

The Florida Department of Health in Leon County has several assessment documents corresponding to the Mobilizing for Action through Planning and Partnerships (MAPP) methodology they used. Together these documents form their community health assessment. Please see below for each document's page number.
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Next, a prioritization process was conducted to further narrow the scope of the Community Health Improvement Plan in order to make substantial progress on each issue more feasible. Each Strategic Health Issue was considered, with all of its components included.

| Obesity and Chronic Disease | Health Disparities | Access to Health Care |
| :---: | :---: | :---: |
| - Overweight/ obesity <br> - Hypertension/stroke <br> - Diabetes <br> - Heart disease <br> - Cancer | - HIV <br> - STDs <br> - Influenza/ pneumonia <br> - Infant mortality <br> - Cancers (mortality for breast, prostate, colorectal) <br> - Diabetes <br> - Access to health care | - Access to primary care for low income populations <br> - Dental care <br> - Mental health/counseling <br> - Substance abuse treatment <br> - Prescription medications |

The MAPP Steering Committee used the World Café process to create an inventory of existing resources and programs deThe MAPP Steering Committee used the World Café process to create an inventory of existing resources and programs de-
voted to each of these issues areas. Small groups rotated through each of five tables, one for each issue area. This exercise voted to each of these issues areas. Small groups rotated through each of five tables, one for each issue area. This exercise
helped participants to develop a more complete picture of the needs, assets, and existing resources dedicated to addressing each issue.

Finally, each member voted on his or her top issue; three were identified through the process as being the highest priority and worthy of inclusion in the Community Health Improvement Plan. Those final issues were:

## - Obesity and chronic disease <br> - Health disparities

- Access to health care

Important strategies to employ in addressing these issues will be: 1) improve health education and communication and 2) strengthen partnerships and collaboration

This publication represents four phases of the MAPP Community Health Needs Assessment. Phase Five of the MAPP model continues with planning through the development of goals and strategies for the key strategic issues identified. Over the next several months the Capital Coalition for Health will need to agree upon goals for each strategic issue and brainstorm posseveral months the Capital Coalition for Health will need to agree upon goals for each strategic issue and brainstorm pos-
sible strategies to reach each goal. Through a series of further community conversations among partners and led by the Leon County Health Department, broad strategies will be defined and leadership for each strategy to be determined. The results of this process will be presented in the Leon County Community Health Improvement Plan.

## LEON COUNTY Community Health Assessment

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2012-2017
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## Executive Summary

Leon County Health Department (LCHD), founded in 1931, provides various public health services throughout the county to ensure the health and safety of all residents. Services include vital statistics, epidemiology and disease control, environmen tal health services, emergency preparedness, social services, Women, Infants and Children (WIC) supplemental nutrition program, and community health promotion including tobacco and chronic disease prevention. Clinical services (provided in clinics, mobile units, and schools) include family planning; pregnancy testing; screening for sexually transmitted diseases; im munizations; cancer screenings; tuberculosis testing and prevention; dental care; and school health.

In the spring of 2011, LCHD initiated a county-wide, community health assessment that would determine public health priorities for the next three to five years. The MAPP model was chosen to guide this comprehensive effort. MAPP, the acronym for "Mobilizing for Action through Planning and Partnerships," is recommended by many national and state public health organizations including the National Association for City and County Health Officials (NACCHO) and the Florida Department of Health as a best practice for health assessment and planning. MAPP is built on principles of broad community engagement and strategic planning, which prepare community partners to act together to address prioritized health issues and improve community health

LCHD engaged two local health councils to assist with the community health assessment process. Health Planning Council of Northeast Florida facilitated the overall assessment and community engagement processes, and Big Bend Health Council or vided expertise on local health status data. To begin the process, a Core Planning Team was recruited from within the LCHD. This group worked together throughout the year-long process to assure community involvement and to provide the public health agency perspective. A Community Kick-Off Event was held in August 2011 with over 100 participants from the community. At this event, an overview of community health assessment and MAPP was provided a group process was conducted
 Steering Committee and various subcommittees.

The MAPP Steering Committee was comprised of over forty individuals representing diverse interests and organizations. This group of dedicated individuals met approximately monthly from June 2011 through May 2012 to determine direction for the process, assist with data collection, and review assessment data. This group finalized the name of the MAPP effort (Capital Coalition for Health) along with the tagline, vision, and values of the group.

## Capital Coalition for Health: Forging Strong Partnerships to Promote Healthy Living

Vision: Leon County communities will distinguish themselves as collaborative, civically-engaged and accountablecommunities where residents and leaders support health-based policies that ensure the healthy choice is the easy ccess to

## Values: Leon County:

- Will invest in the health and well-being of all residents
- Will model healthy and active lifestyles
- Will advocate for equitable and transparent health-based policies

Once the Capital Coalition for Health was established, the assessment work began. The MAPP process is comprised of four distinct assessments:

- Big Bend Health Council and Health Planning Council of Northeast Florida gathered secondary data on a variety of indicators of community health status. Leon County measures were compared to measures for the state of Florida as a whole and trends were considered to understand the how the measure has changed over time. The MAPP Steering
major findings were discussed. The result is a comprehensive Community Health Status Assessment which describes population demographics, socioeconomic characteristics, and community health status, including health care access and utilization information
- Next, the coalition set out to understand what were the perceptions and opinions of community residents as part of the Community Themes and Strengths Assessment. A Community Survey was developed and disseminated broadly to adults via online survey posted on websites and pushed out through email contacts. Paper surveys were completed at various events and through partner organizations. Roundtable discussions began as the survey process was coming to a close. Small groups of community members participated in facilitated discussions that aimed to delve deeper into community health and quality of life issues.
- The MAPP Steering Committee developed a list of key forces that impact, or are likely to impact, the health of Leon County residents. This Forces of Change Assessment was completed through a group process that prioritized the top forces and then identified potential opportunities and/or threats associated with each of the top forces
- Finally, the Local Public Health System Assessment was completed in a three-step process that drew on the experiences and opinions of the Core Planning Team, MAPP Steering Committee and additional community partners, and subject matter experts within the local public health system.

The findings from all four assessments were synthesized and then reviewed by the MAPP Steering Committee.

## Health Status Assessment

Chronic diseases (diabetes, heart, cancer)
Risk factors (obesity, hypertension)
Health disparities by SES
Motor vehicle accidents
Infant mortality
Childhood asthma STDs and HIV/AIDS

## Gang violence

Binge drinking
Influenza/pneumonia in elderly

## Local Public Health System

 AssessmentEducate and empow
people about health
Mobilize community partnerships
Develop policies/plans
Link to personal health services Workforce development: Leadership
Evaluation of health services

Themes and Strengths Assessment

1. Obesity and chronic disease
2. Health disparities
3. Access to health care

Chronic diseases (diabetes, obesity) Substance abus Substance abuse
Violence STDs
Access to care (esp. dental behavioral health) Quality of advanced care
has low regard Disparity in quality of life
by area of town Improved health communications

## s

## Forces of Change Assessment

Chronic diseases and risk factors
Access to care
Transportation
Lack of partnership and cooperation Economic crisis/child poverty increasing Health disparities by SES
Elderly population and needs are increasing

## LEON COUNTY PROFILE



Leon Country encompasses 702 square miles in area, of which 667 square miles is land and 35 square miles of water. Located within Florida's panhandle, Leon Country is home to Florida's capital, Tallahassee, which was established in 1824. Leon County is one of eight counties in North Florida that make up the Big Bend area. Grady County, Georgia lies to the north of Leon County, with Wakulla County to the south, Jefferson County to the east, and Gadsden County and Liberty County to the west. The city of Tallahassee is the only incorporated municipality in the county and is also the largest city in Florida's panhandle. Leon County forms the nucleus of the Tallahassee, Florida Metropolitan Statistical Area.


## Population Characteristics

The 2010 U.S. Census estimated the entire county population to be 274,900 people, a 15 percent increase over estimates from the 2000 U.S. Census. The population is projected to grow by almost 10,000 people by the year 2015 . Almost two-thirds of Leon County's population lives within the Tallahassee city limits.

Figure 1: Population Estimates


Source: Florida Demographic Estimating Conference, January 2010 and the Florida Demographic Database

## AGE

Leon County has a very high proportion of younger residents, compared to Florida. Twenty-six percent of residents in Leon County are between 15 and 24 years of age, compared to 13 percent statewide. Likewise, Leon County has a lower proportion of older residents, with only 9 percent aged 65 or older, compared to 17 percent statewide. Table 1 shows the population breakdown by broad age ranges, with Figure 2 illustrating these similarities and differences between Leon County and the state.

Table 1: 2010 Age Distribution for Leon County

| Age | Leon County | Florida |
| :---: | :---: | :---: |
| $0-14$ | $16 \%$ | $17 \%$ |
| $15-24$ | $26 \%$ | $13 \%$ |
| $25-44$ | $26 \%$ | $25 \%$ |
| $45-64$ | $23 \%$ | $27 \%$ |
| $65+$ | $9 \%$ | $17 \%$ |

[^0] the Florida Demographic Database.

Figure 2: 2010 Age Distribution for Leon County


Source: Florida Demographic Estimating Conference, January 2010 and the Florida Demographic Database.

## RACE and ETHNICITY

The racial composition of Leon County's population is summarized in Table 2. Approximately 63 percent of the population is White, 30 percent is Black, and 7 percent of the population is categorized as identifying with a different race. Leon County has a large proportion of Black individuals at 30 percent, compared to 16 percent of Florida. While the Hispanic population in Leon County has grown since 2000, it comprises only 5.6 percent of the total population, compared to 22.5 percent of the Florida population (Table 3).

Table 2: Leon County Population by Race

| Race | Leon County |  | Florida |  |
| :---: | :---: | :---: | :---: | :---: |
|  | $\mathbf{2 0 0 0}$ | $\mathbf{2 0 1 0}$ | $\mathbf{2 0 0 0}$ | $\mathbf{2 0 1 0}$ |
| White | $66 \%$ | $63 \%$ | $78 \%$ | $75 \%$ |
| Black | $29 \%$ | $30 \%$ | $15 \%$ | $16 \%$ |
| Other | $5 \%$ | $7 \%$ | $7 \%$ | $9 \%$ |
| Total | $100 \%$ | $100 \%$ | $100 \%$ | $100 \%$ |

Source: U.S. Census Bureau, American FactFinder

Table 3: Leon County Population by Ethnicity

| Ethnicity | Leon County |  | Florida |  |
| :---: | :---: | :---: | :---: | :---: |
|  | $\mathbf{2 0 0 0}$ | $\mathbf{2 0 1 0}$ | $\mathbf{2 0 0 0}$ | $\mathbf{2 0 1 0}$ |
| Hispanic <br> or Latino | $3.5 \%$ | $5.6 \%$ | $12.5 \%$ | $22.5 \%$ |
| Not Hispanic <br> or Latino | $96.5 \%$ | $94.4 \%$ | $87.5 \%$ | $77.5 \%$ |
| Total | $100 \%$ | $100 \%$ | $100 \%$ | $100 \%$ |

Source: U.S. Census Bureau, American FactFinder

## Social and Economic Characteristics

## EDUCATION

The National Governors Association (NGA) method of calculating graduation rates (which is becoming the standard method nationwide) includes both standard and special diploma recipients as graduates but excludes GEDs as graduates. In addition, students who transfer to adult education are not included in this calculation (Figure 3).

The high school graduation rate for Leon County Public Schools for 2010-2011 was 84.8 percent, compared to 80.1 percent in Florida. This rate has steadily increased from 72.7\% in the 2006-2007 school year.

Figure 3: NGA Graduation Rates for Leon County and Florida


Source: Florida Department of Education, School Indicator Report

Figure 4 below shows the educational attainment of Leon County residents ages 25 and older. Leon County has a dramatically higher proportion of individuals with a bachelor's degree or higher at 42.4 percent, compared to the state's at 25.8 percent. This is likely a reflection of Tallahassee's identity as a college town with Florida A \& M University and Florida State University, among others located there.

Figure 4: Leon County Educational Attainment, 2010


[^1]
## LANGUAGE

Among people at least five years old living in Leon County in 2010, 8.4 percent spoke a language other than English at home, compared to 27.4 percent of Florida's population.

Table 4: Leon County Population by Language Spoken at Home

| Language | Leon County |  | Florida |  |
| :---: | :---: | :---: | :---: | :---: |
|  | $\mathbf{2 0 0 0}$ | $\mathbf{2 0 1 0}$ | $\mathbf{2 0 0 0}$ | $\mathbf{2 0 1 0}$ |
| English only | $92.4 \%$ | $91.6 \%$ | $76.9 \%$ | $72.6 \%$ |
| Language other than English | $7.6 \%$ | $8.4 \%$ | $23.1 \%$ | $27.4 \%$ |
| Total | $100.0 \%$ | $100.0 \%$ | $100.0 \%$ | $100.0 \%$ |

Source: U.S. Census Bureau, American FactFinder

## INCOME

Leon County had a per capita income of $\$ 24,272$ in 2010, very similar to Florida's per capita income of $\$ 24,373$. The median household income in Leon County, however, was $\$ 44,409$ in 2010, higher than the median in Florida (Figure 5). The income range per household is summarized in Figure 6. Leon County has a large proportion of individuals in the \$50,000 to \$74,999 income bracket and a small proportion in the lowest bracket (less than $\$ 10,000$ ), when compared to the state overall.

Figure 5: Per Capita and Median Household Income, Leon County and Florida, 2010


[^2]Figure 6: Household Income Range, Leon County and Florida, 2010


Source: U.S. Census Bureau, American FactFinder

## POVERTY

In Leon County, 26.3 percent of the population are living in poverty, which is much higher than the 16.5 percent of Floridians living in poverty. This has risen significantly since 2008 (Figure 7). In Florida, the under-18 age group has the highest poverty rates at 23.5 percent, while in Leon County 28.5 percent live below the Federal Poverty Level (FPL). However, the group with the highest poverty rates is the 18-64 age group, with 30 percent living below FPL (Figure 8). Disparities by race and ethnicity are evident in Leon County, with more than 40 percent of the Black and Hispanic populations living below FPL, compared to approximately half that for White and Asian groups (Figure 9). Figure 10 shows the food stamps caseload from 2002-2011 in Leon County and Florida. The percentage of the population using food stamps in Leon County is lower than the state, but has steadily increased since the economic recession that started in 2008.

Figure 7: Individuals Living in Poverty Less Than or Equal to 100\% Federal Poverty Level


Figure 8: Percent of Population Below Poverty Level, by Age, 2010


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

Table 9: Leon County Population by Language Spoken at Home


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

Figure 10: Food Stamps Usage, Caseload in September of Each Year


The percentage of students eligible for free or reduced-price lunch based on family income has risen significantly since the 2001-2002 school year. During the 2010-2011 school year, 44 percent of students in Leon County were eligible for free or reduced-price lunch, compared to 29.8\% during the 2001-2002 school year (Figure 11).

Table 11: Free/Reduced-Price Lunch Eligibility


Source: Florida Department of Education, 2011

## HOUSING

According to the US Census, in 2000 there were 103,974 housing units within Leon County. This number rose to 124, 136 in 2010, reflecting a 19 percent increase over the ten year period. The average household in Florida in 2010 was 2.48 persons per household; in Leon County, the average household size was lower at 2.31 persons per household. In 2010, the average household value in Leon County was higher than the state, and the value is expected to increase more quickly than the average state value by 2015 (Table 4). Cost-burdened households are households that pay more than 30 percent of their household income for rent or mortgage costs. Leon County has higher percentages than Florida of households spending 30-50 percent of household income, as well as 50 percent or more of household income, on rent or mortgage costs (Table 5).

Table 4: Average Household Value

|  | Leon County | Florida |
| :---: | :---: | :---: |
| 2000 | $\$ 126,265$ | $\$ 127,405$ |
| 2010 | $\$ 185,488$ | $\$ 176,537$ |
| 2015 | $\$ 221,819$ | $\$ 208,893$ |

Source: US Census, American Community Survey, 2010

Table 5: Cost Burdened Households, 2010

| Percent of Income <br> Spent on Housing | Leon County | Florida |
| :---: | :---: | :---: |
| $0 \%-30 \%$ | $64.9 \%$ | $71.2 \%$ |
| $30 \%-50 \%$ | $17.5 \%$ | $16.3 \%$ |
| $50 \%$ or More | $17.6 \%$ | $12.5 \%$ |

Source: Shimberg Center for Housing Studies, University of Florida

## HOMELESSNESS

Estimates of the number of homeless people in Florida communities are obtained through "point-in-time" counts on one day during the last 10 days of January. Following federal guidelines, this includes people who "lack a fixed, regular and adequate nighttime residence, and includes any individual who is either living on the street, in their car, park or public or private place not intended for human occupancy; or is living in an emergency shelter." ${ }^{1}$ Data collected on services provided for homeless in-
dividuals also paints a picture of homelessness in Leon County. Table 6 shows that of those who received services in 2011 for homelessness 50 percent were male, 67 percent were African-American, and 26 percent were children. Six percent of those receiving homelessness services were veterans, though at the point-in-time measurement, 19 percent were veterans. Annual homelessness services report 15 percent of the population were disabled, though 43 percent were disabled at the point-intime measurement.

Table 6: Homelessness in Leon County, 2011

| Population | Annual <br> Services | Point-in-Time <br> (One Day) |
| :---: | :---: | :---: |
| Total | $\mathbf{6 8 0 3}$ | $\mathbf{6 8 3}$ |
| Male | $50 \%$ | $68 \%$ |
| African-American | $67 \%$ | $57 \%$ |
| Children | $26 \%$ | $11 \%$ |
| Veterans | $6 \%$ | $19 \%$ |
| Disabled | $15 \%$ | $43 \%$ |
| Homeless more than one year | $\mathrm{n} / \mathrm{a}$ | $44 \%$ |

Source: The Big Bend Homeless Coalition, Homeless Management Information System and 2011 Point-in-Time Count

## UNEMPLOYMENT

Florida has suffered from some of the highest unemployment rates in the nation during the last several years of economic recession. From 2008 to 2010, unemployment in Leon County and Florida rose significantly to a peak of 8.2 percent in Leon County and 11.5 percent statewide. Finally in 2011, unemployment rates began to subside slightly (Figure 12).

Figure 12: Unemployment Rates, Leon County and Florida


[^3]
## LABOR FORCE

The largest industries in Leon County include educational services, health care/social services, retail, and accommodation and food services. More than 40 percent of the civilian jobs in Leon County are attributed to those industries. The top growing industries in Leon County are construction; arts, entertainment, and recreation; transportation and warehousing; and administrative support and waste management and remediation. Each of these industries is projected to grow by more than 20 percent by 2018. Construction is expected to grow by more than 30 percent by 2018 (Table 7).

Table 7: Industry Employment \& Projections Data in Leon County from Base Year 2010 to Projected Year 2018

| MAPP Phase | 2010 Estimated Employment | $\begin{gathered} 2018 \\ \text { Projected } \\ \text { Employment } \end{gathered}$ | Total Employment Change | Total Percentage Change |
| :---: | :---: | :---: | :---: | :---: |
| Total Employment, All Jobs | 161,761 | 178,065 | 16,304 | 10.1 |
| Educational Services | 22,489 | 25,597 | 3,108 | 13.8 |
| Health Care and Social Assistance | 16,895 | 19,496 | 2,601 | 15.4 |
| Retail Trade | 15,119 | 16,809 | 1,690 | 11.2 |
| Accommodation and Food Services | 13,730 | 16,099 | 2,369 | 17.3 |
| Professional, Scientific, and Technical Services | 10,867 | 12,407 | 1,540 | 14.3 |
| Other Services (Except Government) | 9,174 | 9,092 | -82 | -0.9 |
| Administrative Support and Waste Management and Remediation | 5,330 | 6,401 | 1,071 | 20.1 |
| Construction | 4,825 | 6,283 | 1,458 | 30.2 |
| Finance and Insurance | 4,745 | 5,313 | 568 | 12.0 |
| Information | 3,025 | 3,593 | 568 | 18.8 |
| Wholesale Trade | 2,471 | 2,755 | 284 | 11.5 |
| Real Estate and Rental and Leasing | 1,933 | 2,217 | 284 | 14.7 |
| Manufacturing | 1,848 | 2,022 | 174 | 9.4 |
| Arts, Entertainment, and Recreation | 1,009 | 1,285 | 276 | 27.4 |
| Transportation and Warehousing | 980 | 1,232 | 252 | 25.7 |
| Management of Companies and Enterprises | 525 | 578 | 53 | 10.1 |
| Utilities | 88 | 101 | 13 | 14.8 |

Source: FRED Florida Research and Economic Database, Labor Market Analysis

## COMMUNITY HEALTH STATUS ASSESSMENT

An assessment of a community's health typically includes a profile of the community's population and characteristics. From there, mortality and morbidity indicators for the general population, as well as specific populations that experience a higher burden of disease and death, are reviewed. Prevention indicators are also an important component to consider. MAPP's Community Health Status Assessment seeks to answer the questions:

- How healthy are our residents?
- What does the health status of our community look like?


## HEALTHY PEOPLE

The U.S. Department of Health and Human Services (HHS) sponsors Healthy People, which determines science-based, national objectives for promoting health and preventing disease. The program establishes and monitors national health objectives to meet a broad range of health needs, encourages collaborations across sectors, guides individuals toward making informed health decisions, and measures the impact of prevention activities.

Healthy People 2020 was launched in December of 2010 and provides an ambitious 10-year agenda for improving community health. The overarching goals of the updated objectives are:

- Attain high-quality, longer lives free of preventable disease, disability, injury, and premature death.
- Achieve health equity, eliminate disparities, and improve the health of all groups.
- Create social and physical environments that promote good health for all.
- Promote quality of life, healthy development, and healthy behaviors across all life stages.

Healthy People 2020 continues to focus on reducing health disparities, and has added 13 new topic areas for a total of 42 topic areas that reflect major risks to health and wellness, changing public health priorities, and emerging issues related to our nation's health preparedness and prevention. For more information, visit www.healthypeople.gov/2020.

## COUNTY HEALTH RANKINGS

A snapshot view of community health is provided by the County Health Rankings, an initiative of The Robert Wood Johnson Foundation and the University of Wisconsin Population Health Institute. Health rankings for each county in the nation are developed, using a variety of data for factors that impact the health of a community. These factors range from individual health behaviors to education to jobs to quality of health care to the environment. Among all 67 counties in Florida, Leon ranked \#7 in Health Outcomes and \#9 in Health Factors. Of note, Leon County ranked very highly in both Mortality and Clinical Care and very poorly in Physical Environment, which includes air pollution, access to recreational facilities, access to healthy foods, and the number of fast food restaurants. More data and information on the rankings can be found at www.countyhealthrankings.org (Table 8).

Table 8: County Health Rankings, Leon County, 2011

| Leon County | Rank |
| :--- | :---: |
| Health Outcomes | $\mathbf{7}$ |
| Mortality | 3 |
| Morbidity | 18 |
| Health Factors | 9 |
| Health Behaviors | 18 |
| Clinical Care | 3 |
| Social and Economic Factors | 12 |
| Physical Environment | 55 |

## MAJOR CAUSES of DEATH

The table below summarizes the major causes of death in Leon County in 2010. The numbers of deaths for each cause are listed, along with the percent of total deaths in the county for each cause. Death rates are presented for 2010 alone, and for 2008-2010 combined to provide rates calculated with larger numbers for greater statistical stability. The rates of almost all causes of death vary by age. Using age-adjusted rates allows meaningful comparisons to be made across populations regardless of the populations' age structures, thus the Leon County and Florida rates may be meaningfully compared (Table 9).

Table 9: Major Causes of Death in Leon County, 2010

| Cause of Death | Number of Deaths | Percent of Total Deaths | $\begin{gathered} 2010 \\ \text { Age-Adjusted } \\ \text { Death Rate } \end{gathered}$ | LEON <br> 3-Year <br> Age-Adjusted Death Rate | FLORIDA <br> 3-Year Age-Adjusted Death Rate |
| :---: | :---: | :---: | :---: | :---: | :---: |
| All Causes | 1,651 | 100.0 | 726.9 | 710.3 | 660.7 |
| 1. Cancer | 370 | 22.4 | 162.8 | 163.3 | 160.2 |
| 2. Heart Disease | 317 | 19.2 | 142.7 | 146.8 | 150.8 |
| 3. Chronic Lower Respiratory Disease | 93 | 5.6 | 43.9 | 38.6 | 37.7 |
| 4. Unintentional Injury | 84 | 5.1 | 32.5 | 31.6 | 42.7 |
| 5. Stroke | 84 | 5.1 | 37.1 | 39.2 | 30.5 |
| 6. Suicide | 41 | 2.5 | 15.2 | 12.0 | 13.9 |
| 7. Diabetes Mellitus | 39 | 2.4 | 17.7 | 16.6 | 19.6 |
| 8. Alzheimer's Disease | 39 | 2.4 | 17.2 | 15.9 | 15.5 |
| 9. Pneumonia/Influenza | 31 | 1.9 | 14.5 | 16.2 | 8.5 |
| 10. Parkinson's Disease | 20 | 1.2 | 10.1 | 9.5 | 5.8 |
| 11. Kidney Disease | 19 | 1.2 | 9.0 | 10.5 | 11.4 |
| 12. Chronic Liver Disease/ Cirrhosis | 19 | 1.2 | 7.8 | 8.8 | 10.6 |
| 13. AIDS/HIV | 14 | 0.8 | 5.7 | 5.3 | 6.5 |
| 14. Homicide | 13 | 0.8 | 4.4 | 4.4 | 6.7 |
| 15. Septicemia | 13 | 0.8 | 5.8 | 6.6 | 7.2 |
| 16. Perinatal Conditions | 13 | 0.8 | 0.0 | 0.0 | 0.0 |
| 17. Benign Neoplasms | 12 | 0.7 | 5.2 | 4.4 | 4.3 |

[^4]
## PREMATURE DEATH

Table 10 below illustrates the Years of Potential Life Lost (YPLL). It measures premature death by estimating the average number of years a person would have lived if they had not died prematurely. Therefore, YPLL weights deaths that occur in younger populations. If the death rate for a given cause of death is low, but the YPLL is high, then a young population is most affected by that cause. In Leon County, the most YPLL is due to cancer. The high YPLL due to unintentional injury, suicide, homicide, and HIV/AIDS indicates these causes of death occur in younger populations in Leon. The low YPLL in Alzheimer's Disease, pneumonia/influenza, Parkinson’s Disease, and kidney disease indicates these causes of death occur in older populations. Table 9 provides the YPPL for the major causes of death and Figure 12 illustrates the top causes of premature death from Table 9.

Table 10: Years of Potential Life Lost to Those Under Age 75 (per 100,000), 2010

| Cause of Death | YPLL |
| :--- | :---: |
| Cancer | $1,190.2$ |
| Heart Disease | 646.2 |
| Chronic Lower Respiratory Disease | 163.0 |
| Unintentional Injury | 832.2 |
| Stroke | 168.7 |
| Suicide | 498.8 |
| Diabetes Mellitus | 81.7 |
| Alzheimer's Disease | 15.2 |
| Pneumonia/Influenza | 25.1 |
| Parkinson's Disease | 17.1 |
| Kidney Disease | 33.8 |
| Chronic Liver Disease/ Cirrhosis | 133.3 |
| AlDS/HIV | 135.6 |
| Homicide | 225.1 |
| Septicemia | 45.6 |
| Benign Neoplasms | 19.8 |

Source: Florida Department of Health, Office of Health Statistics and Assessment

Figure 12: Top Causes of Premature Death, 2010


## Chronic Disease

## Black mortality

 rates from cancer are notably higher than White mortality rates.Black cancer mortality rates in Leon County are also higher than Black cancer mortality rates in Florida.

## CANCER

Cancer is the second leading cause of death in the United States, but it is the number one leading cause of death to residents in Leon County. Figure 12 below shows that the death rate from all types of cancer in Leon County and the statewide rate have remained steady over the past several years.

Figure 12: Age-Adjusted Death Rates Due to Cancer, All Types


Source: Florida Department of Health, Bureau of Vital Statistics

Figure 13: Age-Adjusted Death Rates Due to Cancer, All Types, by Race, 2008-2010


[^5]
## LUNG CANCER

Lung cancer is the leading cause of death among cancers (Figure 14). The main risk factors identified for lung cancer are smoking and exposure to secondhand smoke, environmental exposures such as radon gas or asbestos, and having a family history of lung cancer. ${ }^{1}$ Comparing rates by White and Black race show a disparity between the groups. Death due to lung cancer is higher in White populations than Black populations (Figure 15).

Figure 14: Age-Adjusted Death Rates Due to Lung Cancer


Source: Florida Department of Health, Bureau of Vital Statistics

## Lung cancer rates

 in Leon County have been decreasing since 2002, and they are lower than the state rates.Figure 15: Age-Adjusted Death Rates Due to Lung Cancer, by Race, 2008-2010


[^6]
## Mammograms

 are the best method to detect breast cancer early, allowing for easier treatment and lowering the risk of dying from breast cancer. Women aged 40 and older should discuss getting a mammogram with their doctors, while women aged 50 to 74 should have a mammogram every two years. In 2010, 66.4\% of Leon County women ages 40 and older who were surveyed for the Behavioral Risk Factor Surveillance System (BRFSS) reported having received a mammogram in the past year, compared to the Florida rate of 61.9\%.
## BREAST CANCER

Breast cancer is the most common cancer among women in the United States, aside from non-melanoma skin cancers. ${ }^{2}$ Figure 16 presents the death rates due to Breast Cancer. During 2008-2010, breast cancer mortality rates were higher in Leon County than the state. Comparing rates by race shows a disparity between White and Black. Breast cancer mortality rates are higher in Black populations than White (Figure 17).

Figure 16: Age-Adjusted Death Rates Due to Breast Cancer


Source: Florida Department of Health, Bureau of Vital Statistics

Figure 17: Age-Adjusted Death Rates Due to Breast Cancer, by Race, 2008-2010


[^7]
## PROSTATE CANCER

Prostate Cancer is the most common type of cancer in men, and one of the leading causes of cancer death in men. ${ }^{3}$ Figure 18 shows the death rates per 100,000 men to prostate cancer. Prostate cancer mortality rates are higher in Black populations than White (Figure 19).

Figure 18: Age-Adjusted Death Rates Due to Prostate Cancer


Source: Florida Department of Health, Bureau of Vital Statistics

Figure 19: Age-Adjusted Death Rates Due to Prostate Cancer, by Race, 2008-2010


[^8]Prostate cancer mortality rates in Leon County are higher than the state.

Black men had a much higher rate of prostate cancer mortality than White men.

## Screening tests

for colorectal cancer can save lives by finding precancerous polyps early, when treatment often leads to a cure. If everyone 50 years and older had regular screening tests, up to 60\% of deaths from colorectal cancer could be prevented. In 2010, $42.2 \%$ of Leon adults surveyed for the BRFSS reported having received a blood stool test in the past year, a significantly higher percentage than the 14.7\% in Florida overall. The rate in 2010 of adults 50 and over receiving a sigmoidoscopy or colonoscopy in the past five years was higher in Leon (80.4\%) than Florida (68.2\%).

## COLORECTAL CANCER

Colorectal cancer is the second leading cause of death by cancer in the United States among cancers that affect both men and women. ${ }^{4}$ Figure 20 shows the death rates due to colorectal cancer. The Black population in Leon County has a colorectal cancer mortality rate more than twice the rate of the White population (Figure 21).

Figure 20: Age-Adjusted Death Rates Due to Colorectal Cancer


Source: Florida Department of Health, Bureau of Vital Statistics

Figure 21: Age-Adjusted Death Rates Due to Colorectal Cancer, by Race, 2008-2010


[^9]
## HEART DISEASE

Cardiovascular diseases include a range of diseases involving the heart and blood vessels, such as coronary heart disease, hypertension, and stroke. Heart disease is the most common of these, and can cause heart attack, angina, heart failure, and arrhythmias. ${ }^{5}$ Figure 22 shows the death rates from heart disease, the second leading cause of death. Heart disease mortality rates are higher in Black populations than White (Figure 23).

Figure 22: Age-Adjusted Death Rates Due to Heart Disease


Source: Florida Department of Health, Bureau of Vital Statistics

Figure 23: Age-Adjusted Death Rates Due to Heart Disease, by Race, 2008-2010


[^10]Death rates from heart disease have been decreasing since 2002 in both Leon County and the State.

Black populations have a much higher rate than White populations in Leon County.

Although the death rate from stroke has been decreasing since 2002, the rate is still higher in Leon County than in Florida.

Black populations in Leon County experience higher rates of stroke death than White populations.

## STROKE

Cerebrovascular disease, or stroke, is the third leading cause of death in the United States, and the fifth leading cause in Leon County. Stroke is more common in men, Blacks, Hispanics, and American Indians by heredity. Other risk factors include hypertension, tobacco use, alcohol use, diabetes, being overweight or obese, and having heart disease or high cholesterol. 6 Figure 24 shows the death rates due to stroke and Figure 25 shows the disparity by race.

Figure 24: Age-Adjusted Death Rates Due to Stroke


Source: Florida Department of Health, Bureau of Vital Statistics

Figure 25: Age-Adjusted Death Rates Due to Stroke, by Race, 2008-2010


[^11]
## CHRONIC LOWER RESPIRATORY DISEASE

Chronic Lower Respiratory Disease (CLRD) is comprised of a group of diseases that block airflow to the lungs. Emphysema, chronic bronchitis, and asthma are included in this group. ${ }^{7}$ CLRD is the third leading cause of death in Leon County. Figure 26 presents the overall death rates due to CLRD, and Figure 27 presents the disparity by race.

Figure 26: Age-Adjusted Death Rates Due to CLRD


Source: Florida Department of Health, Bureau of Vital Statistics

Figure 27: Age-Adjusted Death Rates Due to CLRD, by Race, 2008-2010


[^12]Hospitalization rates from asthma are lower in Leon than Florida, but these rates have decreased since 2009.

## ASTHMA

Asthma affects the lungs by restricting airflow during attacks or "episodes", characterized by wheezing, breathlessness, chest tightness, and coughing. ${ }^{8}$ Figure 28 shows the percentage of adults who currently have asthma. Black populations experience significantly higher rates of asthma in Leon County than White populations (Figure 29).

Figure 28: Percentage of Adults Who Currently Have Asthma, by Race, 2010


Source: Florida Agency for Health Care Administration (AHCA)

Figure 29: Hospitalizations From or With Asthma


[^13]Figure 30 shows the hospitalization rates for children. Hospitalization rates in children aged 5-11 and children aged 12-18 are lower in Leon County than the state, but these rates have been significantly increasing (Figure 31).

Figure 30: Asthma Hospitalizations for Children Aged 5-11


Source: Florida Agency for Health Care Administration (AHCA)

Figure 31: Asthma Hospitalizations for Children Aged 12-18


[^14]Diabetes is the seventh leading cause of death in Leon County and the cause of significant disability in some patients.

## DIABETES

Diabetes is a disease marked by high levels of glucose in the blood which is caused by problems with insulin production, insulin use, or both. Without the insulin needed to achieve this process, glucose and fats remain in the blood, eventually causing damage to vital organs. Diabetes can lead to serious complications and premature death if not controlled effectively. Heart disease and stroke, blindness, chronic kidney disease, and amputations are some of the health issues that people with diabetes may face. ${ }^{9}$ Death rates due to diabetes in Leon County have been declining since 2002 and the rates are lower than the state rates (Figure 32). There is a disparity by race, with Black populations experiencing more death due to diabetes than White populations; however, rates for each racial group are still lower than the state rates (Figure 33).

Figure 32: Age-Adjusted Death Rates Due to Diabetes


Source: Florida Department of Health, Bureau of Vital Statistics

Figure 33: Age-Adjusted Death Rates Due to Diabetes, by Race, 2008-2010


[^15]Figure 34 presents data from 2006-2009 for the hospitalizations from or with diabetes for Leon County and for Florida as a whole. Diabetes can damage the nervous system and cause a condition called diabetic neuropathy. The most common type is peripheral neuropathy, which affects the arms and legs. Sometimes nerve damage can contribute to injuries that are slow to heal. Poor circulation and infection lead to the amputation of a toe, foot, or leg. ${ }^{10}$ Hospitalization rates from the amputation of a lower extremity attributable to diabetes are presented below in Figure 35.

Figure 34: Hospitalization Rates Per 100,000 From or With Diabetes


Source: Florida Agency for Health Care Administration (AHCA)

Figure 35: Hospitalizations From Amputation of a Lower Extremity Attributable to Diabetes


[^16]
## Diabetes can

 damage the nervous system and cause a condition called diabetic neuropathy. The most common type is peripheral neuropathy, which affects the arms and legs.In Leon County,
diabetes hospitalization rates in children aged 5-11 have been increasing since 2002 and are higher than the state rates.

Diabetes is a common chronic disease in children and adolescents. Usually children with diabetes are assumed to have Type I, juvenile-onset diabetes, however in recent decades rates of Type II (previously "adult-onset") diabetes have been increasing in children (Figure $36 ; 37$ ). ${ }^{11}$

Figure 36: Diabetes Hospitalization for Children Ages 5-11


Source: Florida Agency for Health Care Administration (AHCA)

Figure 37: Diabetes Hospitalization for Children Ages 12-18


[^17]
## ALZHEIMER'S DISEASE

Alzheimer's disease is the most common type of dementia in the elderly, usually beginning after age 60 with the risk increasing with age. ${ }^{12}$ Alzheimer's Disease is the eighth leading cause of death in Leon County. The mortality rate due to Alzheimer's Disease is about the same in Leon County and Florida, however the rate in Leon has increased slightly since 2005 (Figure 38; 39).

Figure 38: Age-Adjusted Death Rates Due to Alzheimer's Disease


Source: Florida Department of Health, Bureau of Vital Statistics

Figure 39: Age-Adjusted Death Rates Due to Alzheimer's Disease, by Race, 2008-2010


[^18]The Behavioral Risk Factor Surveillance System (BRFSS) survey was conducted at the county level in Florida among adults in 2002, 2007, and 2010. The data for the risk factors in this section were collected through this survey.

## HYPERTENSION

In addition to maintaining a healthy lifestyle by exercising, eating a healthy diet, and maintaining a healthy weight, taking medication to control high blood pressure is important. ${ }^{13}$ The percentage of adults with hypertension in Leon County is lower than in Florida (Figure 40). Hypertension rates are higher in Black populations than White populations, and highest in those with an income less than \$25,000 per year (Figure 41).

Figure 40: Percentage of Adults With Diagnosed Hypertension, by Race, 2010


Source: BRFSS Survey, FDOH, Bureau of Epidemiology

Figure 41: Percentage of Adults With Diagnosed Hypertension, by Income, 2010


[^19][^20]
## TOBACCO USE

The single most preventable cause of disease, disability, and death in the United States is tobacco use. The risk of heart disease and heart attack increases with the use of tobacco. Cigarette smoking promotes atherosclerosis and increases the levels of blood clotting factors, such as fibrinogen. In addition, nicotine raises blood pressure, and carbon monoxide reduces the amount of oxygen that blood can carry. Exposure to secondhand smoke, can increase the risk of heart disease, as well as lung cancer and lower respiratory tract infections in children younger than 18 months (Figure 42; 43). ${ }^{14}$

Figure 42: Percentage of Adults Who Are Current Smokers, by Race, 2010


Source: BRFSS Survey, FDOH, Bureau of Epidemiology

Figure 43: Percentage of Adults Who Are Current Smokers, by Income, 2010


[^21]An estimated 443,000 people die prematurely from smoking or exposure to secondhand smoke annually, and millions more experience serious illness caused by smoking.

[^22]
## Overweight

 and Obesity are conditions that increase the risk for a variety of chronic diseases and health concerns, including heart disease, Type 2 diabetes, certain cancers, hypertension, high cholesterol, and stroke (among others).
## OVERWEIGHT and OBESITY

The condition of overweight and obesity are determined by using a calculation called the Body Mass Index (BMI), which takes into account a person's height in proportion to his or her weight. BMI is correlated with the amount of body fat present. ${ }^{15}$ The percentage of adults who are overweight is similar in Leon County and Florida. Black populations in Leon have a higher percent of overweight adults than White populations. Those with an income of less than $\$ 25,000$ have a higher percentage of overweight adults than those with a higher income (Figure 44; 45).

Figure 44: Percentage of Adults Who Are Overweight, by Race, 2010


Source: BRFSS Survey, FDOH, Bureau of Epidemiology

Figure 45: Percentage of Adults Who Are Overweight, by Income, 2010


[^23]Approximately 17\% (or 12.5 million) of children and adolescents aged 2-19 years are obese. Obese Children are more likely to have high blood pressure, high cholesterol, diabetes, asthma, joint problems, gastrointestinal problems, and social/psychological problems. ${ }^{16}$ The percentage of children age two or older who are overweight or at risk for overweight has been increasing since 2006. This percentage is slightly lower in Leon County than Florida. The percentage of Middle school students who are overweight is higher in Leon than Florida, but the percentage of overweight High school students is about the same in Leon and Florida (Figure 46; 47).

Figure 46: WIC Children Age Two and Older Who Are Overweight or at Risk for Overweight


Source: Florida DOH, WIC Potentially Eligible
Obese children are more likely to become obese adults.

Figure 47: Percentage of Students With a BMI at or Above 95th Percentile, 2010


Source: Florida Youth Risk Behavior Survey, Bureau of Epidemiology

## HEALTHY FOODS

Having access to healthy foods can be a challenge for some residents, especially those living in areas deemed to be "food deserts". Food deserts are defined by the United States Department of Agriculture (USDA) as low-income census tracts where a substantial number or share of residents has low access to a supermarket or large grocery store. Without grocery store access, gas stations, convenience stores, and fast food restaurants are often the alternative source of food. These outlets rarely offer fresh, healthy, and affordable options, thus acting as a contributor to the prevalence of obesity and related health problems.

The USDA food desert locator (www.ers.usda.gov/data/foodDesert) identifies southern and western areas of Tallahassee as food deserts (see map below).

Map 1: Food Deserts in Leon County


Source: USDA Food Desert Locator, www.ers.usda.gov/data/foodDesert

It should be noted that there is a burgeoning movement in Tallahassee to address these issues on a neighborhood level. Community gardens and farmers markets are present in some of these food desert areas, bringing fresh produce to areas that need it most.

## HIV/AIDS

Death rates due to HIV/AIDS in Leon County are much lower than in Florida as a whole (Figure 48). Black populations have notably higher death rates due to HIV/AIDS than White populations (Figure 49).

Figure 48: Age-Adjusted Death Rates Due to HIV/AIDS


Source: Florida Department of Health, Bureau of Vital Statistics

Figure 49: Age-Adjusted Death Rates Due to HIV/AIDS, by Race


[^24]The Human Immunodeficiency Virus (HIV) is the virus that can lead to Acquired Immune Deficiency Syndrome (AIDS).

In 2010, Black populations in the eight-county area experienced an HIV case rate of more than twelve times the White case rate and more than five times the Hispanic rate.

New HIV cases rates in Leon County have increased significantly since 2002, and are now on par with the Florida rate (see Figure 50 below). Combined data from Partnership 2B1 (which includes Leon, Franklin, Gadsden, Jefferson, Liberty, Madison, Taylor and Wakulla Counties) shows a significant disparity by race in new HIV cases (not depicted). The overall HIV case rate increased from 2009 to 2010, with the Black rate rising from 57.3 per 100,000 in 2009 to 70.1 per 100,000 in 2010. The rate of new AIDS cases has stabilized and remains lower than the state average (Figure 51).

Figure 50: New HIV Cases, Rate Per 100,000


Source: Florida Department of Health, Bureau of HIV/AIDS

Figure 51: New AIDS Cases, Rate Per 100,000


[^25][^26]
## SEXUALLY TRANSMITTED DISEASES (STD)

Chlamydia and gonorrhea are two of the most common sexually transmitted diseases and can have long-term impacts on the health of women and infants, in particular. In addition, there is an interrelationship between the presence of STDs and transmission of the HIV virus. ${ }^{2}$ The total gonorrhea, chlamydia, and infectious syphilis rate in Leon County has increased dramatically since 2005. During 2008-2010, the total rate rose to 1,392 per 100,000, which is almost three times the state rate or 507 per 100,000 (Figure 52). There are few cases of syphilis in Leon County, but rates have risen since the mid2000s (Figure 53).

Figure 52: Total Gonorrhea, Chlamydia, and Infectious Syphilis


Source: FDOH, Bureau of STD Prevention \& Control

Figure 53: Infectious Syphilis Case Rate, Per 100,000


[^27]Sexually transmitted diseases (STDs) are the most common type of infectious disease in the United States.

## The gonorrhea

 case rate in Leon County is significantly higher than the state (more than threefold), though the rate has been decreasing slightly since 2008.Figure 54 shows the gonorrhea case rate by age groups for Leon County combined with surrounding counties in Partnership 2B. Adolescents and young adults aged 13-24 experience the bulk of gonorrhea cases (Figure 55) and there is a striking disparity by race. Black populations experienced a case rate more than seventeen times the rate in White and Hispanic populations in 2009, with a rate of 804 per 100,000. While the overall case rate decreased slightly in 2010 to 728.1 per 100,000 in Black populations, the magnitude of the disparity remains. From 2009 to 2010, the case rate in Hispanic populations rose from 39.6 to 52.1 per 100,000, while the case rate in White populations decreased slightly from 46 to 41 per 100,000.

Figure 54: Gonorrhea Case Rate, Per 100,000


Source: FDOH, Bureau of STD Prevention \& Control

Figure 55: Gonorrhea Case Rate Per 100,000 for Area 2B, by Age


[^28]The chlamydia case rate in Leon County is significantly higher than in Florida overall. From 2007 to 2008, the chlamydia case rate rose dramatically; it has since remained steady at a rate twice the state rate. shows the chlamydia case rates by age for Area 2B. Adolescents and young adults aged 13-24 experienced the highest case rates, particularly 20-24 year olds (Figure 56; 57).

Figure 56: Chlamydia Case Rate, Per 100,000


Source: FDOH, Bureau of STD Prevention \& Control

Figure 57: Chlamydia Case Rate, Per 100,000, by Age, 2010


[^29]There is a significant disparity by race with chlamydia case rates in Area 2B (not shown).

In 2009, Black populations experienced a case rate more than seven times the rate of White and Hispanic populations.

From 2009 to 2010, the case rate rose from 1852.2 to 1928.7 per 100,000 in Black populations, from 251.4 to 272.4 per 100,000 in White populations, and from 273 to 329.7 per 100,000 in Hispanic populations.

## Adults over 65,

 young children, and people with certain medical conditions are at high risk for flu complications such as pneumonia that may result in hospitalization or death.
## INFLUENZA and PNEUMONIA

Influenza (the flu) is a communicable respiratory illness causes by influenza viruses. Vaccination is the best way to prevent contracting influenza and pneumonia. ${ }^{3}$ In Leon County, influenza and pneumonia is the ninth leading cause of death (Figure 58). The death rates due to influenza and pneumonia have been slightly increasing since 2002. These death rates are much higher in Leon County than the rates in Florida. The death rate due to influenza and pneumonia in Black populations is more than three times the rate in White populations in Leon County (Figure 59).

Figure 58: Age-Adjusted Death Rates Due to Influenza and Pneumonia


Source: Florida Department of Health, Bureau of Vital Statistics

Figure 59: Age-Adjusted Death Rates Due to Influenza and Pneumonia, by Race


[^30]
## CHILDHOOD IMMUNIZATIONS

Childhood immunizations protect children from serious infectious diseases, and also protect the health of our community by safeguarding those who are unable to be immunized or who have not yet developed immunity from a vaccine. ${ }^{4}$ Florida's county health departments (CHDs) provide immunization services to many children whose parents depend on the CHD as their child's immunization provider. Each year, CHDs complete an assessment of immunization coverage levels of young children receiving services in their facilities. ${ }^{5}$ Figure 60 below shows the percentage of CHD children who have been immunized on schedule recommended by the Advisory Committee on Immunization Practices (ACIP): four or more doses of DTaP, three or more doses of poliovirus vaccine, one or more doses of MMR, three or more doses of Hib, three or more doses of Hepatitis B, and one Varicella (4:3:1:3:3:1) by two years of age. A higher proportion of children in kindergarten in Leon County have been immunized fully as compared to the state average (Figure 61).

Figure 60: Percentage of Two Year Old Children Fully Immunized


Source: Florida Dept. of Health, Bureau of Immunization

Figure 61: Percentage of Kindergarteners Fully Immunized


[^31][^32]The data for other communicable diseases were reviewed, but given the low rates of these diseases, these data have not been included in detail.

- Historically, tuberculosis was a leading cause of death in the United States, but is now controlled to very low levels. Since 2002, the rates of Tuberculosis deaths in Leon County have decreased from 4.9 to 3.0 per 100,000 during 2008-2010 and are lower than the state rates of 4.6 per 100,000.
- Hepatitis is a general term that refers to inflammation of the liver. Viral hepatitis is usually caused by Hepatitis A, B , or C and is a leading cause of liver cancer and liver transplantation. The number of deaths to viral hepatitis is low in Leon County: six in 2008, two in 2009, and seven in 2010.

In this section, birth data is presented for the county population over time and then by White and Black race in order to highlight that Black mothers and infants (as a whole) experience diminished birth outcomes when compared to White mothers and infants. However, in some cases, race is unknown and is therefore not included in the statistics. These unknown cases, along with other races, account for discrepancies where the total rate is not reflected in the breakout of the two race categories presented.

Birth rates in a population are an important indicator of future population growth and demographic composition. The birth rates in Leon County are similar to those in the state of Florida. Black women have the highest birth rates and White women have the lowest (Figure 62). Birth rates to Hispanic women are lower in Leon County than in the Hispanic population throughout the state of Florida (Figure 63).

Figure 62: Birth Rate Per 1,000, by Mother's Race


Source: Florida Department of Health, Bureau of Vital Statistics

Figure 63: Birth Rate Per 1,000, by Mother's Race and Ethnicity


[^33]
## INFANT MORTALITY

Infant mortality refers to the death of an infant less than one year old (0 to 364 days). The overall infant mortality rate has steadily declined in the United States over the past several decades, but drastic disparities remain between certain racial and ethnic groups in many areas. Figure 64 presents three-year rates in Leon County and the state of Florida of the number of infant deaths per 1,000 live births. Infant mortality in Leon County was notably higher that the state average in the earliest time frame, but has since been decreasing. Black populations experience a nearly threefold higher rate at 13.1 deaths per 1,000 births compared to 4.6 deaths per 1,000 births in White populations (Figure 65).

Figure 64: Infant Mortality Rates


Source: Florida Department of Health, Bureau of Vital Statistics

Figure 65: Infant Mortality Rates, by Race


[^34]
## Infant mortal-

ity rates are often used as a marker for the overall health and well-being of a society.

## Infants born

weighing less than 5 pounds, 8 ounces ( 2500 grams) are considered low birth weight.

## LOW BIRTH WEIGHT

Low birth weight babies are at increased risk for intellectual disabilities, learning problems, cerebral palsy, vision and hearing loss, and even death. ${ }^{1}$ The low birth weight rate in Leon County is higher than the rate in Florida overall (Figure 66) and the disparity by race is substantial (Figure 67), with almost twice as many Black infants born with low birth weight (13.0\%) as White infants (6.3\%).

Figure 66: Percentage of Births Less Than 2500 Grams


Source: Florida Department of Health, Bureau of Vital Statistics

Figure 67: Percentage of Births Less Than 2500 Grams, by Race, 2008-2010


[^35]
## PRE-TERM BIRTHS

Pre-term babies are more likely to be premature, placing them at risk for newborn health complications such as breathing problems and even death. ${ }^{2}$ Pre-term births have been declining since 2002 in Leon County and the rates are lower than in Florida overall (Figure 68). There is a disparity by race in Leon County, with Black populations experiencing a higher rate of pre-term births than White populations (Figure 69).

Figure 68: Percentage of Births Before 37 weeks


Source: Florida Department of Health, Bureau of Vital Statistics

Figure 69: Percentage of Births Before 37 weeks, by Race, 2008-2010


[^36]Infants born before 37 completed weeks of pregnancy are considered preterm.

Teen pregnancy and childbearing bring significant costs to teen parents and their children, as well as society at large.

## TEEN BIRTHS

The majority of teen pregnancies are unintended. In 2009, the live birth rate to mothers aged 15-19 was 39.1 per 1,000 women in this age group in the United States. ${ }^{3}$ Figure 70 shows that in Leon County, the birth rate to teen mothers is much lower than the state. However, there is a significant disparity by race with the birth rate to Black teens more than three times the birth rate to White teens in Leon County (Figure 71).

Figure 70: Births to Mothers Aged 15-19


Source: Florida Department of Health, Bureau of Vital Statistics

Figure 71: Births to Mothers Aged 15-19, by Race, 2008-2010


[^37]
## PRENATAL CARE

During 2008-2010, 87.4 percent of births in Leon County were to mothers who received early prenatal care, defined as beginning during the first trimester. On the opposite end of the spectrum, pregnant women who begin prenatal care during the third trimester, or not at all, often fall into the highest risk categories for poor birth outcomes. Figure 72 shows that the percentage of pregnant women receiving early prenatal care is higher in Leon than in Florida, and has remained relatively constant since 2005. A higher percentage of White women in Leon County receive prenatal care than Black women, however both rates are still higher than the rates in Florida (Figure 73).

Figure 72: Percentage of Women Receiving Prenatal Care in the First Trimester


Source: Florida Department of Health, Bureau of Vital Statistics

Figure 73: Percentage of Women Receiving Prenatal Care in the First Trimester, by Race, 2008-2010


[^38]The percentage of pregnant women receiving early prenatal care is higher in Leon than in Florida, and has remained relatively constant since 2005.

A higher percentage of White women in Leon County receive prenatal care than Black women, however both rates are still higher than the rates in Florida.

## Smoking tobacco

 during pregnancy increases the risk for preterm delivery, stillbirth, low birth weight, and sudden infant death syndrome (SIDS).
## RISK FACTORS ASSOCIATED with POOR BIRTH OUTCOMES

Leon County has a slightly lower percentage of pregnant women who smoke during pregnancy, when compared to the state average (Figure 74). There is a disparity by race in mothers who smoke during pregnancy, with White women having a higher percentage than Black women (Figure 75).

Figure 74: Births to Mothers Who Smoked During Pregnancy


Source: Florida Department of Health, Bureau of Vital Statistics

Figure 75: Births to Mothers Who Smoked During Pregnancy, by Race, 2008-2010


[^39]Women with short interpregnancy intervals, or time between births, are at nutritional risk and are more likely to experience adverse birth outcomes such as low birth weight. Over forty percent of births in Leon County are to women with an interpregnancy interval of less than 18 months (Figure 76).

Figure 76: Percentage of Women With an Interpregnancy Interval of Less Than 18 months


[^40]
## UNINTENTIONAL INJURY

Unintentional injury is the third leading cause of death in Florida, and the fourth leading cause in Leon County. Figure 77 shows that the death rates from unintentional injury are much lower in Leon County than the state. There is a disparity by race in death rates from unintentional injuries in Leon County, with the White population rate higher than the Black population rate (Figure 78).

Figure 77: Age-Adjusted Death Rates From Unintentional Injury


Source: Florida Department of Health, Bureau of Vital Statistics

Figure 78: Age-Adjusted Death Rates From Unintentional Injury, by Race, 2008-2010


[^41]
## MOTOR VEHICLE ACCIDENTS

Figure 79 shows that the death rates from motor vehicle accidents in Leon County are much lower than the state. There is a disparity by race in death rates from motor vehicle accidents, in which Black populations experience a higher rate than White populations (Figure 80). The disparity by race in Florida is reversed, with White populations having a higher death rate than Black populations.

Figure 79: Age-Adjusted Death Rates From Motor Vehicle Accidents


Source: Florida Department of Health, Bureau of Vital Statistics

Figure 80: Age-Adjusted Death Rates From Motor Vehicle Accidents, by Race, 2008-2010


[^42]Motor vehicle accidents are the leading cause of death among those age 5-34 in the U.S. ${ }^{1}$

Every day, almost 30 people in the United States die in motor vehicle crashes that involve an alcohol-impaired driver. This amounts to one death every 48 minutes. ${ }^{2}$

## ALCOHOL-RELATED MOTOR VEHICLE CRASHES, INJURIES, and DEATHS

The rate of alcohol-related motor vehicle crashes in Leon County has been decreasing dramatically since 2002, however the rate in Leon is still higher than in Florida (Figure 81). The rate of alcohol-related crashes with injuries during 2008-2010 was higher than the Florida rate, though the alcohol-related crash death rate was lower than the Florida rate (Figure 82).

Figure 81: Alcohol-Related Motor Vehicle Crashes


Source: Florida Department of Highway Safety \& Motor Vehicles

Figure 82: Alcohol-Related Motor Vehicle Crashes With Injuries and Crashes With Deaths, 2008-2010


[^43]
## VIOLENCE

## HOMICIDE

The death rate from homicide is substantially lower in Leon County than in the state of Florida overall, though the rates have risen in the last several years (Figure 83). A notable disparity by race is evident, with the homicide death rate for Black residents reaching almost four times that of the rate for White residents. However, this rate still remains far lower than that of the Florida death rate from homicide among Black populations (Figure 84).

Figure 83: Age-Adjusted Death Rates From Homicide


Source: Florida Department of Health, Bureau of Vital Statistics

Figure 84: Age-Adjusted Death Rates From Homicide, 2008-2010


[^44]A notable disparity by race is evident, with the homicide death rate for Black residents reaching almost four times that of the rate for White residents.

## Domestic

violence can include physical, sexual, and emotional violence that happens within a relationship.

## DOMESTIC VIOLENCE and FORCIBLE SEX

In addition to the immediate harm caused by domestic violence to the victim, longterm emotional consequences as a result of trauma can be devastating. Risky behaviors negatively impacting health, such as alcohol and drug use, may increase as an attempt to cope with such trauma. ${ }^{3}$ Figure 85 presents domestic violence offense rates, which include assault, threats/intimidation, stalking, murder, manslaughter, and rape, among others. Forcible sex offenses, which include rape and sodomy, are high in Leon County. While the rate has declined significantly in the last several years, it is still substantially higher than the rate in Florida (Figure 86). Both of these indicators are likely an underestimation of the occurrence since they are dependent upon reporting to law enforcement.

Figure 85: Domestic Violence Offense Rate Per 100,000


Source: Florida Department of Law Enforcement

Figure 86: Forcible Sex Offense Rate Per 100,000


[^45]
## AGGREVATED ASSAULT and GANG ACTIVITY

The threat of serious personal injury and potential death is high in aggravated assault incidents. Figure 87 shows that the rate of aggravated assault in Leon County is higher than the state rate. Research finds that gang members are more likely than their peers to engage in crime, violence, and other forms of delinquency, which increases their risk of violence-related injuries. ${ }^{4}$ The Florida Youth Substance Abuse Survey is administered annually to middle and high school students attending public schools in Florida. The survey assesses the prevalence of, and the risk and protective factors for, substance abuse. Figure 88 shows the rate of students aged 15-17 witnessing various gang activities at school. The rates of students witnessing these delinquent behaviors in Leon County are either below or on par with the state rates.

Figure 87: Aggravated Assault Rate Per 100,000


Source: Florida Department of Law Enforcement

Figure 88: Students Ages 15-17 Witnessing Delinquent Behaviors Among Gang Members at School, 2010

## Aggravated

assault usually includes the use of a weapon or means likely to cause serious harm.


[^46]
## SUBSTANCE ABUSE

Excessive use of alcohol can negatively impact personal and community health in a variety of ways. Liver disease and unintentional injuries are two of the most prominent issues where alcohol abuse is an important factor that can be prevented. ${ }^{1}$ Heavy drinking is defined as "drinking more than two drinks per day on average for men and more than one drink per day on average for women". Binge drinking is defined as "drinking five or more drinks during a single occasion for men or four or more drinks during a single occasion for women". Figure 89 presents the results of the 2010 County-level BRFSS survey question addressing these behaviors. Nearly one in five adults in Leon County reported engaging in heavy or binge drinking in 2010.

Substance abuse is also a major risk factor for adolescents and young adults. Among these groups, alcohol and other substance use is associated with injuries, sexually transmitted diseases, fights, academic and occupational problems, and illegal behavior in addition to the health effects of the substances. ${ }^{2}$ Figure 90 shows the responses of public middle school and high school students surveyed in Leon County and Florida regarding drug and alcohol usage in the past month.

Figure 90: Percentage of Youth Who Reported Having Used Various Drugs in the Past 30 Days, 2010


[^47]${ }^{1}$ Centers for Disease Control and Prevention (CDC). www.cdc.gov/alcohol
${ }^{2}$ Centers for Disease Control and Prevention (CDC). http://www.cdc.gov/healthyyouth/alcoholdrug/index.htm

## MENTAL HEALTH

Poor mental health is often associated with health risk behaviors such as substance abuse, tobacco use, and physical inactivity. Depression has also been linked as a risk factor for chronic illnesses such as hypertension, cardiovascular disease, and diabetes and can negatively affect the management of these conditions. ${ }^{3}$ Figure 91 shows the average number of unhealthy mental health days ( 3.8 days) in the past 30 days, reported by adults surveyed in Leon County and Florida. Figure 92 shows that 87.6 percent of adults report having good mental health in Leon County.

Figure 91: Average Number of Unhealthy Mental Health Days in the Past 30 Days


Source: BRFSS Survey, FDOH, Bureau of Epidemiology

Figure 92: Percentage of Adults With Good Mental Health


[^48]
## Suicide rates in

 the United States have been on the rise in recent years, with the national rate in 2009 up to 13.7 deaths per 100,000 population. ${ }^{4}$
## SUICIDE

Though the actual counts of suicide deaths in Leon County are not large (41 deaths in 2010), the impact of a suicide on a community can be devastating. Suicide is the sixth leading cause of death in Leon County, and while this rate is lower than the state average, it has increased notably over the past several years (Figure 93). There is a significant disparity by race, with the rate of suicide in White populations more than four times the rate in Black populations (Figure 94).

Figure 93: Age-Adjusted Death Rates From Suicide


Source: Florida Department of Health, Bureau of Vital Statistics

Figure 94: Age-Adjusted Death Rates From Suicide, by Race, 2008-2010


[^49]Access to health care services is an important determinant of health status and continues to be a central focus for health policy in Florida. The following summary provides a review of health coverage available to Leon County residents, health care providers practicing in the county, health care facilities and services and other community resources. An assessment of existing health care systems will help to identify the current status of care availability and significant gaps or challenges.

## HEALTH INSURANCE COVERAGE

Health care insurance coverage is critical to accessing medical care in the U.S. health care system. Coverage options vary dramatically in terms of what services are covered, what providers are covered, and what portion of the costs is the responsibility of the patient. As the national economic climate continues to fluctuate and costs of health care remain high, individuals and families are struggling to pay for adequate health care services. Most have health coverage through an employer (their own or their spouse's) or receive benefits through Medicaid or Medicare.

The U.S. Census collects information about health insurance coverage at the county level (see Figure 95). With $87 \%$ of residents reporting having health insurance coverage, Leon County exceeds state and national averages. For a breakdown by age groups, refer to Figure 96.

Figure 95: Percentage of Adults With Health Insurance Coverage, 2010


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

Figure 96: Percentage of Adults With Health Insurance Coverage by Age Group, 2010


[^50]
## Uninsured

 persons experience reduced access to health care and are less likely to have a regular source of care or use preventive services. As a result, uninsured persons are more likely to require avoidable hospitalizations and emergency hospital care.Data from the Behavioral Risk Factor Surveillance System (BRFSS) mirror the Census data. Table 11 presents this BRFSS data for 2010 in Leon County and Florida with breakdowns by race, age, education level, and annual income.

Table 11: Percentage of Adults With Any Type of Health Care Insurance Coverage, 2010

|  | Leon County 2010 | Florida 2010 |
| :---: | :---: | :---: |
| All | $89.4 \%^{*}$ | $83.0 \%$ |
| Race/Ethnicity |  |  |
| White | $93.4 \%^{*}$ | $87.3 \%$ |
| Black | $77.6 \%^{*}$ | $76.1 \%$ |
| Age Group |  |  |
| $18-44$ | $86.7 \%^{*}$ | $73.0 \%$ |
| $45-64$ | $90.4 \%^{*}$ | $83.4 \%$ |
| 65 and older | $100.0 \%^{*}$ | $98.0 \%$ |
| Education Level | ----- | $64.4 \%$ |
| <High School | $75.0 \%^{*}$ | $76.5 \%$ |
| High School/GED | $93.1 \%^{*}$ | $87.9 \%$ |
| >High School |  |  |
| Annual Income | $56.2 \%$ | $64.2 \%$ |
| <\$25,000 | $87.5 \%$ | $81.7 \%$ |
| \$25,000 - \$49,900 | $99.6 \%$ | $95.4 \%$ |
| \$50,000 or more |  |  |
|  |  |  |

* Asterisk denotes instances where the differences between the Leon and Florida values are statistically significant at the $95 \%$ confidence level.

Source: Florida County-Level BRFSS Survey, Florida DOH, Bureau of Epidemiology

## MEDICARE and MEDICAID

Medicare is provided to people age 65 and older, some disabled people under age 65, and people of all ages with End-Stage Renal Disease (permanent kidney failure treated with dialysis or a transplant). Figure 97 provides a summary of Leon County resident Medicare beneficiaries and for Medicare Advantage (MA), which includes the private health plans such as HMOs, PPOs, and Private Fee for Service (PFFS) plans contracted to provide Medicare services. Figure 98 depicts the median monthly Medicaid enrollment for Leon County and Florida. While Leon County's Medicaid enrollment is consistently lower than the state of Florida overall, the upward trend for both is evident.

Figure 97: Medicare Beneficiaries and Medicare Advantage


Source: Centers for Medicare and Medicaid Services (CMS)

Figure 98: Median Monthly Medicaid Enrollment


Source: Florida Agency for Health Care Administration (AHCA)

Medicaid is a
state administered program available to low-income individuals and families who meet specific eligibility requirements.

## FLORIDA KIDCARE

Federal government provisions for children's health coverage include Medicaid and Title XXI of the Social Security Act. The states use Title XXI block grants to fund child health care coverage through an expansion of the Medicaid program, health insurance, or a combination of the two. The KidCare Act of 1997 expanded Medicaid eligibility and the Healthy Kids Program, and initiated the MediKids program. Currently, there are four KidCare programs available to augment health care for children (listed below). Enrollment data are provided in Figure 99 and Table 12.

- Healthy Kids Program - The Healthy Kids program provides subsidized health insurance for children ages 5 through 18 who reside in households whose income is between $100-200 \%$ of the federal poverty level (FPL). Full-pay options are also available to families with incomes above 200\% FPL.
- MediKids - MediKids covers children age 1 through 4 with income at 133-200\% of FPL.
- Children's Medical Services (CMS) - CMS covers children from birth through 18 who have special behavioral or physical health needs or chronic medical conditions.
- Medicaid - Medicaid provides health insurance for children from birth though 18 years, with eligibility based on the age of child and household income. Children less than age 1 are covered if the household income is below $200 \%$ of FPL , children ages 1 through 4 if household income is less than $133 \%$ of $F P L$, and children ages 6 through 19 if household income is below $100 \%$ of FPL.

Figure 99: KidCare Enrollment for Children Under Age 5 MediKids and Medicaid


Source: Florida Agency for Health Care Administration (AHCA)

Table 12: KidCare Enrollment by Program, Excluding Medicaid, April 2012

| Program | Leon <br> County | Florida |
| :---: | :---: | :---: |
| Medikids | 292 | 34,613 |
| Healthy Kids | 1,577 | 231,556 |
| Children's Medical Services Network | 282 | 23,018 |
| Total Active Children | $\mathbf{2 , 1 5 1}$ | $\mathbf{2 8 9 , 1 8 7}$ |

[^51]
## HEALTH CARE PROVIDERS and FACILITIES

The Department of Health and Human Services (HHS) has designated the low-income population in Leon County to be $M$ Medically Underserved Population (MUP). In addition, Leon County is designated a Health Professional Shortage Area (HPSA) for the low income population in the areas of Primary Care, Dental Care, and Mental Health. Bond Community Health Center, the Federal Correctional Institution-Tallahassee, and North Florida Medical Centers are currently funded to address health care access needs of the low income population.

There are a variety of health care providers and facilities located throughout Leon County. Table 13 provides a listing of the different types of providers and facilities. All facilities and providers are located in the Tallahassee area.

Table 13: Health Care Providers and Facilities, April 2012

| Facility Type | Total |
| :---: | :---: |
| Abortion Clinic | 1 |
| Adult Day Care Center | 2 |
| Ambulatory Surgical Center | 13 |
| Assisted Living Facility | 12 |
| Birth Center | 1 |
| Clinical Laboratory | 63 |
| Crisis Stabilization Unit/Short Term Residential Treatment Facility | 2 |
| End-Stage Renal Disease Center | 3 |
| Health Care Clinic | 13 |
| Health Care Clinic Exemption | 91 |
| Health Care Services Pool | 2 |
| Home Health Agency | 17 |
| Home Medical Equipment Provider | 14 |
| Homemaker and Companion Service | 39 |
| Hospice | 1 |
| Hospital | 5 |
| Intermediate Care Facility for the Developmentally Disabled | 4 |
| Nurse Registry | 1 |
| Nursing Home | 6 |
| Organ and Tissue Procurement | 1 |
| Portable X-Ray | 2 |
| Prescribed Pediatric Extended Care Center | 1 |
| Rehabilitation Agency | 3 |
| Residential Treatment Center for Children and Adolescents | 1 |
| Residential Treatment Facility | 4 |
| Skilled Nursing Unit | 1 |
| Total | 303 |

Leon County has a lower rate of licensed physicians than the state of Florida overall with 256.8 licensed physicians per 100,000 in Leon and 336.3 per 100,000 in Florida during 2010-2011 (Figure 100).

Figure 100: Total Licensed Physicians

Family practitioners, internists, pediatric and general medicine physicians, and obstetricians/ gynecologists are all considered primary care providers.


Source: Florida DOH, Division of Medical Quality Assurance

## PRIMARY CARE

Primary care is the typically the first point of entry into the health care system for non-emergent services. Primary care providers (PCPs) give routine medical care for the diagnosis, treatment, and prevention of common medical conditions. PCPs refer patients requiring additional care to specialists for treatment and play an important role in the coordination of care in the managed care environment. Figure 101 shows the rate of licensed primary care physicians per 100,000 in Leon and Florida.
liks

Figure 101: Total Licensed Primary Care Physicians, 2010-2011


[^52]
## DENTAL CARE

During 2010-2011, the rate of licensed dentists per 100,000 population was much lower in Leon County than the state (Figure 102). Generally, access to dental care declines as income declines. The percentage of low income persons with access to dental care in Leon County is half the percentage of persons with access in Florida. While the state rate has been gradually increasing since 2006, the rate has remained low and relatively constant in Leon County (Figure 103).

Figure 102: Total Licensed Dentists


Source: Florida DOH, Division of Medical Quality Assurance

Figure 103: Percentage of Low Income Persons With Access to Dental Care


[^53]Access to dental care is an important part of overall dental and oral health.

## NURSING HOMES

Figure 104 compares the rates in Leon County and the state of Florida overall. The number of beds in Leon County has remained steady at 816 in the last few years.

Figure 104: Total Nursing Home Beds, Rate Per 100,000 People


Source: Florida AHCA, Certificate of Need Office

## ACUTE CARE

Acute care hospitals play a key role in the delivery of health care services in a community. In addition to providing traditional inpatient services, hospitals also provide extensive diagnostic and treatment services on an outpatient basis. Table 14 provides a snapshot of hospital bed types located in Leon County.

Table 14: Inventory of Licensed Medical Services Bed Types as of January 2012

| Licensed Hospital Beds | Leon <br> County <br> Total | Tallahassee <br> Memorial <br> Hospital | Capital <br> Regional <br> Medical <br> Center | HealthSouth Rehab Hospital of Tallahassee | Eastside Psychiatric Hospital | Select Specialty Hospital Tallahassee, Inc. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Total Beds | 1,121 | 772 | 198 | 76 | 46 | 29 |
| Acute Care Beds | 765 | 567 | 198 | - | - | - |
| Long Term Care | 29 | - | - | - | - | 29 |
| NICU Level II | 13 | 13 | - | - | - | - |
| NICU Level III | 19 | 19 | - | - | - | - |
| Psychiatric Adult | 91 | 45 | - | - | 46 | - |
| Psychiatric Child/Adolescent | 15 | 15 | - | - | - | - |
| Substance Abuse Adult | 0 | - | - | - | - | - |
| Substance Abuse Child/Adolescent | 0 | - | - | - | - | - |
| Hospital Based Skilled Nursing Unit | 113 | 113 | - | - | - | - |
| Comprehensive Medical Rehabilitation | 76 | - | - | 76 | - | - |
| Services/Characteristics |  |  |  |  |  |  |
| Level 2 Adult Cardiovascular Services |  | Yes | Yes | - | - | - |
| Primary Stroke Center |  | Yes | Yes | - | - | - |
| Adult Open Heart Surgery |  | Yes | Yes | - | - | - |
| Emergency Department |  | Yes | Yes | - | Yes (Psychiatry) | - |
| Trauma Center |  | Yes Level 2 | - | - | - | - |
| Baker Act Receiving Center |  | Yes | - | - | Yes | - |
| Profit Status |  | Not-For- <br> Profit | For-Profit | For-Profit | Not-For- <br> Profit | For-Profit |

Source: Florida Agency for Healthcare Administration (AHCA), April 2012

Leon County residents received acute care services in the five hospitals listed in the table above, as well as in other hospitals throughout the state of Florida. As Figure 105 on the next page illustrates, from October 2010 through September 2011, 60\% of patients received care at Tallahassee Memorial Hospital and another 29\% at Capital Regional Medical Center.

Figure 105: Where Do Leon County Residents Go For Hospital Care?


Capital Regional Medical Center
HealthSouth Rehabilitation Hospital of Tallahassee
Eastside Psychiatric Hospital
Select Specialty Hospital - Tallahassee
All Other Florida Hospitals

Source: AHCA Hospital Inpatient Data - October 2010 through September 2011

Table 15 shows the top twelve adult diagnostic related groups (DRGs) for adults. The leading discharge diagnoses are related to births, psychoses, and digestive disorders. Table 16 illustrates the leading pediatric discharges. The leading discharge diagnoses are normal births, neonatal complications, and bronchitis and asthma. Data represent discharges from all hospitals in Florida.

Table 15: Adult Discharges by Top Diagnostic Related Groups (DRG), October 2010-September 2011

| Top 12 Adult Discharges (Age 18 Years and Older) | Number | \% of Top <br> 12 DRGs |
| :---: | :---: | :---: |
| Vaginal delivery without complicating diagnoses | 1,552 | 22\% |
| Psychoses | 1,143 | 16\% |
| Cesarean section without CC/MCC | 579 | 8\% |
| Esophagitis, gastroent and miscellaneous digest disorders without MCC | 544 | 8\% |
| Rehabilitation with CC/MCC | 532 | 8\% |
| Major joint replacement or reattachment of lower extremity without MCC | 498 | 7\% |
| Chest pain | 441 | 6\% |
| Cesarean section with CC/MCC | 405 | 6\% |
| Uterine and adnexa proc for non-malignancy without CC/MCC | 371 | 5\% |
| Red blood cell disorders without MCC | 310 | 4\% |
| Depressive neuroses | 296 | 4\% |
| Vaginal delivery with complicating diagnoses | 272 | 4\% |
| Total Top 12 Discharges | 6,943 | 100\% |
| Total Adult Discharges | 21,466 |  |

[^54]Table 16: Pediatric Discharges by Top Diagnostic Related Group (DRG), October 2010-September 2011

| Top 12 Pediatric Discharges (Age 17 Years and Under) | Discharges | $\%$ <br> 12 of Top |
| :--- | :---: | :---: |
| Normal newborn | 2,188 | $63 \%$ |
| Neonate with other significant problems | 420 | $12 \%$ |
| Full term neonate with major problems | 150 | $4 \%$ |
| Bronchitis and asthma without CC/MCC | 129 | $4 \%$ |
| Prematurity with major problems | 107 | $3 \%$ |
| Psychoses | 107 | $3 \%$ |
| Prematurity without major problems | 79 | $2 \%$ |
| Esophagitis, gastroent and miscellaneous digest disorders without MCC | 64 | $2 \%$ |
| Cellulitis without MCC | 61 | $2 \%$ |
| Otitis media and URI without MCC | 59 | $2 \%$ |
| Extreme immaturity or respiratory distress syndrome, neonate | 54 | $2 \%$ |
| Seizures without MCC | $\mathbf{3 , 4 7 3}$ | $\mathbf{4 , 5 6 3}$ |
|  | Total Top 12 Discharges | $2 \%$ |
|  | Total Pediatric Discharges | $100 \%$ |

Source: AHCA Hospital Inpatient Data Files, October 2010-September 2011

Hospital services are known to be extremely expensive, making health insurance coverage almost a necessity when seeking acute care services. Figure 106 shows the payor sources for hospital services to Leon County residents at discharge for all hospitals in Florida. The top three payors are commercial insurance, Medicare, and Medicaid.

Figure 106: Hospital Inpatient Discharges by Payor Source


[^55]
## EMERGENCY DEPARTMENT VISITS

Local hospital emergency department utilization can be a good indicator of the availability and accessibility of area health care services. Figure 107 shows that in 2010, Leon residents made 143,000 total emergency room visits. Since 2005, Capital Regional Medical Center has seen an increasing number of emergency department visits, while the number of visits at Tallahassee Memorial Hospital has decreased slightly. In 2010, Capital Regional Medical center saw slightly more visits $(75,509)$ than Tallahassee Memorial Hospital $(67,491)$.

Figure 107: Emergency Department Visits in Leon County, FY-2005 - FY-2010


Source: AHCA Emergency Department Utilization Report

The majority of pediatric emergency department visits in 2010-2011 were funded by Medicaid (18 percent) and Medicaid Managed Care (43 percent). Another twenty-four percent were funded by commercial health insurance, while self-pay accounted for nine percent of the total (Figure 108).

Figure 108: Emergency Department Visits by Payor Source, Children 0 to 17 Years, October 2010-September 2011


The majority of adult emergency department visits in 2010 were funded by commercial health insurance ( 29 percent). In contrast to the pediatric population and to the hospital inpatient population, twenty-seven percent of emergency department visits to the six hospitals in Leon County in 2010 were funded by the patients through self-pay (Figure 109).

Figure 109: Emergency Department Visits by Payor Source, Adults Ages 18 and Older, October 2010-September 2011


Source: AHCA Emergency Department Utilization Report


## Conclusion

The MAPP Steering Committee reviewed the data presented in this section, along with many other indicators not presented here. This process increased the group's understanding of what issues needed to be addressed and what issues reflect the assets of the community and its public health system. Major findings for areas needing attention were arranged according to life stage and include the following:

- All Ages
- Chronic Diseases
- Diabetes/Kidney Disease
- Heart Disease
- Overweight/Obesity
- Risk factors: hypertension
- Motor Vehicle Crashes


## - Children

- Infant Mortality
- Overweight/Obesity
- Asthma and connection to physical environment
- Diabetes management (hospital utilization)
- Adolescents/Young Adults
- Sexually Transmitted Diseases/ HIV/AIDS
- Gang Violence
- Binge Drinking
- Adults
- Prostate/Colorectal Cancer - Disparity by Race


## - Seniors

- Influenza/Pneumonia


## COMMUNITY THEMES and STRENGTHS ASSESSMENT

The importance of community input to a community health assessment cannot be overstated. The fundamental purpose of the Community Themes and Strengths Assessment is to incorporate the direct voices of community residents into the assessment process. Specifically, this assessment seeks to answer the following questions:

* What is important to our community?
* How is quality of life perceived?

By exploring these questions, the top health and quality of life issues, experiences, and concerns-according to those who live in Leon County-can be identified. The data collected through this process add a critical piece to the larger picture of community health, and will be closely reviewed during the development of the community health improvement plan. Two strategies were utilized to gather community input: roundtable discussions and community surveys. A sub-committee was recruited from the Capital Coalition for Health to assist with planning and implementation of both strategies.

## Roundtable Discussions

Beginning in October 2011, Health Planning Council worked with the Community Themes and Strengths Subcommittee to identify potential audiences, venues, and facilitators for the roundtable discussions. By reviewing the preliminary results of the Community Health Status Assessment, subcommittee members focused efforts on populations that were most heavily impacted by adverse health outcomes. Venues where those populations convene were identified and those interested in facilitating discussions were matched with those groups.

## METHODOLOGY

A facilitation guide was developed by the Health Planning Council that included questions recommended by the National Association of County and City Health Officials (NACCHO), the entity that provides guidance on the implementation of MAPP. The guide also provided detailed instructions, an introduction, and a checklist of steps to be completed in order to assure that each of the discussions was similar in format and content.

Leon County Health Department staff coordinated the scheduling of roundtable discussions, facilitated some groups, and provided back-up support to other facilitators as needed. Nine different roundtable discussions were conducted, which ranged in size from three to 23 people with a total of 78 people participating overall. See Table 17 for an overview of the groups and Table 18 for detailed demographics of participants.

All but one of the discussions were audio recorded and then transcribed in summary format to convey participants' concerns and opinions. Detailed notes were taken with the one group that was not audio recorded. Data from all groups were then reviewed systematically question by question to identify common themes across groups.

Table 17: Leon County Roundtable Discussions

| GROUP \# | AUDIENCE | \# PARTICIPANTS |
| :---: | :--- | :---: |
| 1 | Elder residents attending a community Senior Center | 12 |
| 2 | African-American adults from a church community | 6 |
| 3 | Young White adults enrolled at Florida State University (FSU) | 11 |
| 4 | Young lower-income adults enrolled in vocational school | 23 |
| 5 | Young lower-income adults enrolled in vocational school | 10 |
| 6 | Young African-American adults enrolled at Florida A\&M University (FAMU) | 5 |
| 7 | Adults involved in provision of health care services | 3 |
| 8 | Young adults enrolled at Florida State University (FSU) | 3 |
| 9 | Hispanic/Latino adults who are public employees | 5 |

Table 18: Detailed Demographics of Roundtable Discussion Participants

|  | GROUP \# > | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | TOTAL |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Age | 18-24 |  |  | 7 | 12 | 7 | 4 | 1 | 3 |  | 34 |
|  | 25-29 |  | 1 | 3 | 5 | 2 | 1 |  |  | 1 | 13 |
|  | 30-39 |  | 2 |  | 1 | 1 |  | 1 |  |  | 5 |
|  | 40-46 |  | 1 |  | 4 |  |  |  |  | 1 | 6 |
|  | 47-54 | 2 | 1 |  | 1 |  |  | 1 |  | 2 | 7 |
|  | 55-64 | 1 | 1 |  |  |  |  |  |  | 1 | 3 |
|  | 65-74 | 6 |  |  |  |  |  |  |  |  | 6 |
|  | 75-84 | 3 |  |  |  |  |  |  |  |  | 3 |
|  | 85+ |  |  |  |  |  |  |  |  |  | 0 |
|  | no answer |  |  | 1 |  |  |  |  |  |  | 1 |
|  |  |  |  |  |  |  |  |  |  |  |  |
| Gender | Female | 10 | 3 | 6 | 11 | 8 | 3 | 3 | 2 | 3 | 49 |
|  | Male | 2 | 3 | 4 | 12 | 2 | 2 |  | 1 | 2 | 28 |
|  | no answer |  |  | 1 |  |  |  |  |  |  | 1 |
|  |  |  |  |  |  |  |  |  |  |  |  |
| Sexual Orientation | Straight | 12 | 6 | 9 | 20 | 9 | 5 | 3 | 3 | 4 | 71 |
|  | Gay/Lesbian |  |  |  | 2 |  |  |  |  |  | 2 |
|  | Bisexual |  |  | 1 | 1 |  |  |  |  | 1 | 3 |
|  | no answer |  |  | 1 |  | 1 |  |  |  |  | 2 |
|  |  |  |  |  |  |  |  |  |  |  |  |
| Race/ Ethnicity | Asian/PI |  |  |  |  |  |  |  |  |  | 0 |
|  | Black/African American | 2 | 6 |  | 12 | 7 | 5 | 1 |  |  | 33 |
|  | Hispanic/Latino |  |  |  | 1 |  |  |  |  | 5 | 6 |
|  | Native American |  |  |  | 1 | 1 |  |  |  |  | 2 |
|  | White | 9 |  | 11 | 9 | 2 |  | 2 | 2 |  | 35 |
|  | Other |  |  |  |  |  |  |  | 1 |  | 1 |
|  | no answer | 1 |  |  |  |  |  |  |  |  | 1 |
|  |  |  |  |  |  |  |  |  |  |  |  |
| Education | < 9th grade | 1 |  |  |  |  |  |  |  |  | 1 |
|  | some high school |  |  |  |  | 1 |  |  |  |  | 1 |
|  | high school grad | 3 |  |  | 2 | 2 |  |  |  |  | 7 |
|  | some college | 6 | 3 |  | 5 | 3 |  |  |  | 1 | 18 |
|  | current college |  |  | 6 | 16 | 4 | 5 |  |  | 1 | 32 |
|  | bachelor's | 1 |  | 3 |  |  |  | 2 | 2 | 3 | 11 |
|  | master's | 1 | 3 | 1 |  |  |  | 1 | 1 |  | 7 |
|  | doctoral |  |  |  |  |  |  |  |  |  | 0 |
|  | no answer |  |  | 1 |  |  |  |  |  |  | 1 |
|  |  |  |  |  |  |  |  |  |  |  |  |
| Income | < 10K | 3 | 2 | 9 | 8 | 6 | 3 |  | 1 |  | 32 |
|  | 10-20K | 5 |  |  | 5 | 2 | 1 |  | 2 |  | 15 |
|  | 20-30K | 2 | 1 |  | 2 |  |  |  |  | 1 | 6 |
|  | 30-50K | 1 | 3 | 1 | 4 | 1 | 1 | 1 |  | 3 | 15 |
|  | 50-100K | 1 |  |  | 4 |  |  | 1 |  | 1 | 7 |
|  | 100K+ |  |  |  |  |  |  | 1 |  |  | 1 |
|  | no answer |  |  | 1 |  | 1 |  |  |  |  | 2 |

## Results

The findings from the roundtable discussion groups are presented in this report and organized by categories to follow the Moderator's Question Guide. The categories include the following:

- Quality of Life, including change over time, raising children, growing old, economic opportunity, safety, and equal opportunity for all residents.
- Health Problems of most concern
- Health Care System and Services

Each category is comprised of a brief summary of key points, along with notable quotes from the participants with speakers identified by age group. Differences between groups are noted and described as necessary. An additional section entitled "Additional Community Needs and Assets" is included at the end and provides some key points discussed by participants after the structured questions were complete. Finally, the report concludes with a summary of the issues of most concern by roundtable participants.

## QUALITY of LIFE

In discussing overall quality of life, participants were prompted to consider sense of personal safety, well-being, participation in community life, and feeling connected to others.

Across various groups, the following positive aspects of quality of life were noted:

- People are friendly.
- Quality of life is very good in certain areas of town.
- "College town" status brings opportunities such as art, cultural, and intellectual offerings.
- Nice, quiet neighborhoods

Negative aspects were also noted across multiple groups:

- Challenging economic conditions, lack of jobs, and low pay in many jobs.
- Disparities based on the part of town, especially in terms of safety and crime.
- Health care services are very difficult to access if you are uninsured.
- There is perceived variability in the quality of health care services.
- Transportation options are limited, especially in the outlying areas of the county.
- "College town" status means that most resources go to areas near colleges at the expense of other areas.

Older adults describe high quality of life and being happy living in Tallahassee overall. Having a community center and/or being well-connected to family, friends, and neighbors is very important. These seniors report that people in Tallahassee are very friendly and helpful.
"I'm very happy with this community. I've been here about seven years. I love the college atmosphere and the people are so friendly." --Elder resident
"I moved into a beautiful community and neighbors cannot do enough for you. They are always helping in any way and ... after I was diagnosed with lymphoma, the Senior Center (helped)." --Elder resident

African-American and lower-income groups reported a less optimistic view of quality of life. Concerns from middle-aged adults focused on two main areas: 1) economic conditions and the lack of jobs, and 2) lack of access to and quality of health care services. College students focused on concerns for personal safety.
"In most minority communities and even particularly ours on a college campus, you don't feel as safe as you would on the other side of town. The other side has better lighting, security, police presence." --Young adult/college student

FSU students (all young adults) reported general satisfaction with their quality of life. Concerns that were raised centered on safety issues and the barriers present for pedestrians and bicycle riders.

One Latina immigrant participant shared that her quality of life now is high. But when she first arrived in Tallahassee, she felt very isolated. There isn't a large immigrant population and that makes the assimilation process more difficult.

## CHANGE OVER TIME

Participants were asked to consider how quality of life has changed over time. Many of the young adults were new to the area and did not have enough experience to comment. This question was answered most substantially by older adults and those born and raised in the community. There were mixed responses; some expressed that things had improved and others felt that overall things had deteriorated. There was general agreement that these perspectives differed based on the area of town that one called home.

The key points discussed across various groups included:

- Increase in crime and increase in awareness of crime
- In terms of crime, some areas have improved and some have gotten worse
- Degradation of the environment
- Growth in population and development
- Economy has weakened and jobs have become scarcer
"I feel like it's gotten worse... kids today bringing guns and knives to school. They used to just fight it out with their fists and be done with it. But now there's retaliation also. That causes a problem with community." --Young adult/college student
"I love Tallahassee. It's gotten better over time. However, the one issue is seeing the degradation of our environment, our bodies of water, all the sinkholes we used to swim in. I live on Lake Jackson and nobody would swim in it now. The sinkholes are either inaccessible or they're really dirty. It's an area I think we need to focus on, preserving our environment for our future generations." --Elder resident
"It has become more impersonal. (You) feel like a number with your physician. Could be because it's getting bigger..." --Adult resident
"With our economy now, we have a different set of people... a new poor. It's hard for them to wrap their mind around having to go get services that they wouldn't normally have to go get. From an emotional place, it's hard." --Adult resident

Hispanic/Latino participants agreed that the Hispanic/Latino population had grown or had become more visible over the past several years. Evidence of this was seen in the increase in community participation at the annual "Hispanic Festival".

## RAISING CHILDREN

Participants were asked to consider school quality, day care, after school care, recreation, and the environment as they discussed raising children in Leon County. Some of the student groups had little to say about this, but even those participants who had not raised children here offered examples of positive and negative characteristics in the community in relation to raising children.

The key points discussed across various groups included:

- It can be a good place, but it largely depends on where you live. The quality of education depends on what part of town you live in. There is a perceived inequality in educational opportunity and quality based on income.
- Concern was expressed over cuts in funding to public education.
- Recreational centers and parks are numerous and for most people, perceived to be high quality. However, enthusiasm over these offerings ranged from extremely high to extremely low. Ease of access varied as well, with costs identified as a barrier for some.
"... knowing how to do certain activities in the environment like kayaking. I don't know anyone back home who used to do anything like that... but up here people are really outdoorsy and that's great. I would like that to be a part of my kids' lives." --Adult resident

Lower income participants reported that more affordable child care options and youth centers were needed. Discussion also centered on the state of parks and recreation in some of the lower income neighborhoods:
"Nah, there's a playground, but it's not anything you would play on. There's a slide with a lot of graffiti..." --Young adult/ vocational student

For those who had lived in large cities, Tallahassee is seen to be a better place to raise children, as compared to Miami or New York. A "small town atmosphere" is seen as more supportive of raising children.

## GROWING OLD

As they discussed whether this community is a good place to grow old, participants were asked to consider the availability of elder friendly housing, transportation, churches/faith communities, shopping, elder day care, social support organizations and agencies, services, and activities.

The key points discussed across various groups included:

- Crime is one aspect that is not favorable.
- Affordable housing is a problem.
- Transportation, especially the inconvenience and limited routes of the bus system, is seen to be a barrier for seniors. If you don't have a car or can't drive yourself, your quality of life is affected.
- Social support is crucial when growing old. Concern was expressed for those seniors who do not live in retirement homes, have family support, or other networks.
"The elderly people who are not in retirement homes are not getting the social interaction or care they need. Those in retirement homes probably do better... We have to do better. It has to be partnerships, churches, getting more involved. Also students can get connected-that will help young people be connected to the community and build relationships here." --Adult resident

Elder residents reported more favorable perceptions of growing old in Leon County than did younger adults. They felt that services were available to them through their communities, the senior center, and churches. The one exception discussed was affordable housing. It is perceived to be located in unsafe areas of town. One participant expressed concern that "pet children" are not allowed or are restricted to a certain weight. It is important to note that these seniors are all involved in a senior center, so they are able to manage transportation to the site and they are receiving social interaction and support.
"This is a great place to grow old... availability of housing, program support for seniors, transportation. Elder population growing, which helps. More should be done to alleviate growth of crime, but I think it's a good place for seniors." --Elder resident

A robust discussion of the health care system in terms of growing old took place in the group comprised of health care advocates. This group felt strongly that the quality and availability of geriatric, specialty, and advanced care are in doubt. Many people feel they need to seek care in a larger city to feel confident they are getting high quality care.
"When I get to a certain age, I don't really want to rely on the services here". --Adult resident
"I wouldn't particularly want to grow old here... as I've seen my parents get older. Any kind of specialty or advanced care-we just don't have the confidence level. You'd always want a second opinion." --Adult resident

## ECONOMIC OPPORTUNITY

Many groups acknowledged that Leon county communities are suffering similar economic hardships as the rest of Florida and the nation.

The key points discussed across various groups included:

- There are not enough community-owned businesses. There is a general perception that small local businesses are closing down.
- The economy in Leon County focuses on higher education and government. Jobs are available for lawyers, lobbyists, government workers and those who cater to the university populations (i.e. FSU football, student life).
- There is a lack of affordable housing in "decent" areas.
- Job training and education is plentiful, but jobs are not.
- Oftentimes, opportunity depends on who you know. Networks are important for getting a job and for getting a customer base for a small business.
"A lot of people want to stay in a smaller community (like Tallahassee), but they don't think they can get a job here, so it doesn't even cross their minds to stay." --Adult resident
"There is opportunity here... I think it takes knowing the right people and having a lot of money to do it." --Adult resident
Students feel there are good opportunities for internships related to legislative and government work. Low-paying jobs in restaurants and at the mall are geared toward the student population. Because there are so many students and young people willing to take those jobs, they are competitive. A few students agreed that employers know that if you don't like the job or you complain, someone else will take it quickly. There is not much job security.
"They know there are so many college students willing to take your job. So if you complain, you don't have many options. Someone else can take your job." --Young adult/college student


## SAFETY

Safety and crime were raised without a prompt by all groups during earlier questions about overall quality of life. This issue is clearly a top priority for community members. During this focused question on crime and safety, participants were encouraged to consider perceptions of safety in the home, workplace, schools, playgrounds, parks, mall, etc. They were also asked to comment on whether neighbors look out for one another.

The key points discussed across various groups included:

- Every group expressed strong opinions that safety depends on where you live. Quiet, outlying neighborhoods are said to be safer, but not free from crime.
- Overall, there is a perception that crime has increased, including violent crime and hate crimes.
- Seniors do not feel safe out in the community at night.
- Some perceive the police presence to be small and the police to be somewhat indifferent.
- Tallahassee is safer than the larger cities in Florida and the nation.
- Lower income adults were split in their perceptions of crime and safety. Some felt that their neighborhoods used to be "bad", but that they have "cleaned them up" and are safer now. Others reported feeling very unsafe and high levels of crime and violence.
- Students from both FAMU and FSU reported having experienced their cars being broken into with some frequency.
"Near the FSU side of the train tracks is better. Better lighting, happy people, smiling faces over there. You get over here and you can tell the difference... different funding. They put a lot more effort over there. You have to be precautious. It's night and day when you cross the train tracks." --Young adult/college student
"Definitely Tallahassee is safer than some other areas in the state, and within Tallahassee there are areas that are safer than others. When I first moved here, I lived in an apartment off of Old Bainbridge and I would hear gunshots once or twice every few weeks. So some areas are better than others, but overall it's a safe place." --Adult resident
"I live so far away from my neighbors here yet I know them... In Miami, you live so close to your neighbors that you could hear them snoring next door, but you didn't know anybody until the hurricane came. I like the Southern Hospitality part of it here compared to down there. Same thing goes for New York City. Up there if you look at somebody they say 'What're you looking at?' But here it's 'Hello, ma'am! How you doing, ma'am? Thank you, ma'am!'"' --Adult resident


## EQUAL OPPORTUNITY for ALL

Participants were asked to talk about opportunities to contribute to and participate in the community's quality of life, specifically in relation to there being equal opportunities for all residents and all groups. Some groups declined to comment, perhaps because they found the wording of the question unclear. There were, however, some interesting findings.

The key points discussed across various groups included:

- There are many diverse opportunities, especially volunteering, for anyone interested.
- Young adults/students especially expressed enthusiasm about community and being engaged in community to change things for the better.
- Lack of transportation can be a limitation for community engagement.
- Communication about opportunities could be improved.
- Some people feel that some opportunities in Tallahassee can be very exclusive. It can be hard for a newcomer to break into certain things.
- Language barriers for those with limited English can be a barrier to participation.


#### Abstract

"What happens sometimes, especially in the African American community, people don't think that one person make a difference. But that's not true, if one person acts, it influences someone else and so on... a chain reaction. Until we get out of the mindset that we can't make a difference, we won't make a difference!" --Young adult/college student "There are some activities that some people do feel excluded from, but then I think it's your own responsibility to build up your own support system... I just think that we have a responsibility to ourselves and our families. Also, I think this isn't just a Hispanic thing. It's got something to do with being a non-native to Tallahassee. Even for an Anglo, Tallahassee is a little closed to outsiders." --Adult resident


## HEALTH PROBLEMS of MOST CONCERN

The next section explores the health problems in the community that participants believed to be the most important and of most concern. A list of broad health topics areas was used to prompt discussion of different health problems. These topics included the following: chronic diseases like asthma, heart disease, stroke, cancer, and diabetes; sexually transmitted diseases (STDs) and HIV/AIDS; other contagious diseases like flu and pneumonia; health risks such as overweight/obesity, high blood pressure, smoking, and physical inactivity; substance use and abuse; mental health problems like depression, anxiety, and suicide; violence, including child abuse, domestic violence, rape/sexual assault, and firearm-related injuries; motor vehicle crashes, including speeding and DUI; infant death and premature birth; aging issues such as arthritis, Alzheimer's, and end of life care; and dental problems.

The key points discussed across various groups included:

- Obesity and related problems such as diabetes and hypertension
- Sexually transmitted diseases, especially among the young adult populations
- Substance abuse, especially binge drinking among college students and the connection to DUI
"Probably more than half my family actually suffers from diabetes and I feel like it's not only a lack of knowledge of what fast foods and not cooking much at home can do to you, but is also people just don't see the need. It's so much easier just to go out and get quick food. So I feel like people should take more initiative and go out and take better care of themselves." --Young adult/college student
"Healthier foods are more expensive and they're really not as tasty as unhealthy foods that are loaded with salt and sugar." --Young adult/college student
"The Hispanic population comes from countries where you pay more money for processed food and less money for fresh food. So people tend to eat unprocessed food. When they come here, it's swapped. In South America, going to McDonald's is expensive. Here it's cheap and proportions are huge. The plates and glasses are enormous! So the food is the biggest part—it's a huge change and causes lots of health problems for the Hispanic community." --Adult resident
"I have heard the stories of 'Garnet and Gold Chlamydia'... I'm sure FSU has given out its fair share of antibiotics." --Young adult/college student
"STDs, especially HIV are a big part. Big, big problem in our community." --Young adult/college student
"Substance abuse. It is college. It's like training grounds for alcoholism. (People say) it's not alcoholism when you're in college!" --Young adult/college student
"It's binge drinking. We need that to get by with the biology test." --Young adult/college student

Other issues that were discussed with enthusiasm in one or more groups included the following:

- Homelessness and the connection to mental health problems.
- The increasing prevalence of asthma, especially in children.
- Early onset of sexual activity, resulting in teenage pregnancy and aforementioned STDs.
"...the homeless, the plight of the homeless, and the children. And that encompasses a lot of things on this list-depression, mental illness, returning service people not being taken care of..." --Elder resident
"Asthma... a lot of young kids have asthma. I have asthma and my young cousin has asthma and both her kids have asthma. And a lot of kids have asthma." --Young adult/vocational student
"Teen pregnancy. My cousin has little girls and it's a big problem... All these kids are having sex." -- Young adult/vocational student


## HEALTH CARE SYSTEM and SERVICES

Roundtable discussion participants then discussed their experiences with the overall health care system and the health care services available to them in Leon County.

## SATISFACTION with HEALTH CARE SYSTEM

Participants were encouraged to share their level of satisfaction with the health care system in Leon County. They were prompted to consider cost, quality, options, and prescription drugs. Finally, they were asked to comment on what kinds of improvements they would like to see in the system.

The key points discussed across various groups included:

- All groups feel like health care is too expensive, especially with no insurance.
- Older adult groups complained that doctor's visits are too short and the doctors are in a hurry to get out the door.
- In general, FSU students feel that their student health center provides good quality care.
- Several groups expressed doubts about health care quality in Tallahassee. Some feel that a second opinion is needed from a bigger city. There is a perception that good doctors go to bigger cities like Jacksonville and Miami.
- Many acknowledged that the weaknesses in the system are reflective of the national health care system and not specific to Tallahassee.
- There is a perception among Medicaid recipients that they do not receive the same quality of care and customer service as those with private health insurance.
- Prescription drugs are prohibitively expensive without insurance coverage.
"There's many a time where I just chose to accept the pain because I just couldn't afford it." --Young adult/college student "Stop scheduling 25 people for every 15 minutes. Physicians are too busy." --Elder resident
"Getting more residency programs and getting them to the advanced level needed to attract really good people would really help the overall quality of the health care system." --Adult resident
"Prescription drugs are too expensive, especially if you don't have insurance. Doctors want to prescribe the newer drugs, which are really expensive. My daughter had a prescription that costs $\$ 600$. What are you supposed to do with that?" --Adult resident
"When you have Medicaid you are treated differently than those who don't. You can tell the difference... I know whythey don't get a lot of money out of Medicaid. So they treat you like \#\%\$!" --Young adult/vocational student


## AVAILABILITY of HEALTH SERVICES

Participants discussed the availability of health services. Specifically, they were asked if there are health services they need that are not available to them and were prompted to consider the following: primary care, specialty care, dental/oral care, family planning/birth control, mental health or substance abuse services, prescription medications, and hospital services.

The key points discussed across various groups included:

- Access to dental care is a major limitation among all age groups.
- Many groups agreed that without health insurance, accessing any care beyond primary care is not possible.
- Mental health is expensive, not fully covered by insurance, and therefore unavailable to many.
- There was general consensus among groups that health care services should be available to people who need them.
- Many people expressed frustration and perceived it to be an injustice that health care resources are unavailable to so many people.
"Medicaid takes care of dentists but you have a difficult time getting dentists to do extractions and other work. That is a big problem; you can't have teeth made if you can't get the teeth out." --Elder resident
"I believe there is a shortage of dentists in this city. When we moved here nobody was accepting new patients." --Elder resident
"It's there, but I can't afford it so it might as well not even be there." --Young adult/college student
"My father suffered from cancer and it was really, really hard for him to find care and health insurance...period. So I just feel like it's a shame if a sick person needs help and can't get the services they need or deserve." --Young adult/college student
"The elderly have to choose between health care and life insurance. So she says 'I can die, but I can't get sick.' Because she wants to take care of her family after she dies." --Young adult/college student

Young, lower income women lament the fact that you can only qualify for Medicaid if you're pregnant or have children. And only when you are pregnant does your Medicaid cover dental services.
"...they won't give it (Medicaid) to me. I got no kids, so I don't qualify for it. I don't make no money because I work at McDonald's. If I have a trauma and have to go to a doctor's visit, I have to pay cash out of my pocket. If I have to get my teeth cleaned or have to go to the hospital it comes out of my pocket. Yeah, they're free clinics. To use the free clinics, you have to schedule it like a year ahead of time or something. Life if I get pneumonia or something, I can't go to the doctor. I have to go to the emergency room... I feel bad about this." --Young adult/vocational student

Hispanic/Latino participants agreed that finding bi-lingual providers is difficult and therefore a barrier to quality care. Older adults expressed concern that many providers are not native English speakers and are sometimes difficult to understand.

## ADDITIONAL COMMUNITY NEEDS and ASSETS

At the end of each roundtable discussion, participants were given an opportunity to offer any additional insights or suggestions about improving community health. Some groups did not respond to the question but for those who did, the following ideas were recorded:

- Community gardens are a great way to redevelop empty spaces while providing food, activity, an opportunity for older people to teach younger people, and for generations to interact.
- Lower income people need better access to exercise facilities.
- Churches can be a powerful force in improving lives. Community centers and schools are also seen to be central to community and a great asset for addressing health needs.
- Communication around services and opportunities for community health improvement are critical and need to be improved. Several groups felt that awareness of some community assets was low and that some needs could be met with existing resources if communication was better.
- Lower income adults feel strongly that transportation needs must be addressed to decrease barriers to accessing health care.


## Conclusion

These roundtable discussions among diverse Leon County residents served to illuminate a variety of factors affecting quality of life and health in the community. The issues that emerged most often and with the most consensus that they are of community concern are the following:

- Violence, safety, and crime
- Disparities in quality of life by area of town
- Chronic diseases, especially obesity and diabetes
- Sexually transmitted diseases
- Substance abuse
- Limited affordable health care services for those without insurance
- Inconsistent quality of health care services, especially for advanced needs
- Limited access to dental care
- Lack of coordinated communications around services and opportunities

While many needs were discussed, Leon County communities also have many assets that residents appreciate and can be leveraged for improvement efforts. Some of these assets include the following:

- Higher education opportunities (colleges and universities)
- Public and private sector jobs as a result of Tallahassee's status as state capital
- Parks and recreation options
- Friendly and engaged residents, many of whom are eager to help address community issues

A survey of community residents can provide robust information about the general perceptions, priorities, and concerns in a community. The Capital Coalition for Health set out to obtain broad input from Leon County residents and their efforts exceeded even their very lofty goals.

## METHODOLOGY

A two-page survey with 21 questions was created, utilizing the MAPP sample survey and other surveys previously used in Florida counties as a starting place. Answer options were customized and simplified in some cases and a heavier focus on access to health care was incorporated. The full survey instrument is located in the Appendix.

The Community Themes and Strengths subcommittee assisted with the identification of venues and contact people to disseminate the survey in order to get diverse input. Paper surveys were completed by residents at health fairs, community events, public libraries, senior centers, in waiting rooms of service providers, in conference rooms of partner organizations, and on campus at Florida State University. FSU public health students also went door-to-door with surveys in the Frenchtown area. An electronic survey was created in Survey Monkey. The link was provided to coalition partners who disseminated the survey via email and Facebook. Several entities embedded the survey link on their web site home pages, including Leon County government, Capital City AIDS Network, Leon County Health Department, and Whole Child Leon, among others. Other entities heavily involved in the completion of surveys were Leon County Schools, Florida Department of Health, Tallahassee Community College, Leadership Tallahassee, Working Well, and Early Learning Coalition.

The goal of 1500 completed surveys was met and surpassed with a total of 2,135 respondents completing the surveys. Of those, 1,153 were completed via the online survey and 982 were completed in person with a paper survey. Data were entered into Survey Monkey's online database by Health Planning Council staff. In addition to summary statistics, cross tabulations were produced by gender, income level, age, and race/ethnicity. Cross tabulations by gender did not reveal substantial disparities and therefore are not included in this report. Other cross-tabulated data are presented where findings are significant.

## DEMOGRAPHICS of SURVEY RESPONDENTS

Survey responses include a broad representation of the population in Leon County. Key demographics such as income level, race/ethnicity, age, and zip code of residence were represented in a similar distribution to that of the overall population (according to 2010 Census data). Exceptions within those categories were minor. For example, households earning less than $\$ 10,000$ annually were overrepresented somewhat, comprising $17 \%$ of the survey respondents and $7 \%$ of the county residents. This discrepancy could be attributed to substantial participation by FSU students, who are not accounted for in Leon County census data if their residency is in another county. Black/African-American residents were slightly overrepresented at $36 \%$ of survey respondents (vs. $30 \%$ of population, according to 2010 Census), leaving White/Caucasian residents slightly underrepresented at $56 \%$ (vs. 63\%).

As is commonly seen in convenience sample surveys related to health, females were represented more heavily than males ( $81 \%$ and $19 \%$, respectively). Cross tabulation of data by major demographic categories helps to reveal any differences among groups that are not evident in the summary statistics. A summary of demographic data is presented in Table 19 and in Map 2 on the following pages.

Table 19: Demographics of Survey Respondents

| SURVEY QUESTIONS and ANSWERS | RESPONSE PERCENT | SURVEY QUESTIONS and ANSWERS | RESPONSE PERCENT |
| :---: | :---: | :---: | :---: |
| How long have you lived in Leon County? | $\begin{aligned} & \mathrm{n}=2002 \\ & (93.8 \%) \end{aligned}$ | Gender | $\begin{aligned} & \mathrm{n}=2034 \\ & (95.3 \%) \end{aligned}$ |
| Less than 2 years | 3.3\% | Male | 18.9\% |
| 2-5 years | 18.9\% | Female | 80.9\% |
| 5-10 years | 16.4\% | Transgender | 0.2\% |
| More than 10 years | 61.4\% |  |  |
|  |  |  |  |
| Race/Ethnicity | $\begin{aligned} & \mathrm{n}=2023 \\ & (94.8 \%) \end{aligned}$ | Household Income | $\begin{aligned} & \hline n=1959 \\ & (91.8 \%) \end{aligned}$ |
| Black/African American | 36.3\% | Less than \$10,000 | 17.3\% |
| White/Caucasian | 56.1\% | \$10,000-\$20,000 | 11.3\% |
| Hispanic/Latino(a) | 3.7\% | \$21,000-\$30,000 | 13.3\% |
| Asian or Pacific Islander | 1.8\% | \$31,000-\$50,000 | 17.6\% |
| Native American/Alaskan Native | 0.3\% | \$51,000-\$100,000 | 26.1\% |
| Other | 1.9\% | More than \$100,000 | 14.4\% |
|  |  |  |  |
| Age | $\begin{aligned} & n=2048 \\ & \text { (95.9\%) } \end{aligned}$ | Current Employment Status | $\begin{aligned} & n=2040 \\ & (95.6 \%) \end{aligned}$ |
| Under 18 | 0.9\% | Employed - Full time | 58.6\% |
| 18-25 | 21.7\% | Employed - Part time | 12.3\% |
| 26-39 | 27.0\% | Student | 12.4\% |
| 40-54 | 24.0\% | Home Maker | 2.3\% |
| 55-64 | 18.7\% | Retired | 7.2\% |
| 65-74 | 4.2\% | Disabled | 0.9\% |
| 75+ | 3.5\% | Unemployed - Less than 1 year | 2.8\% |
|  |  | Unemployed - More than 1 year | 3.6\% |
|  |  |  |  |
| Highest Level of Education Completed | $\begin{aligned} & n=2036 \\ & \text { (95.4\%) } \end{aligned}$ | Sexual Orientation* | $\begin{aligned} & n=1888 \\ & \text { (88.4\%) } \end{aligned}$ |
| Elementary/Middle School | 1.5\% | Heterosexual or Straight | 95.7\% |
| High School Diploma or GED | 23.5\% | Gay or Lesbian | 2.7\% |
| 2-Year College Degree | 17.6\% | Bisexual | 1.6\% |
| Technical or Trade School | 5.4\% | *The low response rate of $88.4 \%$ indicates that data for sexual orientation of respondents are likely unreliable. |  |
| 4-Year College/Bachelor's Degree | 28.1\% | *The low response rate of $88.4 \%$ indicates that data for sexual orientation of respondents are likely unreliable. |  |
| Graduate/Advanced Degree | 23.9\% |  |  |

While responses from 2,135 surveys were entered into the database, every respondent did not answer every question. Demographic questions were placed at the end of the survey instrument to maximize responses to the high priority questions regarding community health. The number of responses for each demographic question above is included to the right of each question, along with the corresponding percentage of total respondents represented by this number. Because of these missing responses, conclusions about the demographics of the survey respondents are estimates.

The map below shows the distribution of respondents by zip code of residence. The percentage ranges represent the portion of the total number of surveys from each zip code. There was a small number of respondents whose zip codes of residence were outside of Leon County; these were not included in the map because their impact was extremely minimal.

Map 2: Survey Respondents' Zip Code of Residence - Leon County


## Results

## KEY FINDINGS

The top choices for the key questions indicating the priorities of community residents are presented below.

Most important features of a healthy community:

1. Access to healthcare (53\%)
2. Good jobs, healthy economy (43\%)
3. Churches/places of worship (32\%)
4. Clean environment (29\%)
5. Healthy behaviors and lifestyles (28\%)

Top health problems:

1. Obesity (35\%)
2. Diabetes (27\%)
3. Cancers (25\%)
4. Addiction (alcohol or drug) (24\%)

Unhealthy behaviors of most concern:

1. Drug abuse (47\%)
2. Poor eating habits/nutrition (40\%)
3. Being overweight (38\%)
4. Alcohol abuse (35\%)

Health care services that are most difficult to access:

1. Dental/oral care (36\%)
2. Mental health/counseling (32\%)
3. Alternative therapy ( $26 \%$ )
4. Substance abuse services (22\%)

Most common barriers to medical care:

1. Long waits for appointment and services (42\%)
2. Could not afford to pay ( $29 \%$ )
3. Could not afford medicine (21\%)
4. Lack of weekend or evening services (20\%)

Results from all questions are presented in data charts in the next section. Cross tabulations are included for select questions that were found to be significant or requested by the Capital Coalition for Health Steering Committee.

## Respondents

 could choose more than one option for each of these questions, resulting in the total exceeding 100\%. The accompanying percentages in this list indicate the proportion of respondents who chose each option.For example, $48 \%$ of all those surveyed chose "good jobs/ healthy economy" as one of their options for "most important feature of a healthy community".

## FULL SURVEY RESULTS

Summary statistics for each question are presented in this section and organized in two categories: 1) general perceptions of personal and community health, and 2) perceptions and experiences of the local health care system and access to health care services.

## GENERAL PERCEPTIONS of PERSONAL and COMMUNITY HEALTH

More than $80 \%$ of residents surveyed rated their health as excellent or good, leaving about $16 \%$ reporting that their health status is fair and less than 2\% with a reported poor health status (Figure 110).

Figure 110: How Do You Rate Your Own Personal Health?


Survey respondents were asked to choose up to three options that they felt were the most important features of a healthy community. Access to healthcare and good jobs/healthy economy were the top-ranked features (Figure 111).

Figure 111: Most Important Features of a Healthy Community


When these data are cross-tabulated by income level, we see differences among groups. Of particular note is that the importance of churches and places of worship increases as income level decreases and conversely that the perceived importance of health behaviors and lifestyles increases as income level rises (Figure 112).

Figure 112: Top Features of a Healthy Community by Income Level


Survey respondents were asked to choose up to three health problems that they felt were the most important in the community. Obesity ranked as the \#1 problem, followed by diabetes, cancers, and addiction to alcohol or drugs (Figure 113).

Figure 113: Most Important Health Problems


The top problems, along with others rated lower overall but higher by certain demographic groups are presented below in charts that highlight differences by income level, race/ethnicity, and age group (Figure 114; 115; 116).

Figure 114: Top Health Problems by Income Level


Figure 115: Most Important Health Problems by Race/Ethnicity


Figure 116: Most Important Health Problems, by Age Group


Figure 117 shows the unhealthy behaviors of most concern by residents surveyed. Drug abuse is ranked as the \#1 concern, followed by poor eating habits/nutrition, being overweight, and alcohol abuse. Figures 118 and 119 highlight differences seen by income level and race/ethnicity.

Figure 117: Unhealthy Behaviors of Most Concern


Figure 118: Unhealthy Behaviors of Most Concern, by Income Level


Figure 119: Unhealthy Behaviors of Most Concern, by Race/Ethnicity


Cross tabulation by income on this question produced some of the most consistent trends in the survey. A clear rise in concern is seen for drug and alcohol abuse, dropping out of school, and unsafe sex as income decreases. Conversely, as income rises, issues like poor eating/nutrition, being overweight, not getting enough exercise, and tobacco use are of more concern than in the lower income groups.

Acknowledging the impact that stress can have on personal health, one question related to the poor economy was included in the survey. Respondents were asked: "Have you had added stress related to the economy in the last year that negatively impacted your health?" More than 70\% responded affirmatively (Figure 120).

Figure 120: Added Stress Related to the Economy Has Negatively Impacted Personal Health


## PERCEPTIONS and EXPERIENCES of the HEALTH CARE SYSTEM and ACCESS to HEALTH CARE SERVICES

This section of the survey focused on health care services and the health care system. Questions sought to better understand the experiences that residents have with the system and the decisions that residents make about health care services.

Residents surveyed reported a variety of experiences with health care coverage. While respondents could choose more than one option, the large majority only chose one option. With less than $1 \%$ reporting that they do not need health insurance, residents clearly understand the importance of health care coverage in today's health care system (Figure 121).

Figure 121: Health Care Coverage


More than half (55\%) of respondents rated the quality of the health care system as excellent or good. One-third rated quality as fair, leaving a small proportion (7\%) with a poor rating and $4 \%$ unable/unwilling to offer a quality rating (Figure 122).

Figure 122: Quality of the Health Care System in Leon County


Survey respondents were asked to choose the health care services that are most difficult to access in Leon County. Dental/ oral care and mental health/counseling are the most difficult service to obtain, with alternative therapy and substance abuse services also rated as being more difficult to access (Figure 123).

Figure 123: Health Care Services Most Difficult to Obtain


The health care services rated most difficult to obtain overall were then cross-tabulated by income level, race/ethnicity, and age group and the most significant results are presented in Figures 124, 125, and 126. Many of the differences seen also reflect the varying assets, needs, and priorities that care characteristic of the different groups. For example, in Figure 124, it is evident that higher income respondents find mental health services more difficult to obtain than lower income groups. The likely reason for this is that other services are covered more substantially by health insurance plans and more upper income residents are covered by these plans. Lower income residents have a different hierarchy of needs with basic services like primary care and dental care taking precedence.

Figure 124: Health Care Services Most Difficult to Obtain, by Income Level


Figure 125: Health Care Services Most Difficult to Obtain, by Race/Ethnicity


Only the services that showed a difference among age groups are presented in Figure 126. The difficulty in obtaining the other services did not vary substantially by age. Dental care services are easier to obtain or become in less demand as age increases. Mental health services appear to be in more demand during middle adulthood.

Figure 126: Health Care Services Most Difficult to Obtain, by Age Group


Respondents were asked to indicate which, if any, problems they had experienced when trying to get medical care. Almost half reported that long waits for appointments and services was a barrier to accessing medical care (Figure 127).

Figure 127: Barriers to Access to Medical Care


Fortunately, the large majority of those surveyed reported that they are able to get a prescription filled at a pharmacy when they need it. However, it is clear by looking at the responses to the other options that $91 \%$ of respondents do not do that every time they need a prescription. Sometimes they resort to other options such as buying over the counter medicine instead, going without medicine, or using leftover medication (Figure 128).

Figure 128: What Do You Do When You Need a Prescription Medication?


Respondents were asked to where they would go if they were sick and needed medical help. While the severity of the sickness clearly impacts the choices people make in this regard, the question is most often interpreted as referring to a non-emergency situation (Figure 129).

Figure 129: Place You Would Go if You Were Sick and Needed Medical Help


As expected, those who report using the Emergency Room are more likely to be in the lower income groups, with the most obvious reason being that their access to other health care options is limited by lack of health insurance and financial constraints. This group is also more likely to see help at a community health center or free clinic (Figure 130).

Figure 130: Place You Would Go if You Were Sick and Needed Medical Help, by Income Level


When this question is cross-tabulated by age group, an interesting picture emerges where Emergency Room use is highest among the youngest and oldest adults. This likely reflects the higher proportion of young adults without health insurance and the increase in severe health issues experienced by the oldest adults (Figure 131).

Figure 131: Place You Would Go if You Were Sick and Needed Medical Help, by Age Group


Finally, respondents with children/dependents were asked where they would take their children/dependents if they were sick. We see similar responses as in Figure 132, but with more responding that they would go to their doctor or pediatrician's office/clinic.

Figure 132: Place You Would Go if Your Children/Dependents Were Sick*


## Conclusion

After reviewing the survey results, the Capital Coalition for Health noted several findings that were either especially prominent or surprising in some way.

- Perceptions of healthy weight vs. overweight/obesity are influenced heavily by culture and differ by age and race/ethnicity.
- Drug and alcohol abuse are clearly of great concern to many in the community.
- Access to dental care is said to be limited, but it is also rated as being less important than most health problems.
- The role of the church and other places of worship is much more substantial in lower income groups.
- A surprising finding is that transportation did not rise to the top as one of the most important barriers to accessing medical care.
- As age increases, people are less concerned about STDs and HIV.
- Diabetes, HIV and STDs are the most important issues among African-American residents, where obesity and addiction are the most important among White and Hispanic/Latino residents.


## FORCES of CHANGE ASSESSMENT

The Forces of Change Assessment requires a group process to assess the forces that may impact the health and quality of life of the community and the local public health system. By compiling information and feedback from community members, these forces are identified, discussed, and prioritized in order to answer the following questions:

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

The Forces of Change Assessment was launched at the December 2011 meeting of the Capital Coalition for Health MAPP Steering Committee meeting and was finalized by the MAPP Core Team in February 2012. Prior to beginning the assessment, participants were oriented to its purpose and components in the following ways: 1) brief presentation at November's meeting; 2) email containing overview slides prior to the December meeting; and 3) brief presentation at the start of the December meeting. The group discussed the following types of forces in order to initiate the brainstorming of ideas.

- Trends are patterns over time, such as migration in and out of a community or a growing disillusionment with government.
- Factors are discrete elements, such as a community's large ethnic population, an urban setting or the jurisdiction's proximity to a major waterway.
- Events are one-time occurrences, such as a hospital closure, a natural disaster or the passage of new legislation.

After a multi-phased process, the following forces were prioritized as the five most important and influential:

1. Rise in chronic diseases and associated risk factors
2. Treatment services and prescriptions are inaccessible to many due to cost.
3. Shortage of certain health care providers
4. Lack of public transportation
5. Ability to impact community health is dependent on an exclusive group of local power brokers.

## METHODOLOGY

Participants represented diverse backgrounds and interests from Leon County communities, including health and human services providers and administrators, community advocates, and representatives from the public school system, local colleges and universities, local and state government services, and a variety of community-based organizations. The 21 committee members present at the December meeting split into two smaller groups to brainstorm ideas in order to develop a comprehensive list of current and potential forces of change. Each group had a facilitator from the Health Planning Council who also recorded ideas on large poster paper and then refined them with the assistance of the group. Forces were organized into broad categories and redundancies were eliminated or consolidated.

This initial list of 43 forces was sent via email to all participants for review (see Table 20 on next page). An electronic survey was then disseminated to all steering committee members, whether they were present at the meeting or not. Eighteen people completed the survey by rating each force as either "not very important", "moderately important", or "extremely important."

Based on these results, the top 25 forces were presented at the January 2012 meeting. Forces were listed out by category on large sheets of paper posted on the wall. Each of the twenty participants then placed up to five dot stickers on the forces they viewed to be the most influential. Forces were then priority-ranked, based on the numbers of votes. The top 11 forces were then reviewed and the group identified the potential impacts of each force-both opportunities and threats (see Table 21). To address a concern that the participants on that day did not represent the diversity of backgrounds and opinions that had been present at the previous meeting and that is typical of the community, the final prioritization exercise was repeated via an online survey. Four additional people who were present at the December meeting provided their input. As a result, the rank order of some forces shifted slightly, and one new force moved into the top 10. Finally, the MAPP Core Team reviewed the final list and refined the language of the associated impacts.

Table 20: Leon County Forces of Change (all forces identified during brainstorming exercises)

| SOCIAL/POPULATION |
| :--- |
| Large college-aged/student population. |
| Institutionalized, systemic racism. |
| Highly educated population. |
| Polarization of ideas, attitudes, and values; lack of compromise. |
| Alcohol use and abuse is prominent; drinking is a social norm, <br> especially with the college population. |
| Prescription drug abuse and the recent policy changes that ad- <br> dress the issue. |
| Elderly population is growing; health care and long-term care <br> needs are increasing as people live longer. |
| Number of children living in poverty is on the rise. |
| Emphasis in the school district has shifted toward academic ac- <br> countability at the expense of physical activity. Chronic diseases <br> and associated risk factors (lack of physical activity) are on the <br> rise. |
| Eallahassee lacks employment opportunities to attract/retain <br> certain fields of young professionals. <br> Disparities exist between Black and White populations in terms <br> of economic opportunity specifically and social determinants of <br> health more broadly. <br> Stimulus money is at an end. <br> Unstable economic environment is resulting in poor credit, high |

## GOVERNMENT/POLITICAL

Government budget cuts result in loss of government jobs and public services.

Increased emphasis on policy-level changes to improve health.
Community improvement efforts dependent on political will and personal priorities of those in power, which are not always in the best interests of the common good. Entrenched power (good old boys network) resists change; those not seen as "in the club" are treated as outsiders.

Policies supported by increasingly powerful conservative leaders are seen by some to erode/destroy the social safety net for the most vulnerable residents.

The outcomes of the future elections, including 2012 Presidential elections, are unknown and may dramatically impact the availability of health care at the national, state, and local level.

Funds that impact infant mortality are vulnerable; opportunities for funding exist on a year to year basis (example: Closing the Gap grant).
Current political will in Florida does not support preventive health approaches.
Florida's term limits have resulted in less experienced individuals holding public office; loss of knowledge base.

## TRANSPORTATION

[^56]
## HEALTH CARE

Shortage of health care providers; limited access to certain specialty providers.

Affordable Care Act (health care reform); plethora of positive and negative impacts listed.
State to discontinue funding to health departments for primary care services in 2013.
Changes and uncertainty in Medicaid reimbursement rates, possibly contributing to a shortage of specialists.
New internal medicine residency program at TMH with FSU is pending but likely.

TMH opened the Transition Center in 2011 to provide postdischarge care to address high readmission rates among some populations.

TMH will open a new freestanding Emergency Department in March 2013.
Steady changes over time in health insurance in terms of both cost and design.
Funding is available for diagnosis and screening of health problems; however, treatment and medications are inaccessible to many (examples: HIV/AIDS, mental illness).
Shortage of some prescription drugs (example: ADHD medication).
There is not a well-coordinated local health system (public and private partnerships). However, there is an increasing national focus on population health (IHI triple Aim), which enhances the linkages between hospitals/health care organizations and public health agencies.

Undocumented immigrants and other individuals without access to health coverage rely on Emergency Departments for care because options are limited; uncompensated care raises costs overall.

## COMMUNITY

There is a lack of engagement between universities and some communities; opportunities for community investment and improvement are lost.
Community groups function in silos with limited cooperation and partnerships.
Multiple organizations are interested in Leon County population health as evidenced by the diverse representation of such organizations on the Capital Health Coalition.
The recreation opportunities in Tallahassee and surrounding areas are vast.

## ENVIRONMENTAL

Numerous barriers have decreased access to nature and the associated health benefits.

The importance of becoming a multi-use community is being discussed and changes are being made.

## TECHNOLOGICAL

Social media has a strong influence and offers many opportunities.

Health care providers and systems are moving to electronic medical records.

Table 21: Top 10 Forces of Change With Associated Impacts (Opportunities and Threats)

| RANK (votes) | FORCE | THREATS | OPPORTUNITIES |
| :---: | :---: | :---: | :---: |
| $\begin{gathered} 1 \\ (15) \end{gathered}$ | Chronic diseases and associated risk factors are on the rise. | - Increased health care costs. <br> - Disparities in access to care. <br> - Perceptions influence outcomes (generational and cultural). <br> - Lack of personal responsibility persists. | - Provide education \& awareness to address barriers and increase personal responsibility for health behaviors. <br> - Screenings. <br> - Build capacity in medical community to address this. |
| $\begin{gathered} 2 \\ (10) \end{gathered}$ | Funding is available for diagnosis and screening; however treatment and meds are inaccessible to many people (e.g. HIV/AIDS, mental health). | - Cost. <br> - People may not be screened if they think treatment is not accessible. <br> - Too much focus on medical model of treatment, not enough on prevention. <br> - Adherence/patient noncompliance. <br> - Increases gaps in disparity. <br> - Pharmaceutical companies scaling back R\&D. | - Broaden view toward prevention and role of connectedness to community as solution. <br> - Makes the case for increased funding for treatment. <br> - Increase participation in "compassionate use" programs. |
| $\begin{gathered} 3 \\ (9) \end{gathered}$ | Shortage of health care providers; limited access to certain specialty providers. | - Residents may have to leave community for care; those who can't will not get care. <br> - Major gaps in rural areas, especially for specialty care. <br> - Gap in cultural sensitivity of providers when there are few providers. | - Funding may be available for underserved areas. <br> - Develop residency program with incentives to serve underserved. |
| $\begin{gathered} 4 \\ (8) \end{gathered}$ | Lack of public transportation, especially in rural areas. | - Expensive to provide public transportation. <br> - Logistics very complicated. <br> - Barrier to accessing health care, which results in people not getting timely care and not following through with care. <br> - Providers may not seek patients where transportation results in missed appointments. <br> - Barrier to prenatal care may impact birth outcomes/infant mortality. <br> - Improvements to existing service are slow (no funding). <br> - Elders can be captive all day waiting for transportation option. | - Area Agency on Aging funds vouchers for transportation (TMH Transition Center). <br> - Improve coordination with existing service. |
| $\begin{gathered} 5 \\ (7) \end{gathered}$ | Community improvement efforts dependent on political will and personal priorities of those in power, which are not always in the best interests of the common good. Entrenched power, or "good old boys network" resists change and not open to newcomers. | - Reduction in services to those who need it most (health and social services). <br> - Plans and policies incorporate a limited range of perspectives. | - Grassroots advocacy to educate general public. <br> - Educate political establishment, especially newer power brokers. |


| RANK (votes) (votes) | FORCE | THREATS | OPPORTUNITIES |
| :---: | :---: | :---: | :---: |
| $\begin{gathered} 6 \\ (5) \end{gathered}$ | Number of children living in poverty is increasing. | - Higher demand for services (with more children in need and eligible). <br> - Higher abuse rates. <br> - Hungry children and impact on education outcomes. <br> - Increased risk for poor health and social outcomes. | - Makes the case for community need and increases opportunities for grants, especially for community-based services. |
| $\begin{gathered} 6 \\ (5) \end{gathered}$ | Community groups function in silos with limited cooperation and partnership. | - Competition for same resources. <br> - Fatiguing professionals/redundancy. <br> - Those invested in maintaining silos. <br> - Reinventing bad ideas. | - Leveraging funding for collaboration. <br> - Address findings of multiple assessments done. <br> - Integrate care. <br> - Maintain and build existing collaboratives/coalitions. |
| $\begin{gathered} 6 \\ (5) \end{gathered}$ | Disparities exist between Black and White populations in terms of economic opportunity specifically and social determinants of health more broadly. | - Gap will increase if disparities are not addressed. <br> - Lack of opportunity to improve will result in prolonged poor outcomes. <br> - Community may not see it as everyone's problem. | - Economic development. <br> - Community ownership. <br> - Education around systemic racism/income equality. |
| $\begin{gathered} 7 \\ (4) \end{gathered}$ | Elderly population is growing; health care and long-term care needs are increasing as people live longer. | - Waiting lists, barriers to care, infant mortality rates higher among Black infants. <br> - Waiting lists for in-home and long-term care. <br> - Reduced reimbursements for Medicaid and Medicare. <br> - Higher readmission rates (and impact on Medicaid and Medicare). | - Enhance family's ability to provide care ("age in place" initiatives, commu-nity-based services). <br> - Connecting elder services assessment findings/ planning process. <br> - Raise awareness for larger elder community of resources, connect to local senior center. |
| $\begin{gathered} 7 \\ (4) \end{gathered}$ | Unstable economic environment is resulting in poor credit, high unemployment rate, and high foreclosure rate. | - Increase in poverty (especially children). <br> - Increase in stress results in poor health outcomes. <br> - Substance abuse, mental health problems, and social issues increase and worsen. <br> - Loss of health insurance. <br> - When families lose housing, children must move and their education is disrupted. <br> - Unhealthy eating increases as healthy option become less affordable. <br> - Widespread discontent, animosity, and instability in society. | - Increase in civic engagement and strength of civic associations. <br> - Raises awareness and motivates citizens to get out the vote and get involved. |

## LOCAL PUBLIC HEALTH SYSTEM ASSESSMENT

The Local Public Health System is comprised of all public health services and the entities that provide them, including the local health department, as well as other public, private, and voluntary organizations. The illustration below shows the variety of entities that contribute to the local public health system and the interconnectedness of each to the other's work.


Leon County's assessment of the local public health system set out to answer the following questions:

* What are the components, activities, competencies, and capacities of our local public system?
* How are the Essential Public Health Services being provided in our community?

To assess such a broad and complex system, the use of a structured assessment tool is necessary. The National Public Health Performance Standards Program (NPHPSP) has developed instruments for this purpose that are used throughout the country at the local and state levels. The mission of the NPHPSP is to improve the practice of public health and the performance of public health systems by evaluating performance against a set of optimal standards. The NPHPSP instruments utilize the 10 Essential Public Health Services (Essential Services) as a framework. Within the local instrument, each Essential Service includes two to four model standards that describe the key aspects of an optimally performing system. The process of completing the instrument helps to identify strengths and weaknesses in the system and determine opportunities for improvement.

## METHODOLOGY

The NPHPSP Instrument was completed via the knowledge and expertise of Leon County Health Department's MAPP Core Planning Team (Core Team), subject matter experts, and community partners. A subcommittee assisted with planning to ensure that appropriate community partners were engaged in the process. The Core Team began by assessing eight model standards through open discussion, voting, and group consensus on the final rating. Next, community partners came together for an afternoon workshop where a similar group consensus process was used. Essential Service 7 was assessed by the full attendance of over 40 people, and six additional services were assessed in smaller groups. Next, Health Planning Council staff conducted interviews with subject matter experts for the remaining model standards. Notes were recorded of the discussions and are included in the discussion at the end of this report. Finally, all steering committee members and other participants in the assessment were given the opportunity to complete the Priority Questionnaire via online survey. Twenty-two people responded to the survey. Individual ratings were averaged to produce the final priority rating for the questionnaire. Table 22 presents each Model Standard for the ten Essential Public Health Services and the forum where the standard was assessed.

Table 22: Essential Services, Model Standards, and Assessment Forums for Each

| EPHS | MODEL STANDARD | $\begin{aligned} & \text { CORE } \\ & \text { TEAM } \end{aligned}$ | SUBJECT <br> MATTER <br> EXPERT | COMMUNITY EVENT |
| :---: | :---: | :---: | :---: | :---: |
| 1 | 1.1 Population-Based Community Health Profile |  |  | x |
|  | 1.2 Current Technology to Manage \& Communicate Population Health Data |  |  | x |
|  | 1.3 Maintenance of Population Health Registries | x |  |  |
| 2 | 2.1 Identification \& Surveillance of Health Threats | x |  |  |
|  | 2.2 Investigation \& Response to Public Health Threats \& Emergencies |  | x |  |
|  | 2.3 Laboratory Support for Investigation of Health Threats | x |  |  |
| 3 | 3.1 Health Education \& Promotion |  |  | x |
|  | 3.2 Health Communication |  |  | x |
|  | 3.3 Risk Communication |  | x |  |
| 4 | 4.1 Constituency Development |  |  | x |
|  | 4.2 Community Partnerships |  |  | x |
| 5 | 5.1 Governmental Presence at the Local Level | x |  |  |
|  | 5.2 Public Health Policy Development |  |  | x |
|  | 5.3 Community Health Improvement Process \& Strategic Planning |  |  | x |
|  | 5.4 Plan for Public Health Emergencies |  | x |  |
| 6 | 6.1 Review \& Evaluation of Laws, Regulations, and Ordinances | x |  |  |
|  | 6.2 Involvement in the Improvement of Laws, Regulations, \& Ordinances | x |  |  |
|  | 6.3 Enforcement of Laws, Regulations, \& Ordinances | x |  |  |
| 7 | 7.1 Identification of Personal Health Service Needs of Populations |  |  | x |
|  | 7.2 Assuring the Linkage of People to Personal Health Services |  |  | x |
| 8 | 8.1 Workforce Assessment, Planning, \& Development |  |  | x |
|  | 8.2 Public Health Workforce Standards | x |  |  |
|  | 8.3 Life-Long Learning Through Continuing Ed, Training, \& Mentoring |  |  | x |
|  | 8.4 Public Health Leadership Development |  |  | x |
| 9 | 9.1 Evaluation of Population-Based Health Services |  |  | x |
|  | 9.2 Evaluation of Personal Health Services |  |  | x |
|  | 9.3 Evaluation of the Local Public Health System |  |  | x |
| 10 | 10.1 Fostering Innovation |  | x |  |
|  | 10.2 Linkage with Institutions of Higher Learning and/or Research |  | x |  |
|  | 10.3 Capacity to Initiate or Participate in Research |  | x |  |

## NPHPSP ASSESSMENT RESULTS

Results were submitted to the NPHPSP at the Centers for Disease Control and a standard report was provided. The following sections highlight major findings from that report. The response options below were used to rate the "level of activity" that is occurring within the local public health system and are the same categories used in the results.

| NO ACTIVITY | 0\% or absolutely no activity. |
| :--- | :--- |
| MINIMAL ACTIVITY | Greater than zero, but no more than $25 \%$ of the activity described within the question is met. |
| MODERATE ACTIVITY | Greater than $25 \%$, but no more than $50 \%$ of the activity described within the question is met. |
| SIGNIFICANT ACTIVITY | Greater than $50 \%$, but no more than $75 \%$ of the activity described within the question is met. |
| OPTIMAL ACTIVITY | Greater than $75 \%$ of the activity described within the question is met. |

## PERFORMANCE SCORES

An overview of the system's performance for each of the 10 Essential Services is provided in Table 23. Each Essential Service score is a composite value determined by the scores given to those activities that contribute to each Essential Service. These scores range from a minimum value of $0 \%$ (no activity is performed pursuant to the standards) to a maximum of 100\% (all activities associated with the standards are performed at optimal levels).

Table 23: Summary of Performance Scores by Essential Public Health Service

|  | ESSENTIAL PUBLIC HEALTH SERVICE | SCORE |
| :---: | :--- | :---: |
| 1 | Monitor Health Status To Identify Community Health Problems | 72 |
| 2 | Diagnose And Investigate Health Problems and Health Hazards | 95 |
| 3 | Inform, Educate, And Empower People about Health Issues | 73 |
| 4 | Mobilize Community Partnerships to Identify and Solve Health Problems | 41 |
| 5 | Develop Policies and Plans that Support Individual and Community Health Efforts | 67 |
| 6 | Enforce Laws and Regulations that Protect Health and Ensure Safety | 100 |
| 7 | Link People to Needed Personal Health Services and Assure the Provision of Health Care when Otherwise Unavailable | 51 |
| 8 | Assure a Competent Public and Personal Health Care Workforce | 54 |
| 9 | Evaluate Effectiveness, Accessibility, and Quality of Personal and Population-Based Health Services | 45 |
| 10 | Research for New Insights and Innovative Solutions to Health Problems | 75 |
|  | Overall Performance Score | 67 |

Figure 133 below presents the same data as in Table 23, but with added range bars to show the minimum and maximum values of responses within the Essential Service and an overall score. The Essential Services are rank ordered by performance score and color-coded by level of activity category. Figure 134 on the next page provides a breakdown of performance scores by the model standards within each Essential Service.

Figure 133: Rank Ordered Performance Scores for Each Essential Service, by Level of Activity


Figure 134: How Well Did the System Perform on Specific Model Standards?


It is important to note that the overall performance score for Essential Services are derived by averaging the scores of their associated model standards. Focusing only on the scores of the Essential Services would omit the importance of understanding disparate scores among model standards within that service. For example, Essential Service 3 is scored highly at $73 \%$. However, by looking more closely at the model standard scores, it is evident that Model Standard 3.1 (Health Education and Promotion) and Model Standard 3.2 (Health Communication) have lower scores and plenty of room for improvement.

## PRIORITY RATINGS

Essential Services and Model Standards were rated on a scale of 1 to 10, with 1 being low priority and 10 being high priority. These priority ratings were then matched up with performance scores to produce the scatter plot below. Quadrant I, containing Essential Services 4, 9, 7, and 8 are high priority areas that were scored lower than the other areas, indicating that these areas may need increased attention.

Figure 135: Scatter Plot of Performance Scores and Priority Ratings


Model Standards were also matched up with performance scores to provide a more detailed picture of the competencies within the system and how the community prioritizes these activities. Table 24 on the following page presents the Model Standards categorized in quadrants with specified areas for attention. This shows that the Model Standards related to Essential Service 3 that were mentioned before are at the top of the list under high priority and low performance.

Table 24: Model Standards by Priority and Performance Score, With Areas for Attention

| MODEL STANDARD | PRIORITY RATING | PERFORMANCE SCORE |
| :---: | :---: | :---: |
| Quadrant I (High Priority/Low Performance) <br> These important activities may need increased attention. |  |  |
| 3.1 Health Education and Promotion | 9 | 56 (Significant) |
| 3.2 Health Communication | 9 | 66 (Significant) |
| 4.1 Constituency Development | 8 | 40 (Moderate) |
| 4.2 Community Partnerships | 8 | 43 (Moderate) |
| 5.2 Public Health Policy Development | 8 | 49 (Moderate) |
| 5.3 Community Health Improvement Process | 8 | 58 (Significant) |
| 7.1 Identification of Populations with Barriers to Personal Health Services | 8 | 58 (Significant) |
| 7.2 Assuring the Linkage of People to Personal Health Services | 8 | 43 (Moderate) |
| 8.4 Public Health Leadership Development | 8 | 60 (Significant) |
| 9.1 Evaluation of Population-based Health Services | 8 | 30 (Moderate) |
| 9.3 Evaluation of the Local Public Health System | 8 | 47 (Moderate) |
| Quadrant II (High Priority/High Performance) <br> These activities are being done well, and it is important to maintain efforts. |  |  |
| 2.1 Identification and Surveillance of Health Threats | 9 | 89 (Optimal) |
| 2.2 Investigation and Response to Public Health Threats and Emergencies | 9 | 97 (Optimal) |
| 2.3 Laboratory Support for Investigation of Health Threats | 8 | 100 (Optimal) |
| 3.3 Risk Communication | 9 | 97 (Optimal) |
| 5.4 Plan for Public Health Emergencies | 8 | 92 (Optimal) |
| 6.2 Involvement in the Improvement of Laws, Regulations, and Ordinances | 8 | 100 (Optimal) |
| 6.3 Enforce Laws, Regulations and Ordinances | 8 | 100 (Optimal) |
| 8.2 Public Health Workforce Standards | 8 | 80 (Optimal) |
| Quadrant III (Low Priority/High Performance) <br> Activities are being done well, but system can shift/reduce some resources/attention to focus on higher priorities. |  |  |
| 1.1 Population-Based Community Health Profile (CHP) | 7 | 71 (Significant) |
| 1.3 Maintenance of Population Health Registries | 7 | 88 (Optimal) |
| 5.1 Government Presence at the Local Level | 7 | 72 (Significant) |
| 6.1 Review and Evaluate Laws, Regulations, and Ordinances | 7 | 100 (Optimal) |
| 10.2 Linkage with Institutions of Higher Learning and/or Research | 7 | 83 (Optimal) |
| 10.3 Capacity to Initiate or Participate in Research | 7 | 88 (Optimal) |
| Quadrant IV (Low Priority/Low Performance) <br> These activities could be improved, but are of low priority. They may need little or no attention at this time. |  |  |
| 1.2 Access/Use of Current Technology to Manage, Analyze, Communicate Population Health Data | 7 | 58 (Significant) |
| 8.1 Workforce Assessment Planning, and Development | 7 | 32 (Moderate) |
| 8.3 Life-Long Learning Through Continuing Education, Training, and Mentoring | 7 | 43 (Moderate) |
| 9.2 Evaluation of Personal Health Care Services | 7 | 59 (Significant) |
| 10.1 Fostering Innovation | 7 | 53 (Significant) |

## DISCUSSION of HIGH PRIORITY/LOW PERFORMANCE AREAS

## HEALTH EDUCATION, PROMOTION, COMMUNICATION

Community discussion of this area focused on the fact that there are many efforts underway by many agencies, but they are not being conducted with a single coordinated strategic direction. Health education and promotion campaigns are being planned and implemented well, but improvements are needed in communicating health needs with policy makers, assessing population needs, evaluating programs, and collaborating across agencies and efforts. Larger agencies have more sophisticated media relationships and communications that may lead the way for smaller agencies.

## MOBILIZE COMMUNITY PARTNERSHIPS

Community discussion of this area focused on the need for one centralized place (or master list) of organizations working on community health in Leon County. United Way's 2-1-1 provides some information, but some feel that it is not comprehensive; as a result, many entities and coalitions maintain their own lists. Collaboration and sharing of resources are happening, but in an informal "word-of-mouth" kind of way. Constituents need to be engaged more in community health improvement efforts. Health Equity Alliance of Tallahassee (HEAT), Capital Coalition for Health, and Leon County's Health Committee were named as some of the larger community health partnerships. Public health can do much better educating the community about the importance of public health.

## PUBLIC HEALTH PLANNING and POLICY DEVELOPMENT

In terms of planning, partners are enthusiastic about the MAPP process and looking forward to the results and action cycle. This is the first time that the county is organizing itself to develop a strategic plan for community health improvement. In terms of policy development, many feel that their hands are tied from engaging in the process or that it is someone else's role to do so. Many non-profit groups feel stretched so thin in terms of staff and resources that they can't afford to advocate for policy change on top of their mission-related work.

## LINK PEOPLE to/ASSURE PROVISION of HEALTH CARE SERVICES

Leon County Health Department and Tallahassee Memorial Hospital were mentioned to be actively assessing needs and special populations in terms of accessing personal health services. Whole Child Leon has developed a referral system that is working well, but overall, the system does a poor job coordinating the delivery of personal and social services to those who may encounter barriers to care. Bond Community Health Center serves some of the most vulnerable residents.

## PUBLIC HEALTH LEADERSHIP DEVELOPMENT

Strengths noted included opportunities and promotion of formal leadership training, specifically through Florida Department of Health, Tallahassee Memorial Hospital, Florida State University, and Florida A\&M University. Areas for improvement focused on recruiting and developing leaders that represent the diversity of the county population.

## EVALUATION of PUBLIC HEALTH SYSTEM and SERVICES

Community partners are interested in using the local public health system assessment results and investing in system improvements. Population-based health services have not regularly been evaluated rigorously; part of this limitation is attributed to lack of funding.


[^0]:    Source: Florida Demographic Estimating Conference, January 2010 and

[^1]:    Source: U.S. Census Bureau, 2010 American Community Survey

[^2]:    Source: U.S. Census Bureau, American FactFinder

[^3]:    Source: Florida Agency for Workforce Innovation, Labor Market Statistics

[^4]:    Source: Florida Department of Health, Office of Health Statistics and Assessment

[^5]:    Source: Florida Department of Health, Bureau of Vital Statistics

[^6]:    Source: Florida Department of Health, Bureau of Vital Statistics

[^7]:    Source: Florida Department of Health, Bureau of Vital Statistics

[^8]:    Source: Florida Department of Health, Bureau of Vital Statistics

[^9]:    Source: Florida Department of Health, Bureau of Vital Statistics

[^10]:    Source: Florida Department of Health, Bureau of Vital Statistics

[^11]:    Source: Florida Department of Health, Bureau of Vital Statistics

[^12]:    Source: Florida Department of Health, Bureau of Vital Statistics

[^13]:    Source: Florida Department of Health, Bureau of Vital Statistics

[^14]:    Source: Florida Agency for Health Care Administration (AHCA)

[^15]:    Source: Florida Department of Health, Bureau of Vital Statistics

[^16]:    Source: Florida Agency for Health Care Administration (AHCA)

[^17]:    Source: Florida Agency for Health Care Administration (AHCA)

[^18]:    Source: Florida Department of Health, Bureau of Vital Statistics

[^19]:    Source: BRFSS Survey, FDOH, Bureau of Epidemiology

[^20]:    ${ }^{13}$ Centers for Disease Control and Prevention (CDC). www.cdc.gov/bloodpressure

[^21]:    Source: BRFSS Survey, FDOH, Bureau of Epidemiology

[^22]:    ${ }^{14}$ Centers for Disease Control and Prevention (CDC). www.cdc.gov/chronicdisease/resources/ publications/aag/osh.htm

[^23]:    Source: BRFSS Survey, FDOH, Bureau of Epidemiology

[^24]:    Source: Florida Department of Health, Bureau of Vital Statistics

[^25]:    Source: Florida Department of Health, Bureau of HIV/AIDS

[^26]:    ${ }^{1}$ The Florida Department of Health funds 14 designated areas as part of the Ryan White Care Act, Part B HIV Care consortia. Area 2B is an eight county area including Franklin, Gadsden, Jefferson, Leon, Liberty, Madison, Taylor and Wakulla Counties. The Partnership 2B data represent summary data from all of the counties in Area 2B.

[^27]:    Source: FDOH, Bureau of STD Prevention \& Control

[^28]:    Source: Area 2B, FDOH, Bureau of HIV/AIDS

[^29]:    Source: Partnership 2B, FDOH, Bureau of HIV/AIDS

[^30]:    Source: Florida Department of Health, Bureau of Vital Statistics

[^31]:    Source: Florida Dept. of Health, Bureau of Immunization

[^32]:    ${ }^{4}$ Centers for Disease Control and Prevention (CDC). www.cdc.gov/vaccines
    ${ }^{5}$ Florida Department of Health. www.doh.state.fl.us/disease_ctrl/immune/statistical

[^33]:    Source: Florida Department of Health, Bureau of Vital Statistics

[^34]:    Source: Florida Department of Health, Bureau of Vital Statistics

[^35]:    Source: Florida Department of Health, Bureau of Vital Statistics

[^36]:    Source: Florida Department of Health, Bureau of Vital Statistics

[^37]:    Source: Florida Department of Health, Bureau of Vital Statistics

[^38]:    Source: Florida Department of Health, Bureau of Vital Statistics

[^39]:    Source: Florida Department of Health, Bureau of Vital Statistics

[^40]:    Source: Florida Department of Health, Bureau of Vital Statistics

[^41]:    Source: Florida Department of Health, Bureau of Vital Statistics

[^42]:    Source: Florida Department of Health, Bureau of Vital Statistics

[^43]:    Source: Florida Department of Highway Safety \& Motor Vehicles

[^44]:    Source: Florida Department of Health, Bureau of Vital Statistics

[^45]:    Source: Florida Department of Law Enforcement

[^46]:    Source: Florida Youth Substance Abuse Survey

[^47]:    Source: Florida Youth Substance Abuse Survey

[^48]:    Source: BRFSS Survey, FDOH, Bureau of Epidemiology

[^49]:    Source: Florida Department of Health, Bureau of Vital Statistics

[^50]:    Source: U.S. Census Bureau, 2010 American Community Survey

[^51]:    Source: Healthy Kids, Florida AHCA

[^52]:    Source: Florida DOH, Division of Medical Quality Assurance

[^53]:    Source: Florida DOH, Public Health Dental Program

[^54]:    Source: AHCA Hospital Inpatient Data Files, October 2010-September 2011

[^55]:    Source: AHCA Hospital Inpatient Data Files, October 2010 - September 2011

[^56]:    Lack of public transportation, especially in rural areas.

