PLACE MATTERS FOR HEALTH IN JEFFERSON COUNTY, ALABAMA:

The Status of Health Equity on the 50th Anniversary of the Civil Rights Movement in Birmingham, Alabama

A Special Report
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A Special Report

Prepared by
The Jefferson County PLACE MATTERS Team
(Housed at the University of Alabama at Birmingham)

In Conjunction With
The Joint Center for Political and Economic Studies
The contents of this report reflect the views of the authors and do not necessarily reflect the views of the Joint Center for Political and Economic Studies or its Board of Governors, the Jefferson County PLACE MATTERS team, or its collaborating partners.

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FORWARD

Place matters for health in important ways, according to a growing body of research. Differences in neighborhood conditions powerfully predict who is healthy, who is sick, and who lives longer. And because of patterns of residential segregation, these differences are the fundamental causes of health inequities among different racial, ethnic, and socioeconomic groups.

The Joint Center for Political and Economic Studies and the Jefferson County, Alabama Place Matters Team are pleased to add to the existing knowledge base with this report, *Place Matters for Health in Jefferson County, Alabama: The Status of Health Equity on the 50th Anniversary of the Civil Rights Movement in Birmingham* (A Special Report).

The report provides a comprehensive analysis of the range of social, economic, and environmental conditions in Jefferson County and documents their relationship to the health status of the county’s residents.

The study finds that social, economic, and environmental conditions in low-income and nonwhite neighborhoods make it more difficult for people in these neighborhoods to live healthy lives.

The overall pattern in this report—and those of others that the Joint Center has conducted with other Place Matters communities—suggests that we need to tackle the structures and systems that create and perpetuate inequality to fully close racial and ethnic health gaps. Accordingly, because the Joint Center seeks not only to document these inequities, we are committed to helping remedy them.

Through our Place Matters initiative, which is generously supported by the W.K. Kellogg Foundation, we are working with leaders in 27 communities around the country to identify and address social, economic, and environmental conditions that shape health. We look forward to continuing to work with leaders in Birmingham and other communities to ensure that every child, regardless of race, ethnicity, or place of residence, can enjoy the opportunity to live a healthy, safe, and productive life.

Ralph B. Everett
President and CEO
Joint Center for Political and Economic Studies
EXECUTIVE SUMMARY

Place matters for health in important ways. Neighborhood conditions—such as the quality of public schools; the age, density, and size of housing; availability of medical care and healthy foods; availability of jobs; levels of exposure to environmental degradation; and availability of exercise options—powerfully predict who is healthy, who is sick, and who lives longer. This study examined the relationships between place, race, and health over the past 50 years in Jefferson County, Alabama to address the following specific questions:

• What are the racial/ethnic and geographic dimensions of poverty in Jefferson County?

• How has racial/ethnic residential segregation changed over time, and what is its relationship to health in Jefferson County?

• What is the distribution of health (e.g., life expectancy) by census tract in Jefferson County?

• What is the relationship between racial/ethnic residential segregation and healthy food access in Jefferson County?

The study found that:

• In 2011, more than 13% of households in Jefferson County had annual incomes below the federal poverty level (FPL). The geographic concentration of poverty in the county is similar to that of the concentration of blacks in these same census tracts;

• Overall, the county’s racial residential segregation has declined over the past 30 years. The Dissimilarity Index (DI), a measure of residential segregation that explains the percent of the population that would have to move in order to achieve a completely integrated community, moved from 75.8 in 1980 to 64.7 in 2010. Birmingham’s 2010 DI was 65.8, ranking it the 16th most segregated U.S. metropolitan area with 500,000 residents or more;

• Similar to national trends, life expectancy for all residents of Jefferson County has increased over the past several years. In 2010, the countywide life expectancy was 75.4 years, up from 70.6 in 1990. While relative racial differences in life expectancy have decreased, remaining inequities exist across sex and racial groups: for white males life expectancy is 74.3 years, for white females 79.3 years, for black males 69.1 years, and for black females 76.7 years. Again, census tracts with higher percentages of black residents are similar to tracts with the lowest life expectancy;

• Life expectancy can vary by as much as 20 years on average across census tracts;

• In 2010, the infant mortality rate in Jefferson County was 2.5 times higher for black mothers than white mothers at 16.1 per 1,000 live births vs. 6.4 per 1,000 live births, respectively;

• Above all, this study found significant variation in racial concentration, poverty, life expectancy, infant mortality, and healthy food access between census tracts in the “Over the Mountain” and Trussville areas and census tracts near the Interstate 20/59 corridor. Specifically, “Over the Mountain” census tracts were found to have a higher percentage of white residents, less poverty, longer life expectancy, lower infant mortality, and greater healthy food access.

To be clear, these findings indicate a correlation between neighborhood conditions and health; researchers cannot say with certainty that these neighborhood conditions caused poor health. Data from this investigation point to an overall pattern related to the clustering of social and economic distress in low-income and nonwhite neighborhoods that constrain opportunities for people in these communities to live healthy lives. Because African Americans and Latinos are far more likely than whites to be confined to neighborhoods of concentrated poverty,
the significance of place in creating inequities in health outcomes is tied to patterns of racial segregation. Although the scope of this report does not permit us to examine in great detail the reasons for and consequences of residential racial segregation, these historical policies, practices, and projects have left a lasting legacy. Birmingham’s longest-standing racial zoning law (1926-1951), the use of the federal urban renewal program in the 1950s to clear a 60-block predominately black neighborhood, and the routing of the interstate highway system through black neighborhoods resulted in a concentration of blacks and lower-income residents in select areas of town that are readily apparent on maps presented in this report.

While acknowledging the painful, deadly, and divisive history of racism, Jim Crow laws, and discrimination in this region, the city of Birmingham has focused 2013 on celebrating 50 Years Forward since the major events of the 1963 Civil Rights Movement in the city. Events are focusing on honoring and commemorating the past and embracing the positive consequences since then. For example, more recent city and county planning and projects have included a focus on encouraging the county’s diverse residents to live, work, and play together.

In continuing the momentum to move forward, we more broadly recommend that government, private sector, and civil society leaders:

- Increase understanding of the social determinants of health among elected policy makers, community leaders, and health, social service, education, and community/economic development professionals through professional education and other tools;
- Monitor on an ongoing basis environmentally challenged and socioeconomically vulnerable communities and increase public-sector efforts to engage with—and invest in—these communities;
- Aggressively tackle poverty by fully funding sustainable programs that focus on early childhood development and economic development (including job training incentives and enterprise and empowerment zones);
- Adopt land-use policies that reflect an emphasis on smart and equitable growth, facilitate access to affordable housing for vulnerable populations, and promote housing mobility to help reduce the clustering of people in neighborhoods of concentrated poverty and in areas where exposure to environmental risks is highest;
- Implement a public financing program to provide financial seed money to stimulate healthy food retail in neighborhoods with low food access;
- Increase the capacity of communities to hold decision makers accountable through building the capacity of grassroots/community leaders and through encouraging support for collaborative decision making and advocacy to address local and regional challenges;
- Require public decision makers and program implementers to consider the impacts of proposed actions on racial/ethnic equity in life opportunities, health, and well-being, and to adjust actions to maximize this goal. This equity in all policies approach should also be adopted by philanthropic and religious groups and other organizations serving the region.

Beyond the global ideas above, the following specific local recommendations identify timely strategies to target a reduction in health inequities and the reversal of the legacy of neighborhood racial segregation and concentrated poverty in Birmingham and Jefferson County. We recognize that current city and county leaders will likely not support policies and programs that divide communities and/or deny certain citizens their civil rights. However, by failing to acknowledge and address existing inequities, those who remain silent and/or are inactive in putting forward a solution may not have started the problem, but are contributing to maintaining it. The following represent immediate opportunities for actions to improve health and promote health equity in Jefferson County:
• Work to ensure that health and health equity are embedded throughout the new City of Birmingham’s Comprehensive Plan (in final revisions). Given that the last comprehensive plan was developed in 1961 in the context of racial zoning and segregation, this new plan holds a unique opportunity to set a new course for Birmingham in the 21st century;

• Support efforts by the Jefferson County Department of Land Planning and Development Services to enforce SmartCode zoning ordinances and other efforts (e.g., land banking) to use planning and zoning to ensure health equity for all communities. While planning and zoning practices through the 1960s likely contributed to the negative health outcomes reported here, these tools are certainly capable of transforming the county into a place where everyone is excited to work, live, and play;

• Fund and support groups like REV Birmingham’s Urban Food Project, which seeks to increase access, availability, and affordability of healthy foods throughout the city with full-service grocery stores, farmers’ markets, small store initiatives, and mobile markets;

• Urge local representatives to support legislation to repeal the sales tax on groceries. For more than a decade, state legislators on each side of the aisle have introduced bills to remove the state sales tax, to no avail. Access to affordable healthy food is vital to reducing health inequities in communities of concentrated poverty;

• Support the expansion of Medicaid in the state of Alabama. Local health economists recently estimated that nearly 300,000 more Alabamians would be covered under the 2010 Patient Protection and Affordable Care Act.1 While the focus of PLACE MATTERS is addressing social determinants of health for the prevention of disease, we recognize that many who become ill are uninsured or underinsured because they can’t afford coverage;

• Protect and seek the more effective and efficient utilization of the county sales taxes earmarked by state law to be used for indigent care. The indigent care fund was previously used to cover expenses at the county-owned hospital (which discontinued inpatient services at the end of 2012), but final plans on how to distribute the fund have not been determined. Careful consideration of how to use these funds to take care of the needs of the most vulnerable citizens in Jefferson County would help to reduce or eliminate inequities in health outcomes;

• Preserve adequate funding for the Jefferson County Department of Health. Like the indigent care fund, by state law a portion of the county’s sales taxes are earmarked for the county health department. Without these funds, the health department will likely be unable to afford non-federally mandated services such as preventive services and chronic disease control;

• Fund and support collaborative efforts (e.g., Jefferson County Health Action Partnership, United Way of Central Alabama’s Bold Goals Group) to bring diverse groups of people and organizations together to find local solutions to improve the health and quality of life of all who work, live, and play in Jefferson County.
INTRODUCTION

[1]nequities in health [and] avoidable health inequalities arise because of the circumstances in which people grow, live, work, and age, and the systems put in place to deal with illness. The conditions in which people live and die are, in turn, shaped by political, social, and economic factors.

World Health Organization Commission on Social Determinants of Health (2008)

Place matters for health. Where one lives is an important factor in determining health outcomes. Because of our history of racial oppression and the legacy of that oppression in residential patterns today, the intersection of place and race in the persistence of health inequities looms large.

Health outcomes are influenced by several factors—the quality and extent of medical care one receives, personal choices one makes with regard to behaviors such as healthy eating and exercise, and institutional policies and practices that are beyond the control of individuals. To a significant degree, all of these factors are a function of where one lives, works, and plays. In poor and predominantly black and Hispanic communities, medical care, healthy foods, and exercise options are scarce and the levels of exposure to environmental degradation and violence are high. These conditions are powerful predictors of poorer health and shorter lives.

Thus, in neighborhoods of concentrated poverty, defined as neighborhoods in which 30% of the households live at or below the poverty level (approximately $22,000 per year for a family of four), family physicians and medical specialists are in shorter supply, hospitals are likely to be less well equipped, and clinics and emergency rooms are likely to be more crowded and to be served by overworked and often less-experienced personnel. Families who are poor are less likely to have health insurance or own a car or have the transportation necessary to access better medical care. Illnesses that are left untreated for too long can lead to more serious conditions. Quality of care for serious conditions such as cardiovascular problems and cancer often is inadequate and reflective of a lack of cultural understanding.2

Personal choices with regard to behaviors that influence health are often severely limited for those living in neighborhoods of concentrated poverty. Adopting a healthier diet requires access to supermarkets or farmers’ markets that sell fresh affordable produce. These are sorely lacking in poor neighborhoods. Lack of transportation is also a factor that can limit a person’s ability to access healthy foods. Regular physical activity requires a built environment conducive for residents to walk, bicycle, and play. These facilities are far less likely to be available in poor, densely populated neighborhoods. Conditions such as obesity and diabetes, often the products of poor diets and lack of exercise, are more frequent among residents of poor neighborhoods.

Institutional policies and practices beyond the control of individuals also play a significant role in health outcomes. Environmental pollutants from aging and unhealthy housing (often with peeling, lead-based paint), nearby factories and smokestacks, and toxic waste dumps are far more prevalent in poor neighborhoods, largely because the residents of these neighborhoods do not have the political or economic clout to resist them. Children growing up in these neighborhoods are more likely to ingest lead and other toxins and are at higher risk for developing subsequent respiratory (e.g., asthma) and cognitive development problems.

Because of our history of racial oppression and the resulting patterns of residential segregation, poor nonwhite families are far more likely to live in neighborhoods of concentrated poverty than poor white families.

For example, negative racial stereotypes, which arose largely as a way to justify slavery and Jim Crow laws (state and local laws mandating segregation of public places) that tend to demonize all nonwhite Americans, have, in the minds of many white Americans, stamped nonwhites, particularly blacks and Hispanic Americans, as undesirable neighbors.
Further, blatant discriminatory mortgage underwriting policies of the Federal Housing Administration that denied mortgages to nonwhite families during the housing boom following World War II, augmented by the policy of “redlining” in predominantly nonwhite neighborhoods, institutionalized residential segregation by blocking nonwhite families from suburban home ownership and locking them into dilapidated rental apartments in government-created ghettos in the inner cities.

Despite the enactment of the Fair Housing Act of 1968 and subsequent legislation that was designed to create equal opportunity for fair and integrated housing and home ownership, patterns of residential segregation have persisted. Ongoing racially biased practices such as redlining, steering, blockbusting, and predatory lending have played a prominent role in shaping local neighborhoods even after fair housing policies were in place. Jim Crow laws and practices in the South, combined with white families leaving the cities for the more spacious suburbs (i.e., white flight), encouraged both by favorable mortgage terms not available to nonwhite families and by construction of interstate highways that have facilitated commuting, intensified these racially biased practices and more fully embedded residential segregation in society. More recently, the situation has been exacerbated by resistance to the upsurge in immigration from Latin American countries. Despite the growth of the nonwhite middle class, particularly the black middle class, nonwhite families have remained disproportionately clustered in poor inner-city neighborhoods.

In some ways, Jefferson County is like many other southern counties, steeped in cultural pride and social conservative thinking. However, the unique history of racial unrest and civil rights of Birmingham (the county seat) provides a further backdrop to health inequities in Jefferson County. The city, incorporated in 1871, was later to be nicknamed Bombingham, reflecting over 50 “unsolved” bombings of black leaders’ homes and meeting places in the city during the 1950s and ’60s.3 Perhaps the most infamous bombing was that of the 16th Street Baptist Church on September 15, 1963, when four young girls (Addie Mae Collins, Cynthia Wesley, Carole Robertson, and Denise McNair) were killed. This tragedy is said to have marked a pivotal turning point in the Civil Rights Movement of the 1960s and focused a worldwide spotlight on the city, state, and country. For some, the sounds, images, and emotions surrounding that time are still with them every day; after all, these events were only 50 years ago. For others, the events and related feelings and interpretations are safely tucked away as a reminder of the city’s past; after all, these events were over 50 years ago.

As the City of Birmingham, Jefferson County, and the nation commemorate the 50th anniversary of significant events in the city in 1963, it is fitting to explore the state of health and health equity then and now.

It is in this context that the Jefferson County PLACE MATTERS Team, in conjunction with the Joint Center for Political and Economic Studies, undertook this study of the relationship between place, race, and health over the past 50 years in Jefferson County, Alabama to address the following specific questions:

- What are the racial/ethnic and geographic dimensions of poverty in Jefferson County?
- How has racial/ethnic residential segregation changed over time, and what is its relationship to health in Jefferson County?
- What is the distribution of health (e.g., life expectancy) by census tract in Jefferson County?
- What is the relationship between racial/ethnic residential segregation and healthy food access in Jefferson County?

This report focuses on the characteristics of Jefferson County and its communities—characteristics such as education, poverty, neighborhood segregation, and healthy food access—that may impact health outcomes. These characteristics are considered in relation to life expectancy. Special consideration is given to the influence of residential segregation and the long-term legacy of historic redlining practices.
Part I of this report provides background information about Birmingham–Jefferson County, including population data, socioeconomic conditions, and health outcomes. Part II examines the relationship between neighborhood characteristics, food access, and health and their correlation with the historic practices leading to significant neighborhood racial segregation throughout the county. Part III explores policies and programs that may contribute to the historical health outcomes described in this report and likewise may be the hope for future health equity. Part IV presents conclusions from the analysis and recommendations.

Part I. Background: History, Population, and Community Characteristics

History

Birmingham, Alabama, the county seat of Jefferson County, was incorporated in 1871 by the Elyton Land Company. It was named after the industrial city of Birmingham, England. Developed during post-Civil War Reconstruction, the city’s rich deposits of iron ore, coal, and limestone made it the only place in the world with all three raw minerals needed to make steel within a six-mile radius.4 Further, the city was the center point of the South and North Railroad and the East and West Railroad, a location that facilitated the distribution of steel and other goods around the country. As such, Birmingham was an ideal hub for industrial development and was described as “this magic little city of ours” in an 1873 annual report of the Elyton Land Company. The tagline was referencing the tremendous two-year growth of the city from 800 to 4,000 residents, hundreds of houses and businesses, six churches, and four hotels. The nickname Magic City was further cemented in the late 1800s and early 1900s when the profits from the first coal mine and open-hearth furnaces led to the transformation of the downtown area from a collection of residential and low-rise commercial businesses to a thriving district of mid- and high-rise buildings, streetcar lines, and the railroad corridor.

Although Birmingham is a post-Civil War city and has no antebellum past, the city came into being around the time of the “separate but equal” doctrine that resulted from the United States Supreme Court decision of Plessy v. Ferguson (1896), and it matured during the Jim Crow era. Precursors to Birmingham’s 1963 Civil Rights Movement point to key barriers to both racial equality and health equity at the start of the 20th century. For example, the 1901 Alabama Constitution (the longest still-operative constitution in the world) and its various amendments successfully employed poll taxes, educational requirements, literacy tests, assessments of “reasonable” interpretation of portions of the constitution, and the restriction of rights of persons convicted of various crimes to exclude many blacks from voting. In 1900, Alabama had 181,471 black males of voting age, but after the state constitution went into effect only 3,000 were eligible for registration.

Alabama’s history of inequity in educational funding was also clear. In the early 1900s, there were 4,903 seats available in eight elementary and one high school to serve the 7,600 white children of school age. On the other hand, three elementary schools and a rented space in a local church provided 1,607 seats for the 6,200 black children of school age. Student ratios were 40:1 for whites and 73:1 for blacks.4 In 1910, $1.78 was spent per capita on each black child and $9.41 on each white child. The discrepancies in teachers’ salaries are telling as well: Black teachers received only 28% of the salary of white teachers.5

With respect to housing, the city’s zoning laws adopted in 1926 guaranteed segregated residential districts where whites and blacks were prohibited from living on the same block. Despite the 1917 Supreme Court decision to strike down such practices, these zoning laws became a mechanism for protecting property values and to slow the spread of African Americans and immigrants into all-white neighborhoods. As a result of population growth, by 1945 a single area designated for black residents could no longer accommodate new black families. Around the same time, the city began to identify neighborhoods with
blighted conditions fitting federal standards for urban renewal. Taking advantage of federal funding, a new highway system was developed that in effect reinforced the racial division within the city as a major highway, Interstate 65, became the physical buffer between the black neighborhood on the west side of the city and the central business district. Further, many of Birmingham’s black residents live in substandard neighborhoods. A 1958 city-commissioned report comparing white and black blocks in the Ensley-Pratt City neighborhoods found that black blocks were more likely to be located next to industrial areas and areas zoned for industrial use. Collectively, this context led to a social, political, and economic quagmire in a city that was billed as having the potential to develop into a beacon for the rest of the world. Instead, the second half of the 20th century saw Birmingham termed as “the most segregated big city in the United States.”

The Civil Rights Movement of the 1950s and ’60s was a massive effort to bring out racial equity and expunge the city of such a sordid past of racism, discrimination, and racial segregation. Experiences during that time included young black children riding segregated public transportation while they observed young white children playing on well-equipped playgrounds at neighborhood parks or heading into the state fairgrounds in West End—all areas that were off-limits to black children. Similarly, black adults heading back and forth to work observed the much-better conditions of housing, schools, and the other amenities (e.g., stores, restaurants) in white communities while knowing that their families deserved to have access to the same. White storeowners who disagreed with the system of segregation felt powerless to make any meaningful change, and whites who worked for change in segregationist practices risked having their families threatened or assaulted. On the other hand, many whites during this time thought of integration and other rights for blacks as coming at the expense of whites, who would inevitably experience a loss of privilege. At the extreme, white members of the Ku Klux Klan and their sympathizers believed in white supremacy and apparently would stop at nothing to preserve it.

The peak of these experiences played out in Birmingham in 1963 with a year of events that brought local, national, and worldwide attention to inequality and injustice. During this time the city continued to live up to its "Bombingham" nickname and became synonymous with the KKK, cross burnings, demonstrations, police dogs, and fire hoses. The year started off with Alabama Governor George Wallace’s January 1963 declaration: “segregation now, segregation tomorrow, segregation forever.” In early spring, members of the Southern Christian Leadership Conference (SCLC) and Birmingham native Fred Shuttlesworth launched Project C (for confrontation), which involved a series of sit-ins, marches, boycotts, and other demonstrations to protest segregation laws in the city. In response, Eugene “Bull” Conner, the commissioner of public safety who supported segregation, ordered the use of police attack dogs and fire hoses to disperse peaceful demonstrators, including children. Through these events and countless others, the world quickly came to experience the intersection of a diverse group of people determined to bring about equality and a group determined to preserve the status quo. These varied perspectives and experiences provide context for why Birmingham was ready and capable of confronting and transforming itself to reach the potential of “this magic little city of ours.”
**Population**

Jefferson County, the most populous county in Alabama, was home to an estimated 657,486 people in 2011. Of that, Birmingham’s population was estimated at 214,348.6 The county’s overall population density was 592.5 persons per square mile, with a racial/ethnic population of 52.1% white, 41.8% black, and 6.1% other races (Figure 1). The comparative statistics for Alabama were 67.3% white, 26.1% black, and 6.6% other races. For the United States, the racial breakdown was 64.2% white, 12.2% black, and 23.6% other races (Table 1).6

Historic vital statistics information in Alabama consists of just two racial categories—white and nonwhite—and these are used here in comparing data over the past 50 years. The population makeup of Jefferson County in 1960 was 65.4% white and 34.6% nonwhite, and in 1970 it was 67.9% white and 32.1% nonwhite. In subsequent decades, the percentage of whites in the county declined and the nonwhite population increased. In 1980, Jefferson County was 66.2% white and 33.2% nonwhite, in 1990 64.2% white and 35.8% nonwhite, and in 2000 58.1% white and 41.9% nonwhite.7

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<th>Alabama</th>
<th>United States</th>
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<tr>
<td>White</td>
<td>52.1%</td>
<td>67.3%</td>
<td>64.2%</td>
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<tr>
<td>Black</td>
<td>41.8%</td>
<td>26.1%</td>
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<td>Hispanic</td>
<td>3.6%</td>
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<tr>
<td>Other</td>
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Source: U.S. Census Bureau, 2011 American Community Survey 5-year average

**Figure 1**

Source: U.S. Census Bureau, 2011 American Community Survey 5-year average
Racial and ethnic population densities vary across Jefferson County. The Dissimilarity Index (DI) is a measure of residential segregation that explains the percent of the population that would have to move in order to achieve a completely integrated community. The higher the index, the more segregated the area. The DI between the black and white populations in Jefferson County has declined from 75.8 in 1980 to 64.7 in 2010 (Figure 2). For the city of Birmingham alone the DI was 65.8 in 2010, making it the 16th most segregated area among metropolitan areas with 500,000 residents or more in the United States. Milwaukee, metropolitan New York City, Chicago, Detroit, and Cleveland occupy the top five spots, with DI ranging from 81.5 to 74.1 to. Maps 1-3 illustrate the racial and ethnic distribution throughout Jefferson County between 1990 and 2010. Areas with a concentration of blue dots are predominantly black, while areas with a concentration of red dots are predominantly white. Mapping the racial groups by census tract shows significant residential segregation along racial lines, though evidence of the county’s decreased Dissimilarity Index is apparent from Map 1 to Map 3. From the maps, a large percentage of the black population resides along the corridor surrounding Interstate 20/59 that runs across the county, and the density of the black population decreases and the white population increases at larger distances from this interstate.

**Figure 2**

[Dissimilarity Index: Black Population compared to White Population](#)

Jefferson County, AL

1980 - 2010

<table>
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<th>Index Value</th>
<th>1980</th>
<th>1990</th>
<th>2000</th>
<th>2010</th>
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<tr>
<td>Dissimilarity Index</td>
<td>75.8</td>
<td>72.9</td>
<td>69.6</td>
<td>64.7</td>
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</table>

Source: U.S. Census Bureau, 2010 Census
Map 1

Jefferson County Racial and Ethnic Distribution by Census Tract (1990)

Legend
- US Interstate

Racial and Ethnic Dist. 1990
- White
- Black
- Hispanic
- Asian

Source: Jefferson County Department of Health
Map 2


Legend
- US Interstate

Racial and Ethnic Dist. 2000
- 1 Dot = 50
- White
- Black
- Hispanic
- Asian

Source: Jefferson County Department of Health
Socioeconomic Characteristics

With regard to socioeconomic status, Jefferson County residents mirror national data. Nationally, families living below the federal poverty level (FPL), meaning an annual income of approximately $22,000 or less for a family of four, are 3.6 times more likely to report fair or poor health than those with incomes of at least twice the poverty level. In 2011, 13.2% of households in Jefferson County had incomes below the FPL, compared to 11.3% in the U.S. The income-to-poverty ratio expresses household incomes as a percentage of the FPL. Figure 3 shows that 5.5% of households in Jefferson County had incomes that were less than half of the FPL (an income-to-poverty ratio of 50%), 17.3% earned 125% of the FPL, and almost 30% earned twice the FPL. Similar to maps depicting the racial distribution of the population in Jefferson County, the most impoverished census tracts are located around Interstate 20/59 (Map 4).
Figure 3

Income to Poverty Ratio in Jefferson County (2011)

Source: U.S. Census Bureau, 2011 American Community Survey 5-year average

Map 4


Legend
- US Interstates
- JeffCoCT

Percent of Population in Poverty
- 0.6% - 6.2%
- 6.3% - 13.1%
- 13.2% - 22.8%
- 22.9% - 36.9%
- 37% - 64.5%

Source: U.S. Census Bureau, Decennial Census 2010
Map Producer: Jefferson County Department of Health
Table 2   Educational Attainment in Jefferson County, Alabama and the United States

<table>
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<th>Educational Attainment</th>
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<th>Alabama</th>
<th>United States</th>
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<tr>
<td>Less than high school graduate</td>
<td>12.8%</td>
<td>17.6%</td>
<td>14.3%</td>
</tr>
<tr>
<td>High school graduate (includes equivalency)</td>
<td>27.6%</td>
<td>31.4%</td>
<td>28.5%</td>
</tr>
<tr>
<td>Some college, associate’s degree</td>
<td>30.3%</td>
<td>28.7%</td>
<td>28.7%</td>
</tr>
<tr>
<td>Bachelor’s degree or higher</td>
<td>29.3%</td>
<td>22.3%</td>
<td>28.6%</td>
</tr>
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</table>

Source: U.S. Census Bureau, 2011 American Community Survey 5-year average

Figure 4

Educational Attainment in Jefferson County (2011)

Source: U.S. Census Bureau, 2011 American Community Survey 5-year average
**Education**

Education is a pathway to higher income and net worth, and it also can have a strong influence on health status and access to health care. In 2011, American adults (age 25 and older) with less than a high school education or equivalent earned only 39% of the earnings of those with a college education ($18,794 vs. $48,309) and were over six times more likely to live in poverty (4.4% vs. 27.9%). Further, persons with less than a high school diploma or equivalent are three times more likely to die before age 65 than were those with a college education.

In Jefferson County, adults on average have higher educational attainment than adults statewide or nationwide (Table 2). Lower shares in Jefferson County than in the state or nation have at most a high school degree, and higher shares have at least some college. However, educational attainment varies by race (Figure 4), with more blacks than whites without a high school diploma (16.7% vs. 9.7%). In addition, data reveal fewer blacks having obtained a bachelor’s degree than whites (11.4% vs. 23.3%).
Part II. Food Access, and Health Outcomes

Food Access

Access to healthy, nutritious food is an important influence on health. Numerous chronic conditions including diabetes, certain cancers, obesity, heart disease, and stroke are linked to poor diets that are higher in calories, sodium, and saturated fat and lower in fruits and vegetables. A significant barrier to eating a healthy, nutritious diet is the lack of access to such food. Larger retail stores, on average, provide a larger selection and variety of food options and at lower cost. Therefore, people with limited access to supermarkets, grocery stores, or other sources of healthy and affordable food are less likely to consume diets that may reduce their risk for poor health outcomes.

The distribution of food retailers in a community is related to a number of factors, including demographics, physical characteristics, and economic conditions. Published research suggests that supermarkets and larger grocers are more prevalent in non-Hispanic white and higher-income communities. In fact, supermarkets are up to four times more likely to be located in white compared to black neighborhoods. By contrast, lower-income and minority neighborhoods are more likely to contain convenience or corner stores that tend to sell few healthy foods. Barriers such as lack of transportation and low incomes often mean people buy food that is cheapest and easiest to get to.

Populated areas where there are physical and/or economic barriers to accessing healthier foods are referred to as food deserts. In addition, areas in which both grocers are distant and unhealthy food is readily available are characterized as having food imbalance. A 2010 commissioned study (conducted by Gallagher Research in Chicago) found that, of the 151.9 square miles making up the city of Birmingham, 43 square miles are characterized as both a food desert and having food imbalance. A total of 88,409 people (23,657 children) in Birmingham live in neighborhoods that significantly limit their access to health food. Consistent with other studies, 83% of residents in these communities are racial/ethnic minorities (72,598 African American; 821 Latino). Communities characterized as having a food imbalance without food-desert conditions make up 13.19 square miles of the city and include 65,528 people (17,030 children). These areas include 82% racial/ethnic minority residents (52,099 African American; 1,318 Latino). Finally, the study identified 29.21 square miles with a total population of 15,422 people (3,676 children) in which there were food-desert conditions without food imbalance. These communities tend to be more racially/ethnically diverse, with 61% minority residents (9,203 African American; 228 Latino).

The Gallagher study also explored the relationship between food access and health outcomes. Findings indicate that even after controlling for other contributing factors (e.g., household income), the greater the food imbalance (the longer the distance to healthy food), the more premature deaths overall, the more diet-related deaths, and the more deaths resulting from cancer. The study authors conclude that food deserts and food imbalance in Birmingham pose serious health and wellness challenges to its residents.

The United States Department of Agriculture (USDA) also collects data to describe areas in which food access may be limited. The USDA recognizes food deserts as low-income census tracts (poverty rate of 20% and above) where at least 500 persons and/or at least 33% of the population lives more than one mile away from a supermarket or a large grocery store in an urban area or 10 miles away in a rural area. Using these guidelines, 41 out of the 147 census tracts in Jefferson County (representing 159,340 residents) are considered food deserts. On average, 69.3% of residents in the 41 tracts have low access to a supermarket or large grocery store in an urban area or 10 miles away in a rural area. Using these guidelines, 41 out of the 147 census tracts in Jefferson County (representing 159,340 residents) are considered food deserts. On average, 69.3% of residents in the 41 tracts have low access to a supermarket or large grocery store, though variability among tracts is noted. For example, less than 25% of residents in three census tracts have low access, whereas 100% of residents in 13 census tracts live more than one mile away from a supermarket or large grocery store.

Further examination of the demographic characteristics of residents of food deserts in Jefferson County mirror the...
Gallagher Birmingham study\textsuperscript{17} and other published research\textsuperscript{14-16,19} Namely, these census tracts are largely minority, with 66.9\% African American and 1.2\% Hispanic residents. In addition, an average of 17\% of residents in these areas are low-income, though this ranges from as low as 3\% to as high as 49\%. Map 5 overlays data from the USDA Food Access Research Atlas\textsuperscript{18} with a map of the racial and ethnic distribution of the county (Map 3) to further show the concentration of food deserts in communities of color. While not depicted in a map in this report, the same food desert overlay could be applied to the map of the distribution of poverty (Map 4) with similar results.

Map 5

Jefferson County Racial and Ethnic Distribution with Food Deserts by Census Tract (2010)

Legend
- US Interstate
- USDA Food Desert

Racial and Ethnic Distribution
- 1 Dot = 50
  - White
  - Black
  - Hispanic
  - Asian

Source: Jefferson County Department of Health
Health Outcomes

Life expectancy at birth represents the average number of years that a group of infants would live if the group was to experience throughout life the age-specific death rates present in the year of birth. In 2010, life expectancy at birth in the U.S. averaged 78.7 years. In 2010, the U.S. life expectancy for females was 81.0 years, a 0.1-year increase from 2009, and the life expectancy for males was 76.2 years, a 0.2-year increase from the previous year. Life expectancy also increased 0.4 years for the black population in 2010 to 75.1 years, compared with 2009 (74.7 years). Life expectancy for the white population was 78.9 years, 76.5 years for males and 81.3 years for females. Life expectancy for the black population was 75.1 years, 71.8 years for males and 78.0 years for females. In the state of Alabama, the overall life expectancy was 75.5 in 2010;20 in Jefferson County it was 75.4 years for all residents in 2010, compared to 70.6 years in 1990. Jefferson County has seen an increase in life expectancy over time for all residents. The white population’s life expectancy increased from 76.0 in 1990 to 76.9 in 2010, and the black population’s life expectancy increased from 67.8 to 73.1. In 2010, for Jefferson County the life expectancy by sex and race revealed the inequity among sex within racial groups and across racial groups: for white males 74.3 years, white females 79.3 years, black males 69.1 years, and black females 76.7 years. While Jefferson County has a growing Hispanic, Asian, and “other” racial/ethnic population, the size of these populations is too small to produce meaningful statistics for comparison. Variation in life expectancy among the census tracts in Jefferson County are illustrated in Map 6, and may be explained by the geographic variation in socioeconomic and environmental factors that affect health in Jefferson County. Life expectancy can vary by as much as 20 years on average across census tracts;

However, caution should be taken when measuring life expectancy at the census tract level due to small numbers and unusual events that may have occurred.

The U.S. crude (non-age-adjusted) death rate for 2010 was 799.5 deaths per 100,000 population. The age-adjusted death rate in 2010 was 747.0 deaths per
100,000 U.S. standard population, a record low value. Age-adjusted death rates are constructs that show what the level of mortality would be if no changes occurred in the age composition of the population from year to year. Thus, age-adjusted death rates are better indicators than crude death rates for examining changes in the risk of death over a period when the age distribution of the population is changing. All subsequent age-adjusted mortality rates are calculated using the year 2000 standard population. In 2010, the U.S. age-adjusted death rate for the white population was 741.8 deaths per 100,000, and for the black population it was 898.2 per 100,000. From 1960 through 1982, rates for the black and white populations declined by similar percentages (22.6 and 26.5 percent, respectively), but from 1983 through 1988 rates diverged, increasing 3.5 percent for the black population and decreasing 2.0 percent for the white population. The inequity in age-adjusted death rates between the black and white populations reached its widest point in 1989 (1.4 times greater). Since 1989, the inequity between the two populations has narrowed, as the age-adjusted rate for the black population declined 29.6 percent and the rate for the white population declined 19.4 percent.
The state of Alabama reports crude death rates per 100,000 population for white and black/other, and so the state information is not directly comparable to the U.S. and Jefferson County age-adjusted rates per 1,000 U.S. standard population. In 2010 the overall crude mortality rate was 1,002.1 per 100,000, 1,121.2 for the white population and 742.7 for the black and other population.20

Similar to the trend in the U.S., in Jefferson County the trend in crude overall mortality has decreased for all races, and the rate gap has narrowed over the last 50 years. But age-adjusted mortality rates from 1990 to 2010 reveal that, while the gap has narrowed, the black population still has a higher mortality rate than the white population. In 1990 the age-adjusted mortality rate for the white population was 934.2 per 100,000 and 1,370.6 per 100,000 for the black population, a difference of 436.4 deaths per 100,000. In 2000 these rates decreased to 936.2 and 1,202.2 for the white and black population respectively, a difference of 266 deaths for 100,000. In 2010 the age-adjusted mortality rate was 922.2 for Jefferson County, 868.8 per 100,000 for the white population and 1,035.2 per 100,000 for the black population, a difference of 166.4 per 100,000. Both the white and black populations have a higher age-adjusted mortality rate than the U.S. population.21

Heart disease, the leading cause of death in the U.S. and in Jefferson County, accounted for an age-adjusted morality rate of 197.4 per 100,000 for Jefferson County in 2010.11,21 The rate for the white population was 189.6 deaths per 100,000, and for the black population it was 215.4. These rates have been trending down, and the inequity between white and black death rates has decreased from a difference of 46.5 deaths per 100,000 in 1990 to 25.8 deaths per 100,000 in 2010.20

Malignant neoplasms (cancer) are the second-leading cause of death in the U.S. and in Jefferson County. The mortality rate due to cancer has decreased over the past 50 years in both the U.S. and Jefferson County.11,21 In 1990 the age-adjusted rate for Jefferson County was 244.7 per 100,000, compared with 184.1 per 100,000 in 2010. Among the white population the 2010 age-adjusted rate was 174.1 per 100,000, and for the black population it was 208.0.21

Cerebrovascular disease (stroke) is the fourth-leading cause of death in the U.S.11 In Jefferson County stroke is the third-leading cause of disease, but the overall age-adjusted mortality rate associated with stroke has decreased over the past 20 years. In 2010 the mortality rate for the county was 52.4 per 100,000, compared to 82.0 per 100,000 in 1990. White mortality rates (46.2 per 100,000) were lower than those for blacks (64.1) in 2010, but black mortality has declined more rapidly than white mortality over the last 20 years: from 68.6 deaths per 100,000 in 1990 to 46.2 in 2010 for whites, a difference of 22.4 deaths per 100,000, and from 114.1 per 100,000 in 1990 to 64.1 in 2010 for blacks, a difference of 50.0 deaths per 100,000.21

Diabetes mellitus is the seventh-leading cause of death in the U.S. and in Jefferson County.11,21 The mortality rate in the county due to diabetes has fluctuated over the past 50 years. In 1990 the age-adjusted county rate was 30.7 per 100,000, then 35.1 per 100,000 in 2000, and 26.9 per 100,000 in 2010. In 2010 the age-adjusted rate was 18.5 per 100,000 for the white population and 47.1 per 100,000 for the black population, a difference of 28.6 per 100,000. In 1990 the difference was 40.7 per 100,000, and the decrease is primarily due to the decrease in diabetes mortality among the black population, from 59.6 per 100,000 in 1990 to 47.1 per 100,000 in 2010.21

In 2010, a total of 24,586 deaths occurred in children under age 1 in the U.S. This number represents 1,826 fewer infant deaths in 2010 than in 2009. The U.S. infant mortality rate in 20010 was 6.2 per 1,000 live births, the neonatal mortality rate (deaths of infants aged 0–27 days per 1,000 live births) was 4.1, and the post-neonatal mortality rate (deaths of infants aged 28 days–11 months per 1,000 live births) was 2.1. Births to white mothers resulted in an infant mortality rate of 5.2 per 1,000 live births, and for black mothers the rate was 11.6 per 1,000 live births.11
Table 3  Health Outcomes in Jefferson County, Alabama and the United States (2010)

<table>
<thead>
<tr>
<th></th>
<th>Jefferson County</th>
<th>Alabama</th>
<th>United States</th>
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</thead>
<tbody>
<tr>
<td>Life Expectancy at Birth</td>
<td>75.4</td>
<td>75.5</td>
<td>78.7</td>
</tr>
<tr>
<td>White</td>
<td>76.9</td>
<td>NA</td>
<td>78.9</td>
</tr>
<tr>
<td>Black</td>
<td>73.1</td>
<td>NA</td>
<td>75.1</td>
</tr>
<tr>
<td>All-Cause Mortality(^\d)</td>
<td>922.2</td>
<td>NC</td>
<td>747.0</td>
</tr>
<tr>
<td>White</td>
<td>868.5</td>
<td>NC</td>
<td>741.8</td>
</tr>
<tr>
<td>Black</td>
<td>1035.2</td>
<td>NC</td>
<td>898.2</td>
</tr>
<tr>
<td>Diseases of Heart Mortality(^\d)</td>
<td>197.4</td>
<td>NC</td>
<td>179.1</td>
</tr>
<tr>
<td>White</td>
<td>189.6</td>
<td>NC</td>
<td>176.9</td>
</tr>
<tr>
<td>Black</td>
<td>215.4</td>
<td>NC</td>
<td>224.9</td>
</tr>
<tr>
<td>Malignant Neoplasms Mortality(^\d)</td>
<td>184.1</td>
<td>NC</td>
<td>172.8</td>
</tr>
<tr>
<td>White</td>
<td>174.1</td>
<td>NC</td>
<td>172.4</td>
</tr>
<tr>
<td>Black</td>
<td>208.0</td>
<td>NC</td>
<td>203.8</td>
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<tr>
<td>Cerebrovascular (stroke) Mortality(^\d)</td>
<td>52.4</td>
<td>NC</td>
<td>39.1</td>
</tr>
<tr>
<td>White</td>
<td>46.2</td>
<td>NC</td>
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<td>Black</td>
<td>64.1</td>
<td>NC</td>
<td>53.0</td>
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<tr>
<td>Diabetes mellitus Mortality(^\d)</td>
<td>26.9</td>
<td>NC</td>
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<td>NC</td>
<td>19.0</td>
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<td>Black</td>
<td>47.1</td>
<td>NC</td>
<td>38.7</td>
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<tr>
<td>Infant Mortality(^\d)</td>
<td>10.8</td>
<td>8.7</td>
<td>6.2</td>
</tr>
<tr>
<td>White</td>
<td>6.4</td>
<td>6.6</td>
<td>5.2</td>
</tr>
<tr>
<td>Black</td>
<td>16.1</td>
<td>13.0</td>
<td>11.6</td>
</tr>
<tr>
<td>Low Birth Weight(^\d)</td>
<td>11.3%</td>
<td>10.3%</td>
<td>8.2%</td>
</tr>
<tr>
<td>White</td>
<td>8.3%</td>
<td>8.2%</td>
<td>7.2%</td>
</tr>
<tr>
<td>Black and Other</td>
<td>14.4%</td>
<td>14.6%</td>
<td>13.7%(^\wedge)</td>
</tr>
</tbody>
</table>


\(^\d\) Mortality rates are calculated per 100,000 population and age-adjusted to the year 2000 standard population

\(^\wedge\) Infant mortality rates are calculated per 1,000 live births

\(^\wedge\) Low birth weight refers to births weighing less than 2,500 grams

\(^\wedge\) The U.S. low birth weight for black and other only includes the black non-Hispanic population

Note: NA = race specific life expectancy not reported for Alabama
Note: NC = Alabama mortality rate is not age-adjusted to the year 2000 standard population
In Alabama the 2010 infant mortality rate was 8.7 per 1,000 live births, the neonatal mortality rate was 5.4, and the post-neonatal mortality rate was 3.3. All the child mortality rates differed between white and nonwhite (black and other racial groups) mothers. In particular, the infant mortality rate for white mothers was 6.6 per 1,000 live births, and for black mothers it was 13.0 per 1,000.20

In Jefferson County in 2010 the infant mortality rate was higher than the U.S. and Alabama rates, at 10.8 per 1,000 live births; the neonatal mortality rate was also higher at 6.1; and the post-neonatal mortality rate was 1.9. The infant mortality rate for white mothers was 6.4 per 1,000 live births, while the rate for black mothers was 16.1 (15.4 per 1,000 live births for the nonwhite population).20

Infant mortality has been associated with many factors, including low birth weights of less than 2,500 grams. In Jefferson County nonwhite mothers are more likely to deliver a child of low birth weight (14.4%) than white mothers (8.3%) (Table 3). Similar to the U.S. trend, in Jefferson County the infant mortality rate for all races has been trending downward over the past 50 years. In 1960 the infant mortality rate was 27.0 per 1,000 live births, 21.4 among the white population and 35.0 among the nonwhite population. In 1970 the infant mortality rate was 22.8 per 1,000 live births, 16.0 among the white population and 33.9 among the nonwhite population. In 1980 the infant mortality rate was 14.6 per 1,000 live births, 10.8 among the white population and 19.4 among the nonwhite population.7 In 1990 the infant mortality rate was 11.9 per 1,000 live births, 6.5 among the white population and 18.1 among the nonwhite population.21 In 2000 the infant mortality rate was 12.1 per 1,000 live births, 6.8 among the white population and 17.8 among the nonwhite population.21 Yearly electronic infant mortality data were available from 1990, and Figure 5 shows the relationship between the white and nonwhite population of Jefferson County.2 Further, Maps 7 and 8 show the five-year and 10-year average infant mortality rate mapped by census tract. These maps illustrate the magnitude of infant mortality in the urban, suburban, and rural areas of Jefferson County.

Figure 5

Infant Mortality 1990 - 2011

Source: Jefferson County Department of Health Vital Statistics Database
W IMR = white infant mortality rate
NW IMR = non-white infant mortality rate
Hot Spot Analysis (Getis-Ord Gi*) is a spatial analysis method to identify statistically significant “hot spots” or “cold spots” for an area in terms of a given measure. For this report, life expectancy for five years of data and infant mortality for five and 10 years of data were used as measures for hot spots and cold spots at the census tract level (Maps 9-11). Hot Spot Analysis calculates the z-score and related p-value for each census tract \((p=0.05)\) and defines hot spots as census tracts bordering other census tracts with an equal or higher value. The areas with the highest and lowest raw values are therefore not necessarily hot spots or cold spots. A census tract with a high z-score and a small p-value indicates a spatial clustering of high values. A census tract with a low negative z-score and small p-value indicates a spatial clustering of low values. The higher (or lower) the z-score, the more intense the clustering. A z-score near zero indicates no apparent spatial clustering.
Map 8

Infant Mortality Rate per 1,000 births, Jefferson County (2000-2009)

Legend

- US Interstate

Census Tracts

IMR_PER_1000_10yr

- Insufficient Data
- 0.1 - 7.6
- 7.7 - 11.1
- 11.2 - 15.5
- 15.6 - 21.7
- 21.8 - 32.4

Source: Jefferson County Department of Health
In the Hot Spot Analysis for life expectancy by census tract, the areas with the longest life expectancies are the cold spots while the areas with the lowest life expectancies are the hot spots. This spatial analysis identifies the “Over the Mountain” area (which includes some of the county’s most affluent neighborhoods) with a high clustering of census tracts with long life expectancy and the lowest Z scores. Meanwhile, the areas with the lowest expectancies and the highest Z scores are closest to the I-20/59 corridor. Similar results are seen with the infant mortality rate Hot Spot Analysis. The measure using five years of data as well as the measure using 10 years of data show that the “Over the Mountain” and Trussville areas have the lowest infant mortality rates and Z scores, while the downtown I-20/59 corridor contains hot spots for the highest infant mortality rates and highest Z scores. This implication is that there are statistical and spatial differences between areas in Birmingham, differences that are manifested as health inequities through life expectancy and infant mortality.
Map 10

Hot Spot Analysis* Infant Mortality Rate per 1,000 births, Jefferson County (2005-2009)

Legend

US Interstate

Infant Mortality Hotspots

Gi* Z Score

- < -2.58 Std. Dev.
- -2.58 - -1.96 Std. Dev.
- -1.96 - -1.65 Std. Dev.
- -1.65 - 1.65 Std. Dev.
- 1.65 - 1.96 Std. Dev.
- 1.96 - 2.58 Std. Dev.
- > 2.58 Std. Dev.

*Hot Spot Analysis is the Getis-Ord Gi* Statistic for statistical significance of clustering using a Z-Score on contiguous census tracts.

Source: Jefferson County Vital Events Database
Map Producer: Jefferson County Department of Health
Map 11

Hot Spot Analysis* Infant Mortality Rate per 1,000 births, Jefferson County (2000-2009)

Legend

- US Interstate

Infant Mortality Hotspots

Gi* Z Score

- < -2.58 Std. Dev.
- -2.58 - -1.96 Std. Dev.
- -1.96 - -1.65 Std. Dev.
- -1.65 - 1.65 Std. Dev.
- 1.65 - 1.96 Std. Dev.
- 1.96 - 2.58 Std. Dev.
- > 2.58 Std. Dev.

*Hot Spot Analysis is the Getis-Ord Gi* Statistic for statistical significance of clustering using a Z-Score on contiguous census tracts.

Source: Jefferson County Vital Events Database
Map Producer: Jefferson County Department of Health
Part III. Policies and Programs Related to Public Health

As noted earlier, there is a growing body of literature suggesting that health outcomes are not solely dependent on health care. Policies and neighborhood conditions (e.g., educational opportunity, employment opportunities, housing, access to amenities, protection from environmental pollutants and hazards) affect the health and well-being of a population. Because of this association, policy decisions, irrespective of the intentions of decision makers, may greatly impact health. Here we describe a few policies and programs from the past and present that may serve as context for the findings and recommendations of this report.

Legacies of the Past

Historical Jim Crow laws and city planning played major roles in the neighborhood racial segregation still visible today. Like other southern cities in the early 1900s, Birmingham adopted Jim Crow laws that were used to segregate whites and blacks on public transportation and in public places. During this time, the local hospital and railroad station were segregated and the city zoo, library, and city-owned parks were closed to blacks. Birmingham’s 1926 zoning ordinance further established both land use and racial districts in the city. Prepared by city planners and included in the city’s comprehensive plan, the ordinance prevented blacks from living in white neighborhoods and permitted them to live only in select areas of the city (Map 12). Areas zoned for black households were more likely than white neighborhoods to be located in or near flood-prone areas and heavy industrial sites. While Birmingham’s use of zoning to enforce neighborhood racial segregation was not unique in the South during this era, the Birmingham zoning ordinance went unchallenged for 25 years; it was not until 1951 that the U.S. Supreme Court struck it down.

The longevity of the ordinance meant that it significantly impacted the development of neighborhoods and land uses during an active period of development in the second quarter of the 1900s and helped to set future land use.

Map 12
As the 1950s saw the end of racial zoning and an increase in the black population, development of the interstate highway system and use of the federal urban renewal program helped city officials to further plan land use and residential locations in Birmingham. While there is no evidence of deliberate intentions to use the highway system to maintain racial segregation, in effect, the location of these highways reinforced many boundaries of the 1926 racial zoning map. At the southern end of the county Interstate 65 intersected the city to place the black neighborhoods on the west side and the central business district and white residents on the east side. Further, Interstate 20/59 was diverted from its originally planned straight line path from east to west to a more curvilinear route that bypassed at least two predominately white neighborhoods and served as a buffer between the black neighborhoods in the north and the white neighborhoods in the south. This route again aligned with the 1926 zoning map and ran directly through many black communities. Further, Birmingham’s participation in the federal urban renewal program in the 1950s and 1960s allowed for the relocation of blacks from areas identified as slums or having blighted conditions, but prime for development and employment opportunities. For example, a 60-block predominately black neighborhood was cleared using urban renewal to make way for the expansion of the Southside Medical Center, which later became the University of Alabama at Birmingham (UAB). While UAB, currently the largest employer in the state, certainly contributed to the revitalization of the city’s dying industrial-based economy during the mid-20th century, black residents paid a particularly high price. Housing authority surveys during that time suggested that, while the majority of the Southside’s black residents lived in substandard homes, they lacked sufficient incomes to find alternative dwellings in the private market. In fact, it was estimated that only one-quarter of black residents compared to three-quarters of white residents could afford to buy or rent comparable homes in another neighborhood. The relocation of black families was further complicated by the historically limited housing for blacks. This resulted in an even higher concentration of poverty within predominately black neighborhoods that is still apparent today (Map 4).

An ironic consequence of urban renewal and interstate highway projects was a significant shift in the racial makeup of the city between 1960 and 1980. Birmingham’s overall population decreased for the first time between 1960 and 1970, when nearly 40,000 residents left the city. Most of this decline (75%) resulted from whites leaving the city to live in suburbs throughout Jefferson County. While some blacks also left, many others remained and began moving into areas previously occupied by whites. In 1960, the city was 60.3% white and 39.6% black. By 1980, the racial makeup had shifted to 43.9% white and 55.6% black.

In perhaps an acknowledgment of the role of city planning and community development in creating and/or maintaining physical, economic, and social divides, members of the civil rights movement and its supporters called for greater involvement of residents in local governance. The establishment of the Citizen Participation Program (CPP) in 1974 was an attempt to establish a mechanism for direct input on community development by persons representing the ethnic, age, economic, and business characteristics of the community at large. Further, this program was developed to improve overall communications, understanding, and cooperation between residents and city leaders. The structure involved dividing Birmingham’s 23 communities into 99 neighborhoods with corresponding neighborhood associations. Neighborhood association leaders provide input on community problems, plans, and projects at monthly meetings with the mayor, City Council, and other city officials and agencies. Recognized as a national model for community participation, the CPP has continued to be an active participant in development to advance the economic and social growth of Birmingham. Other efforts to involve the totality of the community in planning and development have continued over the years and have met with significant wins for Birmingham and Jefferson County and all those persons who live, work, and play here.
Progress Through Civic Engagement and Collaborative Partnerships

The tremendous gains of the Civil Rights Movement came in large part from the heroic efforts of citizens willing to take individual and collective action to identify, challenge, and address practices that created and/or maintained racial inequities. We believe that civic engagement and collaborative partnerships are still key to identifying, challenging, and addressing practices and community contexts that create and/or maintain inequities in health. In that spirit, we highlight just a few recent policies and programs that support the rights of all Jefferson County residents to live, work, and play in communities that support a healthy lifestyle. Each effort was substantially aided by civic engagement and collaborative partnerships.

Established in 2007, the Jefferson County Health Action Partnership is led by the Jefferson County Department of Health in collaboration with over 60 agencies committed to improving community health. The development of the partnership and strategic goals developed from a national public health framework designed to engage diverse community stakeholders and residents in identifying strategic issues and actions. The published result, Our Community Roadmap to Health, (see www.jcdh.org/misc/ViewBLOB.aspx?BLOBId=109) set the stage for a mission to improve health and quality of life throughout Jefferson County. With funding from Communities Putting Prevention to Work with the U.S. Department of Health and Human Services (DHHS), Health Action Partners succeeded in a number of community actions relevant to this report. Below are a few examples:

- On September 8, 2010, the Jefferson County Board of Health passed a resolution supporting the comprehensive, formal, and systematic integration of public health considerations into land-use and transportation planning and decision-making processes;
- On November 10, 2010, the Jefferson County Board of Health passed a resolution in support of improved food access and education across the county. Part of the resolution included the establishment of a food policy council;
- In 2010, Main Street Birmingham, Inc. (now REV Birmingham) commissioned two studies to help improve food access in the county. The first was a study to identify inequities in food access. This “Food Desert” study explored Birmingham communities at the block level and found (similar to this report) that the foods residents have access to depend on where they live. The second study was “Neighborhood Market DrillDown,” aimed at determining communities’ market size, buying power, and overall grocery gap to identify neighborhoods where unmet demand could attract potential food retailers to current food deserts;
- In 2010, the Jefferson County Planning and Zoning Committee and the County Commission unanimously passed a SmartCode zoning ordinance, developed by the Jefferson County Department of Land Planning and Development Services, that allows for mixed-use, village-style development that promotes a more active lifestyle. The ordinance can now be applied to new development throughout the county;
- In September 2011, the Birmingham City Planning Commission passed a “Complete Streets Resolution,” committing to improving streets and sidewalks for over 200,000 residents and 88,000 commuters;
- In February 2012, the Freshwater Land Trust unveiled the Red Rock Ridge Valley and Trail master plan (www.redrocktrail.org), a “roadmap” for a regional greenway and street-based trail system that would connect communities across Jefferson County. The plan included input from over 3,000
community members and represents over 200 miles of shared-use greenways and trails along six main corridors plus 600 miles of street-based bicycle and pedestrian pathways that would connect corridors with surrounding areas.

While this report definitely points to the need for more work to get to measurable improvements in health outcomes and health equity, the above initiatives show several steps forward in that direction.

**Part IV. Conclusions and Recommendations**

This report documents a consistent pattern of poorer health among blacks and low-income families in Jefferson County that is associated with differences in the conditions in which county residents live, work, and play. These conditions directly and indirectly shape exposure to health risks and resources, and are often beyond the control of individuals, despite their level of health knowledge and awareness. Relative to white residents, blacks living in Jefferson County are more likely to live in areas of concentrated poverty and have measurably poorer geographic access to healthy foods. These differences in living conditions are reinforced by persistent segregation, which, although lessening, is maintained as a result of historical and contemporary practices (e.g., discrimination in the real estate market and higher rates of predatory lending in communities of color).

Jurisdictions around the country increasingly recognize that efforts to eliminate these inequities must be comprehensive and address their root causes: poverty concentration and disinvestment stemming from segregation. Comprehensive policy strategies that invest in both people (e.g., through early childhood educational enrichment programs) and places (e.g., through efforts to attract businesses such as full-service grocery stores in food deserts) are necessary to reduce the burden of health inequities, which ultimately hurt all segments of society. For example, a study released by the Joint Center for Political and Economic Studies found that the direct medical costs associated with health inequities—in other words, additional costs of health care incurred because of the higher burden of disease and illness experienced by minorities—was nearly $230 billion in the four years between 2003 and 2006. Adding the indirect costs associated with health inequities—such as lost wages and productivity and lost tax revenue—the total costs of health inequities to our society was $1.24 trillion during that period.

While acknowledging the painful, deadly, and divisive history of racism, Jim Crow laws, and discrimination in this region, the city of Birmingham has focused 2013 on celebrating 50 Years Forward since the major events of the 1963 Civil Rights Movement in the city. Events are focusing on honoring and commemorating the past and embracing the positive consequences since then. For example, more recent city and county planning efforts and projects have included a focus on bringing together the county’s diverse residents as they live, work, and play.

In continuing the momentum to move forward, we more broadly suggest strategies that align with the latest World Health Organization and Global Commission on the Social Determinants of Health goals, declarations, and policy recommendations. The Rio Political Declaration on Social Determinants of Health, for example, was adopted during the World Conference on Social Determinants of Health on October 21, 2011. The declaration expresses global political commitment for the implementation of a comprehensive approach to reduce health inequities and to achieve other global priorities. Examples of key recommendations to be highlighted for acknowledgment and implementation in Jefferson County that come directly from the Global Commission’s Rio Declaration include support of policies that:

- Promote participation in policymaking and implementation. This can be accomplished by promoting and enhancing inclusive and transparent decision making and by implementing and ensuring accountability for health and health governance at all levels, including through enhancing access to information, access to justice, and public participation;
• Track health inequities. Health departments and other agencies should monitor health inequities and make the data available to the public. Health departments need to have funding adequate to the task of collecting, analyzing, and presenting data related to inequities, and they need infrastructure and capacity sufficient to draft and implement actions to address health inequities. Local health departments should also have sufficient capacity to conduct Health Impact Assessments, which allow policymakers to understand the potential health consequences of decisions made in sectors such as housing, education, economic development, and transportation.

Further it is recommended that government, the private sector, and civil society leaders work together to:

• Increase understanding of the social determinants of health among elected policy makers, community leaders, and health, social service, education, and community/economic development professionals through professional education and other tools;

• Monitor on an ongoing basis environmentally challenged and socioeconomically vulnerable communities and increase public-sector efforts to engage with—and invest in—these communities;

• Aggressively tackle poverty by fully funding sustainable programs that focus on early childhood development and economic development (including job training incentives and enterprise and empowerment zones);

• Adopt land-use policies that reflect an emphasis on smart and equitable growth, facilitate access to affordable housing for vulnerable populations, and promote housing mobility to help reduce the clustering of people in neighborhoods of concentrated poverty and in areas where exposure to environmental risks is highest;

• Implement a public financing program to provide financial seed money to stimulate healthy food retail in neighborhoods with low food access;

• Increase the capacity of communities to hold decision makers accountable through building the capacity of grassroots/community leaders and through encouraging support for collaborative decision making and advocacy to address local and regional challenges;

• Require public decision makers and program implementers to consider the impacts of proposed actions on racial/ethnic equity in life opportunities, health, and well-being, and to adjust actions to maximize this goal. This equity in all policies approach should also be adopted by philanthropic and religious groups and other organizations serving the region.

Beyond the global ideas above, the following specific local recommendations identify timely strategies to target the reduction of health inequities and reversal of the legacy of neighborhood racial segregation and concentrated poverty in Birmingham and Jefferson County. We recognize that current city and county leaders will likely not support policies and programs that divide communities and/or deny certain citizens their civil rights. However, by failing to acknowledge and address existing inequities, those who remain silent and/or are inactive in putting forward a solution may not have started the problem, but are contributing to maintaining it. The following represent immediate opportunities for actions to improve health and promote health equity in Jefferson County:

• Work to ensure that health and health equity are embedded throughout the new City of Birmingham’s Comprehensive Plan (in final revisions). Given that the last comprehensive plan was developed in 1961 in the context of racial zoning and segregation, this new plan holds a unique opportunity to set a new course for Birmingham in the 21st century;
• Support efforts by the Jefferson County Department of Land Planning and Development Services to enforce SmartCode zoning ordinances and other efforts (e.g., land banking) to use planning and zoning to ensure health equity for all communities. While planning and zoning practices through the 1960s likely contributed to the negative health outcomes reported here, these tools are certainly capable of transforming the county into a place where everyone is excited to work, live, and play;

• Fund and support groups like REV Birmingham’s Urban Food Project, which seeks to increase access, availability, and affordability of healthy foods throughout the city with full-service grocery stores, farmers’ markets, small store initiatives, and mobile markets;

• Urge local representatives to support legislation to repeal the sales tax on groceries. For more than a decade, state legislators on each side of the aisle have introduced bills to remove the state sales tax, to no avail. Access to affordable healthy food is vital to reducing health inequities in communities of concentrated poverty;

• Support the expansion of Medicaid in the state of Alabama. Local health economists recently estimated that nearly 300,000 more Alabamians would be covered under the 2010 Patient Protection and Affordable Care Act. While the focus of PLACE MATTERS is addressing social determinants of health for the prevention of disease, we recognize that many who become ill are uninsured or underinsured because they can’t afford coverage;

• Protect and seek the more effective and efficient utilization of the county sales taxes earmarked by state law to be used for indigent care. The indigent care fund was previously used to cover expenses at the county-owned hospital (which discontinued inpatient services at the end of 2012), and final plans on how to distribute the fund have not been determined. Careful consideration of how to use these funds to take care of the needs of the most vulnerable citizens in Jefferson County would help to reduce or eliminate inequities in health outcomes;

• Preserve adequate funding for the Jefferson County Department of Health. Like the indigent care fund, by state law a portion of the county’s sales taxes are earmarked for the county health department. Without these funds, the health department would likely be unable to afford non-federally mandated services such as preventive services and chronic disease control;

• Fund and support collaborative efforts (e.g., Jefferson County Health Action Partnership, United Way of Central Alabama’s Bold Goals Group) to bring diverse groups of people and organizations together to find local solutions to improve the health and quality of life of all who work, live, and play in Jefferson County.
**REFERENCES**


