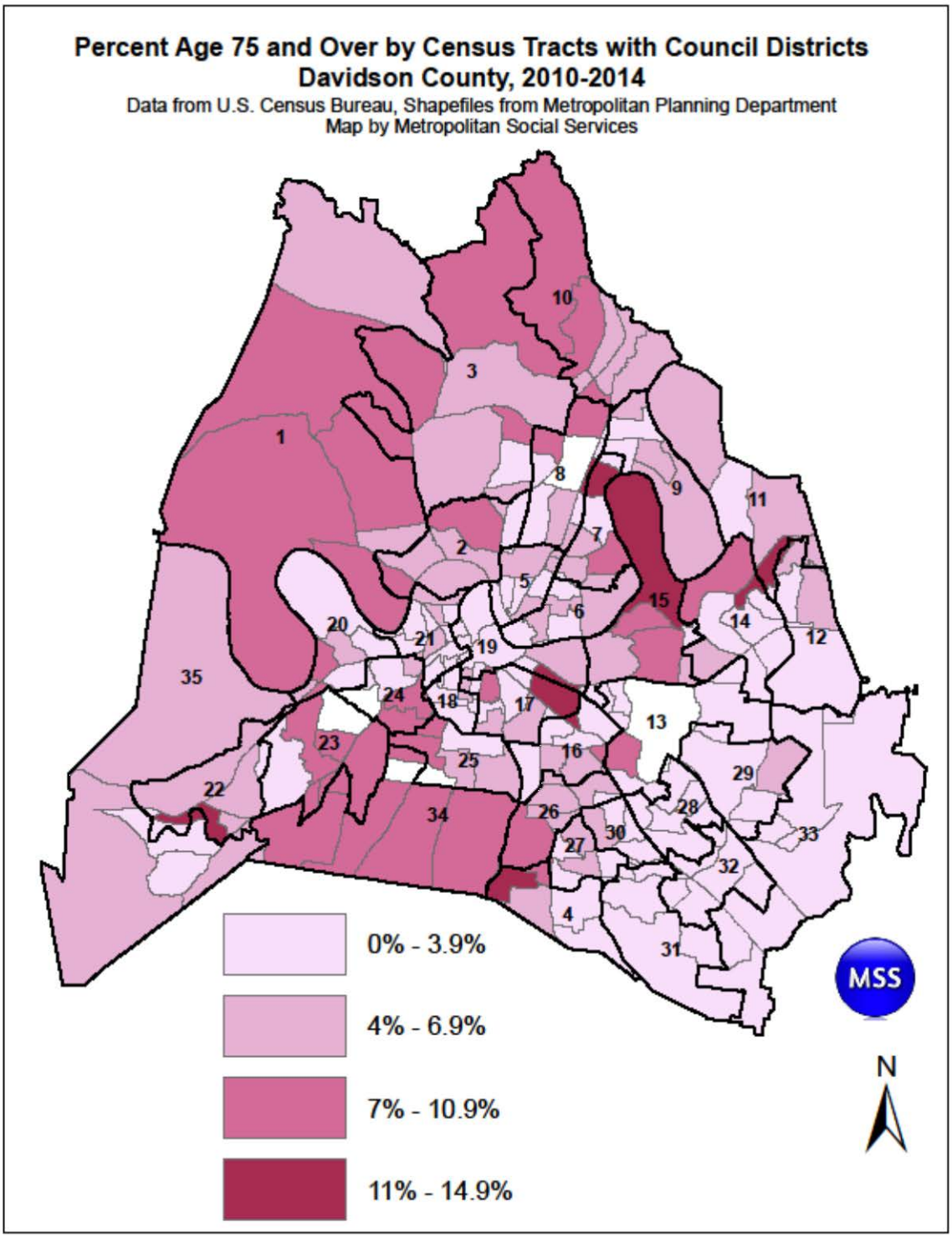
An Aging Population – Davidson County's Senior Adults

As noted in the previous Community Needs Evaluation, the number of Davidson County's population of persons age 65 will continue to increase as the Baby Boom population continues to age. The number of people in

Davidson County who are over age 65 is projected to increase from an estimated 75,199 persons in 2015 to 150,484 by the year 2050. The map below, with 2010-2014 data from the U. S. Census Bureau, reflects where people over 65 reside, generally the suburban and peripheral areas of Davidson County with fewer in the southeast area.

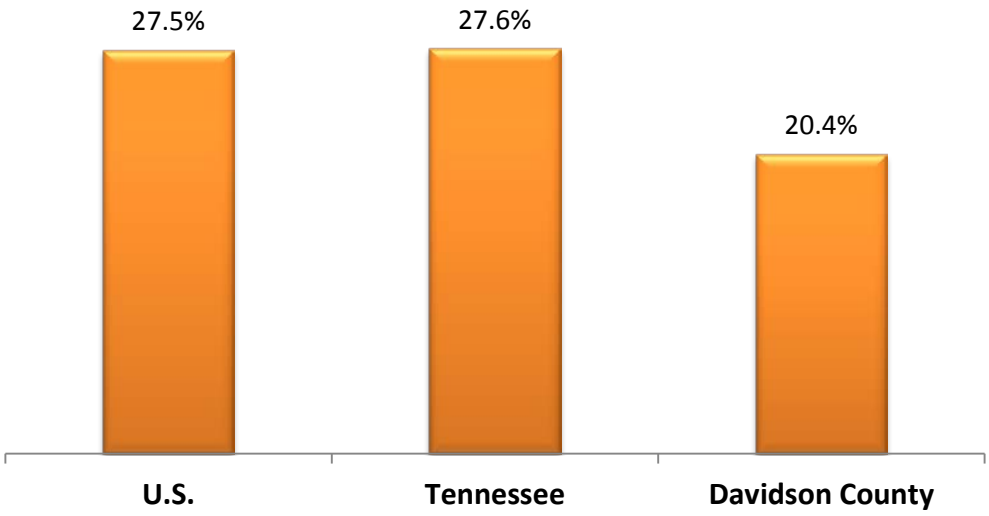


The map below shows where persons age 75 and over lived during the 2010-2014 period in Davidson County by Council Districts, showing a similar concentration in the suburban areas, other than southeastern Davidson County.



One in five households in Davidson County contains at least one person age 65 and over. Davidson County's percentage of households with at least one person age 65 and over is lower than the U.S. and Tennessee. Davidson County has a lower percentage of seniors who live alone at 8.6%, compared to 10.3% for both Tennessee and the United States.

Chart AD-1: Percentage of Households with at least one person Age 65 and Over
U.S., Tennessee, Davidson County 2014



Source: 2014 American Community Survey, Table DP02

Older Adults Well-Being

Gallup-Healthways Well-Being Index report *State Well-Being Rankings for Older Americans* indicates that Tennessee ranks 43rd out of the 50 states in overall well-being for older adults. The report measures five elements of well-being; purpose, social, financial, community and physical for older Americans.
The State of Well-Being Rankings measured the comparative well-being of Americans age 55 and older. The report measured several indicators of well-being such as fresh produce consumption, exercise, obesity, depression, smoking, health insurance coverage and having a personal doctor. According to the report, older Americans have better access to healthcare, eat more fresh produce and smoke less than younger persons smoke.
http://www.well-beingindex.com/hubfs/Well-Being_Index/2014_Data/Gallup-Healthways_State_of_American_Well-Being_Older_Americans_Rankings.pdf

Adverse Health Outcomes for Food Insecure Older Adults

The Spotlight on Senior Health Adverse Health Outcomes of Food Insecure Older Americans report indicates that between 2001 and 2011 the number of food insecure seniors doubled. Race, ethnicity, employment status and income were associated with food insecurity for seniors.
The adverse health effects for older adults who were food insecure included deficient nutrient intake and lower calorie consumption. These deficiencies had negative health consequences for older adults such as an increased likelihood of heart attack, asthma, congestive heart failure, activities for daily living limitations and coronary heart diseases.
http://www.nfesh.org/wp-content/uploads/2013/03/SeniorLiteratureReport-Final-Draft.pdf

Aging and Retirement

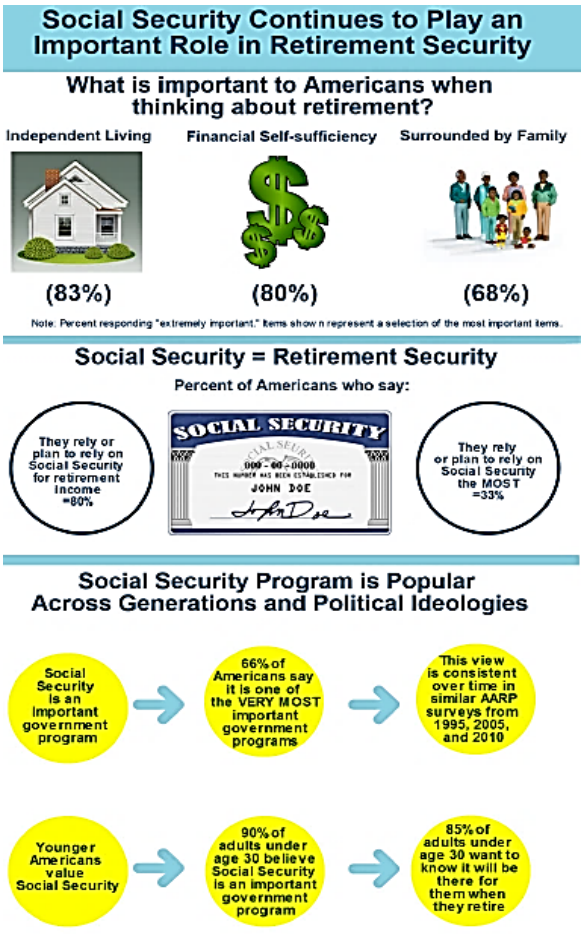
As persons age and retire, there is a growing concern of how financially unprepared Americans are for retirement. A *Report on the Economic Well-Being of U.S. Households in 2013* conducted by the Federal Reserve System indicates that 1/3 of non-retired Americans reported having no retirement savings in preparation for retirement. Among persons aged 55 to 64, nearly 19% of persons surveyed reported having no savings or pension plan as they neared retirement age. The Social Security Administration estimates that those persons would need between 60-90% of the preretirement income to maintain their current standard of living.

With life expectancy, increasing for both men and women coupled with increased healthcare costs, retirement savings are increasingly important. Persons nearing retirement age will have more years of expenses to cover, along with higher out-of-pocket health care cost to cover with smaller savings or pensions. A decline in interest rates earned on savings accounts has negatively affected wealth accumulation, resulting in a decline in retirement income compared to previous decades. In addition, a study by the National Institute for Retirement indicates that retirement preparedness is generally getting worse for younger households.
https://www.americanprogress.org/issues/economy/report/2015/01/26/105394/the-reality-of-the-retirement-crisis/
http://www.nirsonline.org/storage/nirs/documents/Retirement%20Savings%20Crisis/retirementsavingscrisis_final.pdf

In a report *The Inefficiencies of Existing Retirement Savings Incentives* published by the Center for American Progress 1/3 of working age Americans are reported to have no retirement saving or pension and more than half of all working households may be at risk of reducing their standard of living in retirement.
https://cdn.americanprogress.org/wp-content/uploads/2015/10/29075443/ExistingRetirementIncentives-brief.pdf

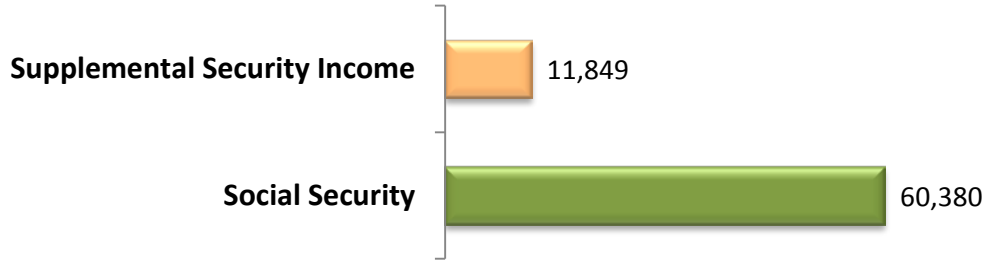
Social Security is the primary source of income for millions of households across the country, especially for low-income persons. In Davidson County, thousands of households receive Social Security. Supplemental Security Income is for eligible disabled adults and children with limited income and resources. Supplemental Security Income benefits are also payable to people age 65 and over without disabilities who have limited income and assets.
https://www.ssa.gov/pubs/EN-05-11000.pdf

The graphic at right from AARP shows the importance of Social Security benefits to many Americans.



The chart below shows the number of households in Davidson County that receives Social Security and Supplemental Security Income.

Chart AD-2: Number of Households receiving Social Security and Supplemental Security Income
Davidson County, 2014



Source: U.S. Census Bureau, 2014 American Community Survey, Table DP03

Aging in Place

Studies continue to show that most older adults want to age in place (continue to live in their own homes or communities). A research report from the AARP Public Policy Institute and the National Conference of State Legislatures, *A State Survey of Livability Policies and Practices, notes* that the degree to which these seniors can participate in community life and receive needed services would be affected by how communities are designed. There are three areas in which policy changes are recommended at the state and local levels:

1. Land Use – integrating land use and transportation, transit-oriented development and multiple uses for facilities.
2. Transportation – complete streets, pedestrian safety, rural access (for smaller cities), coordination between human services and transportation services and modified laws for volunteer drivers.
3. Housing – affordability (in areas where services and transportation are available and affordable), building standards that promote accessibility (so as mobility and other issues occur, they can remain in their homes longer) and models to promote services in the homes.

http://www.ncsl.org/documents/transportation/Aging-in-Place-2011.pdf

Aging in Place: A Toolkit for Local Governments from the Community Housing Resource Center and the Atlanta Regional Commission provides a number of ways that communities can create senior-friendly communities that promote aging in place. It also notes that aging in place is the most cost-effective and desirable option for seniors and works best as part of a comprehensive and holistic approach design to support the people and communities that are aging.

Health Care/House Care

- Coordinate Healthcare and Supportive Services with Housing
- Expand Local Aging Networks
- Increase Medicaid funding for Community Based Care

Environmental

- Tax Deferrals
- Tax Postponement
- Property Tax Assistance
- Property Tax Caps
- Homestead Exemptions
- Limiting Assessed Values
- Property Tax Credits
- Deferred Payment Loan Programs
- Predatory Lending Protections
- Reverse Mortgages
- Home Maintenance Contracts
- Independent Advisory Services
- Reduced Utility Payments
- Code Enforcement
- State Tax Credits
- Create a Variety of Housing Types
- Incorporate Accessibility Standards in New Construction
- Incorporate Easy Living Standards in New Construction
- Walkability
- Strategies for Improving Transportation Services

Planning and Zoning

- Diversify Housing Stock
- Change zoning to encourage diverse uses
- diverse housing types and increased densities
- Modify existing stock to fit diverse housing needs
- Create a Political Constituency

http://www.aarp.org/content/dam/aarp/livable-communities/plan/planning/aging-in-place-a-toolkit-for-local-governments-aarp.pdf

Information about how to create aging in place homes and communities is provided by a variety of sources, including the National Home Builders Association, particularly regarding aging in place remodeling, aging and accesibility design/building and other solutions.
http://www.nahb.org/

Age and Poverty

The chart below shows the Median Household Income for persons age 65 and over for the U.S. and select counties in Tennessee. The median household income for all households in Davidson County is $47,993, although it is lower for persons age 65 and over, as shown in Chart AD-3, the median household income for people age 65 and over is $42,417.

Chart AD-3 shows the median household income for persons age 65 and over in the U.S. and select Tennessee Counties. Davidson County has the highest median household income for persons age 65 and over compared to other urban Tennessee counties as well as the U.S.

Chart AD-3: Median Household Income for Persons Age 65+
U.S. and Selected Tennessee Counties, 2014

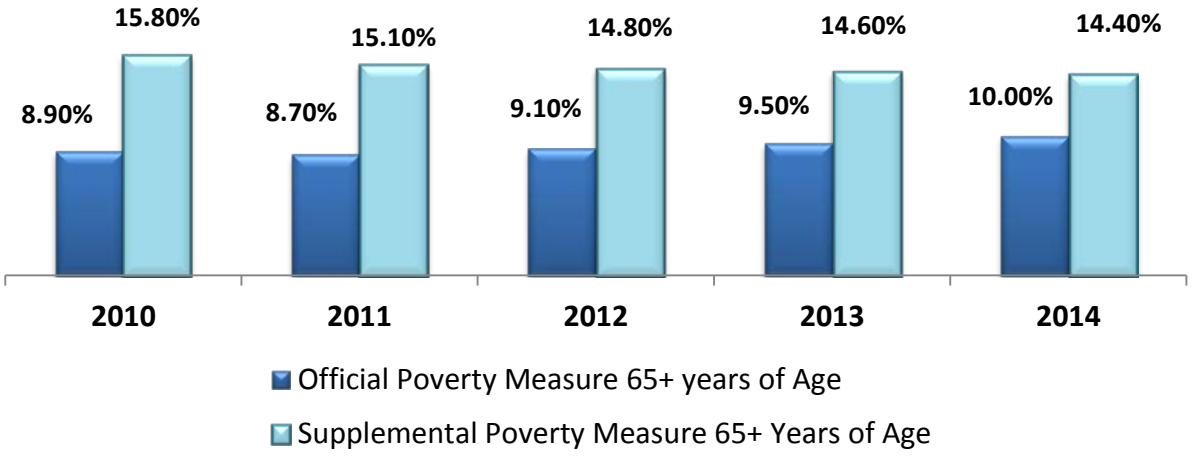
Source: U.S. Census Bureau, 2014 American Community Survey

Supplemental Poverty Measure (SPM) compared to Official Poverty Measure by Age

The Supplemental Poverty Measure (SPM) uses an alternative way to measure poverty by considering government benefits programs such as Supplemental Nutrition Assistance Program (SNAP), housing subsidies, low-income energy assistance programs, etc. The SPM also considers out-of-pocket medical expenses that are generally higher for persons age 65 and over while the Official Poverty Measure does not factor in these costs.

The SPM, which considers additional factors, indicates that there are even more older adults in poverty than when measured using the official poverty measure that was created about 50 years ago. There was a .05% increase in the official measure for this group and a .02% decline in the SPM between 2013 and 2014. No local data is available for the SPM. Chart AD-4 compares the rate of poverty for people 65 and over by the Official Poverty Measure and the Supplemental Poverty Measure.

Chart AD-4: Percentage of Persons Age 65 and over by Poverty Status
Official Poverty Measure and Supplemental Poverty Measure, U.S. 2010-2014



Source: The Supplemental Poverty Measure, 2014 Current Population Reports
http://www.census.gov/content/dam/Census/library/publications/2015/demo/p60-254.pdf

Disability Status and Characteristics

According to the 2014 American Community Survey, Davidson County had 78,745 residents with a disability (11.9%). Females were slightly more likely to have a disability at 12.6% than males at 11.2%. Black or African American residents were more likely to have a disability at 14.2% than white at 11.9% or Hispanic at 6.0%.

Studies consistently find that disability rates rise with age. After age, 65 people are at the highest risk for disease and disability, according to a National Institutes of Health 2010 report. The report indicates that disability prevalence increases rapidly with age, which is also consistent with data from the American Community Survey.

According to the 2014 American Community Survey (Table S1810), 36% of people who are age 65 and over have a disability. In Tennessee, 39.4% of persons age 65 and over has a disability, compared to 35.5% of Davidson County residents age 65 and over.

The American Community Survey identifies disabilities as hearing, vision, cognitive, ambulatory, self-care and independent living difficulties. ACS further measures and defines these disabilities as:

- **Hearing difficulty**—deaf or having serious difficulty hearing.
- **Vision difficulty**—blind or having serious difficulty seeing, even when wearing glasses.
- **Cognitive difficulty**—because of a physical, mental, or emotional problem, having difficulty remembering, concentrating, or making decisions.
- **Ambulatory difficulty**—having serious difficulty walking or climbing stairs.
- **Self-care difficulty**—having difficulty bathing or dressing.
- **Independent living difficulty**— because of a physical, mental, or emotional problem, having difficulty doing errands alone, such as visiting a doctor's office or shopping.

Because the likelihood of disability increases with age, the issues of aging and disability are connected. The table below shows the types of disabilities and the percent by age category for Davidson County residents, which reflects the pattern an increasing rate of disabilities with age, using data from the 2014 American Community Survey.

Age Category	Hearing Difficulty	Vision Difficulty	Cognitive Difficulty	Ambulatory Difficulty	Self-care Difficulty	Independent Living Difficulty
Population under 5 years	0.7%	0.4%	0.0%	0.0%	0.0%	0.0%
Population 5 to 17 years	0.9%	0.7%	4.2%	0.3%	1.0%	0.0%
Population 18 to 64 years	1.8%	2.2%	4.6%	5.5%	2.0%	3.8%
Population 65 years and over	11.7%	5.9%	7.9%	23.9%	6.4%	14.0%
Total	**15.1%**	**9.2%**	**16.7%**	**29.7%**	**9.4%**	**17.8%**

Tennessee has an estimated 1,012,498 people with a disability or 15.7%, although the rate of disability varies, especially by age, according to the 2014 American Community Survey:

- Under age 5 - .8%
- Ages 5-27 – 6.2%
- Ages 18-64 – 14.1%
- Age 65 and Over – 39.4%

Aging and Dementia

The National Institute on Aging's *2014-2015 Alzheimer's Disease Progress Report* (December 2015) notes that there are no current treatments that can prevent this progressive brain disorder, resulting in loss of ability to remember, learn, think and live independently. It notes, "The future impact of this age-related disorder looms large for our nation." It acknowledges that fighting dementia is a priority not only for NIH and the federal government, but also across the nation and beyond.

The Advisory Council on Alzheimer's Research Care and Services established a goal of finding effective interventions to treat and prevent Alzheimer's and related dementias by 2025 – still a decade away. The *Progress Report* describes in detail the interaction of genetics, vascular system and the brain, and discusses research toward developing an understanding of the cause and prevention of these debilitating dementias.
https://www.nia.nih.gov/alzheimers/publication/2014-2015-alzheimers-disease-progress-report/introduction

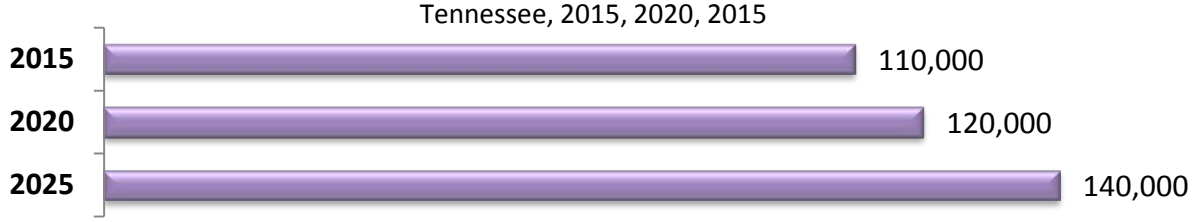
According to the Alzheimer's Association, in the U.S., someone develops Alzheimer's disease every 67 seconds, with about 96% being over age 65 and about 60% of those are women. It is estimated that by 2025, the number of people age 65 and over with Alzheimer's is estimated to be 7.1 million. By 2050, the projection is that about 13.8 million people over 65 will have Alzheimer's disease, unless there is a medical breakthrough in the form of prevention or cure. In 2015, it is estimated that about 700,000 in the U.S. over age 65 will die with Alzheimer's, which is likely to increase as the population of the U.S. continues to age. Between 2000 and 2013, Alzheimer's deaths increased 71%, while deaths from heart disease decreased 14%.

The Alzheimer's Association states that, "Alzheimer's disease is one of the costliest chronic diseases to society," costing $226 billion in 2015, with about half of it paid by Medicare. The cost of Medicare spending for people over 65 is three times as much for those with dementia as for those without. As a result, 2050 spending by Medicare and spending out –of-pocket will be five times as high as now.

While there is no specific data for Davidson County, the Tennessee data indicates that 11% of seniors have Alzheimer's disease and that 2,536 die from the disease. Tennessee has the 6th highest Alzheimer's death rate in the U.S. and is the 6th leading cause of death in Tennessee. The number of people over 65 who have Alzheimer's disease is projected to increase, as shown in Chart AD-5.

Chart AD-5 : Projected Number Over 65 with Alzheimer's

Tennessee, 2015, 2020, 2015



http://www.alz.org/facts/

Aging and Life Expectancy

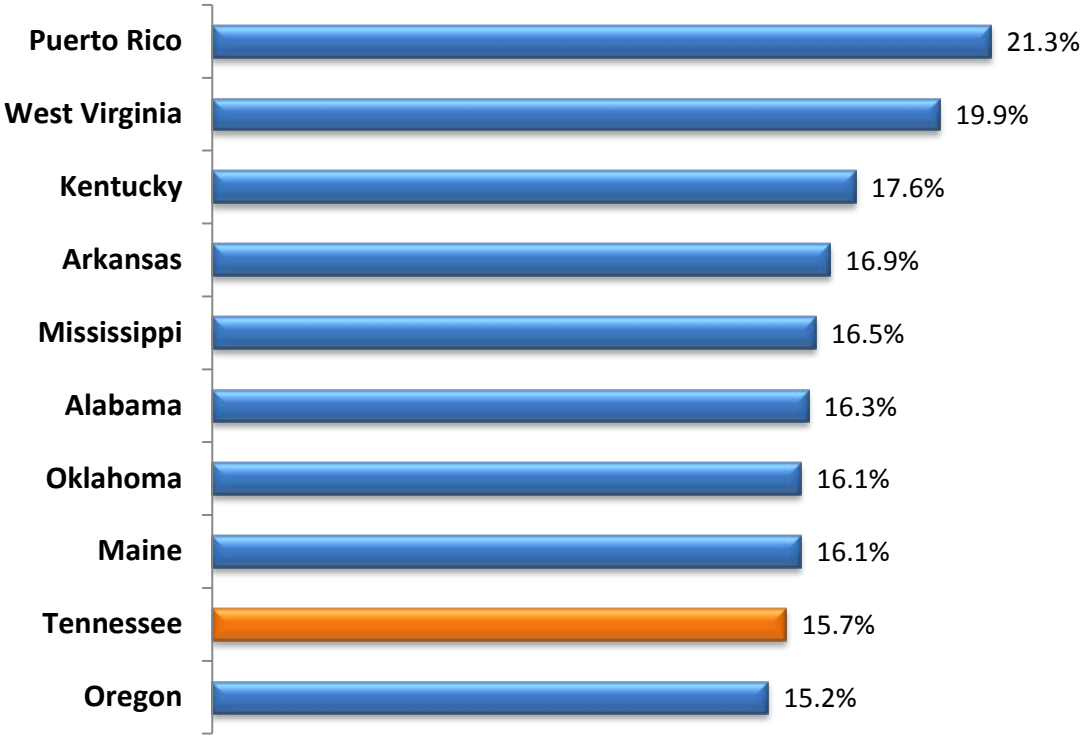
Disability in Older Adults from the National Institutes of Health notes that over the years, there has been an increase in the life expectancy of Americans. It explained that some types of disease and disability are not inevitable with aging and that other influential factors include genetic and environmental influences. It discussed research that can help prevent or minimize disability that occurs from stroke, diabetes and other acute and chronic health problems. *Disability in Older Adults* also indicated that interventions are being developed to improve how older people function, including ways to prevent falls, improve muscle function and reduce delirium during hospital stays.
https://report.nih.gov/nihfactsheets/ViewFactSheet.aspx?csid=37

Aging and Falls

Falls are a major cause of injuries for older adults. According to a recent Center for Disease Control and Prevention report, *Important Facts about Falls,* over a million older adults fall each year, with some falls causing serious injuries. The report indicates that one out of three older adults fall each year, in addition to others not reported to physicians. It is estimated that at least 250,000 older adults are hospitalized for hip fractures because of falls. Over 2.5 million older adults are treated in emergency rooms for fall injuries. Medical costs related to falls could be as high as $34 billion each year. Several conditions exist that contribute to older adult falls, such as lower body weakness, ambulatory difficulties and balance, vision problems and foot pain.
http://www.cdc.gov/HomeandRecreationalSafety/Falls/adultfalls.html

Among the 50 states, the District of Columbia and Puerto Rico, Tennessee is 9th from the top in the percent of residents who have a disability, according to the 2014 American Community Survey and shown in Chart AD-6. Eight states have less than 11% of residents who have disabilities, including Utah with the lowest rate of 9.6%.

Chart AD-6: Top Ten States-Percentage with a Disability
2014

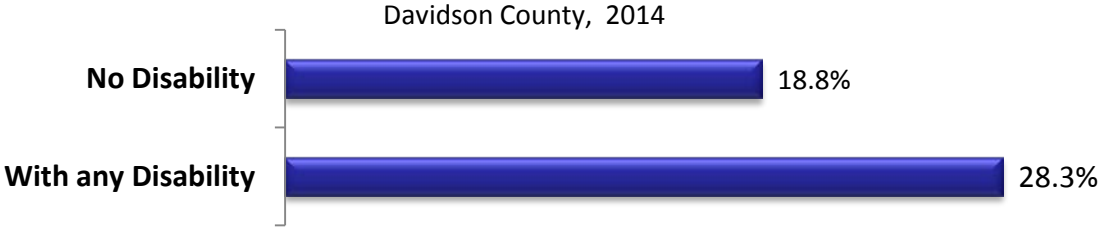


Source: 2014 American Community Survey

Disability and Poverty

Persons with a disability are more likely to be in poverty compared to persons without a disability. The 2014 American Community Survey indicates that there are 22,141 people in Davidson County who have a disability and are in poverty, plus an additional 56,215 that are 100-200% of poverty. Chart AD-7 reflects the higher poverty rate of Davidson County residents who have a disability at 28.3%.

Chart AD-7: Percentage of People in Poverty by Disability Status
Davidson County, 2014



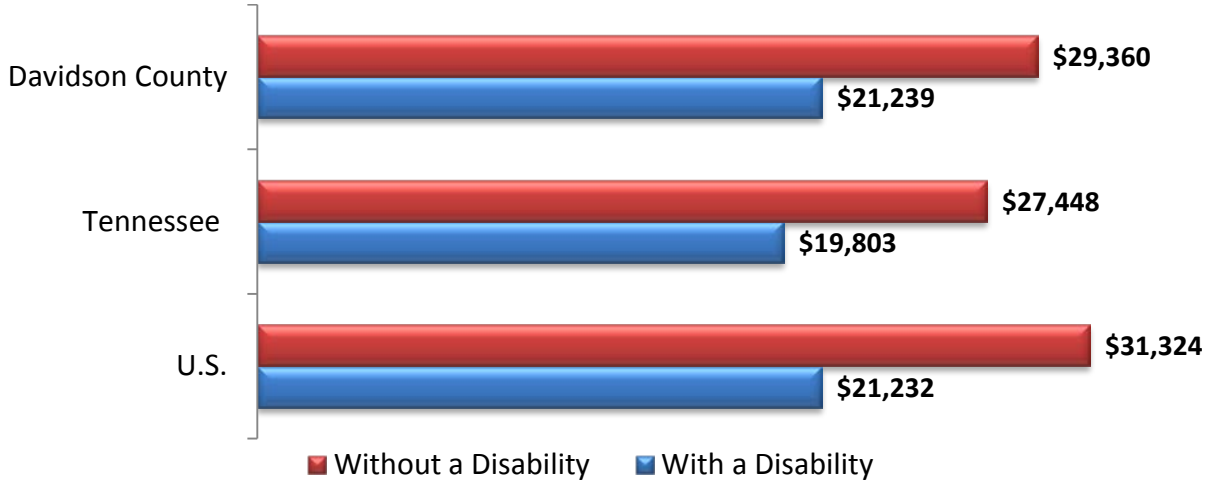
Source: 2014 American Community Survey

Income for People with Disabilities

The poverty rate for working age adults with a disability is higher than working age adults without a disability. Persons with a disability are more likely to be unemployed or underemployed than persons without a disability. According to a report *Financial Capability of Adults with Disabilities,* half of all working age adults with a disability experience at least one year of poverty and are more likely to experience longer-term poverty than persons without a disability are.
https://cdn.americanprogress.org/wp-content/uploads/2015/01/WorkersDisabilities.pdf
http://www.realeconomicimpact.org/data/files/reports/ndi_financial_capability_report_july_2014.pdf

Chart AD-8 shows that in 2014, persons with a disability earned less than persons without a disability in Davidson County, Tennessee and the U.S.

Chart AD-8: Median Annual Earning for Persons with a Disability in Past 12 Months
U.S., Tennessee, Davidson County, 2014



Source: 2014 American Community Survey, B18140

Disability and Employment

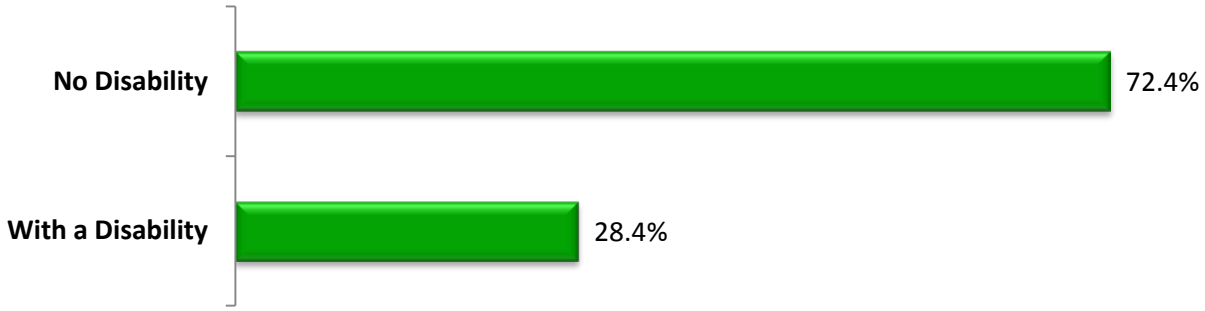
Chart AD-8 indicates that Davidson County residents without a disability were far more likely to be employed at 72.4%, compared to 28.4% for those who have a disability. In Tennessee, 65.0% of people without a disability were employed, compared to 20.8% with a disability. In the U.S., 66.0% of people without a disability were employed, compared to 22.5% who did not have a disability.

The 2014 American Community Survey also indicated that the percentage of people not in the labor force is higher for people with disabilities at 67.1% than for people who do not have disabilities at 23.0%. The term not in the labor force describes people who are not looking for work, institutionalized people, and people doing only incidental unpaid family work, and may include students, homemakers, retired workers and seasonal workers who were interviewed in an off-season.

People with a disability also had lower median income at $21,239, compared to $29,360 for those who did not have a disability. In addition, people who had a disability were more likely to be in poverty at 26.6%, compared to 14.7% who did not have a disability, as shown in Chart AD-9.

Chart AD-9: Percent Employed by Disability Status

Davidson County, 2014



Source: 2014 American Community Survey, Table S1811

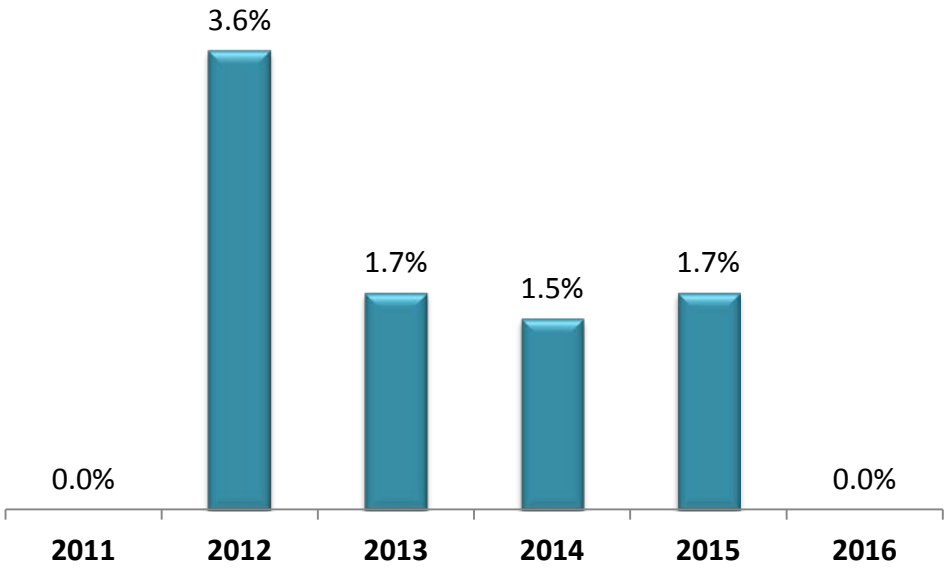
Social Security

Among Davidson County's 267,952 households, 60,380 of them receive Social Security income, according to the 2014 American Community Survey. The mean household annual income for households that receive Social Security or Supplemental Security Income is lower than all households, as shown in the table below.

Source of Income	Mean Income
With cash public assistance income	$ 3,402
With Supplemental Security Income (SSI)	$ 8,692
With Social Security income	$ 18,043
With interest, dividends, or net rental income	$ 19,735
With retirement income	$ 24,037
With earnings (from a job)	$ 68,219
All households	$ 69,919

As shown in Chart AD-10, beneficiaries received a 1.5% increase in 2015. With increased expenses for food, housing, utilities and other essentials increasing older adults will continue to experience a decline in their disposable income even without considering increased medical costs. The Social Security Administration *History of Automatic Cost-Of-Living Adjustments* report indicates there would be no benefit increase for 2016.

Chart AD-10: Percentage of Social Security Benefit Increase
2011-2016



Source: History of Automatic Cost-Of-Living Adjustments
https://www.socialsecurity.gov/news/cola/automatic-cola.htm

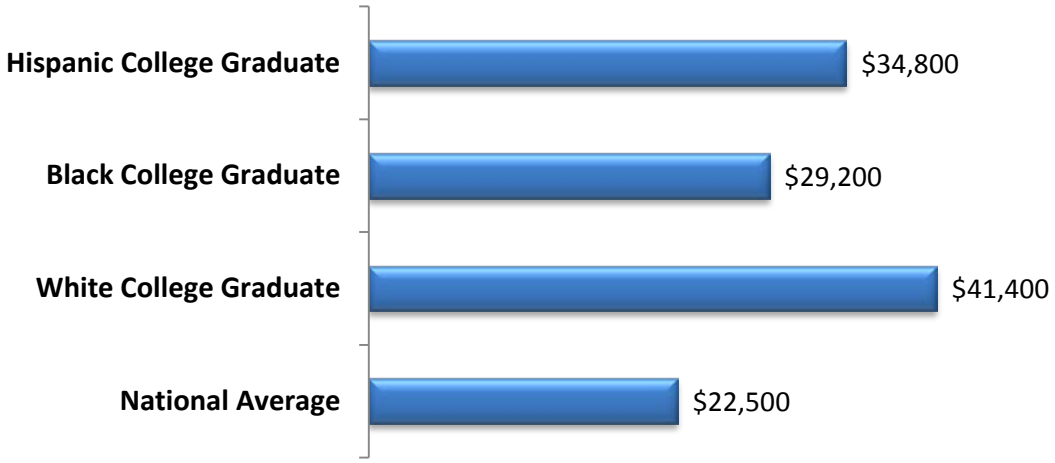
There has been a great deal of discussion on the viability and sustainability of the Social Security System. With over 80% of older adults, relying on Social Security benefits to meet basic living expenses there has been proposed legislation to reform Social Security benefits to increase sustainability. A Justice in Aging study indicates that important aspects of the program have not been updated in more than 30 years.
http://www.justiceinaging.org/our-work/economic-security/ssi-restoration-act/

Medicare

People who receive Medicare, older people and younger people with disabilities, often live on fixed, limited incomes, sometimes supplemented by savings, as described in a report by the Kaiser Foundation, *Wide Disparities in the Income and Assets of People on Medicare by Race and Ethnicity.* The report indicates a disparity of financial experience by income, savings and home equity based on race and educational level. The following charts indicated the disparities in the three areas.

Median incomes for Medicare Beneficiaries increased for persons with a college degree but disparities remained base on race and ethnicity. Chart AD-11 indicates that White college degreed Medicaid beneficiaries per capita income was more than $12,000 higher that median income for Blacks.

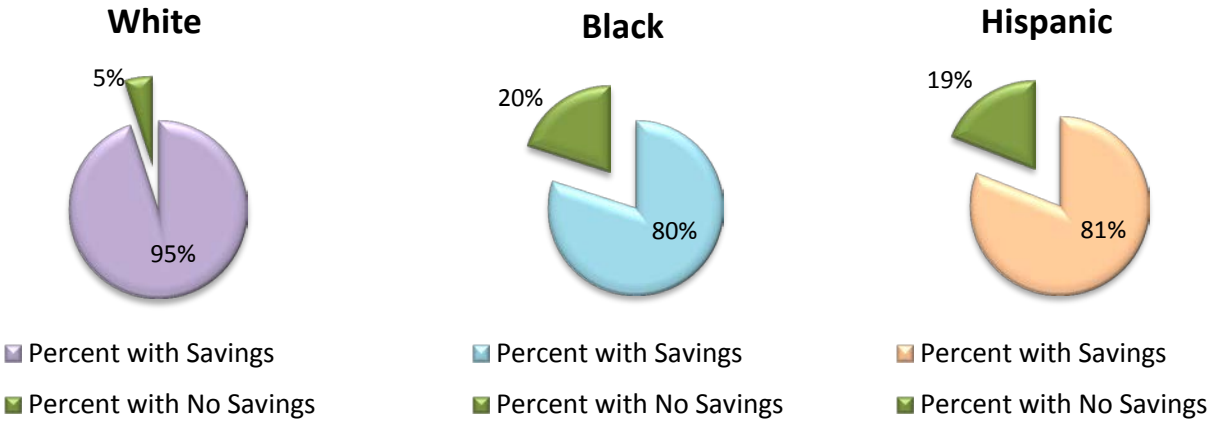
Chart AD-11: Median Income of the Medicare Population by Education Level, Overall and by Race/Ethnicity
U.S., 2012



Source: *Wide Disparities in the Income and Assets of People on Medicare by Race and Ethnicity*

Most of Medicare beneficiaries had some savings but savings rates were related to race and ethnicity. Chart AD-12 shows the percentage of Medicaid beneficiaries who had some or no savings in 2012 by race or ethnicity.

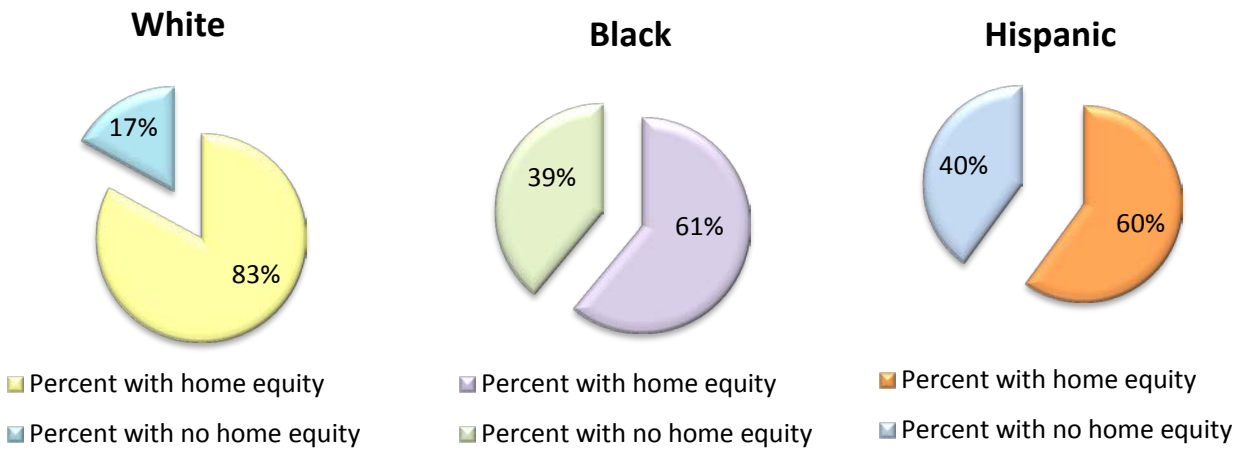
Chart AD-12: Percentage of Medicare Beneficiaries with Savings or no Savings by Race/Ethnicity
U.S., 2012



Source: *Wide Disparities in the Income and Assets of People on Medicare by Race and Ethnicity*

Most Medicaid beneficiaries had some home equity but disparities existed based on race and ethnicity. Chart AD-13 indicates that home equity percentages for Whites were higher than for both Blacks and Hispanics.

Chart AD-13: Percentage of Medicare Beneficiaries with or without Home Equity by Race/Ethnicity
U.S. 2012

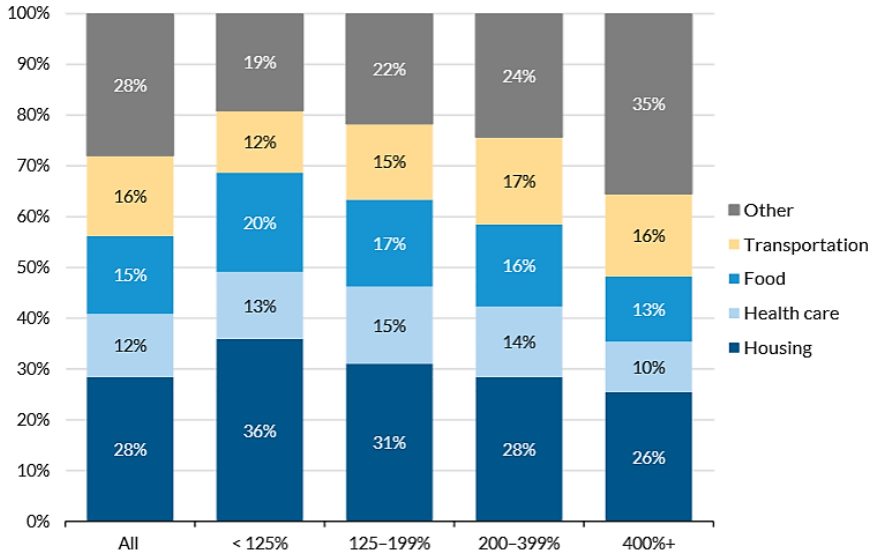


Source: *Wide Disparities in the Income and Assets of People on Medicare by Race and Ethnicity*
http://kff.org/medicare/report/wide-disparities-in-the-income-and-assets-of-people-on-medicare-by-race-and-ethnicity-now-and-in-the-future/

Housing and Older Adults

While healthcare costs are a major factor in estimating the cost of living for older adults, 2013 housing costs for this population averaged 28% of their spending, more than twice as much as spent on healthcare cost, as reflected in Chart AD-14. A report by the Urban Institute *Housing Costs and Financial Challenges for Low-Income Older Adults indicates* housing costs for low-income older adult consumed 36% of total household income.

Chart AD-14: Distribution of Household Spending by Income Relative to Federal Poverty Level
Households headed by adults age 65 or over
U. S., 2013



http://www.urban.org/research/publication/housing-costs-and-financial-challenges-low-income-older-adults/view/full_report

TennCare CHOICES

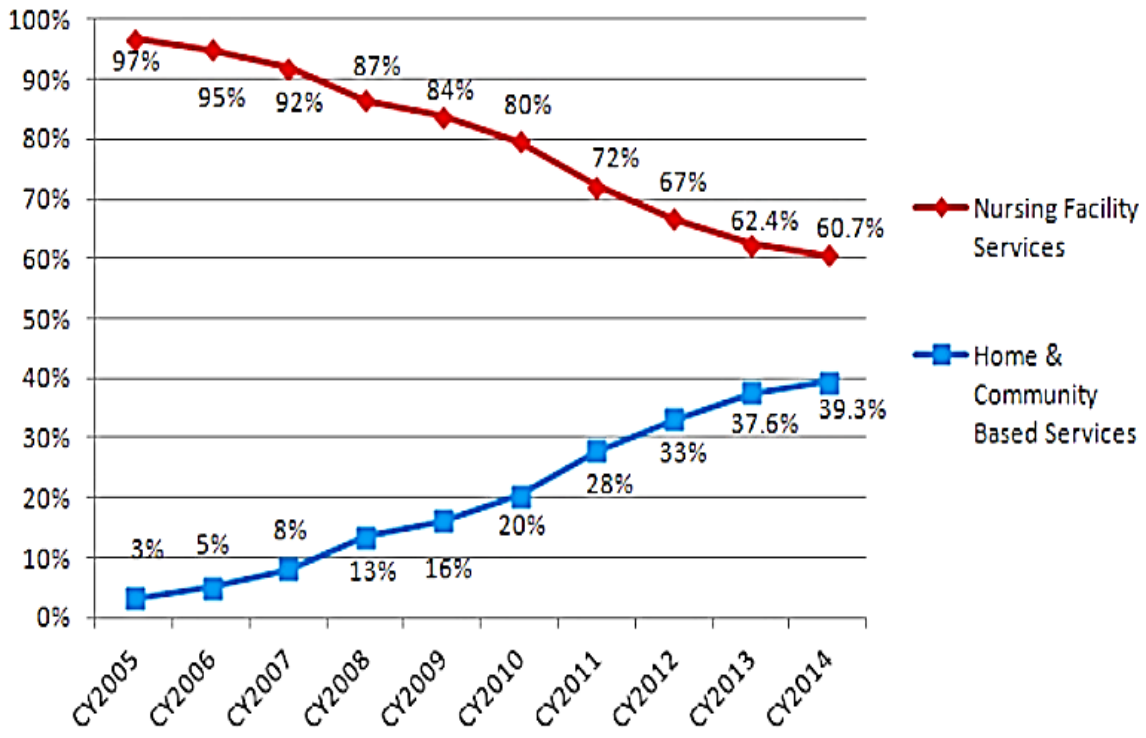
TennCare CHOICES began in 2010 and is designed to provide long-term services and supports (LTSS) to eligible individuals. The program is administered by the TennCare Division of Health Care. TennCare CHOICES qualification requirements include income/asset requirements, as well as age and/or disability status requirement. It can cover nursing facility services and community-based services for adults. LTSS provides help with activities for people who are unable to care for themselves, including bathing, dressing, doing households chores, etc.

http://www.tn.gov/tenncare/topic/choices
http://www.tn.gov/tenncare/article/to-qualify-for-choices

The CHOICES program was developed to reduce the imbalance in funding LTSS from Nursing Facilities Care to Home and Community Based Services. Historically, Tennessee's Long-Term Care Services funding was disproportionately allocated to Nursing Home Care.

TennCare CHOICES enrollment in Nursing Facility Services continues to decline and enrollment in Home and Community Based Services increased between 2005 and 2014 as indicated by Chart AD-15.

Chart AD-15: Percent of TennCare Choices Enrollees
By Nursing Facility Services and Home and Community Based Services
Tennessee, 2005-2014



Source: LTSS Governor's Dashboard Graphs
https://www.tn.gov/tenncare/topic/ltss-governors-dashboard-graphs

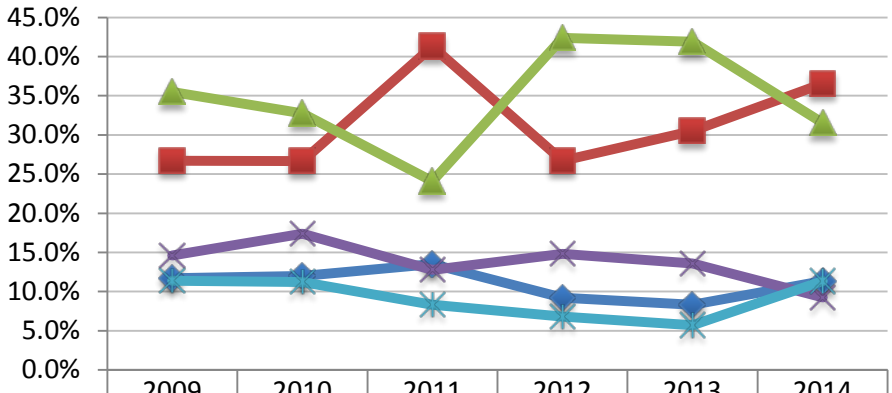
Grassroots Community Survey

Chart AD-16 shows the greatest unmet needs identified in the Grassroots Community Survey for Home & Community Based Services (care for children, disabled or elderly).

Each year, the top two needs continued to be Help Paying for Child Care and Homemaker Services for Elderly or Disabled People, which alternated for first place. In 2011 and 2015, Help Paying for Child Care was higher than for Homemaker Services for Elderly or Disabled People.

Chart AD-16: Greatest Unmet Need in Home & Community Based Services

Grassroots Community Survey, 2009-2014



	2009	2010	2011	2012	2013	2014
Child Care Closer to My Home	11.7%	12.0%	13.5%	9.2%	8.3%	11.3%
Help Paying for Child Care	26.7%	26.7%	41.3%	26.7%	30.5%	36.6%
Homemaker Services for Elderly or Disabled People	35.5%	32.8%	24.1%	42.4%	41.9%	31.5%
Homemaker Services for Relative Caregivers (raising the children of relatives)	14.6%	17.4%	12.8%	14.8%	13.6%	9.2%
More Infant Child Care	11.4%	11.2%	8.3%	6.8%	5.7%	11.3%

Source: MSS Grassroots Community Survey, 2009-2014

Connections with Aging & Disability

As persons age their quality of life is affected by their work history, where they live and their health status.

Health & Human Development

Baby Boomers have long been the fastest growing segment of the population, just recently surpassed by Millennials. Baby Boomers are a living longer than previous generations, due to new medical procedures, research and technology. Baby Boomers are affecting health care in several ways, including the greater likelihood that they would have more chronic diseases such as diabetes, high cholesterol and obesity. Access to affordable

and appropriate health care has become increasingly important for the aging population. Many adults are delaying needed medical care due to cost particularly if they are uninsured or underinsured.
http://www.cdc.gov/nchs/hus/special.htm

Housing

Older adults are more likely to own their homes than young people, resulting in less mobility and potential costly repairs to maintain their homes. Older adults who rent are faced with increased rental fees while living on fixed incomes. For older adults, rising housing costs may force individuals to have to make difficult choices of how to spend their limited income, between health care cost, food, transportation and medical bills. For persons who have a disability, income from employment is generally lower and they are less likely to find appropriate and affordable housing.

Workforce

Older adults who worked in low-wage, low-skilled jobs are less likely to have adequate retirement savings and are more likely to be dependent upon government assistance through Medicaid and Medicare for their health care. Older adults are more likely to have worked in jobs that were labor intensive or in the manufacturing sector, in which jobs are no longer available because of the changing economy and technology. Older adults have to acquire new skills for jobs in developing fields while competing with younger persons for those same jobs. Older adults were more likely to remain unemployed longer after the Great Recession. Older adults were more likely to delay retirement and continue working because of retirement assets declining in value.
https://web.stanford.edu/group/recessiontrends/cgi-bin/web/sites/all/themes/barron/pdf/Retirement_fact_sheet.pdf

Profile of Older Americans: 2014

The Administration on Community Living a division of the United States Department of Health and Human Services publishes an annual profile of Older Americans. The 2014 report highlights the following results:

- Persons age 65 and over account for 14.1% of the U.S. Population
- In 2013 persons reaching age 65 had an average life expectancy of 19.3 years
- Ten thousand people turn 65 years of age each day in the U.S.
- Median income for older persons in 2013 was $29,327 in the U.S.
- Households containing families headed by persons 65 and older reported median incomes in 2013 of $51,486.

Poverty
Over 4.2 million people age 65 and over (9.5%) were below the poverty level in 2013. This poverty rate is statistically different from the poverty rate in 2012 (9.1%). Another 2.5 million or 5.6% of older adults are classified as "near-poor" (income between 100-125% of the poverty level).

Housing
Of the 26.8 million households headed by older persons in 2013, 81% were owners and 19% were renters. The median family income of older homeowners was $34,500. The median family income of older renters was $17,300.

Employment
In 2014, 8.4 million (18.6%) Americans aged 65 and over were in the labor force (working or actively seeking work).

Health and Health Care
Most older persons have at least one chronic condition and many have multiple conditions. In 2011-2013, the most frequently occurring conditions among older persons were diagnosed arthritis (49%), all types of heart disease (31%), any cancer (25%), diagnosed diabetes (21% in 2009-2012), and hypertension (high blood pressure or taking antihypertensive medication) (71 percent in 2009-2012).

In 2012, 6.8 million people age 65 and over stayed in a hospital overnight at least one night during the year.

- Older Americans spent 12.2% of their total expenditures on health, as compared with 7.1% among all consumers.
- In 2013, older consumers averaged out-of-pocket health care expenditures of $5,069, an increase of 35% since 2003, significantly lower than the total population out-of-pocket average expense of $3,631.
- Older Americans on average spend more on insurance, medical services, prescription drugs and medical supplies than the general population.

Source: *A Profile of Older Americans: 2014*
http://www.aoa.acl.gov/Aging_Statistics/Profile/2014/docs/2014-Profile.pdf

Promising and Evidence-Based Practices

Medical Legal Partnerships Toolkits

The National Center for Medical Legal Partnerships provides a toolkit for health care and legal institutions interested in developing a coordinated care system to improve services and delivery. The toolkit assists medical and legal partnerships with laying the groundwork, building infrastructure and sustaining and growing the partnership. Medical Legal Partnerships generally co-locate legal services into a clinical medical setting with the goal of the solving legal issues that present barriers to access to health care and healing.
http://medical-legalpartnership.org/
http://medical-legalpartnership.org/mlptoolkit/

With the rising number of older adults facing complex medical and legal issues, an innovative program developed by the University of California at Hastings College of Law addresses these concerns. A Medical-Legal Partnership for Seniors Clinic allows Law school students to work with medical providers who care for older adults to address areas such as health care planning, access to public benefits, long-term care placements and estate planning in a comprehensive approach. Law students work with older adults in hospitals, medical clinics and with home care professions in a collaborative approach to legal and medical problem solving.
http://www.uchastings.edu/academics/clinical-programs/clinics/medical-legal/index.php

Vanderbilt Shade Tree Clinic is an example of a medical-legal partnership by providing not only a primary care clinic but also in partnership with Legal Aid Society of Middle Tennessee and the Cumberlands provide legal assistance in housing, family law, estate planning and health insurance eligibility.
http://medical-legalpartnership.org/wp-content/uploads/2014/02/Middle-Tennessee-MLP-2015-Nashville3.pdf

Caregiver Support for Veterans

Veterans Administration supports caregivers to service members through a Caregiver Support Coordinator through VA medical Facilities. Services include In-home and community based care, respite care, caregiver training and education, family support services, transportation and other benefits. In addition, long-term services and supports are available to Veterans through adult day care centers, peer support caregivers, skilled home care, homemaker services and hospice care. The Caregivers and Veterans Health Services Act signed into law in 2010 provides new services for caregivers such as a monthly stipend, travel expenses when accompanying a veteran, mental health services and counseling, training and caregiver respite care.
http://www.caregiver.va.gov/index.asp
http://www.military.com/benefits/veterans-health-care/new-va-family-caregiver-program.html

Elder Abuse

It is estimated that one out of ten older adults are abused or exploited each year. This estimate is deemed low by many experts due to under reporting or lack of enough physical evidence to prosecute. The National Council on Aging identifies elder abuse as physical, sexual, emotional, verbal, financial exploitation, neglect and abandonment. Social isolation and mental impairment are leading causes in making older adults vulnerable to abuse.
https://www.ncoa.org/public-policy-action/elder-justice/elder-abuse-facts/

Elder abuse can take place in a variety of places such as nursing homes, adult day care settings and individual homes. Perpetrators are usually a family member, caregiver or someone the older adult relies on or trusts. National, state and local efforts are being developed to address this growing need to protect older adults.

The Tennessee Commission on Aging and Disability (TCAD) has highlighted elder abuse as one of its priorities in its annual plan. TCAD has provided funding for ombudsman programs across the state to investigate elder abuse in nursing home and skilled care facilities. In addition, the Commission supports Family Justice Centers in Chattanooga, Cookeville, Knoxville, Memphis and Nashville. The Tennessee Vulnerable Abuse Coalition receives training, technical assistance and financial support from the Commission.
https://www.tn.gov/aging/topic/elder-abuse

Council on Aging of Middle Tennessee has developed an Elder Abuse Task Force to identify the unmet needs of older adults who are victims of abuse and neglect. The Task Force has conducted informational sessions for law enforcement, medical and financial institution personnel to develop pocket guides to assist persons with identifying elder abuse victims.
http://www.coamidtn.org/elder-abuse/

Support of Elder Abuse Victims

In San Angelo, Texas, the Adult Protective Services unit created a "Bridge Room" so that when Adult Protective Services offices are closed, staff would have access to emergency supplies to assist elderly abuse victims. The Bridge Room maintained emergency supplies needed by victims of abuse such as adult briefs, cooking utensils, fans, heaters, blankets and non-perishable foods.

Maricopa Elder Abuse Prevention Alliance in Arizona (MEAPA) developed weekly support groups for victims of elder abuse. In addition, (MEAPA) purchased a 19-unit apartment complex to provide support services for victims of elder abuse.
http://www.ncea.aoa.gov/Resources/Publication/docs/PromisingPracticesElderAbuseCoalitions.pdf

Food & Nutrition

Key Findings

- 14% of U.S. Households are food insecure. Nearly one in six households are food insecure meaning they are unsure of their ability to provide adequate food for the family during the month. Persons who live in food insecure household's health care costs are higher than food secure households are.
- 19.2% of U.S. Households with Children are food insecure. One in five children grows up in households that are food insecure. Children who do not get adequate nourishment are more likely to fall behind academically, have more emergency room visits and experience negative consequences for child development.
- U.S. Conference of Mayor's Report on Hunger and Homelessness indicates that requests for food assistance and resources to provide food assistance will see another increase in the next year. For the past several years, the report has indicated that demands for food have gone unmet in most of the cities surveyed.
- SNAP benefits for Tennessee and Davidson County went up to 2013 levels, higher than in 2014. SNAP benefits fluctuate from year to year due to a variety of reasons in Davidson County and Tennessee. Benefits amounts have not changed significantly in Tennessee for the past decade.
- Median income for households that do not receive SNAP is nearly 3 times higher than for households that receive SNAP benefits. SNAP beneficiaries continue to have lower incomes than people who did not receive SNAP benefits in Davidson County, Tennessee and the U.S.
- 15.5% or one in six seniors face the threat of hunger. One in six seniors indicted that they are concerned about adequate nutrition and access to healthy affordable food. Tennessee continues to rank as one of the top ten states for seniors facing the threat of hunger.
- Second Harvest Food Bank of Middle Tennessee provided food to 124,519 individuals through its Emergency Food Box Program in its forty-six county service area. While the number of food boxes and persons served declined over the past year more people requested and received perishable foods because of increased donations.
- Women Infant and Children (WIC) participation showed a slight decline over the past year. WIC provides breastfeeding education, counseling, and support, nutrition education, and referrals to healthcare and social services. Nationwide over 8.2million persons participated in the WIC program in 2014.

Food Security/Food Insecurity

Food security generally means access by all people at all times to enough food for an active, healthy life. In 2006, the U. S. Department of Agriculture (USDA) Economic Research Service created specific definitions that are listed below.

FOOD SECURITY

- **High food security** (*old label=Food security):* no reported indications of food-access problems or limitations.
- **Marginal food security** (*old label=Food security):* one or two reported indications—typically of anxiety over food sufficiency or shortage of food in the house. Little or no indication of changes in diets or food intake.

FOOD INSECURITY

- **Low food security** (*old label=Food insecurity without hunger):* reports of reduced quality, variety, or desirability of diet. Little or no indication of reduced food intake.
- **Very low food security** (*old label=Food insecurity with hunger):* Reports of multiple indications of disrupted eating patterns and reduced food intake.

Food secure households need nutritious and safe food readily available at all times, with the ability to acquire such food in socially acceptable ways without resorting to emergency food sources. Food insecurity is important because it has been linked to mental and physical health challenges for low-income families, especially for pregnant women and infants.

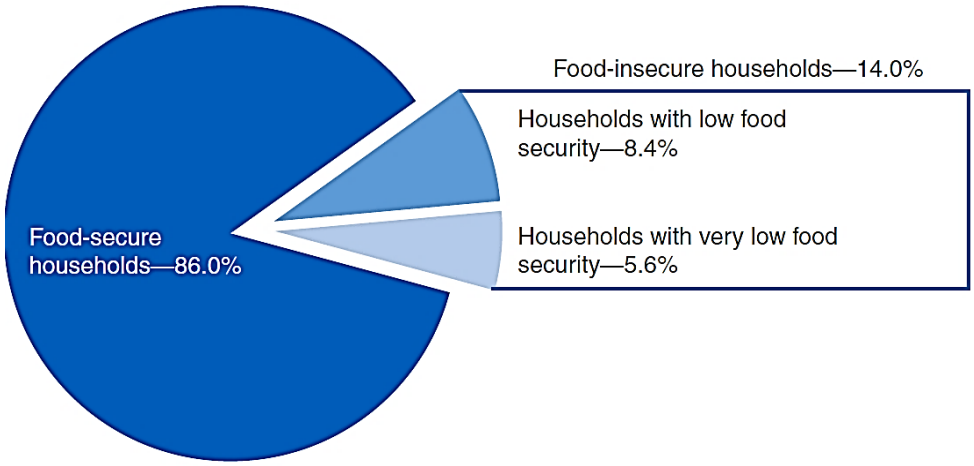
Food Insecurity and Health Impact

Recent research from the Urban Institute, *How Food Insecurity is Adding to Our Health Care Costs,* indicates that food insecurity is a factor in increasing adverse health outcomes. In addition, food insecurity and limited food access can make it more difficult to manage illnesses and contribute to increase healthcare cost for individuals and healthcare providers.

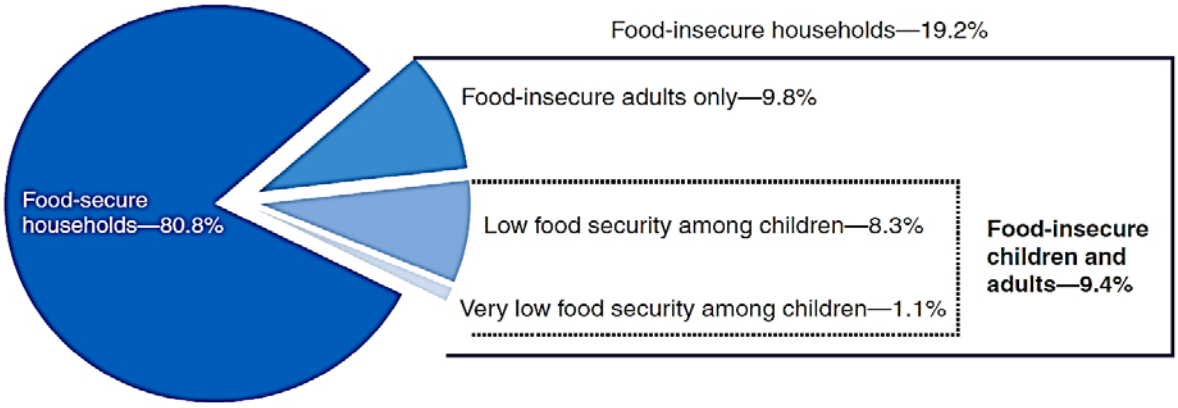
Chronic diseases that are directly impacted by diet such as diabetes and obesity are important factors in improving health outcomes particularly for low-income persons. The health care costs are higher for food insecure households than for food secure households, with one study that estimated costs to be 49% higher for food insecure households.
http://www.urban.org/urban-wire/how-food-insecurity-adding-our-health-care-costs

The graphic below from the U.S. Department of Agriculture's Economic Research Service (ERS) shows that the 14.0% of U.S. households were food insecure. Using data from the 2014 Current Population Survey, it shows that 8.4% of households have low food security and 5.6% have very low food security.

Low food insecurity includes reduced quality, variety, or desirability of diet. Even more severe is very low food security with disrupted eating patterns and reduced food intake.



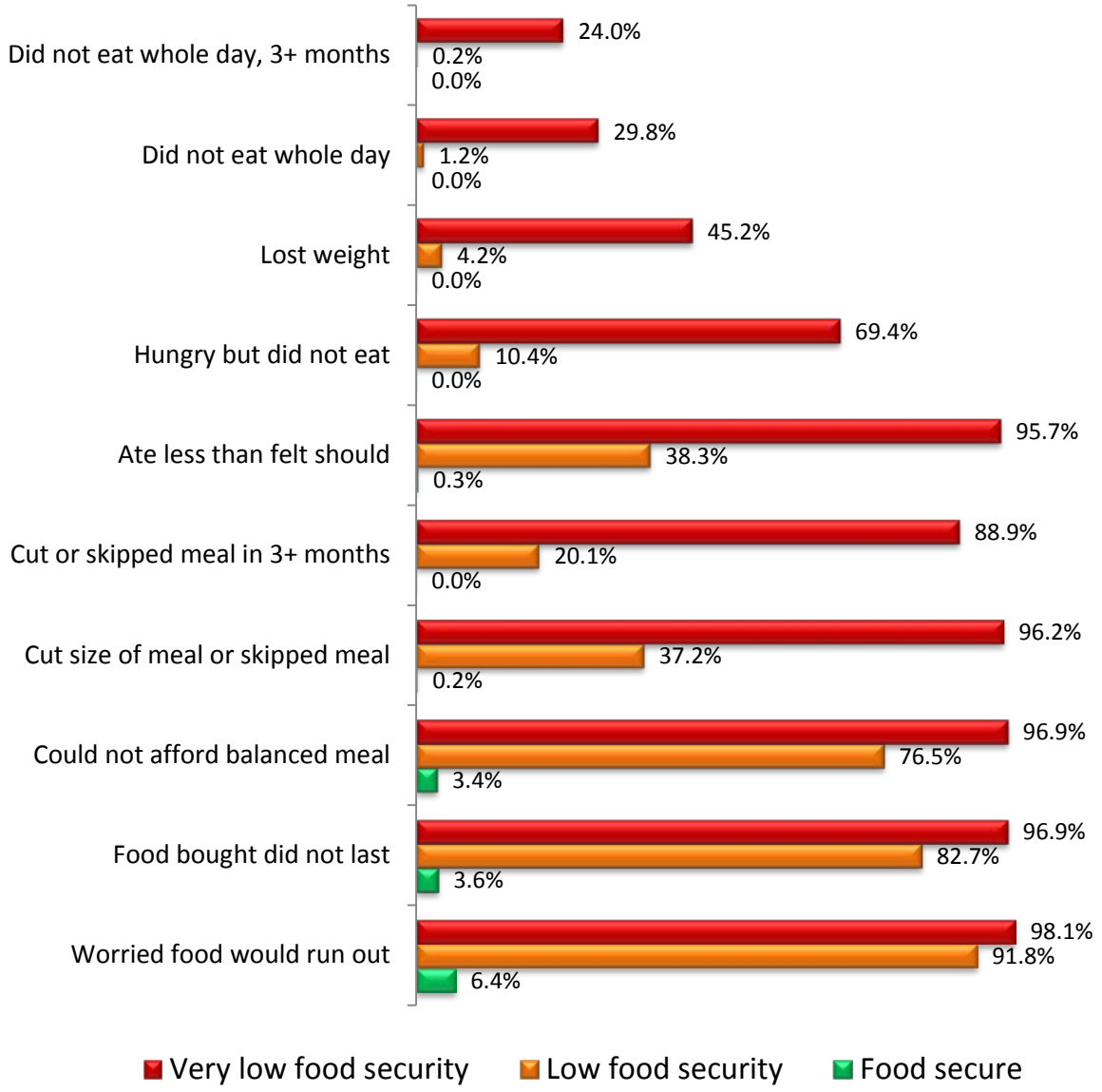
The graphic below focuses on U.S. households with children from the 2014 Current Population Survey, showing an even higher rate of food-insecure households at 19.2%.



http://www.ers.usda.gov/media/1896841/err194.pdf

The USDA has identified specific characteristics of households with very low food security. The chart below reflects these conditions as being higher than in houses with low food security and much higher than food secure households.

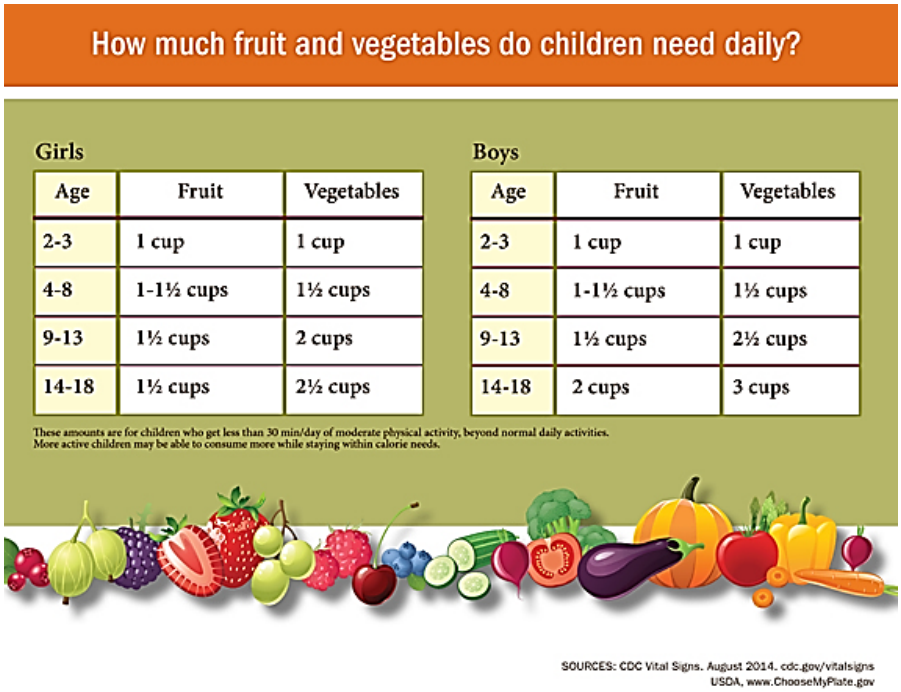
Chart F-1: Characteristics of Households by Food Security Status
U.S., 2014



Source: USDA Economic Research Service, 2014 Current Population Survey Food Security Supplement
http://www.ers.usda.gov/topics/food-nutrition-assistance/food-security-in-the-us/definitions-of-food-security.aspx

The increased consumption of fruits and vegetables can have health benefits, particularly among vulnerable populations, including children and the elderly. According to the U. S. Centers for Disease Control (*Fruit and Vegetable Intake Among Children – United States 2003-2010,* released August 8, 2014), eating more fruits and vegetables provides nutrients that are often under consumed.

The graphic below shows the recommendations for children with normal levels of activity.



The CDC indicates that this can have a variety of benefits, especially for children, by reducing risk for leading causes of illness and death and managing body weight. The CDC indicated that the consumption of fruits increased more than vegetables and that for 2007-2010, 90% of children did not eat enough vegetables.
http://www.cdc.gov/mmwr/preview/mmwrhtml/mm6331a3.htm?s_cid=mm6331a3_w

Aging adults can also benefit from better nutrition. The CDC indicates that specific vitamins or minerals may be needed for people who are over age 50, particularly Vitamin D, Vitamin B-6, Vitamin B-12, Folate and Calcium. The CDC noted that many older people do not need a multivitamin supplement if they have a high quality balanced diet. However, for those who do not have a nutritious and varied diet, it is recommended that they may benefit from a "complete vitamin and mineral supplement," with 100% of most recommended vitamins and minerals, but not mega-doses (unless recommended by a physician).

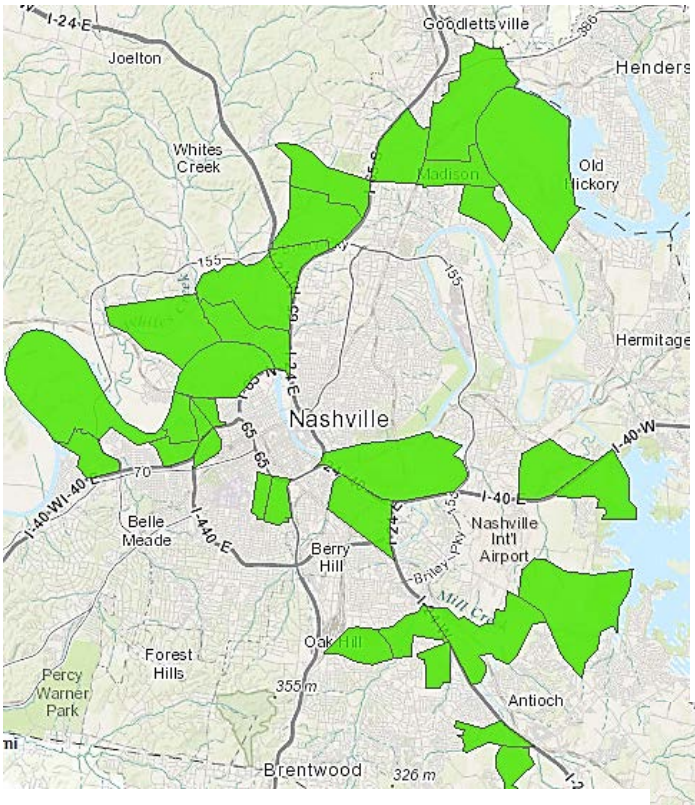
Different vitamins/minerals have different functions, including helping people resist infections, keeping nerves healthy, helping blood to clot property and maintaining strong bones and teeth. As people get older, eating well can reduce heart disease, stroke, type 2 diabetes, some cancers and anemia.
https://www.nia.nih.gov/health/publication/whats-your-plate/vitamins-minerals
http://nihseniorhealth.gov/eatingwellasyougetolder/benefitsofeatingwell/01.html

Limited Food Access

The USDA-ERS provides an online mapping tool to locate food deserts in the U.S. The map below shows food deserts in the Davidson County area, using the original food desert measure, shown in green (low-income census tracts in which a significant number of residents are at least 1 mile from a supermarket in urban areas or 10 miles in rural areas). A newer measure for food deserts uses ½ mile in urban areas, as shown in the next map (orange area).
http://www.ers.usda.gov/data-products/food-access-research-atlas/go-to-the-atlas.aspx

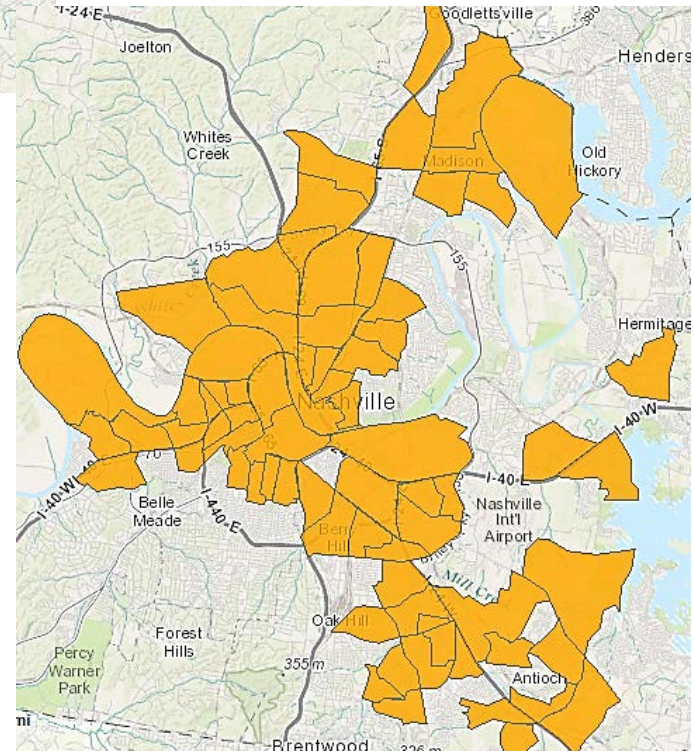
Low-Income Census Tracts qualify as "low access" tracts if at least 500 persons or 33% of their population live more than a mile from a supermarket or large grocery store (for rural census tracts, the distance is more than 10

miles). Many of these areas are not only defined as low food access tracts but also experience higher obesity rates, fewer high school graduates and have incomes below the poverty level. The first map below reflects the low-income census tracts (in green) that are at least 1 mile from a supermarket. The next map reflects the low-income census tracts (in orange) that are at least 1/2 mile from a supermarket.



Low-Income Census Tracts,
at least 1 Mile from Supermarket
Davidson County, 2015

Source: USDA, Food Access Research Atlas
http://www.ers.usda.gov/data-products/food-access-research-atlas/go-to-the-atlas.aspx



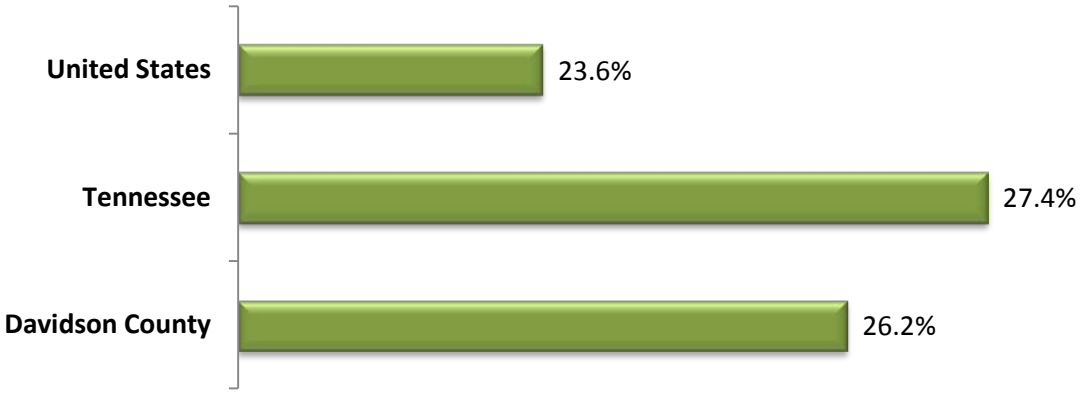
Low-Income Census Tracts,
at least ½ Mile from Supermarket
Davidson County, 2015

Source: USDA, Food Access Research Atlas
http://www.ers.usda.gov/data-products/food-access-research-atlas/go-to-the-atlas.aspx

Davidson County's percentage of the population with limited food access is higher than the national average but lower than Tennessee's. Limited food access can have negative consequences for child development, a person's

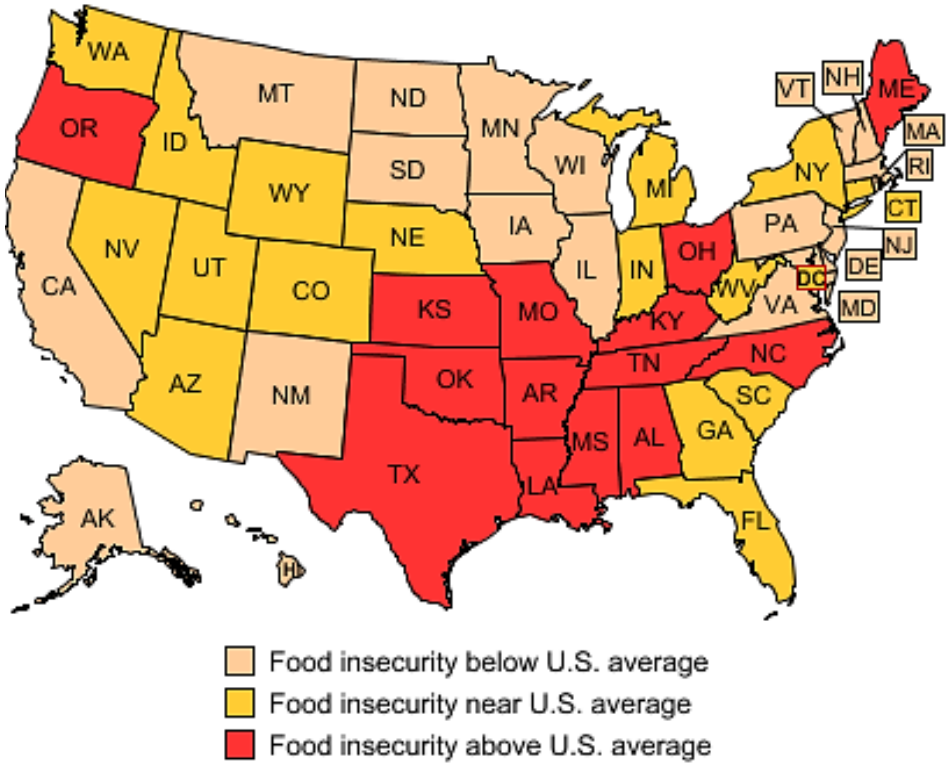
well-being and overall general health. Limited food access is a barrier to sources of healthy food either by distance from a full service grocery store or by lack of transportation options to access healthy foods.

Chart F-2: Percentage of Population with Limited Food Access
Davidson County, Tennessee, United States 2014



Data Source: U.S. Department of Agriculture, Economic Research Service USDA

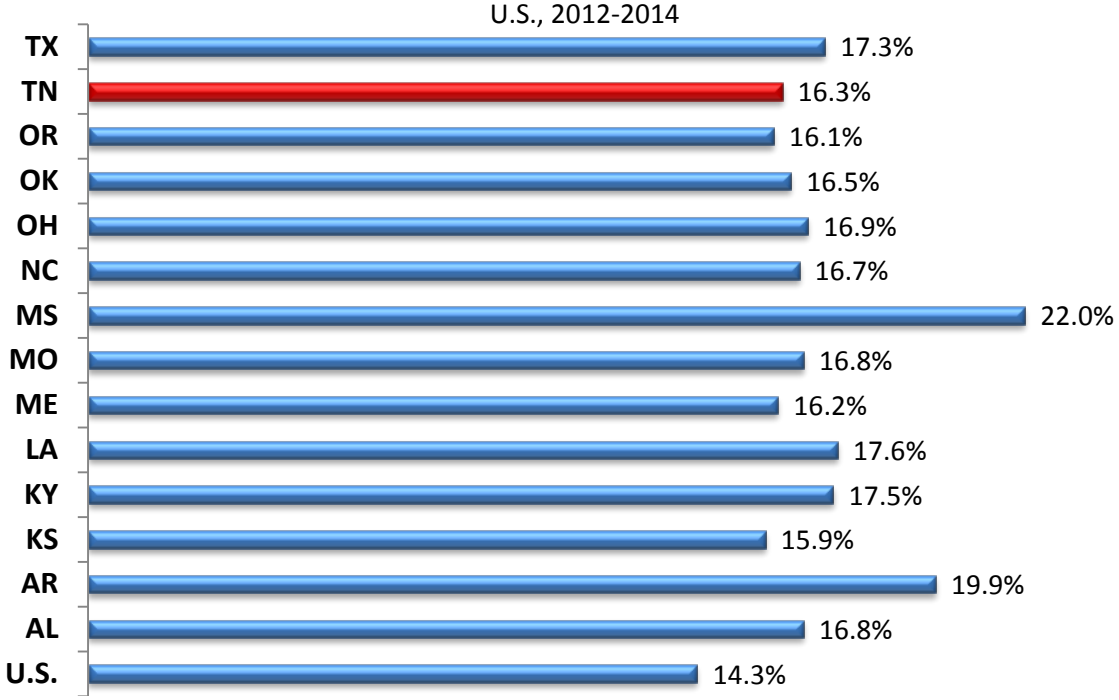
The level of food insecurity varies across the states. The map below shows the prevalence of food insecurity from 2012 through 2014 by state. According to the Current Population Survey analyzed by USDA, Tennessee ranked 11th highest in food insecurity and 17th worst in very low food security.



The prevalence of food insecurity was higher than the national average in 14 States. Alabama, Arkansas, Kansas, Kentucky, Louisiana, Maine, Missouri, Mississippi, North Carolina, Ohio, Oklahoma, Oregon, Tennessee and Texas had higher prevalence of food insecurity than the other twenty-six states as shown in Chart F-3.

Chart F-3: States with Higher Food Insecurity than U.S.

U.S., 2012-2014



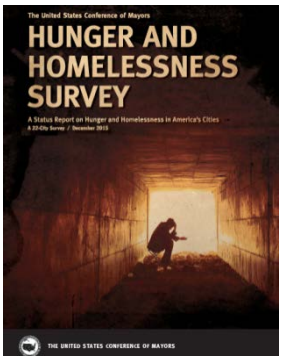
http://www.ers.usda.gov/topics/food-nutrition-assistance/food-security-in-the-us/key-statistics-graphics.aspx

The Economic Research Service of USDA analyzed data from the2014 Current Population Survey (CPS), provides the nationwide rates for Food Insecurity by demographic and social characteristics. The table below shows that the rate of Food Insecurity for all people in the U.S. is 14.0%. The categories that have lower rates of Food Insecurity are highlighted in green and shown at the top of the chart. The characteristics that have higher rates of Food Insecurity are highlighted in orange, with the highest rate of 35.3% for female heads of households with no spouse (generally meaning single women with dependents in the household).

Characteristics	Percent Food Insecure
Elderly living alone	9.3%
White non-Hispanic	10.5%
Households with no children under 18	11.7%
Married-couple families	12.4%
All households with Food Insecurity	14.0%
Men living alone, no children under 18	14.0%
Women living alone, no children under 18	15.3%
Households with children under 18	19.2%
Households with children under age 6	19.9%
Male head of household, no spouse	21.7%
Hispanic	22.4%
Black non-Hispanic	26.1%
Female head of household, no spouse	35.3%

The CPS data is not available by county or state, but has some data by region of the country. It shows that the South has the highest rate of food insecurity, followed closely by the Midwest. The lowest food insecurity is shown in the West, slightly lower than in the Northeast.
http://www.ers.usda.gov/topics/food-nutrition-assistance/food-security-in-the-us/key-statistics-graphics.aspx

Hunger in Davidson County



Each year, the U. S. Conference of Mayor's releases the *Hunger and Homeless Survey – A Status Report on Hunger and Homelessness in America's Cities.*

The *2015 Status Report* surveyed 22 cities by asking elected officials to provide information on the extent and causes of hunger in their communities. Of the cities that responded 65% indicated that requests for emergency food assistance increased within the past year. Low wages, poverty and high housing cost were identified as the causes for this increase. Elected officials surveyed indicated that more jobs with higher wages, access to preventive health, increase in SNAP benefits and more affordable housing were important steps to take in reducing hunger.

The 22-city survey released in December 2015, reported that Nashville was among the participating cities in which the overall number of requests for food assistance decreased (4% decrease in Nashville, 6% in San Antonio, 2% in Los Angeles). Requests remained the same in Chicago, Cleveland and Memphis. Among the cities, the average increased by 5.9%, ranging from a high of 27% in Washington, DC to a low of 1.4% in Santa Barbara.

The report identified exemplary programs, including Second Harvest Food Bank of Middle Tennessee's perishable distribution at 4 pm each Friday. Health produce and dairy is distributed in locations across Davidson County, with a total of 285,000 pounds distributed to those who were food insecure and had limited access. In Nashville, food pantries and emergency kitchens had to turn some people away due to a lack of resources or had to reduce the number of times individuals or families could visit each month. There was an 8% increase in requests from food over the previous year.

The *Hunger and Homeless Survey* for 2015 indicated that the food distributed in Nashville came from various sources.

- 7% Federal Emergency Food Assistance
- 55% Donations from Grocery Store Chains/Other Food Suppliers
- 23% Donations from Individuals
- 15% Purchased Food

It also described the characteristics of people who requested food assistance:

- 70% are Families
- 9% Elderly
- 21% Employed
- 5% Homeless

The report projects that request for food assistance and resources to provide food assistance to remain at the same levels. In past years, the report indicated that food assistance requests would increase substantially.
http://www.usmayors.org/pressreleases/uploads/2015/1221-report-hhreport.pdf

The Nourishing Effect: Ending Hunger, Improving Health, Reducing Inequality from the Bread for the World Institute notes, "Hunger and food insecurity cost us all a great deal more than we may realize." It notes that U.S. food assistance programs actually save money because they improve education and health outcomes. *The Nourishing Effect* explains that the real costs of hunger are in places such as the health care system, with an estimated $160 billion added to national health care costs. It points out that much of the increased health care costs created by hunger and food insecurity comes through Medicare and Medicaid.

By failing to provide early childhood education or job training or other initiatives to reduce poverty, even greater expense comes from emergency rooms and hospital rooms that treat the damaging effects. Without adequate nutrition, there are increases in conditions such as vitamin deficiencies that contribute to infection. It can also include seniors who lack adequate nutrition being admitted to hospitals because they cannot afford both their food and medication, as well as low-income workers who struggle to pay basic expenses.
http://hungerreport.org/2016/full-report/

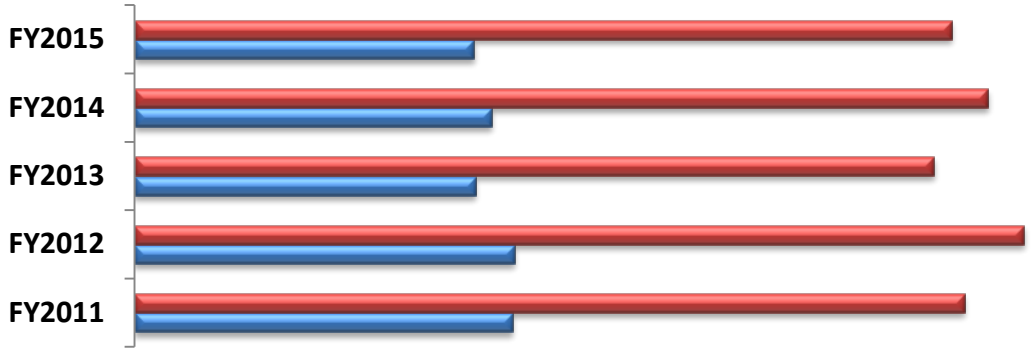
Second Harvest Food Bank of Middle Tennessee

Second Harvest Food Bank of Middle Tennessee (SHFBMT) is the largest emergency food distributor in the 46-county Middle Tennessee area. Second Harvest uses a network of growers, manufacturers, wholesalers, grocery stores and individuals to make healthy food available to their food pantries and partner organizations.

While Second Harvest Food Bank of Middle Tennessee's Emergency Food box locations served fewer individuals in FY 2015 than in FY 2014, it continued its efforts to reach hungry families. More recently up to 100,000 pounds of perishable food was distributed through partner sites in Davidson County. To date in FY 2015, SHFBMT has distributed more than 285,000 pounds of healthy perishable food directly to eligible families through their distribution network.

Chart F-4 indicates a fluctuation in the number of emergency food boxes distributed and persons served between FY2011 and FY2015, with slightly fewer in 2015 than 2011.

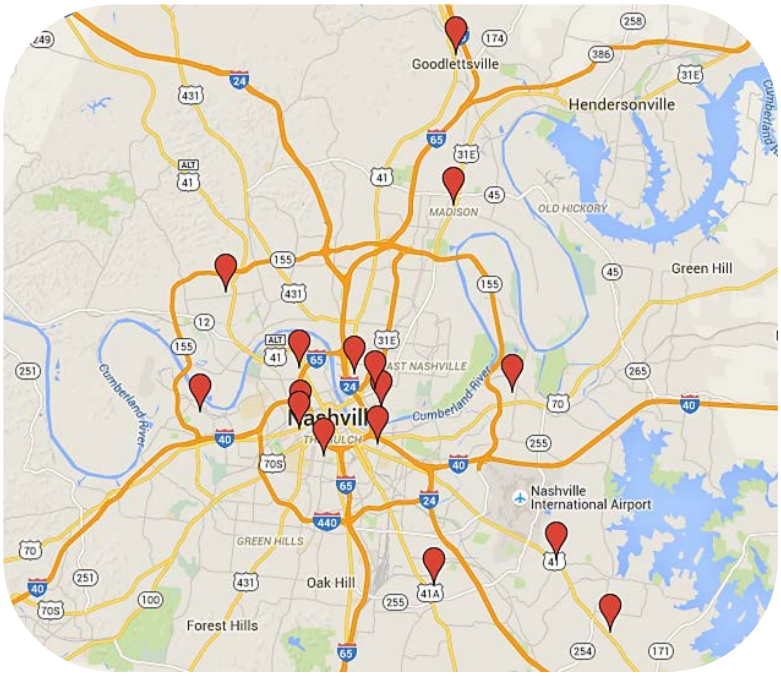
Chart F-4: Emergency Food Distribution
Second Harvest Food Bank, FY 2011-2015



	FY2011	FY2012	FY2013	FY2014	FY2015
Individuals Served	126,516	135,510	121,816	130,049	124,519
Emergency Food Boxes	57,611	57,878	52,013	54,477	51,760

Source: Second Harvest Food Bank of Middle Tennessee

The Google Map at right shows local Emergency Food Box locations, as identified by Second Harvest. http://secondharvestmidtn.org/get-help/

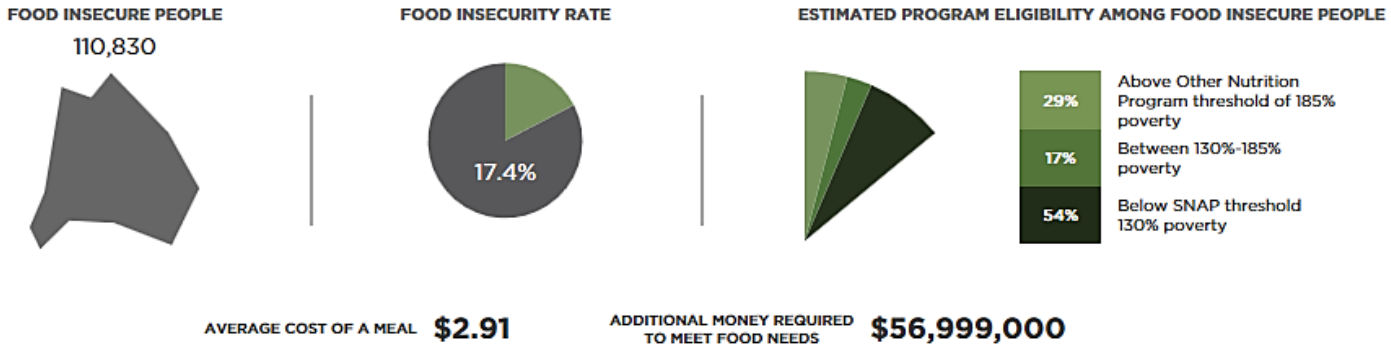


Feeding America's *Map the Meal Gap 2015* provides data on food insecurity to help communities understand more about food insecurity in order to identify strategies to help people who most need food assistance.

The graphic shows the prevalence of food insecurity in the U. S. is 1 in 6 people and 1 in 5 children. It shows that food security improves circumstances including employment, income and home ownership.

http://www.feedingamerica.org/hunger-in-america/our-research/map-the-meal-gap/2013/map-the-meal-gap-2013-exec-summ.pdf

The graphic below from Feeding America's *Map the Gap* initiative shows data that estimates there are 110,830 food insecure people in Davidson County, with a food insecurity rate of 17.4%. It also shows the eligibility status for existing food programs for Davidson County's food insecure population.



http://map.feedingamerica.org/county/2013/overall/tennessee/county/davidson

Federal Food and Nutrition Assistance Programs

U.S. Department of Agriculture's Food and Nutrition Service administers an array of programs to promote access to healthy food and nutrition. The largest of these programs include:

- Supplemental Nutrition Assistance Program (SNAP) formerly called Food Stamps
- National School Breakfast and Lunch Program
- Special Supplemental Nutrition Program for Women, Infants, and Children (WIC)

http://www.fns.usda.gov/programs-and-services

Supplemental Nutrition Assistance Program (SNAP)

SNAP (formerly called Food Stamps) provides nutritional assistance benefits to eligible children, persons with a disability and adults. SNAP benefits supplement monthly food budgets for low-income families with the goal of improving nutrition and health.
http://www.fns.usda.gov/snap/supplemental-nutrition-assistance-program-snap

The percent of persons in the United States receiving SNAP benefits declined for the U. S. but increased for Tennessee and Davidson County between 2013 and 2014. According to the 2014 American Community Survey, of the 367,952 total households in Davidson County, 43,298 households received SNAP benefits.

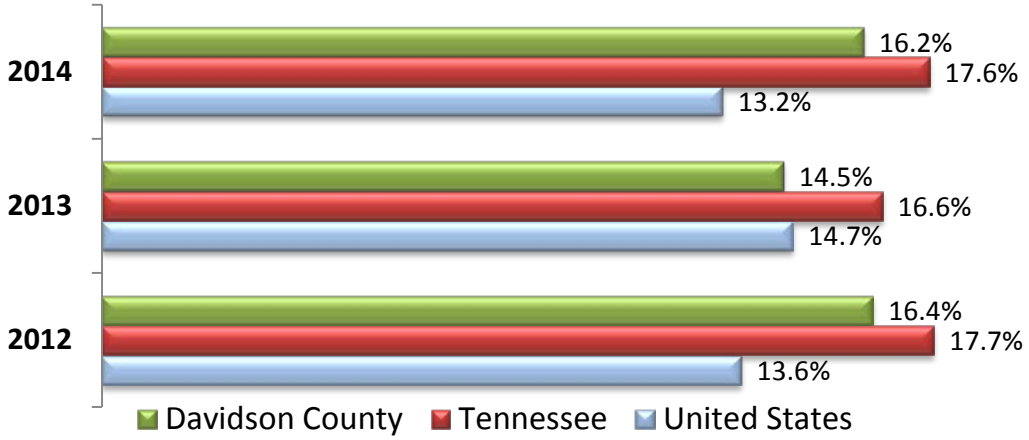
Among households with one or more people age, 60 or over, 21.5% received SNAP benefits. In households with children under age 18, 59.6% received SNAP.

The poverty rate for SNAP benefit households was 58.5%, compared to 9.4% poverty for households that did not receive SNAP.

Chart F-5 compares the percent of the population receiving SNAP benefits in Davidson County, Tennessee and the U.S. for the years 2012-2014.

Chart F-5: Percent of Population Receiving SNAP Benefits

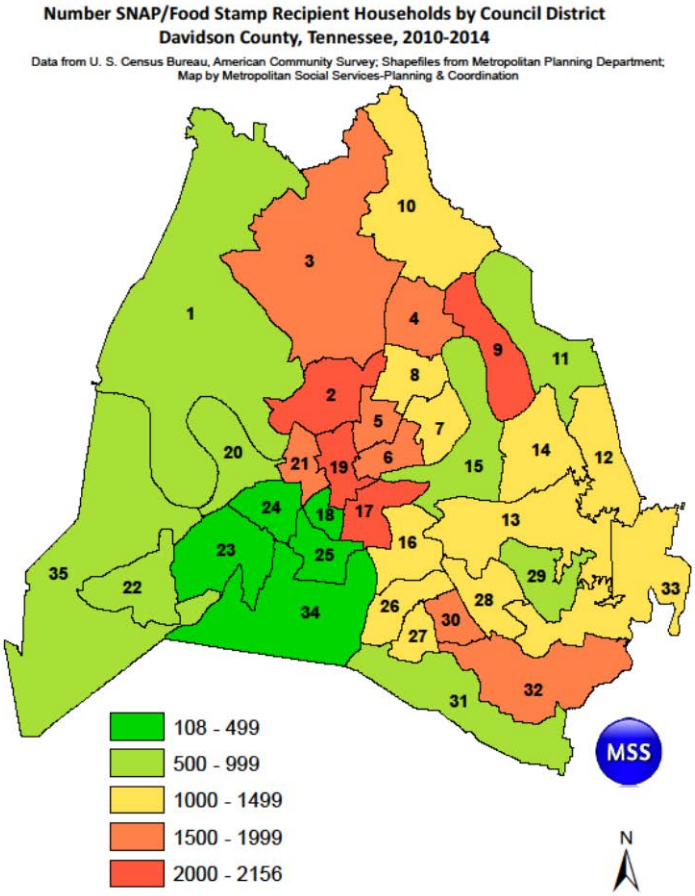
U.S., Tennessee, Davidson County, 2012, 2013, 2014



Source: U.S. Census Bureau American Community Survey

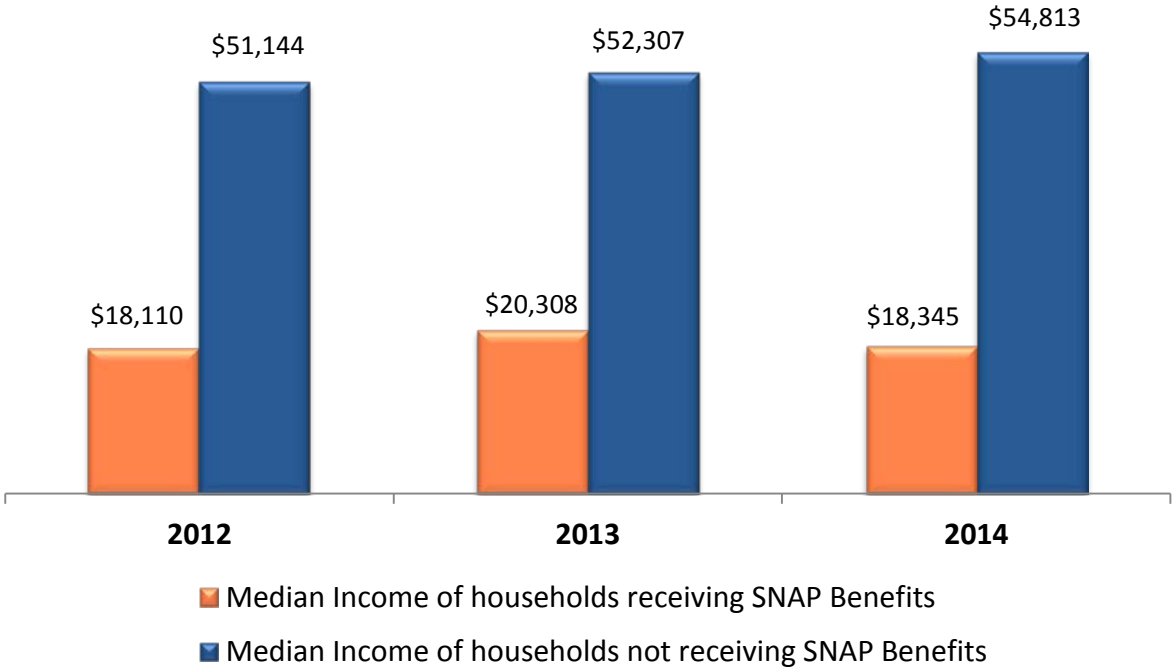
During 2010-2014, Davidson County had 40,717 households that received SNAP/Food Stamp Benefits, and the number of households receiving SNAP benefits varies by Council District. The number ranges from a low of 108 in District 34 to a high of 2,156 in District 9. Four Council Districts each have more than 2,000 households receiving SNAP benefits (9, 17, 2 and 19).

The map at right shows the number of households receiving SNAP/Food Stamp benefits from 2010-2014.



Households that receive SNAP benefits have much lower incomes and are more likely to be in poverty, as shown in Chart F-6. The chart below shows that the median income for households that do not receive SNAP is nearly 3 times as high as households that receive SNAP benefits.

Chart F-6: Median Income of Households Receiving and Not Receiving SNAP Benefits
Davidson County, 2012-2014



Source: American Community Survey, Table S2201

National School Lunch and Breakfast Lunch Program - Community Eligibility Provision (CEP)

The CEP is a new alternative to the traditional meal application process associated with the United States Department of Agriculture (USDA) National School Breakfast and Lunch Programs. The program allows schools and local educational agencies with high poverty rates to provide free breakfasts and lunches to all students, relieving the burden on families by eliminating barriers to processing applications.

All Metro Nashville Public School students are able to participate in the free breakfast and lunch meal program without having to submit a meal application.
USDA.gov/school-meals/communityeligibility-provision
http://mnpsnutritionservices.org/index.php?page=communityeligibility&sid=0105151608459305

Local efforts continue through community organizations, such as Alignment Nashville's School Food Committee, Nashville Food Policy Council, Farmers Markets, School Food Pantries, and Kids Back Pack Program to address hunger-related issues for public school students.

Special Supplemental Nutrition Program for Women, Infants, and Children (WIC)

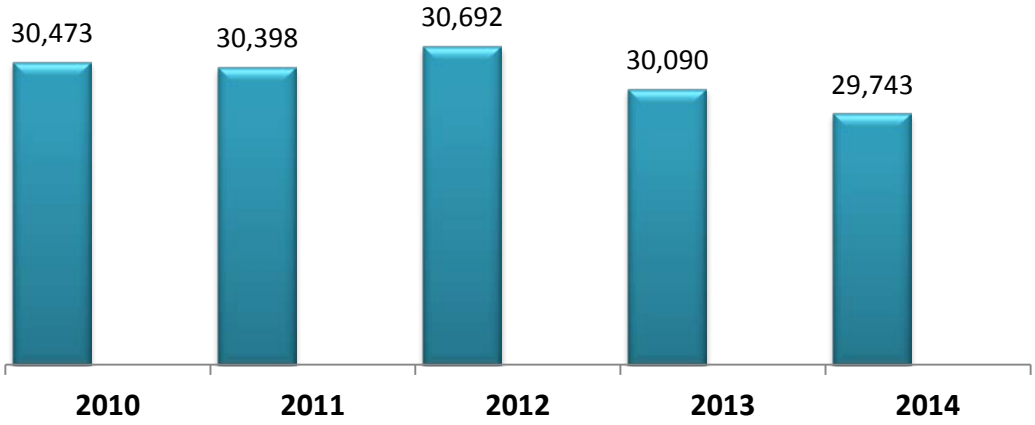
The Women, Infants and Children Supplemental Food Program (WIC) is a supplemental nutrition program that provides nutrition education, promotes breastfeeding, and provides food vouchers that program participants can

use in area stores. The Metropolitan Public Health Department makes the WIC program available to pregnant and post-partum women, infants and children up to age five who meet income guidelines.

WIC is a program of the USDA and serves 8.2 million women and families, including half of all babies in the United States. WIC plays a vital role in ensuring healthy, nutritious diets for families facing financial difficulty. In addition, WIC provides breastfeeding education, counseling, and support, nutrition education, and referrals to healthcare and social services.
http://www.fns.usda.gov/wic/women-infants-and-children-wic

The number of participants in Davidson County's WIC program participation has remained ~~very~~ consistent in recent years, as shown in Chart F-7.

Chart F-7: Number of WIC Unduplicated Participants
Davidson County, 2010-2014



Source: Metropolitan Health Department Women, Infant and Children Supplemental Food Program

Senior Hunger

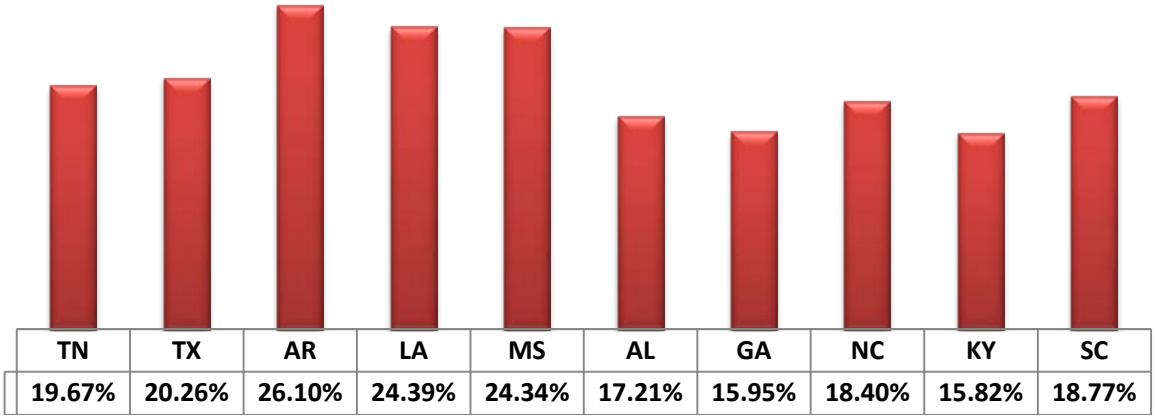
In a report *Baby Boomers and Beyond – Facing Hunger After Fifty* by Feeding America and AARP, more than 81% of older adults reported they were food insecure and 13 million adults age 50+ received assistance from Feeding America food bank network each year. Older adults have typically higher medical costs and emergency food assistance helps with having to make the difficult choices of buying gas or paying medical expenses.
http://www.feedingamerica.org/hunger-in-america/our-research/senior-hunger-research/baby-boomers-executive-summary.pdf

According to *The State of Senior Hunger in America 2013 Annual Report* prepared for the National Foundation to End Senior Hunger, 15.5% faced the threat of hunger. Race, ethnicity and low-income are contributing factors for seniors facing the threat of hunger. The report indicates that since the Great Recession there has been a 56% increase in the number of seniors experiencing hunger.
http://www.nfesh.org/wp-content/uploads/2015/04/State-of-Senior-Hunger-in-America-2013.pdf

Chart F-8 shows the states with the highest percent of seniors who faced hunger in, including Tennessee. Tennessee and surrounding states with the highest percentage of seniors facing hunger in 2012-2013.

The National Foundation to End Senior Hunger indicates that most of the states with seniors facing the threat of hunger continue to be located in the southeast and southwestern part of the United States. Tennessee continues to rank amongst the top 10 states for seniors facing the threat of hunger.

Chart F-8: Percentage of Senior's Facing Threat of Hunger
Tennessee and Surrounding States, 2012-2013



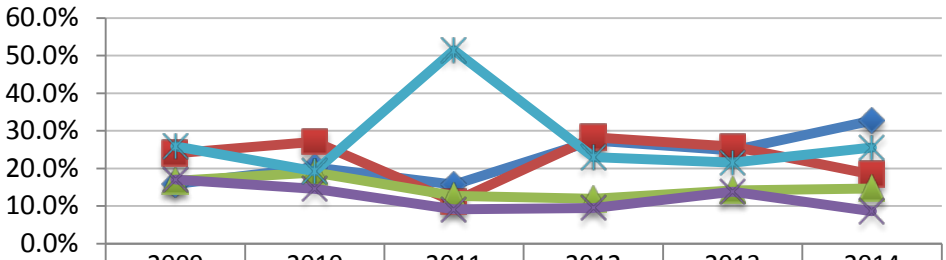
TN	TX	AR	LA	MS	AL	GA	NC	KY	SC
19.67%	20.26%	26.10%	24.39%	24.34%	17.21%	15.95%	18.40%	15.82%	18.77%

http://www.nfesh.org/wp-content/uploads/2014/05/worst-to-best-states.pdf
http://www.nfesh.org/wp-content/uploads/2015/04/2012-to-2013-comp-Alpha.pdf

Grassroots Community Survey

In the Grassroots Community Survey conducted each year, beginning in 2009, survey respondents indicated their greatest needs in Food & Nutrition. Among respondents in 2014, the highest percent (32.1%) indicated that food boxes/food pantries were the greatest unmet need in Food & Nutrition. The second highest was SNAP/Food Stamps at 25.6%, followed at third by food for elderly and disabled persons.

Chart F-9: Greatest Unmet Need in Food & Nutrition
Grassroots Community Survey, 2009-2014



	2009	2010	2011	2012	2013	2014
Food Boxes/Food Pantries	15.8%	20.3%	15.64%	27.4%	24.7%	32.7%
Food for Elderly or Disabled Persons	24.0%	27.1%	11.17%	28.3%	25.8%	18.4%
Food for Infants and Young Children	16.7%	18.9%	12.66%	11.9%	14.2%	14.7%
Food for School Children	17.0%	14.5%	9.12%	9.4%	13.8%	8.6%
Food Stamps	25.9%	19.2%	51.40%	23.0%	21.5%	25.6%

Source: 2015 Grassroots Survey

Connections to Food & Nutrition

Access to affordable and healthy food is usually related to a person's income status and where the person lives. It can affect other facets of their life, especially for the youngest and the oldest who are usually the most vulnerable.

Housing

Low-income housing is typically found in areas that have limited transportation options, as well as where most students are eligible for free or reduced price lunches and rely on SNAP (food stamps) benefits to purchase food. In addition, these areas have a high concentration of corner stores that market tobacco and alcohol. Food deserts, with limited access to affordable and nutritious food, are generally found in neighborhoods with low-income housing.
http://americannutritionassociation.org/newsletter/usda-defines-food-deserts

Health and Human Development

Health outcomes for persons with limited incomes who live in areas with concentrated poverty are more likely to experience chronic diseases such as hypertension, diabetes, obesity and heart diseases. Many of these health issues are related to diet and exercise. Health outcomes for infants and children are adversely affected by a lack of proper food and nutrition resulting in impaired cognitive and motor development, obesity and brain development.
http://www.urbanchildinstitute.org/articles/updates/nutrition-and-early-brain-development

Workforce

Unemployed, underemployed and low-skilled workers have limited income to spend on basic living expenses. For food and nutrition, persons with limited incomes are more likely to purchase cheap, processed, ready-to-eat food from corner stores, due to a lack of transportation and access to full service grocery stores. Persons with limited incomes have to make difficult choices between buying more expensive healthy fresh fruits and vegetables or cheaper easily accessible processed foods at the corner store. Without access to a vehicle or affordable transportation persons with limited incomes, it becomes more difficult to get to a full service grocery store or farmers market.
http://thefoodtrust.org/uploads/media_items/grocerygap.original.pdf

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Promising and Evidenced-Based Practices

Grocery Store and Health Clinic Complex

Brockton, Massachusetts, launched a unique approach to tackling chronic, poverty-borne illness. A new complex comprising a grocery store and community health clinic will bring primary care, creative nutrition education and affordable, wholesome food to the city's low-income residents. Boston's Brockton Neighborhood Health Center and Vicente's Market together opened adjacent facilities that replaced a blighted corner with jobs and economic activity and launched a shared strategy that makes nutrition a part of healthier lifestyles for nearby residents.

One in four residents of Brockton, Massachusetts, live below the poverty line and have higher rates of obesity and diabetes that then state average. The grocery store and health clinic complex was part of a $22million investment to restore an abandoned commercial site in the low-income community.
http://www.lisc.org/our-stories/story/sen-elizabeth-warren-lisc-celebrate-22mm-effort-that-feeds-better-health

City Slicker Farms

City Slicker Farms was created to address the lack of access to fresh healthy food in West Oakland, California, primarily an African American and Hispanic/Latino low-income community. The program uses vacant lots donated by the city or individuals to grow food. Originally, the program ran by an all-volunteer crew but since has grown to include paid staff. City Slicker Programs includes a Community Market Farms, Backyard Gardens and Urban Farming Education Program.

The programs provide training, education, tools, resources and support to individuals and families interested in growing healthy foods. With donated land City Slicker Farms transformed vacant lots and unused space to improve access to fresh produce to the African Americans and Latino community. In addition, City Slicker Farms has a Policy Advocacy Initiative that promotes sustainable food systems for inner-city residents.
http://www.cityslickerfarms.org/mission-and-history

Health & Human Development

Key Findings

- There were an estimated 98,736 non-institutionalized people in Davidson County without health insurance in 2015. The lowest percent of the uninsured in Davidson County were children under age 18 at 11%.
- Early childhood is the most critical phase of human development and an essential part of health. Early child development is described as a science that is so powerful it can transform the lives of children and improve their life outcomes.
- Davidson County when compared to the 95 Counties of Tennessee ranked as 87th worst for overall wellbeing of children. In 2014, there were 18.1% of youth ages 16-19 unemployed and only 6.5% of children under age 18 who received public benefits from Families First. There were increased numbers of substantiated child abuse/child neglect cases going from 548 cases in 2013 to 611 cases in 2014 in Davidson County.
- Adverse Childhood Experiences have been linked to later health problems and mental health disorders, including depression, hallucinations and post-traumatic stress disorders. Because of a variation in the level of resiliency, (mitigating factors such as having a loving grandparent, understanding teacher, trusted friend), some people with greater adverse childhood experiences may function at a higher level.
- Children who live in poverty are more likely to have cognitive, behavioral, social and emotional difficulties. During their lives, they are likely to have fewer years of school and more unemployment.
- An estimated 1 out of 5 children experience a mental disorder in any given year that not only affects the child but also their family and community.
- In Davidson County, 31% of adults were obese. The percent of adult obesity was higher in Davidson County than in the U.S. In the area of excessive drinking and smoking Davidson County showed a slightly higher percent of excessive drinking, and Tennessee had a higher percent of smokers.
- Among all of counties in Tennessee, Davidson County was ranked as the 77th worst for physical environment (based on too many people driving alone, long commutes, and severe housing problems).
- In overall health, Tennessee was ranked as the 43rd worst state in the nation in 2015 by America's Health Rankings compared to 45th in 2014. The health challenges in Tennessee were obesity, physical inactivity, smoking, drug deaths, low birth weight, violent crimes and immunization coverage.
- Violence has become a major factor in premature deaths. Violent behavior has become a familiar course of action in dealing with conflict, emotional distress and criminal activity.
- More people died from drug overdoses in Tennessee than in motor vehicle accidents, homicides or suicides. Opioid prescription pain medications exceeded alcohol as the primary substance of abuse in Tennessee and in the U.S.

Health and Human Development

According to the World Health Organization and other researchers, health is a comprehensive state of physical, mental and social wellbeing. It is more than the absence of disease or illness with many impacts on life. The U.S. Centers for Disease Control and Prevention (CDC) has identified five social determinant areas that are critical to wellbeing:

1. Economic Stability (not in poverty, having employment, food security, housing stability)
2. Education (educational attainment, early childhood development, higher education, language/literacy)
3. Social and Community Context (social cohesion, civic participation, equity, incarceration)
4. Health and Health Care (access to health care, health literacy)
5. Neighborhood and Built Environment (access to healthy foods, quality of housing, crime and violence, environmental conditions)

http://www.healthypeople.gov/2020/topics-objectives/topic/social-determinants-health

The CDC has established that health is multidimensional and directly linked to individual quality of life and has been associated with specific illnesses and conditions to living in poverty. If people are happy about their lives, they are more likely to have better health outcomes. Not only does health involve the absence of disease, but it is also a powerful resource to allow people to fulfill their needs, satisfy their desires and cope with their environment for a long, productive and rewarding life.

The Healthy People 2020 initiative identified the importance of quality of life and wellbeing for a healthy life. People are living longer than ever before, another reason that the quality of a healthy life is important.
http://www.healthypeople.gov/2020/topics-objectives/topic/health-related-quality-of-life-well-being

The CDC has defined wellbeing as a positive and meaningful outcome for people and society. Wellbeing is the individual perception of satisfaction or happiness about one's life. The CDC stated that having satisfying living conditions of housing, employment and other necessities are the basics of wellbeing. What people think and feel about their lives, the quality of their relationships, positive emotions, coping skills and achievements are all related to how people feel about their overall health.
http://www.cdc.gov/hrqol/wellbeing.htm

Health, Quality of Life and County Health Rankings

The Robert Wood Johnson Foundation and the University of Wisconsin's County Health Rankings and Roadmaps annually evaluate and publish the factors in all U.S. counties that affect the health and life expectancy of residents. Counties are ranked by multiple measures that affect health, including Health Outcomes (how healthy based on mortality and morbidity measures) and Health Factors (the elements that influence health, particularly behavioral, clinical, social/economic and environmental).

Quality of life is a Health Outcome that is based on the scoring from the Behavioral Risk Factor Surveillance System and the National Center for Health Statistics. For 2015, among Tennessee's 95 counties Davidson County ranked 6th in Health Outcomes (with 1st being the best and 95th being the worst) based on length and quality of life. Davidson County was ranked 12th for length of life/premature death. For quality of life, Davidson County was ranked 10th.

The 2015 County Health Rankings also included rankings of Health Factors, in which Davidson County was ranked 22nd among the 95 Tennessee Counties, reflecting improvement from the previous year. The following table shows the rankings for Davidson County in the four categories, along with the elements on which the rankings

were based. Although there are still concerns in some areas, there was improvement in Physical Environment, having improved from 95th in 2014 to 77th in 2015. There were problems of too many people driving alone to work, long driving commutes and severe housing problems that affected the ranking.

The 2015 Rankings of Davidson County Health Factors			
Health Behaviors 6th	**Clinical Care 17th**	**Social and Economic Factors 44th**	**Physical Environment 77th**
• Tobacco Use • Diet and Exercise • Alcohol Use • Sexual Activity	• Access to Care • Quality of Care	• Education • Employment • Income • Family and Social Support • Community Safety	• Environmental Quality • Severe Housing Problem • Driving Alone to work • Long Driving Commutes

Source: 2015 County Health Rankings and Roadmaps, Robert Wood Johnson Foundation

Compared to the other major cities in Tennessee, Davidson County ranked higher among some subcategories and lower in others in 2015.

- Length of Life - Davidson County as 12th (among 95 counties), compared to 11th for Knox County, 17th for Hamilton County and 33rd for Shelby County
- Quality of Life - Davidson County ranked 10th, compared to 24th for Knox County, 49th for Shelby County and 53rd for Hamilton County
- Clinical Care - Davidson County ranked 17th, compared to 2nd for Knox County, 6th and 18th for Shelby County
- Social & Emotional Factors – Davidson County ranked 44th, compared to 6th for Knox County, 30th for Hamilton County and 90th for Shelby County
- Physical Environment – Davidson County ranked 77th, compared to 30th for Hamilton County, 40th for Shelby County and 70th for Knox County

http://www.countyhealthrankings.org/app/tennessee/2015/rankings/davidson/county/outcomes/overall/snapshot
http://www.countyhealthrankings.org/sites/default/files/state/downloads/CHR2015_TN_0.pdf

Three major behavioral health risks for Davidson County, Tennessee and the U.S. have been adult smoking, adult obesity and excessive drinking. Without improvement, these factors will have a detrimental and lasting effect on residents, according to the County Health Rankings and Roadmaps.

- Excessive drinking is a risk factor for a number of adverse health outcomes such as alcohol poisoning, hypertension, acute myocardial infarction, sexually transmitted infections, unintended pregnancy, fetal alcohol syndrome, sudden infant death syndrome, suicide, interpersonal violence, and motor vehicle crashes.

- Obesity increases the risk for health conditions such as coronary heart disease, type 2 diabetes, cancer, hypertension, dyslipidemia, stroke, liver and gallbladder disease, sleep apnea and respiratory problems, osteoarthritis, and poor health status.

- Each year approximately 443,000 premature deaths are attributed to smoking. Cigarette smoking is identified as a cause of various cancers, cardiovascular disease, and respiratory conditions, as well as low birth weight and other adverse health outcomes.

http://www.countyhealthrankings.org/app/tennessee/2015/measure/factors/11/description
http://www.countyhealthrankings.org/app/tennessee/2015/measure/factors/9/description
http://www.countyhealthrankings.org/app/illinois/2015/measure/factors/49/description

RAND Health recently released a report, *Development of the Robert Wood Johnson Foundation National Survey of Health Attitudes* (2016) that discussed the Culture of Health concept. In recent years, the Robert Wood Johnson Foundation has led an initiative to "advance a culture that enables all in our diverse society to lead healthier lives now and for generations to come." The survey was designed to assess views on what factors influence health, values related to investments for health and well-being, behaviors such as civic engagement for health and community engagement on health attitudes and values.

The RAND report discussed the importance of a paradigm shift to a focus on well-being, rather than the traditional disease/health care view of health. With the anticipated outcome of improved health and well-being, four action areas were identified:

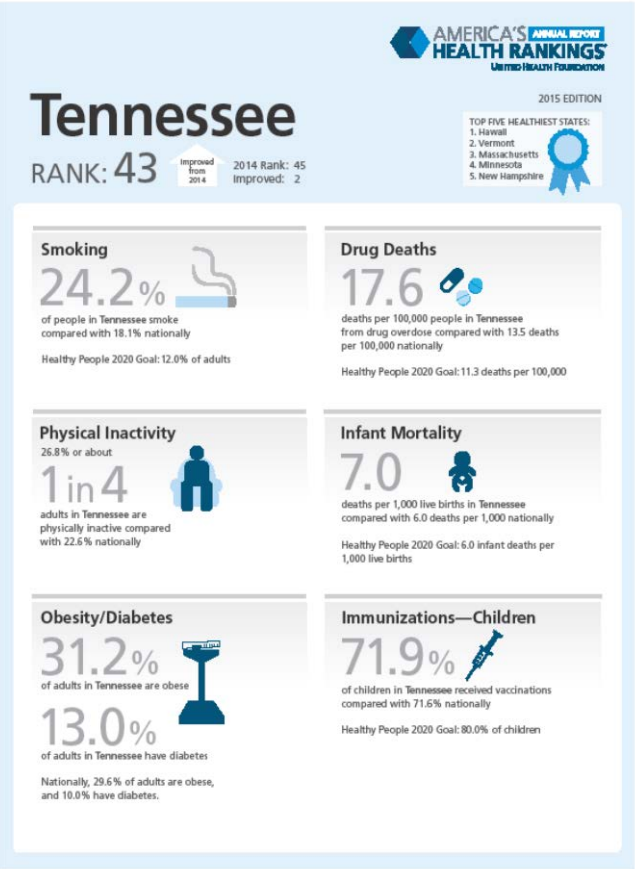
1. Making health a shared value
2. Fostering cross-sector collaboration to improve well-being
3. Creating healthier, more equitable communities
4. Strengthening integration of health services and systems

http://www.rand.org/content/dam/rand/pubs/research_reports/RR1300/RR1391/RAND_RR1391.pdf

Overall Health of Tennesseans

When people do not have the opportunity to live long and well their health can be significantly burdened according to the *Tennessee Health Gaps Report* from County Health Rankings and Roadmaps. In other words, the lack of opportunity for good health may be caused by health gaps that can be costly but preventable. Based on the report, there are differences in health outcomes according to where people live, learn, work and play.
http://www.countyhealthrankings.org/health-gaps/tennessee

America's Health Rankings, ranked the overall health for the state of Tennessee as the 43rd worst in the U.S. in 2015. Tennessee's rate of violent crimes was cited in the rankings as 47th in the U.S. The following graphic provides a representation of other health challenges in Tennessee included obesity, physical inactivity, smoking, drug deaths, low birth weight, and immunization coverage.
http://cdnfiles.americashealthrankings.org/SiteFiles/StateProfiles/Tennessee-Health-Profile-2015.pdf



Health Disparities

Research has found that racial and ethnic minority groups experience poorer health compared to the overall population of the country. According to *Health Disparities* from the National Institutes of Health, the health disparities result from a complex interaction between factors such as biology and the environment. The shortage of racial and ethnic minority health professionals, discrimination, and inequities in income, education, and access to health care have attributed to health disparities and poor health outcomes.

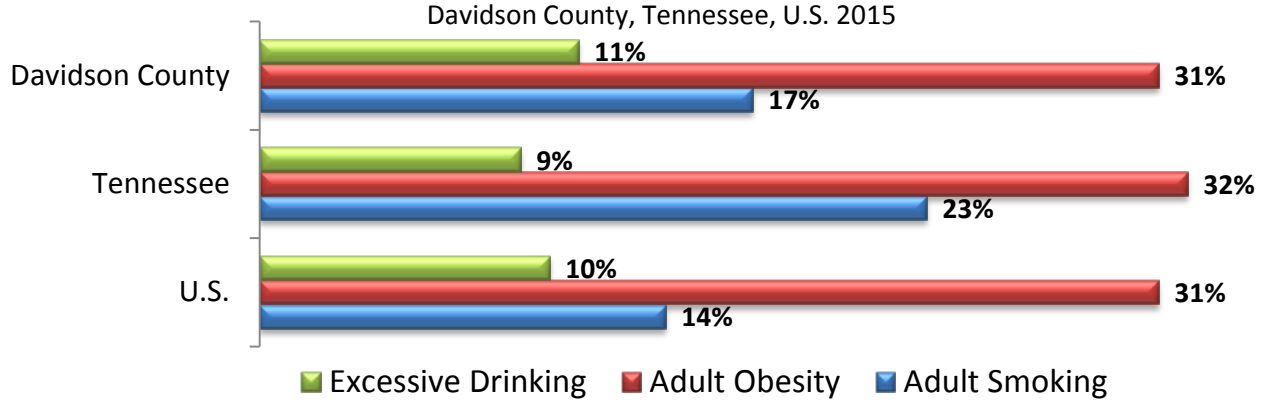
Heart disease continues to be the leading cause of death in the U.S., with racial and ethnic minorities and low-income individuals being most affected, according to the University of California's Center for Healthcare Policy and Research report, *Lower Socioeconomic Status Linked with Heart Disease despite Improvements in other Risk Factors*. People with low incomes are more likely to develop heart disease than wealthier or higher educated people, according to the University of California Davis Health System. It also stated that workers earning the lowest wages had a greater risk of hypertension than workers with higher wages. The correlation between wages and hypertension was especially strong among women and persons between the ages of 25-44.
http://report.nih.gov/nihfactsheets/viewfactsheet.aspx?csid=124
http://ucdmc.ucdavis.edu/welcome/features/2012-2013/02/20130206_hypertension_wages.html
http://m.ucdmc.ucdavis.edu/publish/news/newsroom/5660

The causes of disparate cancer rates within different socioeconomic or racial/ethnicity groups are complex, and include interrelated social, economic, cultural, and health system factors, according to the American Cancer Society. However, disparities predominantly stem from inequities in work, wealth, income, education, housing, and overall standard of living, as well as social barriers to high-quality cancer prevention, early detection, and treatment services. Discrimination is another factor that the American Cancer Society identified as contributing to

racial/ethnic disparities in the burden of cancer. It stated that racial and ethnic minorities tend to receive lower-quality health care than Whites, even when insurance status, age, severity of disease, and health status are comparable.
http://www.cancer.org/acs/groups/content/@epidemiologysurveilance/documents/document/acspc-029771.pdf

Chart HHD-1 compares three major behavioral health risks in Davidson County, Tennessee and the U.S. In Davidson County, 31% of adults were obese (1% increase from 2014). Tennessee was 1% higher in adult obesity than Davidson County and the U.S. In the area of excessive drinking and smoking, Davidson County showed a slightly higher percent of excessive drinking, and Tennessee had a higher percent of smokers.
http://www.countyhealthrankings.org/app/tennessee/2015/rankings/davidson/county/outcomes/overall/snapshot

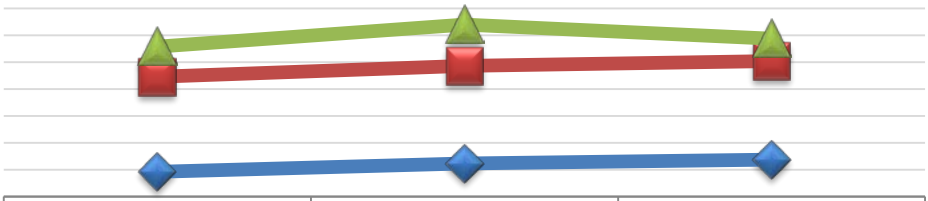
Chart HHD-1: Major Behavioral Health Risks
Davidson County, Tennessee, U.S. 2015



Source: 2015 County Health Rankings and Roadmaps, Robert Wood Johnson Foundation

Another challenging behavioral health risk for Davidson County has been sexually transmitted infections (STI's). The elevated rate negatively affected Davidson County's 2014 and 2013 health ranking with the number of new cases reported per 100,000 people. Chart HHD-2 shows that the number of infections in Davidson County decreased slightly in 2015 and was higher than in Tennessee and the U.S.

Chart HHD-2: Sexually Transmitted Infections (Per 100,000 Population)
Davidson County, 2013-2015



	2013	2014	2015
U.S.	92	123	138
Tennessee	446	486	504
Davidson County	558	639	587

Source: 2013-2015 County Health Rankings and Roadmaps, Robert Wood Johnson Foundation

The CDC recommended early detection and treatment, reduction of risk behaviors and vaccination for the reduction of STI's. In areas with higher rates of infections, the CDC recommended the expansion of screening and

treatment programs, to be implemented with private and public partners. STI increases the risk of HIV infected persons transmitting the virus to sex partners.
http://www.cdc.gov/std/hiv/stdfact-std-hiv.htm

The most significant change in Davidson County's physical environment health factors from 2014-2015 was the change of the drinking water violations, from 41% in 2014 to 0% in 2015. The purpose of the drinking water rating was to show the percent of the population potentially exposed to water exceeding a violation limit during the past year, according to the County Health Rankings and Roadmaps.

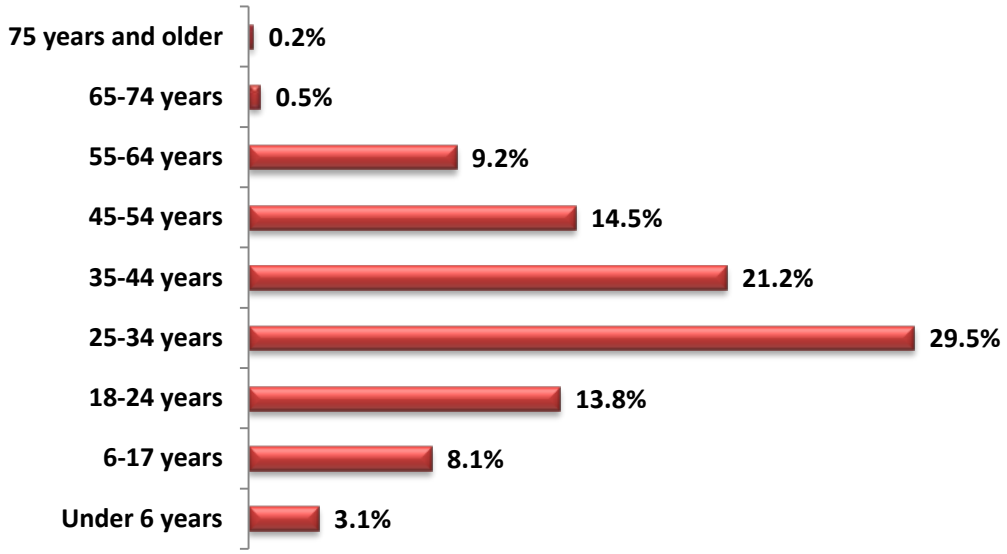
The Metro Water Services' *2015 Consumer Confidence Report* stated that tests on 105 possible contaminants found that Nashville's water were at safe levels. It stated that the presence of contaminants was not necessarily an indication that the water posed health risks and that water samples are tested daily to ensure the highest quality of water.
http://www.nashville.gov/Portals/0/SiteContent/WaterServices/docs/reports/CCR2015.pdf

Health Insurance and Access

Access to comprehensive, quality health care services are important for the achievement of health equity and for increasing the quality of health. Limited access to health care creates barriers for some people in trying to reach their full potential and it can negatively affect their quality of life. The greatest barriers to health care are often the inaccessibility of health care services, the high cost and the lack of health insurance coverage.
http://www.healthypeople.gov/2020/topics-objectives/topic/Access-to-Health-Services

The 2014 American Community Survey reports that an estimated 98,736 non-institutionalized people in Davidson County do not have health insurance. Chart HHD-3 shows the percent of uninsured for 2014 by age category. It shows that the highest percent of uninsured Davidson County residents is in the 25-34 age category, followed by ages 35-44. The 2014 American Community Survey estimated that over 11% of children under age 18 were uninsured in Davidson County.

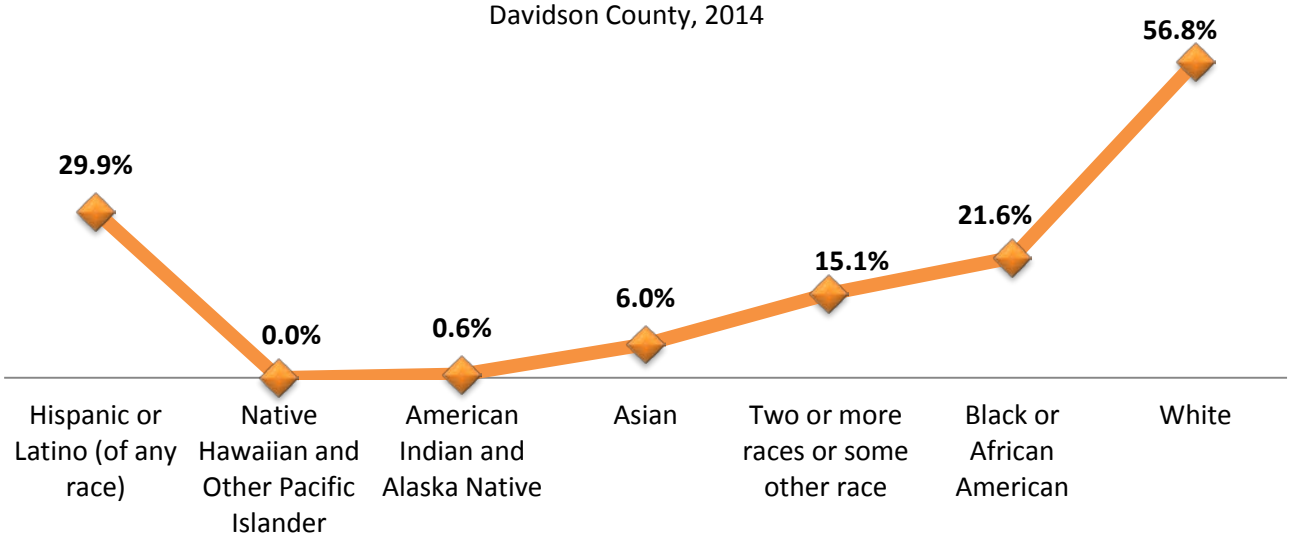
Chart HHD-3: Percent Uninsured by Age Category
Davidson County, 2014



Source: U.S. Census Bureau, 2014 American Community Survey

The percent of uninsured people in Davidson County varies by race and ethnicity. Chart HHD-4 shows races, and ethnicity and the percentages of uninsured individuals in each of the groups.

Chart HHD-4: Percent Without Health Insurance by Race and Ethnicity
Davidson County, 2014

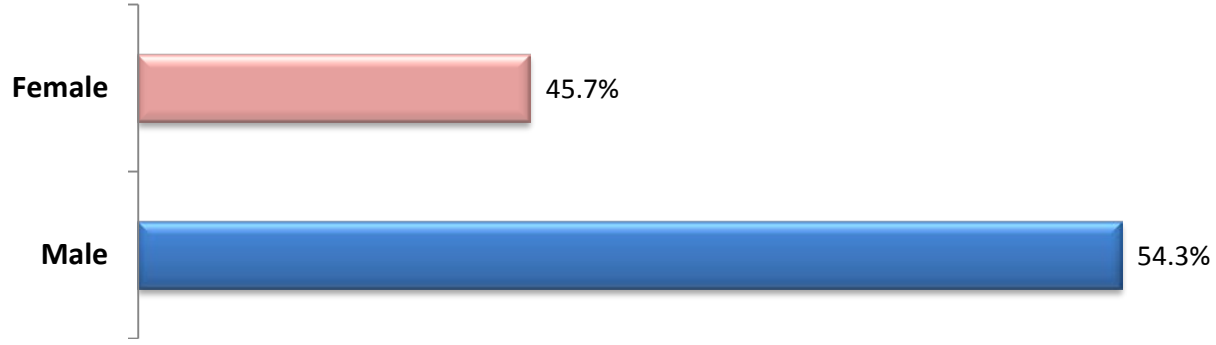


Source: U.S. Census Bureau, 2014 American Community Survey

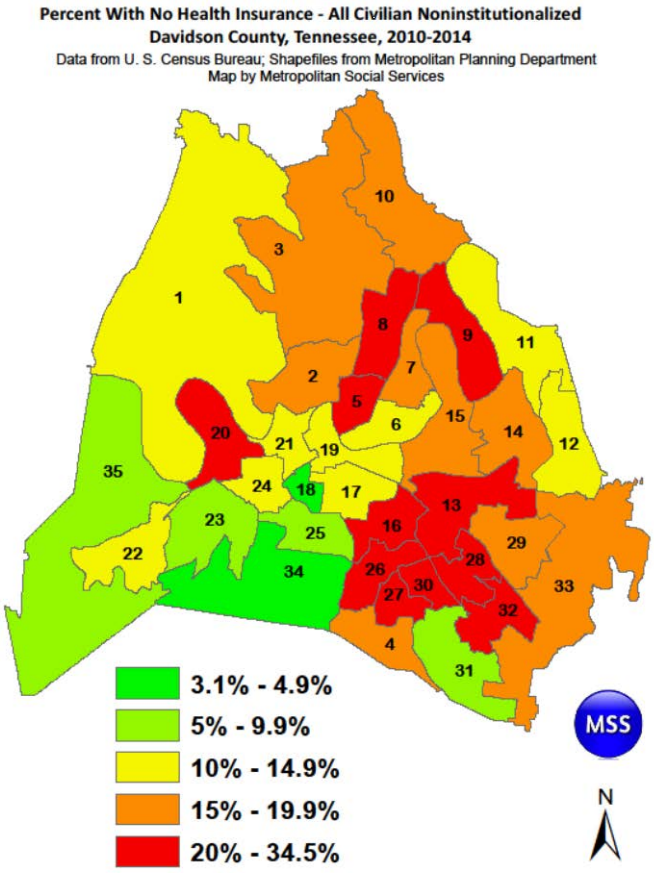
Chart HHD-5 shows that a greater percent of males were uninsured than females. The Kaiser Family Foundation report, *Women's Health Insurance Coverage* found that women were less likely than men to be insured through their own jobs but were more likely to be covered as a dependent of their spouses.

Because women were more likely than men to be covered as dependents, a woman was at greater risk of losing her insurance if she became widowed or divorced, if her spouse lost a job, if her spouse's employer discontinued family coverage or if out-of-pocket costs were not affordable.
http://kff.org/womens-health-policy/fact-sheet/womens-health-insurance-coverage-fact-sheet/

Chart HHD-5: Percent Without Health Insurance by Gender
Davidson County, 2014



Source: U.S. Census Bureau, 2014 American Community Survey



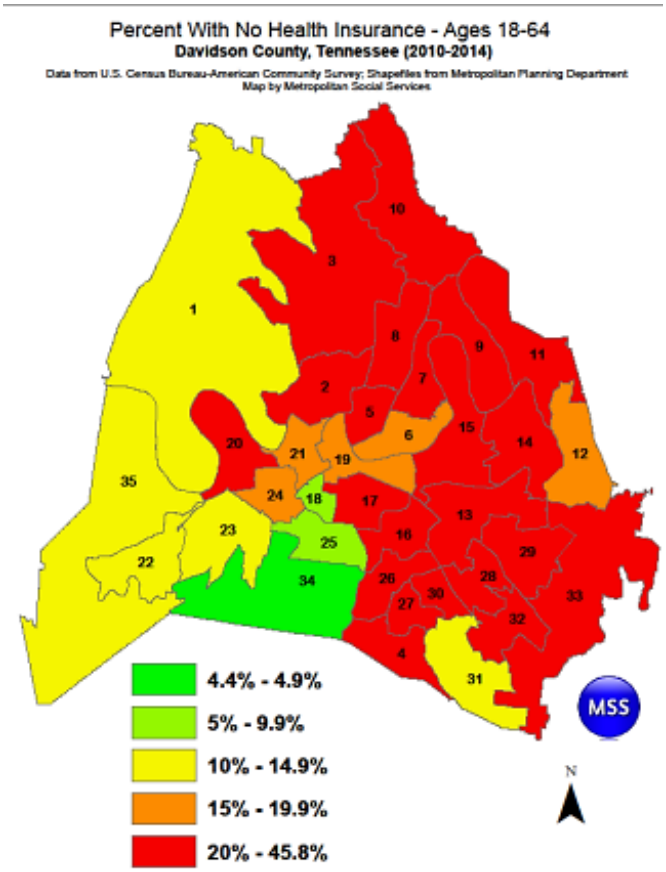
The map at left shows the percent of civilian noninstitutionalized residents of Davidson County who had no health insurance coverage by Metro Council District, according to the 2010-2014 American Community Survey 5-Year Summary from the U. S. Census Bureau.

In the red areas, at least 20% of the population has no health insurance coverage.

The map at right reflects the percent of Davidson County residents ages 18-64 who had no health insurance coverage by Metro Council District, according to the 2010-2014 American Community Survey 5-Year Summary from the U. S. Census Bureau.

Working age people are typically less likely to have health insurance coverage. Younger children are usually covered by Medicaid and older people are usually covered by Medicare.

In the red areas, at least 20% of the population ages 18-64 has no health insurance coverage.



The Affordable Care Act (ACA) was signed into law in 2010 by President Obama with a major focus on expanding insurance coverage. The Kaiser Family Foundation found that even under the ACA, many uninsured people could not afford health insurance. In 2014, 48% of uninsured adults said the main reason they were uninsured was that the cost was too high.

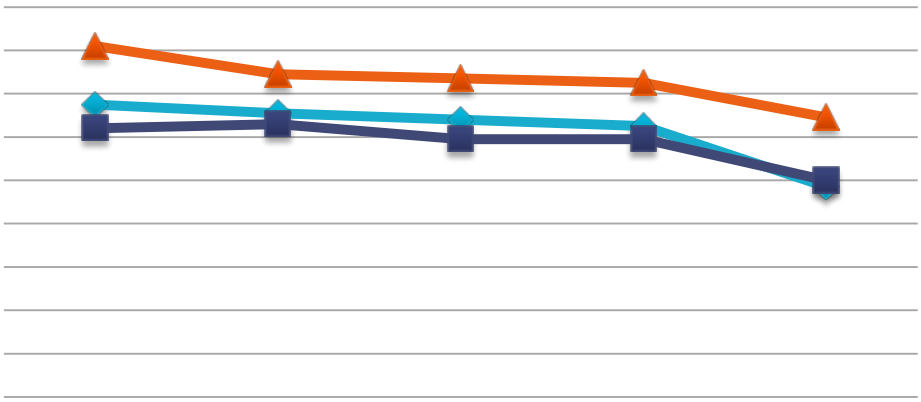
According to Kaiser, some poor adults in Tennessee and other states that did not expand Medicaid were not eligible for public health coverage. In addition, some undocumented immigrants are not eligible for Medicaid or the Health Care Marketplace coverage.
http://kff.org/uninsured/fact-sheet/key-facts-about-the-uninsured-population/

Chart HHD-6 shows the percent of Davidson County's uninsured residents from 2010-2014, reflecting a decrease during the 5-year period. This pattern is also reflected in Tennessee and the U.S., but Davidson County's rate of uninsured was higher each year shown.

The decrease in Tennessee and Davidson County may be linked with education and advocacy of individuals, professionals, educators, advocacy groups and others on navigating the TennCare System and the Health Care Marketplace. Many groups including Tennessee Justice Center, Tennessee Health Care Campaign, Baptist Healing Trust, Get Covered Nashville and other organizations promoted health insurance coverage for the poor and children.

Chart HHD-6: Percent of Uninsured by Location

U.S., Tennessee, Davidson County, 2010-2014



	2010	2011	2012	2013	2014
United States	15.5%	15.1%	14.8%	14.5%	11.7%
Tennessee	14.4%	14.6%	13.9%	13.9%	12.0%
Davidson County	18.2%	16.9%	16.7%	16.5%	14.9%

Source: U.S. Census Bureau, 2010-2014 American Community Surveys

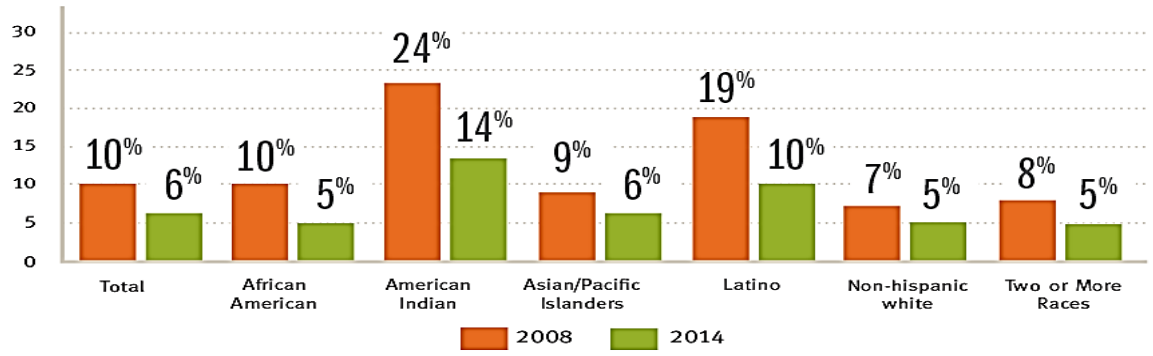
Children's Health

According to KIDS COUNT Data Center, children without health insurance were less likely than children with insurance to have regular health care providers and receive care when needed. They were more likely to receive treatment after their condition worsened, putting them at risk of hospitalization.

According to the *KIDS COUNT Data Center* of the Annie E. Casey Foundation, 6% of the children in the United States do not have health insurance. It reported that from 2008-2014 there was a 40% decrease of uninsured children across all racial and ethnic groups in the United States.

Chart HHD-7 shows the decrease of uninsured children across racial and ethnic groups from 2008-2014 according to the *KIDS COUNT Data Center*. The center attributed the overall decline of uninsured children to the expansion of public health coverage.

Chart HHD-7: Percent of Uninsured Children by Race and Ethnicity
United States, 2008-2014



Source: KIDS COUNT Data Center, Annie E. Casey Foundation
http://datacenter.kidscount.org/updates/show/101-kids-in-america-lack-health-insurance
http://datacenter.kidscount.org/data/tables/8810-children-without-health-insurance?loc=44&loct=3#detailed/3/72,77/false/869,36,868,867,133/any/17657,17658

Health Issues

Tennessee was ranked as the worst state for children's health according to the 2015 KIDS COUNT Data Book of the Annie E. Casey Foundation. The overall wellbeing of children for the state of Tennessee ranked at 36th. As for the Counties in Tennessee, Davidson's overall wellbeing of children ranked at 87th out of the state's 95 Counties, according to both the Tennessee Commission on Children and Youth and the 2015 KIDS COUNT Data Book.

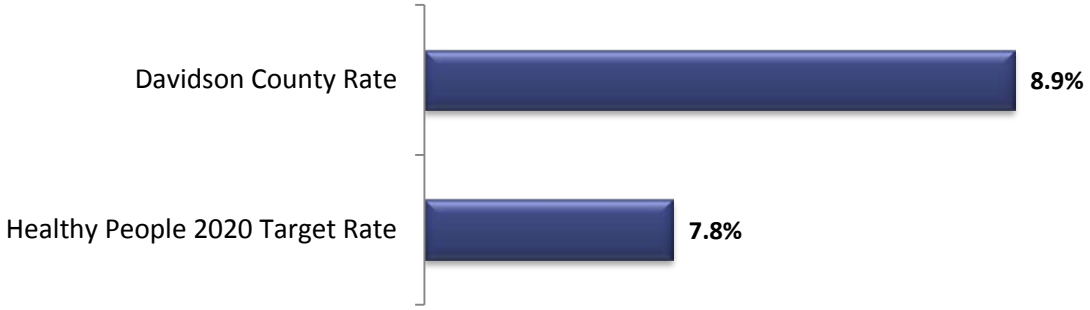
The KIDS COUNT Data Center provided additional data on Davidson County relevant to the wellbeing of children. In 2014, there were 18.1% of youth ages 16-19 unemployed, and only 6.5% of children under age 18 that received public benefits from Families First. There were increased numbers of substantiated child abuse/child neglect cases, from 548 cases in 2013 to 611 cases in 2014.
http://www.aecf.org/m/resourcedoc/aecf-2015kidscountdatabook-2015.pdf
https://www.tn.gov/tccy/topic/kc

When babies are born at a low birth weight of 5.8 pounds or less, they are at risk of developmental problems and disabilities, and at greater risk of dying within their first year of life, according the Annie E. Casey Foundation. Many risk factors that can lead to low birth weight include smoking, poor nutrition and violence. In addition, neighborhood poverty affects children's health outcomes. High poverty neighborhoods are more likely than

moderate and upper income neighborhoods to have high rates of crime, violence, unemployment and other negative circumstances.
http://www.aecf.org/m/resourcedoc/aecf-2015kidscountdatabook-2015.pdf

The Metropolitan Health Department and many community providers continue to address the low birth weight problem of Davidson County infants. Based on the latest data from the KIDS COUNT Data Center and the Tennessee Department of Health the rate of Davidson County's low birth weight babies was larger than the Healthy People 2020 target of 7.8% as shown in Chart HHD-8. The KIDS COUNT Data center noted that Davidson County's percent of low birth weight babies at 8.9% was better than the state of Tennessee, which was 9.1%. The U.S. at 8.0% was also higher than the Healthy People target of 7.8%.

Chart HHD-8: Babies with Low Birth Weight
Davidson County, 2013



Source: KIDS COUNT Data Center, Annie E. Casey Foundation and Tennessee Department of Health

Improving the health of Americans has been a primary goal of the CDC. Breastfeeding, with its many known health benefits for infants, children, and mothers, is a key strategy to accomplish this goal. Breastfeeding also is associated with the reduced risk for ovarian cancer and premenopausal breast cancer in mothers. Babies that are not breastfed have increased health risks that could include respiratory tract infections, and diarrhea.
http://datacenter.kidscount.org/data/tables/5425-low-birthweight-babies?loc=44&loct=2#detailed/2/44/true/36,868,867,133,38/any/11984,11985

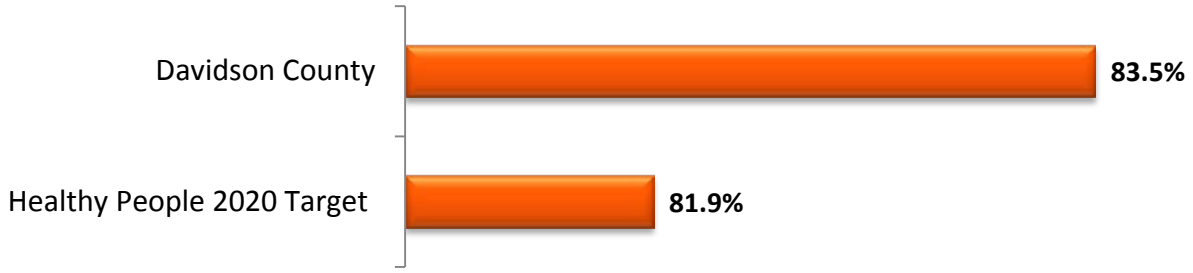
The CDC recommended that public health programs promote breastfeeding initiation and increase support of breastfeeding especially among groups with the lowest rates that included Blacks, the poor, teen mothers, mothers with less than a high school education, and mothers in rural areas.
http://www.cdc.gov/breastfeeding/pdf/2014breastfeedingreportcard.pdf
http://www.cdc.gov/mmwr/preview/mmwrhtml/mm5512a3.htm

The CDC has credited breast milk as being the most complete form of nutrition for most infants, with a range of benefits for their health, growth, immunity, and development. The American Academy of Pediatrics noted that breastfed infants in the U.S. have lower rates of illnesses, especially from infectious diseases. It also stated that promoting breastfeeding has the potential to deter post-neonatal deaths in infants.
http://www.healthynashville.org/modules.php?op=modload&name=NS-Indicator&file=indicator&iid=17324297
http://www.cdc.gov/breastfeeding/pdf/2014breastfeedingreportcard.pdf
http://pediatrics.aappublications.org/content/pediatrics/113/5/e435.full.pdf

According to Healthy Nashville of the Metropolitan Health Department 83.5% of the babies born in Davidson County were breastfed, which exceeded the 81.9% target of Healthy People 2020 as shown in Chart HHD-9.

In 2014 according to the CDC's *Breast Feeding Report Card 2014,* 74.9% of babies in the state of Tennessee were breastfed, and 79.2% of the babies in the U.S. were breastfed.

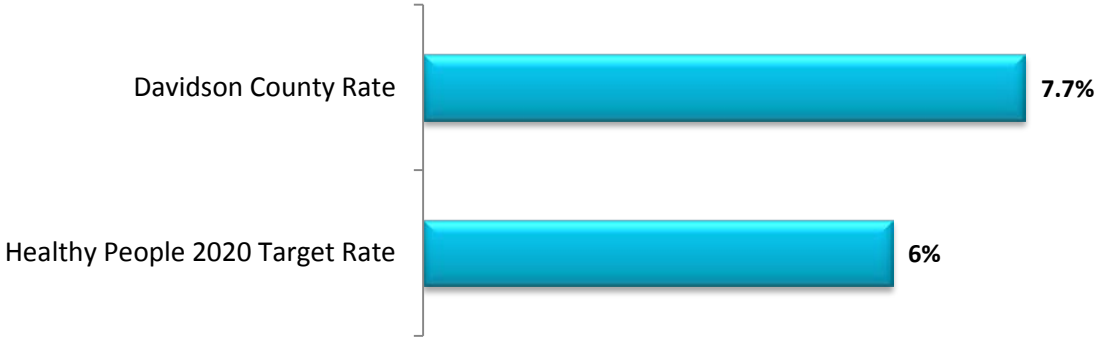
Chart HHD-9: Babies Breastfed
Davidson County, 2013



Source: Tennessee Department of Health, Office of Health Statistics

Chart HHD-10 showed that Davidson County's infant mortality rate was higher than the targeted rate of Healthy People 2020. Davidson County continued to improve at 7.7% but was still higher than Tennessee at 6.8%. http://datacenter.kidscount.org/data/tables/6051-infant-mortality?loc=44&loct=2#detailed/2/44/true/36,868,867,133,38/any/12718,12719

Chart HHD-10: Infant Mortality Rate
Davidson County, 2013



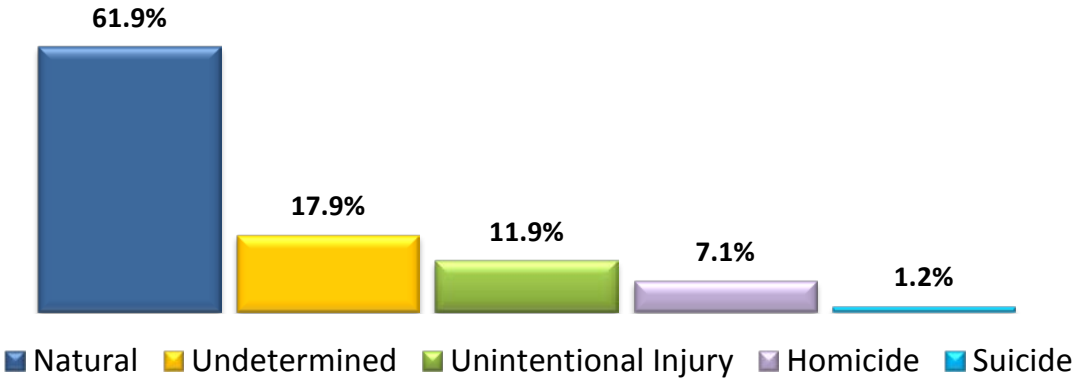
Source: Tennessee Department of Health and Healthy Nashville Community Dashboard

According to the *Davidson County Child Death Report* unintentional deaths of children included motor vehicle crashes, drowning, suffocation, fires, burns, poisoning, falls, being crushed, and weather exposure. The undetermined deaths were defined as "any death for which manner is unknown after extensive autopsy and

crime scene investigation". Providing children with a healthy start in life and protecting them from harm and danger is important in preventing unintentional and undetermined deaths.

Chart HHD-11 showed that most children died from natural causes, 17.9% died from undetermined causes, 11.9% from unintentional injuries, 7.1% from homicide, and 1.2% from suicide.
http://www.nashville.gov/Portals/0/SiteContent/Health/PDFs/HealthData/CDR2012.pdf

Chart HHD-11: Percent of Total Children's Deaths by Manner of Death
Davidson County, 2012



Source: Davidson County Child Death Report Data for 2012, Metropolitan Public Health Department

According to the 2014 Tennessee Men's Health Report Card, the health of men had improved, but more efforts were needed to understand and address disparities. The report noted that the life expectancy of men and women varied according to race and gender. The average life expectancy in Tennessee was 73 years for men and 79 for women, based on data from the World Life Expectancy. Black men had a shorter life expectancy at 69.16 years than White men with life expectancy of 73.94 years. The life expectancy for Black women in Tennessee was 76.33 years and 79.37 for White women.

The three leading causes of death for Tennessee's men:

- Heart disease
- Cancer
- Lung disease

According to the data released in March 2015 by the Tennessee Department of Health, Division of Policy, Planning and Assessment, the leading causes of death in Tennessee's women were:

- Heart Disease
- Chronic Lower Respiratory Disease
- Cancer

https://tn.gov/assets/entities/health/attachments/39923-WomensHealth2013_3-15_(2).pdf
https://medicineandpublichealth.vanderbilt.edu/tmhrc/2014TMHRCFINALcorrected.pdf
http://www.worldlifeexpectancy.com/usa/life-expectancy-white
http://www.worldlifeexpectancy.com/usa/life-expectancy-african-american

According to the Alliance for a Just Society's *2014 Women's Health Report Card*, Tennessee when compared to the other states, ranked 29th for the health of women in the state, which was considered as fair for the areas of health

coverage, access to health care and outcomes of health. The top states with the best overall rankings in the U.S. were Massachusetts, Connecticut, Hawaii, Vermont, and Minnesota.

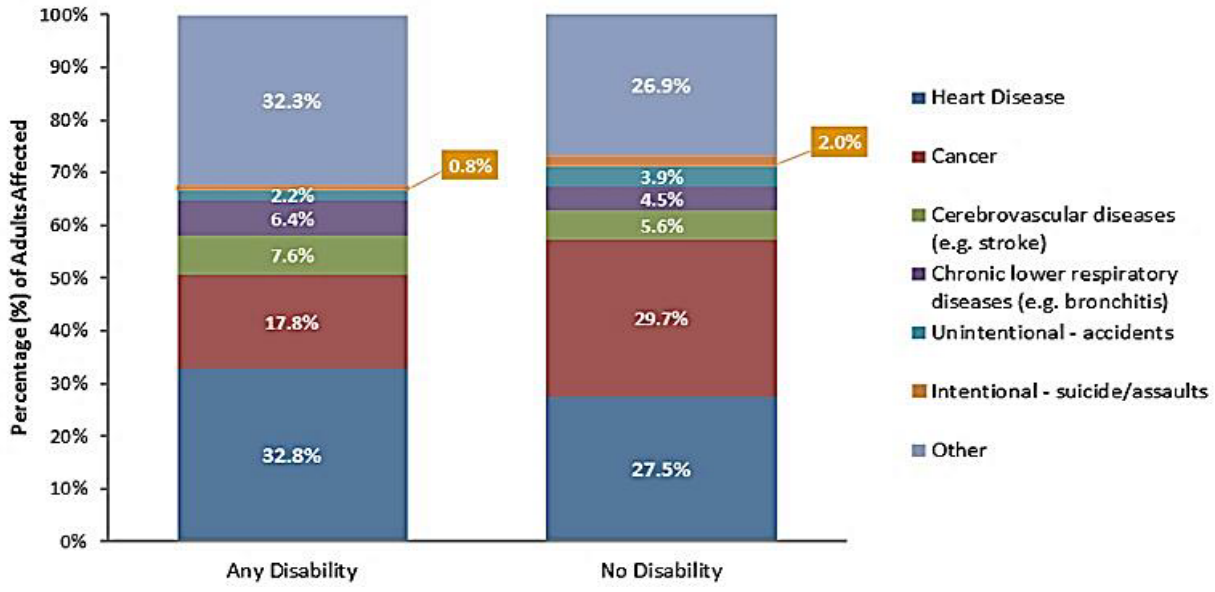
The States were ranked and graded on a wide range of measures relevant to women's health. The Report Card converted the state rankings into letter grades, with Tennessee's rank of 29th equivalent to a grade of C-. Tennessee was ranked 26th in Health Coverage (share of women who are uninsured), 22nd in Access to Care (physician access, basic preventive care, access to family planning and reproductive care services), 44th in Health Outcomes (specific health conditions, life expectancy, maternal and infant mortality rates, etc.).
http://allianceforajustsociety.org/wp-content/uploads/2014/10/2014.10_WomensHealth_Tennessee.pdf

The CDC published *Disability Status, Mortality, and Leading Causes of Death in the United States Population in Medical Care* concerning the relationship between disability and death. Using the follow up data from a study 11 years afterwards on U.S. adults age 18 and over, it found that adults with disabilities were more likely to have died than the adults that did not have disabilities. It also found that adults with disabilities were more likely to die from heart disease at 32.8% as shown in Chart HHD-12. The chart also revealed that .8% was less likely to die from suicide/assaults, and adults without disabilities were more likely to die from cancer.

The CDC suggested the need for more access to preventive services and public health interventions to mitigate the increased likelihood of death for adults with disabilities. Unmet health care issues for people with disabilities included:

- Behavioral health risks (such as physical inactivity or smoking)
- Secondary conditions (such as bladder or kidney infections)
- Not receiving preventive services (such as mammograms)
- Lower quality of care

Chart HHD-12: Leading Causes of Death in Adults with and without Disabilities in the U.S.



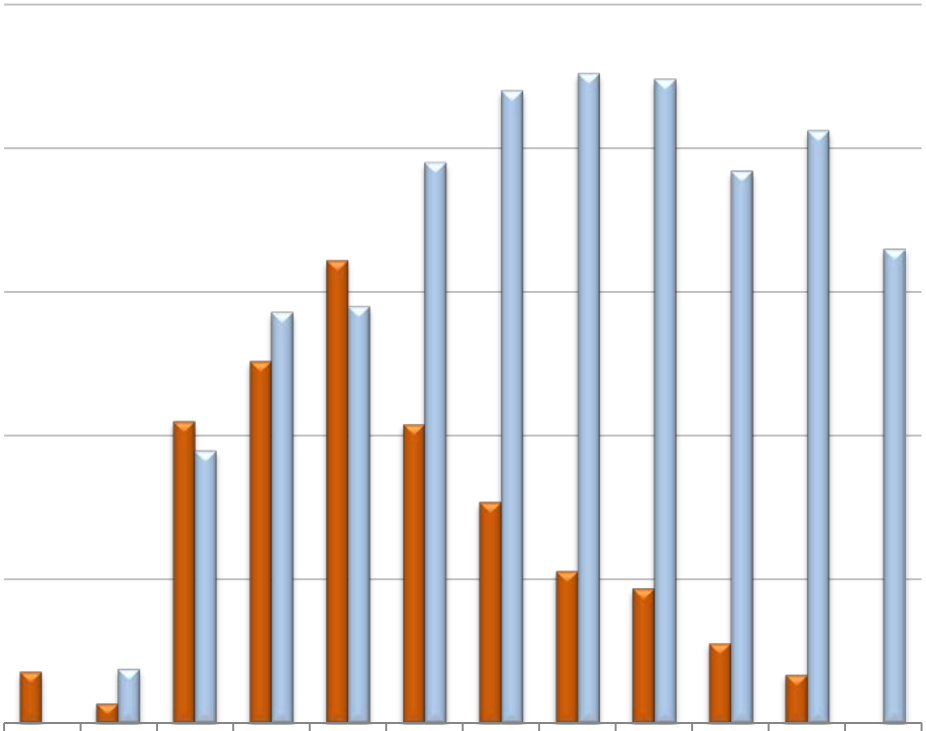
http://www.cdc.gov/ncbddd/disabilityandhealth/features/disabilitystatus.html
http://journals.lww.com/lww-medicalcare/Citation/2015/04000/Disability_Status,_Mortality,_and_Leading_Causes.9.aspx

Violence

Another public health issue considered by CDC to be very significant is violence, which can affect people regardless of their socioeconomic status. It can devastate communities and decrease property values, which could increase the burdens of people in poverty.

Violence has also become a major issue in premature deaths. According to *Tennessee Deaths 2013*, released in 2014 by the Tennessee Department of Health, violent behavior can occur in dealing with conflict, emotional distress and criminal activity. Chart HHD-13 shows the variation by age groups in the rate of deaths from assaults (homicides) and deaths by self-harm (suicide). The rate of assaults decreases with age.
http://tn.gov/assets/entities/health/attachments/TnDeaths13.pdf
http://www.cdc.gov/ViolencePrevention/overview/index.html

Chart HHD-13: Rates of Assault and Intentional Self-Harm Deaths by Age (in Years)
Tennessee, 2013 (Per 100,000 Population)



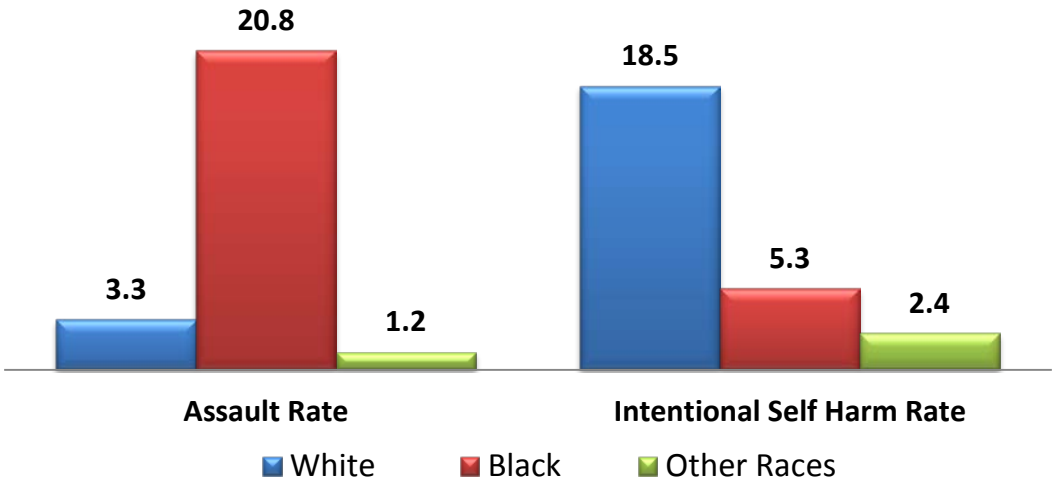
	0-9	10-14	15-19	20-25	24-29	30-34	35-44	45-54	55-64	65-74	75-84	85+
Assault Rate	1.8	0.7	10.5	12.6	16.1	10.4	7.7	5.3	4.7	2.8	1.7	0
Intentional Self-Harm Rate	0	1.9	9.5	14.3	14.5	19.5	22.0	22.6	22.4	19.2	20.6	16.5

Source: Tennessee Department of Health, Division of Policy, Planning and Assessment, August 2014

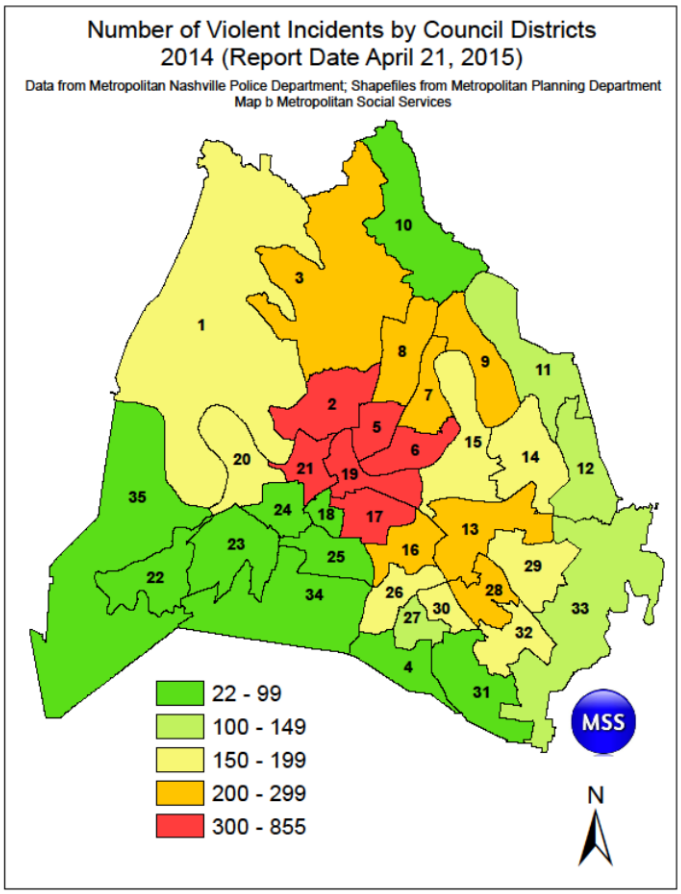
In 2013, Blacks in Tennessee had the highest rate of assault deaths. According to the Tennessee Department of Health, Division of Policy, Planning and Assessment, the 2013 assault death rate for Black residents was 20.8 per 100,000 population, as shown in Chart HHD-14. That rate was 6.3 times the White rate of 3.3. The 2013 intentional self-harm rate for the White population was 18.5. That rate was 3.5 times the Black rate of 5.3. The

highest rate for assault deaths occurred to persons 25-29 years, while the highest rate for intentional self-harm was for persons 45-54 years of age.
http://tn.gov/assets/entities/health/attachments/TnDeaths13.pdf

Chart HHD-14: Rate of Assualt and Intentional Self Harm Deaths by Race
Tennessee, 2013 (Per 100,000 Populations)



Source: Tennessee Department of Health, Division of Policy, Planning and Assessment, August 2014



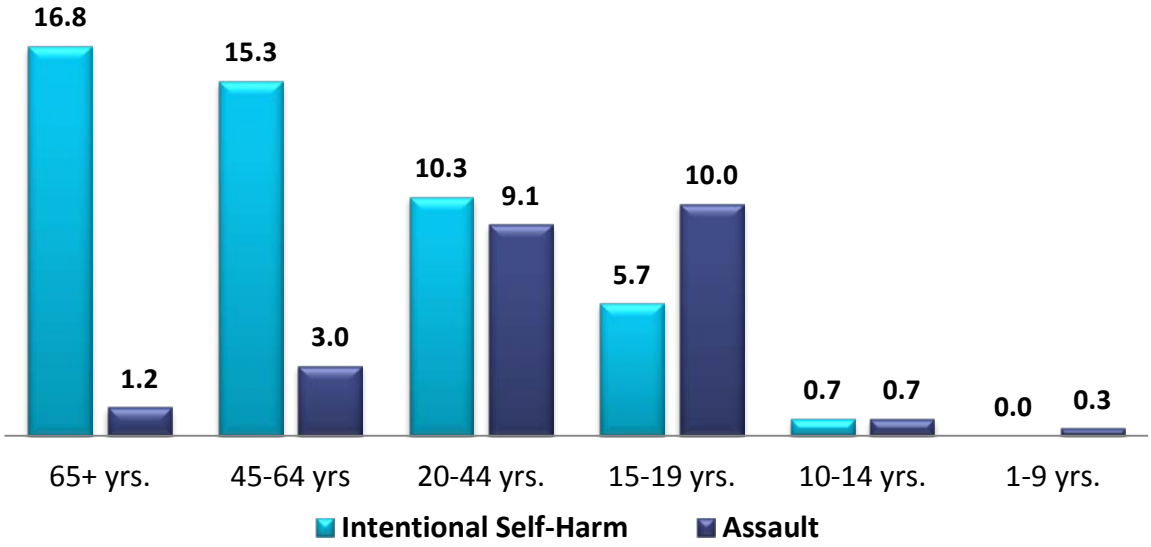
The Metropolitan Nashville Police Department reported 7,284 violent incidents in Davidson County during 2014. When broken down by Metro Council Districts, the violence varies significantly from one area to another.

With an average rate of about 208 violent incidents per Council District, the actual occurrences were as few as 22 in Council District 35 up to 855 in Council District 19. The map shows the distribution of violent incidents during 2014.

Source: Metro Nashville Police Department

Tennessee Deaths 2013 also provided information on firearm deaths as shown in Chart HHD-15 with the rate of assaults and intentional self-harm deaths due to firearm use. The age group from 15-19, had the highest rate of firearm mortality with violent deaths being a major health issue. The Kaiser Family Foundation reported the number of deaths in Tennessee due to firearms per 100,000 population by race/ethnicity was 19.9 for Blacks and 14.2 for Whites.
http://tn.gov/assets/entities/health/attachments/TnDeaths13.pdf
http://kff.org/other/state-indicator/firearms-death-rate-by-raceethnicity/

Chart HHD-15: Rate of Deaths by Firearms by Age Group
Tennessee, 2013 (Per 100,000 population)



Source: Tennessee Department of Health, Division of Policy, Planning and Assessment, August 2014

Youth Violence and Poverty

The Center for Law and Social Policy's *Investing in Boys and Young Men of Color* (2014) addressed the issues of poverty, crime, violence, and their effects on emotional and social wellbeing, as well as physical and psychological health of young people. It stated that young men of color experience traumatic issues of violence more frequently than other demographic groups, which require greater investment and community support to improve their adult outcomes.

Researchers of Adverse Childhood Experiences report that youth of color disproportionately experience adverse childhood experiences that negatively could affect their development with long-term repercussions. Incidents of crime and violence are far more prevalent in communities with concentrated poverty (areas with poverty rates higher than 30%), and children of color are more likely to be exposed to crime and violence than White children. Based on the National Research Council and Institute of Medicine it is estimated that 13-20% of children living in the U.S. (1 out of 5 children) experience a mental disorder in a given year and an estimated $247 billion is spent annually on childhood mental disorders.

When parents are financially unstable, it is difficult for them to maintain housing, food and basic needs, adding stressors that can negatively affect parenting and impair childhood development. As the number of families in poverty grows, the opportunity to be successful diminishes for many youth. The effects of concentrated poverty become more apparent when neighborhood poverty rates increases above 20%.

Reducing violence experienced by young men is critical to improving their health and environment. Between 30-40% of youth who are exposed to violence, develop post-traumatic stress symptoms such as nightmares, flashbacks, withdrawals, emotional numbing, sleeplessness, behavioral and other health problems. Experiencing violence affects behavioral and emotional development, academic performance and it affects not only the victim but also families, communities and even the perpetrators of violence.

Formative experiences during early childhood and adolescence have a lasting impact on health and wellbeing. Healthy development provides the foundation for achievement in school, work, and life. Otherwise, exposure to toxic stress from extreme poverty, neglect, abuse, or violence can interrupt normal brain development with lifelong consequences for learning, behavior problems and other physical and mental health issues.
http://www.clasp.org/resources-and-publications/publication-1/June-2014-Youth-Team-Hill-Briefing_Healthy-Communities-FINAL.pdf
http://www.cdc.gov/features/childrensmentalhealth/

Mental Health and Substance Abuse

Researchers have established connections between physical health and mental health. Healthy People 2020's *Mental Health and Mental Disorders* addressed the correlation between mental health and physical health. It explained that the ability to maintain good physical health is directly related to mental health stability.

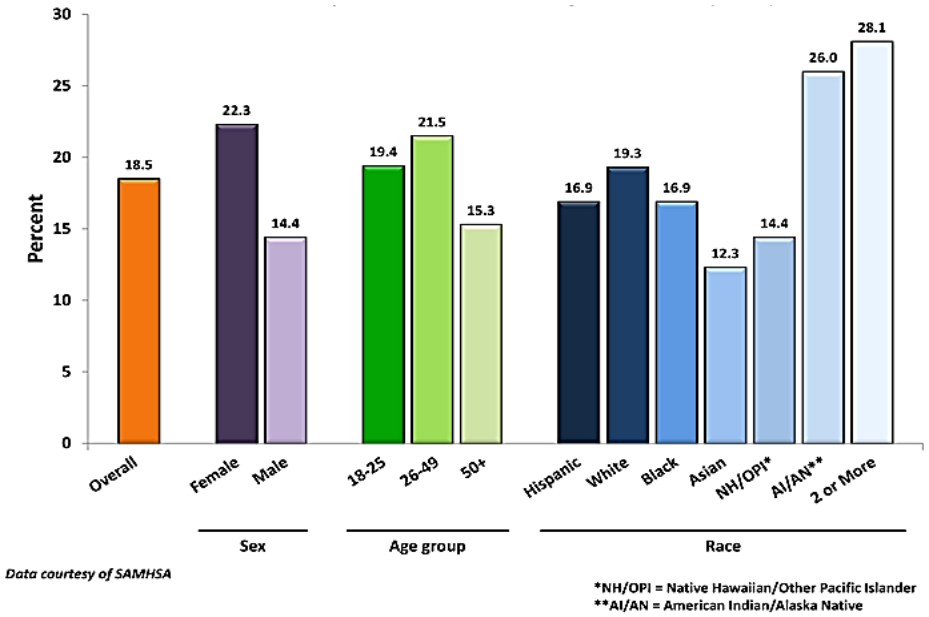
The CDC's report on Morbidity and Mortality*, Mental Illness Surveillance Among Adults in the United States,* noted that mental illness increases the risk for deterioration of many chronic illnesses, including heart disease, diabetes, obesity, asthma, epilepsy, and cancer. The increased risk could be lack of compliance to medical care and treatment. Increased use of tobacco products, alcohol and substance abuse has been associated with mental illness.
http://www.cdc.gov/mentalhealthsurveillance/fact_sheet.html
http://www.healthypeople.gov/2020/LHI/mentalHealth.aspx
http://www.cdc.gov/mmwr/pdf/other/su6003.pdf

Many factors can contribute to risk for drug abuse, according to the National Institute on Drug Abuse. Risk factors can increase a person's chances for drug abuse, while protective factors can reduce the risk. Children can be impacted at different stages of their lives by protective factors to mitigate the effects of drug abuse in their environment. Early childhood risks, such as aggressive behavior, can be changed or prevented with family, school, and community interventions that focus on helping children develop appropriate, positive behaviors. If not addressed, negative behaviors can lead to other risks, such as academic failure and social difficulties, which put children at greater risk for later drug abuse.
http://www.drugabuse.gov/publications/preventing-drug-abuse-among-children-adolescents/chapter-1-risk-factors-protective-factors/what-are-risk-factors

In Duke University's *Childhood Economic Status Affects Substance Use among Young Adults*, poverty during childhood not only appeared to affect the development of children, but also produce lasting effects on the types of health choices made during adolescence and early adulthood. Children who grow up in poverty are more likely than wealthier children to smoke cigarettes are but they are less likely to binge drink. Neither wealth nor poverty appeared to influence marijuana use, although positive parenting did reduce the use. An important note was that parents who were nurturing and engaging diminished the likelihood of young people using any of these substances and helped to develop self-control in children.
http://corporate.dukemedicine.org/news_and_publications/news_office/news/childhood-economic-status-affects-substance-use-among-young-adults

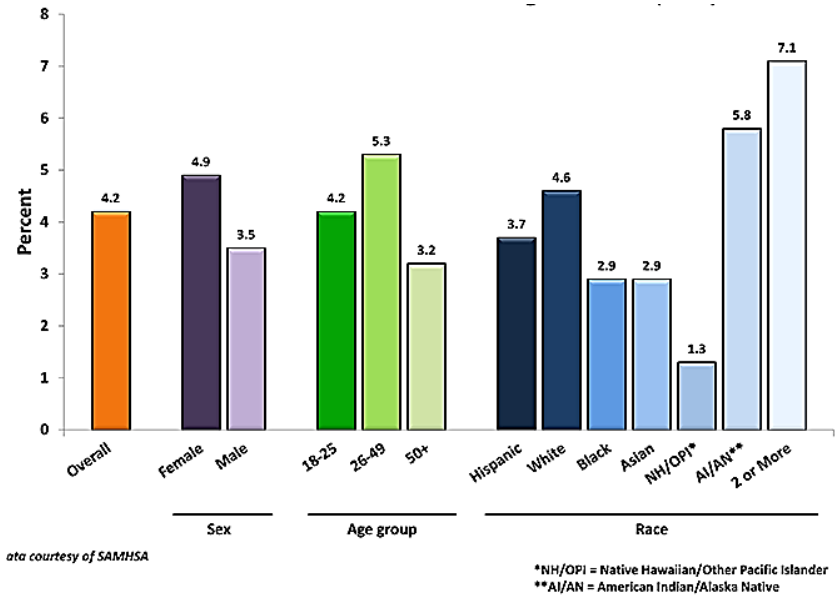
According to *Serious Mental Illness Among U.S. Adults* from the National Institute of Mental Health (NIMH), in 2013, 18.5% of U.S., adults (or about 43.8 million people) had some type of mental illness (excluding developmental and substance abuse disorders). These ranged from mental illnesses with little or no impact on functionality to those that impair function to the extent that it interfered with one or more major life activities. The prevalence is shown in Chart HHD-16 by gender, age category and race/ethnicity.

Chart HHD-16: Prevalence of Any Mental Illness among U.S. Adults (2013)



For those who had a serious mental illness, about 10 million adults in the U.S. were affected during 2013. Chart HHD-17 shows the prevalence by gender, age and race/ethnicity, from NIMH.

Chart HHD-17: Prevalence of Serious Mental Illness among U.S. Adults (2013)



http://www.nimh.nih.gov/health/statistics/prevalence/serious-mental-illness-smi-among-us-adults.shtml

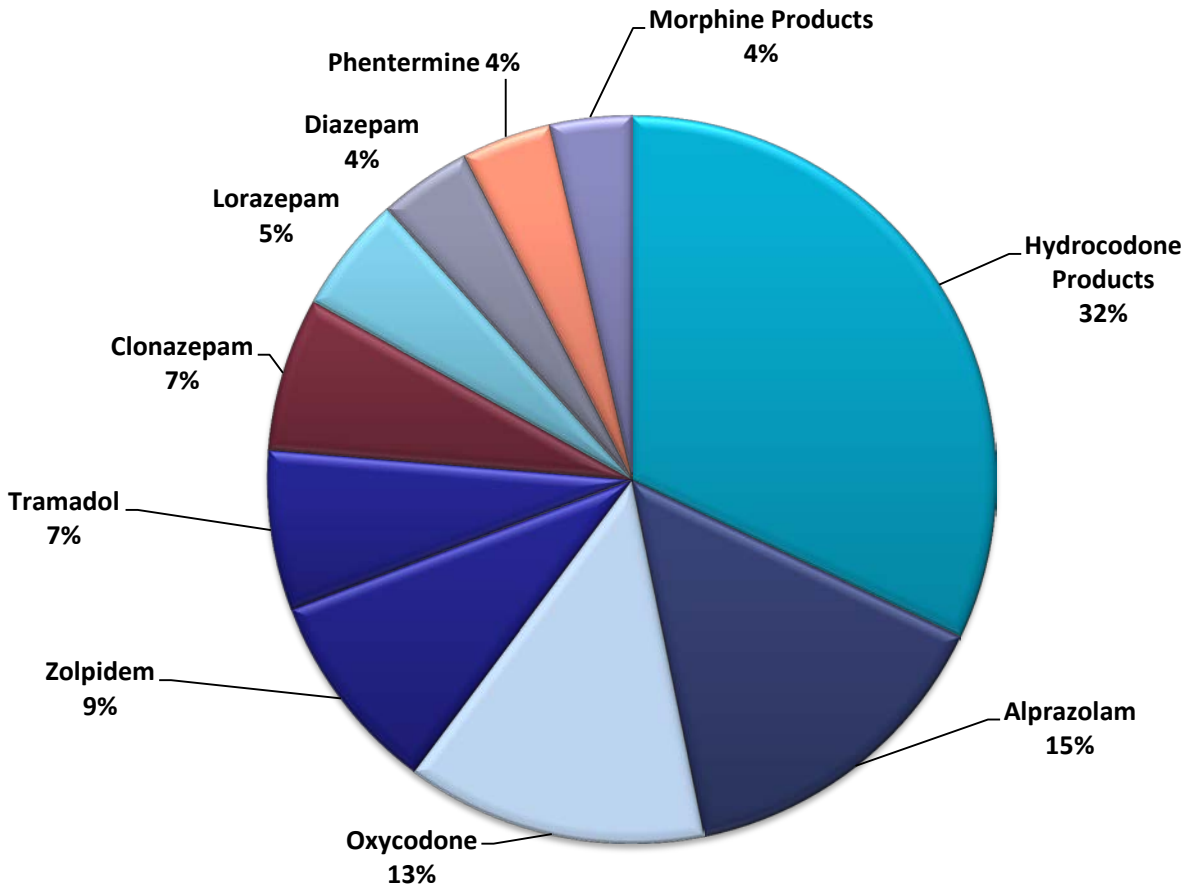
Some mental illnesses, particularly depression, may be associated with lower socioeconomic status. The greater issue for low-income people is the lack of access to adequate mental health care. In *Minority Health and Mental*

Health Disparities, NIMH found that "health care quality and access are suboptimal, especially for minority and low-income groups." It noted that overall quality of care may be improving, but the disparities remain. http://www.nimh.nih.gov/about/organization/gmh/minority-health-and-mental-health-disparities-program.shtml

The abuse of opioid prescribed pain medications has caused increased mental and physical health problems. With the abuse of opioid prescribed pain medications, Tennessee has experienced very costly and critical issues. In *Prescription for Success,* the Tennessee Department of Mental Health and Substance Abuse Services reported that opioid prescriptions exceeded alcohol as the primary substance of abuse for many people.

Most opioid prescriptions are dispensed legally with a prescription based on medical need, but there has been abuse for non-medical purposes. Using data from the Tennessee Board of Pharmacy's *2015 Annual Report*, the percent of the most frequently controlled substances are shown in Chart HHD-18, as reported in 2014 to the Tennessee Controlled Substance Monitoring Database.

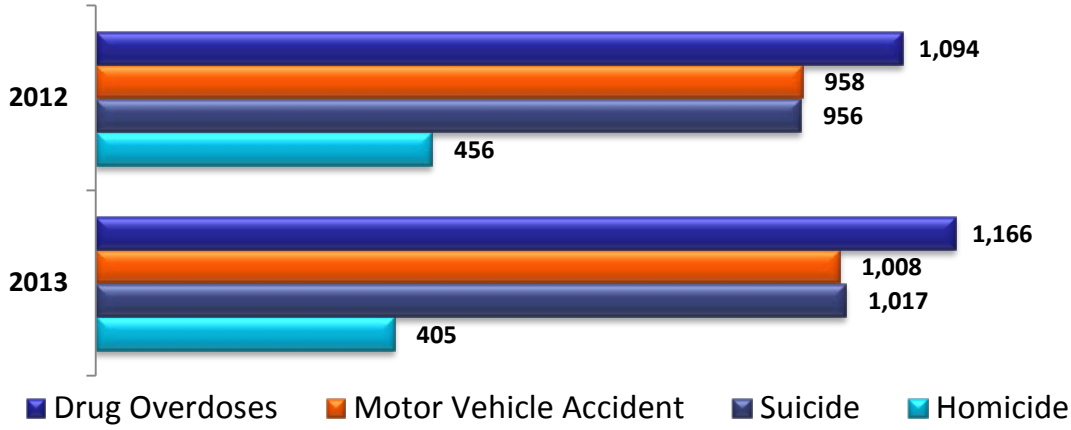
Chart HHD-18: 10 Most Frequently Prescribed Controlled Substance Products
Tennessee 2014



Source: Tennessee Dept. of Health, the Controlled Substance Monitoring Database 2015 Annual Report
https://tn.gov/assets/entities/behavioral-health/sa/attachments/Prescription_For_Success_Full_Report.pdf
https://tn.gov/assets/entities/health/attachments/CSMD_AnnualReport_2015.pdf

Chart HHD-19 shows that from 2012-2013 more people died from drug overdoses in Tennessee than in motor vehicle accidents, homicides or suicides, based on data from *Drug Overdose Deaths Continue to Rise in Tennessee,* from the Tennessee Department of Health.
https://news.tn.gov/node/12763

Chart HHD-19: Drug Overdose Deaths and Other Leading Causes of Death
Tennessee, 2012-2013



Source: Tennessee Department of Health Vital Statistics, July 2015

Methamphetamine abuse has also been shown to contribute to increased transmission of infectious diseases, including hepatitis and HIV/AIDS, due to the high-risk behaviors associated with the effects of the drug. Along with the distribution and abuse of prescription pain medications, methamphetamine drug abuse has been a serious problem in Tennessee.

In *What is Methamphetamine*, the National Institute on Drug Abuse defined methamphetamine as a highly addictive stimulant that affects the central nervous system. Also known as meth, chalk, ice, crystal, and many other terms, it forms a white, odorless, bitter-tasting crystalline powder that easily dissolves in water or alcohol. The abuse of methamphetamine causes memory loss, aggression, psychotic behavior, damage to the cardiovascular system, malnutrition and severe dental damage.
http://www.drugabuse.gov/publications/research-reports/methamphetamine/what-methamphetamine
http://www.drugabuse.gov/publications/research-reports/methamphetamine/letter-director

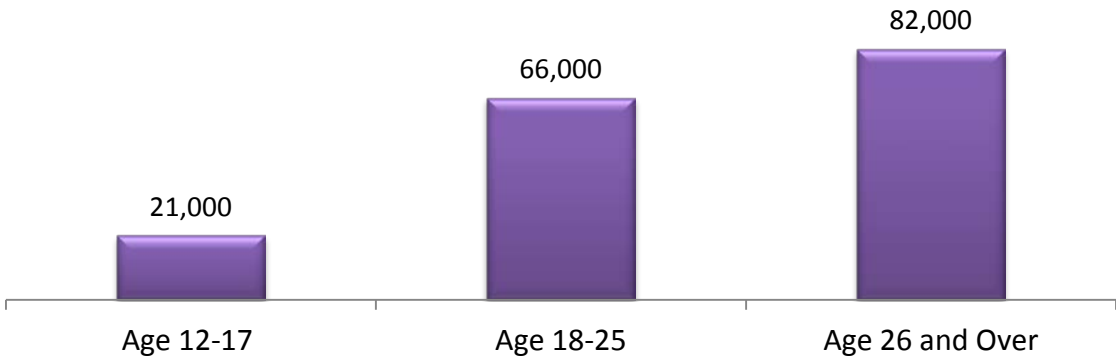
In *Associations of Nonmedical Pain Reliever Use and Initiation of Heroin Use in the United States* from the Substance Abuse and Mental Health Services Administration (SAMHSA), heroin use has increased significantly across most demographic groups. Heroin overdose related deaths have increased. The increased heroin use, abuse and dependency occurred in the context of reducing inappropriate prescribing and the use of opioids by enforcing prescription drug monitoring programs and other clinical measures. Such measures may have led abusers of opioids to switch to heroin, which tends to be cheaper and easier to access, although illegal.

It reported that the percentage of heroin users with opioid pain reliever abuse or dependence more than doubled from 20.7% in 2002–2004 to 45.2% in 2011–2013. By 2011–2013, opioid pain reliever abuse and dependence was more common among heroin users than alcohol, marijuana, or cocaine.
http://www.samhsa.gov/data/sites/default/files/DR006/DR006/nonmedical-pain-reliever-use-2013.htm

Based on *Trends in Heroin Use in the United States,* from SAMHSA in 2013, an estimated 169,000 individuals aged 12 or older used heroin for the first time in the past year (also known as past year initiates). On average, this

represents almost 460 people initiating heroin use each day. Among individuals age 12-49 who initiated heroin use, the average age of first time users was age 24. Chart HHD-20 shows the first time users of heroin within the past year and the age groups.
http://www.samhsa.gov/data/sites/default/files/report_1943/ShortReport-1943.html

Chart HHD-20: First Time Users of Heroin, by Age 12 Years or Older
United States, 2013



Source: The Substance Abuse and Mental Health Services Administration, Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health

Based on the CDC's *Morbidity and Mortality Weekly Report*, released in May 2015 linked the increased use of Heroin through injection drug use with the increased risk of Hepatitis C Virus infection. Hepatitis C is a common blood-borne infection caused by exposure to contaminated blood. The exposure to contaminated blood through injection creates a primary risk factor for infection.

Surveillance data from four states including Tennessee, Kentucky, Virginia, and West Virginia showed a substantial increase (364%) in the number of cases of acute Hepatitis C infection from 2006 to 2012 among persons below age 30. Those infected were primarily non-Hispanic White residents from both urban and rural areas. According to the Preliminary Data Reportable Diseases and Events, from the Tennessee Department of Health, there were 104 confirmed/probable cases of acute Hepatitis C in 2014. There have been 132 confirmed/probable cases of acute Hepatitis C year to date as of August 22, 2015.
http://tn.gov/health/article/CEDS-33-2015
http://www.cdc.gov/mmwr/preview/mmwrhtml/mm6417a2.htm

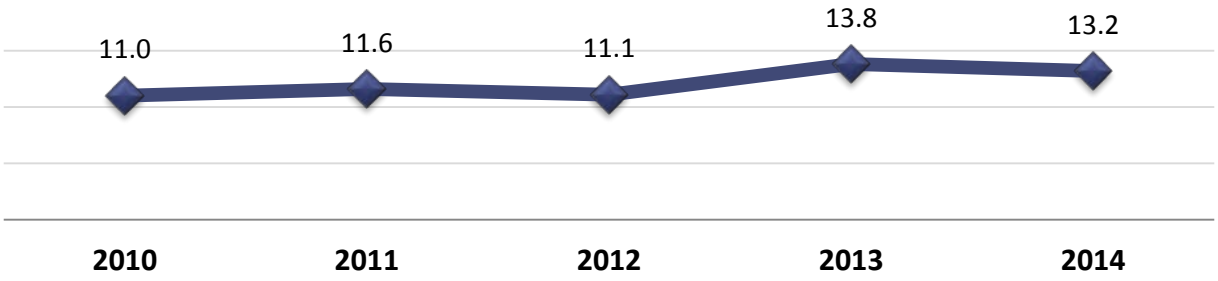
According to the U.S. Department of Health and Human Services (HHS), many national surveys have revealed the relationship between drugs, alcohol, and suicide. The legal age of 21 for drinking alcohol has been associated with the likelihood of poor judgment. Intoxication of individuals age 18-20 has been linked with high rates of suicide. Substance abuse occurred more frequently among youth and adults, compared to older persons. People who were dependent on substances often had high risk factors for suicide.
http://www.hhs.gov/answers/mental-health-and-substance-abuse/does-alcohol-increase-risk-of-suicide/index.html

Anyone could suffer from incapacitating mental illness or severe emotional trauma that can lead to suicide. Suicide is not limited to or excluded from any ethnic, religious, or socioeconomic groups, according to the Tennessee Suicide Prevention Network's *Status of Suicide in Tennessee* and officials from the Tennessee Department of Health.

Chart 21 shows that the suicide rate in Davidson County decreased from the rate of 13.8 in 2013 to 13.2 in 2014 per 100,000 population. However, it was even lower in 2010-2011.

Chart HHD-21: Suicide Rate

Davidson County, 2014 (Per 100,000 Population)



Source: Tennessee Department of Health and Tennessee Suicide Prevention Network

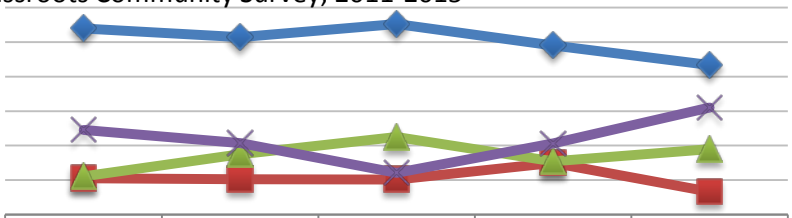
In Davidson County, there were 91 suicides in 2013, which decreased to 88 suicides in 2014. Based on data from the Tennessee Department of Health, the total number of suicides in Tennessee decreased from 1017 in 2013 to 945 in 2014. According to *Status of Suicide in Tennessee* improvements in the rate of suicide in Tennessee has been attributed to the expansion of outreach and education.
http://tspn.org/suicide-and-population-groups
http://tspn.org/wp-content/uploads/2015/09/2005-14-NUMBERS-ALL.pdf
http://tspn.org/wp-content/uploads/SOST14.pdf

Grassroots Community Survey

The Grassroots Community Surveys, conducted annually since 2009, asked respondents to identify their greatest unmet needs among various issues. In 2011, a question on unmet needs in the category of health was added. Since then, the greatest need has been for basic health care for the uninsured/underinsured. Chart HHD-23 compares the different health needs, identified by respondents.

Chart HHD-23: Greatest Unmet Need in Health

Grassroots Community Survey, 2011-2015



	2011	2012	2013	2014	2015
Basic Health Care-Uninsured/Underinsured	54.0%	51.5%	55.2%	49.0%	43.4%
Mental Health or Substance Abuse Care	10.5%	10.2%	10.2%	15.0%	6.6%
Preventive Care	11.0%	17.5%	22.5%	15.4%	19.0%
Specialty Care	24.5%	20.8%	12.1%	20.6%	31.0%

Source: 2011-2015 Grassroots Community Surveys

Other Assessments of Community Health in Davidson County

The *Davidson County, TN Community Health Needs Assessment 2016,* was produced by St. Thomas Health and Vanderbilt University Medical Center. The assessment was a review of publically available community health data, Interviews with key stakeholders, listening sessions, with special attention to underserved, low income and minority populations.

Some of the key highlights of Davidson County from the report:

- High school graduation rates are lower than the State and the U.S.
- Violent Crime rate is very high, great housing cost burden and the rate of fast foods are increasing
- 17% of residents did not go to the doctor due to cost and 34% did not get go to the dentist in the past year
- Leading causes of death vary by race and gender
- The combined rate of accidents, assaults and suicide represented 23% of potential life lost
- 20% of seniors (age 65 years and older) are not vaccinated for influenza and pneumococcal
- Sexually Transmitted Diseases incidence rates vary by race, ethnicity and race, and Chlamydia rates were increasing

http://www.mc.vanderbilt.edu/documents/main/files/Davidson%20Summit%20Slides%20-%209_10.pdf

Healthy Nashville is an initiative of the Metro Nashville Public Health Department with an array of partners. It collects data, identifies areas for improvement, sets priorities and collaborates to address Davidson County's priority health needs. The Healthy Nashville web site has an online community, demographic and disparity dashboards, with health and related data for Davidson County.
http://www.healthynashville.org/index.php

The Metro Nashville Public Health Department and the Robert Wood Johnson Foundation-Center for Health Policy at Meharry Medical College produced the *Health Equity in Nashville 2015,* which was created to inform discussions around health equity in Nashville. Health equity was described as creating conditions and environments that allow everyone in the community an opportunity to attain their highest level of health. Health inequity was referred to as systematic disadvantages for certain groups, whereas health inequality referred to differences between groups. The report indicated that there were specific disadvantaged groups may experience health inequities.

- Low-income people and families
- Women, children, youth, or the elderly
- People with disabilities

- Ethnic or racial minorities
- People experiencing homelessness
- People who speak limited English
- Religious and faith communities
- People who are lesbian, gay, bisexual, or transgender

http://www.nashville.gov/Portals/0/SiteContent/Health/PDFs/HealthData/MetroNashvilleHealthEquityReport2015.pdf

The Health Equity Recommendations for Nashville 2015 report was also produced through the partnership of the Metro Nashville Public Health Department and the Robert Wood Johnson Foundation Center for Health Policy at Meharry Medical College. It was created as a supplement to the *Health Equity in Nashville* report and provided recommendations based on the 2015 Health Equity Summit in Nashville. The recommendations centered on development of equity-focused programs and interventions used to incorporate equity into decision-making and to prioritize programs and initiatives.
http://www.nashville.gov/Portals/0/SiteContent/Health/PDFs/HealthData/CommunityHealthStatus/HealthEquityRecommendationsReport2015.pdf

The Healthy Nashville Leadership Council produced the *Healthy Nashville Community Health Improvement Plan (CHIP): 2015-2019*, resulting from issues gathered from a health assessment process using the Mobilizing for Action through Planning and Partnerships (MAPP) framework for community health improvement. The CHIP plan presented three key systems issues for the community to address during the next five years. The Priorities areas to be targeted are:

- Advance health equity
- Maximize the built and natural environments
- Support for mental and emotional health

http://assets.thehcn.net/content/sites/nashville/CHIP_FINAL_for_release_20150226092711.pdf

Early Child Development

The early years of a child's life are critical to health and development. Harvard University's *Establishing a Level Foundation for Mental Health Begins in Early Childhood* discussed healthy development of all children, including those with special health care needs. It identified the importance of opportunities for children to grow up with social, emotional and educational stability. Just as proper nutrition, exercise, and rest are essential to health, it is also important for children to have a safe and loving home, spend time with family, playing, reading and engaging in socialization, etc. for healthy child development. Early experiences in a child's life are formulated in the child's body and physical condition.

Health in the earliest years of life actually begins with the mother's health before she becomes pregnant. The mother is the beginning of the child's lifetime of health, as discussed in Harvard University's *the Foundations of Lifelong Health are Built in Early Childhood.* When children's developing biological systems are strengthened by healthy early experiences, the healthy children will more likely grow into healthy adults. That foundation of health provides the opportunity for the sound brain development, early learning and child development.
http://developingchild.harvard.edu/wp-content/uploads/2010/05/Foundations-of-Lifelong-Health.pdf
http://developingchild.harvard.edu/wp-content/uploads/2008/05/Establishing-a-Level-Foundation-for-Life-Mental-Health-Begins-in-Early-Childhood.pdf

According to the Annie E. Casey Foundation's *The First Eight Years,* children who live in persistent poverty and low income families are more likely to be poor between the ages of 25-30, give birth as teens without being married,

have problems maintaining stable employment and have poorer health. Poverty, abuse and stress are associated with abuse and neglect, poor prenatal care and poor nutrition. All are factors that compromise the development of children as stated by the National Institute for Early Education Research, *Early Childhood Education Pathways to Better Health*. It stated that when children live in poverty they are more likely to experience highly stressful home environments with possible exposure to violence that are associated with negative health outcomes and negative influences on childhood development.
http://nieer.org/sites/nieer/files/health%20brief.pdf
http://www.aecf.org/m/resourcedoc/AECF-TheFirstEightYearsKCpolicyreport-2013.pdf

Early Childhood Education and Care

Early childhood education can have significant effects on children from early childhood into adulthood, according to *Early Childhood Education: Pathways to Better Health*, from the National Institute for Early Education Research. For example, children who attend high quality early education programs have better cognitive, social and emotional development. Researchers have linked this enhanced development to better health outcomes as adults.

According to *Early Childhood Education,* preschool participants in high quality early education programs were more likely to have appropriate health screenings and immunizations, as well as medical and dental care that produce an early foundation for better health. Those improvements were attributed to the educational focus on healthy living and prevention. The report also stated that early childhood education programs could lead to improvements in the child's health, health-related behaviors and access to health care.
http://nieer.org/sites/nieer/files/health%20brief.pdf

The Center for Law and Social Policy (CLASP) in *Head Start/Early Head Start,* described Early Head Start as a federally funded community based, early development program for low-income families and pregnant women with infants and toddlers up to age 3. It stated that the purpose is to provide early, continuous, intensive, and comprehensive child development and family support services. Head Start targets preschool age children from age 3-5. It was created to prepare young children for school, and to provide programs that support the mental, social and emotional development of low-income children and their families.

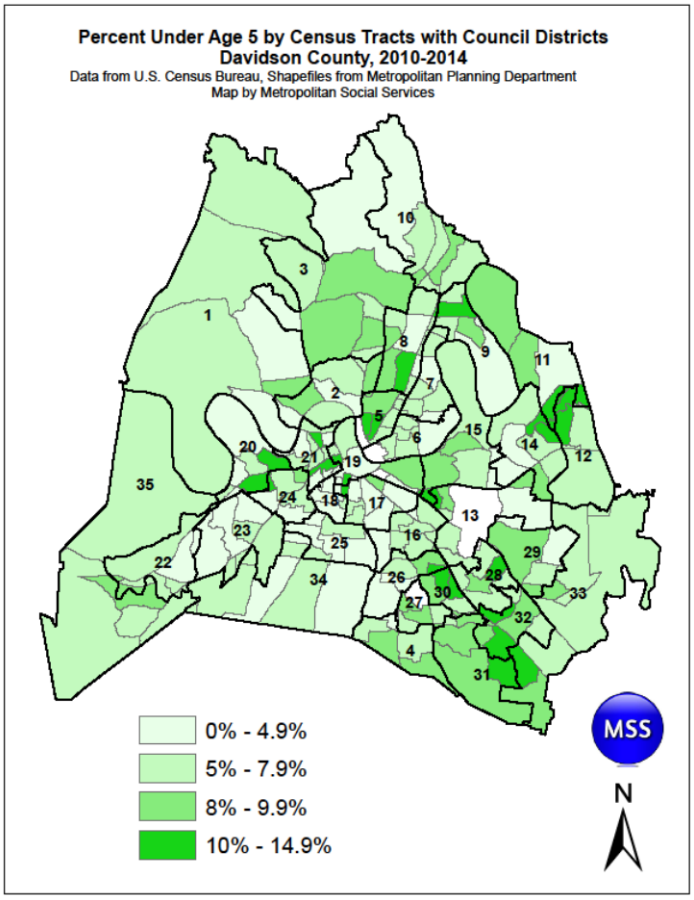
CLASP strongly supports the value of Early Head Start and Head Start and its comprehensive, quality early care, education and support services for vulnerable young children from birth to kindergarten, pregnant women, and their families. One of the major roles of CLASP has been to improve the lives of low-income people, and to strengthen low-income children and families in the U.S.

In September 2015, CLASP expressed to HHS, its concern regarding the need for additional Head Start funding to meet the growing developmental needs of young children in poverty. It stated that, despite the crucial role of Head Start in providing quality services, it served only 45% of the nation's eligible preschoolers and only 4% of eligible infants and toddlers. It also stated that the need was even greater given the high rate of poverty among young children in the U.S.
http://www.clasp.org/about
http://eclkc.ohs.acf.hhs.gov/hslc/hs
http://www.clasp.org/issues/child-care-and-early-education/topics/head-startearly-head-start
http://www.clasp.org/resources-and-publications/publication-1/CLASP-comments-on-Head-Start-Performance-Standards.pdf

With funding through HHS, Head Start promotes school readiness of children under age 5 from low-income families with education, health, social and other programs. According to Tennessee's Head Start State Collaboration Office, there are 27 Head Start programs in the state that annually serve more than 20,000 children and their families with comprehensive educational, social and health programs. There are 350 classrooms operated by government, private, faith-based, and nonprofit organizations in the state. Head Start programs partner with schools, social service agencies, health services, childcare services and families.
http://www.tnheadstart.info/
http://www.acf.hhs.gov/programs/ohs

Early Head Start Services PIR 2013-2014 Export		Head Start Services PIR 2013-2014 Export	
Funded Enrollment	72	Funded Enrollment	1485
Accumulative Enrollment	130	Accumulative Enrollment	1685
Total Budgeted Staff	6	Total Budgeted Staff	262
Total Number of Classrooms	9	Total Number of Classrooms	78
Average Class Size	8	Average Class Size	20
Children completing a Behavioral Assessment	98	Newly Enrolled Children Behavioral Screening	1030
Number Requiring Medical Treatment	5	Dental Examine	1596
Children up-to-date on Immunizations	99	Dental Treatment	81
Children with IFSP	11	Child with IEP	118
Prenatal Services/{postnatal Services	31/31	English as a Second Language (ESL)	114
Single Parent Families	77	Single Parent Families	1152
Two Parent Families	15	Two Parent Families	427
Both Parents Employed	2	Both parents Employed	60
One Parent Employed	5	One Parent Employed	300
Parents in Training or School	10	Parents in Training or School	76
Volunteers	57	Volunteers	1402
Homeless Families Served	4	Homeless Families Served	19

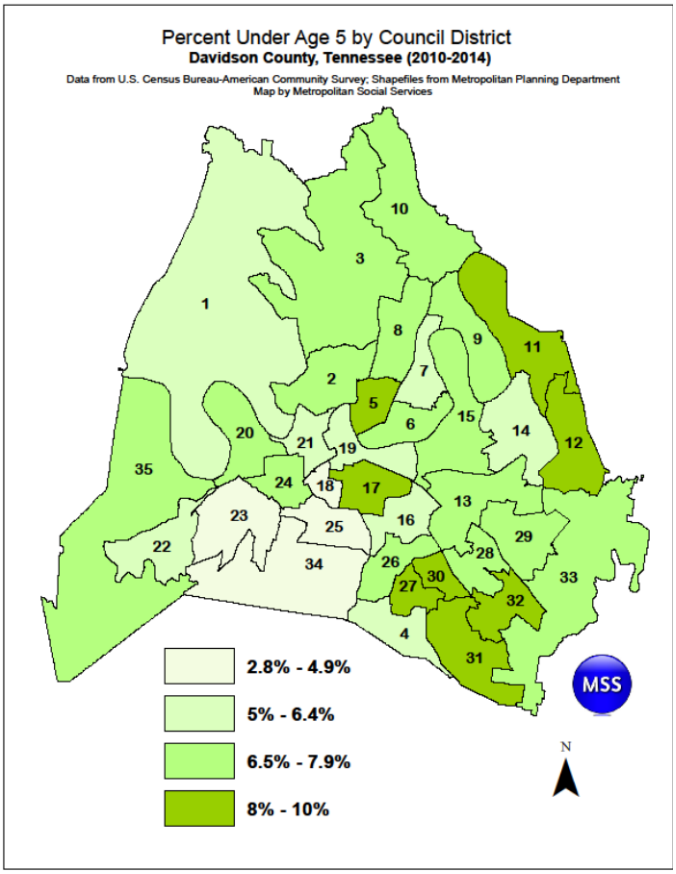
The Metro Action Commission (MAC) Annual 2013-2014 Report described school readiness as a major focus of their Head Start and Early Head Start programs. That focus is being implemented through an ongoing plan that promotes success that includes the child as well as the caregiver, parent, home and the school environment.



MAC's Head Start and Early Head Start programs ensure that children successfully transition to school and those children and their families engage in the process of transitioning. The table above shows some of the significant outcomes of both programs for the 2013-2014 school year.
http://www.nashville.gov/Portals/0/SiteContent/MAC/docs/headstart/reports/2013-14Annual.pdf

Using data from the 2010-2014 American Community Survey 5-Year Summary from the U.S. Census Bureau, the map at left shows the percentage of children under age 5 by census tract, primarily on the east side of Davidson County.

The map at right by Metro Council District also reflects a higher concentration in the eastern side of Davidson County, based on data from the 2010-2014 American Community Survey 5-Year Summary.



According to Stanford University's *Talking to Children Matters: Early Language Experience Strengthens Processing and Builds Vocabulary*, the more that parents and caregivers talk to toddlers, the more children learn language skills, process language and increase their vocabulary. Talking with children, using more descriptive words, asking questions, giving instructions using complete sentences and encouraging responses using full sentences all help to develop the vocabulary of children. The following table with the cumulative vocabulary experiences of U.S. preschool children shows that higher socioeconomic status families tend to use more verbal communication with children.
http://news.stanford.edu/news/2013/october/fernald-vocab-development-101513.html
http://edpov.stanford.edu/readings/talking-children-matters-early-language-experience-strengthens-processing-and-builds

Early Language and Vocabulary

Families First (TANF)	616	13 Million
Working Class	1,251	26 Million
Professional	2,153	45 Million

Source: The Human Development Report 2014

In Tennessee, the Voluntary Pre-K program was enacted by the Tennessee General Assembly in 2005. The purpose of VPK is to provide 4 year-old children, school readiness skills and social skills in preparation for academic success. The total state enrollment for the 2013-2014 school year was 18,609. For each child enrolled in VPK Tennessee spent $4,611, the total spent per child in Tennessee's VPK including local funding was $5,895.

According to *Children First*, 2,516 students were enrolled in the Metro Nashville Public School's Pre-K program in 2013-2014. Enrollment increased for the 2014-2015 school year, with an additional 260 new Pre-K slots added. There are plans to expand Pre-K the following school year to 340 additional pre-k seats as funding becomes available according to *Children First*.
http://mnpschildrenfirst.com/2014/01/15/we-want-to-give-every-four-year-old-in-nashville-access-to-prekindergarten/
http://www.tn.gov/education/early_learning/pre-k.shtml
http://nieer.org/yearbook
http://nieer.org/sites/nieer/files/Yearbook2014_full2_0.pdf

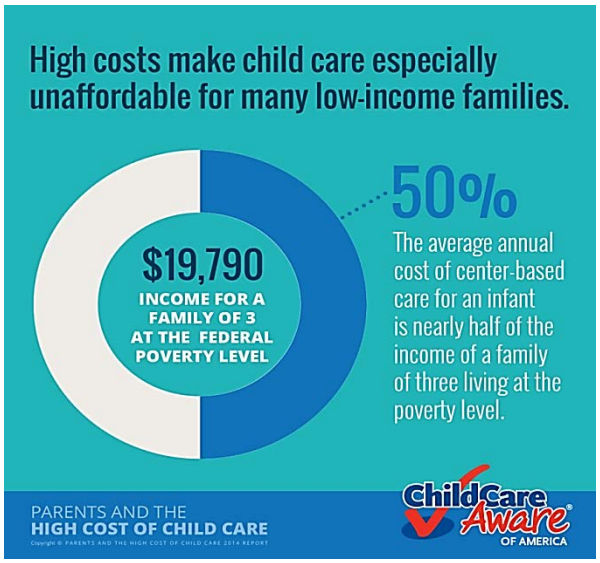
Based on *Kindergartners' Skills at School Entry* from the Mathematica Policy Research (July 2014), children begin kindergarten at different levels of school readiness. Those who start school behind in math, reading, and other skills are at risk of not being able to keep up with their peers throughout school. Differences in their language, reading, writing, math and their social/behavioral skills affect how well children perform in school. In the U.S., approximately one-third of all children who begin kindergarten need help with basic reading, math, and social-emotional functioning due to the lack of adequate early childhood learning.
http://www.sesameworkshop.org/wp_install/wp-content/uploads/2014/07/Kindergarten-Skills-Report-2014.pdf

Based on the *TN-VPK Effectiveness Study* from Vanderbilt's Peabody College and the Tennessee Department of Education, Tennessee's Pre-K program could be very effective for economically disadvantaged children with the inclusion of consistent quality education from Kindergarten through the 3rd grade. The study found that poverty was a major academic disadvantage for many children. Poverty presents learning challenges for children that require improving the quality and consistency of current programs and assessing the program's effectiveness. It reported that TN Pre-K had not been well integrated into the K-3 academic curriculum in all schools, and that continuity in learning would allow gains made in Pre-K to be sustained and developed.
http://news.vanderbilt.edu/2015/09/pre-k-in-tn-how-can-we-sustain-the-gains/
https://my.vanderbilt.edu/tnprekevaluation/

In response to the Vanderbilt study of Pre-K, the National Institute for Early Childhood Research commented on *Lessons learned from Vanderbilt's study of Tennessee Pre-K.* It cautioned against the overly optimistic views, with a number of questions for future research. The report noted several issues of concern about the providers involved in the study: only 15% of classrooms were rated as good or better; only 9% of time was spent in small groups; most time was spent in transitions, meals and with the entire group. The circumstances were reported as not being in conformity with high quality protocols that involve intentional teaching in small groups and individual sessions. *Lessons learned* suggested that quality might have suffered because the study was done shortly after a major expansion.
http://preschoolmatters.org/category/preschool/head-start-programs/

For preschool age children who are not in preschools, high quality childcare can also be an advantage in the child's development. High quality childcare is essential to working parents and increases their capacity to maintain employment, according to HHS, *Strategic Plan Fiscal Years 2010-2015*. It also described the high cost of childcare as a deterrent for many low-income families who cannot afford to pay for childcare without financial assistance.
http://www.hhs.gov/sites/default/files/secretary/about/priorities/strategicplan2010-2015.pdf

The average annual cost of center-based childcare for an infant is nearly half of the income of a family of three living at the poverty level, as shown in the graphic below from *Parents and the High Cost of Child Care 2015 Repor*t released by Child Care Aware® of America. It found that childcare was one of the most costly expenses to budgets of families with children.



The report noted that the average annual cost of infant care in Tennessee was $5,857 and the average cost for two children in Child Care was $10,372 annually. That cost burden for childcare to Tennessee families at and below the poverty level could be as high as 51.6% of their income.
http://usa.childcareaware.org/wp-content/uploads/2015/12/Parents-and-the-High-Cost-of-Child-Care-2015-FINAL.pdf
http://www.chn.org/2015/01/07/fact-week-child-care-cost-nearly-half-income-family-poverty-level/#.Vov7e01IjX5

Tennessee's state financial subsidy program to help with the cost of childcare is the Child Care Certificate Program (CCCP), which is administered by the Tennessee Department of Human Services, based on public information available on the website of the Tennessee Department of Human Services. The CCCP is intended to assist:

- Families in the Families First program who need help paying for child care
- Parents that are no longer eligible for Families First but need assistance to pay for child care during the transition from welfare to work
- Teen parents to pay for child care
- Children at risk as determined by the Tennessee Department of Children Services

http://www.tn.gov/humanservices/article/child-care-certificate-program http://tn.gov/humanservices/article/child-care-financial-assistance

Some research indicates that participation in Pre-K is strongly related to pre-reading and pre-writing scores rather than characteristics such as race, family income and mother's education level. Researchers also found that children in Pre-K programs result in higher scores on reading and math tests than children who were cared for by their parents. Both short-term and longer-term benefits were tracked for participants in various ways, including academic achievement, home ownership, income, etc.

Several studies have estimated a substantial economic benefit to federal, state and local governments from high-quality Pre-K programs. Per $1 invested, studies show that there can be at least $3.78 benefit (per dollar) ranging up to $10.15 (per dollar). High quality programs are associated with highly trained teachers with expertise in early childhood education, along with learning goals of K-12 standards, low child/teacher ratios and small classes.
http://www.centerforpubliceducation.org/Main-Menu/Pre-kindergarten/Pre-Kindergarten

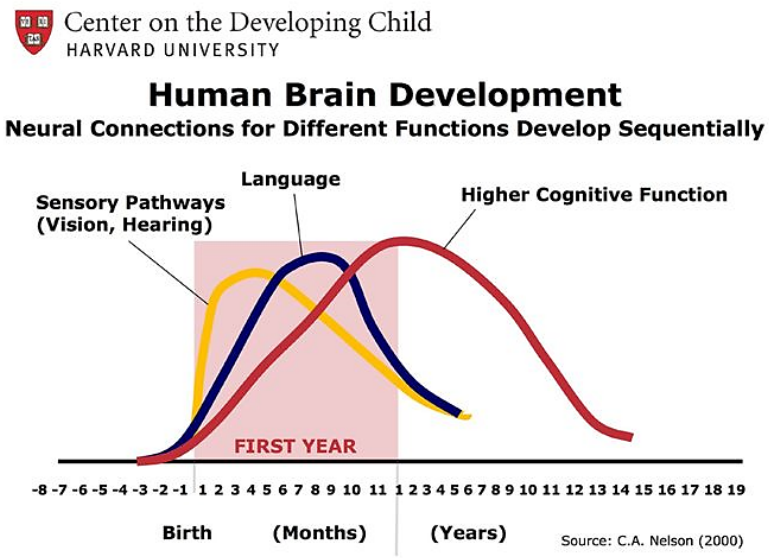
Newer research confirms earlier findings about improvements for Pre-K participants, including Duke University's 2015 *Impact of North Carolina's Early Childhood Initiatives on Special Education Placements in Third Grade.* It found that North Carolina's early childhood programs "significantly reduced special education placements at grade 3." Greater savings were observed in children with greater disadvantages.

Impact of North Carolina's Early Childhood Initiatives further examined the differences in the amounts spent per child in different Counties. The cost savings of the early childhood programs were estimated at 102% of program cost for the Smart Start and up to $364 of program cost in the For More at Four program.
http://investinginkids.net/2015/02/10/new-duke-study-of-special-education-cost-savings-due-to-north-carolinas-smart-start-and-more-at-four-programs/
http://epa.sagepub.com/content/37/4/478

The *Abbott Preschool Program Longitudinal Effects Study: Fifth Grade Follow-Up* (March 20, 2013) from the Rutgers National Institute for Early Education Research reported on 4th and 5th grade improvements in Language Arts, Literacy, Math and Science from preschool programs. The increases were described as equivalent to 10-20% of the gap after one year of Pre-K and 20-40% after two years of Pre-K. It noted that programs with adequate funding and stronger standards showed the most improvement. This study also noted the reduced rate of placement into special education after Pre-K participation.
http://nieer.org/sites/nieer/files/APPLES%205th%20Grade.pdf

Brain development peaks in early childhood with developmental elevation during adolescence, with different parts of the brain developing at different rates. Synaptic connections form early, with a 2-year old having more connections than an adult. It is believed that some synapses may no longer be needed as the brain becomes more efficient, while others may be reduced by what children experience.
http://www.nimh.nih.gov/health/publications/the-teen-brain-still-under-construction/index.shtml

The graphic at right from Harvard University's Center for the Developing Child shows when different brain functions are developed.



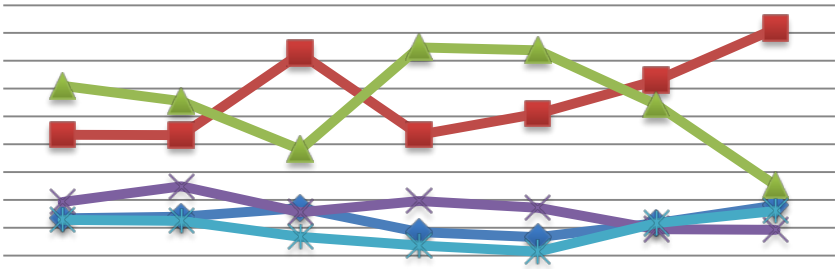
Zero to Three is a nonprofit organization that provides early development information for parents, professionals and policymakers. Zero to Three explains that the neurons in the cortex are produced before birth, they are not well connected and develop synaptic connections after birth and can create up to two million new synapses every second. The number of synaptic connection peaks around 4-8 years of age and then declines until about 25. Zero to Three also provides various parent brochures and guides about development for babies and toddlers.
http://www.zerotothree.org/child-development/brain-development/faqs-on-the-brain.html#changes

Grassroots Community Survey

The Grassroots Community Survey asks respondents to identify their greatest need in the category of Home and Community Based Services that includes services for dependent persons (either children or elderly people with disabilities). From 2009-2015, the greatest need has consistently been help paying for childcare as seen in Chart HHD-24.

Chart HHD-24: Greatest Unmet Need in Home & Community Based Services

Grassroots Community Survey, 2009-2015



	2009	2010	2011	2012	2013	2014	2015
Child Care Closer to My Home	**11.7%**	**12.0%**	**13.5%**	**9.2%**	**8.3%**	**10.8%**	**14.0%**
Help Paying for Child Care	**26.7%**	**26.7%**	**41.3%**	**26.7%**	**30.5%**	**36.5%**	**45.8%**
Homemaker Services for Elderly or Disabled People	**35.5%**	**32.8%**	**24.1%**	**42.4%**	**41.9%**	**32.1%**	**17.6%**
Homemaker Services for Relative Caregivers (raising the children of relatives)	**14.6%**	**17.4%**	**12.8%**	**14.8%**	**13.6%**	**9.7%**	**9.6%**
More Infant Child Care	**11.4%**	**11.2%**	**8.3%**	**6.8%**	**5.7%**	**10.8%**	**13.0%**

Source: Grassroots Community Survey, 2009-2015

Educational Challenges of Children and Youth

Human development is affected by the type and quality of education a child receives. School performance for Metropolitan Nashville Public Schools (MNPS) has been a major focus by the school system, according to *The Academic Performance Framework (APF) Executive Summary,* of MNPS. It has focused on helping students to be aware of their accomplishments, prepared for college, academic growth for success and to reach high standards of achievement.

The APF measures overall school performance and consist of performance indicators and the weights or values of each of the performance measures. According to APF, the four performance indicators used in the evaluation of school performances are Academic Progress (50%), Attainment & College Readiness (30%), the Achievement Gap (5%) and School Culture (15%). The goal of the APF has been to ensure that MNPS level of performance improves using the performance indicators linked with other school performance measures, professional observations and input from educators.
http://mnpschildrenfirst.com/2015/11/09/how-are-our-schools-performing-the-academic-performance-framework-answers-that-question/
http://www.mnps.org/dynimg/_KQAAA_/docid/0x7AC106CC8ACA1FE4/2/APF%2B2014%2B-%2BExecutive%2BSummary.pdf

The implementation of the APF by MNPS was commended by the Nashville Area Chamber of Commerce in their *2014 Education Report Card*, as having attributed to increased effectiveness of schools and students in low performing schools. Since 1992, the Nashville Area Chamber of Commerce has assessed the progress of Metro Schools. The *2014 Education Report Card* acknowledged that Metro Nashville Public Schools had made progress during the 2013-2014 school year. It also addressed the challenges of the school system and some specific concerns:

- 29% of the high school graduates improved on their ACT scores (national college admissions exam), but the benchmark of 50% was not achieved
- The eighth-grade math and English proficiency scores have struggled for the past 3 years
- Elementary School students did not meet state accountability goals

http://www.nashvillechamber.com/docs/default-source/education-reports-and-publications/2014-education-report-card.pdf?sfvrsn=8

Poverty and Education

In Educational Testing Services, *Poverty and Education: Finding the Way Forward* there are educational challenges encountered by children living in poverty when they begin their formal schooling. Children in or near poverty begin their lives with disadvantages:

- Less likely to be raised in two-parent families
- Less likely to be read to regularly
- Less likely to experience center-based and high quality day care
- More likely to be exposed to toxins in their environments
- More likely to reside in food-insecure households
- More likely to suffer the effects of unstable parent employment

Child Fund International's *The Effects of Poverty on Education in the United States* reported on the complex problems related to poverty that challenge educational development. Children from lower-income families are more likely to have lower test scores and higher risks for dropping out of school than children from wealthier families. Students who complete high school are less likely to attend college than students from higher-income families. For some children, the effects of poverty on education can present barriers that make it very difficult to break the cycle of generational poverty, further reducing their chances of rewarding and productive lives.

Charter schools are a growing sector of publicly funded schooling. According to *Poverty and Education: Finding the Way Forward*, there has not been enough evidence that Charter schooling and other reform strategies can substantially reduce the influence of poverty on educational opportunity. Schools must address concurrently children's readiness for school and the availability of equitable and adequate funding for high-poverty schools and districts. Charter schools concentrated largely within lower-income neighborhoods in large urban school districts, have failed to disrupt substantially the concentration of poverty, according to the report.
https://www.ets.org/s/research/pdf/poverty_and_education_report.pdf
https://www.childfund.org/Poverty-and-Education-in-the-US/

Education is a public necessity, according to *Poverty and its Impact on Education: Today and Tomorrow* from the National Education Association Higher Education Journal. For that to happen, it stated that the nation must address, and treat poverty as a condition that erodes the future and impedes attempts for educational reform.

The report noted that some teachers have not been trained to adequately work with impoverished populations and generally lack a background for comprehending the culture of poverty therefore their efforts in the classroom are obstructed. Additionally, educators from kindergarten to college use textbooks that do not address poverty.

Many students who lack basic skills in math, literacy, geography, and writing are entering college. It also stated that too many students spend time in remedial courses before entering into credit bearing courses. It stated that public schools must serve the poor with more school-based clinics, low income housing subsidy/initiatives,

expansion of early childhood education, implement dropout intervention programs, and after school programs that protect and enhance poor children's capabilities for quality education.
http://www.nea.org/assets/docs/HE/TA09PovertyCapra.pdf

Connections to Health & Human Development

Aging

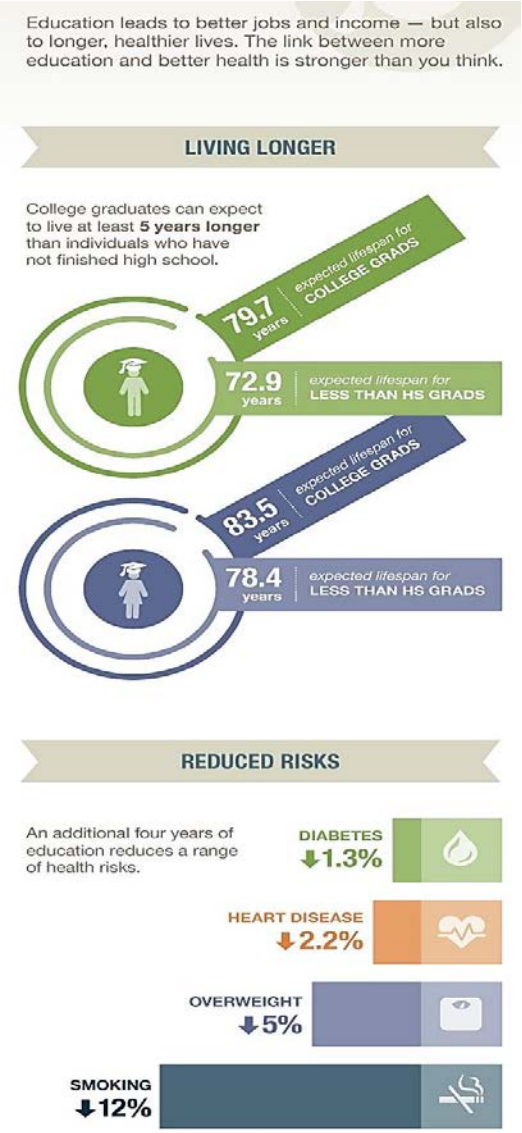
Medical spending for individuals between the ages of 55-64 is almost twice the amount spent by individuals between the ages of 35-44. Health care costs have contributed to increased bankruptcy filings among elderly Americans according to *Elderly Poverty: The Challenge Before Us* from the Center for American Progress. The report cited that the increasing cost of health care could be especially difficult for low-income elderly Americans with limited budgets. The high cost of health care is significant to the elderly who may require care not covered by Medicare or other insurances, placing a burden on retirement income. Based on the report economists had anticipated a large exit of baby boomers from the workforce when they reached age 60, however with the weakened economy and rising health care costs many Americans have delayed retirement.

Aging Americans, like other age groups may experience the effects of the declining stock markets, increased cost for transportation, auto maintenance cost, food prices, medications, health care, etc. However, the financial impact on the elderly with fixed incomes may create increased stress that affects their health.
https://www.americanprogress.org/wp-content/uploads/issues/2008/07/pdf/elderly_poverty.pdf

Education and Economic Development

One of the most important strategies for reducing economic inequality and boosting economic opportunity in the U.S. is to ensure that college is affordable for every child regardless of income, according to *Time for Change: A New Federal Strategy to Prepare Disadvantaged Students for College*, from The Future of Children. The report emphasized that children from economically disadvantaged families who have the academic capacity to earn a college degree should be allowed to do so.

When young adults from poor families earn a four-year college degree, research has proven that they are less likely to be poor, and more likely to have better health outcomes. According to *Education and Health in Developing Economies* from Princeton University, the health and education of parents improve outcomes in their children. Good health enables children to learn, concentrate and analyze which improves educational outcomes.
http://futureofchildren.org/futureofchildren/publications/docs/23_01_PolicyBrief.pdf
http://www.princeton.edu/~tvogl/vogl_ed_health_review.pdf



Research has proven that better educated people have lower morbidity rates from the most common illnesses to acute and chronic diseases.

The graphic at left from the Robert Wood Johnson Foundation illustrates how education leads to better jobs and higher incomes, that better-educated individuals live longer, have healthier lives than those with less education, and their children are more likely to thrive. http://www.rwjf.org/en/library/research/2012/12/why-does-education-matter-so-much-to-health-.html

Housing

The report, *Impacts of Affordable Housing on Health: A Research Summary*, from the Center for Housing Policy cited that affordable housing is a valuable strategy to support and improve wellbeing. Affordable housing generates more household resources to pay for health care, healthy food, basic necessities and it leads to better health outcomes. High-quality housing limits exposure to environmental toxins that negatively affect health.

Stable and affordable housing also supports mental health by limiting stressors related to financial burdens or frequent moves. Affordable homeownership can have mental health benefits by offering homeowners control over their environment. Affordable housing can provide support to improve the health of vulnerable populations. http://www2.nhc.org/HSGandHealthLitRev_2015_final.pdf

Nutrition

Providing nutrition is vital to sustaining the stamina for adults to work and for children to learn, grow and have a healthy future. Nutritionally healthy people respond better to health treatments and illnesses. Nutrition is a preventive measure for good health. Proper nutrition is an important part of being healthy for all ages, especially children, according to the Children's Nutrition Research Center at Baylor University. The center found that having access to healthy food at home and in school were critical to growth and development of adolescents and teens. However, access to healthy and nutritious food has been a challenge for many households and low-income neighborhoods.

Children who are food insecure are more likely to lack nutrients needed for healthy growth and development. Adequate nutritional intake is required for prevention of many childhood illnesses. School aged children without proper nutrition are generally unprepared to learn, have more behavior problems and are less likely to graduate from high school.
http://www.bcm.edu/cnrc/consumer/archives/percentDV.htm

Poverty

Research has shown a link between poverty and poor health. The Institute for Research on Poverty's *Poverty Fact Sheet: Poor and In Poor Health* stated that people with more income tend to be healthier and live longer. Nearly 70% of the uninsured population in the U.S. lives in poverty. Many tend to go without preventative health care and often wait until an illness is severe before seeking medical care. Families in poverty are more likely have inadequate housing, live in unsafe neighborhoods or may be homeless. They often have limited access to healthy foods, employment options, and adequate education.

KEY POINTS ON POVERTY AND HEALTH

- Education, occupation, income, and assets of one's socio-economic status are major determinants of health.
- Children are especially vulnerable to the negative health effects of poverty.
- Birth to age five is critical for development and health outcomes, children living in poverty are at greater risk.
- The U.S. has higher rates of child poverty than many other countries.
- As family income increases, the number of families reporting poor health decreases.
- Many health insurance consumers face limited options, high costs, and incomplete coverage.
- Some 32 million Americans could receive health insurance coverage if the Affordable Care Act is implemented as originally designed.

http://www.rwjf.org/content/dam/farm/reports/issue_briefs/2011/rwjf70442
https://morgridge.wisc.edu/documents/Poor_and_In_Poor_Health.pdf

Workforce and Economic Development

In *Healthy Workforce/Healthy Economy,* from the American College of Occupational and Environmental Medicine having a healthy, able and available workforce to compete in the global economy is an important asset. The current U.S. workforce is aging and increasingly burdened with chronic illnesses, functional impairments and work disability. There have been many ailments affected by the economy that could have been prevented, delayed or mitigated.

The report emphasized the need for more primary prevention strategies such as health promotion, health education, lifestyle management, safety, hazard recognition, nutrition, prenatal care, immunizations and other wellness services. The strategies help people to maintain healthy and productive lifestyles. Screening and early detection programs, health coaching, biometric testing and work disability prevention programs are secondary prevention strategies for early detection of potential diseases. Disease management, evidence-based quality care management, return to work programs and vocational rehabilitation are other prevention strategies that could limit the often-disabling effects of medical conditions that affect daily life functioning, work, lifestyles and future health costs.
https://www.acoem.org/HealthyWorkforce_HealthyEconomy.aspx

Promising and Evidence Based Practices

Best Start for Kids

Best Starts for Kids in King County, Washington, is the first initiative of its kind in the U.S. to improve health and wellbeing by investing in prevention and early intervention for children, youth, families and communities. The six-year initiative that began in 2015 will be the most comprehensive approach to childhood development in the U.S., beginning with prenatal to teen years, and investing in safe, healthy communities. The three major components of the initiative:

- To support pregnant women and young children with home health visits and screenings
- To track the progress of children and their developmental stages
- To support communities with culturally appropriate interventions for success

Funding will come from the County's tax levy that will generate almost $65 million annually. The average cost of the levy to King County property owners is approximately $56 per year, which is approximately $1 per week.

Best Start for Kids is based on proven scientific evidence for prevention and early intervention strategies. The scientific evidence guides the initiative to ensure that all of the County's children have opportunities to develop cognitive, emotional and social skills necessary to succeed in life. King County government will refine the outcomes and indicators for success through a detailed implementation plan involving input and consultation from the community. Breaking the connection between incomes and outcomes, and reversing demand for high-cost, crisis-focused services, are major goals of Best Start for Kids.

The program will include developmental disability screenings, tools for parents and teachers to identify behavioral and mental health challenges, as well as early intervention investments to prevent crime, drug use, school dropouts and other problems. The majority the levy funding will be for competitive bids of outcomes-focused contracts to community-based organizations.
http://www.kingcounty.gov/elected/executive/constantine/News/release/2015/November/04-best-starts-for-kids.aspx
http://www.kingcounty.gov/elected/executive/constantine/initiatives/best-starts-for-kids.aspx
http://confrontingsuburbanpoverty.org/2015/05/best-starts-for-kids-an-ounce-of-prevention-in-king-county-washington/

Cell Phone-Based Mental Health Support

The cell phone-based mental health support program uses modern technology and the progressive development of cell phones to reach individuals experiencing mental health crisis and concerns. The cell phone program uses mobile phone applications (also known as apps) to deliver a type of cognitive behavior therapy from licensed professionals, with experience in the field. The apps allow patients to regularly self-monitor their emotional state and easily share that information with their mental health provider. The apps allow the patient and the professional to correspond through text messages on mental health needs, advice, support and other automated messages.

The automated messages have worked well with patients participating in long-term mental health interventions. A mobile stress management app used has shown decreased anxiety and increased coping skills for some individuals. An emotion-monitoring app has helped to increase emotional self-awareness among adolescents by

reducing depression over time. Text message programs used by patients with alcohol use disorders and depression have been helpful in improving mental health and motivation to remain sober.
According to the County Health Rankings and Roadmaps, evidence has shown that cell phone-based support programs have helped to reduce depression, anxiety, and stress. Mental health apps have the potential to be effective and could significantly improve treatment accessibility, according to *Smartphones for Smarter Delivery of Mental Health Programs: A Systematic Review* from the U.S. National Institutes of Health's National Library of Medicine.

Nevada's Crisis Call Center was the first in the nation to provide text message, crisis intervention services 24 hours a day. California's Suicide Prevention Initiative includes creation and expansion of web and text-based crisis hotlines. Crisis Text Line provides support to teenagers across the country.
http://www.countyhealthrankings.org/policies/cell-phone-based-support-programs
http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3841358/?report=classic
http://bmcpsychiatry.biomedcentral.com/articles/10.1186/1471-244X-13-49

Cure Violence

Cure Violence in Chicago, Illinois, formerly CeaseFire, was developed in 1995 to reduce youth violence associated with firearms.

The violence prevention program consists of trained street violence interrupters, outreach workers, public education campaigns, and community mobilization to reduce shootings and killings in Chicago, Illinois. The street violence interrupters are trained mediators to prevent shootings by identifying and mediating potentially lethal conflicts in the community and follow up to diffuse conflict. Mentoring is another program component to prevent at-risk youth from delinquency and to help reduce risk behaviors of delinquent youth. The activities of Cure Violence are organized into the five core components of: Street-level outreach, public education, community mobilization, faith leader (clergy) involvement and law enforcement participation.

The program's public health approach to reduce shootings and killings is based on research evidence. The approach used is designed to change the operative norms regarding violence, in youth at risk and the community through community mobilization, public education campaigns, and mentoring for changing violent behavior. Instead of trying to change the behaviors of a large number of individuals, Cure Violence concentrates on changing the behavior and risks of small numbers of selected group members in the community who are at a high risk of being shot or shooting someone.

The program has been associated with significant reductions in shootings, killings, and retaliatory homicides in some Chicago neighborhoods, according to the U.S. Department of Juvenile Justice National Mentoring Resource Center. There have been multiple independent evaluations that have shown large statistical reductions in the city's violence. Chicago's Cure Violence model is being replicated in 15 other locations across the U.S. supported by a $4.5 million Robert Wood Johnson Foundation grant.

Funding for Chicago's program consists of government, nonprofit, faith based and national foundations. Some major funders include the Robert Wood Johnson Foundation, American Psychological Association, Chicago Community Foundation, The Chicago White Sox, Illinois Department of Corrections, and the U.S. Department of Justice, and the University of Illinois at Chicago. http://cureviolence.org/results/scientific-evaluations/
http://www.rwjf.org/en/library/research/2012/01/evaluation-of-baltimore-s-safe-streets-program.html
http://www.crimesolutions.gov/ProgramDetails.aspx?ID=205
http://cureviolence.org/partners/supporters/

All Our Kin

All Our Kin of New Haven, Connecticut is a nationally recognized nonprofit organization that trains, supports, and sustains community childcare providers in order to ensure that children and families have the foundation needed to succeed in school and life. All Our Kin focuses on workforce development and childcare simultaneously, with significant impact to families.

All Our Kin improved educational outcomes and life changes for the youngest and most vulnerable children. Many childcare professionals have succeeded as business owners and educators; working parents find stable, high-quality care for their children; and children gain an educational foundation for achievement in school and beyond. The Connecticut Center for Economic Analysis' found that the All Our Kin program has had a significant impact on the economy of New Haven, due to its effect on workforce participation. It has been replicated not only in New Haven but also in three other Connecticut cities of Bridgeport, Norwalk and Stamford.

Funding includes Care4Kids, Connecticut's child care subsidy program; the Connecticut Office of Early Childhood; the local government School Readiness Council and many private foundations, individual donors, and corporations.

http://www.idealist.org/view/nonprofit/KWTGBnfJwDFP/
http://www.allourkin.org/history
http://www.jaffeawards.com/jaffe/award-winners/all-our-kin-10.aspx
http://opportunities-exchange.org/wp-content/uploads/Profile-All-Our-Kin-7-31-15.pdf
http://www.allourkin.org/sites/default/files/All%20Our%20Kin_CCEAReport.pdf

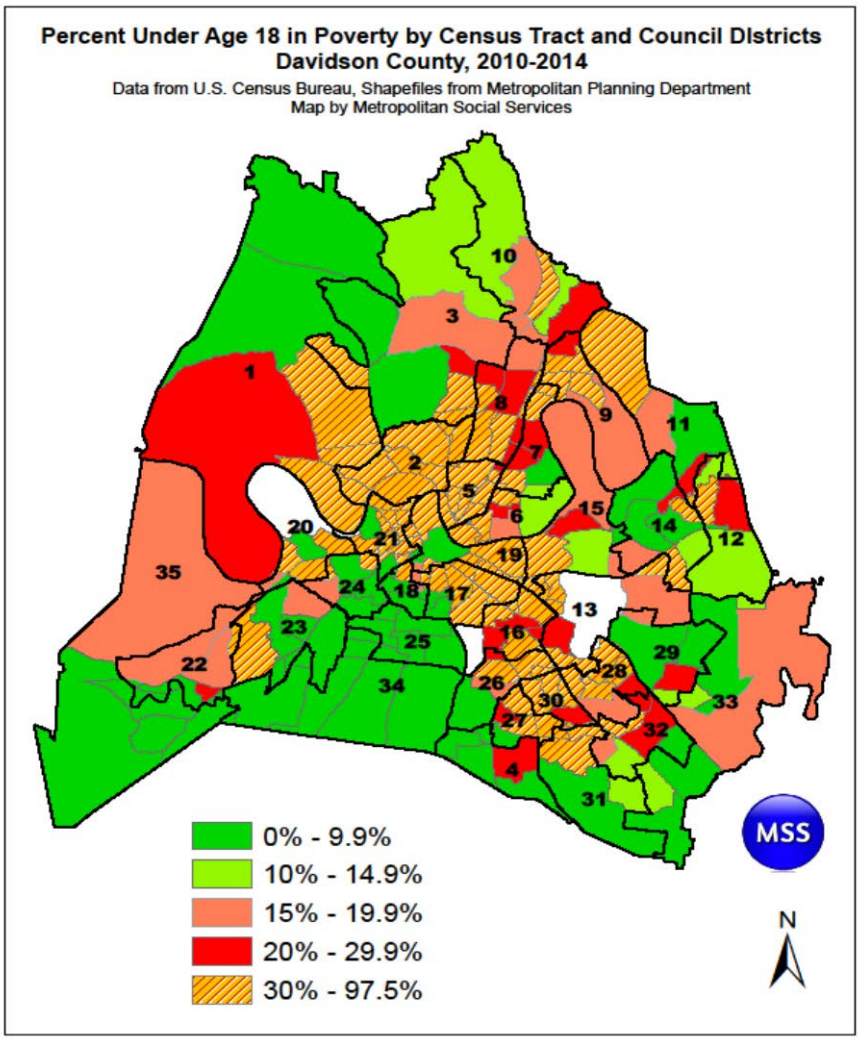
Consequences of Poverty in Childhood and Beyond

For many years, children in Davidson County, Tennessee and throughout the United States have been more likely to be poor than adults. For decades, research has shown that poverty has negative effects on children.

In addition, recent research demonstrates that the detrimental effects of poverty are even more severe and pervasive than previously known. While children may be affected in different ways, evidence continues to build to indicate that poverty increases the chances of poor health, impaired cognitive function, high school dropout rates, decreased future earnings and other areas of their lives.

According to the 2014 American Community Survey, Davidson County has 142,496 minor children, with about 1/3 who live in poverty, an estimated 47,230. There are many negative consequences of poverty on children, including those that leave lifelong damage, as described in this section.

Using data from 2010-2014, the map below shows the percent of minor children who live in poverty in Davidson County by Census Tracts, with the Council Districts outlined. The red and yellow striped areas have more than 30% of people under age 18 in poverty.



The combination of poverty in early life and the chronic stress it causes is a dangerous combination for a child's fragile developing brain. The resulting lower IQ scores and behavioral problems can sometimes be identified by the time the child is age 5. *Child Poverty and Its Lasting Consequences* from the Urban Institute explains that the changes continue as children who experienced poverty at an early age go on to experience lower academic achievement than the children who experience poverty in later childhood. The longer that children experience poverty, the worse their outcomes will be when they are adolescents and adults.

"If poverty and its associated stressors impair children's brain development and impede their future success, then poor children and approaches for helping them should be prominent in the national debate. Resources aimed at improving the well-being of poor children and their families today could have large future payoffs; **the estimated economic cost of child poverty is more than $500 billion a year**."

Child Poverty and Its Lasting Consequence (September 2012)

Child Poverty noted that among the newborns who were born poor during the past 40 years, almost half went on to be poor for at least half their childhoods. Black children were disproportionately affected, with 2/5 born poor and 2/3 remaining persistently poor. The report identified factors, in addition to being born poor, that relate strongly to persistent poverty, including low parental education level and family non-employment. It pointed that there were slight improvements in child poverty before the recession. During a 20-year period, the rate approached the highest in 2010-2011.
http://www.urban.org/research/publication/child-poverty-and-its-lasting-consequence/view/full_report

Poor children are exposed to factors that may impair brain development and affect social and emotional development.

Children from poor families are exposed to experiences and other factors can significantly affect their social and emotional development, placing them at higher risk for various problems. As described in Child Trends' *Children in Poverty 2014*, poor children have higher risks for environmental toxins, parental substance abuse, maternal depression, trauma and abuse, violent crime, divorce and more. As the younger children age into adolescence, they are more likely to have mental health problems, particularly depression and personality disorders. They are more likely to engage in risky health-related behavior such as smoking and early initiation of sexual activity.

Negative factors to which poor children are more often exposed include:

- Environmental toxins
- Inadequate nutrition
- Maternal depression
- Parental substance abuse
- Trauma and abuse
- Violent crime
- Divorce
- Low-quality child care
- Decreased cognitive stimulation (in part from exposure to a more restrictive vocabulary as infants)

Children in Poverty reported an array of negative outcomes for poor children and youth:

- Poor health
- Chronic health conditions
- Born prematurely at low birth weight
- Mental health problems (personality disorders, depression); emotional and behavioral problems
- Higher rates of risky health-related behaviors (smoking, early sexual activity)
- Higher risk for poor cognitive and academic outcomes
- Lower school attendance
- Lower reading and math test scores
- Increased distractibility
- Higher rates of grade failure

- Early high school drop out
- Likely to engage in delinquent behaviors as adolescents
- Lower occupational status and lower wages
- Deficits in working memory in adulthood

http://www.childtrends.org/?indicators=children-in-poverty

Poverty impairs brain development and academic achievement.

In September 2015, the Journal of the American Medical Association (JAMA) Pediatrics included *Association of Child Poverty, Brain Development and Academic Achievement.* It found that "Poverty is tied to structural difference in several areas of the brain associated with school readiness skills," especially in children from the poorest households. *Association of Child Poverty* advocated for additional resources to remediate early childhood environments for children in households below 150% of the poverty level. Specific detrimental findings for children in poverty were:

- 3-4% smaller gray matter in children below 150% of poverty level than developmental norms
- 8-10% smaller gray matter in children below the poverty level than developmental norms
- 4-7 points lower scores in children from low-income households on standardized tests

http://archpedi.jamanetwork.com/article.aspx?articleid=2381542&utm_campaign=articlePDF&utm_medium=articlePDFlink&utm_source=articlePDF&utm_content=jamapediatrics.2015.1475

Brain Drain: A Child's Brain on Poverty from the Institute for Research on Poverty at the University of Wisconsin-Madison explained how there is growing evidence about how living in poverty can result in changes to the brain that can have lasting effects. The human brain grows fastest during before age 4, particularly the gray matter (the key to processing information and executing actions).

MRI studies have shown that children in poor and near-poor circumstances have less gray matter than those in higher income families. Less gray matter can interfere with the ability of children to learn, even before they begin kindergarten and it can also be associated with behavioral problems. While the amount of gray matter is similar at birth across socioeconomic levels, changes can be observed by age 4.

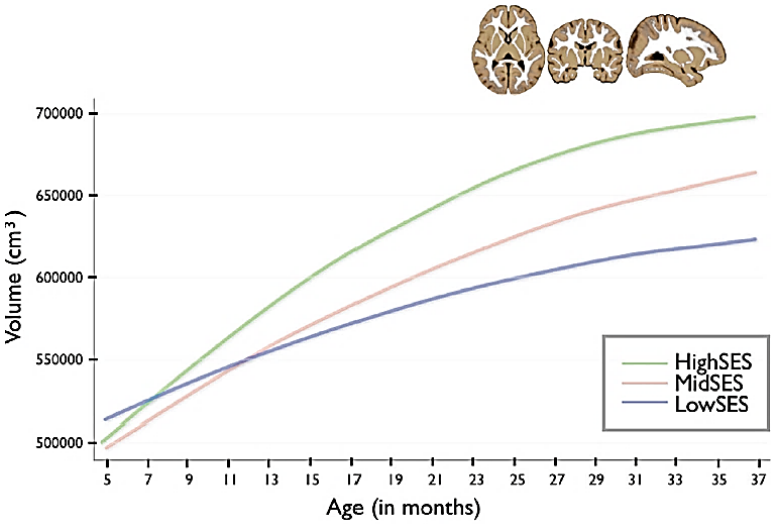


Chart CP-1: Volume of Brain Matter by Socioeconomic Status
2013

The figure at left compares the volume of brain matter, showing that higher volumes are associated with high socioeconomic status. (Hanson, 2013)

Brain Drain describes how poor children often experience an array of detrimental circumstances, including ongoing environmental stress factors. Research suggests different ways in which poor children could be affected.

- Less Cognitive Stimulation (less cognitive stimulation, less access to learning resources, less verbal interaction among parents)
- Stressful and Unsafe Living Conditions (crowded, noisier, neighborhood crime and violence, polluted air and water)
- Harsh Parenting and Family Instability (exposed to family turmoil, domestic violence and conflict)

Brain Drain also suggests ways that could help counter or mitigate the detrimental effects of poverty on children:

- Income Supports (Earned Income Tax Credit, targeting income supports to parents of young children)
- High Quality Preschool (enriching early education programs have been shown to be cost effective and create improvements in short-term and long-term outcomes)
- Nurse Home Visitation (lower levels of abuse and neglect, enhance parenting skills for mothers)

http://morgridge.wisc.edu/poverty-fact-sheets-brain-drain

Poverty is detrimental to the health of children.
For children who grow up living in poverty, many adverse conditions could reduce their chances for healthy development. Childhood adversity leads to poorer health outcomes and disparities that can affect their lifespan, according to *Start Early to Build a Healthy Future: Research Linking Early Learning and Health of the Ounce of Prevention Fund*.

Health disparities begin early in life and progresses over time, affecting the potential for children in poverty to lead healthy lives not limited by illness or injury. Children in poor families experience higher incidences of childhood injury, chronic disease, suppressed immune systems, and cognitive and behavioral challenges. Children in poorer families are five times more likely than children from higher income families to be have "less than optimal health."
http://www.ounceofprevention.org/research/pdfs/start-early-healthy-future.pdf

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http://www.ounceofprevention.org/research/pdfs/start-early-healthy-future.pdf

America's Children: Key National Indicators of Well-Being 2015 from the Federal Interagency Forum on Child and Family Statistics reports that children who live in poverty are more likely to have cognitive, behavioral, social and emotional difficulties. Throughout their lifetimes, they are likely to have fewer years of school and more years of unemployment. The well-being of children is affected greatly by the economic circumstances and material well-being of their families. Their well-being is affected in families with low incomes, food insecurity and other factors related to poverty. The physical environment where children live affects their health, development and safety.

For children who live in disadvantaged areas, there is usually more exposure to secondhand smoke, lead, housing problems, violent crime, injury and mortality. The report also provides detailed information for seven domains with indicators that influence future economic, health, education, behavior and other areas of life. The section on Economic Circumstances explains the specific damage caused by poverty, low income, lack of secure parental income and food insecurity.

http://www.childstats.gov/pdf/ac2015/ac_15.pdf

Children and Instability

The Negative Effects of Instability on Child Development from the Urban Institute (September 2013) explains that children thrive in stable and nurturing environments that are predictable, but that instability has negative effects on children's physical, emotional and cognitive development. Many children experience instability that creates a high level of family stress, with an increase in the children who experienced instability since the recession began.

"Instability is best described as the experience of abrupt, involuntary, and/or negative change in individual or family circumstances." While some change is normal and expected, dramatic and sudden disruptions can make children feel insecure. When parents lack control over such changes, they typically experience difficulties of their own and are less able to help their children adjust to changes.

The Negative Effects of Instability identified five types of instability.

- **Economic Instability** – a drop in family income from which families may or may not recover, often caused through involuntary job loss and divorce or separation. While it is not unusual for income to fluctuate, low-income families usually do not have savings or other resources to maintain stability. Cognitive development and academic achievement are strongly connected with family income.

- **Employment Instability** – increased with the recession as parents became unemployed or reduced to lower paying jobs, negatively affecting educational achievement. Employment instability creates material hardship, with few resources to support childhood development, especially for families without savings or other assets. The unemployment of mothers can also result in poor social-emotional outcomes that lead to problem behaviors (bullying, being withdrawn, truant, etc.).

- **Family Instability** – involves changes in family structure and is linked to problem behaviors and to academic outcomes. It is estimated that by the time children reach the fourth grade, more than 1/3 have experienced parents who marry, remarry, separate, end or begin a cohabiting relationship. These family transitions have more serious consequences when children are younger (who need consistency with their caregivers to form secure attachments) than age 6 or when they are adolescents (and need parental support and role models).

- **Residential Instability** – residential moves can be very stressful and can affect children in different ways at different ages. Frequent moves early in life are detrimental to mental health and vocabulary development. Instability in elementary school years can lead to lower quality homes/neighborhoods, less parent involvement and lower academic and social outcomes. Adolescents may have difficulty adapting, express negative social behaviors and be more likely to drop out of high school.

- **Instability in Out-of Home Contexts** (Child Care and School) – changes in child care arrangements for children in child care during their first 15 months. While the national average child care arrangement lasts about a year, the duration is much shorter for low income families. For infants, this can result in poor attachment and problem behaviors, while preschoolers may not become ready for school. Many U.S. children change schools, including 1/3 of 4th graders, 1/5 of 8th graders and 1/10 of 12th graders. School changes can impair academic progress and decrease social competence, especially if changes occur during the school year. The impairment can be even worse during elementary and high school. Low-income and minority children transfer schools more frequently, so their negative effects are greater.

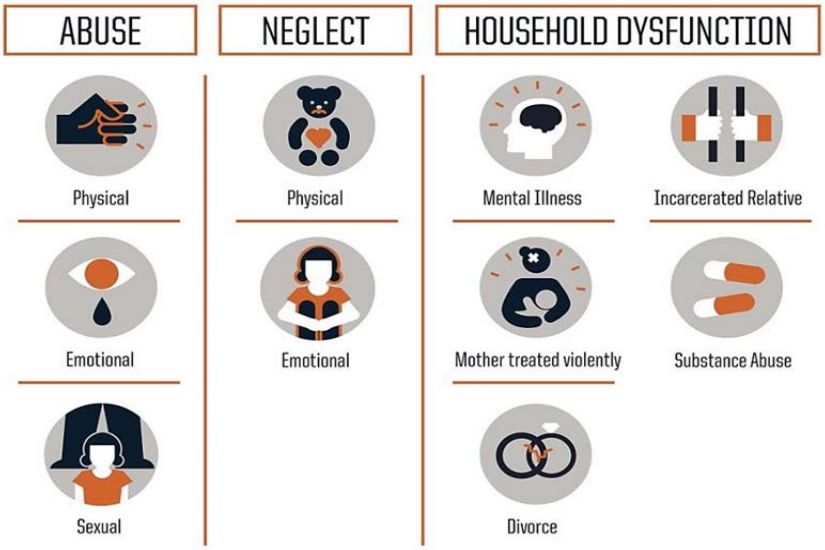
This report encourages the use of programs to serve and support families with children with interventions that alleviate the immediate effects of instability, including financial assistance to families with cash, subsidized housing, child care or food. It also explains how two-generation approaches can mitigate the damage of

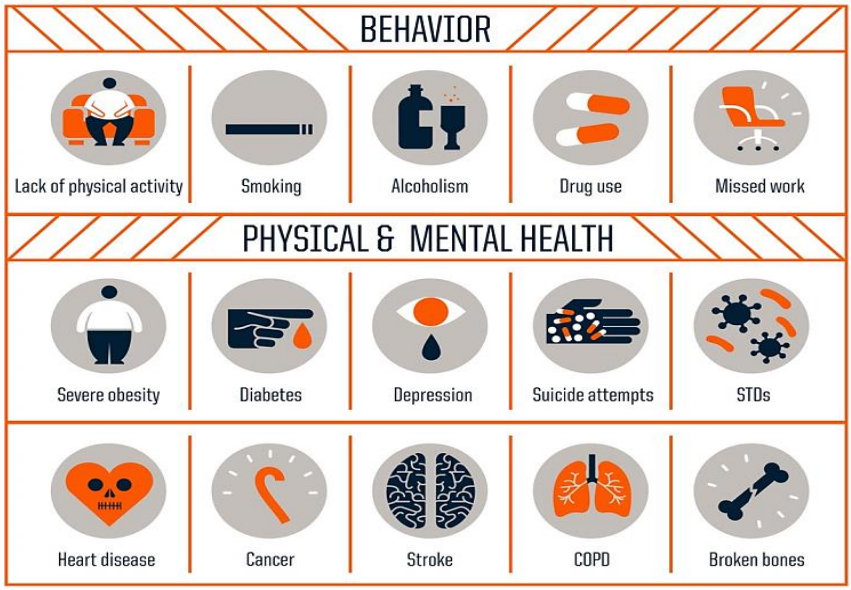
instability on children by supporting positive parenting, reducing parent and child stress, and strengthening family coping strategies.
http://www.urban.org/sites/default/files/alfresco/publication-pdfs/412908-The-Negative-Effects-of-Instability-on-Child-Development-Fact-Sheet.PDF

Adverse Childhood Experiences

Adverse Childhood Experiences (ACEs) have been linked to later health problems and other negative outcomes. Because of a variation in the level of resiliency (mitigating factors such as having a loving grandparent, understanding teacher, trusted friend), some people with greater ACEs may function at a higher level. For adults, trauma informed therapy could also mitigate the long-term effects of ACEs.

Children who are experiencing ACEs sometimes have signs of stress, such as having nightmares, recurring thoughts of a stressful event, may re-enact the trauma through play or seem distracted or withdrawn. The graphic below from CDC/Robert Wood Johnson Foundation shows that the three types of ACEs – abuse, neglect and childhood dysfunction.



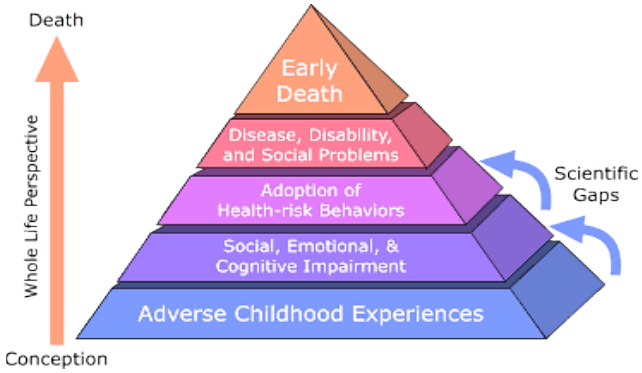


The more ACEs to which a child is exposed increase the likelihood of health risks. The graphic below from CDC/Robert Wood Johnson Foundation indicates behaviors that may result from greater exposure to ACEs, as well as the health problems that can result later in life.

http://www.npr.org/sections/health-shots/2015/03/02/387007941/take-the-ace-quiz-and-learn-what-it-does-and-doesnt-mean

The U.S. Centers for Disease Control estimate that 1 out of 5 children experience a mental disorder in a given year, affecting children families and communities. Mental disorders in children involve serious changes in how

children learn and behave. Examples of childhood mental disorders include attention-deficit/hyperactivity disorder, behavior disorders, mood and anxiety disorders, substance abuse disorders and Tourette syndrome.



Behavioral health describes the connection between a person's behaviors and the health and well-being of the body and mind.

Behavioral therapy is a treatment used to help change problem behaviors by building skills and helping children manage their own behaviors. Behavioral parenting interventions are one type of behavioral therapy that focuses on improving parenting skills and the relationship between parents and their child.

Mental disorders include emotional or psychiatric disorders (such as bipolar disorder, obsessive-compulsive disorder, and schizophrenia) or behavior disorders (such as ADHD and oppositional-defiant disorder).

http://www.cdc.gov/violenceprevention/acestudy/pyramid.html

The effects of Adverse Childhood Experiences have been studied for many years. In 1998, the American Journal of Preventive Medicine reported on Adverse Childhood Experiences in *Relationship of Childhood Abuse and Household Dysfunction to Many of the Leading Causes of Death in Adults.* The research article described how childhood emotional, physical or sexual abuse and household dysfunction affected later health risk behavior and disease. *Relationship of Childhood Abuse* indicated the prevalence of ACEs, with 63% of the people who participated reporting at least one category of childhood trauma. More than 20% experienced three or more categories of trauma. Specific traumas included:

- 11% experienced emotional abuse.
- 28% experienced physical abuse.
- 21% experienced sexual abuse.
- 15% experienced emotional neglect.
- 10% experienced physical neglect.
- 13% witnessed their mothers being treated violently.
- 27% grew up with someone in the household using alcohol and/or drugs.
- 19% grew up with a mentally ill person in the household.
- 23% lost a parent due to separation or divorce.
- 5% grew up with a household member in jail or prison.

It noted that ACEs were found to cause mental health disorders, including depression, hallucinations and post-traumatic stress disorders. ACSs were also found to account for 1/2 to 2/3 of drug use and increased the likelihood that girls would have sex before reach age 15 and that boys or young men were more likely to impregnate a teenage girl. *Relationship of Childhood Abuse* stated "the breadth of exposure to abuse or household dysfunction during childhood and multiple risk factors for several of the leading causes of death in adults." While the factor of poverty was not examined in the early research (described in later studies), it did establish the linkage between ACEs and negative outcomes later in life.
http://www.acestudy.org/yahoo_site_admin/assets/docs/PIIS0749379798000178.127132450.pdf

Children's Mental Health New Report from the CDC (2013) emphasized the importance of early diagnosis and treatment. Otherwise, children with mental disorders may have problems in school, at home and have difficulty forming friendships. Without effective treatment, these problems can continue into adulthood.
http://www.cdc.gov/ncbddd/childdevelopment/documents/CMH-feature20130514.pdf

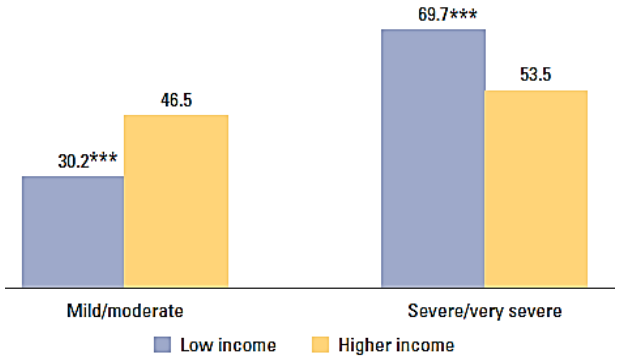
As described in the Urban Institute's *Depression in Low-Income Mothers of Young Children: Are They Getting the Treatment They Need?* (April 2013), among mothers with young children, low-income mothers are more likely to experience depression than higher-income mothers. In addition, lower-income mothers are less likely to receive treatment. Untreated maternal depression can affect the child in many ways, including preterm birth and low birth weight, poor physical health and physical endangerment from neglect or abuse.

Children can experience developmental, emotional and mental health problems, depression, separation anxiety and oppositional defiant disorders from a mother with untreated depression. It is not known how many mothers with young children are affected, how many receive treatment, how depression rates vary by income and health insurance status.

For example, it is clear that low-income mothers who do have depression are less likely to receive appropriate treatment, which could affect the severity and duration of the depression. Among low-income mothers, 37.3% received no treatment, compared to 25.3% of higher-income mothers.

Uninsured mothers of young children were less likely to use prescription medication (70.7% did not use medication) than those who were insured (53.0% not using medication), likely because the lower-income mothers could not afford the medication. As a result, the children of lower-income mothers may be affected in a more significant way than higher-income mothers who have access to and receive treatment. Chart CP-2 compares the severity of depression by income level.

Chart CP-2: Depression in Mothers of Young Children by Severity and Income
U.S., 2008-2010
Source: National Survey of Drug Use an Health, SAMHSA
http://www.urban.org/research/publication/depression-low-income-mothers-young-children-are-they-getting-treatment-they/view/full_report



Although ACEs are experienced at a young age, health damage extends into adulthood. In May 2014, the North Carolina Center for Health Statistics released *The Effect of Adverse Childhood Experiences on Adult Health.* The report explained the extremely high (toxic) level of stress experienced by children who have ACEs, pointing out that frequent or sustained stress hormone levels could damage learning, behavior and health throughout life, as well as increase depression, drug abuse, cardiovascular disease and diabetes. As adults, those who experienced

ACEs were more likely to expose their own children to ACEs, creating a cycle of mental, social and behavioral problems. The report emphasizes the importance of using evidence-based strategies to prevent ACEs and promote healthy parenting.
http://www.schs.state.nc.us/schs/pdf/SCHS_Study_167_FIN_20140505.pdf

The National Council for Behavioral Health notes that trauma can have broad and significant effects on people, including distrust, despair and emotional damage. It indicates that "Trauma is a near universal experience of individuals with behavioral health problems," which suggests the magnitude of the effects of ACEs.

The National Council for Behavioral Health explains that the traumatic experiences affect physical, mental, behavioral and spiritual functioning. There are evidenced-based models of trauma-informed care that can effectively improve the damage sustained by individuals who experienced trauma. Components include early screening and assessment, consumer-driven care and services, nurturing a trauma-informed and responsive workforce, evidenced-based practices, creating safe environments, community outreach, partnership building and ongoing performance improvement and evaluation.
http://www.thenationalcouncil.org/areas-of-expertise/trauma-informed-behavioral-healthcare/

Both the State of Tennessee and the Metropolitan Government of Nashville and Davidson County have initiatives to address the importance of Adverse Childhood Experiences (ACEs).

The Metropolitan Department of Public Health and Healthy Nashville are leading the Davidson County initiative, with a Healthy Nashville Summit dedicated to ACEs on April 22, 2016.

Early Development

The early years of a child's life are critical to health and development, as discussed in *The Foundations of Lifelong Health Are Built in Early Childhood* from the Harvard Center for the Developing Child. Healthy development of all children, including those with special health care needs, provides opportunities for children to grow up with social, emotional and educational stability. Just as proper nutrition, exercise, and rest are essential to health so is having a safe and loving home, spending time with family, playing, reading and socialization, which are the additional components of healthy child development. Early experiences in a child's life are established in the child's body and physical condition.

Early childhood experiences can strengthen or disrupt a child's emotional well-being. The report also makes policy suggestions for promoting the kinds of environments and experiences that prevent early difficulties from derailing the developmental process according to the National Scientific Council on the Developing Child. The emotional well-being of young children is directly tied to the functioning of their caregivers and the families in which they live.
http://developingchild.harvard.edu/resources/establishing-a-level-foundation-for-life-mental-health-begins-in-early-childhood/
http://developingchild.harvard.edu/index.php/resources/reports_and_working_papers/foundations-of-lifelong-health/

Educational Challenges of Children and Youth

According to the Brookings Institute's *Starting School at a Disadvantage: The School Readiness of Poor Children,* when children who are poor start to school they often have disadvantages because of inadequate educational skills and health development. It reported that by age 5, only about 48% of poor children are ready for school compared to 75% of children from families with moderate to high incomes. It also reported that along with

poverty, a child's school readiness was influenced by preschool attendance, the parents' education, prenatal exposure to tobacco, and low birth weight.

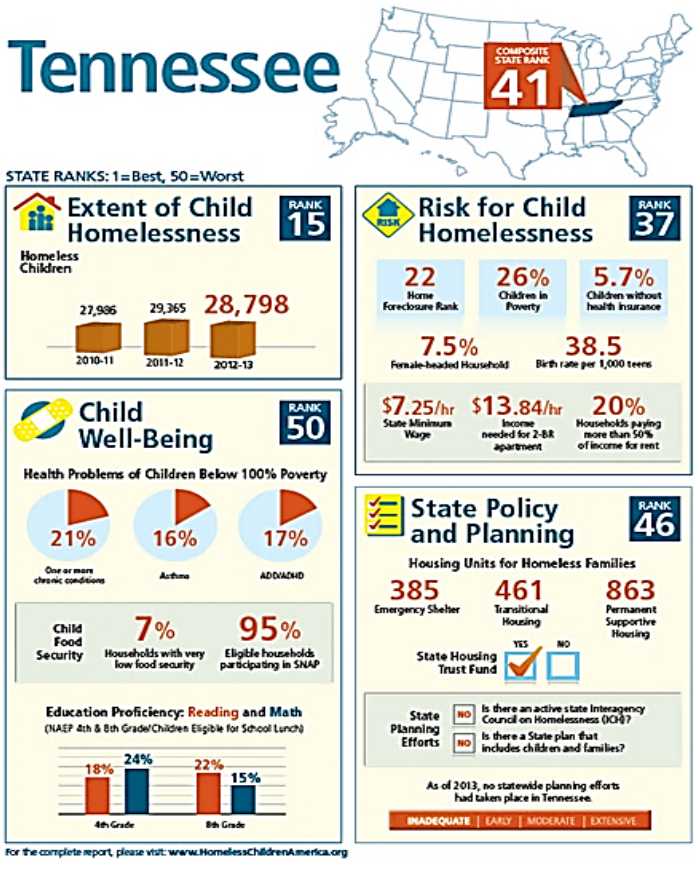
The probability of being school-ready is 9% higher for children who attend preschool. Being ready for school was 10% lower for children whose mothers smoked during pregnancy and 10% lower for children whose mothers were not supportive and nurturing during parent-child interactions.
http://www.brookings.edu/~/media/research/files/papers/2012/3/19%20school%20disadvantage%20isaacs/0319_school_disadvantage_isaacs.pdf

Children and Housing

Creating and sustaining healthy homes for children and families has been one of the major public health issues in the nation according to researchers from *How Housing Matters* of the MacArthur Foundation. In their research brief, *Poor Quality Housing is Tied to Children's Emotional and Behavioral Problems,* inadequate housing significantly affected low-income children due to the stress of unsafe or unhealthy living conditions.

The stress of living in poor quality homes or having to move multiple times in short spans of time can lead to symptoms of depression, anxiety, and family instability. It stated that when a home does not meet the basic needs for comfort, stability, and security the child as well as parents are negatively impacted. *Poor Quality Housing* stated that researchers have determined that substandard housing, such as exposed wiring, peeling paint or infestation of rodents can not only contribute to stress in children but can also hinder their emotional stability and capacity to learn.

Stable homes are very important to the well-being of children. *Poor Quality Housing* notes that instability for children can also interrupt their ability to form friendships and healthy relationships, as well as to hinder their behavioral and academic development. It specified that instability in the family is a major factor in the diminished functioning of the children. The report recommended implementing innovations that support low-income families in safe and stable housing. It emphasized working with local public health departments, along with other local state and federal agencies to strengthen and enforce housing codes, and improve indoor environmental quality and housing conditions.
http://www.macfound.org/media/files/HHM_Research_Brief_-_September_2013.pdf



Homeless Students

The health and development of children are affected by homelessness. According to the Homeless Resource Network, homeless children are four times more likely to have slower academic growth and are twice as likely to have learning disabilities as children who are not homeless.

There are barriers, such as the child's lack of a stable address, delays in transfer of school records, lack of transportation and absence of immunization and health records that often prevent homeless children from enrolling in school. http://bostonhern.org/about/facts/#f3

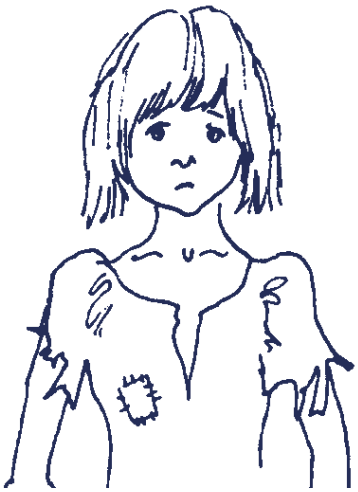
America's Youngest Outcasts, from the National Center on Family Homelessness, released November 2014, presented a comprehensive report card on child homelessness in the United States. Based on the most recent U.S. Department of Education's count of homeless children in U.S. public schools and the 2013 U.S. Census, there were 2,483,539 children that experienced homelessness in the U.S. in 2013. That means that 1 out of 30 children in the U.S. were homeless at some point in 2013.

In the report, the U.S. states were ranked based on child homelessness, child well-being, risk for child homelessness, as well as the state's policy and plans to address the problems. Tennessee's overall composite score was 41st with 50th being the worst. The following graphic of Tennessee's overall composite report illustrates the areas reviewed and assessed in their determination of ranking.

It shows that Tennessee ranked relatively well for the extent of child homelessness (15th), but much lower for state policy and planning for housing units for homeless families (37th) and child well-being related to health problems of children living in poverty (50th).
http://www.homelesschildrenamerica.org/mediadocs/280.pdf

The federal McKinney-Vento Homeless Assistance Act of 1987 ensures educational rights and protections for children and youth experiencing homelessness. The McKinney-Vento Act's Education for Homeless Children and Youth Program defined homelessness as "a lack of permanent housing resulting from extreme poverty, or in the case of an unaccompanied youth, the lack of a safe and stable living environment."
http://center.serve.org/nche/downloads/mv_full_text.pdf

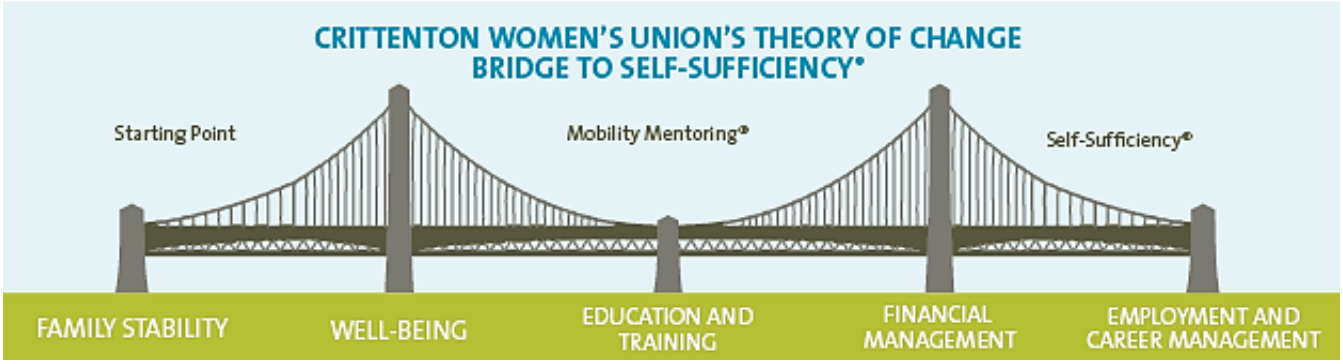
The Metropolitan Nashville Public School System's Homeless Education Resources Outreach (H.E.R.O.) program provides resources and services needed to help homeless children and youth to be successful in school. It reported that during the 2014-2015 school year, MNPS had identified and served 3,081 homeless students. Of these students, 439 lived in motels, 285 in shelters, 6 in cars, 5 in offices/businesses and 3 in tents/campers. MNPS also reported that there were an additional 474 preschool-age children who were homeless (and not in school).



As of November 2015, the program had provided services for 1,626 students for the 2015-2016 school year. The H.E.R.O. program received increased requests for clothing, food and housing assistance. Some schools have food and clothing pantries and they all work closely with other community organizations to address needs.

Moving out of poverty has become "a lengthy, complex navigational challenge" that requires impulse control, working memory and mental flexibility, all that may be impaired by the severe stress of living in poverty. *Using Brain Science to Design New Pathways Out of Poverty* (Crittenton Women's Union, 2014) explains that experiences of social bias, persistent poverty and trauma can undermine brain development and the skills needed to succeed. It indicated that these areas of the brain can be improved, resulting in better outcomes in parenting, personal relationships, money management, educational attainment and career achievement.

It describes the key areas Crittenton has identified as its Bridge to Self-Sufficiency. These include family stability (housing and child stability), well-being (health, behavioral health and social supports), education, financial management and career management. *Using Brain Science* indicates that without all of these pillars, families often have difficulty in achieving economic independence. It noted that these pillars are mutually connected and each pillar affects the others.

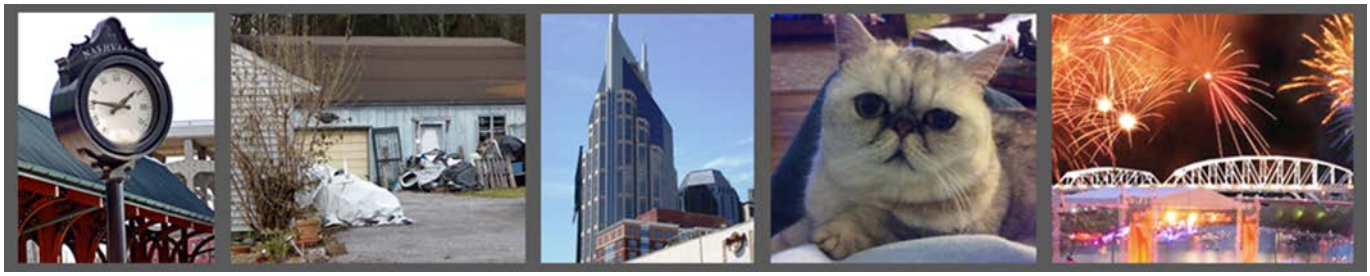


Organizations can help mitigate the poverty-related stress challenges, as described in *Using Brain Science*. They can use program design improvements to improve service delivery by modify the environment, staff approaches, program materials, program access and staff training. Organizations can also provide participants with tools suggested by brain science research (personal organization strategies and tools, reminders, goals contracts, incentives, impulse/distraction control strategies, problem solving, goal setting frameworks, etc.).

Another way organizations can help mitigate the detrimental effects of stress is to provide coaching to help participants develop an array of skills.

- Problem solving
- Evaluating and considering options
- Impulse control, considering future ramifications
- Social skills and anticipation of other points of view
- Leadership and organization of groups and tasks

http://www.liveworkthrive.org/research_and_tools/reports_and_publications/ef_report
http://www.cwda.org/downloads/meetings/conference2014/Using-Brain-Science_Beth-Babcock.pdf



Housing & Neighborhoods

Key Findings

- Davidson County rental vacancy rates continue to decrease indicating a tighter rental market with corresponding higher rents. Homeowner vacancy rates remain low and generally stable. In Nashville, this means that lower-income families, including minimum wage workers, have difficulty finding safe affordable housing without being cost burdened.
- The tight rental market continued to rebound as shown by increased building permits issued for multi-family structures that surpassed pre-recession numbers of 2007. Much of the increased multi-family construction was for higher-cost market rate units, not affordable to low-wage families. Single-family permits continued to increase but not to the 2007 level. The single-family home market recovery remained sluggish due in part to the lack of skilled labor, a limited supply of finished lots ready to build, and lower demand.
- A 2015 national survey about housing attitudes found that a majority of people believe that the housing crisis is not over.
- In-migration was a factor in the increasing need for more housing and the resulting multi-family building. From 2011-2014 migration into Davidson County was greater than natural birth increase. Nashville has experienced a 30% increase in young-adult residents since the 2008 recession.
- The number of Davidson County renters earning less than $20,000 and those earning less than $40,000 per year who were cost-burdened rose from 2013-2014, while the number of cost-burdened homeowners in those income categories has remained about the same since 2006.
- Among the issue-area categories in the Grassroots Community Survey, Housing and Related Expenses continues to be the top need category.
- Within the Housing and Related Expenses category of the 2015 Grassroots Survey, Help with Utility Bills was the top need chosen and was the top need when survey responses were averaged by category 2009-2015.
- Minorities continue to experience discrimination in housing, and geographic segregation by income rises.
- Many people with HUD Housing Choice (Section 8) Vouchers experience difficulty finding an affordable apartment in Davidson County and many Vouchers lapse/expire before applicants find housing.

"I have today approved the Housing Act of 1949. This far-reaching measure is of great significance to the welfare of the American people…[The Act]…establishes as a national objective the achievement as soon as feasible of a decent home and a suitable living environment for every American family, and sets forth the policies to be followed in advancing toward that goal. These policies are thoroughly consistent with American ideals and traditions."

Excerpt from the official statement by President Harry Truman at the signing of the Housing Act of July 1949. *http://www.presidency.ucsb.edu/ws/?pid=13246*

Introduction and Background

This Housing section provides information about local housing data and trends, with demographics, surveys of need, the housing market, barriers such as affordability and discrimination, homelessness, resources for further reading, and recent developments in local housing practices. Some data is available specifically for Davidson County, while other data is available for the multicounty Nashville Metropolitan Statistical Area (MSA). The Nashville MSA combines data from Cannon, Cheatham, Davidson, Dickson, Hickman, Macon, Maury, Robertson, Rutherford, Smith, Sumner, Trousdale, Williamson, and Wilson Counties. The U.S. Office of Management and Budget identifies definitions and publishes a list of the counties in MSAs.
https://www.whitehouse.gov/sites/default/files/omb/bulletins/2013/b-13-01.pdf

There is a wide variation among these counties in income, poverty and other characteristics. The Nashville MSA increased from 10 to 14 counties based on the 2010 decennial census. The Nashville Area Chamber of Commerce's *Nashville MSA Datascape 2014* includes additional MSA data and a timeline of how the counties in the Nashville region MSA have changed over the years.
http://www.nashvillechamber.com/docs/default-source/research-center-studies/nashville-datascape-2014.pdf?sfvrsn=2

In multi-family construction and new home sales, Nashville is reported to be doing well. Nashville has been featured in national publications, discussed on national television, and served as host of the National League of Cities 2015 Conference. However, Nashville's growth and prosperity have not benefitted all residents equally. A significant number of residents are in poverty, live in food deserts, pay over 30% of their income for housing, lack access to transportation, and cope with unemployment and stagnant wages that are not keeping pace with the rising cost of living (see Chart S-6 in the Socioeconomic Profile section above).

Living in Davidson County is great for many but not for others. The U.S. Department of Housing and Urban Development (HUD) defines households that spend more than 30% of income for housing expenses as Cost Burdened. Households that spend more than 50% are identified as Severely Cost Burdened. HUD notes that those who are cost burdened may have difficulty affording necessities such as food, clothing, transportation, and medical care.

The Terwilliger Foundation published national research performed for Housing America's Families. In *The Silent Housing Crisis,* the authors succinctly describe the state of housing at the national level, which is similar to Nashville's circumstances:

"Soaring rental demand, an acute shortage of rental homes, significantly tougher mortgage underwriting standards and an uneven economic recovery have all combined to make housing a source of distress and instability for millions of Americans. With little relief in sight, growing numbers of families find themselves

stuck between a rental market they can no longer afford and a homeownership market for which they do not qualify."

The report indicates that increased housing burdens are not limited to lower-income families, but also include middle-class families. Data in the report indicate that over one-third of U. S. households are paying over 30% of their income for housing, 11 million renters pay more than 50% of income for rental costs (27% of all renters),and the percentage of households who are cost-burdened by paying over 30% has doubled in the last 50 years.
http://jrthousing.org/research/
http://www.joomag.com/magazine/the-silent-housing-crisis/0290011001434491644?short

Data in the *2015 State of the Nation's Housing* by the Joint Center for Housing Studies of Harvard University describes national housing market changes since the recent Great Recession, many of which are reflected in Davidson County and Middle Tennessee. U.S. home ownership has fallen to the same rate as in 1993, eliminating the increases experienced during the 20 years in between.

Household incomes have declined in real dollar terms, and rental costs have risen faster than incomes, with inflation resulting in more families being cost burdened. Vacancy rates are at their lowest nationally and in Davidson County. The share of renters with student loan debt has risen with the average amount of debt up 50% from 2004 to 2013.
http://www.jchs.harvard.edu/research/state_nations_housing

Nashville's Multifamily Development Pipeline is Among Nation's Most Active, a Research & Forecast report from Colliers International, indicated that during the second quarter of 2015, Nashville's multifamily development was among the most active in the nation. The report says that job growth, business expansion and in-migration (including a 30% increase in young adult residents since 2008) increased the need for multi-family housing. It indicated that occupancy has been consistently about 96% for over two years, and that Nashville's 5.1% rent growth was above that for the South region.
http://www.colliers.com/-/media/files/united%20states/markets/nashville/market%20reports/2015%202q/2q%202015_multifamily.pdf?la=en-US

Generational Categories

- Millennials (Gen Y, Echo Boomers) were born between 1981 and 2000
- Generation X were born between 1965 and 1980
- Baby Boomers were born between 1946 and 1964
- Seniors were born between 1927 and 1945

http://www.marketingteacher.com/the-six-living-generations-in-america/

During the last 50 years, there have been significant changes in young adult living arrangements in the U.S., which are now more diverse than at any time since World War II. There is no consensus among experts about how the factor of student debt, high rental costs, and the challenges of buying homes are influencing the home buying patterns for Millennials.

There are varying opinions about the Millennial Generation and housing. Some say that Millennials are delaying starting their own households due to student debt, high rents, and a difficult home-buying environment, but others say that Millennials are in fact starting households and buying homes, and that single Millennials are renting micro-apartments in walkable neighborhoods even at high rental costs. Additional information about generational housing trends is discussed later in this section.

Other generational changes have been observed, as described in *A Gray Revolution in Living Arrangements* from the official blog of the U.S. Census Bureau. For example, adults age 65 and over are more likely to live alone or with an unmarried partner than prior generations. They are the only age group for which living with a spouse is more common today than 50 years ago. Other age groupings show a decline in marriage rates.
http://blogs.census.gov/2015/07/14/a-gray-revolution-in-living-arrangements/

In the spring of 2015, Hart Research conducted public opinion research for the MacArthur Foundation's *How Housing Matters* Initiative. The researchers found that many people believe that housing crisis is not yet over. The lack of affordable housing substantially affects people's lives, causing them to make difficult choices. Over half of the adults surveyed and interviewed said they had to make one or more sacrifices in the previous three years to cover housing costs:

- 21% worked more than one job
- 17% no longer were able to save for retirement
- 14% increased credit card debt, and
- 12% changed to buying less healthy but cheaper food

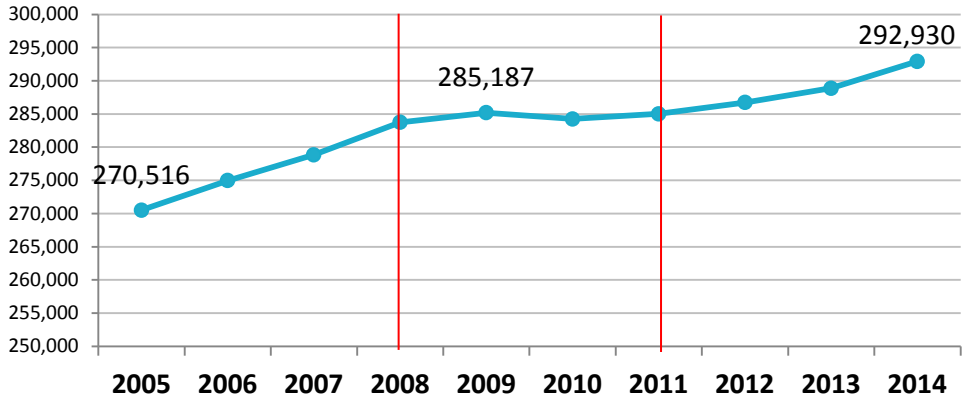
Four of five survey respondents said it was more likely that a middle class family would drop to a lower economic class than it was for lower economic class people to move up to middle class. While 60% of those surveyed said affordable housing is a serious problem, only 14% believed that elected leaders at the local, state, or federal level considered housing affordability to be a high priority.
https://www.macfound.org/media/files/E-11540_How_Housing_Matters_2015_FULL_REPORT.pdf

Housing Demographics

Unless otherwise noted, charts with data from the American Community Survey (ACS) are single year estimates, available at the county, state, and national level. Sub-county areas (council districts, census tracts, zip codes, etc.) are available only in 5-year summary documents. Single year estimates have more current data, while the 5-year summaries are more reliable because of their larger sample size.
http://www.census.gov/acs/www/guidance_for_data_users/estimates/

Chart H-1 shows the number of housing units in Davidson County by year. The 2014 ACS 1-year estimate of total housing units for 2014 was 292,930, a statistically significant increase from 2013's total of 288,878. Housing units include apartments in multi-family buildings and other kinds of housing if they are occupied as someone's usual place of residence.

Chart H-1: Number of Housing Units
Davidson County, 2005-2014



Source: U.S. Census Bureau, 2014 American Community Survey, Table B25001

The table below shows the number of housing units in Davidson County by type. It indicates that between 2013 and 2014, the number of 2-unit housing and housing with 20 or more units increased. The number of units decreased for mobile homes and housing with 3-4 units.

Housing Units by Type
Davidson County, 2011-2014

	2011	2012	2013	2014
1-unit, detached	51.7%	53.0%	53.9%	53.3%
1-unit, attached	9.0%	7.5%	7.6%	7.7%
2 units	5.3%	5.1%	4.9%	*6.7%
3 or 4 units	3.4%	3.9%	4.4%	*3.1%
5 to 9 units	6.7%	7.7%	7.1%	6.4%
10 to 19 units	9.4%	10.3%	10.1%	9.2%
20 or more units	12.8%	10.8%	10.6%	*12.7%
Mobile home	1.7%	1.5%	1.5%	*0.9%
Boat, RV, van, etc.	0.0%	0.1%	0.0%	0.0%

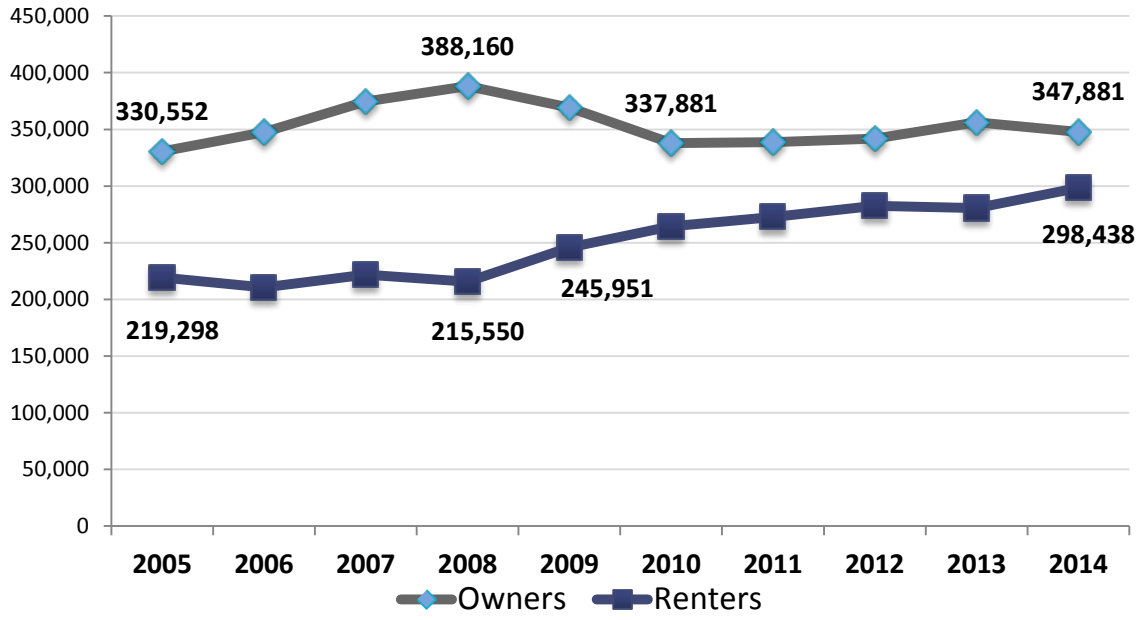
Source: U.S. Census Bureau, 2014 American Community Survey, Table CP04
*An asterisk indicates that the estimate is significantly different from the prior year at a 90% confidence level. American Community Survey data margins of error and levels of statistical significance are stated in the online ACS tables.

Of the 292,930 total housing units in Davidson County, 267,952 (91.5%) units were occupied and 24,987 (8.5%) were vacant. In 2014, 52.9% (141,871) of the occupied units were owner-occupied, with the remaining 47.1%

(126,081) of the units were renter-occupied. Of the total population in occupied housing units in 2014 (646,319), 54% of the people were owners and 46% were renters.

Chart H-2 shows the number of owners and renters in occupied housing. While the number of renters has been climbing steadily, the number of owners has remained steady since 2010.

Chart H-2: Population in Occupied Units by Tenure
Davidson County, 2005-2014



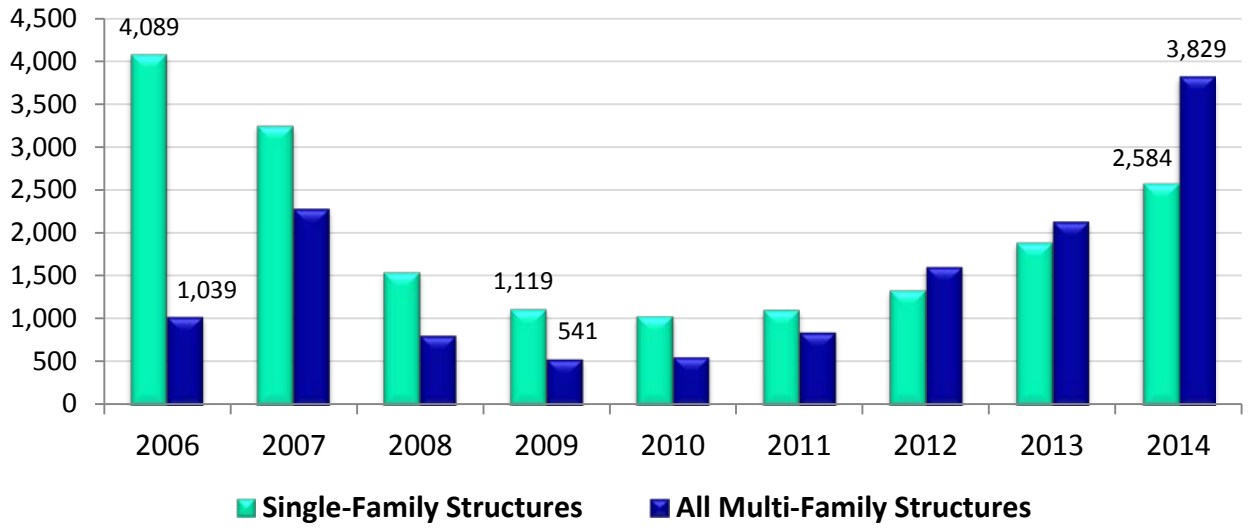
Source: Census Bureau, 2014 American Community Survey, Table B25008

Multi-family rental construction continued into 2015, but builders continued to have difficulty finding skilled workers. In addition, there was a limited supply of finished lots ready to build.

Both of these factors increased construction costs. Additional data about construction is available at the Census Building Permits Survey site.
http://www.census.gov/construction/bps/

The tight rental market contributed to increased investment in multi-family structures that surpassed the pre-recession numbers of 2007. Single-family numbers continued to increase but not to the 2007 level, as shown in Chart H-3.

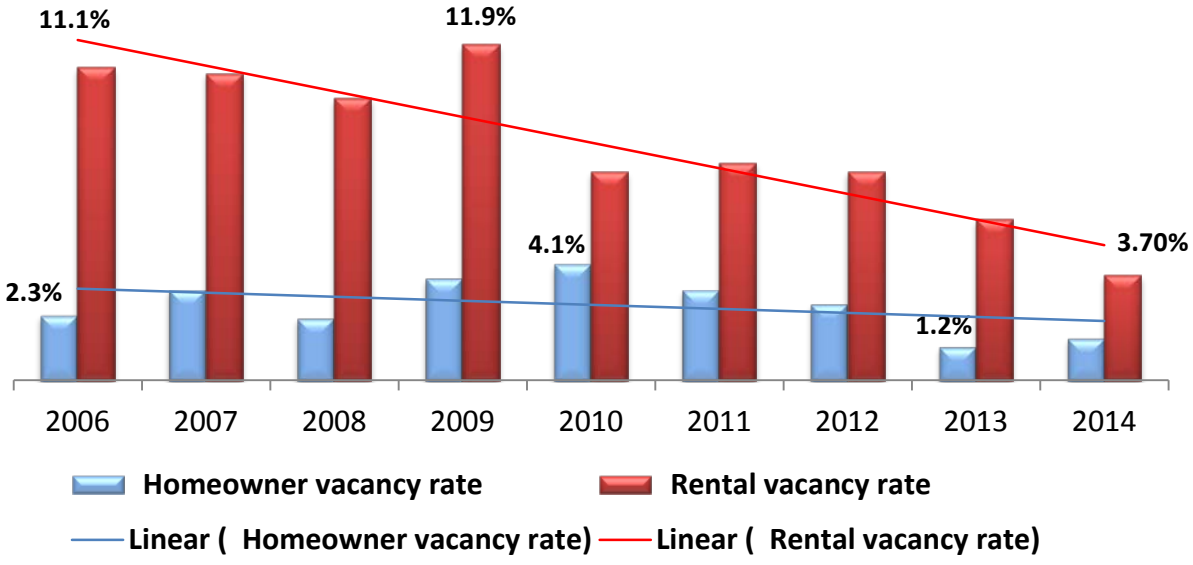
Chart H-3: Number of Building Permits for Structures by Type
Davidson County, 2006-2014



Source: HUD User State of the Cities Data Systems (SOCDS) Building Permits Database
http://socds.huduser.gov/permits/index.html

As shown in Chart H-4 below, the rental vacancy rate continued to decline in 2014, indicating a tighter rental market. The homeowner vacancy rate increased somewhat from 2013-2014, indicating more vacant homes.

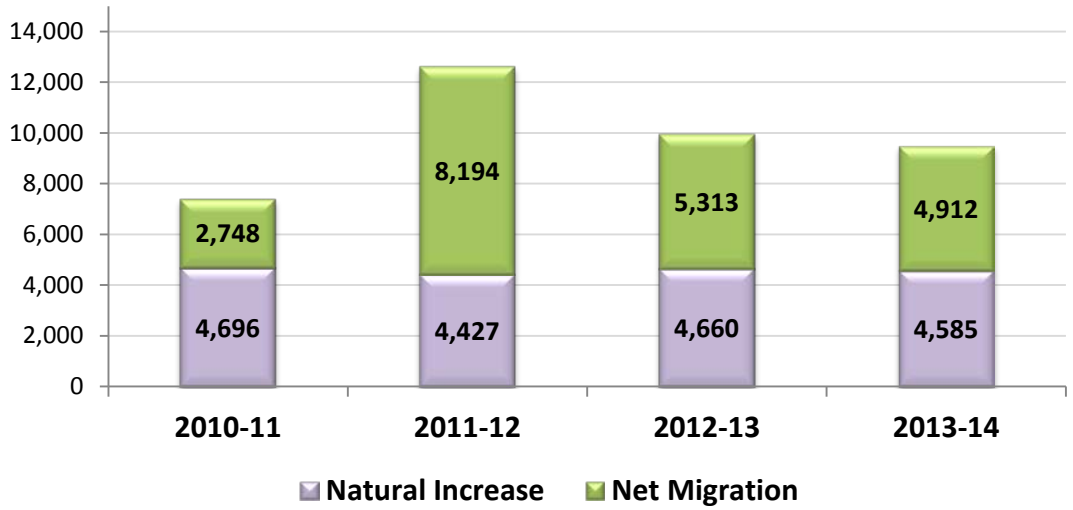
Chart H-4: Homeowner and Renter Vacancy Rates
Davidson County, 2006-2014



Source: Census Bureau, 2014 American Community Survey, Table CP04

In-migration was a factor in the increasing need for more housing and the resulting multi-family building. Chart H-5 shows the share of migration in the increase of population in Davidson Couty. Natural increase is the net difference between births and deaths.

Chart H-5: Elements of Population Increase
DavidsonCounty, 2010-2014



Source: American Community Survey, PEPTCOMP Estimates of the Components of Resident Population Change
http://factfinder.census.gov/faces/tableservices/jsf/ CNE Pages/productview.xhtml?pid=PEP_2014_PEPTCOMP&prodType=table

Housing Need

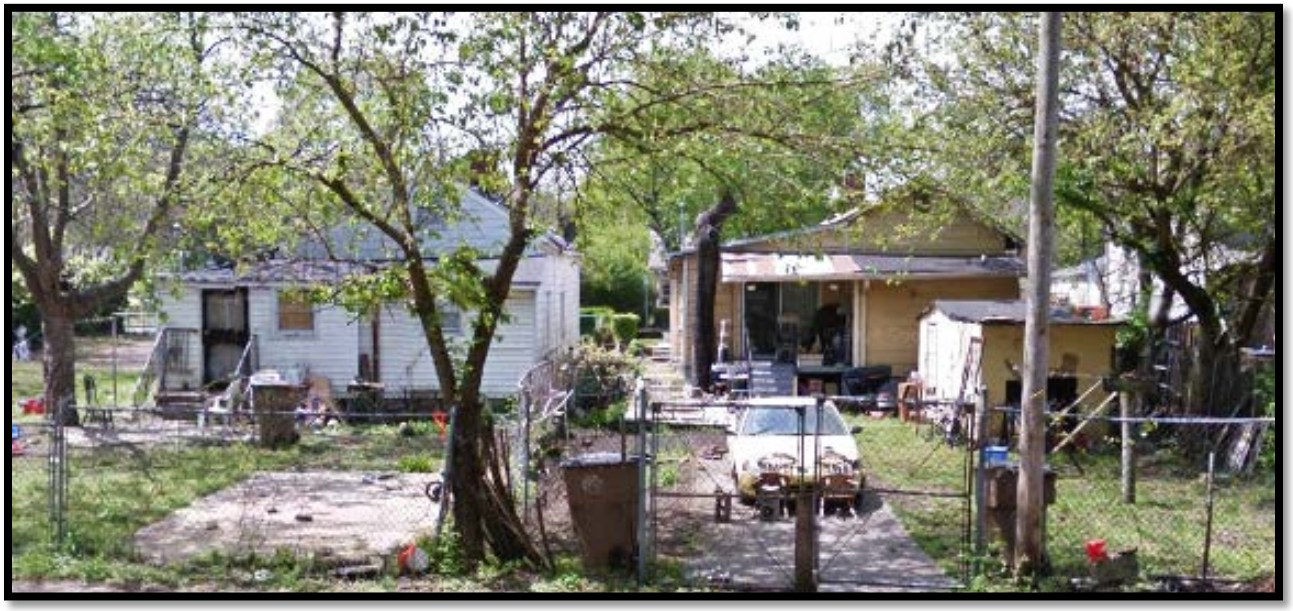
The shortage of affordable housing for lower-income households remains a problem not only in Davidson County but also in many other places across the U.S. HUD's *Worst Case Housing Needs: 2015 Report to Congress* is a nationwide assessment of severe housing problems that face very low-income renter households, based on the 2013 American Housing Survey, conducted every two years. Very low-income renter households earn less than 50% of the area median income (AMI), and include extremely low-income renters earn less than 30% of AMI. Households with worst case needs are defined as "very low-income renters who do not receive government housing assistance and who pay more than 50% of their income for rent, live in severely inadequate conditions, or both."

In 2014, the household median income in Davidson County was $47,933. The 2014 median household income for the Nashville-Davidson/Murfreesboro/Franklin, TN Metro Area (which includes Cannon, Cheatham, Davidson, Dickson, Hickman, Macon, Maury, Robertson, Rutherford, Smith, Sumner, Trousdale, Williamson, and Wilson Counties) was $52,805.
https://www.whitehouse.gov/sites/default/files/omb/bulletins/2013/b-13-01.pdf
http://factfinder.census.gov/faces/tableservices/jsf/ CNE Pages/productview.xhtml?pid=ACS_14_5YR_B19013&prodType=table

The primary cause of worst case housing needs (97%) was severe rent cost burden (paying more than 50% of household income in rent). Severely inadequate housing without severe rent burden was responsible for only 3% of all cases. Although there was improvement in the quality of the housing supply, it is still a problem for extremely low-income renters. The report compared affordability and adequacy for extremely low-income

renters with the number of units available to them. They found that 12% of affordable and available units for extremely low-income renters had severe deficiencies.

In addition, *Worst Case Housing Needs* explained that utility costs play a role in creating severe rent burdens, particularly for very low-income renters. It noted nationwide, only one of four very low-income renters receive housing assistance (including assistance funded through HUD), leaving 72.5% of very low-income households without housing assistance they need.
http://www.huduser.gov/portal/Publications/pdf/WorstCaseNeeds_2015.pdf



The nonprofit sector also helps people in need receive housing and other social/human services. Since 2009, the Nonprofit Finance Fund has surveyed nonprofits about the needs of their communities. The 2015 survey of 5,451 respondents reported on the demand and supply of services and the capacity to respond to these needs.

Affordable Housing was identified as the Top Community Need in both the 2014 and 2015 nonprofit survey. In terms of overall demand for services in 2015, 76% of nonprofits reported that the demand for servies had increased and 71% said the organizations could not meet the level of client needs.

Responding nonprofit organizations identified critical needs in their communities:

- 35% affordable housing
- 26% youth development (such as after-school and mentoring programs)
- 23% job availability; 16% job training
- 21% access to healthcare
- 19% access to strong, well-performing schools

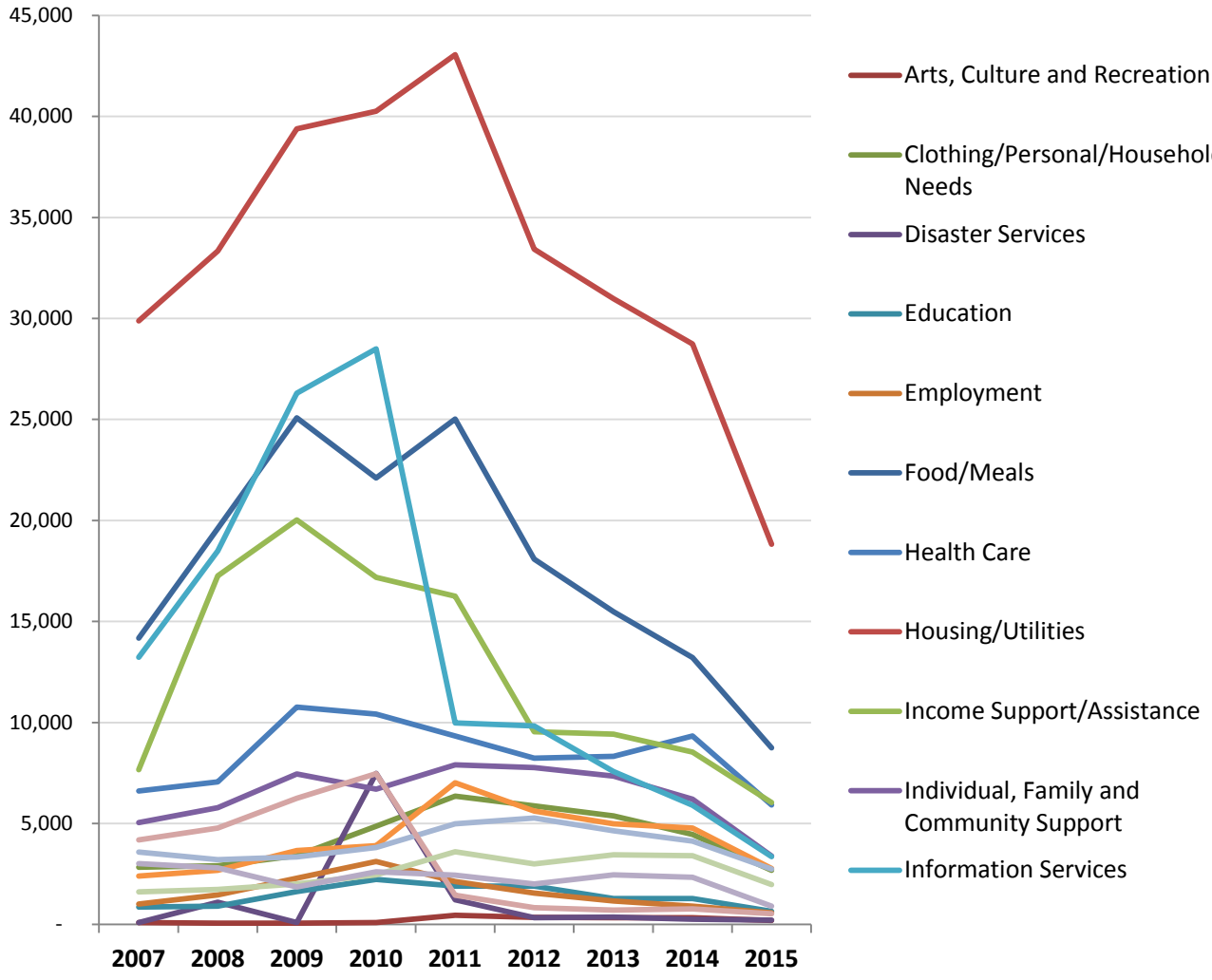
http://www.nonprofitfinancefund.org/state-of-the-sector-surveys

http://survey.nonprofitfinancefund.org/indexie.html

As shown in Chart H-6, calls to the Middle Tennessee 2-1-1 Call Center for housing and utilities continue to top other need categories.

The Middle Tennessee 2-1-1 Center serves 42 counties: Bedford, Benton, Cannon, Cheatham, Chester, Clay, Coffee, Cumberland, Davidson, Decatur, DeKalb, Dickson, Fentress, Franklin, Giles, Hardin, Henry, Hickman, Humphreys, Jackson, Lawrence, Lewis, Lincoln, Macon, Marshall, Maury, Moore, Overton, Perry, Pickett, Putnam, Robertson, Rutherford, Smith, Sumner, Trousdale, Van Buren, Warren, Wayne, White, Williamson, and Wilson.

Chart H-6: Annual Calls to 2-1-1 for Assistance & Referral
Middle Tennessee, 2007-October 2015



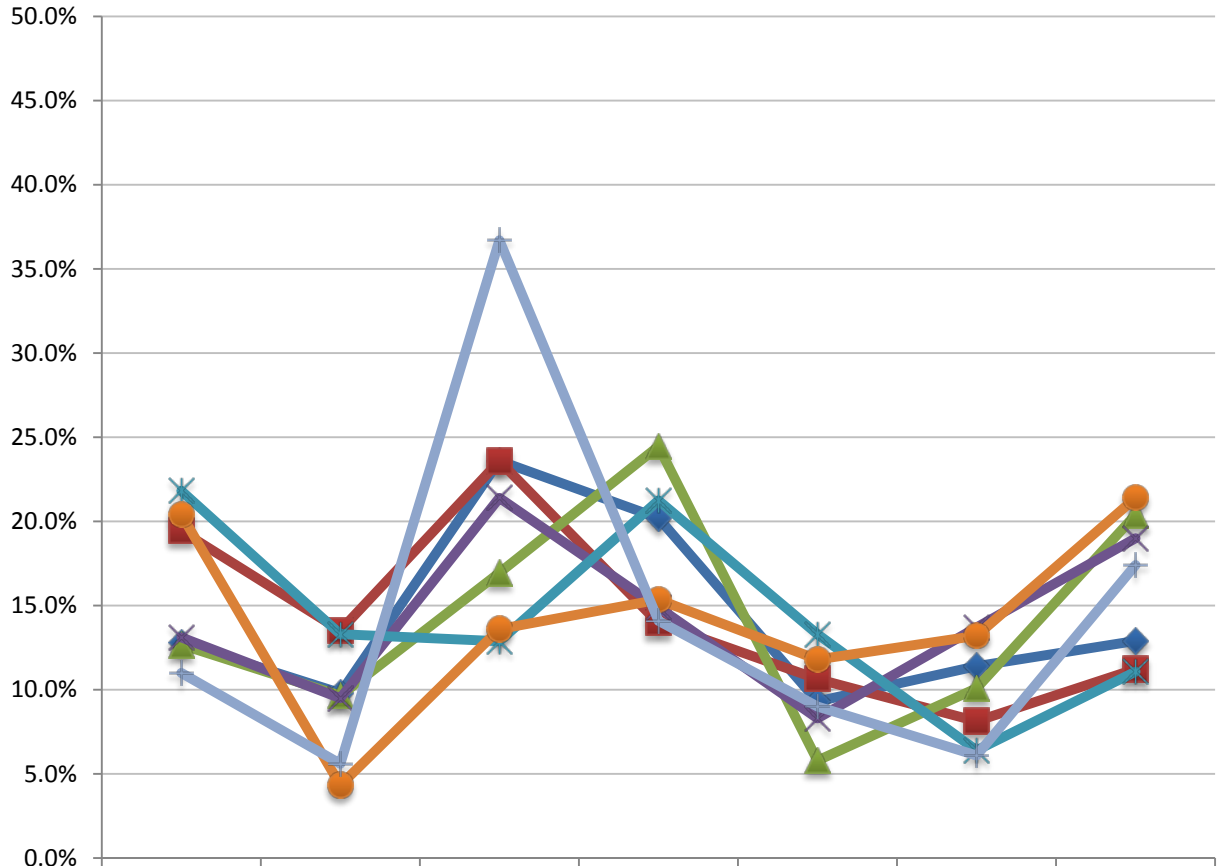
Source: 2-1-1 Call Center, United Way of Metropolitan Nashville

Grassroots Community Survey

Chart H-7 shows respondents' ratings from the Metro Social Services (MSS) Grassroots Community Survey (that has surveyed a combined 7,000+ respondents) for 2009-2015. The top housing related need expressed by

respondents in the 2015 survey was Help Paying Utility Bills. Help Paying Utility Bills has been the top housing related concern 4 of 7 years.

Chart H-7: Grassroots Community Surveys - Greatest Need in Housing
Davidson County 2009-2015



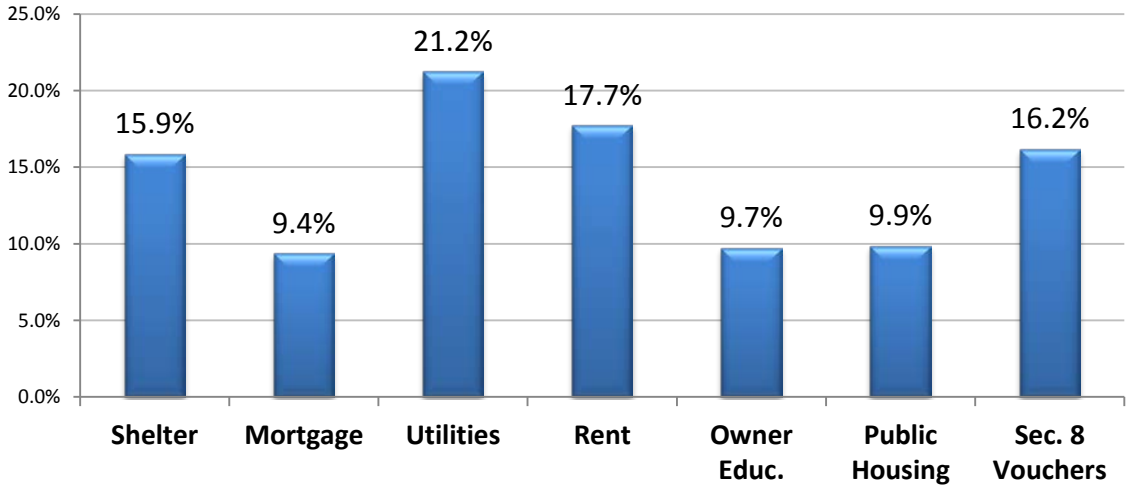
	Emergency Shelter	Help Paying Mortgage Payments	Help Paying Utility Bills	Help with Rent Payments	Home-owner Education and Training	Public Housing Units	Section 8 Vouchers
2009	12.8%	9.8%	23.6%	20.2%	9.3%	11.4%	12.9%
2010	19.4%	13.5%	23.6%	14.0%	10.6%	8.1%	11.2%
2011	12.7%	9.7%	17.0%	24.5%	5.8%	10.1%	20.4%
2012	13.1%	9.5%	21.4%	14.9%	8.3%	13.7%	19.0%
2013	21.8%	13.3%	12.9%	21.2%	13.3%	6.4%	11.1%
2014	20.4%	4.3%	13.6%	15.4%	11.8%	13.2%	21.4%
2015	11.0%	5.6%	36.7%	14.1%	9.0%	6.1%	17.4%

Source: 2009-2015 Metro Social Services Grassroots Community Surveys

Averaging the annual Grassroots Survey data across the 7 years it has been conducted reflects the areas identified as the greatest needs in housing. Chart H-8 shows the top average ranking was Help Paying Utility Bills at 21.2%,

followed by Help with Rent Payments at 17.7%, 16.2% for Section 8 Vouchers, 15.9% for Emergency Shelter, and smaller ranks for other needs.

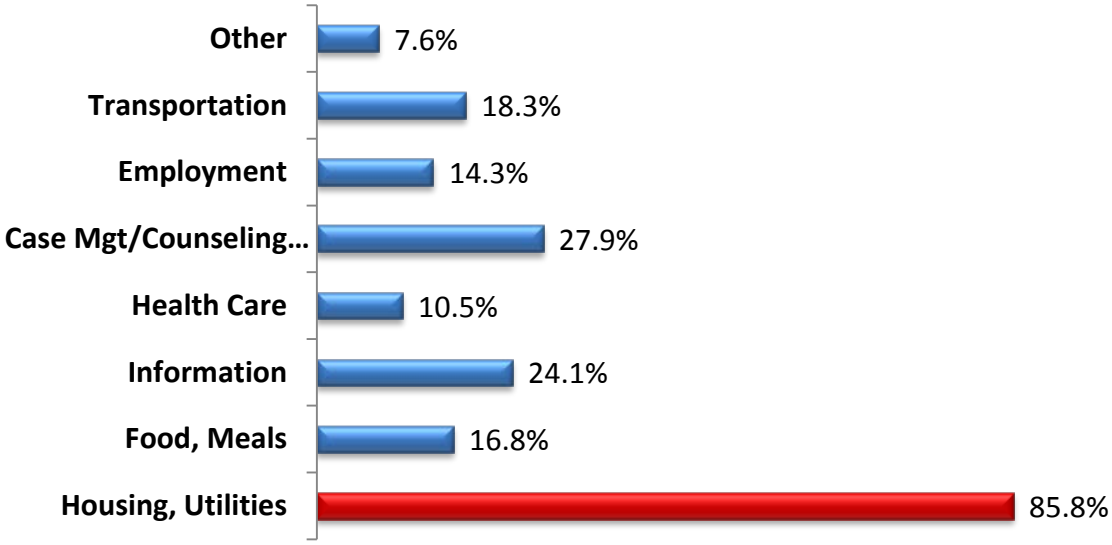
Chart H-8: Grassroots Community Surveys - Greatest Need in Housing Yearly Averages
Davidson County 2009-2015



Source: 2009-2015 Metro Social Services Grassroots Surveys

From July 2013 through December 2015, clients coming to Metro Social Services completed a brief anonymous survey by checking boxes indicating the category of service they needed. Of the 2,699 respondents, 85.8% checked the Housing & Related Expenses category, indicating that as one of their needs. Chart H-9 shows the percentages of people choosing each need category. The percentages total more than 100% because respondents could choose more than one category.

Chart H-9: MSS Front Desk Survey
Davidson County, July 2013-December 31, 2015



Source: Metropolitan Social Services

Housing Market

MPF Research is a housing market information company for the multifamily industry, with an extensive database of individual property occupancy and rental rates, which surveys the top 100 U.S. markets and publishes 72 individual apartment market reports. Their Nashville apartment trend report for the 2nd Quarter of 2015 reported 96.3% rental occupancy, indicating a tight rental market.
http://www.real CNE Page.com/mpf-research/reports/nashville/

Fair Market Rents (FMR) for subsidized housing are determined annually by the U.S. Department of Housing and Development (HUD) [see also Subsidized Housing section below]. They are estimates of the amounts that rental units of various sizes would bring if available on the open market in an area, and are the amounts HUD uses to determine subsidies such as for Housing Choice Vouchers (Section 8).

Vouchers pay for rent and utilities above 30% of a renter's adjusted monthly income up to the Fair Market Rent limit for the area. HUD FMR estimates for the Nashville MSA are compared to the Davidson County ACS Median Gross Rent are shown in Chart H-10 below. The actual cost to rent an apartment and pay related costs in the Nashville area is consistently higher than the FMR. Explanations and spreadsheets of income limits, utility allowances, Fair Market Rent, and more are available online:

HUD Utility Allowances for Tenant-Furnished Utilities and Other Services General information

http://portal.hud.gov/hudportal/HUD?src=/program_offices/public_indian_housing/programs/ph/phecc/allowances

Rules Chapter 18 - http://portal.hud.gov/hudportal/documents/huddoc?id=DOC_11762.pdf

Allowances for Davidson County – THDA

https://s3.amazonaws.com/thda.org/Documents/Research-Planning/Other-Programs/Davidson.pdf

Section 8 Income Guidelines Davidson County MSA FY 2015

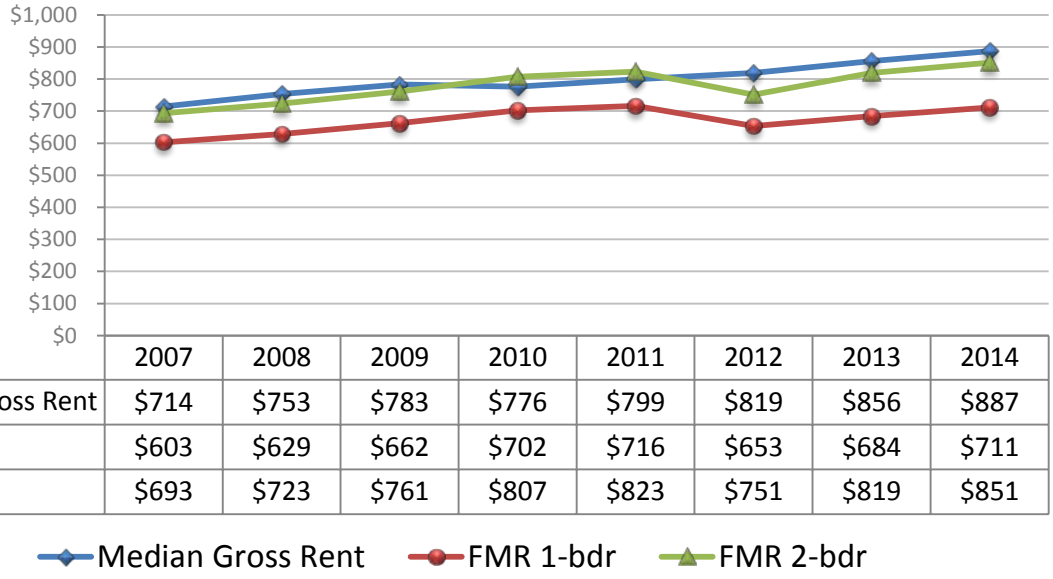
http://www.huduser.gov/portal/datasets/il/il15/FY2015_IL_tn.pdf

HOME Program Rents Davidson County MSA 2015 -
https://www.hudexchange.info/resource/reportmanagement/published/HOME_RentLimits_State_TN_2015.pdf

Fair Market Rents by year and location - https://www.huduser.gov/portal/datasets/fmr.html

The cost of many apartments in Davidson County has increased above the maximum amount that Section 8 Vouchers will pay, so it has become increasingly difficult for renters who have vouchers to find apartments they can afford. As described later in this section, almost 20% of vouchers (between July 1, 2014 and June 30, 2015) expired because the voucher holders could not find an apartment available for that rate.

Chart H-10: Median Gross Rent & HUD Fair Market Rent
Davidson County, 2007-2014

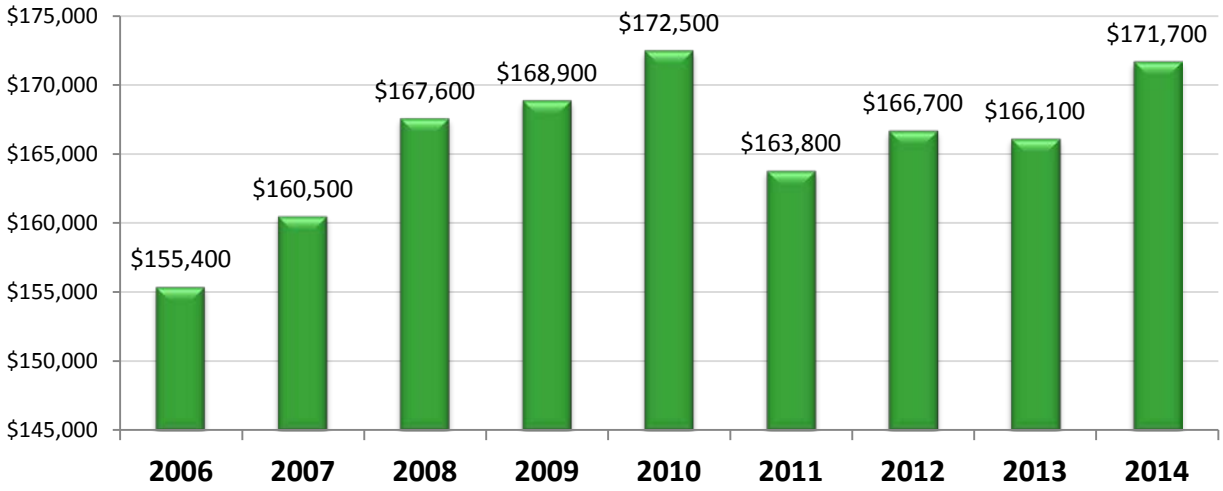


	2007	2008	2009	2010	2011	2012	2013	2014
Median Gross Rent	$714	$753	$783	$776	$799	$819	$856	$887
FMR 1-bdr	$603	$629	$662	$702	$716	$653	$684	$711
FMR 2-bdr	$693	$723	$761	$807	$823	$751	$819	$851

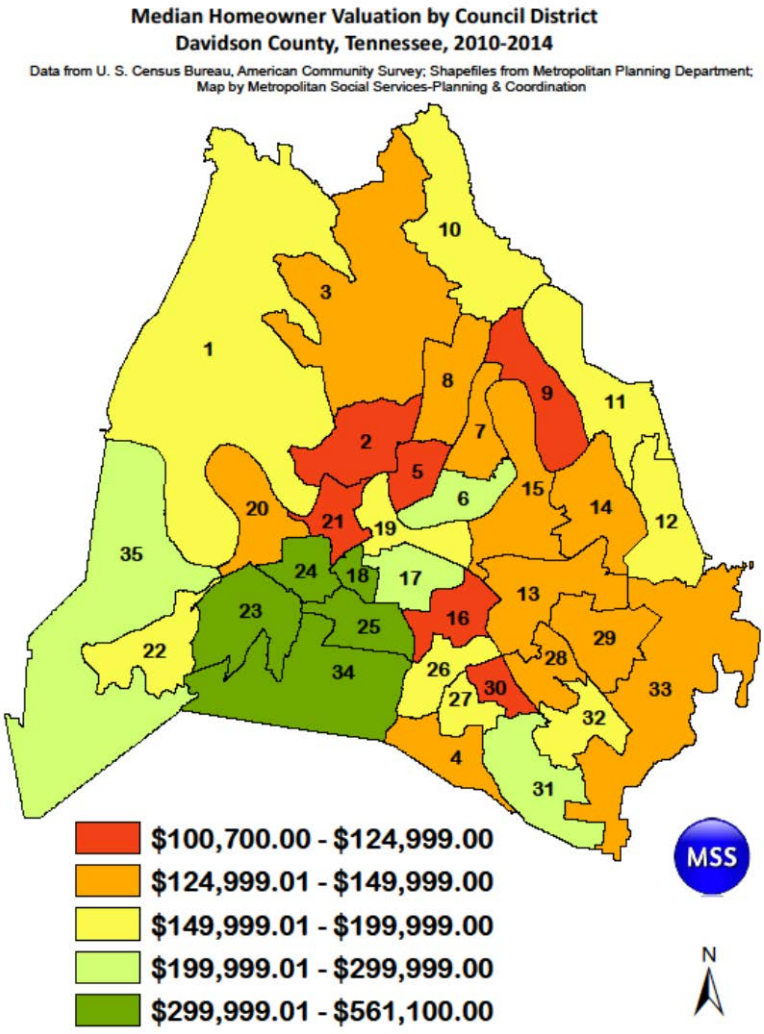
Source: U.S. Census Bureau American Community Survey, Table DP04

Chart H-11 shows the American Community Survey's annual estimates of Davidson County owners' valuation of their homes from 2006 through 2014. Owner valuations in 2014 were almost as much as the peak in 2010.

Chart H-11: Median Home Values from Owner Valuations
Davidson County, 2006-2014



Source: Census Bureau, 2014 American Community Survey, Table DP04



The map at the left shows the variation in the median owner valuation across Davidson County, using data from the 2010-2014 American Community Survey 5-Year Summary.

The valuation ranges from $100,700 in Council District 21 to a high of $561,100 in Council District 34.

Homeownership rates have declined in the U.S., especially among young and middle-aged households. Rates for households aged 35-44 have gone down by 9.5% since 2004, and rates for younger households less than age 35 (the principal first-time homebuyer age group) have also declined by 7.3%. Homeownership rates for households ages 65 and over were already higher than most other age groups, increasing by 2.5% from 1994-2014. Discussion of research about generational housing preferences and decisions are described below.
http://housingperspectives.blogspot.com/

According to SmartAsset, an online financial research and advice company, the Nashville metropolitan area has rebounded highest among the 100 largest housing markets in the U.S., following the Great Recession. SmartAsset reported that between the third quarter of 2007 and the first quarter of 2011, home prices in the Nashville metro area fell nearly 12%. In the four years since then, prices have increased by 26% since they hit bottom.
https://smartasset.com/mortgage/cities-strongest-housing-recoveries

Housing Barriers

Student Loan burden has been identified as a major barrier to homeownership for the Millennial generation. The Institute for College Access & Success issued *Student Debt and the Class of 2014,* its 10th Annual Report (October

2015). It states that the percent of younger renter households with high student debt increased from 5% in 2007 to 19% in 2013.

The report used data from the Federal Reserve Board's Survey of Consumer Finances that samples U.S. households every 3 years on financial issues, including student loan debt. This and other debt requires people to consider how they spend any discretionary income, such as whether to pay down the loans, save for retirement, or save toward a home down payment.

After the Great Recession, the increase in student loan debt had repercussions for the U.S. housing market. Even if the household has enough for a down payment, with the inclusion of student loan debt in the calculation of debt-to-income ratio, even moderate student loan debt could prevent people from getting a Qualified Mortgage under the guidelines of the Consumer Financial Protection Bureau. Deferral options to postpone repayment only postpone the problem. Student loan debt cannot even be alleviated by bankruptcy.
http://ticas.org/sites/default/files/pub_files/classof2014.pdf

Affordability Barriers

The National Low Income Housing Coalition publishes an annual report titled *Out Of Reach* that included the table below. In 2015, it reported that a renter would need to work 2.3 full-time minimum wage jobs to afford a 2-bedroom apartment at Fair Market Rent and not pay over 30% of income for housing.

Income Needed to Rent
Davidson County, 2015

FY 2015 FMR for 2-bedroom unit	$850
Hourly wage needed to avoid 30% cost-burden	$16.35
Full-time jobs needed at Area Minimum Wage	2.3
Area Median Income (AMI)	$66,900
Affordable monthly rent at 30% AMI	$502

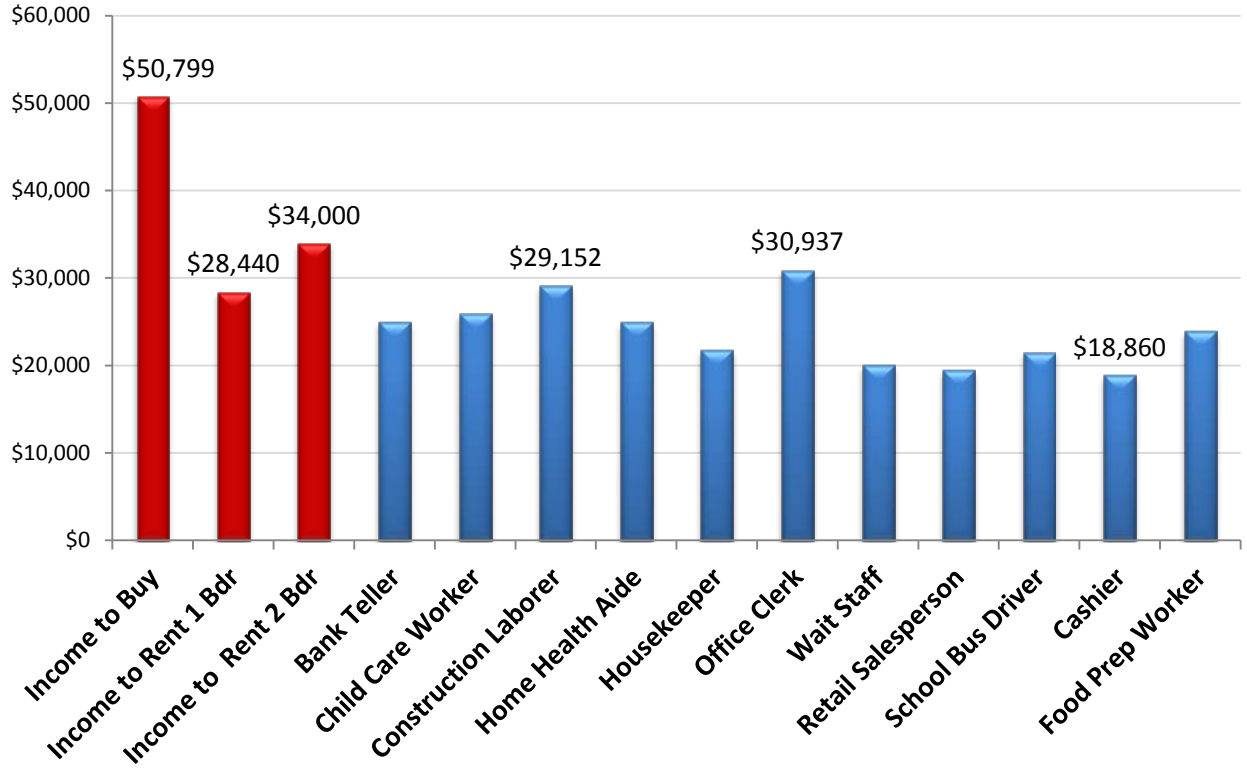
http://nlihc.org/sites/default/files/oor/OOR_2015_FULL.pdf

For data about Nashville's 14 County MSA, the *2015 State of the Nation's Housing* report by the Joint Center for Housing Studies includes an interactive map of U.S. micro- and macro-areas with 2013 cost-burden data for renters, homeowners and all households.
http://harvard-cga.maps.arcgis.com/apps/MapSeries/index.html?appid=0ffea521479a4585b383169bf00e2aa9

The National Housing Council's *Paycheck-To-Paycheck* interactive database allows users to select areas and occupations to look at area median incomes compared to housing costs. The Nashville MSA data shows that

employees in many occupations essential to the business community have difficulty finding housing that does not cost 30% or more of their household income as shown below in Chart H-12.

Chart H-12: Housing Affordability by Occupation
Nashville-Davidson–Murfreesboro–Franklin Metropolitan Statistical Area
First Quarter, 2015



http://www.nhc.org/chp/p2p/

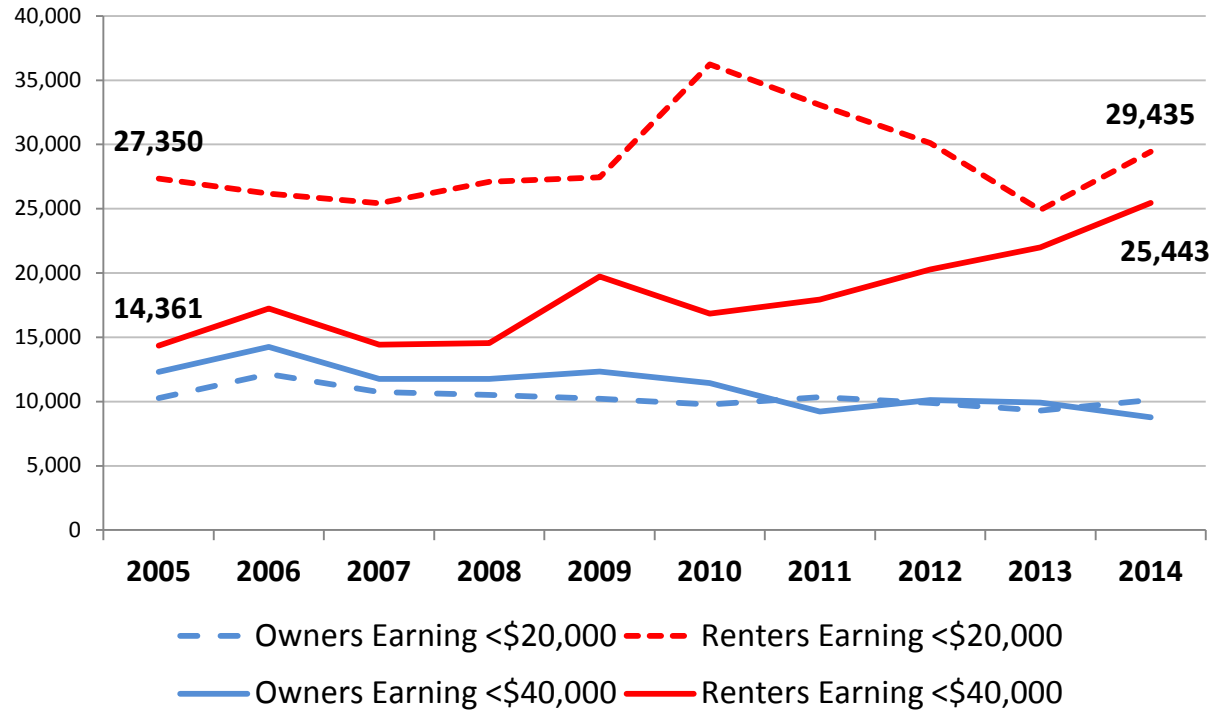
According to the 2014 American Community Survey:

- **Median gross rent was 31.4% of household income.**
- **Median gross rent was $887 for renter occupied units.**
- **63,746 of all households were cost-burdened, paying more than 30% of income for housing expenses.**
- **30,607 of all households paid more than 50% of their income for housing expenses.**

Chart H-13 shows the 2014 ACS estimates for Davidson County owner and renter households that were cost-burdened from 2005-2014 at two income levels. The chart shows a sudden increase in renter cost burden in 2010

for renters earning less than $20,000 annually and for renters earning less than $40,000. The number of cost-burdened homeowners at those income levels has stayed relatively constant since 2006.

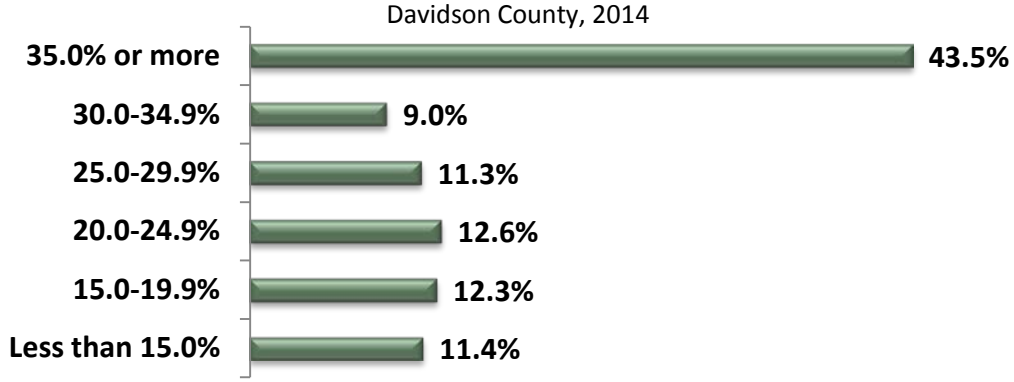
Chart H-13: Owner and Renter Cost Burden by Income Level
Davidson County, 2005-2014



Source: U.S. Census Bureau, 2014 American Community Survey, Table B25106

Chart H-14 shows gross rent as a percentage of household income for 2014. In 2014, the percent of cost burdened renters increased to 52.5% from 48.2% in 2013 and 48.7% in 2012. Among the occupied units paying rent, 37.2% were more than $1,000 per month, with 10.2% being less than $500.

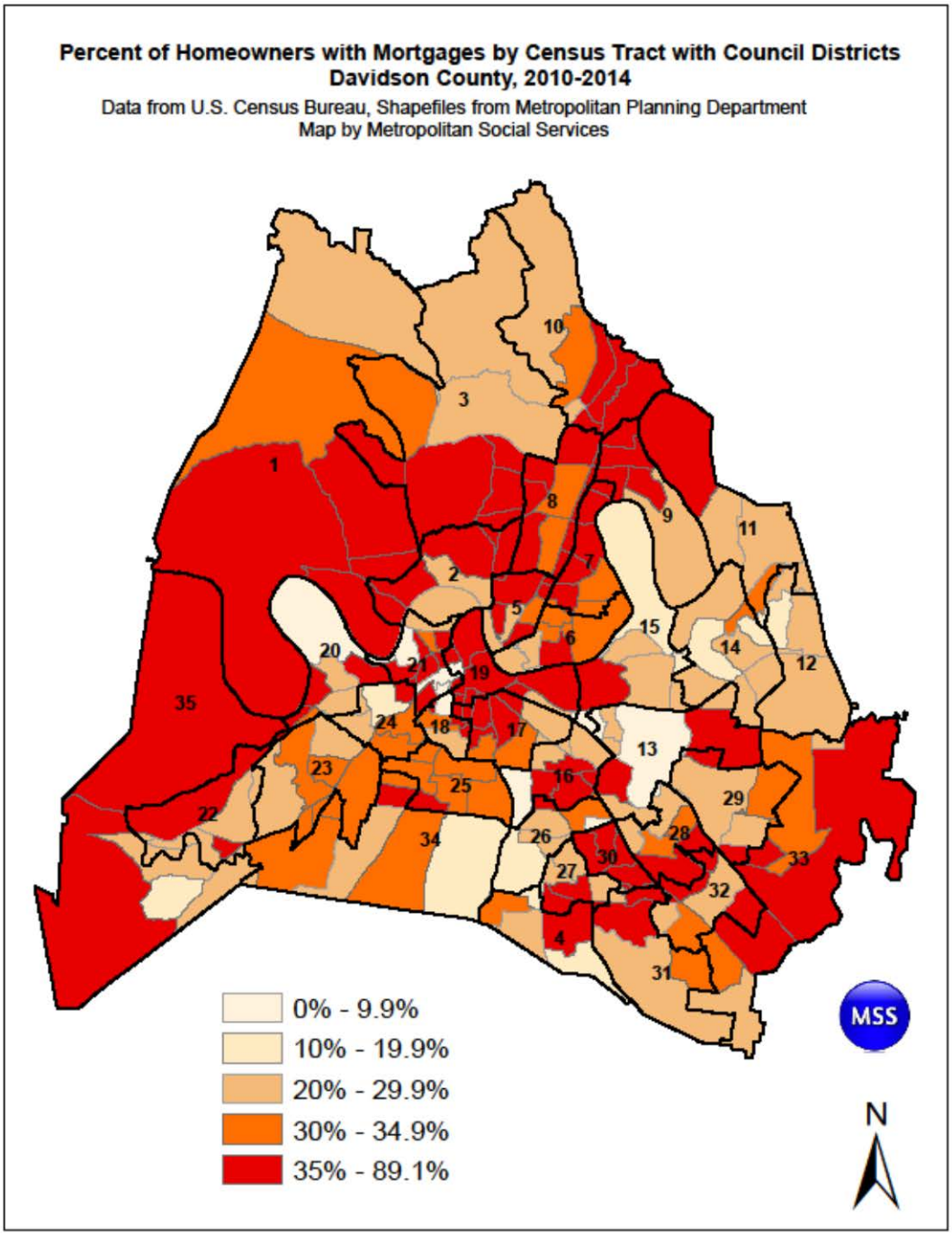
Chart H-14: Gross Rent as a Percentage of Household Income
Davidson County, 2014



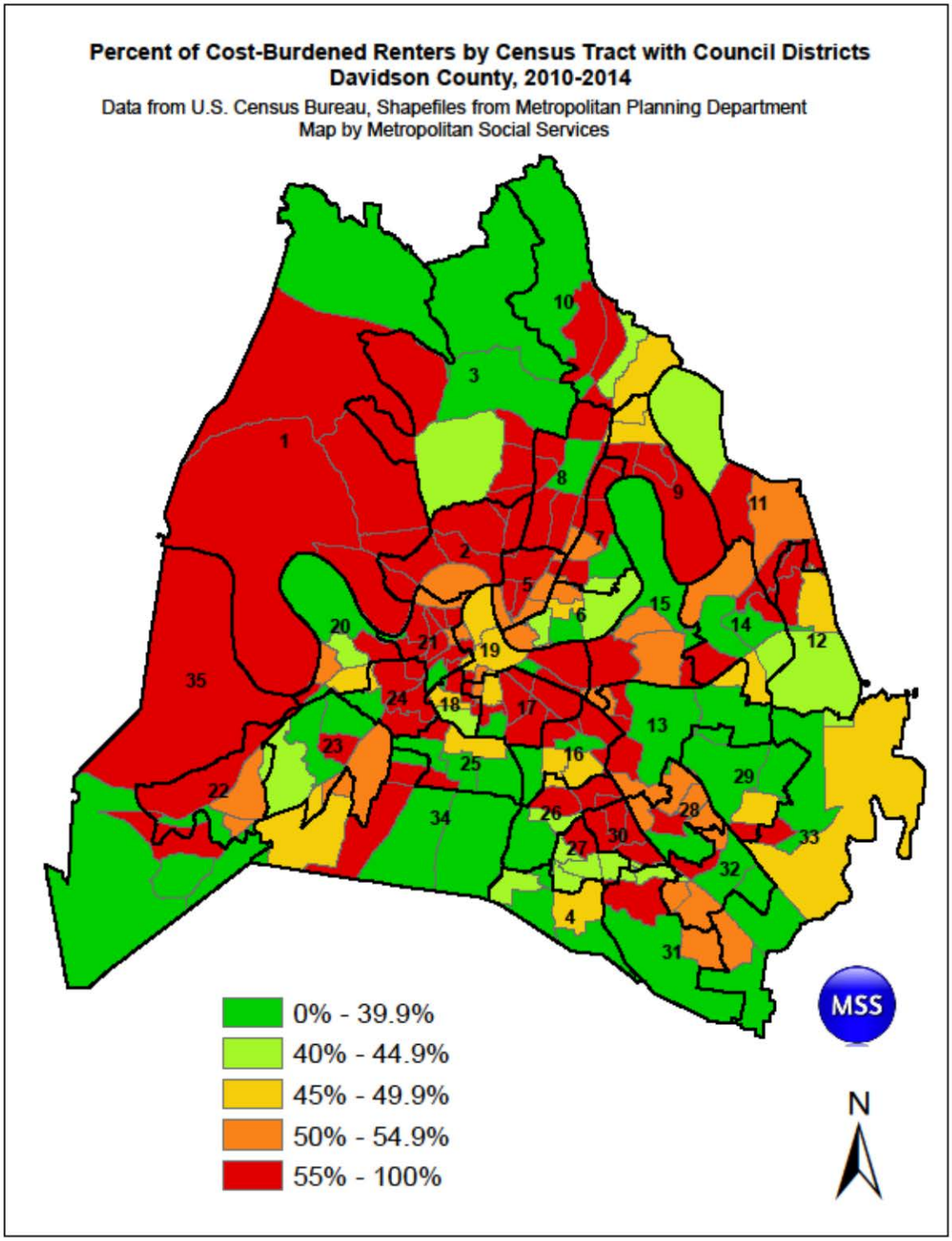
Source: U.S. Census Bureau, 2014 American Community Survey, Table CP04

These maps below demonstrate the extent of Davidson County cost-burdened households (paying more than 30% of household income for housing and related expenses).

Among the 140,219 owner-occupied units, 71.6% of them have mortgages. The map below shows the distribution of cost-burdened households with a mortgage, using data from the 2010-2014 American Community Survey 5-Year Summary. It and the map that follows show cost-burdened households by census tracts, with an overlay of Metro Council District boundaries. During this period, an estimated 32,701 households with a mortgaged were cost burdened, including 23,701 paying 35% or more.



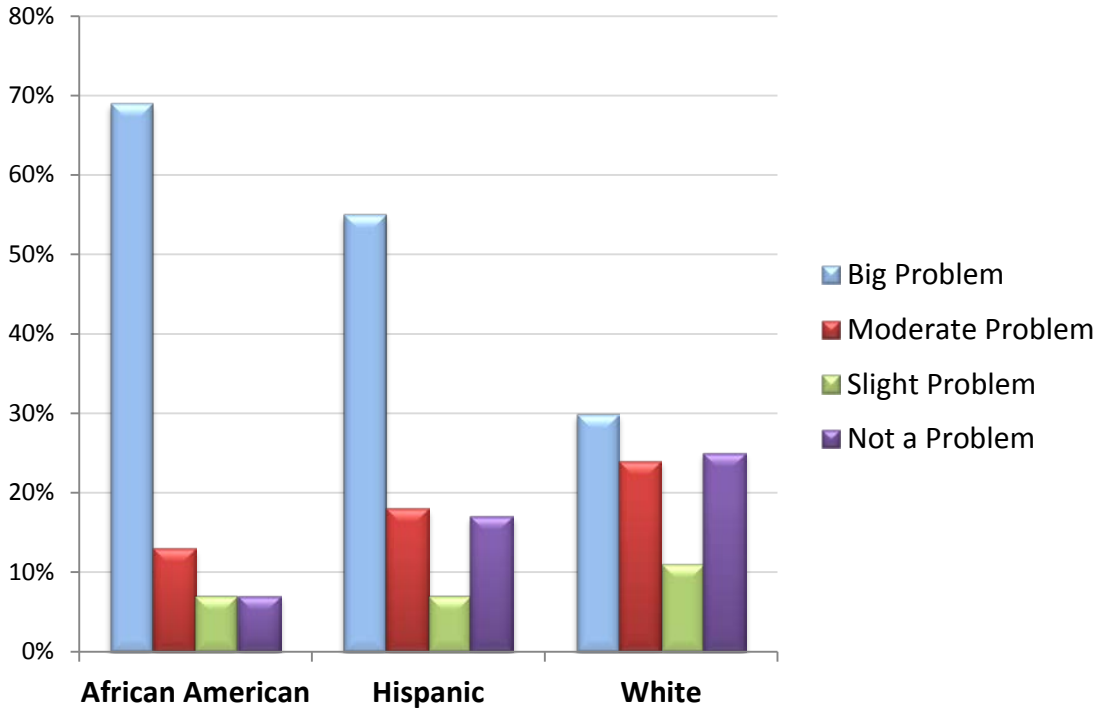
The map below shows cost-burdened renter households during the same 2010-2014 period. In a large portion of Davidson County more than half of renters were cost-burdened, paying more than 30% of their income on housing expenses. This included 57,926 renter units (51.3%) that were cost burdened, 42,654 of which paid 35% or more (42.2%).



Racial and Ethnic Barriers

How Housing Matters 2015, a national survey conducted by Hart Research Associates, reports on perceptions about the housing recovery from the Great Recession. The findings show similar feelings as in the 2014 report: That a majority of African-Americans, Hispanics, and Whites do not think the housing crisis has ended and that it may worsen, as shown in Chart H-15.

Chart H-15: Perceptions of Housing Recovery by Race/Ethnicity
U.S., 2014



The *How Housing Matters 2015* survey found that people of color disproportionately made sacrifices in other areas to pay housing costs, such as taking second jobs or working more hours at their current jobs. Working for extra income or cutting budgets to afford housing costs made 68% of African Americans respondents feel less stable in their current housing. However, even with these sacrifices and feelings of unease about housing, large percentages (78%-80%) of Hispanics and African Americans surveyed felt optimistic about the future of the country and about their own situations. A majority of all respondents who do not own a home said they want to become homeowners – African Americans 80%, Hispanics 69% and whites 67%.
https://www.macfound.org/media/files/ME11540-HHM_2015_Minorities_Memo.pdf

There are local resources for information about housing and other discrimination complaints in Nashville. Statements from their web sites and the web site addresses are given below.

- Tennessee Fair Housing Council, a private, non-profit organization with a mission to eliminate housing discrimination in Tennessee

- Legal Aid Society of Middle Tennessee and the Cumberlands, a private non-profit that provides free legal help to people with low income whose mission is to enforce, advance and defend the legal rights of low-income and vulnerable families in order to obtain for them the basic necessities of life

- Metro Human Relations Commission, which the Metro Code gives responsibility for receiving and resolving inquiries and complaints of discrimination and perceived discrimination in the areas of employment, housing, financial services, commercial transactions, public accommodations, and the provision of city activities and services

- Tennessee Human Rights Commission, a state agency created to promote and advise the public of their human rights, and to ensure Tennessee's compliance with Title VI of the Civil Rights Act of 1964 which prohibits discrimination based on race, color, and national origin by state agencies receiving federal financial assistance.

http://www.tennfairhousing.org/
http://www.las.org/about_new/mission
http://www.nashville.gov/Human-Relations-Commission/About-the-Commission.aspx
https://www.tn.gov/humanrights/topic/overview

Other Challenges

In Nashville as in most parts of the country, there has been a continuing lack of inventory of finished homes for sale. There is strong competition among buyers that keep home prices high and out of reach of many potential homeowners. There are various explanations proposed for the shortage of affordable homes for sale, including owners who owe more on their mortgages than they can sell the home for, the number of homes off the market in foreclosure, the post-recession lack of new construction and a large number of single-family homes bought by investors for the rental market.
http://www.jchs.harvard.edu/americas-rental-housing

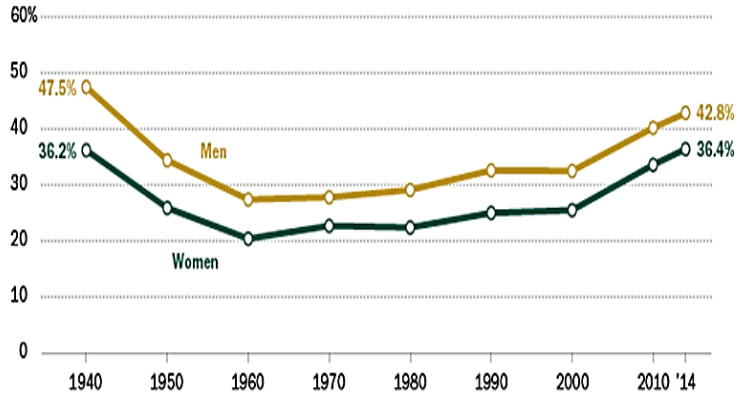
Singles, Mingles and Wedding Jingles: Partnerships and Living Arrangements from 1967 to 2014, a summary in the Census online blog *Random Samplings* states that almost 90% of young adults in 1967 lived with a parent or with a spouse. About half of 18-24 year-olds now live with a parent while the other half lived in an assortment of other household arrangements. Most age 25-34 adults now do not live with a spouse but live alone, with a partner or with others, such as relatives and nonrelatives.
http://blogs.census.gov/2015/07/13/singles-mingles-and-wedding-jingles-partnerships-and-living-arrangements-from-1967-to-2014/
http://www.census.gov/hhes/families/data/adults.html

Some experts suggest that young adults want to buy a home and are waiting until they get better jobs, save for down payments, and get married and start families. Zillow Inc., an online real estate database company, performed an analysis of first-time homebuyers and found they rented longer before buying (6 years) than in the 1970s (2.6 years). The same analysis stated that first-time homebuyers are older and not as likely to be married, that Americans are spending a greater percentage of incomes on housing than in the past 40 years, and that they are buying more expensive first homes.
http://zillow.mediaroom.com/2015-08-17-Todays-First-Time-Homebuyers-Older-More-Often-Single

A May 2015 article in the Housing Perspectives blog of the Harvard Joint Center for Housing Studies, gives other data about Millennials. It states that among young renters, 92% eventually want to become homeowners. However, 42% of these renters think they do not have the resources such as down payment funds, to buy a home, and 47% do not think their credit is good enough to get a home loan.
http://housingperspectives.blogspot.com/

In the report *Record share of young women are living with their parents, relatives* from the Pew Research Center (November 2015) explained that young women are living with their parents in frequency approaching that of the 1940s. Chart H-16 below from the Pew article, shows the percentage share of men and women 18-34 living with parents or relatives.

Chart H-16: Share of U.S. Men and Women Age 18-34 Living with Family
U.S., 1940-2014



Source: Pew Research Center tabulations of Census IPUMS data

The number of women living with family dropped from 1940-1960 as more women got married, entered the workforce, and became financially able to live independently. At the start of the 1960s, only about 24% of young adults lived with parents, but more and more began delaying starting households of their own in succeeding years. The slow recovery of the labor market has exacerbated the situation. More women today are college educated and unmarried than women of the same age in prior generations.
http://www.pewresearch.org/fact-tank/2015/11/11/record-share-of-young-women-are-living-with-their-parents-relatives/?utm_source=Pew+Research+Center&utm_campaign=f3c9299221-Pew_Research_weekly_11_12_1511_11_2015&utm_medium=email&utm_term=0_3e953b9b70-f3c9299221-400115673

In the national survey of housing attitudes for the MacArthur Foundation noted above, some age-related opinion data was collected. The researchers used telephone interviews of a representative sample of 1,401 U.S. adults, including 541 Millennials. This research indicates that Millennials, who grew up in a more unpredictable housing environment, have different housing challenges than did prior generations.

- Seventy-five percent of all adults surveyed and 69% of the Millennials said they believe it is harder for them to have a secure middle-class lifestyle than previous generations.
- Compared with 20-30 years ago, the Millennial generation respondents believed that they find it more difficult to save for retirement (76%), own a home (77%), secure a stable job with good pay (65%), and acquire stable, affordable housing (69%).
- Over 67% of the Millennials said they had to make some trade-off (e.g. second job, not saving for retirement) due to difficulty making rent or mortgage payments. Eighty-eight percent of the Millennials indicated that they want to own a home; over half of them said that homeownership is a high priority for them; and over 85% of them felt optimistic about the near future.

https://www.macfound.org/media/files/ME11540-HHM_2015_Millennials_MemoV2_1.pdf
In contrast to the MacArthur survey noted above, the October 1, 2015 *Young Americans Are Giving Up on Getting Rich,* a Bloomberg Business blog, describes a Bloomberg poll of Americans aged 18-35 which found that 47% of

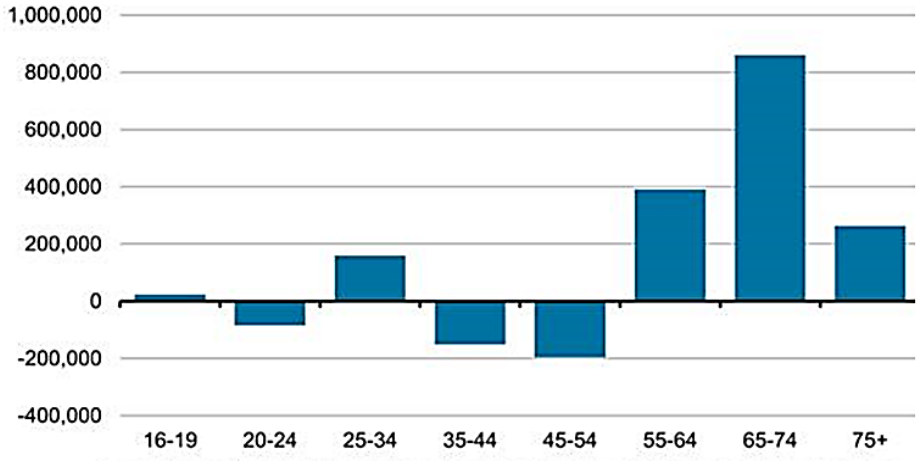
the respondents believed they would not be better off than their parents. The article states that Millennials face stagnant wages, weak employment, high home prices, and stricter mortgage lending standards causing many younger people to delay home buying. It indicated that those who had student debt made it even more difficult to save or purchase a home.
http://www.bloomberg.com/news/articles/2015-10-01/young-americans-are-giving-up-on-getting-rich?cmpid=BBD1001915_BIZ

New household creation by Americans has increased over the past year to the highest level since before the recession began in 2007. An article from the Terner Center for Housing Innovation at Berkeley states that older adults are driving household formation, with 65-74 year-olds responsible for more than two thirds (860,000) of overall household formation in the U.S. It explains that household formation among older adults is rising in great part because the U.S. population is aging, with the age group 65-74 growing the fastest and living in smaller households than younger adults. To explain the greater household formation among older adults, the article describes household relationship to *headship rate*, which equals the number of households divided by the adult population.

A higher headship rate means fewer adults per households or more households for a given population. An example is given: A household with two older adults would have a headship rate of 50% (one household divided by two adults). For younger adults living with roommates or with family, the formula might be one household with four people, for a headship rate of 25%.

As the population ages, there are more 2-person households. Using Census Bureau Current Population Survey (CPS) microdata available through June 2015, the article states that 860,000 new households, almost two-thirds, were created by people 65-74 years old. Only 13% (159,000) were created by young people between 25 and 34 years old. Chart H-17 shows the results of the Terner Center data analysis about new household formation.

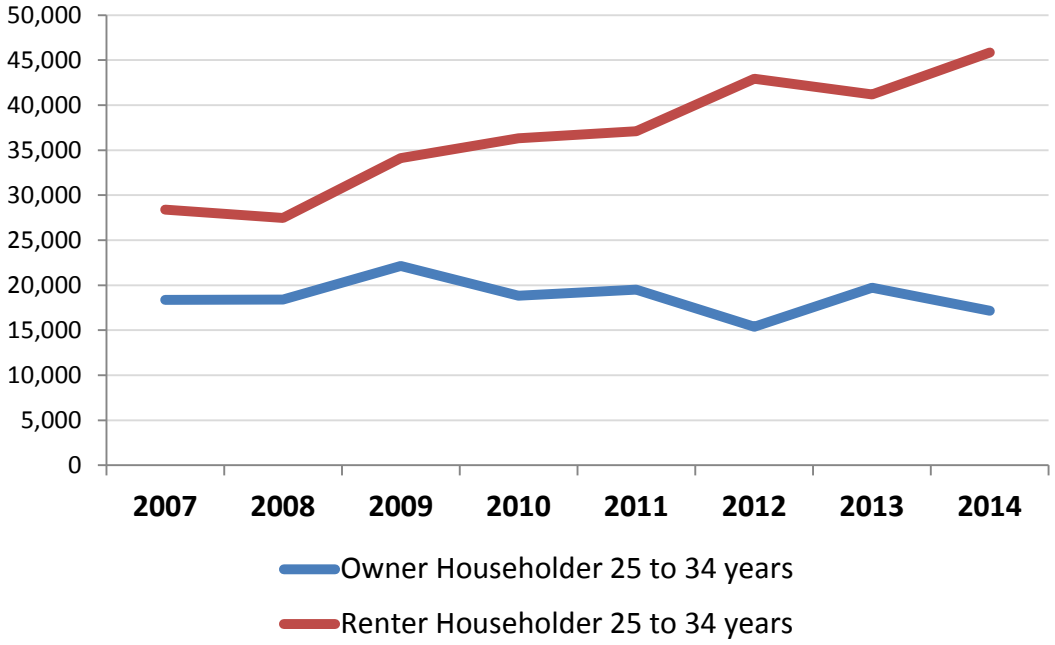
Chart H-17: Estimated Household Formation by Age Group
U.S., June 2014-June 2015



http://ternercenter.berkeley.edu/blog/new-households

Chart H-18 shows the number of Davidson County homeowners and renters in the 25-34 age range. Note that these age ranges do not correspond exactly with the age range given for Millennials in other sources. Davidson County appears to have an increasing number of young people forming households, possibly due to the increased in-migration shown above in Chart H-5.

Chart H-18: Householders Age 25-34 by Tenure
Davidson County, 2014



Source: U.S. Census Bureau, 2014 American Community Survey, Table B25007

Homelessness

"An end to homelessness does not mean that no one will ever experience a housing crisis again. Changing economic realities, the unpredictability of life and unsafe or unwelcoming family environments may create situations where individuals, families, or youth could experience or be at-risk of homelessness. An end to homelessness means that every community will have a systematic response in place that ensures homelessness is prevented whenever possible or is otherwise a rare, brief, and non-recurring experience."

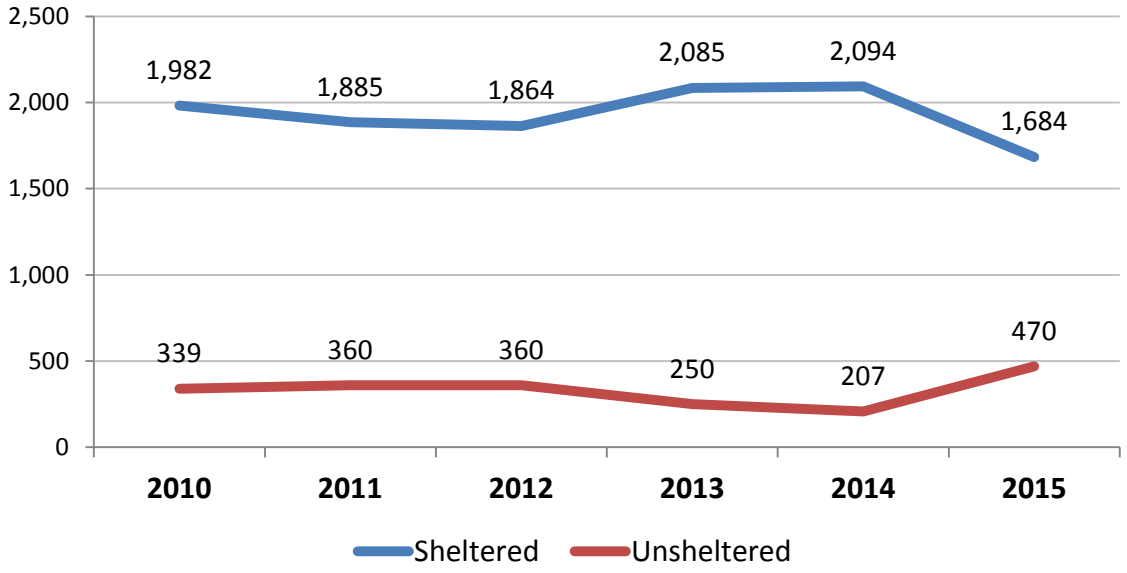
United States Interagency Council on Ending Homelessness, *What It Means to End Homelessness*
http://usich.gov/action/what-it-means-to-end-homelessness/

The U.S. Department of Housing and Urban Development (HUD) sets a date in January for municipalities to conduct a Point-In-Time (PIT) count of homeless people in shelters and on the streets. For the Nashville Continuum of Care (COC), MDHA manages the annual PIT Count using staff and volunteers, many from service agencies.

Total sheltered and unsheltered PIT Counts for Nashville/Davidson County are shown in Chart H-19 below as reported in HUD's 2015 *Annual Homeless Assessment Report (AHAR): Part 1 – PIT Estimates of Homelessness in*

the U.S. The same report gives the reported count of other groupings of people, including Homeless Veterans (1,760), and homeless People in Families (394).

Chart H-19: HUD Point-In-Time Count
Davidson County, 2009-2015



Source: 2015 Annual Homeless Assessment Report (AHAR) to Congress
http://portal.hud.gov/hudportal/HUD?src=/program_offices/public_indian_housing/programs/hcv/about/fact_sheet

Individuals and families may qualify as homeless in one of four federally defined categories:

1) Literally homeless
2) Imminent risk of homelessness
3) Homeless under other Federal statues
4) Fleeing/attempting to flee domestic violence

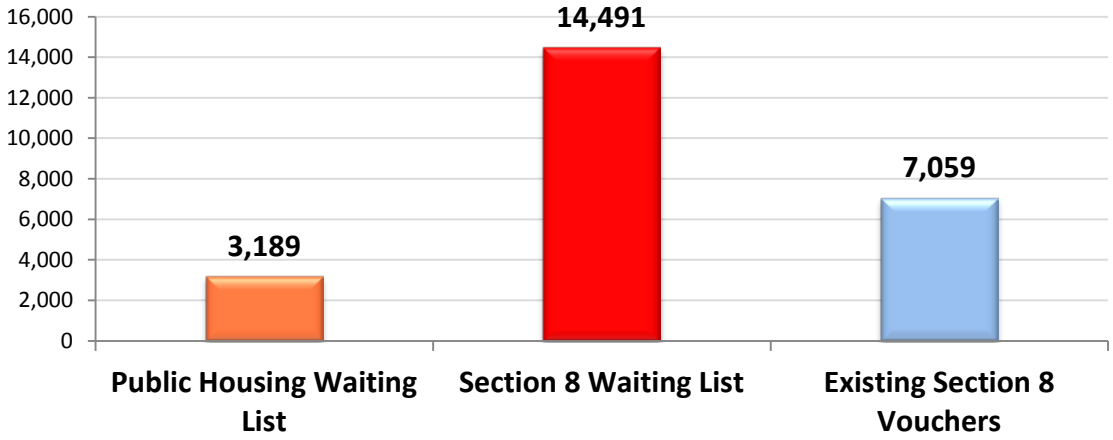
http://portal.hud.gov/hudportal/HUD?src=/program_offices/comm_planning/homeless

Subsidized Housing

One of the tools public housing agencies use to house low-income people and those experiencing homelessness is the HUD Housing Choice Voucher (Section 8) program. The housing choice voucher program is the federal government's major program for assisting very low-income families, the elderly, and people with disabilities to afford decent, safe, and sanitary housing in the private market. These vouchers pay $710 for a 1-bedroom apartment and $850 for a 2-bedroom unit based on HUD's determination of The Nashville MSA Fair Market Rent for 2014.

Chart H-20 shows the number of existing vouchers and waiting list, and the waiting list for public housing in properties owned and managed by Nashville's HUD Public Housing Agency, the Metropolitan Development and Housing Agency (MDHA). Of the 7,059 existing tenant-based housing choice vouchers, 468 are HUD Veterans Affairs Supportive Housing Program (VASH) vouchers in cooperation with HUD.

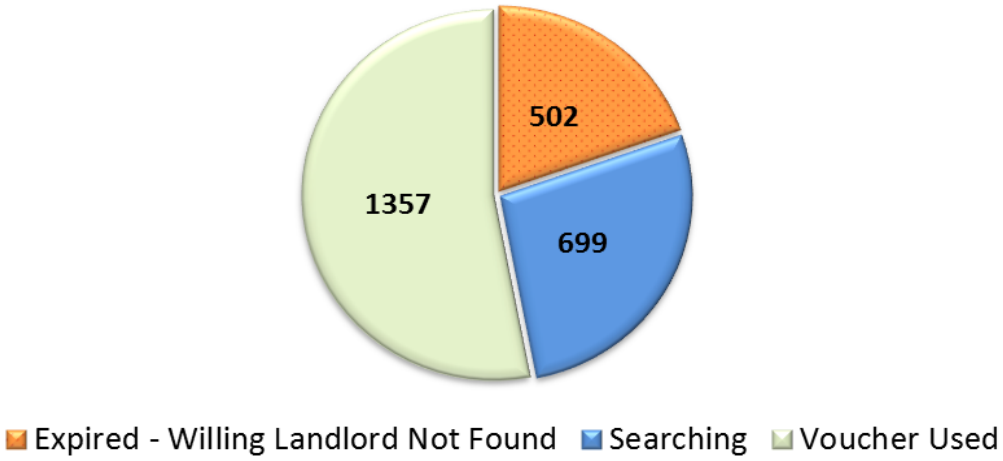
Chart H-20: Public Housing and Section 8 Voucher Waiting Lists
Davidson County, December 2015



Source: Metropolitan Development and Housing Agency, Rental Assistance Department
http://www.nashville-mdha.org/

As Chart H-21 shows, of the 2,258 vouchers issued by MDHA between July 2014 and July 2015, only half were used successfully by voucher holders. Twenty-five percent of the people were still looking for an apartment and 20% expired because the holder could not find an affordable apartment or could not find a property owner who would accept the vouchers within the allowed time, and their vouchers expired.

Chart H-21: Single Year Housing Choice Voucher Status
Davidson County, July 2014–July 2015

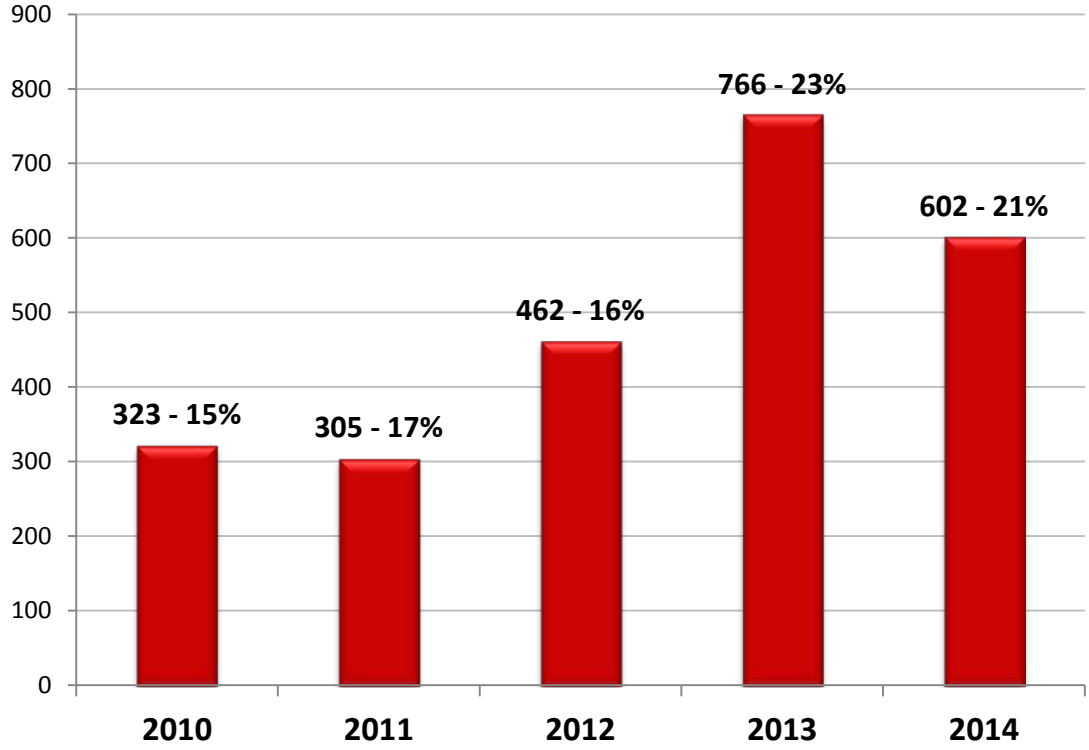


Source: Metropolitan Development and Housing Agency, Rental Assistance Department
http://www.nashville-mdha.org/

Chart H-22 shows the number of Housing Choice Vouchers that expired for the years 2010-2014, and the percentage expired of the total numbers issued for each year. The data includes vouchers issued to families from

the waiting list and families moving from one unit to another. Some vouchers issued to participating families expired because they withdrew notice to move continued in their current Section 8 subsidized housing.

Chart H-22: Housing Choice Vouchers Expired Before Housing Acquired
Davidson County, July 2014–July 2015



Source: Metropolitan Development and Housing Agency, Rental Assistance Department

As of October 2015, MDHA owned and managed the above public housing properties with 5,313 units. The table below shows the type, location, and capacity of Davidson County public housing operated by the Metropolitan Development & Housing Agency. Eligibility Requirements for public housing vary by the type of housing, such as:

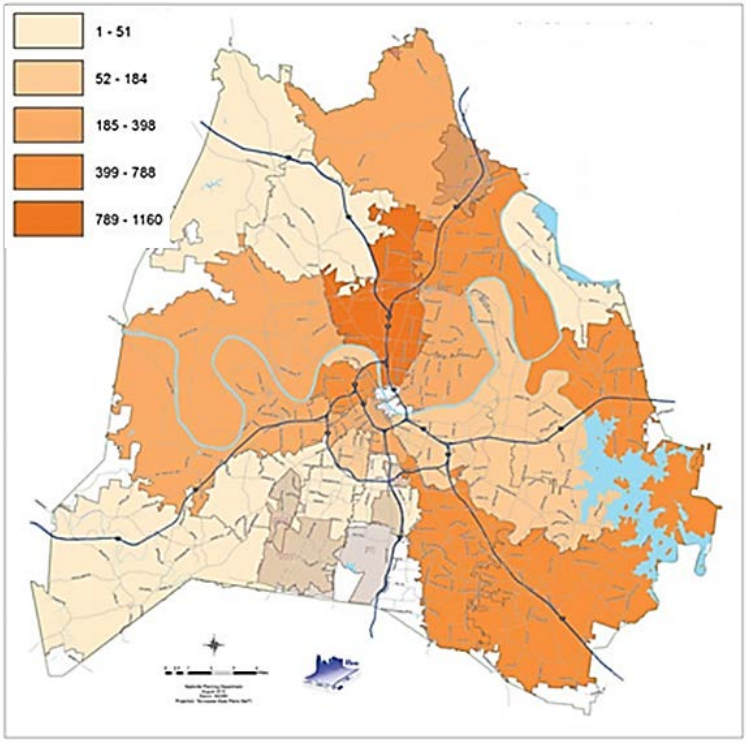
- Family Eligibility - Traditional, family property, no special qualifications
- Market Rate - Residents with higher incomes, over income requirement must pay market rates, not reduced for loss of income, not subject to reporting and other HUD requirements
- Contemporary - At least $10,400 annual income, must pay own utilities
- Elderly Only - Age 62 and over
- Elderly and Disabled - disabled, over age 50

Type of Public Housing	Apartment Name	Location	Units
Family	Cayce Place	701 South 7th Street 37206	710
Family	Napier Place	648 Claiborne Street 37210	378
Family	Edgehill Homes	1277 12th Avenue North 37203	380
Family	Sudekum Apartments	101 University Court 37210	443
Family	Cheatham Place	1564 9th Avenue North 37208	314
Family	Andrew Jackson Courts	1457 Jackson Street 37208	374
Family	Cumberland View	2316 25th Avenue North 37208	226
Family	Neighborhood Housing	(Scattered Sites)	368
Contemporary/Market	Vine Hill	601 Benton Avenue 37204	152
Contemporary/Market	Preston Taylor	3900 Clifton Road 37209	338
Contemporary/Market	Levy Place	303 Foster Street 37207	226
Contemporary/Market	J. Henry Hale	1433 Jo Johnston Avenue 37203	228
Contemporary	Parkway Terrace	196 North 7th Street 37206	125
Elderly Only	Edgefield Manor	525 Shelby Avenue 37206	220
Elderly Only	Carleen Batson Waller Manor	106 31st Avenue South 37212	53
Elderly Only	Gernert Studio	1101 Edgehill Avenue 37203	176
Elderly and Disabled	Hadley Park Towers	2901 John Merritt Boulevard 37209	154
Elderly and Disabled	Madison Towers	591 North Dupont Avenue 37115	211
Elderly and Disabled	Parthenon Towers	301 28th Avenue North 37203	295
Elderly and Disabled	Vine Hill Studio	625 Benton Avenue 37204	147

Source: Metropolitan Development and Housing Agency

The map at right shows the distribution of Housing Choice Vouchers in Davidson County as of August 2015.

Source: Metro Planning Department, August 2015



Forecast for 2016

On December 7, 2015, CoreLogic's online HousingWire.com issued these five predictions for the U.S. housing market for 2016:

1. **Interest rates will increase.** Homeowners who have adjustable-rate mortgages or home-equity loans will most likely see a rise in their interest rate because the **Federal Reserve** is expected to raise short-term interest rates approximately one percentage point between now and the end of 2016. Fixed-rate mortgages will also rise, perhaps up one-half of a percentage point between now and the end of 2016, reaching 4.5% for 30-year loans. Despite this increase in interest rates, mortgage rates will remain historically low.
2. **Household formations will significantly add to housing demand.** More than 1.25 million new households will be formed in 2016 due to improvements in the labor market and lower unemployment rates. These new household formations will increase housing demand, specifically in the rental market.
3. **Rental homes will continue to be in high demand.** Rental vacancy rates are at or near their lowest levels in 20 years, and rents are rising faster than inflation. High demand for rental homes (apartments and houses) will likely continue in 2016, especially from new, young households.
4. **Home sales and home prices will likely increase.** Not only is the rental market hot, but overall purchase demand may lift 2016 home sales to the best year since 2007. Nationally, home prices will likely rise at a quicker rate than inflation, but not at the same rate as last year. The CoreLogic Home Price Index showed a year-over-year increase of 6% in the last 12 months; however, 2016 is only expected to see increases of 4%-5%. This increase in home sales and home prices can be attributed to the improved economy, which has enhanced homeowners' feelings of financial security.
5. **The dollar volume of single-family mortgage originations will fall around 10%.** The single-family mortgage origination decline will occur even though home equity lending is expected to rise, and originations of home purchase loans will likely rise about 10% in volume next year. The growth in those two areas will be offset by a 34% drop in refinance, reflecting the higher mortgage rates and dwindling pool of borrowers with a strong financial incentive to refinance. While single-family mortgage originations are expected to fall, multifamily originations will likely rise. This gain reflects the higher property values and new construction that adds to permanent mortgage usage.

Connections to Housing

Health

An April 2015 publication for the National Housing Council Center for Housing Policy, *The Impacts of Affordable Housing on Health: A Research Summary* indicates that affordable housing continues to be an important factor in the mental and physical health of children, adults and seniors. It describes research-based ways affordable housing can support good mental and physical health:

1. Affordable housing frees family resources that can be used for health food and health care.
2. Families have more housing stability, which can reduce stress and related negative health factors.
3. Affordable housing in good neighborhoods can increase access to amenities like grocery stores health food options, leading to important health benefits.

4. Less crowding in affordable housing can lower exposure to the spread of infectious disease.
5. Affordable housing can allow survivors of domestic violence to escape abusive homes
6. Affordable and accessible housing can be a place of delivery of support services allowing older adults to age in place in the community

The report encourages the housing and health communities to join together so that affordable housing could be part of the overall strategy to improve and support the health of low-income persons.

http://media.wix.com/ugd/19cfbe_d31c27e13a99486e984e2b6fa3002067.pdf

In June 2015, the Center published a report about *Affordable Housing's Place in Healthcare* that found:

1. "Housing is an important social determinant of health, meaning that the quality, location, and cost of housing impact residents' health"
2. "Poor quality housing or housing located in neighborhoods with harmful environmental exposures can contribute to poor health in both children and adults"
3. "Unaffordable housing—measured as housing costs that exceed 30 percent of households' income—requires households to cut back on other necessities which often means going without nutritious food or health care services"
4. "The stress of homelessness or unstable housing situations negatively impacts mental health for people of all ages"

Other research has indicated that up to 40% of individual health outcomes may be attributed to social determinants of health including housing and neighborhoods, as well as other social determinants of income, employment status, access to food, and access to transportation. The publication also provides information about Medicaid and Medicaid Waiver programs, the Affordable Care Act, Medicaid Health Homes, and other health programs that may be useful in mitigating the effects of poor housing in low-opportunity neighborhoods. It provides suggestions about how health and housing providers can work together on behalf of low-income residents, seniors, people experiencing homelessness, and those at risk of becoming homeless.
http://www.nhc.org/HsgandHealthcare_final.pdf
http://www.healthypeople.gov/2020/topics-objectives/topic/social-determinants-health

Compounding Stress, from the National Housing Conference Center for Housing Policy and Children's HealthWatch (June 2015) affirms previous findings that homelessness in early childhood is harmful to a child's growth and development in several areas. Their article states, "There is no safe level of homelessness."

Data from over 20,000 caregivers of low-income children under age four in five U.S. cities indicates that greater lifelong negative effects in health are directly related to younger ages and duration of homelessness for children. Pre-natal and post-natal homelessness both affected health outcomes, and homelessness during both periods compounded the effects.

Chart H-23: Health Outcomes Related by Type of Homelessness,
U.S., 2015

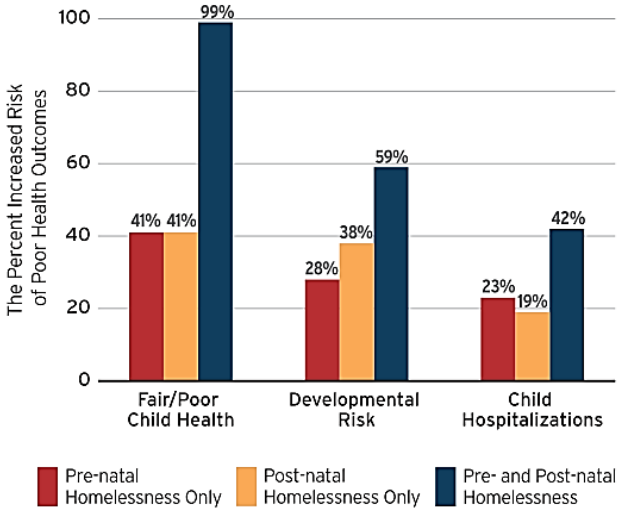


Chart H-23 at right, from *Compounding Stress,* shows the increase in poor health outcomes related to children's prenatal/postnatal homelessness.
http://www.childrenshealthwatch.org/wp-content/uploads/Compounding-Stress_2015.pdf

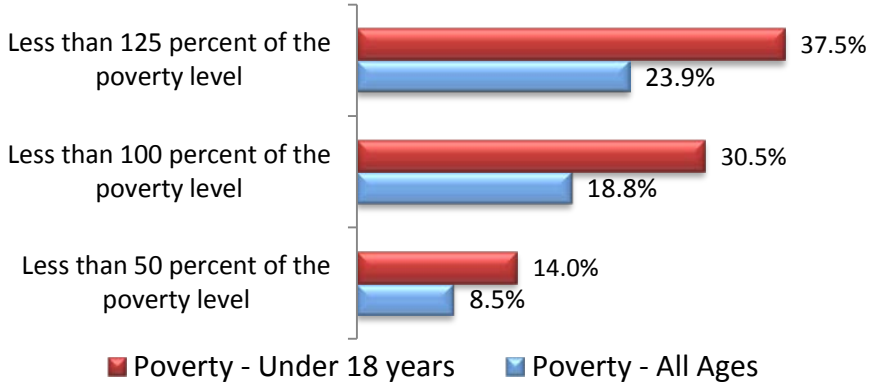
Education

All children, especially those in minority and low-income families, are negatively affected by sub-standard housing and low-opportunity neighborhoods. HUD's *Housing's and Neighborhoods' Role in Shaping Children's Futures* (Fall 2014) discusses the negative effects of crowding, stability, dilapidated housing and high-poverty neighborhoods. Research has shown that these kinds of residential factors have consequences for the success of children's learning and attendance at school. Income and race/ethnicity are both strongly correlated with housing problems and low-opportunity neighborhoods. Both factors are also connected with impaired academic achievement.
http://www.huduser.gov/portal/periodicals/em/fall14/highlight1.html#title

The influence that housing has on children's education and other areas is discussed in the *KIDS Count 2015 Data Book*. Inadequate housing is considered one of the major factors contributing to diminished prospects in life, along with low family income and low levels of parental education. The data book states that in 2013, the U.S. had 26,339,000 (36%) children who lived in housing with a high cost burden. About half of African-American and Hispanic children lived in households spending more than 30% on housing.
http://www.aecf.org/m/databook/aecf-2015kidscountdatabook-2015-em.pdf

According to the 2010-2014 American Community Survey 5-Year Summary, 30.5% of Davidson County children under age 18 lived below 100% of the poverty level and 14.0% lived below 50% of the poverty level. As shown in Chart H-24, minor children are more likely to be in poverty than adults at 50% of the poverty level, 100% of the poverty level and 125% of the poverty level.

Chart H-24: Percent by Poverty Level by Age
Davidson County, 2010-2014



Source: Census Bureau, 2014 American Community Survey, Table B25007

For college students, housing costs create a challenge to affording higher education. HUD's *Barriers to Success: Housing Insecurity for U.S. College Students* (February 2015) described rising college costs and the interactions of housing costs, housing insecurity, and housing assistance programs to help students remain in college. In the *Barriers to Success article*, it is stated that college enrollment has risen significantly in the last 15 years, including more low-income students attending 4-year colleges. However, college completion rates continue to be low, especially among low-income and first-generation students, with only 59% of first time, full-time students at 4-year institutions graduating within 6 years.

Housing costs are cited as a big part of the rising cost to attend college, often exceeding tuition and fees. The article gives an example: Using an average published 2014-15 cost for an in-state 4-year college of $18,943, the average of $9,804 for room and board is more than half that figure. Housing costs are stated to have increased for the last 25 years in the U.S. The table below compares percentage increases from the article of tuition and room and board costs.

Increases in College Costs by Type
U.S., 1994-95 – 2013-14

Type of College	Room & Board Increase	Tuition Increase
2-year public	14%	58%
4-year public	54%	109%
4-year private	44%	63%

The article describes housing assistance programs for students that may help students avoid having to work so many hours. This could also help them afford all the needed class materials and avoid skimping on healthy food, which has been shown to impair school performance.
http://www.huduser.org/portal/periodicals/insight/insight_2.pdf

Employment

Children who grow up in some places eventually earn more than they would if they had grown up elsewhere. A May 2015 Harvard University research study, *The Impacts of Neighborhoods on Intergenerational Mobility*, re-evaluated aspects of the federal Moving To Opportunity (MTO) program. It explained how the place where children grow up affects their chances for upward mobility.

It estimated the likelihood for success for children in each U.S. County improves for every year a child lives in a better neighborhood because his or her environment improves outcomes. They also found that when a family moves to worse areas, for example with a higher crime rate, the negative effect is much stronger for boys than for girls. Davidson County data indicates that growing up here is better than in only 12% of U.S. counties for upward mobility of children in poor families.

The report also states that for every year that a boy lives in a neighborhood with a high crime rate, it negatively affects his earnings by 1.39%, while the same situation affects earnings of girls by only 0.27%. Previous MTO researchers have suggested that when families move to higher-opportunity neighborhoods, the positive effects are greater for girls than for boys, possibly because boys tend to keep peer relationships they had in their previous neighborhoods.

The Impacts of Neighborhoods research is part of a larger effort called the Equality of Opportunity Project, which has multiple articles, maps, and data, including a county-level dataset. The data showed that growing up in Davidson County for children in low income households would earn 7.8% less by age 26 than if they had grown up in the "average" place. The decrease would be 5.7% less for boys and 10.0% less for girls.
http://scholar.harvard.edu/files/hendren/files/nbhds_paper.pdf
http://www.equality-of-opportunity.org/index.php/data

Promising Practices and Resources

HUD's Office of Policy Development and Research (PD&R) HUD USER is an information source for housing and community development researchers, academics, policymakers, and the public. One of the features of the site is the Trending Archive with links to promising practices publications. HUD User publishes an online magazine with articles on a variety of housing topics.
https://www.huduser.gov/portal/pdredge/pdr_edge_spotlight_article_110615.html

The *Choice Neighborhoods: Baseline Conditions and Early Progress* report was implemented by HUD to test initial results of local, place-based approaches to alleviating poverty and inequality in communities. The September 2015 report describes baseline circumstances and early challenges and successes of the initial two years of grants for five Choice grantee communities: Boston, New Orleans, San Francisco, and Seattle. The report describes successes in each of the communities and the locally based programs contributing to the successes. It also states some of the challenges and necessities for localities such as local elected officials' support. The lessons learned in this report may be valuable to communities interested in implementing a place-based approach to affordable housing.
https://www.huduser.gov/portal/sites/default/files/pdf/Baseline-Conditions-Early-Progress.pdf

Another best practice involves an Inclusionary Housing Calculator designed to help describe the connections between Inclusionary Housing requirements and real-estate financial feasibility. The Cornerstone Partnership is a peer network of housing organizations interested in keeping housing affordable. A variety of resources is available on its web site, as are links to the partners such as Innovative Housing Institute, National League of Cities, National Housing Institute, National Association of Realtors, and others.

Under the auspices of this partnership, an Inclusionary Housing Calculator was published. Professional real estate economists designed the tool and it was tested with industry experts. The calculator can demonstrate the effects of local housing variables on profit margins if a specified percentage of units are reserved for lower income households. However, the precision of the calculator depends on user input of local data about land costs, rental rates, local capitalization rate, Cap Rate, Construction Cost, and Rental/ Sales price assumptions. The current beta version of the calculator is the result of about two years of work and Cornerstone hopes people will use the calculator and send them feedback about it. The calculator is available online.
http://www.affordableownership.org/inclusionary-housing/inclusionary-housing-calculator-tool/welcome/

Best Practices for Affordable Housing: Eleven methods used by communities to create & preserve affordable housing across the nation is report published by the city of Asheville, North Carolina in November 2015. Various strategies used by communities are described, including housing trust funds (Ashville, Buncombe county), inclusionary zoning (Boulder, Austin), tax credit investing (Ashville, state of North Carolina, permanent affordability (Boulder, Chapel Hill), land banks (Genessee County Michigan, Annapolis), employer assisted housing

(Illinois, Asheville), code simplification (Washington D.C., Asheville), transit-oriented development (Charlotte) property preservation (Asheville), trends in public-private partnerships (Austin), and purpose-built communities (Atlanta).

The Assessor of Property for the Metropolitan Government of Nashville and Davidson County's web site has an interactive map function to search for data by zip code, assessment neighborhood, neighborhood, Metro Council District, Tennessee House and Senate Districts, school board districts, urban services district, and development areas. Tabs organize the information: area overview, sales, permits, census, flood, personal property, and assessment. Data and charts are available for sub-headings under each tab title.
http://davidson.tn.my-pii.com/

Blogs and Online Newsletters

Urban Wire – The voices of Urban Institute's researchers and staff
http://www.urban.org/urban-wire

Metro Trends – The Urban Institute's report card on how metropolitan America is faring
http://datatools.metrotrends.org/charts/metrodata/Dashboard/v2/landing.cfm

Cities Speak – The official blog of the National League of Cities
http://citiesspeak.org/category/housing/

Living Cities
https://www.livingcities.org/blog/

Open House Blog – Articles by the staff of National Housing Conference, NHC members, & partners
http://www.nhcopenhouse.org/

Insights – Articles about housing economies and property markets by CoreLogic
http://www.corelogic.com/blog/default.aspx

News & Insights – Articles about housing markets and trends by MetroStudy
http://www.metrostudy.com/news-insights/

HUD PD&R Edge online magazine – HUD Policy Development and Research provides analyses of housing and community development statistics
http://www.huduser.gov/portal/pdredge/pdr_edge_hsg_charts.html

Real CNE Page – MPF Research: Apartment Market Intelligence
http://www.real CNE Page.com/mpf-research/

RealtyTrac – Newsroom and Media Center of the real estate information and online marketplace company
http://www.realtytrac.com/news?a=b&utm_medium=3&utm_source=1055945&utm_campaign=3406&accnt=1055945

Workforce & Economic Opportunity

Key Findings

- The Nashville labor market has made a noticeable recovery from the higher unemployment rate it experienced during and after the Great Recession. The unemployment rate in Davidson County continued to decline as it reached 4.2% in November 2015, 1.0% lower than a year before. Despite this, the labor market continues to experience fundamental transformations, such as the introduction of new technologies and globalization that increased competition.

- Even with a growing economy and an improved labor market, Help Finding a Job/Job Placement continues to be the most frequently identified category in the Workforce and Economic Opportunity section of the Grassroots Community Survey. Finding gainful employment is still a priority for many low-income families as they face reduced opportunities for good paying jobs

- The labor market recovery has not been generally shared across the population by race and ethnicity compared to the year before. The unemployment rate among the Black or African American population continues to be higher than for either white or Hispanic/Latino population of any race.

- There is evidence that more jobs will be requiring post-secondary education or advanced specialized skills trainings. A strong link has been shown between the levels of education and the ability to secure employment and the wages paid. Higher levels of educational attainment typically lead to greater labor participation and higher employment rates. People with higher levels of education earn more because it enhances the likelihood of obtaining high-paying jobs. Even when the Great Recession resulted in higher unemployment, the workers with greater educational attainment experienced lower unemployment rates compared to those with less education.

- Persons with disabilities are less likely to be employed than people who do not have disabilities. Women were slightly more likely to have a disability than men, possibly reflecting the greater life expectancy of women. At all levels of education, persons with a disability were less likely to be employed than were their counterparts with no disability.

- Some workers in low-skilled industries experienced employment growth but not real wage increases. Wages in some growing sectors declined for workers in all of the top ten lower-wage occupations, with 6% decreased for personal care aides, restaurant cooks, food preparation workers, house cleaners and housekeepers, and home health aides – contributing to the growing number of working poor.

- The safety net programs kept millions out of poverty in 2014. SNAP (formerly food stamps) lifted about 4.7 million, Supplemental Social Income (SSI), which assists the elderly and individuals with disabilities, lifted 3.8 million, rent subsidies lifted 2.8 million, and unemployment insurance benefits lifted about 800,000 out of poverty.

Definitions

The U.S. Bureau of Labor Statistics (BLS) uses statistics from two major surveys, the Current Population Survey (CPS; household survey) and the Current Employment Statistics survey (CES; establishment survey) in order to release monthly information about the employment status of the country. According to BLS, the household survey provides information on the labor force, employment, and unemployment. It is a sample survey of about 60,000 eligible households conducted by the U.S. Census Bureau for the U.S. Bureau of Labor Statistics.

The establishment survey provides information on employment, hours, and earnings of employees on nonfarm payrolls. In their monthly news release, the Bureau provides the following definitions:

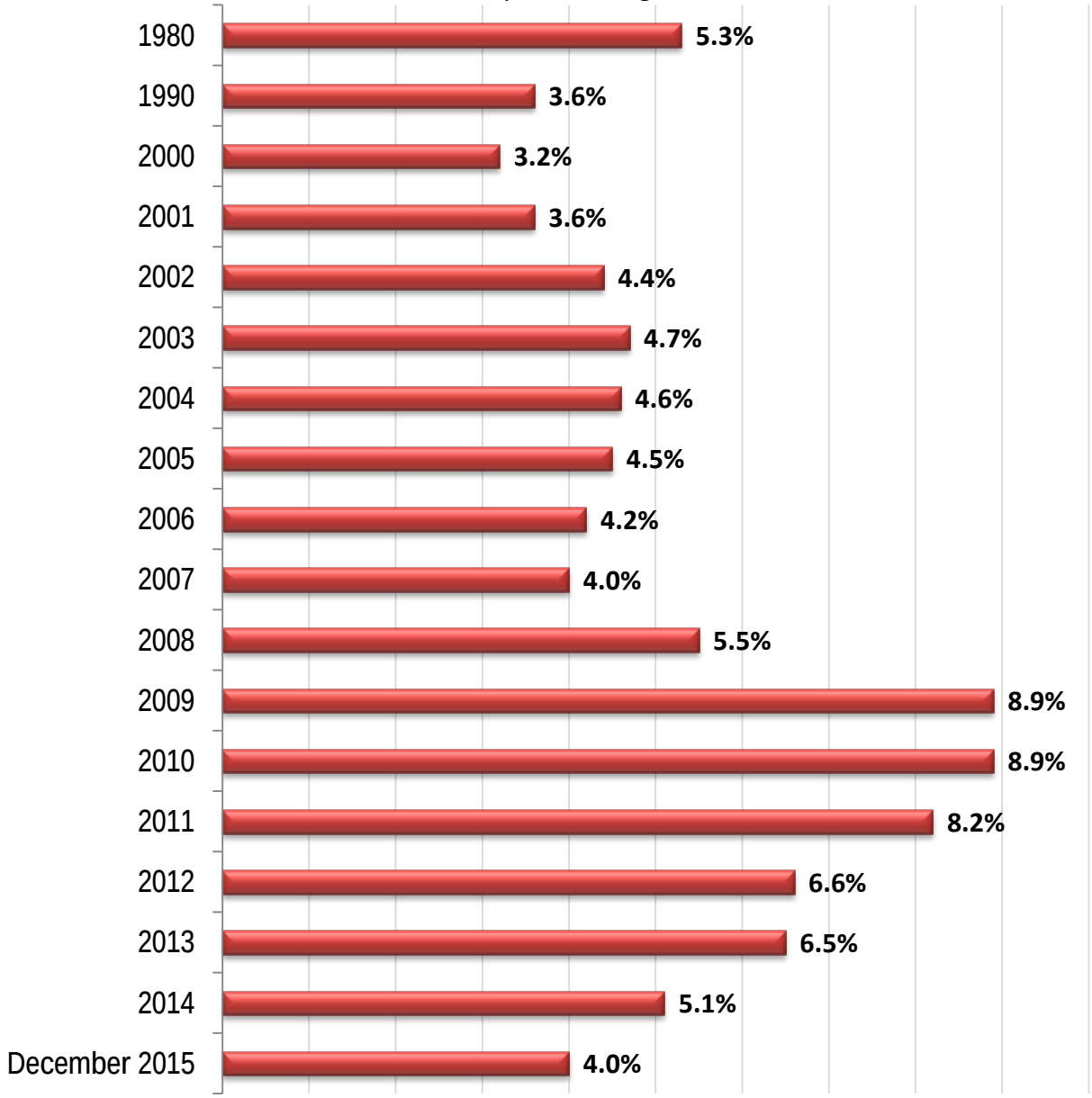
- **E*mployed*** are those who did any work at all as paid employees during the week in which the survey is conducted; worked in their own business, profession, or on their own farm; or worked without pay at least 15 hours in a family business or farm. People are also counted as employed if they were temporarily absent from their jobs because of illness, bad weather, vacation, labor-management disputes, or personal reasons.
- ***Unemployed*** if they meet all of the following criteria: they had no employment during the week in which the survey is conducted; they were available for work at that time; and they made specific efforts to find employment sometime during the 4-week period ending with the reference week. Persons laid-off from a job and expecting recall need not be looking for work to be counted as unemployed.
- The ***civilian labor force*** is the sum of employed and unemployed persons.
- The ***unemployment rate*** is the number unemployed as a percent of the labor force.
- The ***labor force participation rate*** is the labor force as a percent of the population
- The ***employment-population ratio*** is the employed as a percent of the population.

Unemployment

The Nashville labor market has made a remarkable recovery from the higher unemployment rate it experienced during and after the Great Recession. The unemployment rate in Davidson County continued to decline. As shown in Chart W-1, the unemployment rate in Davidson County reached 4.2% in November 2015, which is 1.0% lower than a year ago. Despite the lower rate, according to the Tennessee Department of Labor and Workforce, 15,210 individuals in Davidson County were looking for work in November of 2015, a number that would certainly experience economic hardships.

Chart W-1: Unemployment Rate

Davidson County, 1980 - August 2015



Source: Tennessee Department of Labor and Workforce Development

In addition, there is a wide variation in the rate of unemployment across demographic and social characteristics, based on the 2014 American Community Survey from the U.S. Census Bureau. The table below shows the overall unemployment rate of 6.4% for Davidson County residents age 16 and over.

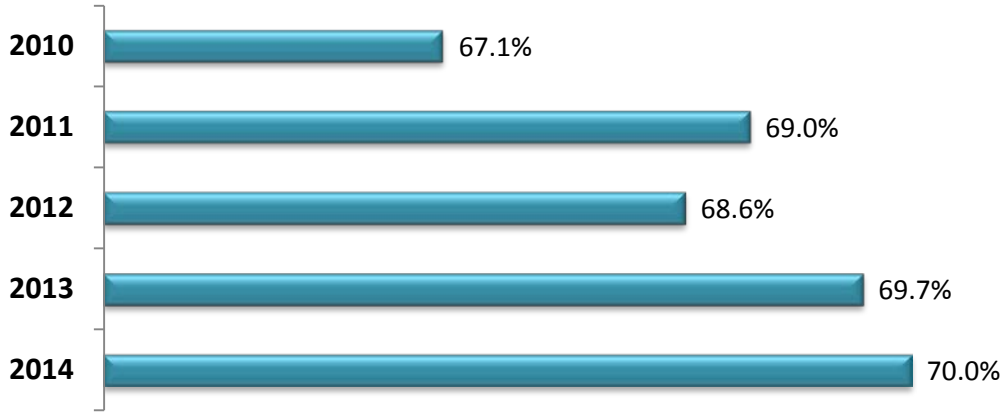
Unemployment rates lower than the overall rate are shown in green, ranging down to 2.4% for people who have a Bachelor's degree or higher. Higher unemployment rates are highlighted in orange, ranging up to 30.1% for people ages 16-19.

Characteristic	Unemployment Rate
Bachelor's degree or higher	2.4%
55 to 64 years	3.3%
Some college or associate's degree	3.4%
White alone, not Hispanic or Latino	3.8%
45 to 54 years	4.1%
White	4.1%
Population 25 to 64 years	4.1%
25 to 44 years	4.3%
65 to 74 years	4.3%
Male	4.9%
75 years and over	5.3%
Population 20 to 64 years	5.5%
High school graduate (includes equivalency)	6.0%
Female	6.1%
Population 16 years and over	6.4%
Hispanic or Latino origin (of any race)	6.7%
Asian	7.1%
Female with children under 6 years	10.1%
Less than high school graduate	10.2%
Black or African American	12.5%
With any disability	14.4%
20 to 24 years	16.3%
People below poverty level	18.7%
16 to 19 years	30.1%

In Davidson County, there has been a slight upward trend in the percent of the population who are in the labor force. As shown in Chart W-2 below, the rate in the labor force was 70.0% in Davidson County, compared to 67.1% in 2010. In 2014, 63.3% were in the labor force in the U.S., compared to 60.8% in Tennessee. The U.S.

Census Bureau defines labor force as people aged 16 and over who were employed as paid workers during the period, including civilians and active duty military personnel plus unemployed.

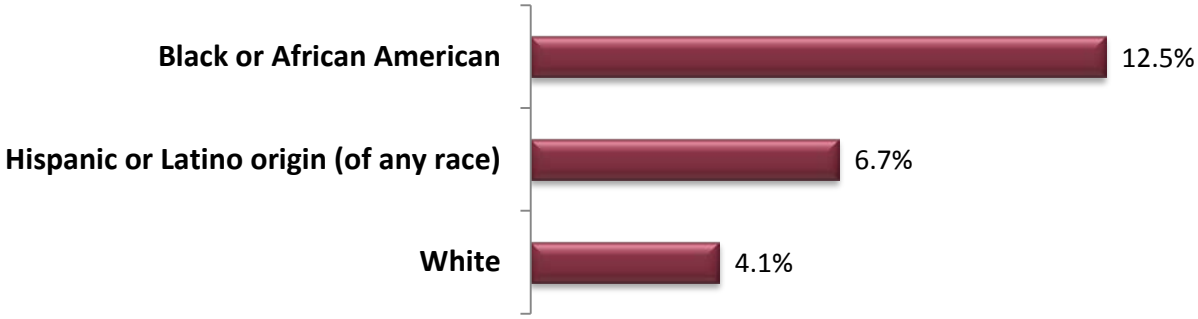
Chart W-2: Percent in Labor Force
Davidson County, 2010-2014



Source: U.S. Census Bureau, 2010-2014 American Community Survey

The labor market recovery has not been generally shared across the population by race and ethnicity compared to the year before. As Chart W-3 shows, unemployment is higher among the Black or African American population than for either white or Hispanic/Latino population of any race. Not only does the Black or African American population have a higher unemployment rate than other two groups but also their 2014 unemployment rate is 2.6% higher than it was in 2013.

Chart W-3 Unemployment by Race/Ethnicity
Davidson County, 2014



Source: U.S. Census Bureau, 2014 American Community Survey

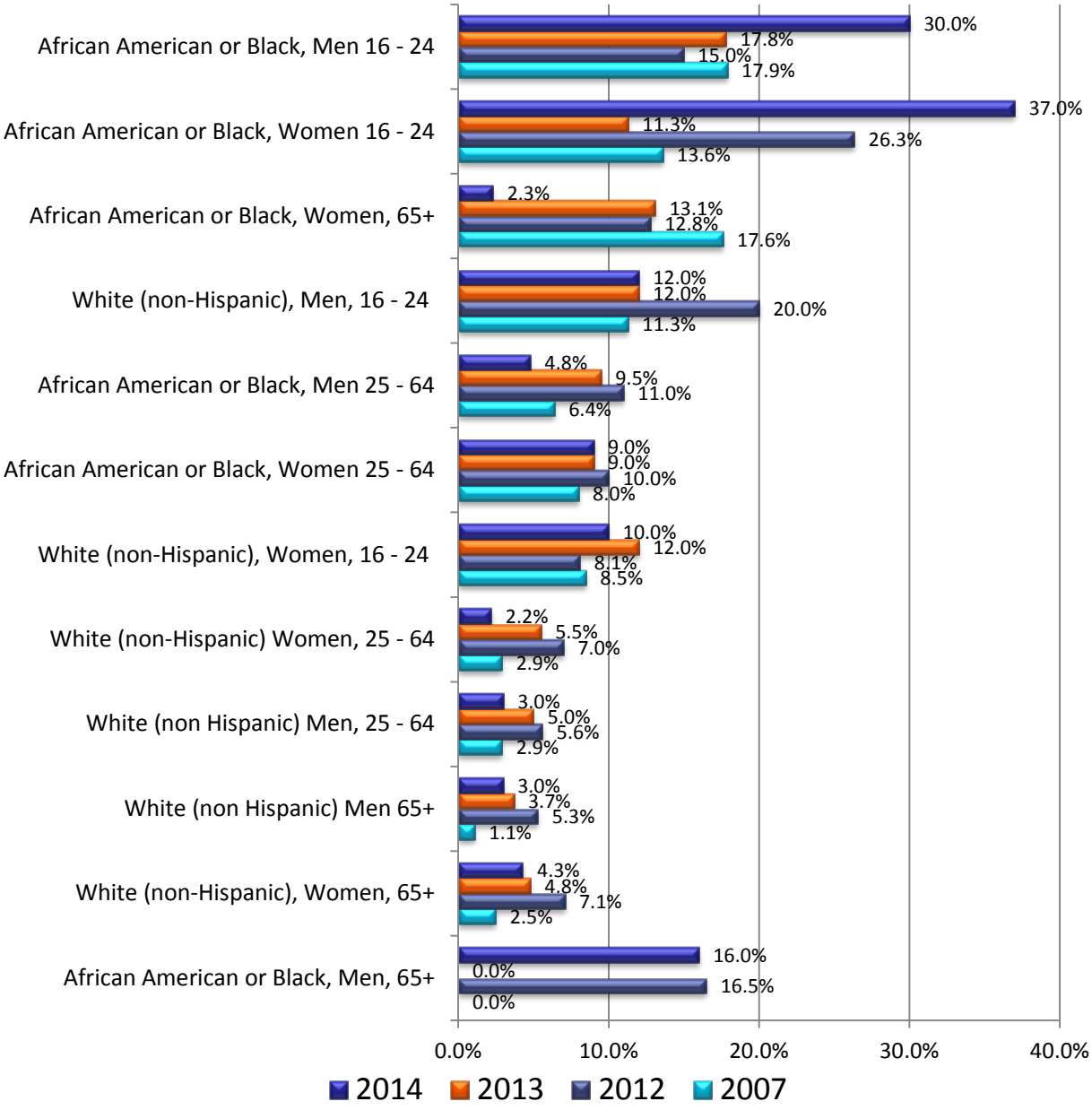
As Chart W-4 shows, unemployment rates vary for different demographic groups. According to the U. S. Census Bureau's 2014 American Community Survey, the unemployment rate for black males in Davidson County between the ages of 16-24 was 30.0%, which is substantially higher than the year before and reached levels not seen since the peak of the Great Recession at 36.4% in 2010. As for black females in the same age group, the unemployment rate at 37.0% is the highest ever documented in any of our previous Community Needs Evaluations. In fact, it is almost 11 percentage points higher than at 26.3% in 2012.

Of particular note is that both black males and females in this age group is the only demographic group that experienced an increase of their unemployment rate in Davidson County in 2014. As in other recent years, in

2014, among the white population, both white men and women ages 16-24 still have the highest unemployment rates of 12.0% and 10% respectively.

Chart W-4 Percentage of Unemployment by Race and Gender

Davidson County, 2007, 2012, 2013 and 2014



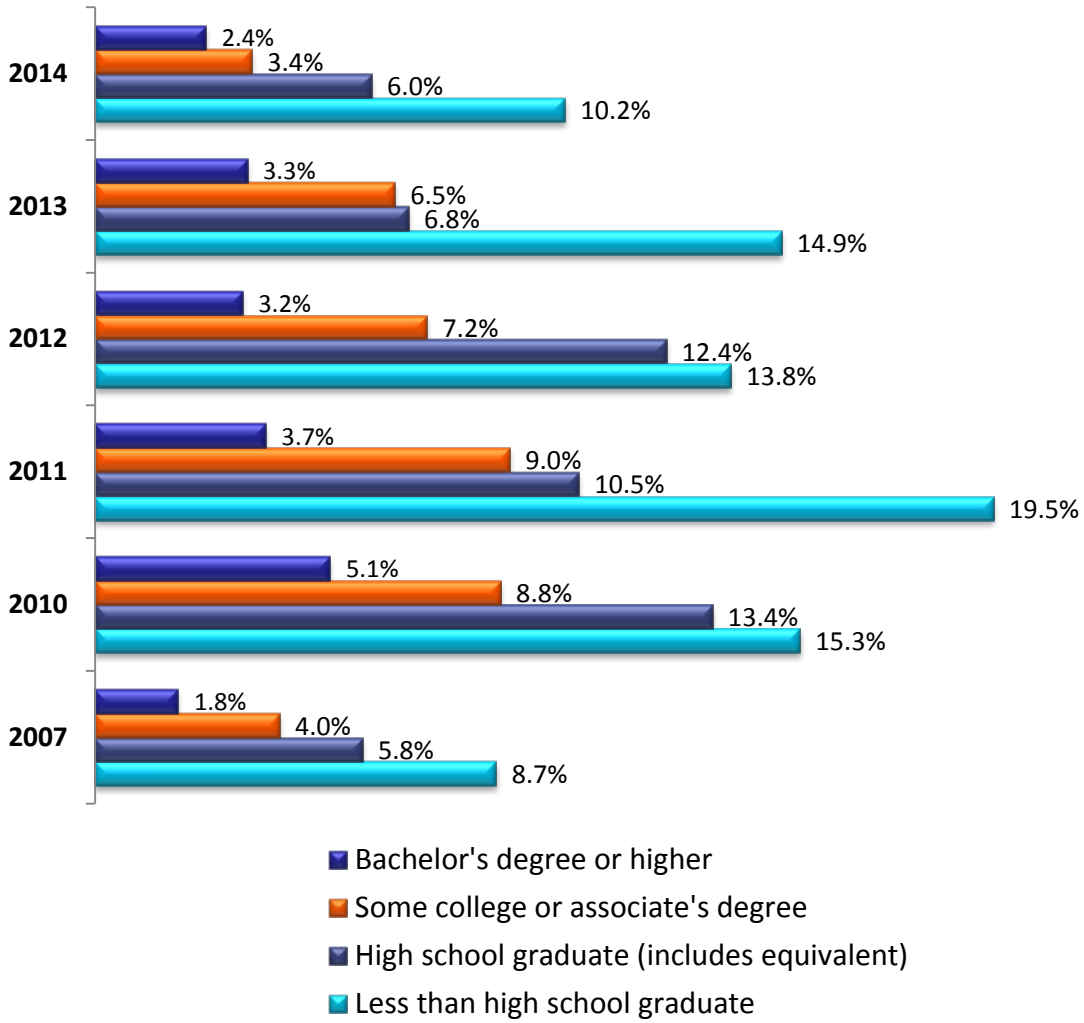
Source: U.S. Census Bureau, American Community Survey 2007, 2012, 2013, and 2014

Disparity in unemployment rates was not limited to age, ethnicity, and race. Studies show that there exists a strong link between the levels of education as it relates to the ability to secure employment and the opportunity to earn a higher wage. Higher levels of educational attainment typically lead to greater labor participation and higher employment rates. It also improves job prospects and the likelihood of remaining employed, even in times of economic slowdown. Those who have lesser educational credentials are more likely to be without a job.

As Chart W-5 shows, the unemployment rate of people with low educational attainment continues to remain much higher than other categories. The unemployment rate in Davidson County for workers without a bachelor's degree continues to be higher than the rate for those with at least a bachelor's degree. In 2014, the unemployment rate of 10.2% for workers with less than a high school diploma was more than four times the unemployment rate for those with a bachelor's degree at 2.4%.

Chart W-5 Unemployment and Educational Attainment

Davidson County, 2007, 2010, 2011, 2012, 2013, and 2014



Source: U.S. Census Bureau, 2007, 2010, 2011, 2012, 2013, and 2014 American Community Survey

In addition to ethnic minorities, youth, and those who have lower educational attainment, persons with disabilities are also less likely to be employed than people who do not have disabilities. A June 2015 analysis by the U.S. Bureau of Labor Statistics, *Persons with a Disability: Labor Force Characteristics – 2014*, reported the following about people with disabilities nationwide:

- The unemployment rate for persons with a disability was 12.5% in 2014, about twice as high than the rate for persons with no disability at 5.9%.

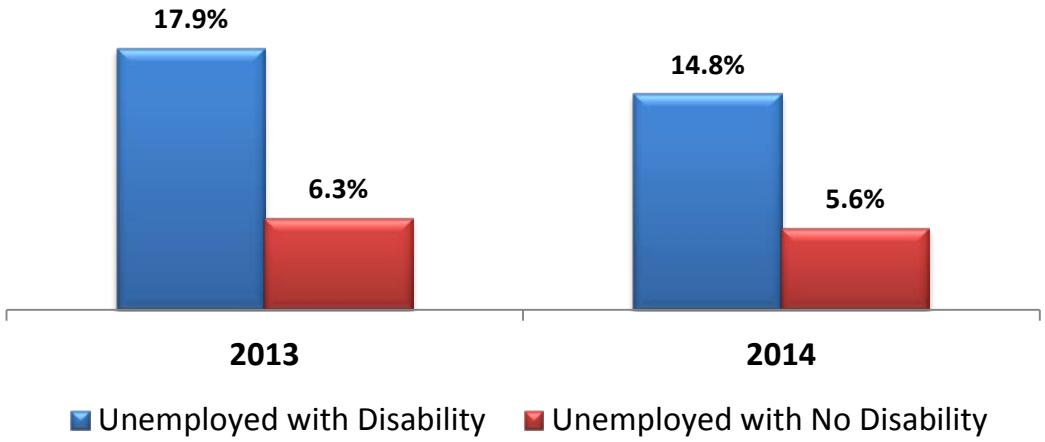
- As was the case among those without a disability, the unemployment rates for those with a disability were higher among blacks (21.62%) and Hispanics (16.1%) than among whites (11.2%) and Asians (8.6%).
- 47.0% of persons with a disability were age 65 and over, compared with 14% of those with no disability.
- Women were slightly more likely to have a disability than men, possibly reflecting the greater life expectancy of women.
- 33.0% of workers with a disability were employed ~~only~~ part time, compared with 18.0% of those with no disability.
- Employed persons with a disability were more likely to be self-employed than those with no disability.
- At all levels of education, persons with a disability were less likely to be employed than were their counterparts with no disability.

http://www.bls.gov/news.release/pdf/disabl.pdf

As Chart W-6 shows, the unemployment rate for both people with disabilities and those with no disabilities went down in Davidson County in 2014. However, the unemployment rate for people with disabilities was 14.8%, more than double for that of people without disabilities at 5.6%.

Chart W-6: Percent Unemployed by Disability Status

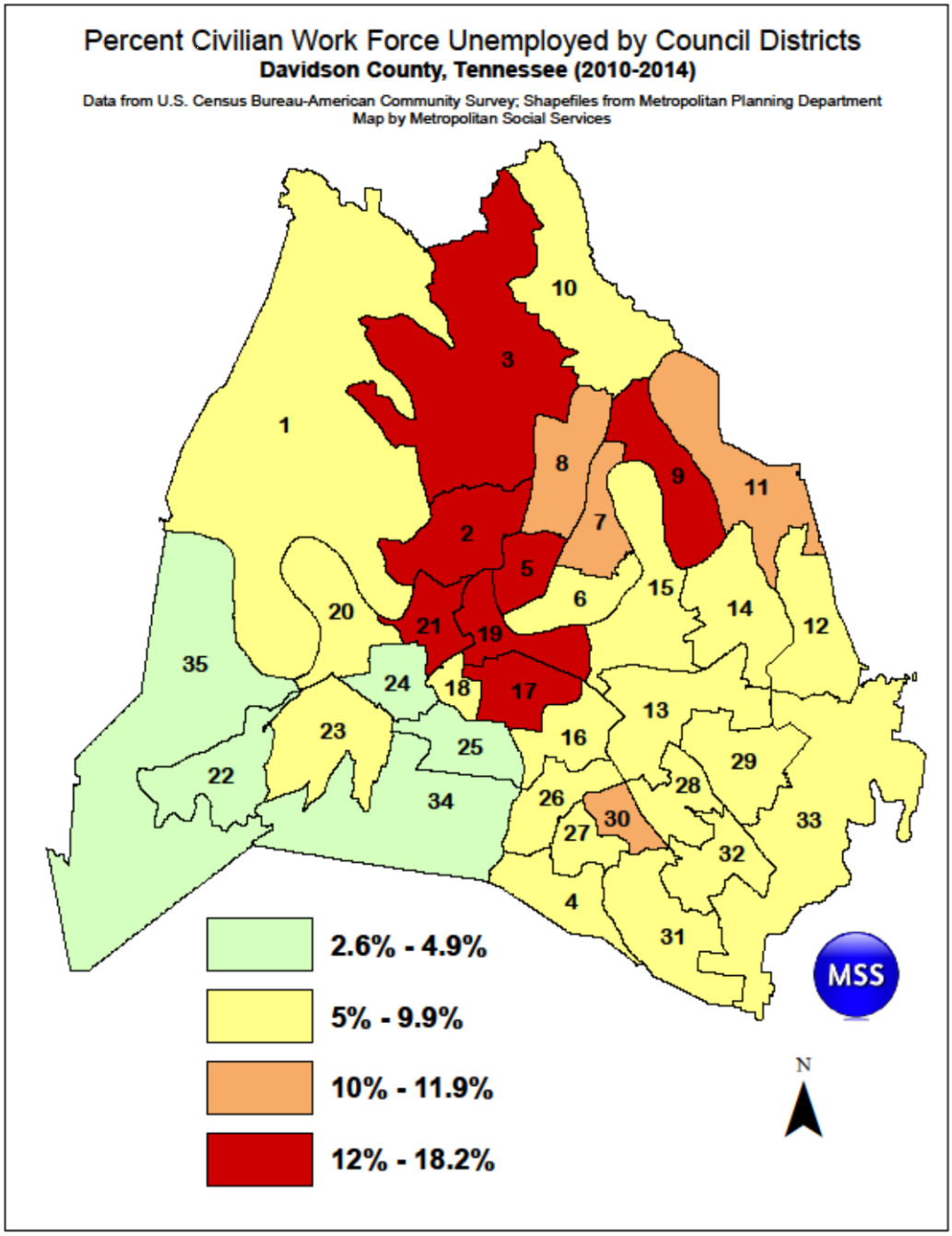
Davidson County, 2013-2014



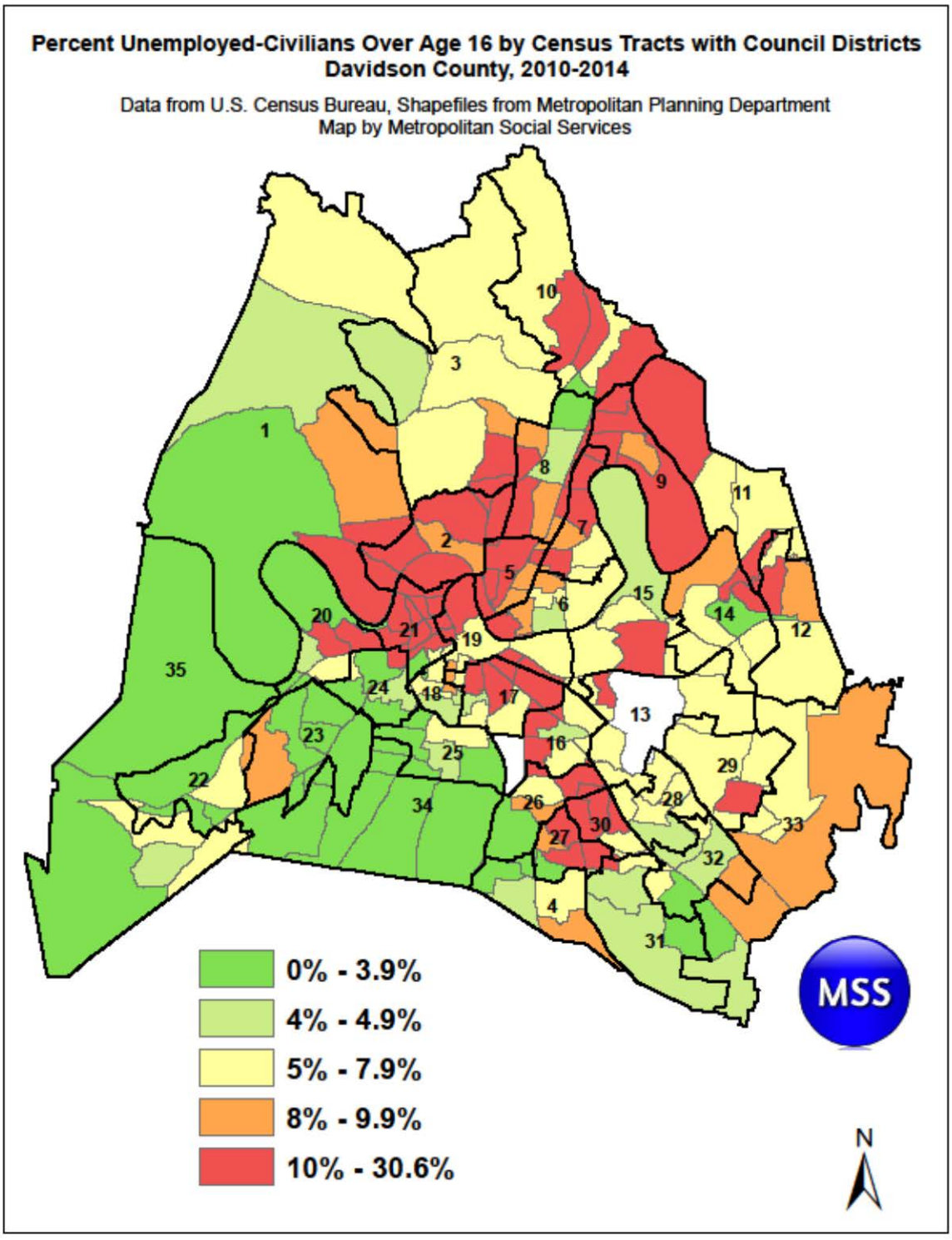
Source: U.S. Bureau, 2014 American Community Survey

Unemployment in Davidson County varies among Metropolitan Council Districts. As shown in the map below using data from the 2010-2014 American Community Survey, there is a wide geographic variation in the percentage of unemployed people by Metropolitan Council Districts. Unemployment ranges from 2.6% in Metro Council District 34 and up to 18.2% in Metro Council District 2.

Eleven Districts (2, 3, 5, 7, 8, 9, 11, 17, 19, 21, and 30 in decreasing order) have unemployment greater than 10.0%. In the previous editions of the Community Needs Evaluations, almost all of Districts that had higher unemployment rates were located near the central city area but it now spread to Districts that border other Counties. Six Districts have unemployment rates 5% and lower (22, 24, 25, 34, and 35).



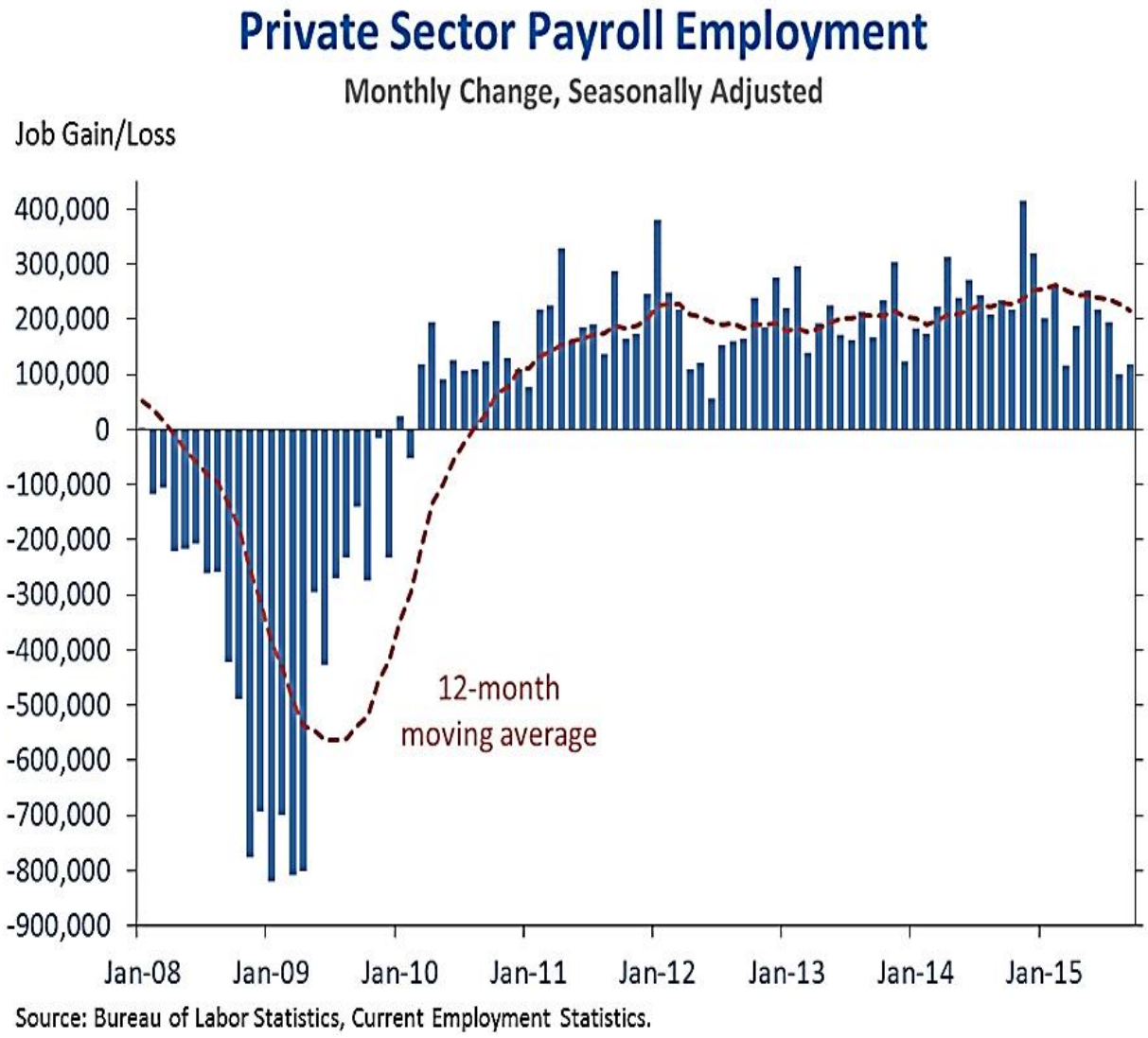
Although the map of unemployment by Metro Council Districts shows that the highest percentage of unemployed people is 18.2% in any district, the map below shows that in some Census Tracts unemployment is even higher. Census Tract data shows smaller areas (161, compared to 35 Council Districts), so extremes are more accurately shown. The range of unemployment ranges from below 1% in some Census Tracts to 30.6% in the Census Tract with the highest unemployment.



According to the U.S. Bureau of Labor Statistics, the total non-farm payroll employment increased by 142,000 for the U.S. in September 2015, and the national unemployment rate declined to 5.1%, a decline of 0.8 percentage points compared to over a year ago.
http://www.bls.gov/news.release/pdf/empsit.pdf

As Chart W-7 shows, the White House's Council of Economic Advisers reported that as of September 2015, "the private sector has added 13.2 million jobs over 67 straight months of job growth, extending the longest streak on record". The Council also shared that a 5.1% national unemployment rate is at its lowest level since 2008.

Chart W-7: Private Sector Payroll Employment – Job Gain/loss (Thousands)
U.S., 2008-2015



https://www.whitehouse.gov/blog/2015/10/02/employment-situation-september

As reported in the *Job Openings and Labor Turnover Survey* in August 2015, the U.S. Bureau of Labor Statistics noted that the ratio of unemployed persons per job opening was 1.5 in August 2015, which means that there are still 3 active job seekers for every 2 job openings.

As Chart W-8 shows, the ratio between the unemployment level and job openings level changes over time. When the most recent recession began (December 2007), the number of unemployed persons per job opening was 1.8. The ratio peaked at 6.8 unemployed persons per job opening in July 2009 and has trended downward since. This

is another indication that the labor market has significantly improved. (Shaded area represents recession as determined by the National Bureau of Economic Research.)

Chart W-8: Number of Unemployed Persons per Job Opening
U.S., 2005-2015

Source: Bureau of Labor Statistics, Current Population Survey and Job Openings and Labor Turnover Survey, October 16, 2015.
http://www.bls.gov/web/jolts/jlt_labstatgraphs.pdf

While the rate for the short-term unemployed (people out of work for six months or less), has returned to pre-recession levels nationwide, other labor market indicators demonstrate continuing challenges. The level of unemployment for workers who remain jobless for more than 6 months is still high.

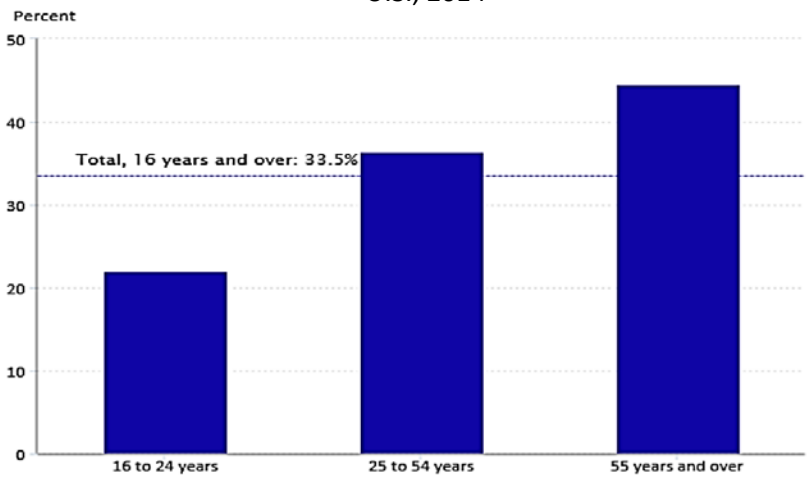
According to the U.S. Bureau of Labor Statistics' *The Employment Situation – September 2015*, the number of long-term unemployed (those jobless for 27 weeks or more) has declined to 2.1 million in September and accounted for 26.6% of the unemployed. During the past 12 months, the number of long-term unemployed decreased by 900,000.
http://www.bls.gov/news.release/pdf/empsit.pdf

As noted in previous editions of the Community Needs Evaluation, unemployed workers find it increasingly difficult to secure jobs as the duration of unemployment increases. Long-term unemployment varies by age, gender, and race. A March 2015 analysis by the Bureau of Labor Statistics, *Trends In Long-term Unemployment*, examines trends in long-term unemployment and the characteristics of people who experience it.

The analysis reveals that the chance of becoming re-employed the following month decreases as the duration of unemployment increases. The analysis indicates that in 2014, about 35% of people who had been out of work less than 5 weeks found work in the next month, while about 11% of job seekers who had been unemployed for 1 year or longer became employed in the following month.

When considering age, about 44.6% of jobseekers aged 55 or older were unemployed for 6 months or longer, compared with 22.1% of jobseekers under age 25, as shown in Chart W-9 for 2014. This disparity between older and younger jobseekers increases as the duration of unemployment increases.

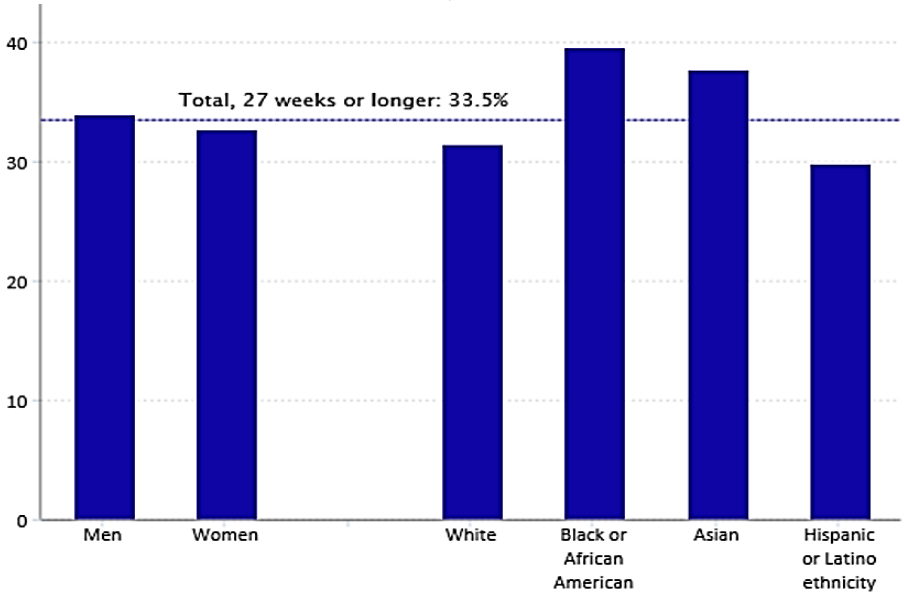
Chart W-9: Percent of the Long-Term Unemployed by Age
U.S., 2014



Source: U.S. Bureau of Labor Statistics

As Chart W-10 shows, the analysis documented that in 2014, 39.6% of unemployed Blacks or African American job seekers and 37.7% of unemployed Asians had been looking for work for 27 weeks or longer. In contrast, Whites and Hispanics were less likely to be unemployed long term (31.5% and 29.9% respectively). In the same analysis, men were slightly more likely than women to be unemployed 27 weeks or longer (34.0% versus 32.8%).

Chart W-10: Percent of the Long-Term Unemployed by Gender, Race and Ethnicity
U.S., 2014



Source: U.S. Bureau of Labor Statistics
http://www.bls.gov/spotlight/2015/long-term-unemployment/pdf/long-term-unemployment.pdf

Some workers in low-skilled industries are experiencing employment growth but not real wage increases. As Table 1 shows, wages in these growing sectors that employed millions of low-skilled have declined for workers in all of the top ten lower-wage occupations, including declines of more than 6% for personal care aides, restaurant cooks, food preparation workers, maids and housekeepers, and home health aides.

Wage Declines for the 10 Largest Occupations in the Bottom Quintile
U.S., 2009-2014

Occupation	Total employment 2014 (in thousands)	Median hourly wage, 2014	Change in real median hourly wage, 2009 to 2014
Retail salespersons	4,562.1	$10.28	-5.0%
Cashiers	3,398.3	$9.15	-3.9%
Combined food preparation and serving workers, including fast food	3,131.3	$8.84	-3.9%
Waiters and waitresses	2,445.2	$9.00	-4.8%
Janitors and cleaners, except maids and housekeeping cleaners	2,137.7	$10.97	-6.6%
Personal care aides	1,257.0	$9.82	-6.6%
Cooks, restaurant	1,104.7	$10.80	-8.9%
Maids and housekeeping cleaners	929.5	$9.66	-6.1%
Food preparation workers	850.5	$9.39	-7.7%
Home health aides	799.0	$10.27	-6.2%

Source: National Employment Law Project
http://www.nelp.org/content/uploads/Occupational-Wage-Declines-Since-the-Great-Recession.pdf

When it comes to college graduates, the economic recovery is presenting better opportunities. An analysis from Georgetown University's Center on Education and the Workforce, *Good Jobs are Back: College Graduates Are First in Line*, states that "good jobs", which is defined as jobs that at least pays $53,000 per year, dominated the recovery from the Great Recession.

Chart W-11: Good Jobs Filled by Educational Attainment
2010-2014 Recovery Period

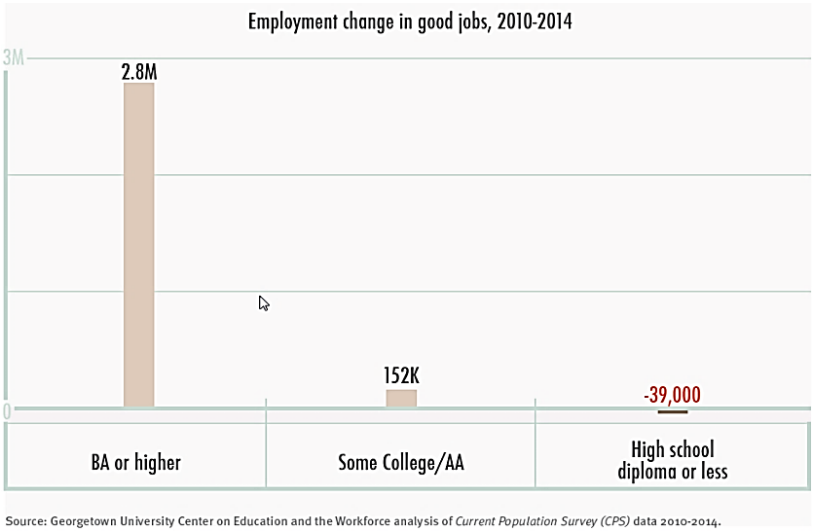


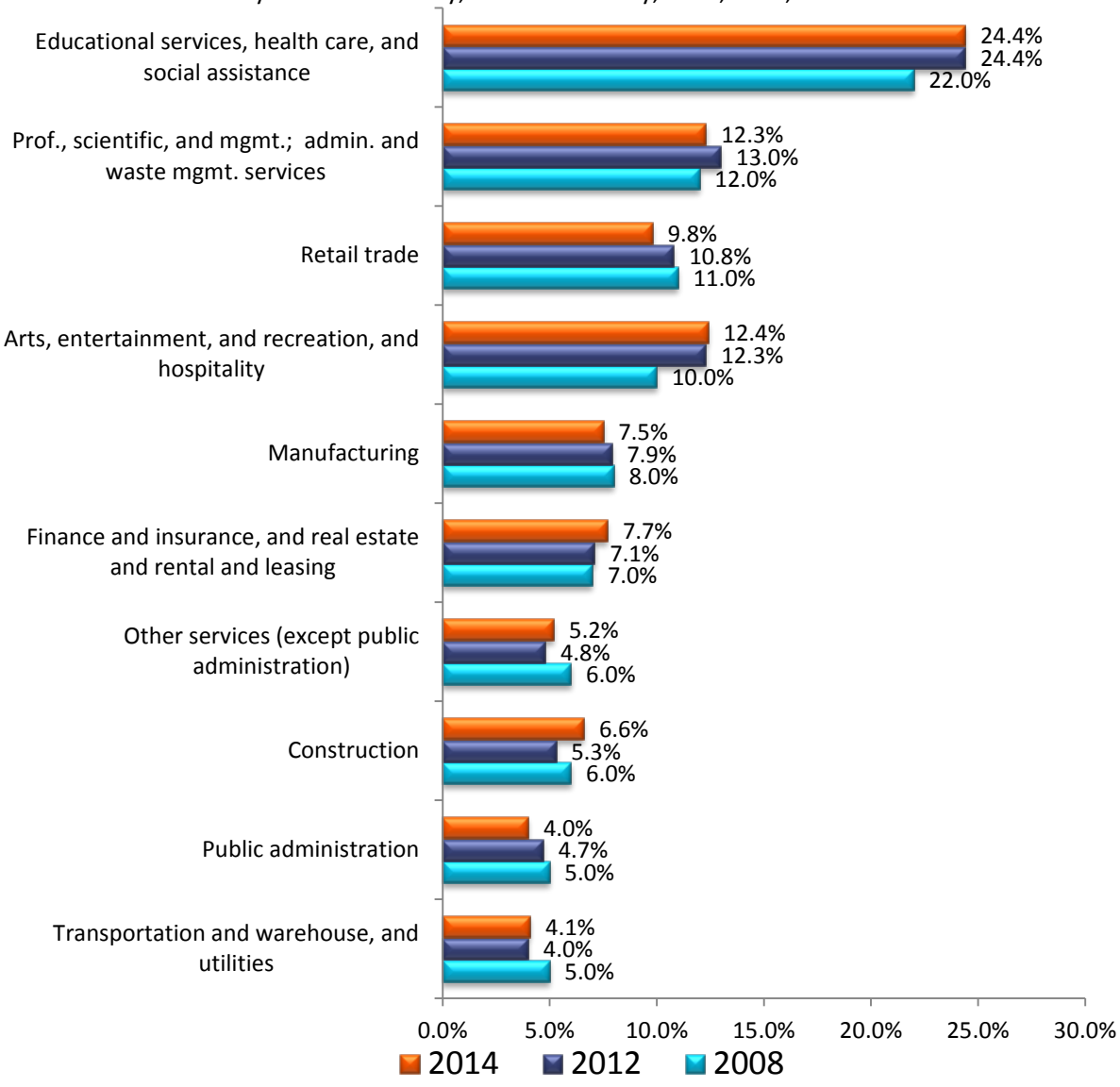
Chart W-11 shows that of the 6.6 million jobs the economy added between 2010 and 2014, 2.9 million or 44% were good jobs, and 2.8 million or 97% of those went to college graduates, according to the report. By contrast, workers with a high school diploma or less lost 39,000 good jobs.
https://cew.georgetown.edu/wp-content/uploads/Good-Jobs_Full_Final.pdf

Employment Leading Sectors

The Nashville economy continues to have a diversified economy that supports a balanced employment in all its sectors, and all sectors contribute to the area's growth. As shown in Chart W-12, in 2014 education, health care, and social assistance continued to be the leading industry categories since the Great Recession in Davidson County at 24.4% as it was in 2013.

According to the 2014 American Community Survey, among the more common occupations for the civilian employed population 16 years and over in Davidson County were management, business, science, and arts occupations (39.0%), service occupations (17.8%), sales and office occupations (25.1%), and production, transportation, and material moving occupations (11.1%).

Chart W-12: Percentage of Employed People 16 Years and Older
By Selected Industry, Davidson County, 2008, 2012, and 2014



Source: U.S. Census Bureau, 2008, 2012, and 2014 American Community Survey

Economic Opportunity

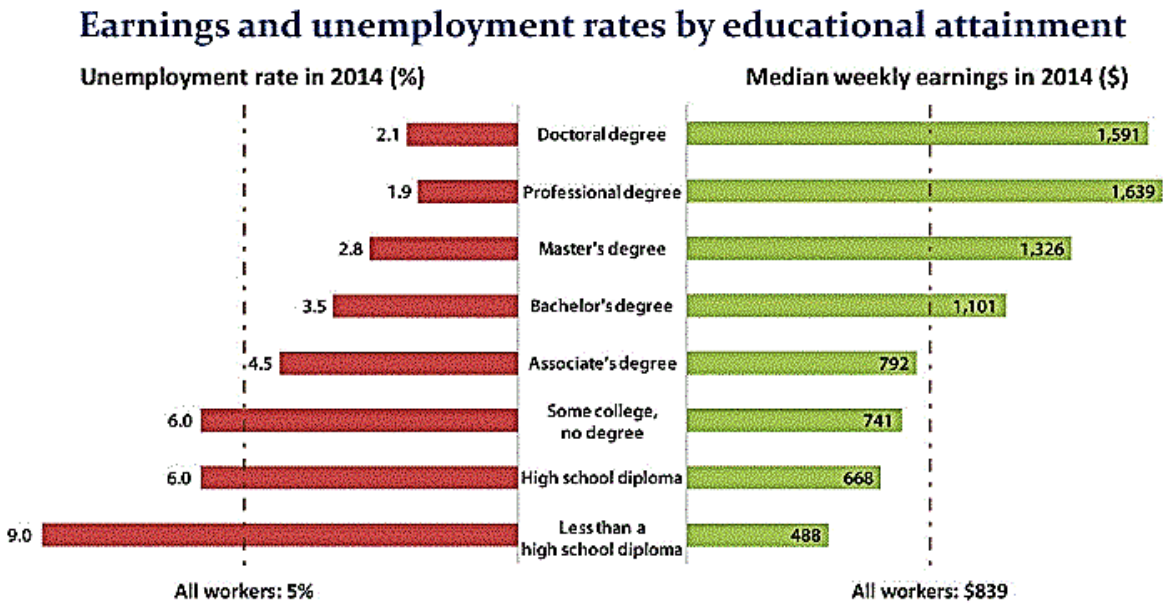
As described in previous Community Needs Evaluations, the labor market has gone through fundamental transformations, such as the introduction of new technologies, globalization that increased competition, and the decline of union influence at the work place. We have also documented the proliferation of low-wage jobs and the unreliable work schedules of some occupations in the service industry that ultimately result in lower earnings.

In addition, there is evidence that more jobs will be requiring post-secondary education or advanced specialized skills trainings. There are also many employers in some industries that are struggling to find qualified applicants for some jobs as we documented in previous needs evaluations. The way then for many workers to enhance their earnings is to seek training and work in industries with higher education and skill requirement.

More education pays on average, and those with higher levels of education earn more because it enhances the likelihood of obtaining high-paying jobs. Even when the Great Recession left many in the labor market with higher unemployment rates, the workers with higher educational attainment experienced lower unemployment rates compared to those with lower levels of education.

As Chart W-13 shows, in 2014 people with the highest educational attainment were the least likely to be unemployed and were more likely to attain higher earnings. For example, the unemployment rate for people with less than high school diploma was 9.0%, while the unemployment rate for people with a bachelor's degree was 3.5%.

Chart W-13: Earnings and Unemployment Rates by Educational Attainment
U.S., 2014



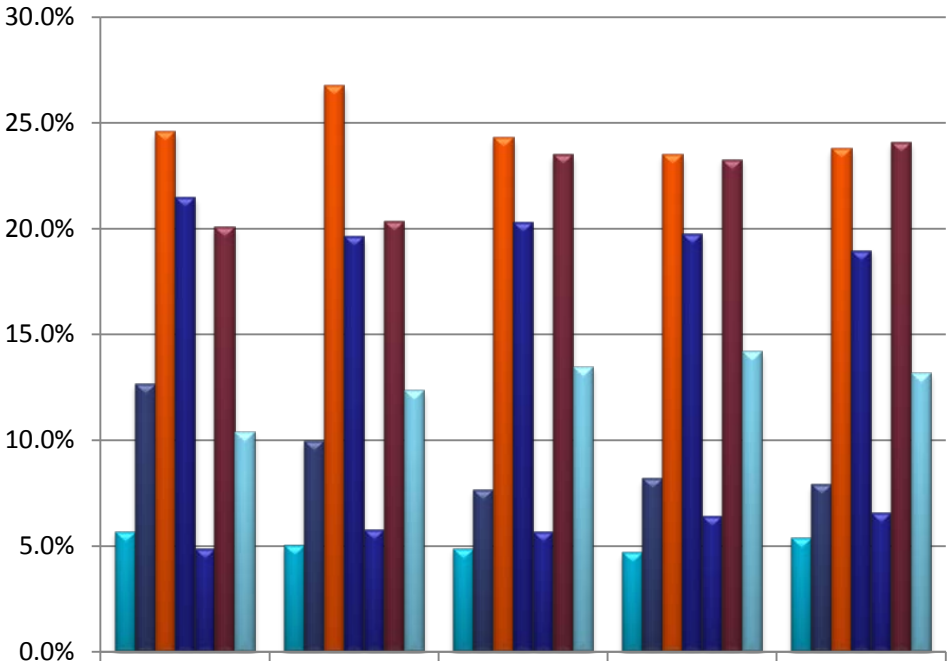
Note: Data are for persons age 25 and over. Earnings are for full-time wage and salary workers.
Source: Current Population Survey, U.S. Bureau of Labor Statistics, U.S. Department of Labor

Higher educational attainment is usually linked to higher earnings and enhances the likelihood for economic success. Chart W-13 shows the variation in median weekly earnings by level of educational attainment for workers aged 25 and older. In addition to the lower unemployment rate, median weekly earnings are higher for those with more education. The lowest median weekly earnings ranged from $488 for workers with less than high school, to the highest of $1,639 for those with professional degree.

Chart W-14 compares the percentage of people in Davidson County who attained specific levels of education by year. The percentage of people in Davidson County with less than a high school diploma decreased from 18.4% in 2000 to 13.3% in 2014.

The percentage of people with a bachelor's degree and higher increased from 30.5% to 37.3% from 2000 to 2014, which is the group that gained the most, an increase of almost 7%.

Chart W-14: Educational Attainment
Davidson County, 2000, 2005, 2012, 2013, and 2014

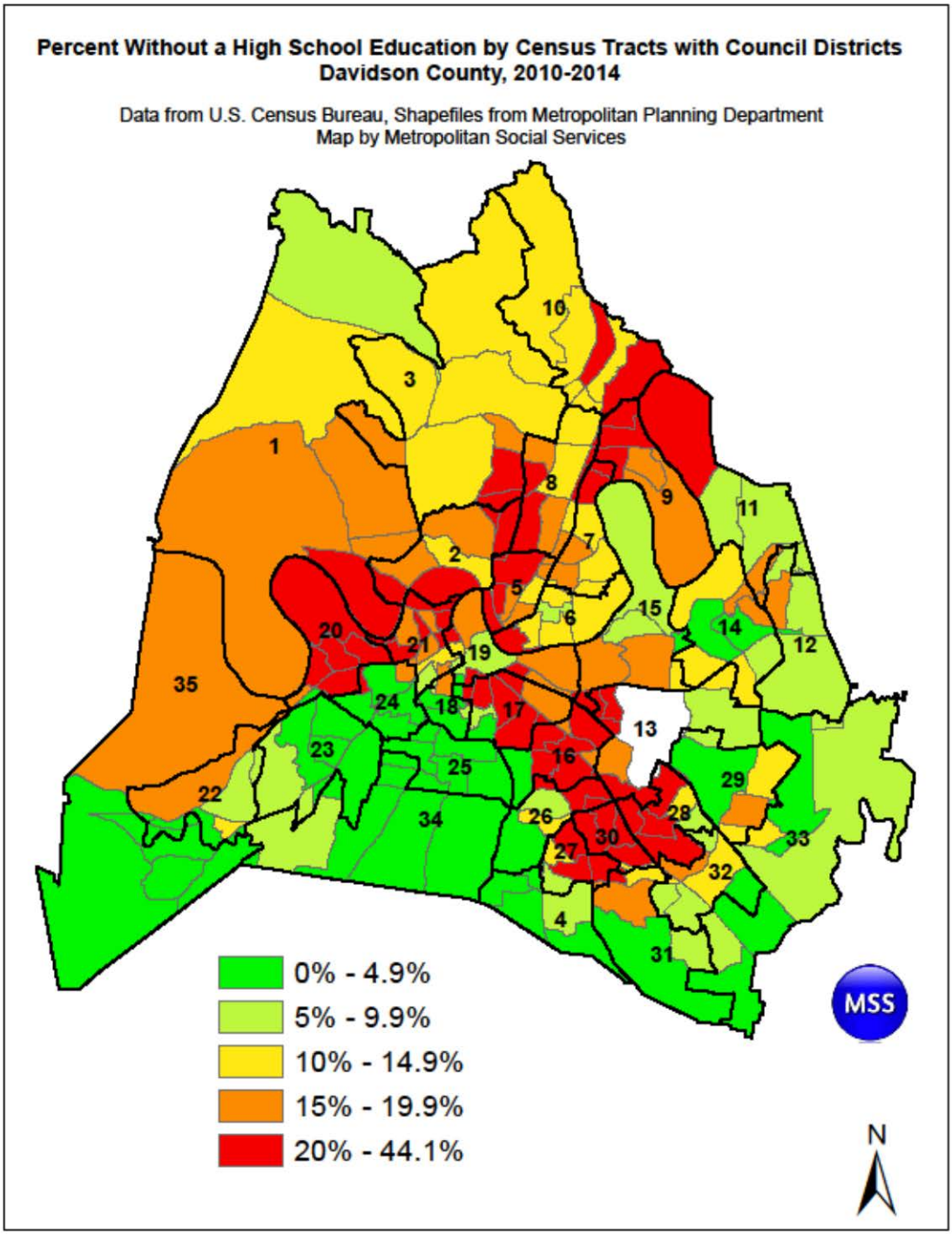


	2000	2005	2012	2013	2014
Less than 9th grade	5.7%	5.0%	4.9%	4.7%	5.4%
9th to 12th grade, no diploma	12.7%	10.0%	7.7%	8.2%	7.9%
High school diploma or equivalency	24.6%	26.8%	24.3%	23.5%	23.8%
Some college, no degree	21.5%	19.6%	20.3%	19.8%	19.0%
Associate's degree	4.9%	5.8%	5.7%	6.4%	6.6%
Bachelor's degree	20.1%	20.4%	23.5%	23.3%	24.1%
Graduate or professional degree	10.4%	12.4%	13.5%	14.2%	13.2%

Source: U.S. Census Bureau (2000 Census, 2005, 2012, 2013, and 2014 American Community Survey)

The map below shows the percentage of people without a high school education by Census Tracts with Metropolitan Council Districts,, using data from the 2010-2014 American Community Survey 5-Year Survey. There are 35 Council Districts compared with 161 Census Tracts, so data from Census Tracts show small areas with higher percentage of people with no high school education. The percentage of people with no high school

education ranges from below 1% in some Census Tracts to 44.1% in the Census Tract with the highest percentage of no high school education. The 2014 American Community Survey estimated that among Davidson County's population over age 25, 13.3% do not have a high school education (more than 60,000 people).



The map below shows the percentage of people who have a bachelor's degree or more by Census Tracts with Metropolitan Council Districts. There are 35 Council Districts compared with 161 Census Tracts, so data from Census Tracts show small areas with lower percentage of people with at least a bachelor's degree. The

percentage of people with a bachelor's degree ranges from 3.4% in one Census Tract to 87.4% in the Census Tract with the highest percentage of people with at least a bachelor's degree.

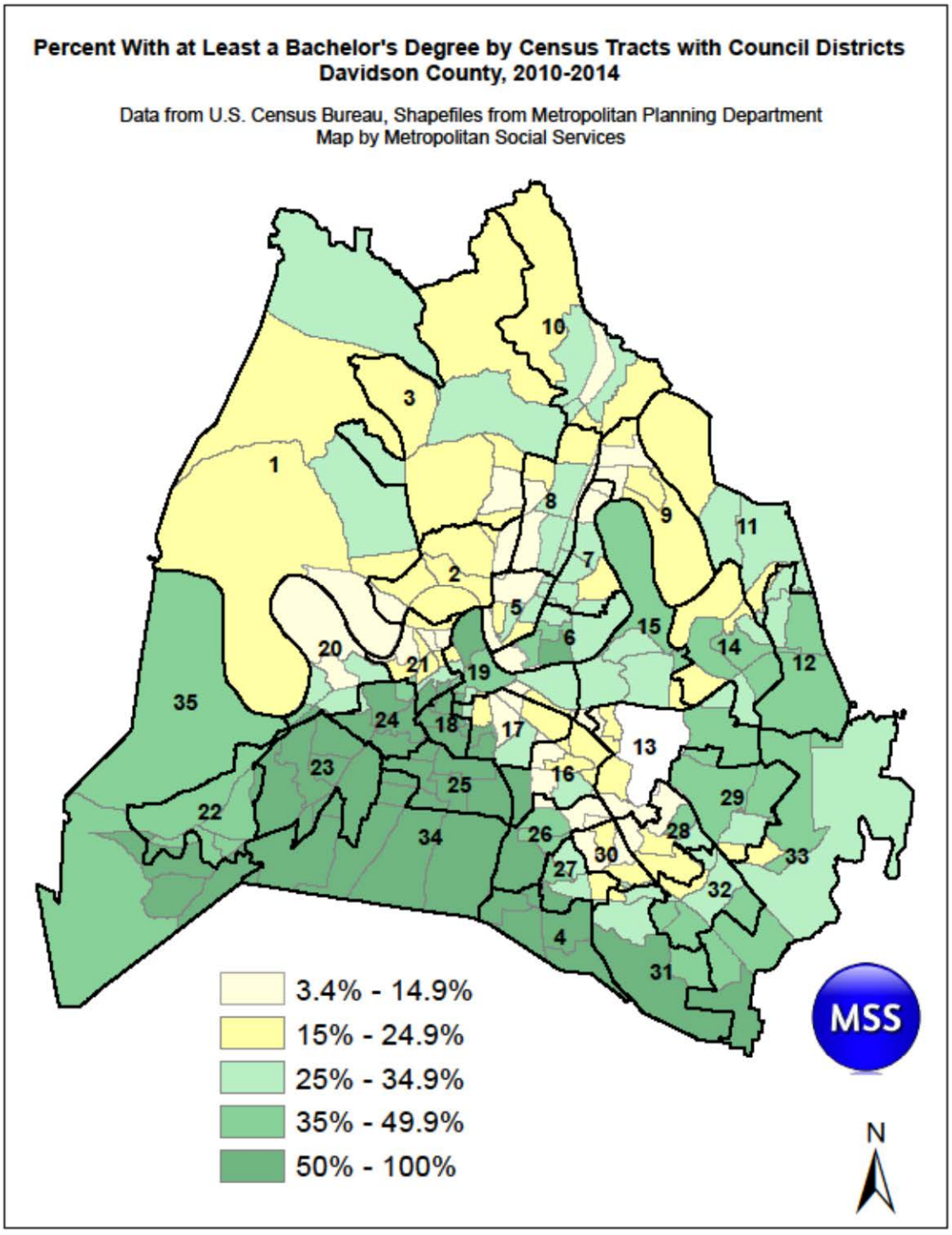
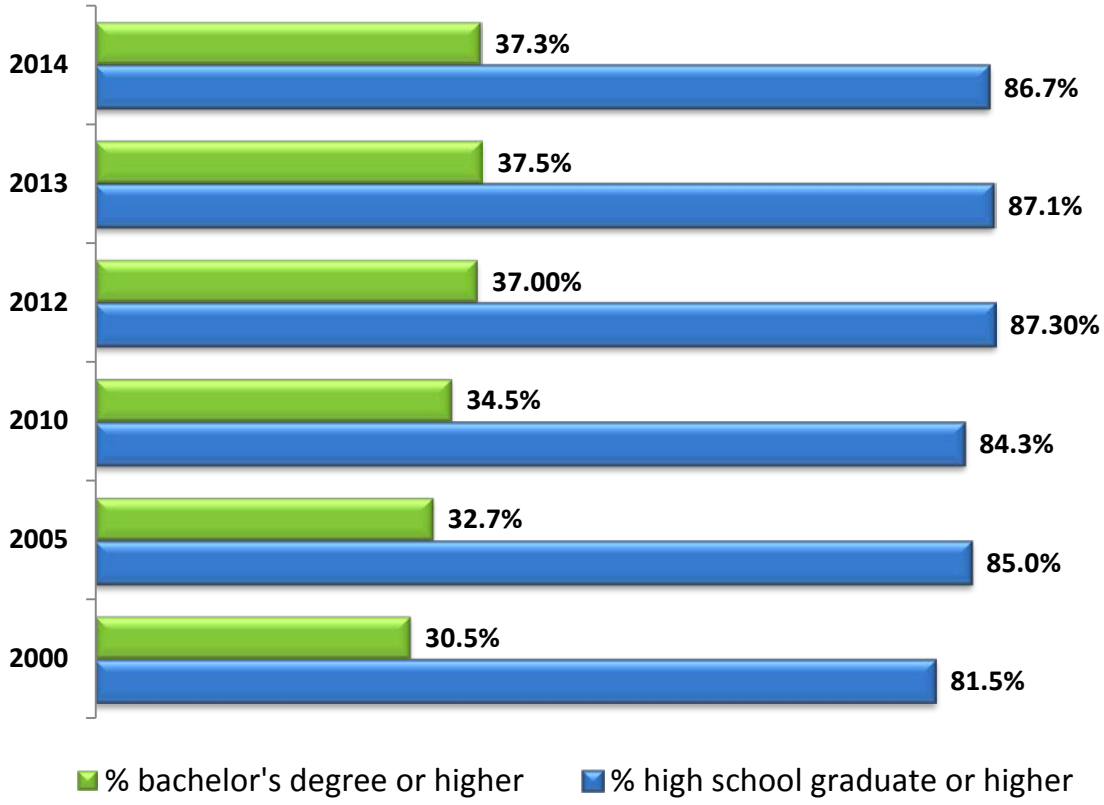


Chart W-15 groups the educational levels together to compare the difference between high school graduates and college graduates to demonstrate the changes the years of 2000, 2005, 2010, 2012, 2013 and 2014.

Chart W-15: Educational Attainment
Davidson County, 2000, 2005, 2010, 2012, 2013, and 2014



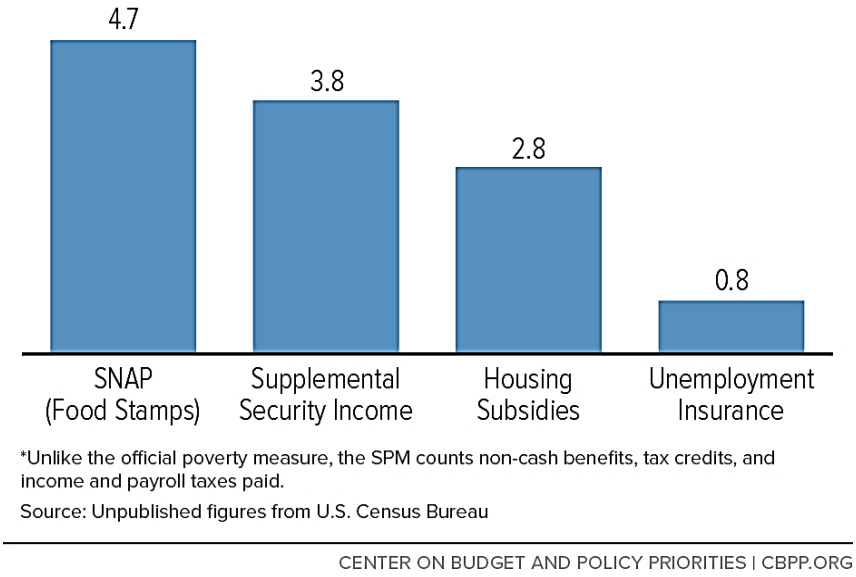
Source: U.S. Census Bureau (2000 Census, 2005, 2010, 2012, 2013, and 2014 American Community Survey)

Enhancing the skills and educational attainment of low-income households that would lead to higher earnings should be a priority. Emphasis should be placed efforts that assist these low-income households maximize the utilization of public benefits and other programs to help these households escape from poverty.

According to an analysis by the Center on Budget and Policy Priorities (CBPP), the safety net programs kept millions out of poverty in 2014. Chart W-16 shows that SNAP (formerly food stamps) lifted about 4.7 million, Supplemental Social Income (SSI), which assists the elderly and individuals with disabilities, lifted 3.8 million, rent subsidies lifted 2.8 million, and unemployment insurance benefits lifted about 800,000 out of poverty.

The same analysis reported that working family tax credits – the Earned Income Tax Credit (EITC) and the low-income portion of the Child Tax Credit lifted about 10 million people out of poverty, including more than 5 million children.

Chart W-16: Number of persons safety net programs lifted out of poverty in 2014
U.S., 2014



http://www.cbpp.org/blog/safety-net-programs-lift-millions-from-poverty-new-census-data-show

Grassroots Community Survey

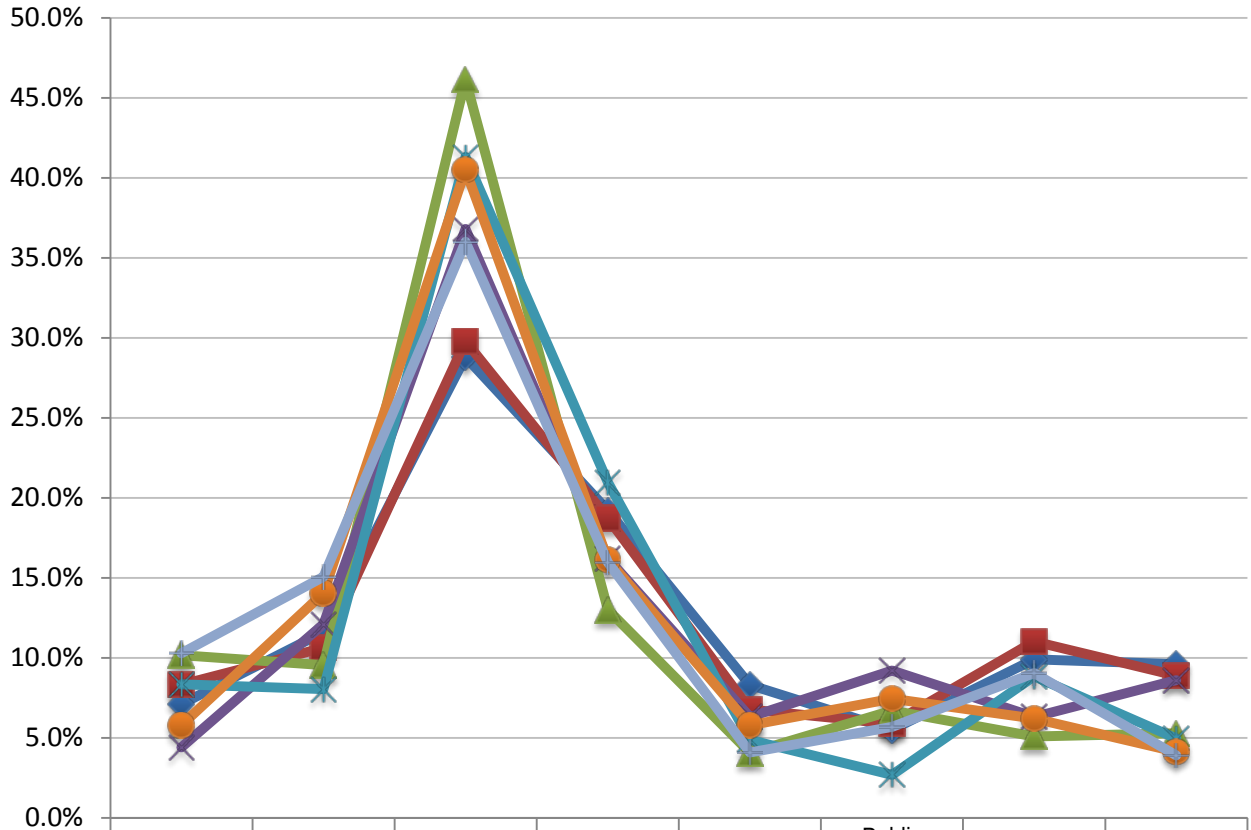
Despite a growing economy and an improved labor market, Help Finding a Job/Job Placement is still the most frequently identified category in the Workforce and Economic Opportunity section of the 2015 Grassroots Community Survey. As documented in several places in this document, challenges remain because of long-term unemployment, stagnant wages, skills gaps, significant barriers for young workers, people with disabilities and those with low educational attainment face in securing employment. Finding gainful employment is still a priority for many low-income families as they face reduced opportunities for good paying jobs.

As shown in Chart W-17, 36.0% of respondents to the 2015 Grassroots Community Survey, when asked to identify the greatest needs in the Workforce and Economic Opportunity, chose Help Finding a Job/Job Placement, lower than it was in 2014. As changes in technology, globalization, diminished unions influence, and stagnated wages worsened the job prospects for workers possessing relatively outdated or few skills, low-skilled workers are facing difficult to attain a foothold in the labor market. There are also businesses struggling to find skilled workers. Because of the economic realities these workers are facing, it makes it clear that securing meaningful employment is their main priority. Providing specific assistance to help workers find a job to meet their skills would significantly improve their prospect of obtaining a job or upgrading a skill that is in demand.

Although only 9.0% of respondents selected Training About Money and Finances category, there is a great need for helping those who struggle to meet their financial obligations. There was a slight increase in 2015 in the number of respondents who identified the need for Adult Education, from 14.0% to 15.1%, an indication of the importance of enhanced need for educational attainment.

Chart W-17 Greatest Unmet Need in Workforce & Economic Opportunity

Grassroots Community Survey, 2009-2015



	College or Junior College	GED Assistance, Adult Education	Help Finding a Job/Job Placement	Job Training	Life Skills Counseling, Case Management	Public Benefits, including SSI, SSA, TANF, etc.	Training About Money and Finances	Vocational Training
2009	7.1%	11.6%	28.8%	19.2%	8.3%	5.5%	9.9%	9.6%
2010	8.3%	10.6%	29.8%	18.7%	6.8%	5.9%	11.0%	8.9%
2011	10.2%	9.6%	46.1%	13.0%	4.1%	6.7%	5.1%	5.3%
2012	4.4%	12.1%	36.8%	16.2%	6.3%	9.2%	6.3%	8.6%
2013	8.3%	8.0%	41.3%	21.0%	4.9%	2.7%	8.8%	5.0%
2014	5.8%	14.0%	40.5%	16.1%	5.8%	7.4%	6.2%	4.1%
2015	10.3%	15.1%	36.0%	16.0%	4.1%	5.7%	9.0%	3.9%

Source: 2009-2015 Metro Social Services Grassroots Community Survey

Connections to Workforce & Economic Opportunity

When household members are unable to secure employment that pays adequate wages or experience stagnant wages, they are forced to make difficult choices between spending on housing and related bills, health care, meals, daycare, and have a little bit saved for emergencies.

Housing

Despite an improving economy, but many hourly wages are low or stagnant at best. According to the 2014 American Community Survey estimates, 50% of Davidson County workers earned $28,296. However, rents across the county keep rising.

A new report by the National Low Income Housing Coalition points that a worker in Tennessee needs to earn $14.41 per hour to rent a two-bedroom apartment, while Tennessee leads the nation in the number of people earning the minimum wage. Housing is out of reach for many who earn less than that wage.
http://nlihc.org/oor

When housing becomes beyond reach for many low and middle-wage workers, it negatively impacts some essential workers, including teachers, daycare workers, police officers, fire fighters, to mention a few. When essential workers are pushed farther from residing close to work, it negatively affects their morale, job satisfaction, attendance, performance, and overall workforce stability.

Child Development and Health

Most Americans who have health insurance are covered through employer-sponsored health plan. However, workers in low-wage jobs are the least likely to be provided health care coverage for themselves and their families. Due to the high cost of health insurance premiums, many go without insurance. Other benefits such as sick pay, family and maternity leave, and retirement benefits are close to nonexistent. That leads to many workers who are not able to get proper treatment in the event of illness.

According to the Centers for Disease Control and Prevention, productivity losses linked to absenteeism cost employers $225.8 billion annually in the United States, or $1,685 per employee. Healthy and safe workforce is vital to the economy.
http://www.cdcfoundation.org/pr/2015/worker-illness-and-injury-costs-us-employers-225-billion-annually

Children growing up in low-income families have worse health and educational outcomes, are more likely to live in single-parent families, and are more likely to experience violent crime compared with children in more affluent families. Low-income children have fewer opportunities for upward mobility, and are more likely to have low quality jobs and lower earnings when they reach adulthood. Therefore, in many low-income families, poverty is transmitted from parents to children, from one generation to the next.

Hunger

Unemployed people or those on low wage jobs experience hunger as there is few resources left after paying basic bills. There is lost productivity at the work place associated with hunger. Malnourished workers have a compromised immune system that would be susceptible to diseases. The Center for American Progress estimated that in 2010 the total cost burden of hunger in America was $167.5 billion. Hunger and food insecurity lead to poor educational outcomes and lost lifetime earnings for children from these households. Hungry children lack the concentration, attendance, and the discipline needed to succeed in school.
https://www.americanprogress.org/wp-content/uploads/issues/2011/10/pdf/hunger_paper.pdf

Promising and Evidence-Based Practices

This section presents exemplary initiatives, models, programs, and organizations that introduce and implement a practice that is evaluated or producing promising opportunities for high paying jobs or improved educational attainment and can be replicated.

The Plus 50 Initiative

The website of The Plus 50 Initiative, describes it as a project of the American Association of Community Colleges that invests in community colleges to create a workforce development program model for community college students 50 and older. Responding to the Great Recession's detrimental employment and financial impact on older workers, the initiative focused on workforce training and preparing these impacted workers for new careers. However, community colleges were not prepared to meet the unique needs presented by this demographic group. As a result, The Plus 50 Initiative assisted community colleges develop and replicate workforce models designed for this group.
http://plus50.aacc.nche.edu/Pages/Default.aspx

The original funding to develop the initiative came from the Atlantic Philanthropies and the Lumina Foundation, and the project began with 15 colleges. The Deerbrook Charitable Trust is the third foundation to support the initiative in order to replicate at 100 new colleges. According to the 2015 Plus 50 Initiative Report, since 2008, Plus 50 has made grants to 138 colleges, which collectively have enrolled 37,494 plus 50 students in workforce development programs.
http://plus50.aacc.nche.edu/Documents/Plus50_Programs_in_Practice_2015.pdf

The initiative has changed the way colleges provide trainings that are aligned with talent needs of employers, which affected the mindset of older workers who had no desire to return to school as they realized effective ways of upgrading their skills. The Initiative has the following program components:

- Outreach
- Math and English Refresher Courses
- Computer Courses
- Plus 50 Coaches or Advisors
- Plus 50 Professional Development for Instructors

Jackson State Community College is the only one in Tennessee that joined the Plus 50 Encore Completion Program in 2013. The College is working to assist adults age 50 and over in completing degrees or certificates in high-demand occupations that give back to the community in education, social services, and health care. The college plans to prepare older adults for careers in phlebotomy, electrocardiogram technology, and clinical medical assistance.
http://www.jscc.edu/

WorkAdvance Model

Traditionally, workforce development programs focused on initial employment placement to meet performance measures. The labor market has experienced many transforming phases where many workers have seen long-term unemployment, stagnant wages, and no more mobility opportunities in many industries. It became imperative that many job service providers re-aligning their services with the new realities in the labor market.

Some of the early initiative focused on specific high-growth high-demand sectors in order to achieve both higher job placements and wages. Despite its early successes, post-employment challenges remained an impediment to long-term stable earnings.

WorkAdvance is part of the New York City Center for Economic Opportunity Center, which aims to increase economic opportunities for low-income people. The Manpower Demonstration Research Corporation (MDRC), which evaluated WorkAdvance, describes it "as a model that integrates the most promising features of two especially important areas of workforce policy: sectoral strategies, which seek to meet the needs of both workers and employers by preparing individuals for quality jobs in specific high-demand industries or occupational clusters and job retention and career advancement strategies, which seek to improve workers' prospects for sustained employment and upward mobility". It is an innovative sector-focused career opportunity for low-skilled workers. http://www.mdrc.org/publication/meeting-needs-workers-and-employers

To combine the two strategies, the WorkAdvance model offers the following sequence of sector-focused program components to participants for up to two years after enrollment:

- Pre-employment and career readiness services
- Occupational skills training
- Job development and placement
- Postemployment retention and advancement services

WorkAdvance programs are currently operated by four organizations, two in New York City, one in Tulsa, and one in Cleveland that focus on a variety of sectors and industries.
The WorkAdvance program operations and evaluation are funded through the federal Social Innovation Fund (SIF), a public-private partnership administered by the Corporation for National and Community Service.
http://nawrs.org/wp-content/uploads/2015/09/3A-Hendra-WorkAdvance.pdf
http://www.mdrc.org/sites/default/files/WorkAdvance_CEO_SIF_2014_FR.pdf

Pink to Green

The Great Recession left behind a labor market that is not producing enough jobs to expedite the economic recovery, proliferation of low-wage industries, and stagnant wages that does not afford many workers to meet ends. In addition, women dominate some of these occupations, such as retail sales, cashiers, home health aides, and hospitality.

One of the bright spots in this evolving economy is the emerging green economy, which takes into consideration producing energy-efficient, safe, and healthy products. The green economy could be a potential career path to women seeking occupations with improved earnings. However, women are not well represented in traditionally male dominated occupations such as building trades and advanced manufacturing by which the green economy promises.

In order to help advance women economically and experience increased financial stability, workforce development practices for women in non-traditional occupations, especially in green jobs are promising. However, barriers that historically prevented women from these opportunities must be removed. Studies document that gender stereotypes, lack of knowledge about these jobs, lack of preparatory skills to be accepted into the apprenticeships, hostile work conditions, and hiring bias are significant obstacles to increasing women's representation in these occupations that lead to higher earnings and economic security.

https://www.kansascityfed.org/~/media/files/publicat/community/workforce/transformingworkforcedevelopment/book/transformingworkforcedevelopmentpolicies.pdf?utm_source=Atlanta+Fed+E-mail+Subscriptions&utm_campaign=23da1bad6b-partners-update-digest-2015-10-26&utm_medium=email&utm_term=0_b7a27f0b85-23da1bad6b-258655577

To break these barriers, the Wider Opportunities for Women (WOW) created Pink to Green Toolkit for the GreenWays Initiative, which is designed to help training programs for green jobs add a gender lens to prevent patterns of occupational segregation. The Toolkit has the following elements:

- Tools to help workforce development providers assess their capacity for recruiting, assessing, placing, and retaining women in nontraditional occupations
- Ways to assist training providers in developing relevant plans, processes, and curricula for recruiting and retaining women in nontraditional occupations
- Guidelines for case management of women and matters related to the unique wraparound and support services required for women to advance on a career path in nontraditional occupations
- Tools to assist training programs in understanding and linking to organized labor, apprenticeships, and major employers to ensure women have access to jobs post-training.

http://www.jff.org/initiatives/greenways/pink-green-toolkit-adding-gender-lens-green-jobs-training-programs
http://www.jff.org/sites/default/files/iniatiatives/files/GW_onepager_112113.pdf

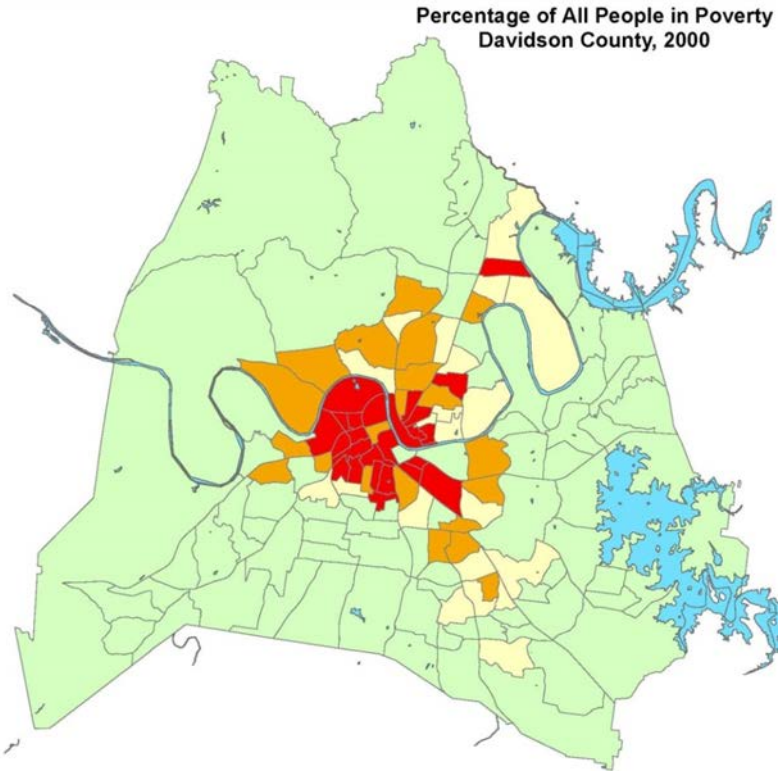
College Match Program

By the end of this decade, employment in jobs that require post-secondary education will grow rapidly than it has ever been. Higher educational attainment translates into higher income, and a pathway into the middle class. Despite significant investments to make higher education accessible and affordable, students from low-income families do not enroll and graduate at the same rate as those from higher and middle-income families.

To improve the chances of students from low-income households to complete college and increase their earnings, Manpower Demonstration Research Corporation (MDRC), an education and research policy organization, designed the College Match Program that helps low-income students make good college choices. From 2010 to 2014, MDRC and a group of partners developed and implemented the College Match Program in Chicago and New York City.

MDRC designed a guide that is designed for counselors, teachers, and advisers who work with high school students from low-income families and students who are the first in their families to pursue a college education. It offers strategies for helping these students identify, consider, and enroll in “match” colleges. These selective colleges are a good fit for students based on their academic profiles, financial considerations, and personal needs.
http://www.mdrc.org/publication/search-match
http://www.mdrc.org/sites/default/files/CollegeMatch_2015_UsersGuide.pdf

COMING SOON! - Later in 2016, Metro Social Services will release a separate document with data by Council Districts and Census Tracts that will show data by geographic distribution.



Poverty Comparison Maps

These maps compare poverty by Census Tract in 2000 with poverty for 2010-2014, based on data from the U.S. Census Bureau. (Davidson County has 161 Census Tracts.)

Areas in red have more than 20% of the residents in those census tracts who lived in poverty.