



Community Health Needs Assessment Report Trenton, New Jersey

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EXECUTIVE SUMMARY

The Trenton Health Team (THT) has completed a comprehensive, data-informed Community Health Needs Assessment (CHNA), in which Trenton residents played a key role in identifying and articulating the city's top health priorities. THT, a collaborative of the city's two hospitals, St. Francis Medical Center and Capital Health; its only Federally Qualified Health Center, Henry J. Austin Health Center and the city government's Department of Health & Human Services, has partnered with 29 community and social service agencies across Trenton in a new approach to develop one CHNA for the city as a whole. Organizations participating in the unified CHNA have committed to allocating resources to address the health needs as identified.

CHNAs are not new. Across the nation, non-profit organizations create government-mandated CHNAs and Community Health Improvement Plans (CHIPs) to determine what the community needs and how to allocate resources to those ends. **But THT's unified approach and community engagement process are currently not typical practices in creating a CHNA.**

THT has turned this reporting requirement of the Internal Revenue Service into a city-wide collaboration between Trenton residents and healthcare professionals to develop targeted actions to improve health in their city. The process allowed THT to hear the voice of the community, with the prioritization of issues flowing directly from Trenton residents. By building the Trenton *community* into this CHNA along with site-specific health data, the THT is furthering its mission to transform healthcare for the city by partnering with the community to provide quality, coordinated care in more sustainable ways. This CHNA effort, funded through a grant from New Jersey Health Initiatives and the Robert Wood Johnson Foundation, has allowed residents and THT to take a vital first step in improving population health of the city.

The CHNA has identified five health priorities that require community-wide attention and focus: obesity/health lifestyles, substance abuse/behavioral health, safety and crime, chronic disease and health literacy and disparities. These were chosen from a longer list of issues, based on health data from THT partner organizations and public sources. During THT's unique community engagement efforts over the last 18 months, hundreds of Trenton residents and THT members talked in over 300 individual interviews and 30 forums held in places of worship, community organizations and public facilities. Priorities emerged as residents shared their personal stories, their fears, their frustrations and their health and life challenges in discussions guided by THT professionals.

The next, all-important step is to take the community needs identified in the CHNA process and, with continued community engagement, drive plans to address those needs by creating a Community Health Improvement Plan (CHIP). The plan will be designed to improve the health of Trenton, New Jersey, zip code by zip code.

A SNAPSHOT OF TRENTON

“Our zip code may be more important to our health than our genetic code.” This quote from Dr. Lavizzo-Mourey, CEO, Robert Wood Johnson Foundation, resonates throughout New Jersey’s capital city. Six zip codes encompassing the city of Trenton and the immediate surrounding area have been identified as the area of highest need within Mercer County. Poverty serves as the backdrop for the emerging priorities of this CHNA, which impacts the residents in the following ways:

- **Income** - Data from 2010 show that 36.3 percent of Trenton’s total population lives below 200 percent of the federal poverty level. The child poverty rate is 32.6 percent.
- **Housing and homelessness** - Two-thirds of Trenton residents are renters, and half of these residents pay one-third to one-half of their monthly income on housing expenses, leaving little money to cover other expenses, including education that might lead to a higher income. Between 2009 and 2012, the estimated homeless population in Trenton ranged from 500 to 700 adults and approximately 300 children.
- **Education, employment and unemployment** - Lack of education fuels the city’s unemployment rate, which averages nine percent across the six zip codes. The majority of jobs in Mercer County require high educational attainment and skill levels, placing the majority of Trenton residents at a disadvantage when seeking jobs.

OVERVIEW OF EMERGING PRIORITIES IN THT’S CHNA

From a longer list of needs generated by quantitative data, residents identified these needs as the top health concerns in Trenton, which will drive the development of the CHIP:

- **Obesity/healthy lifestyles** – Nearly half of the city’s children - even those as young as three to five years old – are obese. Trenton has been identified as a food desert, due to lack of access to healthy foods. Poor food options and limited places to play have taken a toll on Trenton’s children. Hunger is also an issue, with 17 percent of Trenton households regularly lacking enough food to eat.
- **Substance abuse/behavioral health** – Fifty-five percent of the 2012 Mercer County substance abuse treatment admissions were cases from Trenton. Emergency departments are overrun by patients with substance abuse issues. Cultural and socioeconomic disparities result in a hesitancy to seek mental health services.
- **Safety and crime** – Trenton’s rate of violent crime in 2010 was 4.5 times higher than in New Jersey as a whole. At least two of Trenton’s 11 gangs operate within the city’s schools. Decreased numbers of police officers, ongoing gang activity and poverty all fuel Trenton’s high crime rate.
- **Chronic disease** – Trenton residents have high rates of diabetes, hypertension and cancer. Sixteen percent of the city’s residents were diabetic in 2009. Heart disease and cancer are two of the three leading causes of death in Mercer County. Unmanaged chronic illness leads to acute, costly, avoidable emergencies.
- **Health literacy and disparities** – Obstacles to building health knowledge and communicating about health affect many aspects of care. For example, many foreign-born residents struggle to

adapt to a different healthcare system in a new country. Diverse and complex language barriers also impact health literacy in Trenton, where over 35 percent of the population speaks a language other than English in the home.

THT'S INNOVATIVE APPROACH

THT's CHNA and CHIP approach is unique and innovative in two ways. First, rather than creating separate CHNA's, THT partners decided to create a *unified* Community Health Needs Assessment for the city. Second, THT incorporated community engagement through more than 300 one-on-one interviews and 30 community forums.

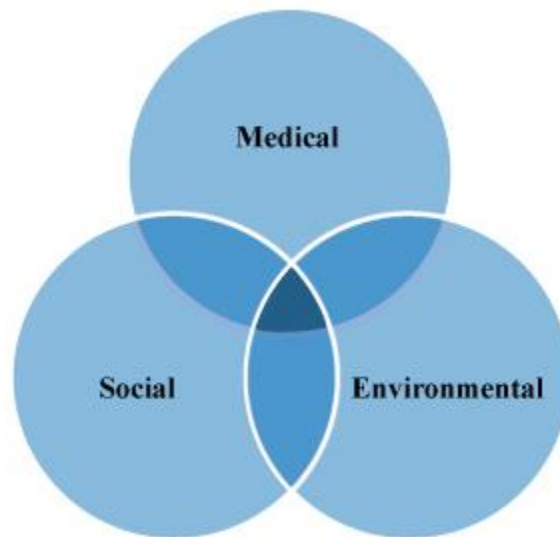
THT's collaborative approach, described in the diagram below, has allowed THT to assemble a more complete picture of the city's health needs than was ever previously possible, utilizing both quantitative and qualitative data to define the emerging health priorities of the city. First, organizations across the city joined THT's community advisory board. Next, quantitative data were collected and analyzed from THT partners and external data drawn from state, county and local sources. The results allowed THT to develop accurate social, economic and health comparisons between Trenton, Mercer County and New Jersey. THT then collected qualitative data from the resident interviews and community forums and used that data to verify and validate the needs that the partners had identified.

Process for Community Health Needs Assessment and Community Health Improvement Plan



The results of these analyses illustrate the complex healthcare crisis in the city of Trenton—a crisis that stretches beyond the exam room, through the streets and into the workplaces, schools, parks, shelters, homes and hearts of residents who could represent the face of any urban area in the United States.

During THT’s community engagement efforts, a framework emerged that outlines dominant themes affecting healthcare in the city of Trenton. From resident accounts of the health challenges of daily life in Trenton, THT prepared the Venn diagram below, with health influenced not just by medical needs, but also by environmental and social concerns. The five emerging priorities of this CHNA fall within the intersection of these three dimensions of health.



NEXT STEPS

The Community Health Needs Assessment will drive the development of THT’s CHIP, which will include realistic, measurable goals to address the emerging priorities uncovered by the CHNA. Each CHNA health priority will be assigned to a community leader who will head that priority’s improvement initiative, guided by a CHIP Steering Team. THT plans to seek grant funding for each priority.

THT partners will roll out the CHNA and CHIP together in unprecedented city-wide public meeting focused on health. Other public meetings and forums will follow for deeper discussion throughout the community. THT will track its progress along with the community using an online dashboard created for THT by Healthy Communities, Inc. The dashboard will display publicly available data for the Trenton community down to the zip code level, allowing THT to track its progress against pre-determined health goals.

THT’s CHNA and CHIP process meet IRS requirements of Form 990, which public charities and private foundations must file annually, disclosing assets, expenditures and other basic information about their activities. THT’s unique approach of community collaboration and transparency will further THT’s goal to make the capital city the healthiest city in New Jersey while promoting more efficient allocation of community resources to improve population health.

OTHER AREAS OF CONCERN

Trenton's health challenges are numerous. Some of those challenges, while beyond the scope of the current CHNA, bear mentioning in order to fully understand the picture of health in Trenton. These are additional factors impacting health outcomes in the city:

- HIV/AIDS and Hepatitis C
- Teen pregnancy and poor birth outcomes
- Sexually transmitted diseases
- Lead poisoning
- Asthma
- Transportation

Efforts are currently in place to address these issues, which may ultimately overlap with some of the CHIP initiatives. THT will continue to acknowledge the impact of these issues, as applicable, while focusing on the emerging priorities identified by quantitative data analysis and community engagement efforts.

LIMITATIONS OF THIS REPORT

Note that there are several limitations of this assessment. Trenton's population is transient, meaning that the snapshot of the population presented in this report may not match the actual population on a particular day. Additionally, the transient nature of the population means that there may be subpopulations that were not identified. Finally, data from existing secondary sources is often several years old, creating a lag between the data and present day circumstances.

CHAPTER HIGHLIGHTS

HEALTH PRIORITY SPOTLIGHT: Obesity and Healthy Lifestyles

- Compared to Mercer County and New Jersey, Trenton residents have more problems with their weight, with 39 percent of residents being obese.
- With only three true supermarkets in the city and an incredibly high number of limited food service restaurants (51 percent of outlets) and bodegas (29 percent), Trenton is a food desert that would have to triple its number of supermarkets to adequately serve its residents.
- Nearly half of Trenton’s elementary, middle and high schools are located in parts of the city with the highest density of bodegas (convenience stores).
- Many Trenton residents lead sedentary lifestyles, with only 34 percent of children meeting recommended exercise guidelines and Hispanic children being least active. Most Trenton parents believe their children get enough physical activity when in reality, they do not.
- One in two Trenton children is overweight and obese in every age category. The largest difference between Trenton public school children and those nationally occurs among the youngest children, with 49 percent of three to five year olds in Trenton being overweight or obese compared to 21 percent in the U.S.
- Despite the city’s obesity problem, food insecurity affects about one in five Trenton households.

HEALTH PRIORITY SPOTLIGHT: Substance Abuse and Behavioral Health

- Drug use is related to all barriers reported in the Community Needs Scores (CNS) and reflects an intersection of health, environment and social conditions illustrated in the Venn diagram developed from our community engagement efforts.
- In 2012, 55 percent of Mercer County’s hospital admissions for substance abuse occurred in Trenton. The majority of hospital admissions in Trenton involved marijuana or alcohol. Of all alcohol licenses issued by the State in Mercer County, 41 percent reside in the City of Trenton.
- Minority populations are very unlikely to seek and receive mental health services. Between the stigma associated with mental illness and inadequate screening by primary care practitioners, identification is often missed. Only 25 percent of persons with a mental illness actually receive professional help.

HEALTH PRIORITY SPOTLIGHT: Safety and Crime

- Trenton is one of six New Jersey towns with multiple gangs of more than 100 members, with 11 total reported gangs comprising around 5,325 members and two to four of these gangs present in the city’s schools. About 45 percent of Trenton parents feel that their neighborhoods are somewhat or very unsafe due to crime.
- Decreases in the number of city police officers, increases in the number of vacant homes and high rates of gang activity fuel Trenton’s high crime rates, along with declining business and poverty.
- A relationship exists between crime and health, as safety concerns cause stress leading to subsequent emotional, mental and physical issues and disparities beginning in childhood and throughout adult life.
- Trenton’s crime index is significantly higher than that of New Jersey, the US and neighboring municipalities in Mercer County. For example, New Jersey averaged 1,154 offenses known to

law enforcement per 100,000 population; Trenton averaged 3,169 on the same scale. The rate is around ten-fold lower, in some cases more, in every neighboring municipality in the county.

- The majority of Trenton crimes were property crimes (68 percent) most frequently burglaries and thefts. The dominant personal crimes were robberies and assaults, while drug and alcohol-related violations topped the list for public order offenses.

HEALTH PRIORITY SPOTLIGHT: Chronic Disease

- Trenton residents have higher rates of chronic illnesses than Mercer County as a whole, the state of New Jersey and the nation. The most significant chronic diseases in Trenton are diabetes, cardiovascular disease and cancer. Co-pays for services (ranging from \$10 to \$80 per encounter) limit access and prevent early detection of chronic diseases.
- Heart disease is one of the top three causes of death in Mercer County and the leading cause of death in New Jersey and the U.S. as a whole. Many Trenton residents do not prioritize cardiovascular preventive care due to disparities in insurance, lack of access to multicultural health professionals, distrust of medical professionals and decreased overall awareness of lifestyle and health practices that increase risk of heart disease.
- In Trenton, 16 percent of residents are diabetic, compared to a little over nine percent in Mercer County. The CDC estimates that the direct cost (medical care) and the indirect cost (lost productivity and early mortality) of diabetes in New Jersey is more than \$4 billion annually.
- Cancer is the third leading cause of death in Mercer County, with lung, prostate, breast and colorectal cancers the most prevalent. Many Trenton residents do not feel they need to attend screenings for breast or prostate cancer, or fear the tests, demonstrating that health literacy issues pose a concern and barrier to care in the city.

HEALTH PRIORITY SPOTLIGHT: Health Literacy and Disparities

- Healthcare quality and access are suboptimal, especially for minority and low-income groups. While quality is improving, access and disparities are not. Disparities exist in quality of care, access to care and prevention.
- Blacks, Hispanics and poor people receive worse care, with worse access to care than non-Hispanic Whites for most quality and access measures.
- Disparities in maternal deaths and breast cancer diagnoses continue to worsen for African Americans.
- The Affordable Care Act of 2010 will institute measures attempting to improve many existing healthcare disparities.

INTRODUCTION

Purpose and Geographic Scope of the Trenton Community Health Needs Assessment

“Our zip code may be more important to our health than our genetic code.” This quote from Dr. Lavizzo-Mourey, CEO, Robert Wood Johnson Foundation, inspired the Trenton Health Team (THT) as it began planning its journey to make the city of Trenton the healthiest city in the state of New Jersey. Trenton has long suffered poor health outcomes, both compared to Mercer County as a whole and New Jersey at large. Residents received fragmented, uncoordinated and costly care as they relied on the city’s emergency departments (ED) for primary care. ED utilization in Trenton was 54 percent higher than the national average. A deeper examination of service utilization data showed 78 percent of Trenton’s highest utilizers were seeking care at multiple hospitals.

A collaborative of the city’s two hospitals, its only Federally Qualified Health Clinic (FQHC), and its Division of Health, THT was formed in acknowledgement that the city’s health problems were bigger than any single organization. THT partners recognized that by collaborating rather than competing, they stood a chance at gaining a deeper understanding of health outcomes and service delivery in Trenton. THT also knew that private health and public health would need to be blended together in new ways for the benefit of the community rather than continuing to function in isolation.

As a first step toward better community health, THT has taken an innovative approach to completing the IRS’s mandated Community Health Needs Assessment (CHNA) and Community Health Improvement Plan (CHIP). First, in place of separate CHNA’s from different organizations serving the same populations, THT engaged multiple stakeholders to create *one unified CHNA and CHIP for the city of Trenton*. Second, THT developed the ultimate set of health priorities by integrating quantitative data analysis with the direct voice of the community, engaging residents in the healthcare transformation of the city by inviting them to express what health concerns matter the most to them.

This effort was funded in part by a grant from the New Jersey Health Initiatives and the Robert Wood Johnson Foundation (RWJF), which also awarded Mercer County a parallel grant to develop a community health needs assessment for the county. Recognizing the unique nature of the city of Trenton, RWJF awarded a grant to look specifically at the six zip codes that lie within the city boundaries.

Note that this assessment has several limitations. Trenton’s population is transient, meaning that the snapshot of the population presented in this report may not match the actual population on a particular day. Additionally, the transient nature of the population means there may be subpopulations that were not identified. Finally, data from existing secondary sources is often several years old, creating a lag between the data and present day circumstances.

The geographic scope of the Community Health Needs Assessment extends across the area of most significant need in Mercer County, which includes as its core the city of Trenton. Mercer County is comprised of 13 municipalities with a broad range of socioeconomic statuses and racial/ethnic identities

present. It is the eleventh largest county in New Jersey, with a population of 366,513 persons.¹ The six zip codes within Trenton’s city limits (08608, 08609, 08611, 08618, 08629, and 08638) include 114,495 persons.² Note that the Census numbers differ for these zip codes because the zip codes 08629 and 08638 extend into parts of Hamilton, Ewing and Lawrence Townships.

While Trenton technically encompasses a number of additional zip codes, THT has chosen to focus on the six aforementioned zip codes based on Community Needs Score (CNS) components determined by Claritas, Inc., a market research company. Claritas determines a Community Needs Score for every zip code uniformly across the entire US. The Community Needs Score is a composite value derived from scores on the following five perceived barriers to health status:

1. Income Barrier

- Percentage of households over age 65 below poverty line
- Percentage of families with children under 18 below poverty line
- Percentage of single female families with children under 18 below poverty line

2. Cultural Barrier

- Percentage of population that is minority
- Percentage of population over age five that speaks a language other than English as their primary language at home

3. Education Barrier

- Percentage of population over 25 without a high school diploma

4. Insurance Barrier

- Percentage of population in the labor force, aged 16 or more, without employment
- Percentage of population without health insurance

5. Housing Barrier

- Percentage of households renting their home

Each of these five barriers was assessed for all Mercer County zip codes, which are represented below on a one to five scale, where one represents the lowest need and five represents the highest. The six THT-selected zip codes ranked highest in need across all five barriers, as shown in the following table and map:

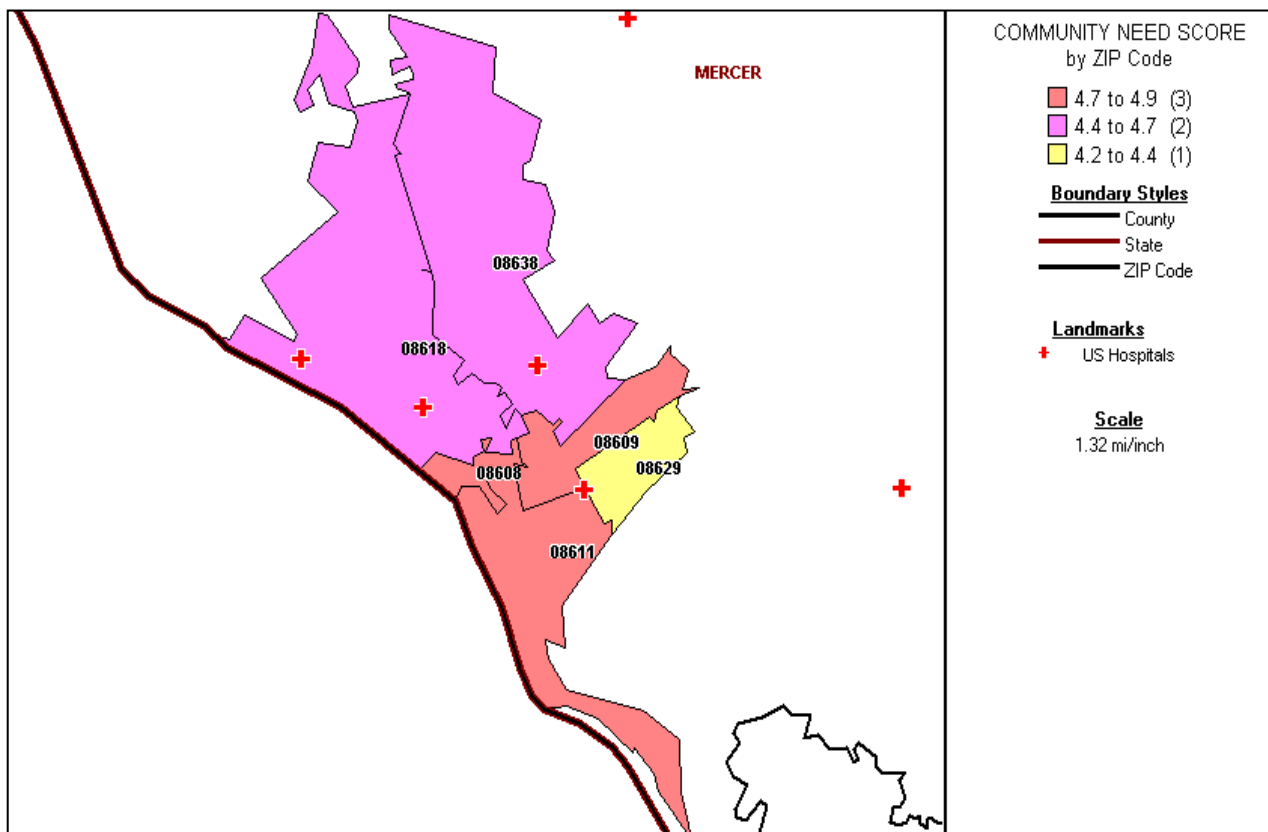
Mercer County Barrier Scores

✦ = Trenton/CHNA Zip Code

1= Lowest Need; 5 = Highest Need

ZIP Code	Community Need Score	Income Rank	Education Rank	Culture Rank	Insurance Rank	Housing Rank
✦08608	5.0	5	5	5	5	5
✦08611	4.8	4	5	5	5	5
✦08609	4.8	4	5	5	5	5
✦08618	4.6	4	4	5	5	5
✦08638	4.4	3	4	5	5	5
✦08629	4.2	3	4	5	4	5
08610	4.0	3	3	5	4	5
08068	4.0	3	3	5	4	5
08610	3.8	2	4	5	4	5
08619	3.6	2	3	5	3	4
08052	3.6	2	3	5	3	5

Geography of 2012 Community Needs Scores - Trenton, NJ



New Jersey is proud to have been named the eighth healthiest state in the US.³ However, its capital city, Trenton, remains resource-poor and in great need in many categories. Insurance, culture and housing pose the highest barriers to health for all six zip codes. The **08608** zip code has the highest need in all categories, with the maximum composite score of five, and can serve as a reference for exploring the barriers in the other five zip codes. The income barrier is lower in the five remaining zip codes compared to 08608. In three of the five remaining zip codes (08618, 08638 and 08629) the education barrier is lower compared to 08608. Despite these individual differences, all six zip codes have very high composite scores, meaning that the “lower” barriers in this case still represent significant areas of need.

When examining specific topics in depth, such as income, poverty, racial and ethnic composition of the city and unemployment, differing community need scores begin to illustrate more clearly the significance of zip code to the health of residents. Zip code level differences will be a main theme throughout this report, as they contribute to and are a product of health disparities that will be discussed as well.

Advisory Structure and Methodology

THT was established as a collaborative of Trenton’s two hospitals, its only Federally Qualified Health Center and its Division of Health. Using a data-driven approach to hear the voice of the Trenton community, THT partnered with 29 Trenton based organizations to create one, unified community health needs assessment. Representatives from these organizations form THT’s Community Advisory Board.

Process for Community Health Needs Assessment and Community Health Improvement Plan



As is the case in most communities across the nation, these organizations have historically each reported their own community health needs assessment, despite overlaps in the populations they serve. In addition to wasting resources where efforts are duplicated, this fragmented approach limits the scope and the usefulness of the information collected.

THT recognized from the onset that there would be many advantages to developing a model that resulted in a unified approach to assessing needs. The needs of the Trenton community are beyond the scope of traditional definition used by most organizations and include more than health-related issues. THT's process built on the needs that the partners had identified within their own spheres and combined them to reflect one integrated community voice.

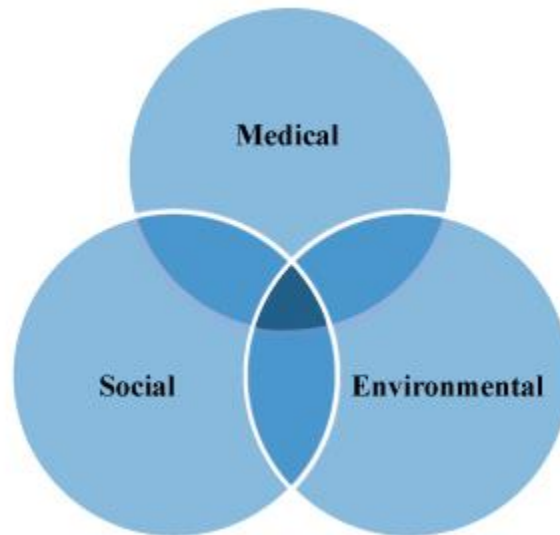
Once the community advisory board was established, each THT partner committed to sharing information that has rarely been available in such a competitive market and in some cases held forums to address exclusively issues of concern to specific communities such as Latinos and immigrants from Africa. THT and its community advisory board reviewed the compiled data to gain a deeper understanding of the correlation between health status, economic status, service utilization and gaps in the service continuum, and developed a preliminary chart of health needs based on the data.

Existing data were drawn from state, county and local sources to develop an accurate social, economic and health comparison between Trenton, Mercer County and New Jersey. Sources of data included, but were not limited to, the U.S. Census, U.S. Bureau of Labor Statistics, Federal Bureau of Investigation Uniform Crime Reports and the State of New Jersey Department of Health and Senior Services. Data sources specific to Trenton included, but were not limited to, city agencies that sit on the community advisory board. A comprehensive appendix with all of the data sources can be found at the end of this report.

The third phase of the process involved community engagement. THT contracted People Improving Communities through Organizing (PICO), to help obtain the voice of the community through one-on-one interviews and community forums across the Trenton geography. Many of the one-on-one interviews were videotaped, creating a permanent, first-person narrative record of the health challenges facing the Trenton community. Thirty community forums were led by members of THT's Executive Team, which enabled THT to hear the unfiltered voices of the residents. **This element is unique to THT's methodology and demonstrated how quantitative and qualitative data can be mutually re-enforcing and useful in refining THT's understanding of barriers to good health in the community.** THT also developed a deeper appreciation of the rich diversity within the Trenton community. This knowledge will be valuable in developing the community health improvement plan because no single intervention will meet diverse needs.

As THT commenced the community forums and residents began to share their health care narratives, it became apparent that the barriers they faced went beyond the purview of traditional health care. Many of these barriers were environmental and social: infestations, lead paint, homelessness and crime. Based on this information, THT modified its approach by grouping the findings under the headings of medical, environmental and social to identify areas of overlap among the three.

Depicted as a Venn diagram below, the intersection of all three arenas was used to help the community prioritize health needs. Similarly, THT is utilizing the intersection of medical, environmental and social issues as a framework to hear directly from the community regarding which interventions have had a positive impact on health. The community forums have laid the foundation for the Community Health Improvement Plan (CHIP) development and implementation.



In Trenton, five priorities have emerged in the CHNA as factors found in the center of the Venn diagram. Poverty influences all of these priorities, which include crime, chronic disease, substance abuse/mental health, obesity, health literacy and health disparities.

The priorities identified in the CHNA process will drive the formulation of a Community Health Improvement Plan. In the fall of 2013, an annual meeting will be held with all of THT's partners and their boards. All of the Trenton residents THT has spoken with and built relationships with throughout the process will also be invited. This event will serve as a community-wide forum in which THT, its partners and city residents will all come together to develop the Community Health Improvement Plan.

Social Determinants of Health Framework

Developed as a public health tool, the Adverse Childhood Experiences (ACE) pyramid grew out of a collaboration between the Centers for Disease Control and Prevention and Kaiser Permanente's Health Appraisal Clinic in San Diego. It suggests that unfortunate events during youth lead to the development and prevalence of risk factors for health, disease and social well-being throughout the lifespan, as shown in the figure below.⁴ In order to highlight the significance of social determinants of healthcare in Trenton, THT also selected the ACE pyramid as a framework for much of the discussion throughout this report.



An understanding of the underlying abuse experienced by residents in a given geographic area must be considered in creating solutions and analyzing individual assessments. In San Francisco, for instance, Dr. Nadine Burke found that clinical health outcomes like morbidity and mortality did not improve at high rates in the poorest and most violent neighborhood of Bayview-Hunters Point without treating the specific risky behaviors outlined by the ACE pyramid. Many doctors have found that adverse childhood experiences alter biochemical pathways in the affected children. Dr. Jack Shonkoff, a professor of pediatrics at Harvard Medical School, says, “The beauty of science is that it’s showing us how all of these have common roots. We now know that adversity early in life can not only disrupt brain circuits that lead to problems with literacy; it can also affect the development of the cardiovascular, immune and metabolic regulatory systems. This leads not only to more problems learning in school, but also greater risk for diabetes and hypertension and heart disease and cancer and depression and substance abuse.”⁵

Events that qualify as adverse childhood experiences include childhood abuse, neglect and exposure to other traumatic stressors. In the case of Trenton, crime is one such tremendous stressor that causes residents to enter the bottom of the pyramid from a young age. In the original ACE study, participants who reported a higher number of ACEs, had a greater “ACE score,” which is used to assess the total amount of stress experienced during childhood. Respondents with the highest ACE scores had the greatest risks for a host of health issues. These include the following⁶:

- alcoholism and alcohol abuse
- chronic disease
- depression
- fetal death
- health-related quality of life
- illicit drug use
- ischemic heart disease (IHD)
- liver disease
- risk for intimate partner violence
- multiple sexual partners
- sexually transmitted diseases (STDs)

- smoking
- suicide attempts
- unintended pregnancies
- early initiation of smoking
- early initiation of sexual activity
- adolescent pregnancy

During the development of this Community Health Needs Assessment, the ACE pyramid was found to be a critical tool, as it relates back to the intersection of medical, social and environmental issues. ACE changes the suggested treatment path for most Trenton residents. By learning more about the adverse events experienced by Trenton residents, THT will be better prepared to meet group and individual needs within the community. The ACE pyramid will serve as part of the foundation for THT's Community Health Improvement Plan.

SNAPSHOT OF TRENTON

Poverty

Poverty relates to all of the barriers that make up the composite Claritas Community Need Score discussed earlier in this report and plays a major role in the high Community Need Scores for the six zip codes in Trenton. Poverty is such a complex phenomenon it requires two definitions. **Absolute Poverty** has been described as a lack of the minimum food and shelter necessary for maintaining life. **Relative Poverty** has been explained as the condition in which the poor lack what is needed by most Americans to live decently. For Trenton residents living in poverty who struggle to meet their basic needs of food, shelter and clothing, both definitions apply.

There are many causes of poverty. Some theorists feel that poverty is related to the flight of the middle class out of the city into the suburbs. Potential employers have done the same. The outward migration has resulted in fewer job opportunities for those remaining in the city.

Some feel that we should "blame the poor," believing that the poor would rather receive welfare payments than work in entry level, low paying jobs. In contrast, others feel that the poor are willing to work hard and do so when they have the chance. The real problem is related to minimal wages and lack of access to the education needed for obtaining a better-paying job.

During a community forum held at a local church, a resident shared that she had observed first-hand a change in the "mood" surrounding her community between now and the time when she first lived in the city. She stated, *"When I lived in Trenton before, people would occasionally get upset over issues within their community. Now that I have returned to the area, I sense a real difference in the mood of the city. People seem to feel hopeless! The feeling worries me. I've never experienced that before."*

The effects of poverty are serious. People living in poverty experience more persistent, frequent and severe health problems than those living under better financial circumstances. Stress levels for poverty-stricken families are significantly higher than those for economically stable ones. As identified in the ACE pyramid, increased stress can result in over-eating, elevated blood pressure, unstable blood sugars, depression and anger that may lead to violence, all of which fuel the cycle of poverty. The fears of not having enough food to feed your family, experiencing eviction and losing utilities are almost too much to bear.

As the overarching emerging priority in Trenton, aspects of poverty that will be explored in this section include income, employment, unemployment, homelessness, education and transportation. Poverty relates to all CNS barriers and the intersection of health, environment and social conditions illustrated in the Venn diagram described earlier.

Income

The income levels of Trenton residents are far below those found in the remaining areas of Mercer County. In turn, the percentage of Trenton residents living in poverty greatly exceeds that of Mercer County as a whole. According to the US Department of Health and Human Services, the Poverty Level for 2012 is \$11,170. The per capita income for residents living within the six zip codes is shown in the following table.

Average Annual Income for Trenton City

Zip Code	Avg. Annual Income/Person
08608	\$8,760.51
08609	\$10,436.03
08611	\$11,466.67
08618	\$13,693.96
08629	\$16,152.00
08638	\$15,684.59
Total	\$12,698.96

In 2008, it was estimated that in order to live in New Jersey (reported to be among the most expensive places in the country to live) a family of three earning \$17,346 met the Federal Poverty level threshold. However an income of \$54,930 actually reflected the amount required to meet the “real cost of living” in the State.⁷

The percentage of residents living **below** the poverty level is equally striking:

Zip Code	Total Population	Number Living in Poverty	Percent Below Poverty Level
08608	1,095	515	46.72
08609	15,166	4,853	31.78
08611	23,868	5,728	23.95
08618	37,144	9,657	23.22
08629	11,102	1,665	14.58
08638	26,120	4,440	16.63

There is a dramatic difference in the percentage of residents of New Jersey living below the national poverty level (almost 9.5 percent) when compared to the percentage of residents of Trenton (25.6 percent) (Source: Quick Facts from the US Census Bureau). According to a 2013 report, while many of the overall health outcomes and health factors have improved, the number of children living in poverty has increased and continues to trend in the wrong direction.⁸

The impact of these two indicators (low income, high rate of poverty) sets the stage for many of the disparities experienced by Trenton residents. The importance of food, shelter and clothing cannot be taken lightly. If basic needs are not met, changes in lifestyle are much more difficult to make. This is true in both the healthcare arena, as well as for the activities associated with daily living, such as regularly attending school, residing in a safe environment and securing a job.

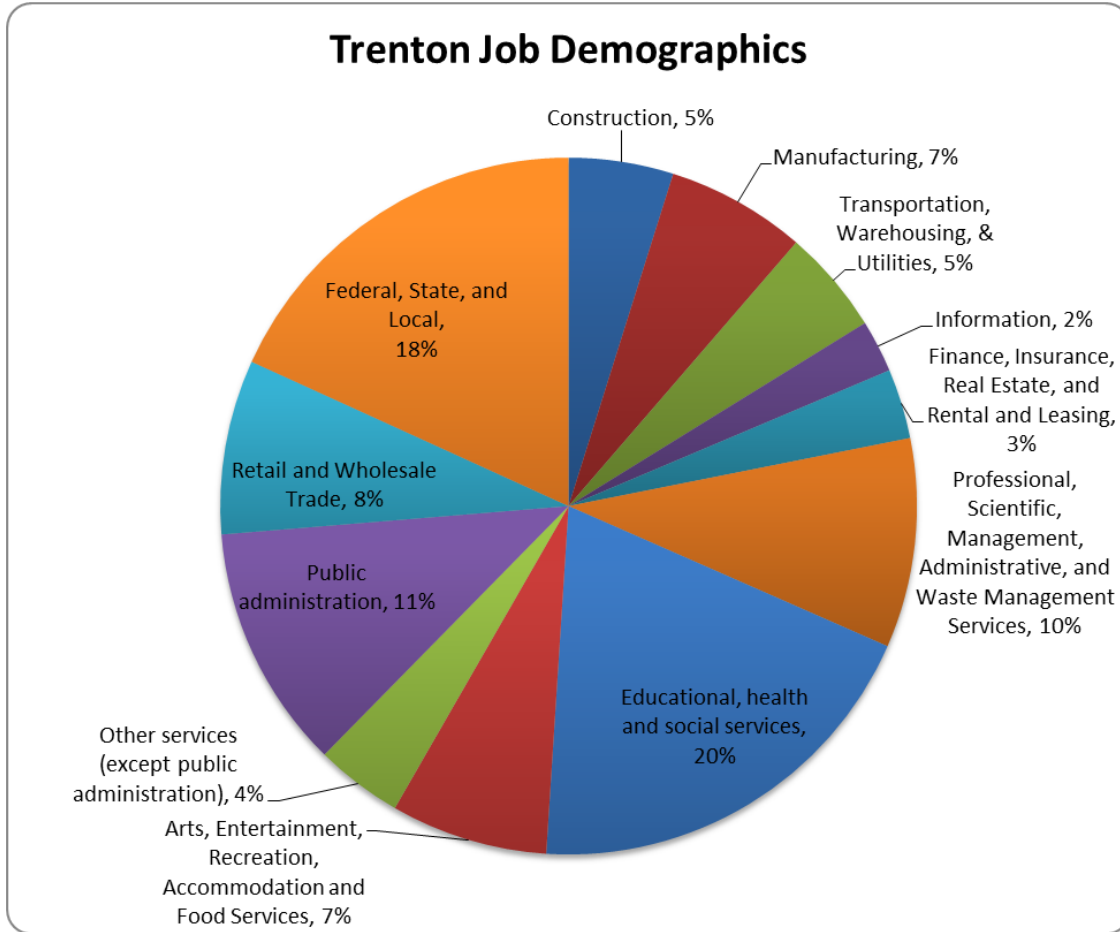
Employment—Job Types

Mercer County’s top 20 occupations, ranked by number of annual job openings, are projected to have 2,400 openings yearly through 2018. However, this does not mean that all job openings are readily accessible to residents. In Trenton, where 67.29 percent of residents in the six zip codes have only graduated from high school, most people may only be qualified for low skill level jobs. In Mercer County, only eight of the top 20 occupations entail low skill sets. These include cashiers, retail salespersons, waiters and waitresses, fast food workers, counter attendants, laborers and freight/stock and material movers, janitors and cleaners, and receptionists and information clerks. The number of job openings for laborers and freight/stock and material movers as well as janitors and cleaners is expected to decline from now through 2018.

While the other low skill job categories will maintain a stable number of openings or add more, the average income for this grouping of jobs is only \$27,441, reflecting the direct link between low-skill-level jobs and lower incomes. Given the obvious disparity in income level for low skill occupations and the fact that only 37 percent of annual job openings in Mercer County have low educational requirements and training levels, it is no wonder that unemployment is so prevalent in Trenton.

Comparatively, 40.7 percent of Mercer County’s annual job openings are projected to have *high* educational and training requirements and have an annual income of \$88,298. Jobs requiring moderate skill sets average an annual income of \$43,086 and are projected to comprise 22.2 percent of annual job

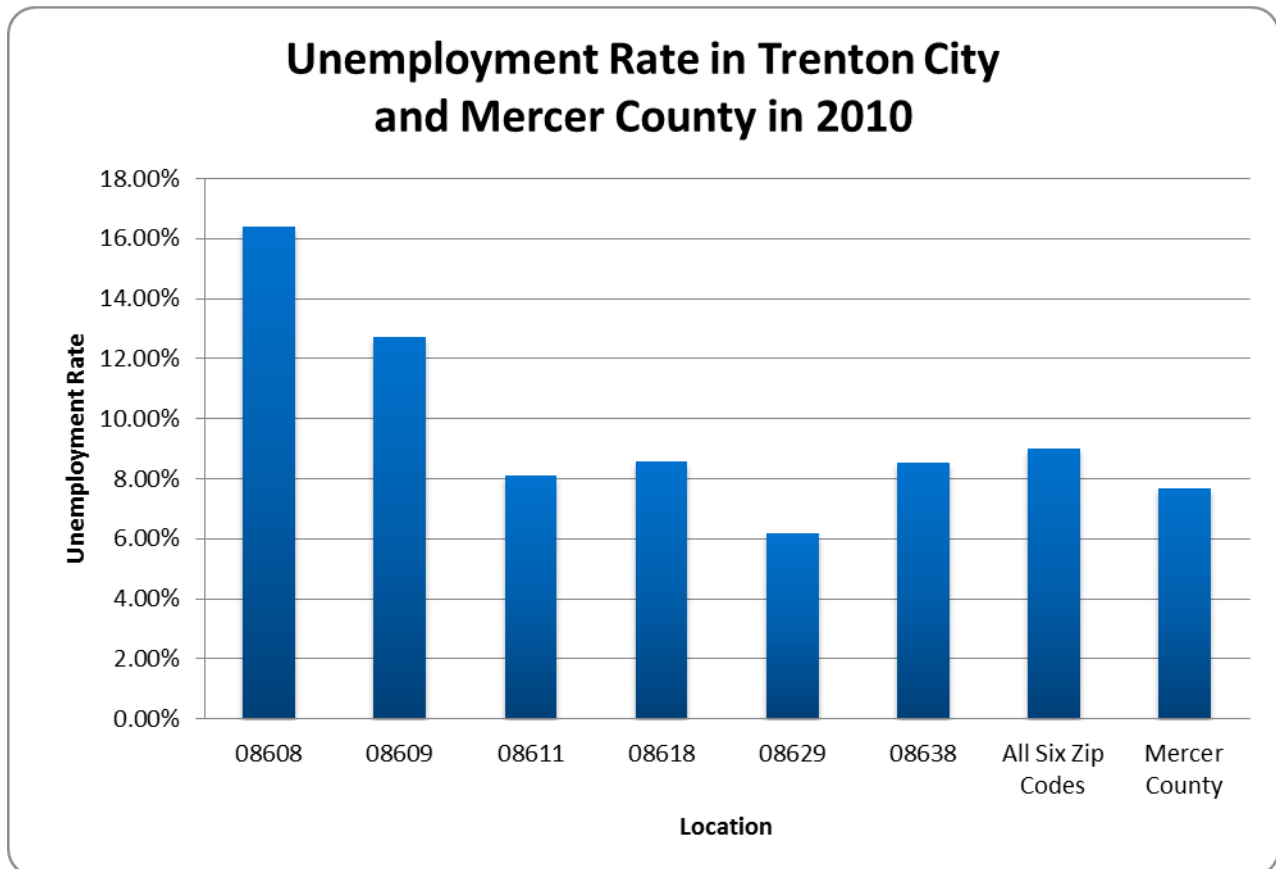
openings through 2018. When combining data for moderate and high skill level jobs, these will comprise 62.9 percent of available jobs through 2018. This places the great majority of Trenton residents who have not completed higher education at a severe disadvantage in the job market, illustrating the intersection of community needs relating to education, income and insurance as well as the intersection of environmental, social and medical/health issues.



Unemployment

During the one-on-one interviews and community forums, the lack of job opportunities was frequently mentioned and became a recurring theme. Currently, the two dominant sectors of employment in the city are government jobs (federal, state and local, 18 percent) and jobs in education and health services (20 percent). While Trenton was once known as a manufacturing city, many of the factories have closed and there has been migration of jobs out of the city in formerly dominant job sectors. This has resulted in a less than ten percent chance of securing a job in these particular classifications of employment. As mentioned in the previous section, existing jobs are difficult to fill without a minimum completion of secondary education, if not a college degree. Without growth sectors in the city, newly created job opportunities are difficult, if not impossible, to find.

Unemployment in New Jersey is a little over nine percent and in Mercer County almost eight percent. In 2010, unemployment within the six zip codes averaged nine percent, represented in the chart below. Unemployment relates to all five community needs barriers as well as the overlap between environmental, social and medical/health issues.



Language Barriers

In New Jersey, 29.2 percent of the population speaks a language other than English in the home; in Trenton this percentage increases to 35.4 percent. Language barriers in Trenton are diverse and complex, stretching well beyond Spanish as the primary language in a percentage of the city's significant Latino community.

Through the community forums, THT identified immigrants and refugees from all over the world residing in the six zip codes of Trenton, leading to a number of different languages spoken throughout the city. For example, Trenton is home to immigrants from African countries and refugees from Nepal and Bhutan. There are also many individuals from Haiti who only speak French or Patois.

Diversity of primary languages in Trenton poses a daily challenge in healthcare settings and in the city’s schools. When evaluating unemployment and poverty levels, language must be considered a major factor in the equation, tying to income, education and cultural barriers as well as the intersection of the circles in the previous Venn diagram.

Housing and Homelessness

Housing costs in New Jersey remain high, and this is no exception for Mercer County and Trenton. The goal of home ownership is a remote dream to many people living in Trenton. **Approximately two-thirds of Trenton residents are renters.** Of these, half are paying 35 to 50 percent of their monthly income on housing expenses. According to HUD, the number of households spending over 50 percent of their income on rent has increased across the country by six percent. These households are defined as being “severely housing cost burdened.” As one can imagine, once such a high percentage of the monthly income is spent on housing, little money remains for additional expenses.

Many of the properties rented in Trenton are not fit for habitation, with substandard housing found throughout the city. Many of the properties have inadequate sanitation, poor lighting, compromised structure and hazardous wiring and heating to name a few issues.

In terms of Trenton’s environment, there has been an increase in the number of abandoned houses and empty lots within the city, as well as a prevalence of poor street lighting. The following table reports the percentage of vacant homes in each zip code. The zip codes with the highest percentages of vacant homes are 08608, 08609, and 08611.

Zip Code	Percent Vacant Homes
08608	19.48
08609	16.42
08611	9.78
08618	12.27
08629	5.22
08638	6.91

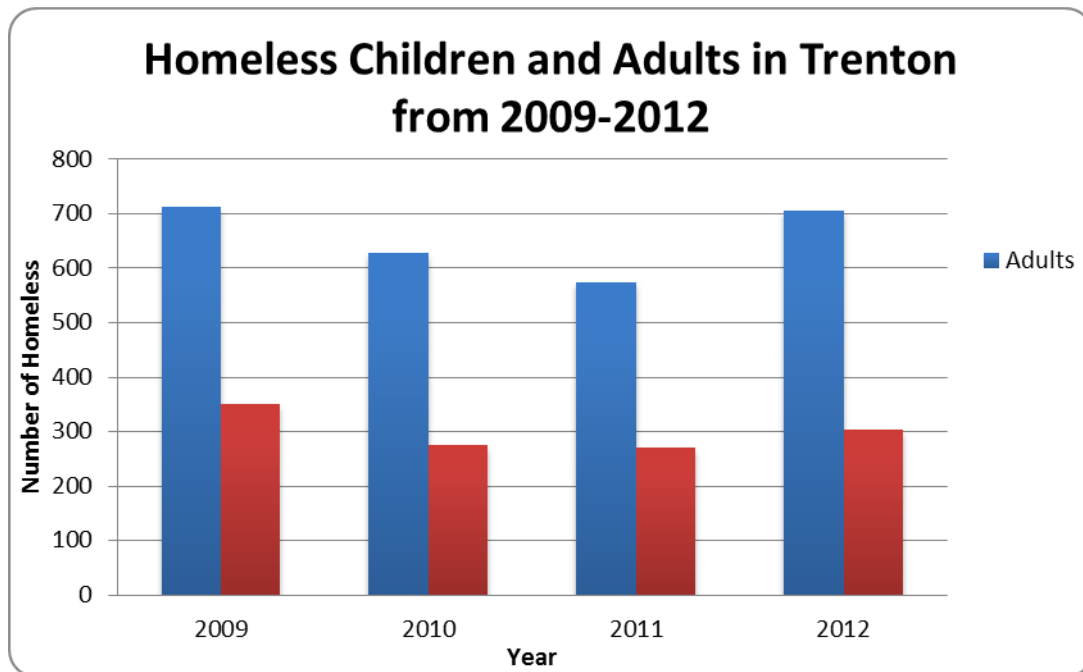
In addition to the financial stressors associated with renting, many tenants live in high-rise apartment complexes that expose residents to drug traffic, prostitution, gang activity and bedbugs. To make matters worse, 75 percent of the homes in the city were built prior to 1978, resulting in potential exposure to lead poisoning.⁹ This issue ties to housing as a barrier to health and relates to the intersection of health, environment and social conditions illustrated in the Venn diagram described earlier.

Any discussion about housing would not be complete without reference to the homeless population in Trenton. Although the total number of homeless individuals over the past few years has declined slightly, the number actually increased by 13.4 percent during the current count year. For this population, the complexity of health-related issues is staggering. Approximately 27 percent have mental health issues; 22 percent have medical disabilities and 18 percent have substance abuse issues. According to the Mercer Alliance to End Homelessness, the largest percentage of homeless in the county is men, followed by single women. Equally distressing, the number of homeless people with families accounts for a quarter of this population.

The actual number of homeless individuals is nearly impossible to capture, therefore “a date in time count” is conducted annually. On January 25, 2012 there were 1,009 homeless men, women and children counted in Mercer County.¹⁰ A total of 303 children were homeless within the counted families. Of these children, 166 were six years of age or younger. These statistics do not reflect the eight and a half percent of unsheltered homeless that live in the city. It is estimated that the actual number who are homeless over the course of a full year could actually be two to four times the number counted at one point in time.

Homeless Population in Trenton City by Calendar Year

	2009	2010	2011	2012
Adults	712	627	574	706
Children	350	274	269	303

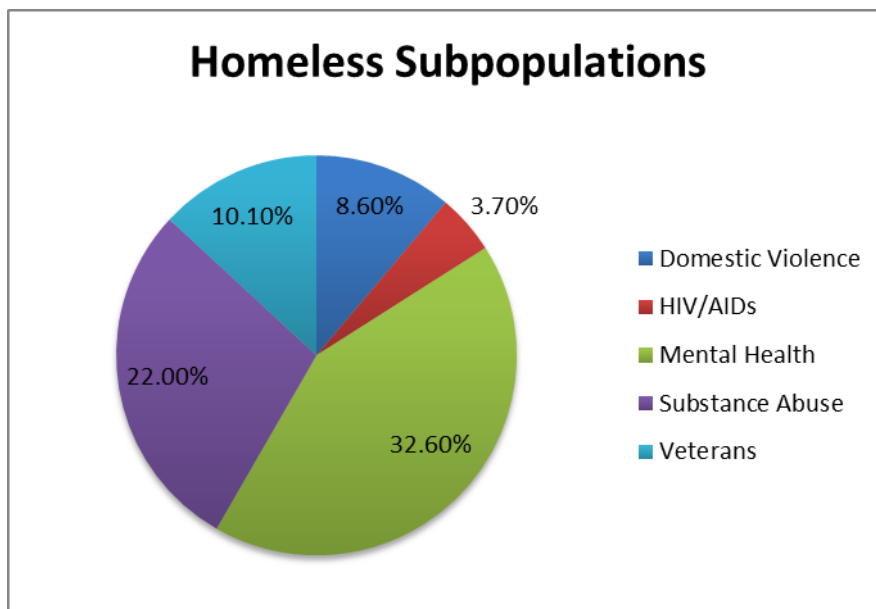


There are several subpopulations of homeless in Trenton that, in addition to their housing needs, have unique characteristics and/or social make-up. *Chronic homelessness* is defined as a person who has

been living on the streets or in some other place not fit for human habitation, such as a car or an abandoned building, for a year or more; or has experienced four episodes of homelessness in three years. In January 2012 there were 62 people in Mercer County who fit the definition of chronic homelessness, according to the Point In Time report of the Mercer Alliance to End Homelessness.

Individuals who use homeless shelters once and leave in less than a month are defined as *transitional homeless*. Those who use the shelter a few times and stay for months are considered the *episodic homeless*. All three categories can include individuals who belong to other subpopulations of significance—victims of domestic violence, veterans returning from duty and/or those struggling with HIV/AIDS, mental health issues or substance abuse.

Although not reflected on the chart below, an emerging population of homeless individuals has been identified as those released from the city/county jail and the state prison located in Trenton. These individuals accounted for 17 percent of the homeless counted on January 25, 2012.



It is estimated that in 2011 close to 1,800 individuals received services at the Trenton Rescue Mission, the only licensed Emergency Shelter in Mercer County. This agency offers a wide range of services to the community such as routine and extensive outpatient services; free-standing two-unit houses where several of those formally homeless rent an apartment and are able to attend the weekend soup kitchen. The agency also has a licensed residential addictions treatment program offering long-term, half-way house and extended levels of care.

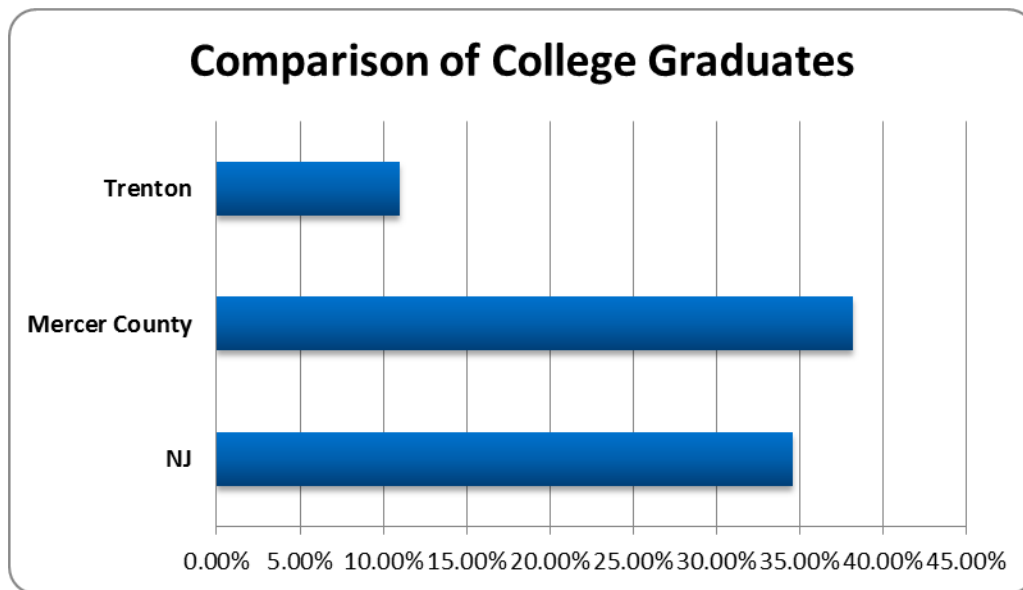
With the increase in the number of homeless with multiple, complex issues, (i.e. victims of abuse, mental health and substance abuse) requiring a variety of services, it is clear that a focus of THT will most certainly be on this population. Homelessness relates to all CNS barriers and the intersection of health, environment and social conditions illustrated in the Venn diagram described earlier.

Education

Education within Mercer County has been described as a major asset. There are six nationally recognized colleges and universities located within the county. However, equal access does not occur and is recognized as a major disparity. The higher graduation rates in several of the six zip codes relate to the fact that these zip codes extend into the suburban community where there are more opportunities than in the city limits of Trenton.

Educational Attainment for Trenton City

Zip Code	Percent of High School Graduates	Percent of College Graduates
08608	52.93	7.94
08609	57.79	6.24
08611	58.24	9.01
08618	72.13	16.51
08629	73.84	11.29
08638	72.01	16.05



When comparing the types of jobs available in Trenton along with the lack of formal education and challenges associated with literacy, high unemployment rates will continue to affect the socioeconomic status of its residents. This is an example of a combination of income, education and cultural barriers as well as overlap between health, environment and social conditions found in the Venn diagram.

Population

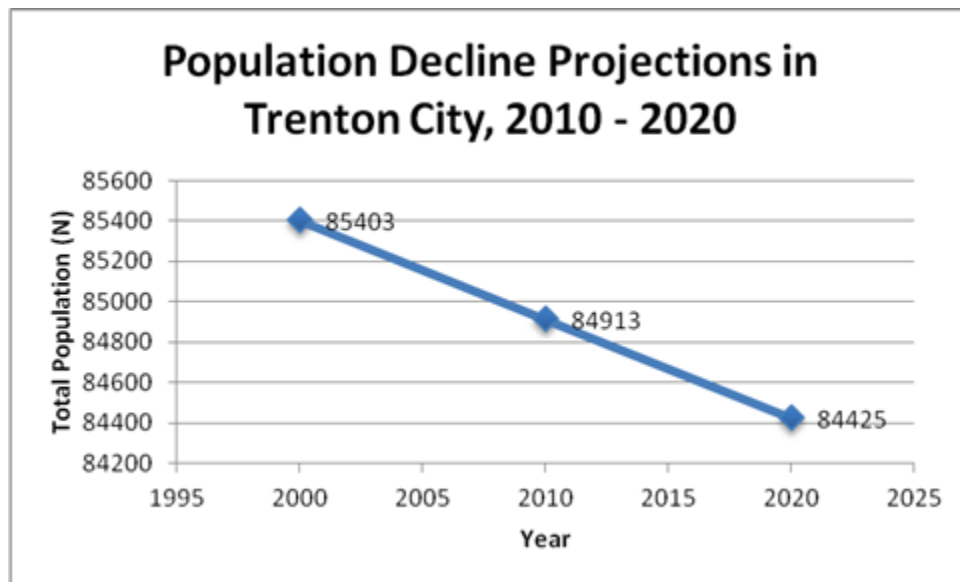
Trenton is the seventh largest city in New Jersey, comprising 23 percent of Mercer County's population. While Mercer County is expected to see an upward trajectory in its population growth over the next 20 years, Trenton is expected to continue to experience population decline, as it did from 2000 to 2010.

Assuming that the population continues to decline at a rate of 0.6 percent, it is projected to decrease to around 84,425 persons by 2020.

It should be noted that while the census reports a current population of 85,403 persons in Trenton, the six zip codes included in this report include sections of Mercer County that extend beyond the City of Trenton into Lawrence, Ewing and Hamilton. Thus, for the purposes of this report, the *N* size for the six examined zip codes is actually 114,495 persons.

Population Comparison

	2000 Population	2010 Population	Percent Change 2000 to 2010
New Jersey	8,414,350	8,791,894	4.5
Mercer County	350,761	366,513	4.5
Trenton City	85,403	84,913	-0.6



When focus groups and one-on-one interview participants were asked to describe their communities and changes they have seen, several discussed having observed a migration out of the city by those who had resources, as well as the closing of stores and factories. Along with this de-industrialization, residents noticed an increase in the number of liquor stores and bodegas, to be discussed in the Obesity and Healthy Lifestyles section of this report. These issues reflect the intersection of health, environment and social conditions illustrated in the Venn diagram as a central theme of this report.

Age Distribution

In Trenton, people are generally younger than in the rest of the county and the state. The highest percentage of Trenton’s population is 25-44 years old, whereas most of Mercer County and New Jersey residents are 45 to 64 years old. In addition, 25.10 percent of Trenton’s population is under 18 years of age, compared to 22.60 percent in Mercer County and 23.50 percent in New Jersey as a whole.

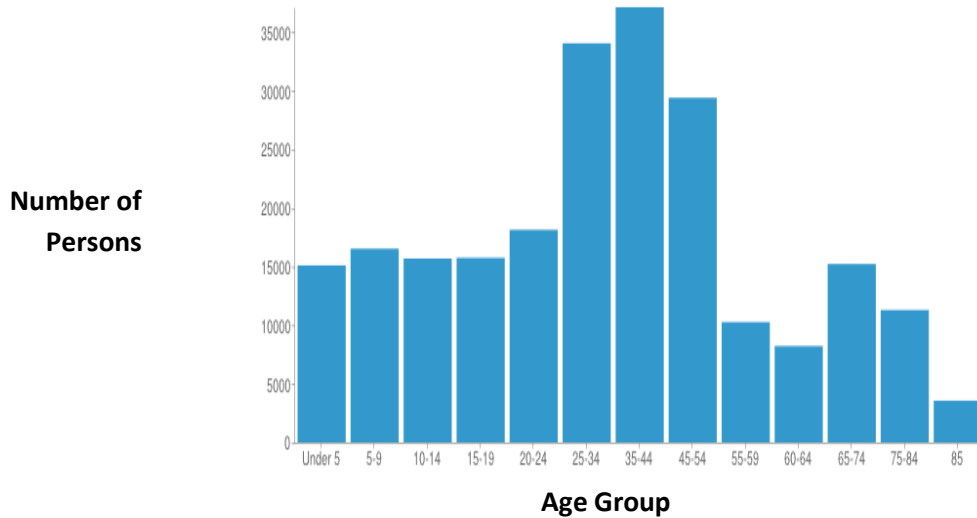
Age Distribution (Percent)

	Under age 18	Ages 18 to 24	Ages 25 to 44	Ages 45 to 64	Ages 65 plus
New Jersey	23.50	8.70	26.70	27.60	13.50
Mercer County	22.60	10.90	26.90	26.90	12.60
Trenton City	25.10	11.00	32.50	22.60	8.80

Age Distribution for Trenton City

Zip Code	Average Population Age	Children Under 10		Seniors Over 65	
		Number	Percent	Number	Percent
08608	36.5	142	12.96	103	9.40
08609	30.7	2,555	16.85	1447	9.54
08611	32.1	3,819	16.00	3368	14.11
08618	33.7	5,895	15.87	4376	11.78
08629	34	1,633	14.71	1332	12.00
08638	31.6	3,048	11.67	3343	12.80
Total	33.1	17,092	14.93	13969	12.20

Trenton Age Distribution



Source: Zip Atlas.com. “Trenton Age Distribution,” taken from <http://zipatlas.com/us/nj/trenton.htm#age-distribution>

Racial and Ethnic Diversity

Mercer County as a whole is incredibly diverse in terms of race and ethnicity, as is the city of Trenton, as summarized in the table and illustrated in the series of pie charts below. There is a large minority population in Trenton, as previously reflected by the fact that each of the six zip codes scored a five for the CNS culture barrier. African Americans comprise 46.33 percent of THT’s six zip codes and Latinos comprise 18.54 percent. Comparatively, all minorities represent only six percent of the population in nearby Pennington; Hightstown has a population that is 30 percent Latino; and neighboring West Windsor is 38 percent Asian.¹¹

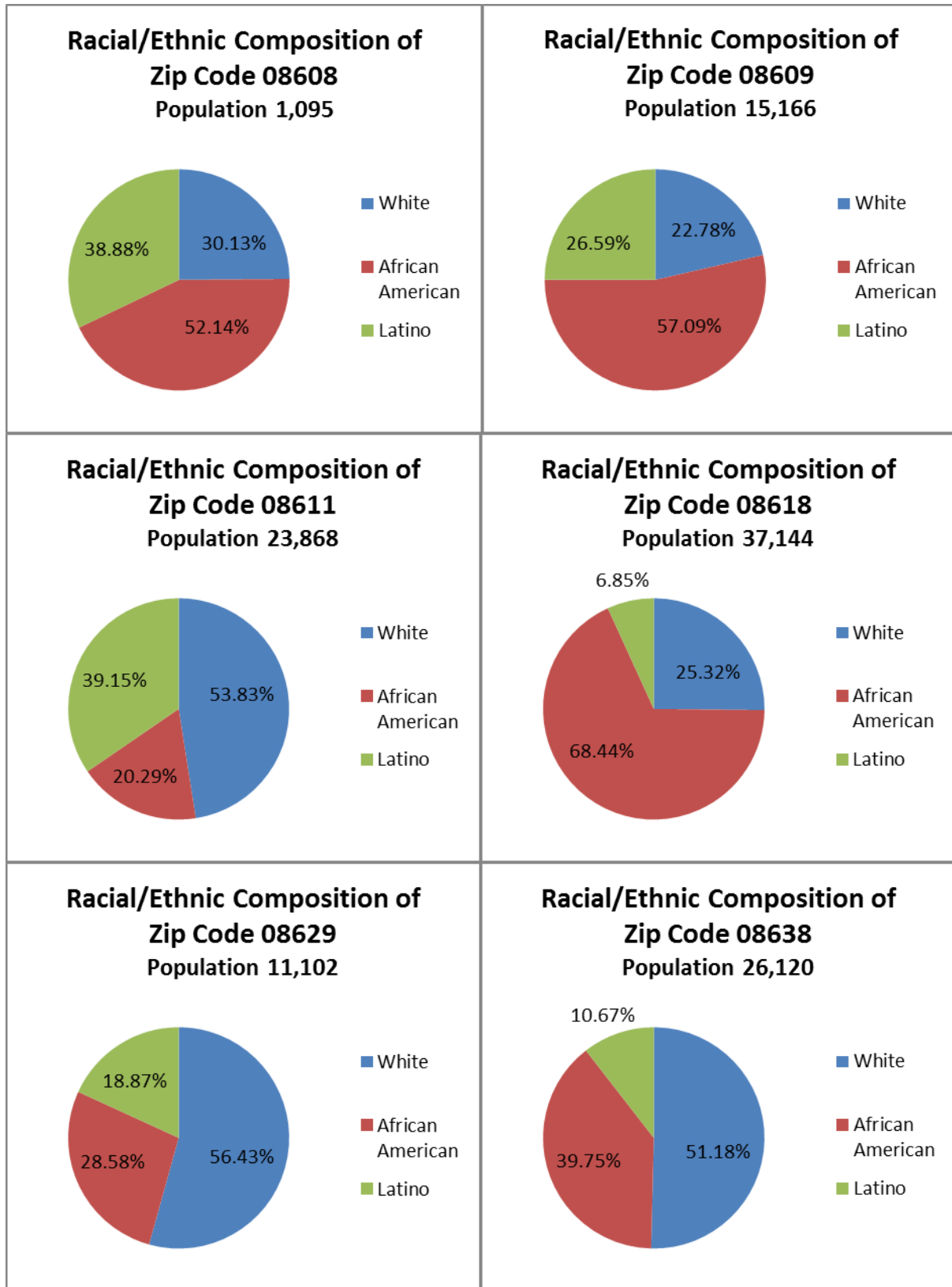
Racial Composition of Trenton City

Zip Code	Population	Percent Whites	Percent African Americans	Percent Latinos
08608	1,095	30.13	52.14	38.88
08609	15,166	22.78	57.09	26.59
08611	23,868	53.83	20.29	39.15
08618	37,144	25.32	68.44	6.85
08629	11,102	56.43	28.58	18.87
08638	26,120	51.18	39.75	10.67
Total	114,495	39.90%	46.33%	18.54%

At the zip code level in Trenton, the racial composition varies compared to that of the city as a whole and each zip code is unique. These differences are most easily visualized in the pie graphs on the next page, which report percentages of each racial population within each zip code. The population is more than 50 percent African American in three of the zip codes (08608, 08609, 08618). In the three remaining zip codes (08611, 08629, 08638), the population is slightly more than 50 percent white, with the balance split differently between the Latino and African American populations in each of those areas. The Latino population makes up almost 40 percent of the total population in two of the zip codes (08608, 08611) and makes up 26.59 percent of zip code 08609.

It is also instructive to look at the range of racial composition for each population across all six zip codes, which varies widely. Depending on zip code, the African American population ranges from 20.29 percent to as high as 68.44 percent. Similarly, the White population ranges from 22.78 percent to 56.43 percent and the Latino population across the six zip codes ranges from around seven percent to 39.15 percent.

Racial/Ethnic Composition of Trenton City Zip Codes



EMERGING PRIORITIES

The Community Needs Score (CNS) barriers discussed at the beginning of this report weigh heavily upon the emerging priorities revealed by the health needs assessment. The CHNA process involved forming a Community Advisory Board, where partners then shared information with THT. That quantitative information was compiled with additional quantitative data from existing external sources. The next step involved unprecedented community engagement, through community forums and one-on-one interviews with residents, accessing the voice of the people to help verify and validate quantitative data.

In merging the quantitative data with qualitative data from the community about health concerns, THT defined five emerging priorities for the CHNA, which will drive the formation of the Community Health Improvement Plan. The priorities include safety and crime, obesity and healthy lifestyles, substance abuse and behavioral health, health literacy and disparities and chronic diseases.

These priorities reflect the voice of the community as well as the intersection of the three themes discussed and depicted with a Venn diagram in the Introduction section of this report—environmental, social and medical factors that influence health.

SAFETY AND CRIME

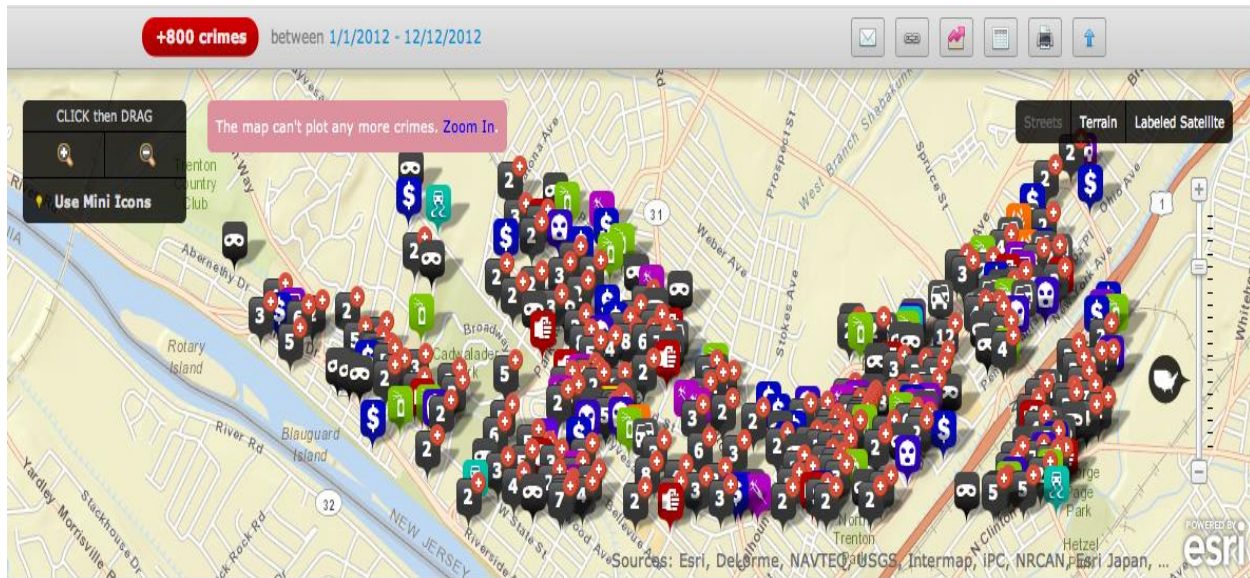
Compared to New Jersey, Trenton has significantly higher violent crime and property crime rates. What is most astonishing is how high Trenton’s crime rates are in comparison to neighboring municipalities in Mercer County, as shown in the following table:

**Offenses Known to Law Enforcement per 100,000 Population
by Mercer County Municipality, 2010**

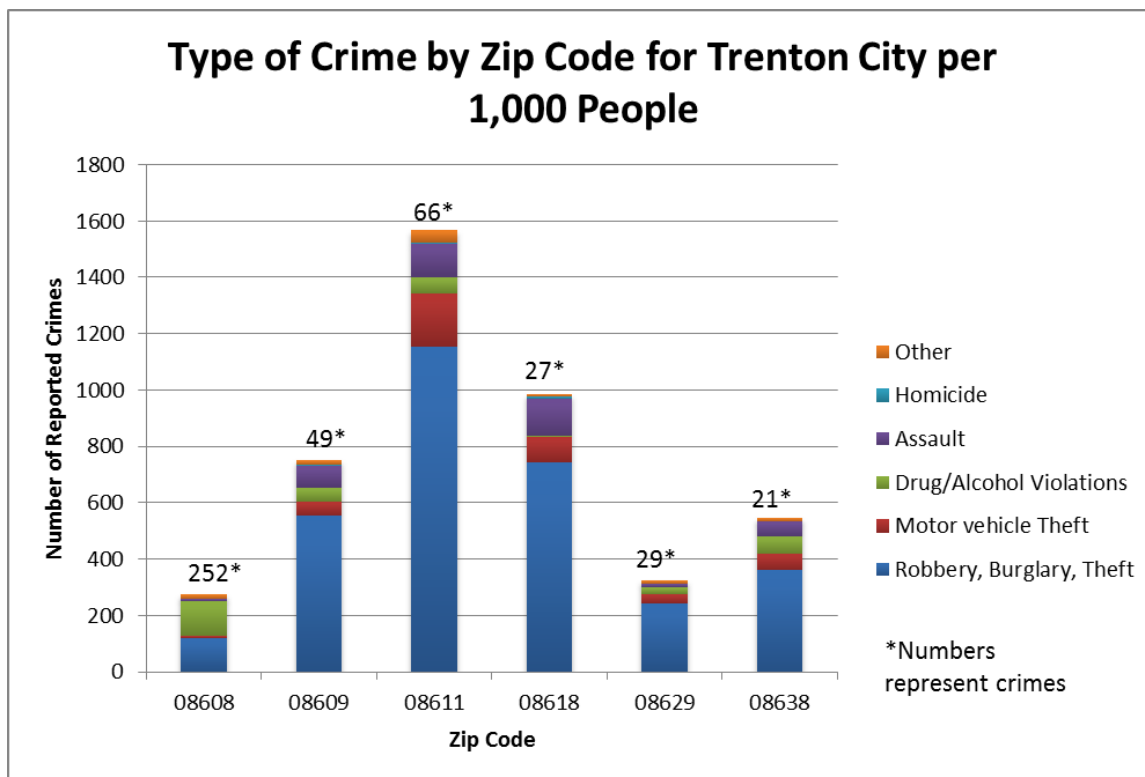
Geography	Violent Crime Rate+	Property Crime Rate**
New Jersey	307.7	2,081.9
East Windsor	91.2	1,236.1
Ewing	330.5	1,939.3
Hamilton	206.7	2,017.7
Hightstown	167.6	1,359.4
Hopewell Boro	50.0	549.7
Hopewell Township	60.9	559.2
Lawrence	127.7	2,563.5
Pennington	74.8	710.5
Princeton Boro	156.2	2,781.1
Princeton Twp	79.6	967.0
Robbinsville	47.7	930.6
★ Trenton	1,433.8	3,011.3
West Windsor	44.1	1,466.8

*Violent crime includes: murder and non-negligent manslaughter; forcible rape; robbery; and aggravated assault.

**Property crime includes: burglary; larceny-theft; motor vehicle theft; and arson.



In both the forums and one-on-one interviews, crime and safety were consistently discussed as major issues in the city. Evidently, there is much quantitative data that corroborates concerns voiced by Trenton residents. According to crime data extracted from the Trenton Police Department on CrimeMapping.com, the crime density in Trenton was so high for 2012, that all of the year's incidences could not be plotted together on one map.



When the six zip codes of Trenton are examined individually, the results are even more striking, as the prevalence and types of specific crimes can be observed.

There were 4,925 total crimes reported for all six zip codes in the 2012 calendar year. The highest number and percentage of total crimes occurred in the area of zip code 08611, with 1,676 crimes representing 34.03 percent of all crime in the city. This was followed by zip code 08618, where 1,021 crimes took place, representing 20.73 percent of all crimes in the city. The Henry J. Austin clinic at Warren Street lies in this zone. Ironically, the 08609 zone contains the Trenton Police Department, yet produced a significant portion of the city's crime last year, with 850 crimes representing 17.26 percent of the total. Two of Henry J. Austin's clinics (at Chambers and Ewing Streets) are also located in 08609.

The Division of Health's clinics are located in zip code 08608, which also has the smallest population and produced the smallest number of crimes, at 366 or 7.43 percent of the city total. Finally, zip codes 08629 and 08638 produced 7.94 percent and 12.61 percent of all total crimes respectively. These zones include both of the hospitals, with St. Francis Medical Center at 08629 and Capital Health at 08638.

There are many interrelated factors that may account for Trenton's alarming crime levels. For example, there has recently been a decrease in the number of police available for patrol, resulting in a reduced presence in some of the most dangerous areas of the city. From 2009 to 2010, the total number of police officers in Trenton fell from 372 to 356 and the total number of police employees decreased from 466 to 445.¹² Continuing along these same lines, Trenton City Government eliminated 105 positions from the Police Department (representing one-third of the total force) in September, 2011, in order to balance the city's budget. The city subsequently saw a significant increase in crime in 2012, as Trenton's criminals are well aware that police numbers are low. In particular, robberies, burglaries, and thefts increased, most likely reflecting the gradual deterioration of environmental and socioeconomic circumstances in the city. While 18 police officers were re-hired in September, 2012, and 14 demoted staffers were restored to supervisory positions, the 241 employees in Trenton's Police Department still represent a lower number than in previous years.

As if the smaller police force were not already a problem in itself, Trenton was also one of four cities with gangs that both threatened *and* assaulted law enforcement during the year of 2010. **As of 2010, Trenton had a strong gang presence, with 11 reported gangs comprised of around 5,325 members.**¹³ Mercer County as a whole had 56 reported gangs, representing four percent of all gangs in New Jersey. Trenton reports the presence of two to four gangs in the city's schools, an issue that relates to the discussion of crime, safety and the health of youth below.

Of particular concern is the fact that Trenton is one of six New Jersey towns with multiple gangs of more than 100 members. Trenton has five such gangs, one of which is Sex, Money, Murder (SMM), the most commonly reported Bloods set in the state of NJ. While SMM sets typically average 27 or fewer members, Trenton by contrast has 500 SMM members, the highest number in the state. The alarming size of Trenton's SMM set makes it one of 21 such New Jersey sets that account for multi-level distribution of at least two drug types, with marijuana and cocaine the most frequently marketed. Similarly, the Grape Street Crips of Trenton also traffic marijuana and cocaine at multiple distribution levels. The sheer size of the above gangs in Trenton may be large enough to sustain extensive drug distribution networks exclusively through their own members, as opposed to networking with similar

sets throughout the state.¹⁴ Please refer to the Substance Abuse section of this report for more information on drug use in the city.

In addition, social issues are not to be taken lightly, as declining business and general poverty certainly fuel the cycle of violence and crime in the city. For more information on declining business and poverty, please refer to the Poverty, Income and Unemployment sections of this report.

At first glance, one may not realize the interrelationship between crime and the health of Trenton residents. The most obvious link occurs when specific crimes like assaults or robberies inflict physical harm on the victims. However, the connection runs deeper. How does crime relate to health beyond surface level violence? The answer lies in the Adverse Childhood Experience (ACE) pyramid.

Many residents have expressed concerns about their safety during forums and one-on-one interviews, particularly in the case of youth and adolescents. One notable exception was during a forum held at a local mosque, when a female member stated, ***“We really don’t worry about crime in our neighborhood. The people around us know we are a peaceful, non-violent congregation. I sometimes feel I can best describe it as “living in a bubble.”*** By sharp contrast, in a forum held at a local church one resident commented, ***“There are not enough activities for teenagers to participate in outside of school, nor are there spaces to do so in the city. Crime plays a large role in the lack of activities and space for teenagers to socialize.”*** This same resident went on to say that she and others ***“fear for their safety”***, which in turn causes stress and related health issues as outlined in the bullet points described with respect to ACE earlier in this report.

Stories such as these in combination with the ACE pyramid reveal the deep link between crime and health, as the psychological and emotional stress endured by Trenton residents in regard to their safety plays a large role in subsequently developing medical conditions. The emotional stress cited by residents coincides with the social, emotional and cognitive impairment level of the ACE pyramid, which in turn can lead to the adoption of risky and unhealthy behaviors, followed by disease, disability, social problems and/or early death. Until crime in Trenton diminishes, it will continue to pose a major threat to the health of residents of all ages throughout the city.

OBESITY AND HEALTHY LIFESTYLES

Another way in which crime is intrinsically linked with health lies in the realm of obesity and sedentary lifestyles. The lack of physical activity exhibited by many Trenton residents partially stems from feeling unsafe in their neighborhoods and subsequently not using sidewalks and parks in the city for exercise. These facts in combination with a lack of access to healthy food in Trenton have created an unhealthy environment fueling the city’s obesity epidemic.

In 2011, approximately 39 percent of Trenton residents were obese, compared to 19.7 percent in Mercer County and 23.7 percent in New Jersey as a whole.¹⁵ The newest County Health Rankings from 2013 show that these percentages have increased further in both Mercer County and New Jersey.¹⁶

The lack of access to supermarkets—the source of healthiest foods—coincides with disparities experienced by various racial/ethnic groups and those of low socioeconomic status. For instance, a

multi-state study discovered that for every additional supermarket in a census tract, produce consumption increases by 32 percent for African Americans and 11 percent for whites (Community Advisory Board agency). Given the large African American population in Trenton, this disparity is significant when considered with supermarket data, which will be discussed further throughout this section.

Supermarket usage correlates with better health. The lowest rates for being overweight or obese in the U.S. are found where people have easy access to supermarkets and grocery stores. Those who live farther away from grocery stores than from convenience stores or limited service restaurants have significantly higher rates of premature death from diabetes. Researchers in Indianapolis even estimate that the addition of one new grocery store to a high poverty neighborhood would result in a three-pound weight decrease among residents¹⁷.

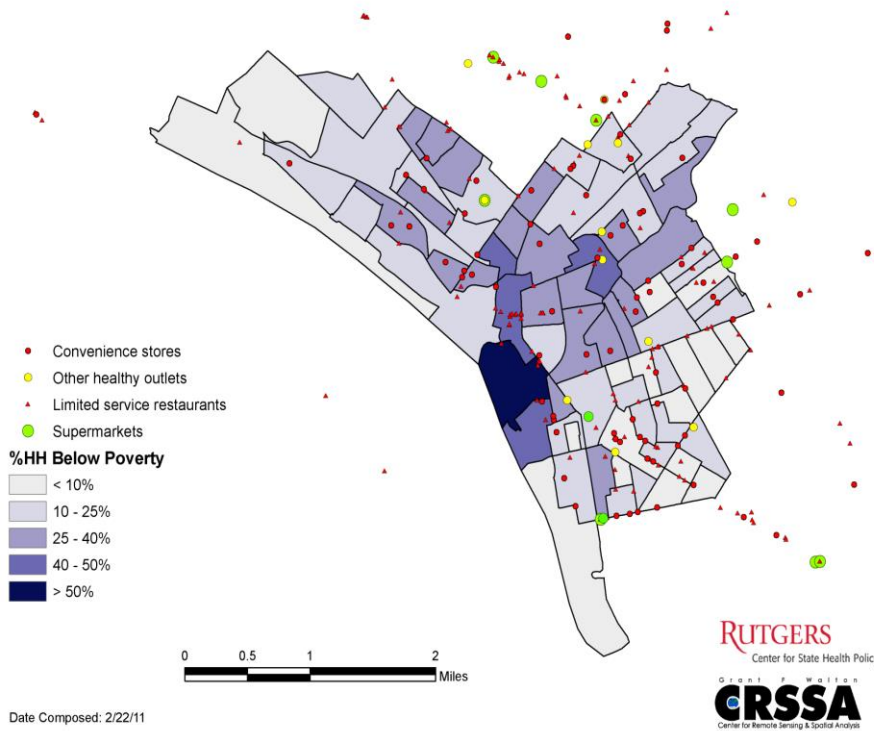
Income disparities also play into access to healthy food and subsequently impact health. The Food Trust, a nonprofit organization started in Philadelphia, found that obesity rates in New Jersey are over 35 percent higher for those earning less than \$15,000 a year when compared to those earning \$50,000 or above¹⁸. The relationship between income, access to healthy food and health of residents begins to emerge even more clearly when examining where people in Trenton buy their food.

Finding Food in Trenton

Given the lack of supermarkets in Trenton, the city has been deemed a “food desert.” Food deserts are defined as urban neighborhoods where fresh fruit and vegetables are scarce and obesity and diabetes are correspondingly common.¹⁹ The Food Trust found that Trenton would have to triple its number of supermarkets to adequately serve its residents.²⁰ The organization also found that New Jersey as a whole has 25 percent fewer supermarkets per capita than the national average, with poverty-stricken cities like Trenton and Camden suffering the most from this state-wide deficit. There are only three true supermarkets in the confines of the city. While there are seven other supermarkets shown on the food outlet map below, these are located in neighboring towns, ranging from 3.7 to 9 miles from the city center.²¹ Subsequently, most Trenton residents do not live within walkable distance (half a mile) of a grocery store.²²

The lack of supermarkets and the distance to existing ones end up contributing to and fueling racial/ethnic and healthcare disparities in the city of Trenton. In a 2009 Chicago study on food deserts, researchers found that as the distance to the nearest grocer increases relative to the distance to the nearest fringe food outlet, the Years of Potential Life Loss (YPLL) due to diseases like cancer, cardiovascular disease, diabetes and liver disease increases.²³ While this relationship is not completely clear for white and Latino communities, the study found that it is significant in African American communities.

Map 1: Trenton Food Outlets



When enumerated, the map above reveals that the most prevalent sources of food in Trenton and the surrounding neighborhoods are convenience stores, commonly referred to as bodegas or corner stores and limited service restaurants. Limited service restaurants are typically fast food franchises and food stands that sell prepared meals at convenient, low prices. Out of 269 reported food sources in Trenton (including food pantries), 51 percent are limited service restaurants and 29 percent are bodegas. Supermarkets, other healthy outlets and food pantries are far outnumbered, as shown in the table below.

Sources of Food in Trenton City

	Number of Stores	Percentage of All Available Food Stores
Convenience Stores	78	29
Limited Service Restaurants	136	51
Other Healthy Outlets	12	4
Supermarkets	9	3
Food Pantries	34	13

Supermarkets are considered the healthiest option of all available food outlets, yet are the least accessible given their paucity in the city. The link between greater access to supermarkets and healthier eating habits and better health is well-documented.²⁴ With more space and better facilities like extensive refrigeration, supermarkets provide the widest selection of high quality food and the most competitive prices. For instance, the Food Bazaar of Trenton is located in the 08611 zip code and has a wide variety of international foods along with traditional grocery options. This, along with the Shop Rite of Ewing and Aldi of Ewing, are among the most popular supermarkets frequented by Trenton residents. Shop Rite and Aldi are located in zip code 08638, about four miles from downtown Trenton. While the Food Bazaar is popular due to its convenient location in the city, Aldi is also a Trenton favorite due to its low prices, as its products are designed to resemble popular name-brand items at a cheaper price.

Overall, most Trenton area supermarkets are inaccessible without a car, representing a major disparity. Many residents do not own cars and, while public transportation in the city is unreliable, it is also costly. According to one resident, ***“I had to take the bus three times in a week in order to buy my groceries because the bags were too heavy to carry all at once. I sometimes use T.R.A.D.E. for transportation, but they are often late and not as convenient as the bus.”*** While there are 12 other healthy food outlets in and around the city that are more accessible than supermarkets, these are often more expensive, posing a problem to the majority of residents who live below FPL. Other healthy food outlets are defined as small neighborhood grocery stores, which usually provide dairy, meat, specialty ethnic food and some produce, yet are small in size and lack the extensive refrigeration units found in most supermarkets, resulting in higher prices. These outlets are not a primary source of food for most Trenton residents, who instead rely upon them for particular specialties like ethnic food or deli meats.²⁵

Residents also rely on food pantries throughout the city and the county. In the first half of 2010, Mercer County food pantries served about 6,000 families per month, representing a 24 percent increase over 2009. The majority of charitable food agencies in Trenton are bagged food pantries that provide pre-packaged bags. One of THT’s partners is a Regional Food Bank, which belongs to the national network of Feeding America and serves many Trenton residents. It is very selective about the food it accepts, with 90 percent of food options deemed “healthy” by the USDA. In addition, it provides food stamp outreach to increase program enrollment and works with 55 member agencies. These include food pantries, soup kitchens, social service agencies with food programs, daycares and shelters. While pantries are an excellent resource for Trenton residents, they tend not to be open regularly, sometimes only operating once a month. At a local forum a resident shared, ***“There are times when the local food pantry is opened only once a month and the selection of winter food items can be very limiting.”***

Due to the infrequency of pantry operations and the lack of supermarkets, bodegas remain the most popular food outlets in Trenton. Across the nation, convenience stores outnumber supermarkets 146,341 to 36,149.²⁶ In low-income zip codes such as the six examined in Trenton, there tend to be 30 percent more bodegas than in middle-income zip codes.²⁷ Compared to supermarkets, bodegas are cheaper and more accessible, but much smaller, tending to carry unhealthy, energy-dense and overly sweetened items including soda, candy, cooked fast food, cigarettes, alcohol, tobacco, packaged food and beverages of minimal nutritional value.²⁸ Most bodegas do not offer fresh fruits and vegetables, meat or dairy.

Through forums and one-on-ones, residents revealed that the few bodegas that have offered these healthier items in the past, have tended to stop offering them because they did not sell well, presenting business problems for the owners. In addition, bodegas are also convenient social gathering spots for residents, as they are within walking distance of homes and schools.

Childhood Obesity

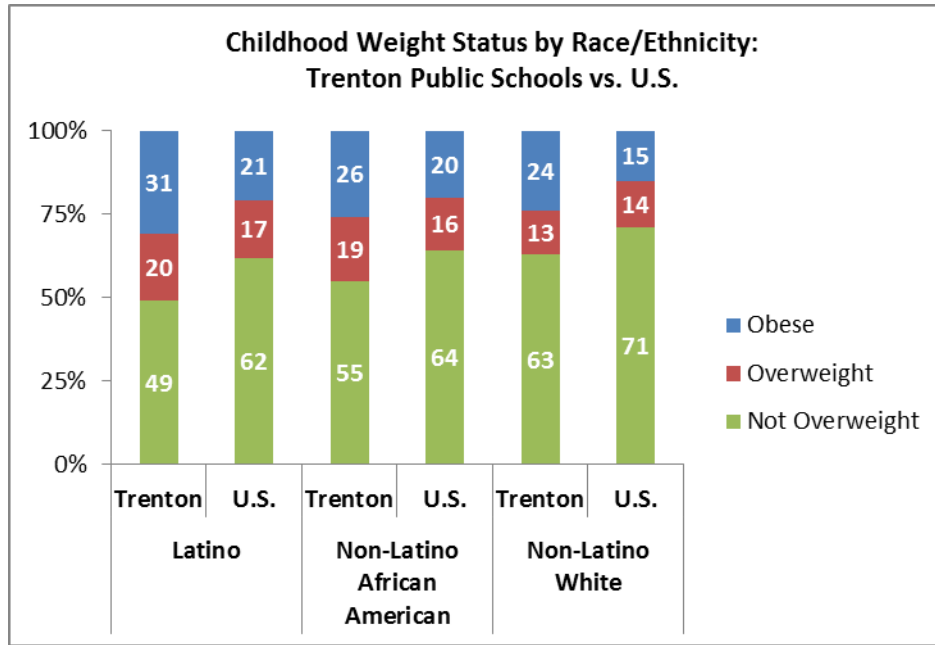
Reported childhood statistics are even more alarming than Trenton’s overall obesity numbers, with nearly one in two Trenton children being overweight or obese, and more than one in four children being strictly obese in every age category. **The most striking statistics show that the largest difference between Trenton public school children and children nationally occurs among the youngest children, with 49 percent being overweight or obese in Trenton compared to 21 percent in the US.** National statistics are based on two to five year old children and Trenton statistics are based on three to five year olds.

Prevalence of Childhood Overweight & Obesity in Trenton by Age Group (Percentage)

Age Group	Children Who Are Both Overweight and Obese	Children Who Are Obese	Children Who Are Very Obese
3-5 yrs	49	26	19
6-11 yrs	48	29	22
12-19 yrs	46	27	20
Total	47	28	21

Source: CSHP 2010, Trenton public schools 2008-2009 BMI data

In Trenton, all racial/ethnic groups of children have a higher prevalence of overweight and obesity compared to national averages. Over half of Latino children in Trenton are overweight or obese compared to 38 percent nationally, along with the fact that Latino children in Trenton are one and a half times as likely to be strictly obese compared to the national average. While less drastic, the rates of overweight and obesity for non-Latino African American and non-Latino white children in Trenton are between eight and nine percent higher than national rates.

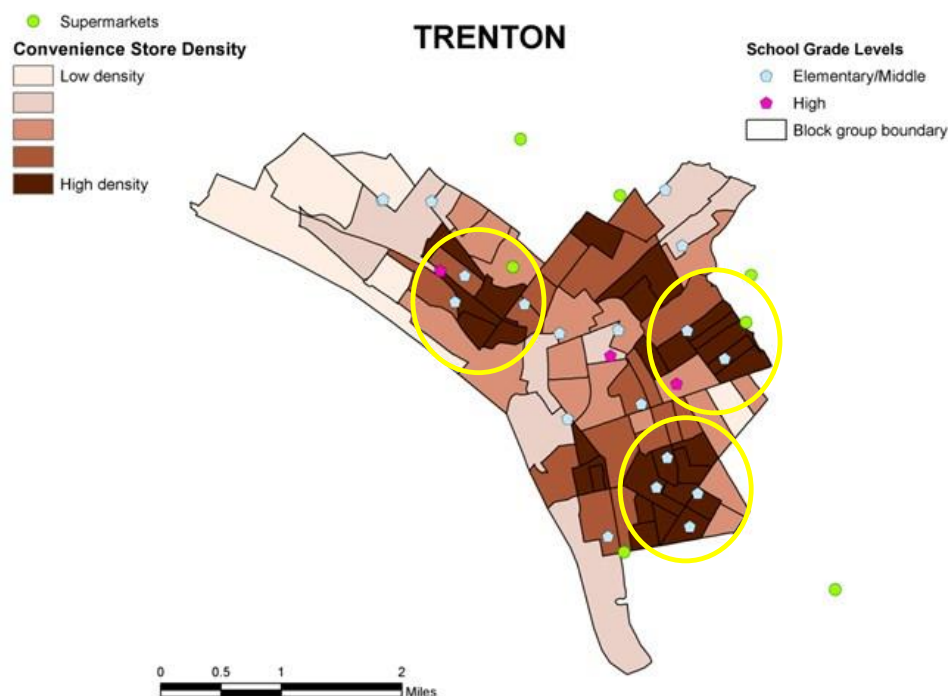


Of particular concern when considering the childhood obesity crisis is the fact that nearly half of Trenton’s elementary, middle and high schools are located in parts of the city with the highest density of bodegas, as shown by the map and table below:

	Total Number	Number Located Near High Density of Convenience Stores
Elementary/Middle Schools	16	12
High Schools	3	2

Given Trenton schools’ proximity to bodegas, it is no wonder that so many children and adolescents in the city are overweight and/or obese. The convenient location of bodegas allows Trenton’s youth to frequent these venues before, during and after school, despite the fact that a majority of students qualify for federal meal programs such as the National School Lunch Program.

Supermarkets, Schools by Grade Level and Mean Convenience Store Density



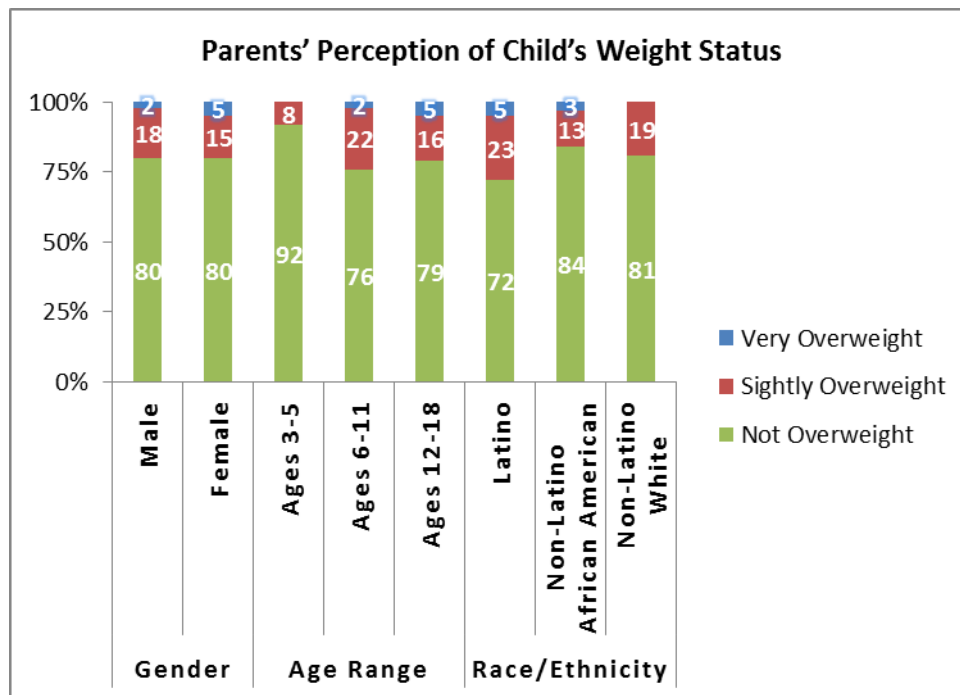
In total, there are about 11,000 students in the 19 schools of the Trenton school district. Three elementary schools are located in the section of Trenton with more than 50 percent of households below FPL. These schools also have the highest percentage of students who are eligible for free and reduced school meals. The schools include Parker Elementary and Washington Elementary, both in zip code 08611 and Woodrow Wilson Elementary in zip code 08638, with 86, 87, and 89 percent of students eligible respectively.²⁹

Despite the fact that Trenton is a universal breakfast district, meaning every student is eligible for the School Breakfast Program administered by the USDA, only 17 percent of students during the 2010-2011 academic year received this meal on an average school day in the month of February.³⁰ First of all, many students do not come to school early enough to receive the meal. To remedy this, some schools are trying a pilot program called *"Breakfast in the Classroom"*, where breakfast is served during homeroom. There is much evidence that breakfast really is the most important meal of the day, as it has been said to improve student outcomes in school and decrease behavioral issues since it allows students to focus better. However, many school administrators in Trenton have voiced concerns about the Breakfast in the Classroom program. This led to many uneaten food items and food wrappers in classrooms resulting in a concern over potential pest outbreaks.³¹

Similarly, 72 percent of students in the Trenton School District during the academic year of 2010-2011 qualified for free and reduced meals through the National School Lunch Program.³² However, only 68 percent of around 8,000 eligible students actually received these meals on any given day in the month of February, 2011. The rate of participation among students decreases as they age, with 62-83 percent of elementary and middle school students participating compared to 43 percent of high school students at Trenton Central High School. National studies show that as children get older, there is more of a stigma surrounding participation in these programs, as they are not considered "cool" and openly denote low

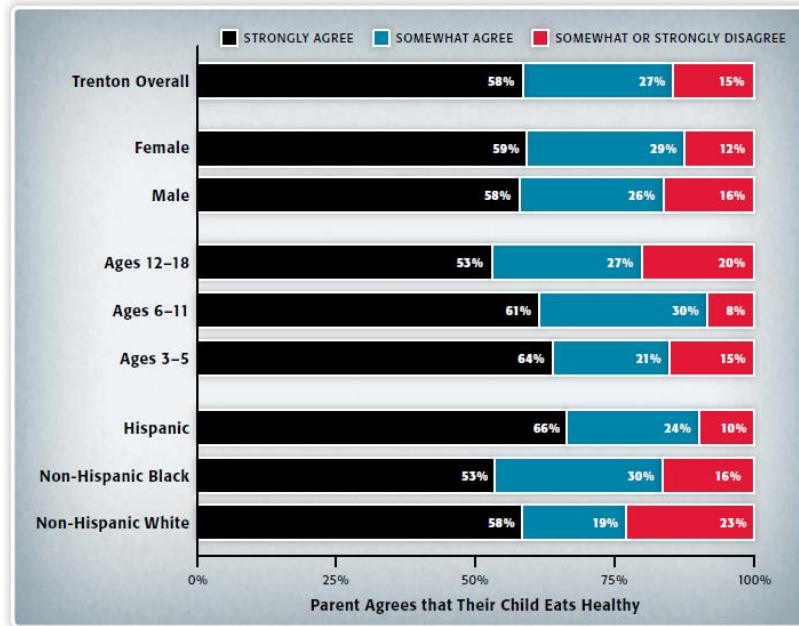
socioeconomic status. **With such high percentages of students eligible for national programs like those discussed above, it is no wonder that one in five (17 percent) Trenton families report that they sometimes or often do not have enough food to eat. This statistic is higher than the national average of 15 percent of households being food insecure.**

In addition to the social stigma many students feel in regard to eating through federal school lunch programs, their parents’ perceptions of healthy eating and weight status do not always assist them in making the best food choices. When asked about their child’s weight status, the majority of Trenton parents did not think their children were overweight or obese, despite their BMIs showing the contrary.³³



Of all racial and ethnic groups, Latino parents were more likely to think that their children were overweight (28 percent) compared to African American (16 percent) and White (19 percent) parents.³⁴ In addition, 85 percent of all Trenton parents, regardless of race/ethnicity, strongly agree or somewhat agree that their children eat healthy. Despite the fact that Latino parents are more likely to think that their children are overweight, they are also more likely to believe that their children eat healthy, with 90 percent believing so compared to 84 percent of African American and 77 percent of White parents. This may in part stem from different social norms in Latino culture, as the ethnic foods consumed by Latino children are viewed as healthy in the eyes of their parents but not in the eyes of the USDA.

Parents Think Their Children Eat Healthy



NOTE: Bar totals may not equal 100% due to rounding.

Finally, while 88 percent of Trenton parents believe that their children are physically active at sufficient levels, in reality, **only 34 percent of Trenton children meet recommended exercise guidelines**. Physical education is in fact another area of concern in and outside of schools. According to the US Department of Health and Human Services' *2008 Physical Activity Guidelines for Americans*, children should be physically active for at least 60 minutes every day. However, 66 percent of three to 18 year olds in Trenton do not meet this recommendation. Latino children are least active, with 75 percent not meeting this requirement, compared to 69 percent of non-Latino white children and 61 percent of non-Latino African American children. What is even more alarming is the fact that 47 percent of children ages three to 18 years old are not active for even 30 minutes a day in Trenton. Once again, Latino children are least likely to be active for at least 30 minutes a day, with 58 percent not meeting this time compared to 43 percent of non-Latino African American children and 37 percent of non-Latino white children.

At school, 35 percent of children exercise only two or fewer days per week, a statistic more prevalent among girls (40 percent) and Latino children (43 percent). A lack of exercise is compounded by the high prevalence of sedentary activity among Trenton's youth. For instance, 34 percent of children ages three to 18 spend more than two hours a day on weekdays watching TV, using the computer or playing video games, with Trenton boys (40 percent) and adolescents (41 percent) more likely to do so. In addition, non-Latino African American children are twice as likely to engage in this behavior compared to Latino and non-Latino white children. Statistics for sedentary behavior on weekends are even higher, with 63 percent of children ages three to 18 spending more than two hours engaging in the aforementioned activities, with Trenton boys (68 percent) and non-Latino African American children (75 percent) once again more likely to behave this way.

Since most Trenton parents believe that their children get enough physical activity, they are less likely to encourage their children to exercise. Therefore, schools have an integral role in assisting Trenton students in making healthy choices. One Trenton school principal said, ***“Schools have a paramount role in encouraging healthy lifestyles. Sometimes we see the kids more than their parents do. Students are not allowed to bring sodas, sweet juices or candy from home.... Many [parents] resist the rules and say they feed their kids what they know the kids will eat.”*** Along with the disconnect between parents and school administrators in regard to healthy eating, many schools have had to cut funding to their physical education programs due to a greater national emphasis on testing.

A few Trenton schools use the President’s Challenge Program as their physical education curriculum, implementing the Physical Fitness Test of curl-ups, shuttle runs, endurance runs/walks, pull-ups and v-sit reaches. The Physical Fitness Test is usually a national standard for physical education curricula, yet it is not a district-wide standard in Trenton. In addition, schools have had issues carrying out consistent policies in regard to recess. While some schools have recess time that counts toward students’ physical education requirement, other schools do not have recess at all, or combine recess with lunch leading to inadequate time for both eating and exercise during the short period of allotted time.

Another problem relates back to crime, as there are not many safe places that children can play or exercise outdoors. In fact, 45 percent of Trenton parents feel that their neighborhoods are somewhat or very unsafe due to crime. About 56 percent of children ages three to 18 do not walk or bike to school despite living close by and many do not use sidewalks, parks and exercise facilities near their neighborhoods because they and their parents feel these venues are unsafe. About half of children do not live near any exercise facilities and one-fifth do not live near any of Trenton’s parks. In addition to crime, traffic levels and poor condition of the city’s sidewalks and parks which deter children from exercising there. It is also interesting to note the low usage of exercise facilities in the city, given that 81 percent of Trenton parents report that these facilities are free.

As described above, there are many social and environmental factors contributing to the high rates of overweight and obesity among Trenton’s youth. Many of these factors qualify as adverse childhood experiences, since crime once again plays a role, along with food insecurity, sedentary behaviors and a lack of access to fresh produce, meat and dairy in the city. The health ramifications of childhood obesity are numerous. While childhood obesity was mostly linked to adulthood diseases in the past, there is now evidence that many of these health issues, such as diabetes, start to appear much sooner than expected. For instance, the CDC found that 70 percent of obese children ages five to 17 had at least one symptom of cardiovascular disease and 39 percent had two or more symptoms of the disease.³⁵ Many children also exhibit high blood sugar that would normally be observed in adult-onset diabetes, along with high blood cholesterol and high blood pressure.³⁶ These conditions increase children’s risk of coronary heart disease, cancer, stroke and diabetes in adulthood. Overweight and obese children are also at a greater risk for sleep apnea, asthma and hepatic stenosis. This is another illustration of the income and cultural barriers in the city, as well as intersection of health, environment and social conditions illustrated in the Venn diagram that emerged from discussions in the community forums.

SUBSTANCE ABUSE AND BEHAVIORAL HEALTH

Challenges related to behavioral health and substance abuse are many. In 1998, approximately forty million Americans between the ages of 15 and 64 had a diagnosis of mental disorder alone or a co-occurring mental and addictive disorder in the past year. The cost of mental illness in the United States exceeds \$144 billion, with approximately half of this cost representing healthcare costs and the other half lost productivity due to illness or premature death. Unlike many other chronic diseases, mental health affects people of all ages, races, ethnicities, socioeconomic statuses and genders. Historically, only 25 percent of persons with a mental illness receive professional help. In terms of youth with mental illness, it is estimated that two-thirds do not get treatment.

Minority populations are very unlikely to seek and receive mental health services. Between the stigma associated with mental illness and inadequate screening by primary care practitioners, identification is often missed. For those fortunate enough to have received an intervention for an acute episode, the lack of compliance with discharge plans and delays in the initiation of community-based follow-up services frequently result in a re-admission.³⁷

Many Latinos rely on their extended family, community, traditional healers (curanderos) and/or churches for help during a health crisis. As a result, many Hispanics with mental illness often go without professional mental health treatment. Studies have shown that older Latino adults and youth are especially vulnerable to the stresses of immigration and acculturation. Many also have different attitudes about accessing mental health services and may feel highly stigmatized for doing so. Once the decision to access care has been made, the lack of interpreters and bilingual professionals can interfere with appropriate evaluation, treatment and emergency response.³⁸

Like Latinos, the Muslim community places a great deal of value on relationships within the family. They too, consider grandparents, aunts, uncles and cousins to be part of their extended family. The leader of the family resides in either the male head of the household or to the eldest male in the family. Since much of a Muslim's lifestyle supports preventative measures such as personal hygiene, dietary restrictions and fasting and avoidance of addictive habits such as using tobacco or over-consumption of food, it is not unusual to find limited engagement with healthcare professionals unless a situation is of an urgent nature. In terms of mental health, Muslims often look to their faith for answers. The imam, or "leader of the prayer," frequently serves as spiritual advisor but can also be very helpful in bridging the gap between the patient and the healthcare provider. Once a mental illness has been diagnosed, treatment and medication are favored over long-term counseling.³⁹

For the African American population, once treatment for mental illness has been implemented, they are more likely to stop treatment early and are less likely to receive follow-up care.⁴⁰ Today, the African American population is more culturally diverse than any time in history. Immigrants from the African nations, the Caribbean and Central America each bring beliefs, values and rituals that are often misunderstood or misinterpreted by others. It is also not unusual for African Americans to underestimate the impact of mental disorders. Issues of distrust in the healthcare system and mental health stigma frequently lead this population to initially seek mental health support from non-medical sources.⁴¹

Unless efforts are made to understand the difference in culture and the stigma associated with mental illness, disparities will continue. As stated by a member of the THT Board, ***“Community mental health education, focusing on both the Black and Hispanic communities will result in decreasing disparities by assuring appropriate, timely care for these populations.”***

In terms of substance abuse, the high percentage of use in Trenton has resulted in many of the residents expressing concerns for their safety. During the one-on-one interviews and community forums, the problems associated with substance abuse emerged as a recurring theme. It is of interest to note that the concerns were focused on drug use by high school students, as well as concerns for personal safety. As a member of the Neighborhood Watch mentioned during a community forum held at her church; ***“I worry about being knocked in the head by one of those kids and then [having them] stealing my purse. The kids are outside all times of the night just walking up and down the streets making noise and creating trouble. It’s scary out there!”***

There are 329 alcohol licenses in Mercer County. Once hundred thirty-six (136) of these licenses have been issued to the city of Trenton accounting for 41 percent of the total number. In 2011 there were 2,930 alcohol-related calls to Emergency Medical Services (EMS) in Mercer County. Unsurprisingly, 2,130 of these calls were from Trenton accounting for 73 percent of the total number.⁴²

Emergency Departments within the city have experienced the greatest impact from substance abuse users. Healthcare providers have had to find creative solutions to overcrowding, inappropriate utilization and dangerous behaviors often exhibited by the users.

The table below compares the number of substance abuse treatment admissions in Mercer County to those in Trenton for 2011, broken down by race to illustrate substance abuse disparities in Trenton. Of the 2,698 total admissions in the county for substance abuse, 55 percent (1,474) came from Trenton.

Substance Abuse Treatment Admissions by Race			
Race/Ethnicity	Number of Mercer County Admissions	Number of Trenton Admissions	Percent of Mercer County Admissions from Trenton
White (Non-Latino)	1,253 (46%)	386 (26%)	31
African American (Non-Latino)	1,130 (42%)	878 (60%)	78
Latino	294 (11%)	199 (14%)	68
Other	21 (1%)	11 (1%)	52
Total Admissions	2,698 (100%)	1,474 (100%)	55

SOURCE: NJ SAMS Substance Abuse Overview, Mercer County 2011

The table below breaks down substance abuse treatment admissions by drug type for Mercer County and Trenton. Alcohol and marijuana use account for about two thirds of the substance abuse treatment admissions in Trenton.

Trenton’s rates of admission for both marijuana and cocaine are higher than the admission rates for Mercer County.

Substance Abuse Treatment Admissions by Drug Type			
Drug Type	Percent of Mercer County Admissions (Total = 2,698 admissions)	Percent of Trenton Admissions (Total = 1,474 admissions)	Percent of Mercer County Admissions from Trenton
Marijuana	23	34	19
Cocaine	11	17	9
Heroin & Other Opiates	31	18	10
Alcohol	33	29	16
Other Drugs	3	2	1

SOURCE: NJ SAMS Substance Abuse Overview, Mercer County 2011

In the final quarter of 2012, Henry J. Austin, a partner of the Trenton Health Team, secured a \$7 million dollar New Jersey Screening, Brief Intervention and Referral to Treatment (NJ SBIRT) grant. The purpose of this grant is to provide pre-screening for “substance use risk” to all adults (18 years and older) seeking medical care at any of the project delivery sites. Thirty percent of the adults pre-screened will screen positive and require a referral for additional assessment and treatment. By assuring early detection by a specially trained navigator who will identify (and arrange for) a community-based referral source, care will be coordinated and managed with more positive outcomes for the patient.⁴³

HEALTH LITERACY AND DISPARITIES

According to the National Healthcare Disparities Report of 2011, healthcare quality and access are suboptimal, especially for the minority and low-income groups. It has been recognized that while quality is improving, access and disparities are not improving. The gap between the best possible care and that which is routinely delivered remains substantial across the nation. All Americans should have equal access to high-quality care. Instead, racial and ethnic minorities and people living in poverty often face more barriers to care and receive poorer quality of care when they can get it.

Disparities exist in **quality** of care:

- Adults age 65 and over received worse care than adults ages 18-44 for 39 percent of the measures
- African Americans received worse care than Whites for 41 percent of quality measures
- Latinos received worse care than non-Latino Whites for 39 percent of measures
- Low-income people received worse care than high-income people for 47 percent of measures

Disparities exist in **access** to care:

- African Americans had worse access to care than Whites for 32 percent of access measures
- Latinos had worse access to care than non-Latino Whites for 63 percent of measures

- Low-Income people had worse access to care than high-income people for 89 percent of measures

Disparities exist in **preventive care** due to these factors:

- Lack of insurance or underinsurance for many
- Inadequate number of multicultural health professionals
- Decreased overall awareness of lifestyle and health practices that increase the risk of heart disease
- Denial of early warning signals and delay in seeking care
- Decreased access to high quality care
- Greater distrust of the health or medical establishment

Some disparities are **changing** over time:

- Maternal deaths per 100,000 live births in African American patients compared to White patients
- Breast cancer diagnoses at advanced stage per 100,000 women >40 in African American patients compared to White patients
- Prevalence of colonoscopy, sigmoidoscopy or proctoscopy in low-income versus high-income adults over 50
- Access to a specialist for a necessary visit in the last year, in low-income compared to high-income adults
- Frequency of citing financial or insurance reasons for not having a source of care in low-income compared to high-income adults

Thanks to the 2010 Affordable Care Act, accountability and close monitoring will assure the population affected the most will see improvements in their general health status. The National Priorities established with the passage of the Affordable Care Act of 2010 include the following:

- Making care safer
- Ensuring person-and-family-centered care
- Promoting effective communication and care coordination
- Promoting effective prevention and treatment of leading causes of mortality, starting with cardiovascular disease
- Working with communities to promote wide use of best practices to enable healthy living
- Making quality care more affordable

CHRONIC DISEASES

The challenges of daily life in Trenton discussed thus far in this report create a perfect storm for chronic disease. Environmental, social and medical/health issues have contributed to the city's high rates of diabetes, cardiovascular disease and cancer. Additionally, like the rest of the nation, the population of the city is aging. In fact, it is expected that within 10 years the population over 45 years of age will account for approximately 45 percent (currently 31 percent) of those living within the six zip codes of Trenton.

Diabetes

Diabetes is a disease that, if left uncontrolled and untreated, can lead to significant morbidity and mortality, including diseases of the heart and circulatory system, nervous system, eyes and kidneys, among others. The disease has close links to hypertension, obesity and heart disease to name just a few. It is one of the leading causes of hospitalization in the U.S.⁴⁴

The total percentage of adults with diagnosed diabetes in 2010 was a little over six percent in the U.S. and a little over eight percent in New Jersey. Comparatively, in 2009, just over nine percent of Mercer County residents and 16 percent of Trenton residents were diabetetic. The CDC's 2012 Diabetes Report Card projects that if the current trend continues; as many as one in three U.S. adults could have diabetes by 2050. Furthermore, individuals who do not achieve good control of their diabetes are more prone to short-term complications that can reduce the quality of life, increase chances of death and increase the overall cost of healthcare.

In the Healthy New Jersey 2010 report, it is estimated that the cost of diabetes in New Jersey is very high. The Centers for Disease Control and Prevention estimates that the direct cost (medical care) and the indirect cost (lost productivity and early mortality) of diabetes in New Jersey is more than \$4 billion dollars annually. Per capita health expenditures for people with diabetes are about four times higher than those for people without diabetes.

Currently there are four annual recommended diabetic interventions: a minimum of two HgbA1c blood tests, a foot exam, a dilated eye exam and a flu shot. The 2011 Healthcare Disparities Report has recorded the following disparities:

- Latinos are less likely than Whites to receive a minimum of two annual HgbA1c blood tests, foot exams and eye exams annually
- Those who are economically disadvantaged, have not graduated from high school and have no insurance are less likely to receive the recommended annual services
- African Americans are less likely than Whites to receive annual flu shots
- Males are less likely than females to receive all four services
- Only 21 percent of adults over 40 years of age receive all four recommended services annually

Note that all of these disparities echo aspects of the populations in the six Trenton zip codes, strongly suggesting that many diabetics in Trenton are not receiving the recommended interventions. The populations most at risk for diabetes are all represented to a significant degree in Trenton: those who are over the age of 45, minority populations (especially African Americans and Latinos) and persons who are obese.

There is a strong correlation between diabetes and obesity. Of the 96 percent of people with Type 2 Diabetes, 80 percent are obese.⁴⁵ Trenton residents are no different. In 2010, the New Jersey Childhood Obesity Study found that of the five New Jersey cities studied (Camden, Newark, Trenton, New Brunswick and Vineland); Trenton had the highest percentage of overweight/obese children.

As discussed earlier in this report, the National percentage of overweight/obese children is 21 percent (two to five year olds) versus 49 percent (three to five year olds) in Trenton. Unless changes are made to address this significant percentage of overweight/obese children, the rate of diabetes for the city will remain the number one health issue for its residents.

According to the New Jersey Department of Health, the increasing trend of numbers and rates of people with diabetes will continue, unless measures are taken to focus on prevention.

Cardiovascular Disease

Heart disease is the leading cause of death of men and women in the United States and in New Jersey. It is one of the top three causes of death in Mercer County. The risk of dying from cardiovascular disease is double for African American men compared to White men. This disparity is most pronounced in the 45 to 64 year age group.⁴⁶ While hypertension, diabetes and high cholesterol play a role in the reason for this disparity, according to an article published by Health Power for Minorities (a nationally unique minority health improvement organization), the following are key contributors to minority health conditions.

Hypertension has long been identified as the “silent killer” of men and women. It is certainly true that if hypertension remains untreated, it can increase the risk of developing heart disease and result in stroke. It is particularly prevalent among African Americans, the middle-aged and elderly, the obese and heavy drinkers. According to the NJDHSS – Center for Health Statistics, in their fact sheet, people with lower educational and income levels are more likely to have hypertension. Approximately one in three adults have hypertension. Hypertension affects about two in five African Americans and one in five Latinos. Finally, approximately one-third of the population with hypertension remains unaware that they have it.

MEN: Cardiovascular Diseases

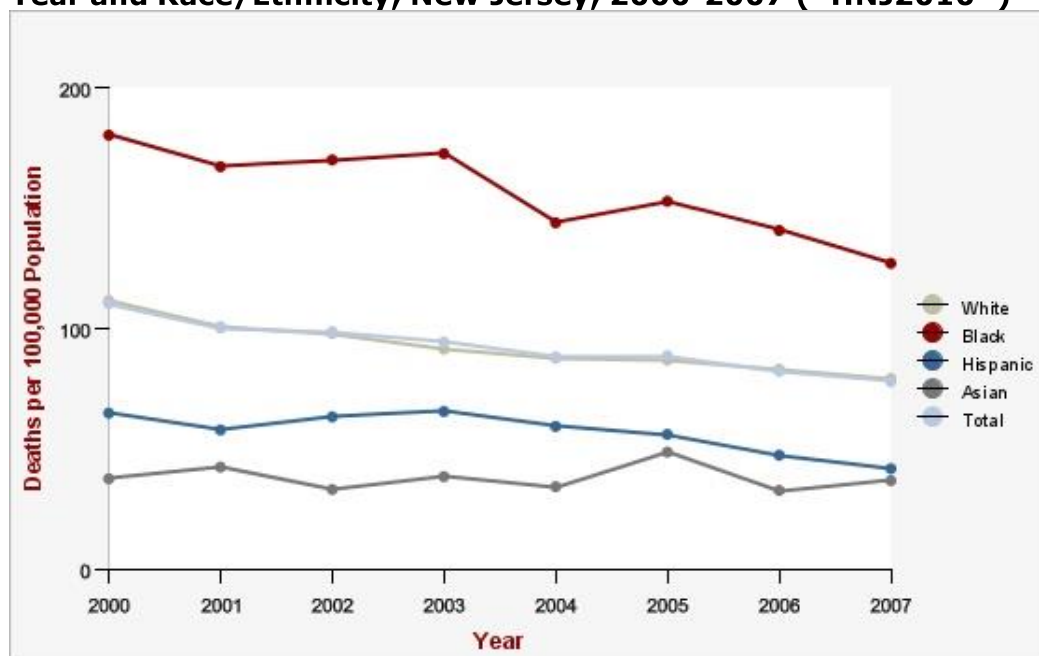
	Disparity Score	All Men	White	African American	Latino
United States	1.3	3.5	3.2	3.8	4.7
New Jersey	2.14	3.1	2.3	4.9	5.6

WOMEN: Cardiovascular Diseases

	Disparity Score	All Women	White	African American	Latino
United States	1.71	2.8	2.3	4.4	4.2
New Jersey	2.38	2.5	1.7	4.5	5.3

SOURCE: The Henry J. Kaiser Family Foundation New Jersey – Putting Men’s Healthcare Disparities on the Map: Examining Racial & Ethnic Disparities at the State Level- Sept 2012

Death Rate due to Coronary Heart Disease among Persons 45-64 Years of Age, by Year and Race/Ethnicity, New Jersey, 2000-2007 (*HNJ2010*)



SOURCE: NJSHAD

One cannot discuss cardiovascular disease without mentioning Congestive Heart Failure (CHF). CHF is the most frequent discharge diagnosis for the elderly. Although some of the hospitalizations for heart failure are unavoidable, these rates can be influenced by the availability and quality of outpatient care. From 2000 through 2008 the overall rate of admission for CHF decreased significantly for each racial/ethnic and income group. However, as with diabetes, disparities remain.

According to the 2011 National Healthcare Disparities Report:

- African Americans have higher rates of admission for CHF compared to Whites
- The benchmark for CHF admissions rate is 195 per 100,000 population – overall this benchmark could be achieved in 10 years. With the **current** rates of improvement, Whites could achieve this goal in eight years; African Americans would require 14 years

Cancer

Cancer is the third leading cause of death in Mercer County. Thirteen residents of Mercer County die from cancer each week.⁴⁷ Four sites represent over 50 percent of all new cancers and 48 percent of all new cancer deaths. The four sites include: lung, prostate, breast and colorectal cancers.

Early detection is the key to best survival rates. As is the case with other chronic diseases, cancer detection and treatment in Trenton is fraught with issues of disparity. From 2000 forward, the rate of advanced stage of breast cancer in African American women increased from 99 to 108 per 100,000 women. According to the 2011 National Healthcare Disparities Report, the benchmark of 79 cases per 100,000 has been achieved by both White and Latino women; African American women are moving away from the benchmark.

Based on a summary of forums held throughout the six zip codes and representing many ethnic and age groups, cost and access were frequently cited as reasons why screening examinations had not been completed. To quote a gentleman in attendance, ***“I want to have a colonoscopy, but there is an eight month wait. Having to wait that long made it seem like it wasn’t really very important. On top of that, I can’t afford the \$80 co-pay.”***

The American Cancer Association states that while White females have a higher incidence of developing breast cancer, African American females have a 41 percent higher death rate. Late detection is the most common reason for these deaths. Late detection is easy to understand when listening to many of the African American and Latino women participating in an educational program focusing on Women’s Health in one of the Trenton’s low-income high-rise apartments. As stated by one woman, ***“I’m 52 years old and I’ve never had a mammogram. The test scares me. I’m afraid of pain and people I know tell me they always have pain during their test.”*** Another shared, ***“My doctor never told me I needed a mammogram. I don’t like to touch my breasts and I don’t like other people touching my breasts.”*** It is clear that much work is needed in the area of education, especially as young women begin to menstruate.

OTHER AREAS OF CONCERN

During community forms, participants were asked to prioritize their areas of concern, which have become the priorities for the CHNA and the CHIP. However, there are several other areas of concern which are acknowledged in this section due to their relevance to residents of Trenton. While these concerns are beyond the scope of this CHNA and CHIP, efforts that are currently in place to address these issues in the city may ultimately overlap with some of the CHIP initiatives.

RISKY BEHAVIORS

HIV/AIDS and Hepatitis C

Since HIV/AIDS was first identified, great progress has been made in the treatment of the disease. Modes of transmission are more clearly understood, and advances in medical treatment have resulted in an extended length and quality of life for many. HIV can now be detected by reliable, inexpensive and noninvasive screening tests. Despite these facts, HIV/AIDS remains the third leading health issue facing New Jersey today.

The spread of HIV has been linked to complex social and economic factors, including poverty, concentration of the virus in specific geographic areas and smaller sexual networks, sexually transmitted co-infections, stigma associated with negative attitudes and beliefs and IV drug use and associated behaviors. These are all factors in the six zip codes of Trenton.

As a resident of the city’s low-income high-rises said, ***“I am HIV positive. For years I worked the streets in Trenton. I know how lucky I am. God gave me the strength to change my life. Now I am helping others. I speak about the challenges of having HIV to students in the high school. This is no joke...not everyone is as lucky as I am. Many of my friends have died because of this disease. The kids need to know how serious this is and how HIV can change their lives.”***⁴⁸

In terms of **Hepatitis C**, New Jersey is facing a growing epidemic. The Centers for Disease Control and Prevention estimate that up to 80 percent of intravenous drug users are infected with the virus. Estimates in New Jersey exceed 160,000 individuals.

In the fall of 2012, the Department of Health issued a long-awaited assessment of the experimental program under which five cities (Camden, Newark, Jersey City, Atlantic City and Paterson) had been granted permission to give intravenous drug users clean syringes in return for used ones as a way to stem the spread of HIV/AIDS and other blood-borne diseases such as Hepatitis C. The Commissioner of Health, Mary E. O'Dowd, reported that the program has been very successful in reducing the chance of contracting and spreading HIV and hepatitis especially in the hard-to-reach and at-risk populations. It is expected that since the five-city ceiling has been recently removed (Senate Bill sponsored by Senator Joseph Vitale), Trenton will most likely initiate a similar program.

Sexually Transmitted Diseases

Sexually transmitted diseases (STDs) are the most common infectious diseases in the United States. Identified as preventable diseases, STDs continue to be a health threat, especially to adolescents and minorities.

Annual screening of sexually active women is recommended as part of routine primary care visits. In New Jersey, screening for women 29 years of age and younger is available in seven high-risk cities that include Trenton. But symptoms of STDs are hard to recognize and many youth have had little or no education about what to look for. If they do suspect a problem, young women are often embarrassed and fearful to seek medical treatment.

Although there have been several formal educational programs offered by the school system, risky behaviors continue. Several comments related to sexual behaviors have been discussed at community forums. As one resident stated, ***“No matter what you tell them, [teenagers] they will do whatever they want to do. No one wants to use a condom even though they are available everywhere! Kids aren't afraid of anything!”***

Teen Pregnancy

The issue of teen pregnancy is multifactorial. According to the County Health Rankings 2012, “Teen pregnancy is associated with poor prenatal care and pre-term delivery. Pregnant teens are more likely than older women to receive late or no prenatal care, have gestational hypertension and anemia and achieve poor maternal weight gain. They are also more likely to have pre-term delivery and low birth weight, increasing the risk of child developmental delay, illness and mortality.”⁴⁹ In order to address some of the issues related to this health concern, in 2012, the New Jersey Department of Health awarded grants to state-identified high-risk cities with specific emphasis on decreasing teen pregnancy. Trenton has been identified as one of those cities. Additional goals of the grant are to reduce the number of diseases related to risky-behaviors such as STDs and HIV. Each city has selected one high school in which the “Personal Responsibility Educational Program” will be instituted.

Birth Outcomes

Prenatal Care

Prenatal care is recommended to all pregnant women because of its potential to improve the health of mothers and infants. From 2007 to 2009, in spite of the steady increase of births to women who began prenatal care in the first trimester, the Central Region remained lower than **the Healthy New Jersey 2010** target of 85 percent. Inadequate use of prenatal care has been associated with increased risk of low infant birth weight, premature births, neonatal mortality, infant mortality, and maternal mortality.⁵⁰

Although improving, there remain observed disparities by race and ethnicity in use of prenatal care. In 2009, 91 percent of whites received prenatal care in the first trimester, while only 72.7 percent of Hispanic mothers and 73.9 percent of Black mothers received it. This resulted in at least 12 percentage points below the 2010 target.

In 2009, the Central Region of New Jersey reported that 84 percent of pregnant women sought prenatal care within their first trimester. The New Jersey Department of Health target for first trimester prenatal care is 85 percent. Although the Region's percentage is close to the expected target, disparities continue.

Low Birth Weight

According to the County Health Rankings & Roadmaps, low birth weight (LBW) is unique as a health outcome because it represents additional factors: maternal exposure to health risks and the infant's current and future morbidity, as well as premature mortality risk. For the LBW infant, there can be a higher than average risk for developing cardiovascular disease, respiratory ailments and cognitive development problems as well as Type 2 Diabetes.⁵¹ In terms of the mother's prenatal modifiable behaviors, weight gain, smoking and alcohol/substance abuse account for more than 10 percent of the variation in birth weight.

Infant Mortality

According to the New Jersey Department of Health, infant death rate is important because it is considered a critical measure of a population health and a worldwide indicator of health status and social well-being.

Although infant mortality in New Jersey has been declining since the early 1900's, today's rate varies widely across the state as well as by several maternal and infant characteristics. For the African American community, the death rate is **more** than three times the rate among Whites and **nearly** three times the rate among Latinos. Additional facts include:

- The infant mortality rate is highest among the oldest and youngest mothers
- Unmarried mothers, regardless the age, have infant mortality rates two to three times that of married mothers
- Infants whose mothers receive no prenatal care are seven times more likely to die than those whose mothers receive prenatal care
- Lower birth weight and preterm infants are much more likely to die⁵²

The most current infant mortality rate available for Mercer County is a little over eight deaths per 1,000 live births. This rate places Mercer County third highest in the state for infant mortality when comparing all 21 counties.⁵³

Stillbirth

Stillbirth is one of the most common adverse pregnancy outcomes, accounting for about half of all prenatal deaths and for more than a third of deaths between 20 weeks gestation to one year of age. Despite improvements, the rate of stillbirth is higher in the United States than in many other developed countries and there is a persistent disparity in the rates of stillbirth by race and ethnic groups. A recent study suggests that in addition to known risk factors, environmental and behavioral factors need to be explained to understand the cause for racial disparity in the rates of stillbirth.

In an attempt to address the gap in these disparities, the Central Jersey Family Health Consortium received a federal grant for \$1.7 million dollars to help 4,000 low-income pregnant women deliver healthier babies. As described by the New Jersey Health Commissioner, Mary O'Dowd, "This award will enhance New Jersey's commitment to improving birth outcomes so more children have a healthier life."

The "Strong Start" grant will assist pregnant women in eight communities that were selected because of higher than average preterm birth rates and number of low-birth weights. The communities also have large numbers of minority women who are single mothers and the women who are at high risk for having unhealthy babies. Trenton has been named as one of the eight communities selected.

ENVIRONMENTAL ISSUES

Transportation

Travel in and around the city has emerged as a secondary concern for many living in Trenton. As expected, car ownership is not possible for many, resulting in the need to access other forms of transportation. In summarizing data obtained during the one-on-one interviews, the two major modes of transportation are walking or taking the bus. As described by a resident of a senior high-rise located in Trenton zip code 08609, ***"I walked to the food bank early one summer day. The line at the food bank was long, so I had to wait outside for about 30 minutes before entering the food bank. Everyone was very nice, but I left the food bank with several bags filled with canned goods. The walk home took me about two hours. It was now hot and the bags were heavy. I had to stop every few minutes to catch my breath before continuing my walk home."*** When asked why she did not use the bus to travel to the food bank the resident simply stated, ***"I didn't have bus fare."*** This is not an unusual story.

For those not able to use public transportation or walk to their destinations, the city has two or three sources that a resident can call requesting a ride to the store or to the doctor's office--a solution that is not as simple as one would think. As explained by a resident of another high-rise in Trenton zip code 08611, ***"I call Medi-Transport or ACCESS for a ride to the hospital for an appointment, for a test or for a visit to the clinic. I'm picked up late, miss my appointment at the clinic and come home needing to reschedule my test or visit. It's very frustrating. After a while, I say, forget it. I'll wait until I'm sick and call 911 for a ride."***

Lead Poisoning

In May, 2012 the Centers for Disease Control (CDC) announced its plan to redefine the level at which children are considered to have too much lead in their blood. Since 1991 the CDC has used a blood level of 10 micrograms per deciliter as the criterion for requiring follow-up on children whose blood level was recorded at that level. The revised value is five micrograms per deciliter. It is interesting to note that by changing the range, the number of children who will require follow-up services will increase from 100,000 to 450,000 nationally. The number will increase by 8,000 in New Jersey.

In 1987, lead paint was outlawed for use in the United States. For Trenton, this fact remains a concern. Seventy-five percent of the homes in the city were built before 1987. Additional sources of lead include dust and soil which can be brought into the house by circulating air and contaminated shoes, tap water running through old lead pipes and old pottery made with lead that may still be used for cooking meals.

Lead poisoning affects the central nervous system and disrupts normal growth and development. Most lead poisoning is found in young children when the brain grows the fastest and when the critical connections in the brain and nervous system are being formed. When brain damage has been sustained, it is not only seen in cognitive function but can also have a cardiovascular, immunological and endocrinal effect. The damage caused by lead poisoning is irreversible.

Asthma

In 1998, the Asthma and Allergy Foundation of America estimated the annual cost of uncontrolled asthma for New Jersey was approximately \$324 million.⁵⁴ Uncontrolled asthma often results in limited activities, missed days at school, missed work days, emergency department visits, frequent hospitalizations and even death. Acute episodes of the disease are often avoidable.

In addition to the economic impact of asthma, individuals with the disease often experience psychosocial effects. For children, missing school and not being able to keep up with their studies can result in a lifelong struggle. For the working adult, missing days on the job can mean no pay for the day, resulting in their inability to pay for essentials. Exacerbations and remissions often lead to depression.

Many organizations within the city have focused their efforts on testing children early, providing education to the parents and care givers and providing healthy home inspections throughout the neighborhoods. A focus on decreasing environmental triggers, accompanied by education and training, are essential to the success of these programs.

NEXT STEPS

For Trenton, disparities in the areas of health, education, employment, housing and transportation continue. The commitment of the Trenton Health Team and their Community Advisory Board members was to produce a document that truly reflected the “voice of the community.” That goal has been realized. The priorities that have emerged over the past fourteen months include:

- Safety and Crime
- Obesity and Healthy Lifestyles

- Substance Abuse and Behavioral Health
- Health Literacy and Disparities
- Chronic Diseases

The next step in this process is to develop a Community Health Implementation Plan (CHIP) that identifies goals and objectives that are both realistic and measurable around each of the priorities. This process will require the ongoing commitment and dedication of THT and Community Advisory Board members as well as those of the Community.

A CHIP Steering Team will govern Trenton's Community Health Improvement Plan, supported by a project manager. THT will engage community leaders to help address the socioeconomic determinants of health in the most significant ways possible. THT will designate a community leader to drive each initiative and engage other community resources as needed. The priority leaders will report to the project manager who will report to the THT Board of Directors. THT plans to seek grant funding for each priority.

Healthy Communities, Inc. (HCI) is working with THT to create a web-based dashboard that reports publicly available health data for the community down to the county and zip code level. The dashboard will allow THT to share the CHIP activities and minutes online. THT will be able to upload its own data for public display as well. The dashboard display will allow THT to track the community's progress against pre-determined health goals. Additionally, the system contains interactive maps that plot data for the Trenton geography. The Department of Health and Human Services Healthy People 2020 initiatives and health disparities module will be part of the dashboard. The HCI dashboard also houses a database that shares best practice examples from across the country.

Public meetings and forums will be used to communicate the CHNA and CHIP to the community. THT partner hospitals, the federally qualified health clinic and the city health department are each required to hold an annual public meeting to answer residents' questions. Instead of separate meetings, these groups can now host a single, unprecedented city-wide public meeting focused on health—the culminating step in the THT CHNA process. THT organizations and their respective boards of directors collectively talk with the community about the CHNA, the CHIP and the new HCI dashboard.

THT's process meets the IRS requirements and forms the core of a 990 for all CAB member organizations. This unique form of community collaboration and transparency will fuel THT's goals while promoting more efficient allocation of community resources to improve population health in the city.

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