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LYNNINSTITUTE

Lynn Lifestyle Summary^o – Northeast Oklahoma City 2016

Lynn Institute for Healthcare Research, Inc.



Corporate Office

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The Lynn Institute seeks to improve the health of geographic communities, communities of individuals aligned by disease entity, communities by age groups, ethnicities, etc. All inquiries are welcomed regarding Lynn's assistance/capacity in developing other Lifestyle Summaries. For more information, please contact the Lynn Institute.



**Lynn Lifestyle Summary®
Northeast Oklahoma City
2016**

Lynn Institute for Healthcare Research, Inc.

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FOREWORD

Oklahoma City is successful, to a large degree, because of the people of Northeast Oklahoma City.

The legacy of previous generations is that of leadership in every genre: the arts, medicine, judicial system, publishing/mass communications, and, very importantly, civil rights. We have made our mark both on Oklahoma and on the nation.

Our residents are both proud of our heritage and supportive of all of the successes of Oklahoma Cityans. We are supportive of the greater good. Indeed, it is the people of Northeast Oklahoma City who patiently, consistently vote to pass taxes and bond issues so that the entire City can prosper. The people of Northeast Oklahoma City care very much about all of Oklahoma City despite our area's obvious lag in economic and quality of life conditions.



Unfortunately, over the years, much of what our Northeast Oklahoma City residents have strived for and believed in has been decimated by a variety of conditions, actions, individuals, and organizations. No one person or issue is to blame; it is a combination of environmental, political, and societal forces.

However, it is now time to re-embrace our proud history and help all of Northeast Oklahoma City move forward.

My fellow residents of Northeast Oklahoma today, and all of the future generations, deserve an opportunity to live in an area where they can thrive and live among other African Americans and people of all ethnicities who are successful and want others to be successful. We want our children to understand the importance of education and achievement. We want them to have role models who are positive contributors to, and leaders of, Oklahoma and national society.

Change starts through listening, through understanding, and then becomes sustainable when like-minded people work together to achieve a common vision. This Lynn Lifestyle Summary gives us the basis from which to focus our renaissance. I know we can be successful in helping Northeast Oklahoma City to not only reclaim its greatness but to provide an environment energetically conducive to positive, healthy lifestyles for all.

I pray for all of today and tomorrow's children to have an opportunity to succeed in Northeast Oklahoma City as well as throughout all of Oklahoma.

Willa Johnson

County Commissioner Northeast Oklahoma City

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The wonderful and welcoming residents of Northeast Oklahoma City

Lynn Institute Board of Directors

The Northeast Renaissance Stakeholders Committee

The Alliance for Economic Development of Oklahoma City

Black Chamber of Commerce

City of Oklahoma City Planning Department

Metro Technology Centers

Oklahoma City Police Department – Springlake Division

Oklahoma Department of Mental Health and Substance Abuse

Oklahoma Department of Health for OK2SHARE

Oklahoma Health Equity Campaign

Oklahoma Historical Society

Oklahoma City Housing Authority

Oklahoma State Department of Health

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Sisters in Motion

University of Oklahoma Physicians

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SECTION 1

EXECUTIVE SUMMARY

In March 2014, the Lynn Institute for Healthcare Research, Inc., undertook a comprehensive assessment of Northeast Oklahoma City as the first step of a multi-year program to measurably improve the health of the community.

Northeast Oklahoma City is defined as zip codes 73105, 73111 and 73117. These zip codes comprise a 20-square mile area and include some 22,000 of Northeast Oklahoma City's 33,000 residents. This report summarizes both assets and challenges of the subject area, as reflected in available statistical data and interviews with community leaders and residents. The Lynn Lifestyle Summary® – Northeast Oklahoma City is the most comprehensive overview of Northeast Oklahoma City ever developed or published.



The Lynn Healthy Community Team selected Northeast Oklahoma City because of generations of high risk health conditions including diabetes, obesity, hypertension, and a high infant mortality rate. The community leads Oklahoma and in some cases, the nation, in morbidity from preventable disease, infant mortality, inadequate access to fresh food and health services, and suicide rates.

Northeast Oklahoma City also is one of the most impoverished areas within the state with a shockingly high number of residents living in poverty. It is marked by blight, high crime and other environmental factors that contribute to the poor health statistics of the area.

Alternately, Northeast Oklahoma City has many assets and resources that can aid in improving the health of the area. These include proximity to the State Capitol Complex, Oklahoma Health Center, and major cultural and recreational attractions. The tri-zip area enjoys a lush landscape and more than 1,500 businesses, churches, and civic organizations.

The biggest assets are Northeast Oklahoma City residents themselves. Despite multiple adversities and a long history of institutionalized racism, the people of Northeast Oklahoma City exhibit cohesiveness and pride in their community. The area now and in the past has been home to the largest concentration of African Americans in Oklahoma, giving rise to a unique history and shared cultural heritage prized by residents.

This assessment includes the most current statistics available (as of this publishing) from more than 340 government and private sources; 12 focus groups, 61 informal interviews, and structured interviews with 56 community leaders. In this report, the terms tri-zip area and Northeast Oklahoma City are used to describe the area defined by zip codes 73105, 73111, and 73117, except where noted. The zip codes were selected for data comparison purposes.

ASSETS AND CHALLENGES OF NORTHEAST OKLAHOMA CITY

The Lynn team inventoried and confirmed Northeast Oklahoma City assets and challenges through a process known as asset mapping. Below are summaries of mapping results.

Summary of Northeast Oklahoma City Assets:

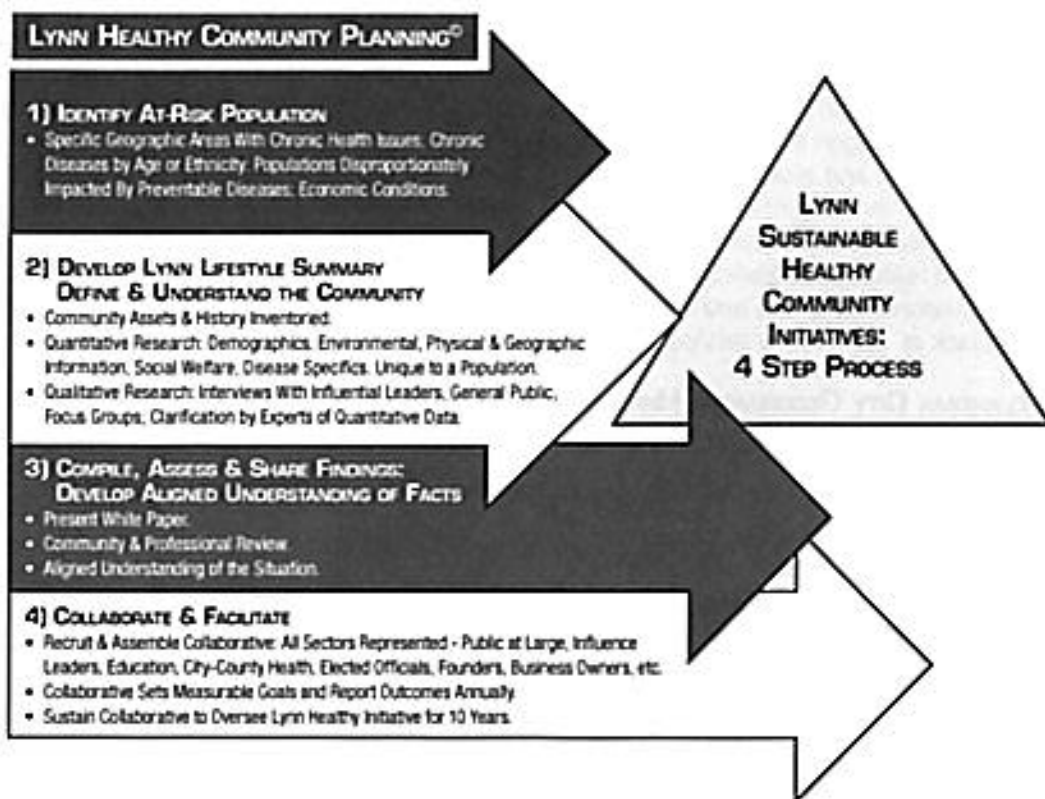
- The community lies adjacent to the State Capitol Complex, Oklahoma Health Center and major cultural and recreational attractions, all major economic engines for the city and state.
- The community's physical landscape is desirable, featuring taller than usual trees.
- The area is home to the largest concentration of African Americans in Oklahoma, providing community cohesion in terms of pride in its history and culture.
- The area boasts some 95 churches and more than 1,500 businesses and organizations.
- The area has 16 parks, eight walking trails, and six recreational or fitness centers.

Summary of Northeast Oklahoma City Health and other Challenges:

- With only minor exceptions, the citizens of Northeast Oklahoma City have a higher morbidity rate in every major disease, as compared to other Oklahomans.
- The area suffers from a lack of access to primary healthcare.
- Infant mortality rate in one zip code is three times higher than in Oklahoma or the US.
- Obesity and smoking rates are higher than Oklahoma and the nation.
- The area has only two grocery stores, limiting access to healthy foods.
- Mental health visits are eight times higher than in Oklahoma County, and drug treatment visits are approximately five times higher.
- Suicide rate is more than double the rest of Oklahoma and the nation.
- Poverty rates for children and families are almost double those of Oklahoma County, and 65% of children under the age of five are living in poverty.
- It is among Oklahoma's most blighted areas, dominated by houses built before 1959, and pocked by abandoned buildings.
- It has low marriage rate, low school graduation rate, and significantly higher single head of household rate.
- Crime is disproportionately high with gun related violence five times the rate of Oklahoma County.

NEXT STEPS

The mission of the Lynn Institute for Healthcare Research, Inc., a nonprofit organization, is to measurably improve the health of the communities it serves. We fulfill our mission by adhering to a structured four point plan to build a healthy community:



With the publication of this report, we are ready to begin the fourth and final step in the process: establishment and facilitation of a collaborative effort to develop and adopt a sustainable 10 year plan. The Lynn Healthy Community Team will next build and facilitate a Collaborative of community leaders with diverse expertise and backgrounds. Influence leaders selected for the Collaborative will represent areas such as local business, funding, health, and social services. This report will be a guide for the Collaborative to plan and prioritize the long-term changes needed to improve the overall health of this vivacious community.

Collaborative members will set two year measurable objectives and ten year measurable goals for community health improvement. The over-arching goal of the Collaborative will be creating sustainable changes in health for Northeast residents ultimately resulting in positive shifts of the statistics and opinions on health presented within the Lynn Lifestyle Summary® - Northeast Oklahoma City.

SECTION 2

INTRODUCING NORTHEAST OKLAHOMA CITY

Northeast Oklahoma City, home to the State Capitol and the Oklahoma Health Center (which encompasses the University of Oklahoma Health Sciences Center and more than 40 health related organizations and services), is notable for its cultural and recreational wealth and for the beauty of its landscape. However, its biggest asset is the citizens. Home to a diverse population of 33,000 that includes the largest concentration of African Americans in Oklahoma, the area historically has generated some of the state's most significant African American leaders and entrepreneurs. Oklahoma City's history of integration and the Civil Rights Movement began in the churches, buildings and homes of Northeast Oklahoma City, and is still a matter of pride and storytelling by residents today. Yet, Northeast Oklahoma City is also notable for its challenges. Its residents are some of the poorest, least healthy in the state, more likely to die of chronic diseases and to die much younger than other Oklahomans. Although it has some of the most desirable land features in Oklahoma City with its rolling hills and taller than usual trees, it hosts many vacant lots, abandoned buildings and deteriorating homes which have contributed to its continued decline, crime, and lack of community services.

NORTHEAST OKLAHOMA CITY GEOGRAPHY, HISTORY AND ASSETS

The Northeast Oklahoma City quadrant consists of a roughly 20-square mile rectangle. It is easily accessed by two of the state's and nation's major arteries: I-40 on the South and I-35 on the East. It adjoins Oklahoma City's bustling Bricktown, Automobile Alley, and encircles the Uptown 23rd District. Zip codes 73105, 73111 and 73117 (area highlighted) were selected as our specific field of study for data comparison purposes.



NORTHEAST OKLAHOMA CITY HISTORY AND LEADERSHIP CONTRIBUTIONS

Northeast Oklahoma City historically has been home to the majority of Oklahoma African Americans. The area has produced notable African American political leaders, writers, entrepreneurs and Civil Rights activists. Representative John White and Archibald Hill were the state's first African American House Members, and State Senator E. Melvin Porter its first African American State Senator. Hannah Diggs Atkins was elected in 1967 as Oklahoma's first African American woman house member and went on to serve as Oklahoma Secretary of State under Governor Henry Bellmon and then as a delegate to the United Nations under President Jimmy Carter. In 1994, Vicki Miles La Grange, raised in Northeast Oklahoma City, became Oklahoma's first African American federal judge.



Judge Vicki Miles LaGrange

Ralph Ellison



African American Entrepreneur/Real Estate Developer Walter J. Edwards (1891-1972) contributed much to the area, introducing a new housing development, Edwards Addition, and in 1938, obtaining the first mortgages available to African Americans from the Federal Housing Administration.¹

Pulitzer Prize winner Ralph Ellison,² author of *"The Invisible Man,"* a book many called the most important novel written

since World War II, also grew up in Northeast Oklahoma City. Northeast area residents not only led the state's progress toward Civil Rights, but also staged the national movement's first peaceful drug store sit-in at Oklahoma City's Katz Drug lunch counter in 1958. Five years earlier, The Rev. Martin Luther King Jr. ³ came to Northeast Oklahoma City and preached in the 120-year-old Calvary Baptist Church ⁴ (300 N. Walnut Street; Constructed in 1890 and now used as Class A office building) in hopes of being hired as pastor. Another product of Northeast Oklahoma City, noted educator and Civil Rights activist Clara Luper, ⁵ used Calvary Baptist Church for meetings and classes to teach residents the art of "peaceful demonstrations" and "non-violent resistance."



Martin Luther King Jr.

Shortly after statehood, the community had its first African American newspaper. Roscoe Dunjee ⁶ founded and published the *Black Dispatch* in 1914, and soon became a voice for residents. He almost single-handedly started and financed the Oklahoma City Chapter of the National Association for the Advancement of Colored People. Today, leaders like County Commissioner Willa Johnson, State Representative/The Reverend George Young, City Councilman John Pettis, and *Black Chronicle* publisher Russell Perry – all residents of Northeast Oklahoma City – continue to work for civil rights for all and a healthier, more vibrant and economically robust Northeast Oklahoma City.



Councilman John Pettis

In the business arena, Northeast Oklahoma City birthed and remains the site of "Deep Deuce", which was one of America's most prominent African American entertainment and business districts for 30 years, operating from the 1920's to the 1950's. The prominence and economic strength of Deep Deuce was lessened, however, by integration, which opened access for African Americans to other venues throughout Oklahoma City. By the early 1960's, most of the buildings in the two-to-four block district were beyond repair. Urban renewal led to the government purchase of most of the buildings, an act still considered controversial among residents who remember the district's glory days. Today, Deep Deuce has been rejuvenated and mainly consists of low-rise upscale apartments (built in 2000) and mixed-use buildings and shops that were formerly vacant.

The last major growth in Northeast Oklahoma City occurred in the 1990s. Although several parks and recreation centers were built at the time, and the area's only full-size grocery store came into being in 2010, much of the area's infrastructure and services have languished.

THE PEOPLE

Northeast Oklahoma City remains rich in contributions from many organizations, businesses and service providers. Northeast Oklahoma City hosts 17,582 African American residents in the three zip codes comprising the majority of Northeast Oklahoma City: 73105, 73111, and 73117. There seems to be much pride among area residents, particularly the long-term neighbors. This is evidenced by vigorous neighborhood association meetings and positive remarks when asked about their community. The Northeast quadrant has a total population of approximately 33,000 with 22,182 ⁷ in the area's primary zip codes.⁸

Quantitative Table 2-1

Population	73105	73111	73117	County	State	US
Population	5,210	11,781	5,191	718,633	3,878,000	318,900,000
Square Miles	4.96	8.83	4.53	718	69,899	3,794,083

Source: US Census Quick Facts.

Ages of residents in all three zip codes average slightly higher than Oklahoma/U.S. and all three average a higher percentage of population over age 65. There are 14,655 adults over age 25. There are a total of 1,731 children under age five, 13,655 adults over age 25, and 3,933 residents over age 65. With the exception of children under five and those over 65, the age distribution and median age is fairly similar in this area to the rest of Oklahoma and the Country ¹:

Quantitative Table 2-2

Ages	73105	73111	73117	County	State	US
% Pop. Under 5	5.7	8.5	8.3	7.7	7.0	6.5
% Pop. 65 & Over	15.95	19.70	15.04	12.02	13.51	13.0

Source: US Census Quick Facts.

After African Americans, Caucasians comprise the second largest ethnic group. Other minorities include Hispanic, Asian, and American Indian residents.¹²

Quantitative Table 2-3

Ages	73105	73111	73117	County	State	US
% Caucasian	17.3	8.0	12.7	64.6	80.3	74.8
% African American	73.2	83.2	76.4	15.4	8.3	13.6
% Asian	2.5	0.2	1.02	2.99	1.7	5.6
% American Indian	1.2	1.5	1.52	3.6	11.4	1.7
% One race-other	0.9	1.7	2.64	8.06	0.1	0.4
% Two or more races	5.0	5.5	5.72	5.3	3.0	7.0
% Hispanic	2.4	4.1	5.12	15.1	5.2	12.5

Source: US Census Quick Facts.

Quantitative Table 2-4

Ages	73105	73111	73117	County	State	US
Median Age	41.2	40.5	38.8	34.3	36.2	37.2
Gender – Females	52.21%	56.87%	53.52%	51.1%	50.5%	50.8%
Gender – Males	47.79%	43.13%	46.68%	48.9%	49.5%	49.2%

Source: US Census Quick Facts.

NORTHEAST OKLAHOMA CITY COMMUNITY RESOURCES/ASSETS

The residents of Northeast Oklahoma City have many resources: more than 1,500 businesses, a concentration of 176 government agencies, a world-renowned health center, 16 parks and four recreation centers, 96 churches, 31 gas and convenience stores, two grocery stores, 61 non-profit organizations, over 30 schools and after school programs, 31 child and family support agencies, and 51 healthcare organizations.”

ASSETS

Located in almost the exact center of the State of Oklahoma and not too far from the center of the United States of America, the quadrant is home to two of Oklahoma's biggest job creators: the State Capitol and the Oklahoma Health Center which includes the University of Oklahoma Health Sciences Center and 40 other health related services and organizations. It also boasts the following other cultural resources, included within the Oklahoma Adventure District:

- The Oklahoma City Zoological Park and Botanical Gardens
- Science Museum Oklahoma
- The National Cowboy & Western Heritage Museum
- Remington Park



There are 10 unique museums: Oklahoma History Center, Ham Homestead, Oklahoma Black Museum, OK Sports Hall of Fame, 45th Infantry Division Museum, Oklahoma State Firefighters Museum, Oklahoma Railway Museum, The American Pigeon Museum & Library, the Amateur Softball Association of America, and the Gymnastics Hall of Fame.

The museum district has given rise to beautiful areas of gardens, greenbelts, parks and recreational trails in the area. Beyond these, Northeast Oklahoma City is a mix of older, single family homes (many built before statehood), small businesses, churches and blighted areas. Many of the area's housing additions, developed during Oklahoma's segregation decades, were never fully developed and many vacant lots sit adjacent to inhabited homes.

SUMMARY OF ASSETS BY TYPE

A detailed list of assets is in Appendix B. A summary of assets by type is listed below.¹⁹

Businesses and Government: 1,567 businesses (241 different types) and 176 government agencies.

Healthcare & Emergency Services: 49 organizations including 12 mental health/substance abuse clinics and agencies, 35 dentists, 37 social service agencies, and seven funeral services.

Family and Child Related Services: 76 licensed childcare centers/homes with the capacity to care for 2,071 children.

Education programs: 12 K-12 public schools, seven K-12 private schools, six GED sites, four graduate/higher education programs, and 15 afterschool programs.

Churches: 95, two provide healthcare clinics and four have gymnasiums.

Parks, Recreations Centers, Fitness Classes, Walking Trails, and Attractions & Museums: 16 parks, four rec centers (including three with fitness centers for both children and adults), eight walking trails including Northeast Health & Wellness campus. Major Attractions feature the Zoo, Remington Park Horse Racing & Casino, Bricktown Hotel & Convention Center, and seven others. Museums include Ham Homestead, Oklahoma Black Museum, Oklahoma History Museum, Amateur Softball Association of America, National Cowboy & Western Heritage Museum, and Science Museum Oklahoma.

Food and Beverage: five liquor stores, two bars/nightclubs, 31 gas/convenience/specialty stores, two grocery stores and 56 restaurants.

Transportation: Embark City Bus system and the Greyhound Bus Station.

Service/Shops/Stores: Five hardware/building supply stores, four clothing/uniform stores 27 hairdressers/barbers, four nail salons, two pest controls, three florists, four furniture stores, one jewelry store, four discount stores, two laundry & dry cleaning, four appliance stores, three bookstores, and two sports equipment stores.

Animal Services: three veterinary services including one equine, two governing boards and one pet supply store.

Media and Information Technology: 12 radio/TV, one TV production/distribution company, one newspaper, five publishing companies, the Associated Press, one public library, 12 information technology services/network Services, two wireless equipment manufacturing companies, and two wireless services companies.

Art & Music: Four performing arts companies, two motion picture production & distribution companies, three music production and distribution companies, and one film/video company.

Infrastructure: Two utility companies, one water/sewer, one electric; four waste management, one solid waste services and recycling, one remediation and environmental clean-up, and two hazardous waste removal companies, four highway street and bridge construction contractors, and one power line and telecommunications construction company.

In brief, within a short distance from some of the state's biggest economic engines, tourist centers and medical resources, lies a community with not only significant history, pride and assets, but one which has remained largely invisible in terms of active intervention to address its serious needs.

SECTION 3

HEALTH

In nearly all measures reviewed, higher rates of adverse health outcomes and behaviors exist for Northeast Oklahoma City when compared to the county, state, and nation. The three zip codes specifically studied, 73105, 73111, and 73117, represent 3.1% of the total population of Oklahoma County but disproportionately account for some of the most troubling health statistics.¹ This portion of the report will present the community health status based on accepted health determinants and measurements along with qualitative data derived from interviews and focus groups in relation to the subject of health and health behaviors. Understanding and reviewing the quantitative and qualitative data will allow for a more objective and complete understanding of the community's health challenges and barriers.

HEALTH OUTCOMES

Quantitative data specific to the Northeast Oklahoma City tri-zip area illustrates a population with below average health outcomes. The results of the qualitative research revealed many members of the Northeast community acknowledge the community as overall unhealthy. An overwhelming majority of respondents, 89.28%, said "no" when asked if they thought Northeast Oklahoma City was a physically and mentally healthy community. Not only did respondents acknowledge the health disparities within their community, but also the respondents were eager to discuss the causes and potential solutions to the Northeast Oklahoma City health crisis.

Table 3-1

<i>Structured Interview - Would you say that in general Northeast Oklahoma City is a physically and mentally healthy community?</i>
<i>11% responded Yes</i>
<i>89% responded No</i>

Source: Lynn Qualitative Research

CHRONIC DISEASE MORTALITY

The health disparities of this community are most apparent when examining the quantitative data related to chronic disease mortality. The tri-zip area collectively has a higher rate of chronic disease mortality than Oklahoma County, the state, and nation in nearly all disease categories.

Beginning with the number one killer of all Americans, heart disease is responsible for 234.2 deaths per 100,000 people in the United States, 303.9 deaths per 100,000 in the state of Oklahoma, and 269.1 deaths per 100,000 in Oklahoma County.² The tri-zip area mortality rates are higher than each of these rates and are double the rate of the United States in zip code 73117.

Quantitative Table 3-2

<i>Average Disease Mortality</i>	<i>73105</i>	<i>73111</i>	<i>73117</i>	<i>Oklahoma County</i>	<i>Oklahoma State</i>	<i>United States</i>
<i>Cardiovascular Mortality/ 100,000 population</i>	<i>335.4</i>	<i>433.2</i>	<i>519.5</i>	<i>269.1</i>	<i>303.9</i>	<i>234.2</i>

Source: OK Wellness Score 2014, Oklahoma City County Health Department.

Hypertension, stroke, diabetes and heart attack mortality rates also are above the national and state averages in the tri-zip area. In addition, chronic lower respiratory disease is elevated in only one of the three zip codes but may be significant in relation to the environmental issues discussed later in this document (see Section 6).

Quantitative Table 3-3

Average Rates of Disease Mortality	73105	73111	73117	Oklahoma County	Oklahoma State	United States
<i>Hypertension Mortality/100,000 population</i>	59.6	80	108.3	27.6	27.9	18.8
<i>Stroke Mortality/ 100,000 Population</i>	34.8	90.7	86.6	42	42	39.1
<i>Heart Attack Mortality/ 100,000 Population</i>	38.3	41.9	**	22.8	34	36.5
<i>Diabetes Mortality/ 100,000 Population</i>	**	46.8	59.5	27.7	29.7	20.8
<i>Chronic Lower Respiratory Disease Mortality/ 100,000</i>	21.3	30.8	85.1	60.7	66.7	42.2

Source: OK Wellness Score 2014, Oklahoma City County Health Department. ** Resulting data too small to report with reliability/100,000

Chronic diseases in some cases can be prevented, and in most cases can be managed to lessen complications and improve the quality and extent of life. Though differences in disease rates based on race, heredity, and culture exist,³ the main morbidity influence on these chronic diseases and mortality seems to be a complex relationship between the community's economic and physical environment, residents' diet, activity levels, smoking and substance abuse habits, age, and stage at the time of diagnosis and treatment. Additionally, any outside influence that creates an artificial or real detrimental effect on the environment or personal health behaviors of community members can increase the rates and progression of diseases.

PREMATURE DEATH

The Years of Potential Life Lost (YPLL) is another measure of community health. This measurement is an estimate of the number of years a person would have lived had they not died before the age of 75 and then adds the lost years together for a geographic area.⁴⁵ This is a measure of premature death and is configured as a crude rate per 100,000 people. In the tri-zip target area, all rates of YPLL are significantly higher than the county, state and nation. Therefore, residents in Northeast Oklahoma City area are dying at younger ages.

Quantitative Table 3-4

Years of Potential Life Lost (YPLL) 2011-2013						
YPLL / 100,000 Population	73105	73111	73117	Oklahoma County	Oklahoma State	United States
<i>YPLL Rate / 100,000</i>	115454.0	19898.6	21260.8	9175	9121	6874.19

Source: OK Wellness Score 2014, Oklahoma City County Health Department and CDC Wonder (state and US).

OBESITY

During qualitative research, obesity surfaced as a major concern of Northeast Oklahoma City residents. Diseases associated with obesity, such as diabetes and hypertension, also placed high on resident's health concerns. All focus groups cited obesity and diseases associated with obesity as health issues most important to them and their community.

Table 3-5

Structured Interview - What health issues are most important to you and your/the community?										
Diabetes	Obesity	Hypertension	Heart Disease	Nutrition	Mental Health	Substance Abuse	Infrastructure /Resources	NA	Other	Total Answers
18%	17%	14%	9%	12%	6%	7%	11%	1%	6%	152

Source: Lynn Qualitative Research

More than 36% of residents of Northeast Oklahoma City are obese which is higher than the national average. Obesity increases the risk for chronic diseases such as adult onset diabetes, cardiovascular disease, hypertension, stroke and some cancers and obesity also increases the chances of complications related to many of these diseases. Obesity affects approximately 34.9% of all adults in the United States and costs each obese individual an additional \$1,429 in medical costs per year over those of normal weight.⁴ Obesity rates vary within the nation by race, culture, income and education.

Quantitative Table 3-6

Obesity 2013						
Measure	73105	73111	73117	Oklahoma County	Oklahoma State	United States
Obesity	36.00%	36.70%	36.30%	29.40%	32.50%	34.90%

Source: Oklahoma State Department of Health (OSDH), OK2SHARE Database and computed for zip codes utilizing race concentration and total population rates.

MATERNAL AND CHILD OUTCOMES

The tri-zip area leads the state in teen births, premature births, and infant mortality. In fact, infant mortality is nearly four times higher in zip code 73105 than the county average. Oklahoma ranks 49 out of 50 states as having the highest teen birth rate.⁷ More low birth weight babies are born in 73111 and 73117.⁸

Quantitative Table 3-7

Maternal / Child Health	73105	73111	73117	Oklahoma County	Oklahoma State	United States
Birth Rate/1000 mid-year female population	17.1	17	16.8	16.5	15.1	13.42
Infant Mortality Rate/1000 live births	26.2	**	8.3	7	7.5	6.1
% Of live births classified as Premature	13.1	16	14.2	10.5	11.4	11.5
% Of live births where birth weight below 2500 grams	12.4	16.1	14.8	8.7	8.1	8

Sources: <http://www.marchofdimess.org/Peristats/> for OK state and US, and OK Wellness Score 2014, Oklahoma City County Health Department for Zip code and County. ** Refers to insufficient data to report.

The tri-zip area also leads the county in factors and behaviors known to affect fetal outcomes, such as smoking, age of the mother, lack of prenatal care, and education level. Zip codes 73111 and 73117 have more mothers who smoked during pregnancy, and 73105 and 73111 had a significantly higher lack of prenatal care. Zip code 73111 has more mothers with less than high school education.¹⁰

Quantitative Table 3-8

Maternal / Child Health	73105	73111	73117	Oklahoma County
% Teen Births (19 years old and younger)	12.7	15.6	16.5	10.9
% No prenatal Care	3.4	3.3	1.9	1.6
% Single Teen Moms Head of Households	9.7	13.5	19.2	8.3
% Of all Births to Teen Mother	12.7	15.6	16.7	10.9
% Of Maternal Education less than High School	20.6	26.6	23.4	23
% Moms who smoked during pregnancy	13.5	19.3	21.8	15

Source: OK Wellness Score 2014, Oklahoma City County Health Department.

According to the U.S. Department of Health and Human Services, inadequate or lack of prenatal care significantly increases the infant's risk at birth. Mothers who have no pre-natal care are five times more likely to have babies who die and three times more likely to have babies of low birth weight. Smoking can increase the infant's health issues and present an increased risk of pregnancy complications. Infants born to smoking mothers are smaller, have an increased chance of being born prematurely, and have a greater risk of sudden infant death syndrome than those born to mothers who do not smoke during pregnancy. Drinking alcohol is also associated with increased infant risk as babies may be born with Fetal Alcohol Syndrome, which may result in physical, mental and/or behavioral problems." According to Centers for Disease Control and Prevention and the 2011-2013 Behavioral Risk Factor Surveillance System, 10.2% of all pregnant women in the U.S. reported alcohol use within the last 30 days and 3.1% of this population reported binge drinking. Binge drinking was highest among 18-20 year olds.¹¹

MENTAL HEALTH

Mental health status should be considered when determining the current state of health in a community. Suicide rate per 100,000 residents is one measure that suggests the amount of deep depression within a community. Suicide is not the only indicator; however it is one that is available with data at the tri- zip level. Only one of the zip codes, 73111, exhibited sufficient data (zip codes 73105 and 73117 had too few occurrences to reliably calculate a rate) to report a suicide mortality rate per 100,000 of the population.¹² This rate is more than triple the national average.

Quantitative Table 3-9

Mental Health						
Measure	73105	73111	73117	Oklahoma County	Oklahoma State	United States
Suicide Mortality/ 100,000	**	37.1	**	16.6	17.5	12.3

Source: OK Wellness Score 2014, Oklahoma City County Health Department.

Another measure that may help to define the health parameters of the area is the number of mental health visits within the community. Many problems exist in using this measure. Use of mental health services can stem from a variety of reasons such as prevalence of disease, mental health visit availability, court mandated visits, and aggressive outreach programs. Therapy methodologies may also increase the number of visits per patient.

Quantitative Table 3-10

2010-2012 Mental Health Visits/ 1000 Population			
73105	73111	73117	Oklahoma County
137.2	181.1	249.9	24

Source: OK Wellness Score 2014, Oklahoma City County Health Department.

In the tri- zip area, the use of mental health visits is extremely high compared to the county as a whole. Upon review of this data, it is difficult to know the exact reason these numbers are so much higher than the county comparison. Additional data was requested to try and determine if a large percentage of the visits within the tri- zip area were court mandated as a possible explanation for the high number of visits. At our request, the Oklahoma Department of Mental Health and Substance Abuse provided additional multi-year data shown in the data Table 3-11 along with a more in-depth understanding of the limitations of this data.¹⁴

The following are the 2012 clinic visits (raw numbers) for the studied zip code area and include two additional fields to further identify the number of patients seen with the diagnosis of depression and the percentage of all visits that were court mandated or referred:

Quantitative Table 3-11

Zip Code Specific Outpatient Mental Health Visits for 2012*				
	Total Patients Seen	Total Number of Visits	% Total Patients Seen With Diagnosis Depression	% Total Visits That Were Court Referred/ Mandated
73105	708	22241	31.4	3.8
73111	2087	76071	27.5	2.9
73117	1003	31300	28.61	3.3

*Limitations of this data include:

- Data available only include Medicaid, Medicare and state and federally funded program visits such as those for the mental health care indigent.
- There is no national or state mandate to collect private or insurance pay visits so those are not available in any accessible database.
- The access to mental health care available in the State of Oklahoma has been deemed insufficient compared to need in a previous study and so there are known access problems.¹³
- Mental Health patients may see multiple providers on a given day thus making it possible for multiple visits to be counted, however, for the purpose of this data each patient was counted as only a single visit within each 24-hour period regardless of the number of providers seen during that period by that patient.
- Patients may be referred to mental health care via a number of sources including self-referral. To determine the impact of court ordered/mandated visits, these data are shown as a percentage of the total visits that were of this referral source in the table.
- Multiple diagnosis fields exist so the percentage of patients with a diagnosis of depression includes only those patients with the diagnosis (depression) occurring in any one of the five possible fields within this database.
- There are multiple mental health providers located within the tri-zip area, some with crisis intervention services and aggressive outreach programs that may be influencing the amount of care available/ given within this geographic area.

This data shows a high number of visits per patient with a very low percentage of the visits being court mandated/referred. Considering the data caveats, particularly the caveat that this is Medicaid, Medicare and mental health indigent counts only, the increased number of reported visits may also be related to the economic hardships of the area as more residents could potentially receive Medicaid, and/or be eligible for state funded care.

The Behavioral Risk Factor Surveillance System (BRFSS), by the Centers for Disease Control and Prevention, is a telephone survey of self-reported, health related data taken from a representative portion of the population in all 50 states and U.S. Territories.¹⁴ Depression is one of the chronic conditions assessed with this tool. In 2010-2012, an average of 18% of the survey respondents in the United States confirmed that they had been told they suffer from depression. During this same time frame, 21.9% of the Oklahoma respondents reported being told they suffer from depression. The percentage of patients with an actual depression diagnosis in table 3-11 is much higher when compared to the percentages from the BRFSS respondents in both the U.S. and the state of Oklahoma. However, the nature of the BRFSS data is that it is self-reported and, as such, may be either under or over reported.

Given the totality of the data, including limitations, the 2010-2012 visits/1000 population, the additional raw clinic visit data for 2012, and the BRFSS data, few absolute conclusions can be drawn. From 2010-2012, more residents of the tri-zip area were seen for mental health issues than comparison populations. The tri-zip population seems to have a higher percentage of diagnosed depression than the depression that is BRFSS respondent-reported for Oklahoma and United States. Only a small portion of the patient visits for the tri-zip area in 2012 were court ordered/referred.

Additional data, currently not available, would be needed to make more definitive conclusions about the high mental health visit usage of the tri-zip area.

HEALTH BEHAVIORS

Maintaining a healthy lifestyle by eating a nutritious diet, staying physically active, getting enough rest, and avoiding smoking and substance abuse can help prevent chronic disease and associated complications. Community residents who make these positive behaviors a priority contribute to the overall health of a community.

TOBACCO USE

Cigarette smoking remains the leading cause of preventable death and illness in the United States. It affects not only the smoker but also bystanders through second hand smoke inhalation. Tobacco inhalation can lead to increased risk of cancer and cardiovascular disease.¹⁷ Cigar smoke and chewing tobacco also pose significant health risks. New studies are starting to reveal risks associated with electronic cigarettes or vapor inhalants. These products contain nicotine and harmful chemicals that are in nanoparticle size allowing the harmful substances to reach further into the lung tissue. Substituting vaporized nicotine for tobacco may not assist in preventing further addiction and/or disease, despite marketing claims.¹⁸

Quantitative Table 3-12

Adult Smoking	73105	73111	73117	Oklahoma County	Oklahoma State	United States
% Total Current Smokers	27.2	28.2	27.7	21.0	23.7	18.8
% Population Current Smokers Everyday	16.6	16.7	16.6	15.2	17.4	13.4
% Population Occasional Smokers	10.6	11.5	11.0	5.8	6.3	5.4
% Total Population Who Quit Smoking	15.7	16.6	14.9	24.0	24.5	25.3
% Total Population Who Never Smoked	57.0	57.7	57.3	54.8	51.8	55.0

Source: Oklahoma State Department of Health (OSDH), OK2SHARE Database and computed based on race practice and concentration.

Current smoking rates are higher in the tri-zip area than the comparisons. The number of everyday smokers is similar to the comparisons yet the occasional smoker rates are higher. On a more positive note, over half of the population has never smoked, a rate higher than the comparisons.¹⁹

Numerous qualitative respondents cited substance abuse as a prevalent health concern in Northeast Oklahoma City. In addition to 83.92% of respondents agreeing that tobacco use is a prevalent health issue, respondents also thought alcohol, marijuana, and crack cocaine abuse contributed to poor health outcomes of the population. Among focus groups, five of the 12 groups cited substance abuse as a cause for the deteriorating health of the community.

Table 3-13

Structured Interview - Do you think tobacco use is a prevalent health concern within the NE community?
16% of respondents do not think tobacco is a prevalent health concern.
84% of respondents do think tobacco is a prevalent health concern.

Source: Lynn Qualitative Research

ALCOHOL AND SUBSTANCE ABUSE

Alcohol consumption is the third leading cause of preventable death in the United States. In the year 2013, 30.8% of all driving fatalities were alcohol related. Alcohol consumption is related to increased risk of fatal alcohol poisoning, alcohol addiction, alcoholic cirrhosis of the liver, cancer, and personal injury. If consumed during pregnancy, the infant may be born with Fetal Alcohol Syndrome.²⁹ Fetal Alcohol Syndrome is a set of problems that occurs in the infant of a mother who drank during pregnancy and may include behavioral, physical, and cognitive issues.

Quantitative Table 3-14

Adult Alcohol Use						
Measure	73105	73111	73117	Oklahoma County	Oklahoma State	United States
% Reporting Binge Drinking (men 5+/occasion, women 4+/occasion)	12.10	12.10	12.10	14.90	12.70	17
% Reporting Heavy Drinking (men 2+/day, women 1+/day)	7.81	8.13	7.96	5.10	4.20	5.00

Source: Source: OK Wellness Score 2014, Oklahoma City County Health Department. Zip code data calculated based on race concentration using Oklahoma State Department of Health (OSDH), OK2SHARE Database.

The tri-zip area has a lower binge-drinking rate than the county, state, or nation, but a higher heavy or chronic drinking rate than all three of the comparisons.³⁰

Substance abuse is an important factor in the health of a community. Data reported by the Oklahoma State Epidemiological Outcomes Workgroup (SEOW) in the 2012 Oklahoma Epidemiological Profile,³¹ reported the following statewide rates of trying illicit drugs among high school students:

Quantitative Table 3-15

Oklahoma Youth Substance Use 2011					
	Marijuana	Methamphetamine	Cocaine	Steroids	Inhalants
% High School Students	19.10%	4.20%	5.20%	5.30%	9.60%

Table 3-16 shows raw outpatient visit numbers for substance abuse, both for illicit drugs and alcohol abuse, for the studied zip code area in 2012:

Quantitative Table 3-16

2012 Substance Abuse Visits By Zip Code					
	Total Patients Seen	Visits	% Total Population	Average Visits/Patient	% of Patients seen under age 17
73105	130	1631	2.50%	13/Patient	0.62%
73111	350	3762	2.97%	11/Patient	12.0%
73117	205	4201	3.95%	20/Patient	1.12%

Source: The Oklahoma Department of Mental Health and Substance Abuse.

This data suggests that only a small portion of the studied zip code population was seen in 2012. For example, roughly 8% of the respondents in the BRFSS survey identified themselves as heavy drinkers, and the survey is a representative sample of the total population. In 2012, only about 3% of the total population was seen in clinic visits for substance abuse in the tri-zip area. In addition, of all the patients seen, only a small proportion were patients 17 and under. Youth intervention in both drug and alcohol abuse is important to prevent additional experimentation and/or continued abuse through adulthood.

PHYSICAL ACTIVITY

Physical Activity Guidelines for adults in 2008 recommend 2 hours and 30 minutes (150 minutes) of moderate intensity activity per week. Being physically active helps the body to maintain appropriate body weight and prevent diseases associated with obesity.²³ Adult inactivity rates are higher among the tri-zip area compared to the county, state, and nation.²⁴

Quantitative Table 3-17

Adult Activity	73105	73111	73117	Oklahoma County	Oklahoma State	United States
% Adults Who Are Inactive	38.30%	39.40%	38.80%	31.80%	33.00%	25.30%

Source: Zip code data calculated based on race concentration using Oklahoma State Department of Health (OSDH), OK2SHARE Database.

Qualitative research participants view the population as inactive. Of participants responding to this question, 85.71% thought the population rarely or never exercised. Among participants of informal interviews, 12 of 14 respondents cited nutrition, exercise, and obesity as the health issues most important to them and to their community. Reasons given for inactivity included a lack of resources that promote active lifestyles, and a culture that does not prioritize exercise either due to lifestyle traditions or lack of time for fitness activities.

Table 3-18

Structured Interview – How often do you think the NE population engages in physical activity/exercise?				
14% responded Varies				
86% responded Never or Rarely, reasons for inactivity listed below.				
Resources/Infrastructure	Time	Culture	Cost	Total Answers
38%	22%	34%	5%	58

Source: Lynn Qualitative Research

Table 3-19

Structured Interview - Data shows people in OK have more health related issues than people in other states. Why do you think this is the case specifically of Northeast Oklahoma City community?						
Resources/Infrastructure	Economics	Education	Culture	NA	Other	Total Answers
30%	26%	15%	24%	1%	4%	98

Source: Lynn Qualitative Research

NUTRITION

Daily diets that contain the recommended servings of fruits and vegetables per day help protect the body from chronic diseases and obesity. Fresh fruits and vegetables together with a low saturated fat, low sodium, high fiber and lean protein diet have been associated with a decreased risk for cardiovascular disease, stroke, diabetes, obesity, and cancer. Fruit and vegetables play a large role in protecting the heart from disease.²⁵ Over half of the adult residents of the tri-zip area responded to the Behavioral Risk Factor Surveillance System (BRFSS) that they ate less than 1 serving each of fruits and vegetables per day.²⁶

This represents a much lower vegetable consumption than the county, state and nation. Fruit consumption was 1.5 times lower than the United States and lower than the state and county.

Quantitative Table 3-20

Adult Nutrition	73105	73111	73117	Oklahoma County	Oklahoma State	United States
% of Adults Consuming < 1 Fruit/ Day	56.60	56.90	56.70	48.20	50.2%	37.70
% Of Adults Consuming < Veg/ day	49.20	51.20	50.20	26.80	26.00	22.60

Source: Zip code data calculated based on race concentration using Oklahoma State Department of Health (OSDH), OK2SHARE Database.

Table 3-21

Structured Interview - Do you think the Northeast Oklahoma City population attempts to consume a nutritious diet on a regular basis?				
13% responded Somewhat				
13% responded Yes				
75% responded No. Reasons listed below:				
Economics	Access	Culture	Education	Total Answers
30%	29%	29%	13%	63

Source: Lynn Qualitative Research

Diet choices often are influenced by cultural identification. Each family will select what is most common to their cultural group. This is true of both the cultural aspects of where one lives and also the ethnicity of the group.²⁷ The tri-clip population is primarily African American. Considering a Southern and Midwestern influence and an African American ethnicity, dietary common food preferences include multiple meats, starchy vegetables, green leafy vegetables, and baked sugar-laden desserts. Common food preparations include frying, baking, and stewing. Qualitative respondents attributed some specific health indicators to the culture and traditions of an African American population. Soul food is characterized as items popular among African Americans and people residing in the southern states. Items such as macaroni and cheese, fried chicken, and greens are typically categorized as soul food. Many respondents stated that the affinity for this diet prevents the population from consuming a more nutritious diet.

Table 3-22

Structured Interview - Data shows people in OK have more health related issues than people in other states. Why do you think this is the case specifically of Northeast Oklahoma City community?						
Resources/Infrastructure	Economics	Education	Culture	NA	Other	Total Answers
30%	26%	15%	24%	1%	4%	98

Source: Lynn Qualitative Research

In review, the health outcomes of the tri-clip area demonstrate poorer statistics than the county, state and nation. Additionally, health behaviors like inactivity, substance abuse, smoking, and poor nutrition within this community are likely contributing to the overall health disparities. It is, however, never simple to show absolute cause and effect. Instead the health of a community is likely a result of multiple factors including heritage, ethnicity, race, physical environment, social, educational, economic, infrastructure, and asset availability, in addition to the health behaviors of the collective group. Though it is not within the scope of this paper to determine the relationships between all of these factors and the health of this community, it is within the purview of this study to define as many of these factors that exist in this community. This helps delineate the potential barriers and assets within this community that might be influencing its health.

SECTION 4

MATERIAL WELLBEING

In this section, economics will be discussed in relation to the health outcomes and behaviors already presented. Economic wellbeing can greatly impact the health of a community, providing the ability to obtain healthy foods, access to safe places to live, work, and play, and the means to obtain a quality education. Economic well-being also may result in free time for socializing, recreation, and physical activity. Members of a strong economic system can invest in the infrastructure to sustain a safe and maintained community and the members can afford to support the role of education within the community. Economic stability can result in a community's ability to attract and offer subsidies to new businesses, creating jobs and economic opportunity. Additionally, economic well-being can assure assets are in-line with the needs of the community.

SOCIO-ECONOMICS

The Northeast Oklahoma City area has many economic challenges. The median income is less than the county, state, nation and significantly so in 73111 and 73117. The median income in 73117 is less than half of what the median income is for the state and county, punctuating a widening gap between those who have and those who have not.^{1,2}

Quantitative Table 4-1

Median Income	73105	73111	73117	Oklahoma County	Oklahoma State	United States
Median Income	\$36,002	\$22,495	\$19,918	\$45,215	\$43,339	\$53,046

Source: US Census Quick facts and Wellness Now Score 2014.

Income levels can greatly influence health behaviors and ultimate health outcomes of a population. Northeast Oklahoma City is one of the poorest areas in Oklahoma County. Many qualitative research respondents blamed economics as the primary reason the population has not received the recommended preventative services that yield a healthy community. Half the structured interview respondents said lack of economic resources contributed to existing detrimental health issues in Northeast Oklahoma City. Economics also was listed as a top barrier preventing residents from consuming a nutritious diet.

Table 4-2

Structured Interview – Data shows people in OK have more health related issues than people in other states. Why do you think this is the case specifically of Northeast Oklahoma City community?						
Resources/Infrastructure	Economics	Education	Culture	NA	Other	Total Answers
30%	26%	15%	24%	1%	4%	98

Source: Lynn Qualitative Research

Table 4-3

Structured Interview – Do you think the Northeast Oklahoma City population attempts to consume a nutritious diet on a regular basis?				
13% responded Somewhat				
13% responded Yes				
75% responded No. Reasons listed below.				
Economics	Access	Culture	Education	Total Answers
30%	29%	29%	13%	63

Source: Lynn Qualitative Research

According to the qualitative research results, lack of sufficient income requires some people in Northeast Oklahoma City to prioritize basic needs over health care, especially preventative care such as annual physicals. The examples listed included choosing to pay the electric company or buy food instead of going to the doctor for preventive care. A large majority of respondents, 75%, said "no" when asked if members of the population have a personal doctor and if the population receives recommended annual physical exams. Respondents stated lack of insurance also prohibits community members from getting and taking prescription medications as ordered by physicians. If medications are obtained, community members may take less than the recommended quantity to extend their supply.

Table 4-4

Structured Interview – Do you think people in Northeast Oklahoma City have a personal doctor and get annual physicals?					
20% responded Yes and No					
4% responded Yes					
2% NA					
2% said No. Reasons listed below.					
Resources/Infrastructure	Economics	Education	Culture	Other	Total Answers
30%	28%	29%	29%	13%	63

Source: Lynn Qualitative Research

Table 4-5

Structured Interview – Do you think people in Northeast Oklahoma City obtain and take prescriptions as ordered by physicians?				
23% responded I don't know or Somewhat				
20% responded Yes				
57% responded No, reasons listed below.				
Cost	Access	Education	Culture	Total Answers
49%	12%	29%	10%	49

Source: Lynn Qualitative Research

Lack of insurance and expensive medical costs were cited as the primary explanation for the high incidences of emergency room visits within the population. A majority (85.71%) of respondents said "yes" when asked if the population uses the emergency room for regular health care. It should also be noted that due to lack of income, some members of the population often wait until a health issue is dire before they seek treatment through the emergency room. Often times the issue could have been resolved through preventative care or earlier diagnosis.

Table 4-6

Structured Interview – Do you think people in Northeast Oklahoma City use the ER for their 'regular' health care?					
7% said Maybe					
7% said No					
86% said Yes, reasons listed below					
Resources/Infrastructure	Economics	Education	Culture	Other	Total Answers
25%	35%	9%	24%	7%	68

Source: Lynn Qualitative Research

Struggling communities further deteriorate as businesses re-locate for better selling and commercial opportunities, residents begin to buy outside of their community as services and goods become scarce, monies are directed by political powers to communities with more wealth and influence, infrastructure begins to deteriorate and abandonment of property increases as it becomes cheaper to abandon than to maintain. From an outside point of view, it is difficult to invest in a self-perpetuating situation in a downward spiral. From an inside point of view, the situation can seem hopeless. However, studies have shown that small investments in such communities, particularly in promoting opportunity and health, can translate into large returns and the cycle can be broken.^{3,4} Small investments in public health also can translate into a decrease in preventable deaths.⁵

POVERTY

On average, one third of all residents in the tri-zip area live below the national poverty level compared to 19.1% of county residents and 17.2% of state residents. Of those in the tri-zip area living below the poverty line, 16% live at 50% below the national poverty level (see appendix E for National Poverty Income Levels).^{6,7} See the table below for specific data by zip code:

Quantitative Table 4-7

Poverty	73105	73111	73117	Oklahoma County	Oklahoma State	United States
% Below Poverty Level	23.2	34	42.3	19.1	16.8	14.5
% Income 50% Below Poverty Level	11.7	14.2	22.3	9.8	7.4	7.0

Source: Zip Code: OK Wellness Score 2014, Oklahoma City County Health Department, State and US data Source: American Community Survey Briefs 2012.

Children within the tri-zip area are especially vulnerable to toxic stress that arises from living in poverty conditions. Toxic stress, according to J.P. Shonkoff, et al., affects the immune system and can cause chronic diseases to develop at a very young age. Children under the age of six are the most affected as poverty frequently leads to lack of nutritious food required for optimal physical growth and brain development. Children from birth to age six, who do not receive adequate nutrition, may be affected behaviorally, mentally and physically, making the transition to school difficult.⁸

Quantitative Table 4-8

Children and Families in Poverty	73105	73111	73117	Oklahoma County	Oklahoma State	United States
% Children < age 18 in Poverty	27.6	65.9	59	27.5	24	23
% Children < age 5 in Poverty	32.5	72.9	69	30.6	28	26
% Families in Poverty	14.4	33.7	38	14.2	24	22

Source: Source: OK Wellness Score 2014, Oklahoma City County Health Department.

The Equality of Opportunity Project Organization⁹ has ranked counties by the opportunities afforded to its lowest income children. Oklahoma County ranks 67th out of 100 as one of the counties with the most negative opportunities. This means that a child growing up in a low income family (bottom 25th percentile) in Oklahoma County can expect to make 5.8% on average (7.6% for boys and 3.4% for girls) less than his or her current family makes when he or she reaches adulthood.⁹ For example, if a male child is growing up in a family with a base family income of \$19,918 (the median for 73117), as an adult male, he can expect to make \$1,155.25 less, or \$18,762.75. However, if a child is fortunate enough to move by age 13 to an area with more opportunity (a positive opportunity ranking) they can improve their earning potential and success by 30%. The improvement potential is negated by the negative influences within the first thirteen years if relocation happens after the age of thirteen⁹.

The use of Supplemental Nutritional Assistance Program (SNAP) benefits and free lunch programs also is an indication of a community's ability to buy nutritious food. Compared to 17% of county households some 31% of tri-clip households benefit from the SNAP program.”

Quantitative Table 4-9

Food Assistance Programs	73105	73111	73117	Oklahoma County	Oklahoma State	United States
% SNAP Use by Households	20.7	34.5	38.3	17	14.2	13.6
% Free and reduced lunch	73.5	43.7	45.8	64.5	60.5	48.1

Source: Source: OK Wellness Score 2014, Oklahoma City County Health Department.

Fast food restaurants are a viable option for low-income families because items are generally cheaper and can be quick for those who have time constraints that do not permit meal preparation. However, children in low-income families experience a greater adverse effect on their diet if food is consumed away from home and in fast food restaurants. When dining away from home, soda intake is twice as much when compared to what is normally consumed at home.¹² Unfortunately, fast food is often calorie dense, contains more sodium, and is less nutritious than fresh options offered.¹³ One study associated working mothers with an increase in obesity in children and adolescents. The longer the mother works, the greater the risk for the child to be obese.¹⁴ Though this article failed to show direct cause and effect, an association was demonstrated.

EDUCATIONAL ATTAINMENT

Education is important to health because it ties directly to the ability to obtain and secure employment, increased earning power, and employment opportunities. It also increases basic understanding of health and the behaviors important to sustaining health.¹⁵ The following shows the tri-clip and comparisons educational attainment levels.¹⁶

Quantitative Table 4-10

Educational Attainment						
Level of Education Achieved	73105	73111	73117	Oklahoma County	Oklahoma State	United States
% Of Total Population over age 25 with less than High School Education	11.76	18.5	16.33	14.07	13.82	14.28
% Of Total Population over age 25 with High School Education	27.68	31.72	38.58	25.46	31.72	28.24
% Of Total Population Over Age 25 with Some College or Associate Degree	30.06	31.23	29.77	31.14	31.23	28.99
% Of Total Population over age 25 with Bachelors Education	16.79	8.27	7.46	19.15	15.57	17.88
% Of total over 25 Masters, Doctorate, Prof	13.71	5.19	7.85	10.19	7.66	10.61

Source: <http://www.usa.com/oklahoma-city-ok-population-and-races-historical-education-level-data.htm>. Based on 2008-2012.

Northeast Oklahoma City has a higher percentage of residents who have less than a high school education than comparisons with the exception of 73105, which is higher than the county as a whole, and the nation but is less than the state. Among all states “Oklahoma ranks 48” out of 50 in educational attainment.”¹⁷ The effect of education on health is well documented. Researchers have found that those who complete four years of college compared to those who did not finish high school have a five year longer life expectancy. In addition, an individual who completes four years of college has a lower risk for diseases such as diabetes, obesity, and heart disease and has less potential to smoke.¹⁸

Interestingly, the tri-zip area, county and state have a higher educational attainment level than the United States as a whole in the percentage of those age 25 and over who hold a masters, doctorate or other professional degree. However, despite having a greater percentage with high level degrees, Northeast Oklahoma City, Oklahoma county, and the state of Oklahoma have a much greater percentage without a basic high school education degree.

Qualitative respondents discussed a definite need for health educational programs. Nearly half of structured interview respondents answered that the population obtains health-related information from sanctioned health facilities while the other half of the respondents answered that media was the primary source of health information for the population. Media was described as the local newspaper, television (specifically the Dr. Oz show), and the internet. In order to improve the diet of the population, 62.5% of structured interview respondents cited a need for health education. When asked what type of program would help with smoking cessation, 30.35% of structured interview respondents answered education. Many focus groups mentioned lack of health education as a barrier to health within the community. The majority of informal interview respondents suggested the development of educational programs in order to improve community health.

Table 4-11

Structured Interview – Where do you think the population obtains health-related information?						
<i>Church</i>	<i>Health Facility</i>	<i>Each Other</i>	<i>Media</i>	<i>They're not</i>	<i>NA</i>	<i>Total Answers</i>
8%	29%	20%	30%	11%	1%	89

Source: Lynn Qualitative Research

Table 4-12

Structured Interview – What would help the people in Northeast Oklahoma City consistently eat a nutritious diet?			
<i>Access</i>	<i>Economics</i>	<i>Education</i>	<i>Total Answers</i>
38%	21%	41%	85

Source: Lynn Qualitative Research

Table 4-13

Informal Interview – What would you do to improve the health of Northeast Oklahoma City?
<i>Primary Answers: Education and resources.</i>

Source: Lynn Qualitative Research

Basic nutrition and health education is typically taught in primary and secondary schools. Basic food preparation is a learned skill taught by generation to generation and through primary and secondary education, which exposes students to different food types and increases their interest as a result. The absence of fruits and vegetables in a person's diet, either because of cost or access, can result in lack of knowledge about how to prepare these foods and their value in terms of health. Lack of access also prevents family experimentation with food preparation and storage.¹⁹

EMPLOYMENT STATUS

Unemployment can present barriers to good health. According to a Gallup Poll being unemployed for greater than six months is associated with an increase in depression.²⁰ The unemployed have fewer resources available to obtain nutritional food, stable housing and health care, particularly preventative care. The tri-zip area has a higher unemployment rate than the comparisons and the unemployment in 73117 is 3.3 times higher than the state.²¹

Quantitative Table 4-14

Unemployment	73105	73111	73117	Oklahoma County	Oklahoma State	United States
% Unemployment	8	12.4	18.2	4.0	5.5	6

Source: US Census Quick facts and Wellness Now Score 2014.

Employment rates and achievement levels were less often mentioned by qualitative research participants when they described the population. During focus group research, one out of the 12 groups defined the population as having high unemployment rates. However, two of the 12 focus groups labeled the population as being under-employed and therefore, people worked multiple jobs. Respondents said that some community members were not able to seek preventative care due to time constraints of working

multiple jobs, and two of the 12 focus groups labeled the population as overall being under-educated, relative to health related topics.



Northeast Oklahoma City, represented by the tri-zip area, has a lower median income, a higher poverty level, receives more government supported Supplemental Nutrition Assistance Program (SNAP) dollars, and has higher unemployment levels than the comparisons. In addition, there are children at critical stages of mental and physical growth that are living in poverty, putting them at a greater risk of poor health now and in the future. The tri-zip area has a greater percentage of adult residents with less than a high school education. This can affect earning power and health knowledge and adds additional risk to mental and social well-being.

SECTION 5 COMMUNITY LIFE

This section describes household composition and types of households in the tri-zip code area. The information presented can help determine at-risk populations, and more appropriately direct community, state and federal dollars to resources that positively affect the health of a community. This section also explores systemic racism associated with the population. Examining the views on community and the current public opinion on race relations will help define opportunities for change and barriers to overcome.

MARITAL STATUS

The tri-zip area has a much lower marriage rate, a higher number of residents who have never been married and a higher divorce rate than comparison groups.

Quantitative Table 5-1

Marital Status	73105	73111	73117	Oklahoma County	Oklahoma State	United States
% Never Married over 15	46.6	34	42.3	30.01	30.6	31.83
% Separated	1.0	5.5	4.8	2.47	1.8	2.17
% Widowed	8.9	13.4	9.5	5.68	3.0	6.02
% Married	28.9	30.4	27.1	48.81	52.5	51.0
% Divorced	14.6	16.6	16.3	13.04	12.1	10.75
Single Status	73105	73111	73117	Oklahoma County	Oklahoma State	United States
% Single	71.1	69.5	72.9	51.2	47.5	50.77

Sources: <http://factfinder.census.gov/faces/tableservices/jsf/pages/productview.xhtml?src=bkmk>

To understand some of the ramifications of these comparisons, household living arrangements are important to review.

HOUSEHOLD TYPES

There are fewer family households than comparisons and fewer married family households by almost half the state and national rates.⁴ Further review of the family households illustrates additional differences that reflect a community with more single parent households than comparisons.^{4,5}

Quantitative Table 5-2

Household Arrangements	73105	73111	73117	Oklahoma County	Oklahoma State	United States
% Family Household (shares home with family or significant Other)	49.77	58.73	52.27	64.0	66.69	66.51
% Non-Family Household	50.23	41.27	47.73	36.0	33.31	33.49

Sources: <http://factfinder.census.gov/faces/tableservices/jsf/pages/productview.xhtml?src=bkmk>

Quantitative Table 5-3

Head of Household Comparisons	73105	73111	73117	Oklahoma County	Oklahoma State	United States
% Of Other Family Households with Female Householder, no Husband	20.99	32.09	23.08	14.30	12.42	13.39
% Married Family Households With Children <18	8.15	6.9	9.22	18.00	21.06	21.18
% Of Other Family Households with Female, No Male With Children <18	11.51	19.73	14.97	8.30	8.47	8.65
% Of Other Family Households with Female, No Male w/o Children <18	9.48	12.36	8.11	6.00	3.95	4.74

Sources: <http://factfinder.census.gov/servlet/tableservices/jsf/pages/productview.xhtml?src=bkmk> and <http://www.usa.com/oklahoma-county-ok-population-and-races.html#HouseholdandFamily>

The Northeast Oklahoma City data reveals significantly more single female head of households with children under 18 than the comparison areas. Single households with children can present some additional risks that married or double households with children do not. Having only one household income often means that earning power and leisure time is reduced. More residents in the tri-zip area are living without family or a significant other in the home than the comparisons. Other family household data such as number of male heads of household with no wife present, with and without children in the home, are similar to the comparisons. In addition, head of household for homes that are not characterized as "family" also are higher than the comparisons for both male and female heads of household, again illustrating that the tri-zip area has a much greater single living style.

LIVING WITH CHILDREN

The table below shows family households with children by age groups in the tri-zip area. The bottom row shows the percentage of families who have children under 18 who are not related living with them.⁴ Families falling into this category would be children living with grandparents, other relatives, or households with adopted, foster, or unrelated children. Grandparents raising grandchildren may pose a greater risk of poverty as they often live on fixed incomes.⁵

Quantitative Table 5-4

Housing Types and Description of Children	73105	73111	73117
% With Related Children under 18-Family Type	21.5	30.5	31.4
% With own children under 18-Family Type	16.6	23	25.4
% With own children under 6 years only-Family Type	4.1	6	8.1
% With own children under 6 and 6-17 years-Family Type	4.4	4.8	8.9
% With own children 6-17 years only-Family Type	8.1	12.2	8.5
% With no own children under 18-Family Type	4.9	7.5	6

Sources: <http://factfinder.census.gov/servlet/tableservices/jsf/pages/productview.xhtml?src=bkmk>

Single parenthood can be particularly challenging when the families are low income or living at 100% of the poverty level. Studies surrounding single parenthood suggest children^{6,7}:

- Have more emotional stress.
- Have lower self-esteem.
- Are less prepared for school.
- May have anger issues.

- May have trust issues.
- Have an increased risk of chronic disease as a result of toxic stress.
- Have an increased risk of poor economic stability as an adult.

A study conducted by researchers from the University of Georgia revealed that the long-term stress of poverty takes a physiological toll.⁸ An article, from a University of Georgia news release cited a quote from Gene Brody, the founder and director of the University of Georgia Center for Family Research ⁹:

Even though children often show resilience in overcoming the obstacles, doing well as students and later becoming successful adults, the physiological toll is much more lasting, often resulting in hypertension and leaving them vulnerable for other diseases such as diabetes, cardiovascular disease and cancer. Further this resilience comes at a price. As the body is bathed in stress hormones, these hormones compromise the immune system and other body functions, which can result in chronic diseases occurring earlier.

CULTURAL VIEWS

Members of the Northeast Oklahoma City community exhibit a strong sense of pride. All focus groups responded positively when asked to describe their community. Words used to label the community included "potential," "connected," and "friendly." Of the structured interview respondents, over half used positive descriptors for the area, including "vibrant," "growing," and "a good place to live." Similarly, 50% of informal interview participants described the community positively. This strong sense of pride creates a cohesive community with the ability to sustain positive change especially if improvements are family-centric. A portion of structured interview respondents cited a need to educate the child and parent in order to improve the health of the population. One focus group strongly advocated a need for family health education. Family friendly programs and park activities were listed as community needs by one-fourth of the structured interview respondents.

Table 5-5

Structured Interview - How would you describe your/the community?				
<i>Resources/Infrastructure</i>	<i>Economics</i>	<i>Positive</i>	<i>Crime</i>	<i>Total Answers</i>
35%	22%	33%	10%	93

Source: Lynn Qualitative Research.

Table 5-6

Focus Group - How would you describe your community?
<i>Primary answers: Pride, potential, united, heartbeat of central OKC, rich history, friendly.</i>

Source: Lynn Qualitative Research.

Table 5-7

Structured Interview - What type of physical activity/exercise do you think the NE population would enjoy most?							
<i>Park Activities</i>	<i>Organized Sports</i>	<i>Biking</i>	<i>Swim</i>	<i>Walking</i>	<i>Classes</i>	<i>NA</i>	<i>Total Answers</i>
14%	24%	7%	5%	31%	17%	2%	105

Source: Lynn Qualitative Research

Community cohesiveness was also a common theme among responses when research participants were asked questions about how best to improve the population's health. Over half of the structured interview respondents said community members would be willing to attend health related programs offered through the local churches or schools. Mentorship programs were also cited as a way to improve community health. Research participants described the ideal role model or 'community champion' as someone

well-respected within the community, and African American. The phrase “someone that looks like us” was commonly used. All 12 focus groups referred to community cohesiveness when asked how they would improve the health of the community. Respondents conveyed a desire to be empowered from within the community in order to improve the health of the population. This empowerment was related to the creation of resources to improve health, and programs that were produced by local community members.

Table 5-8

Structured Interview - If free programs were offered regarding these topics, how would we encourage community members to attend?					
<i>Media/Edu.</i>	<i>Church/School</i>	<i>Incentives</i>	<i>Role Models</i>	<i>Other</i>	<i>Total Answers</i>
22%	41%	12%	23%	3%	74

Source: Lynn Qualitative Research.

Table 5-9

Structured Interview - What type of program do you think would work best?						
<i>Education</i>	<i>Church</i>	<i>Incentive</i>	<i>Mentor</i>	<i>Media</i>	<i>NA</i>	<i>Total Answers</i>
26%	18%	23%	18%	5%	11%	66

Source: Lynn Qualitative Research.

Table 5-10

Focus Group - What would you do to improve the health of Northeast Oklahoma City?
<i>Primary answers: Empower from within and create resources that promote healthy lifestyles</i>

Source: Lynn Qualitative Research.

RACE

Institutionalized racism was discussed as a prevalent barrier to health improvements within the community. Multiple respondents stated that they felt prices at Northeast Oklahoma City businesses, including gas and grocery stores, exhibited inflated prices or a “poverty tax.” Respondents said they prefer to purchase goods and services, including grocery items, in areas outside of Northeast Oklahoma City where they felt prices were lower.

Table 5-11

Structured Interview - Where do people in NE OKC purchase food items?							
<i>Buy for Less</i>	<i>Otwell's</i>	<i>Convenience Stores</i>	<i>Fast Food</i>	<i>Outside NE</i>	<i>Other</i>	<i>NA</i>	<i>Total Answers</i>
32%	19%	16%	9%	17%	7%	1%	114

Source: Lynn Qualitative Research.

Distrust of authority figures within the health care system was cited as an explanation for residents of Northeast Oklahoma City not receiving the recommended preventative services. Over half of the focus groups cited race-related issues as a cause for the poor health outcomes of the community. Some structured interview respondents also cited institutionalized racism when asked to discuss the overall health of the community. Research respondents used phrases such as “historic skepticism of the health system” and “healthcare inequality.”

Table 5-12

Focus Group - Data shows people in OK have more health related issues than people in other states. Why do you think this is the case specifically for the Northeast Oklahoma City community?
<i>Primary answers: Institutionalized racism, distrust in doctors, do not have the same privileges as whites.</i>

Source: Lynn Qualitative Research.

Structured interview participants cited institutional racism, distrust in doctors and “do not have the same privileges as whites” as primary reasons for health related issues in the community. These views are born out in research. As described in a book written by Rachel Spector, *Cultural Diversity in Health and Illness*, African Americans may consider health care services in general as being patronizing or degrading. They may also have a general mistrust for health care arising from their experiences of long waits, unintelligible medical dialogue, inconsistent providers, perceived racism, and a sense of powerlessness.¹⁰ In addition, an Ethno-geriatric Core Curriculum Module offered by Stanford University suggests that non-compliance with previously recommended treatment plans either due to mistrust or poverty that restricts purchasing of prescriptions and treatment modalities, transportation issues or lack of insurance, can also act to further deter African Americans from seeking health care.”



In conclusion, Northeast Oklahoma City has a number of unique characteristics that may be presenting specific barriers to healthier lifestyles. Risks associated with children growing up in poverty and single head of household families are well documented. Persistent perceived institutionalized racism, mistrust, social stereotyping, and poverty in general might be affecting both the use of preventive care and the willingness to seek medical treatment. Without intervention, toxic stress from living in poverty and all the associated family challenges are likely to continue to affect future generations.

SECTION 6

ENVIRONMENT

Healthy communities are typically defined as having the resources and infrastructure needed to support active lifestyles and access to preventative care. The environment in which residents work, live, and play can either pose barriers or assets to the health of a community. Environment, in this section will encompass community life as it serves Northeast Oklahoma City in relation to food, transportation, environmental issues, and crime. Environmental topics relating to health include water quality, air and soil pollutants and the structural issues of homes, buildings, streets, and sidewalks.

SIDEWALKS AND STREETS

According to respondents of the qualitative study, Northeast Oklahoma City is lacking the infrastructure and resources needed to sustain a healthy population. Northeast Oklahoma City exhibits the basic hard infrastructure components such as roads, utilities, and telecommunication networks. However, many respondents cited the need for sidewalks in public areas, including the local neighborhoods. According to 30.35% of structured interview respondents, Northeast Oklahoma City is in need of additional sidewalks. Focus group participants also mentioned that many areas were poorly lit or had no type of street lighting, and that additional sidewalks were needed.

Table 6-1

Structured Interview - How would you describe your/the community?				
<i>Resources/Infrastructure Needed</i>	<i>Economics</i>	<i>Positive</i>	<i>Crime</i>	<i>Total Answers</i>
35%	22%	33%	10%	93

Source: Lynn Qualitative Research.

Table 6-2

Structured Interview - Data shows people in OK have more health related issues than people in other states. Why do you think this is the case specifically of Northeast Oklahoma City community?						
<i>Resources/Infrastructure</i>	<i>Economics</i>	<i>Education</i>	<i>Culture</i>	<i>NA</i>	<i>Other</i>	<i>Total Answers</i>
30%	26%	15%	24%	1%	4%	98

Source: Lynn Qualitative Research.

As part of planned urban renewal, a study known as "The Blight Study" concurred that the condition of roads, and a number of sidewalks and curbs were wholly inadequate in Northeast Oklahoma City and surrounding areas outside the tri-zip area.¹

Quantitative Table 6-3

Blight Study Findings	Tri-Zip Area	Oklahoma City
% No Curb or only one side	23	20.6
% No Side Walk	92.7	71.4
% Side Walk One Side	4	4
% Sq Footage of paved road that is deemed in worst condition	34	45

Source: Blight Study, City of Oklahoma City Planning Department.

In addition to the Blight Study findings in Table 6-3, The Oklahoma City-County Health Department conducted a Walkability Workshop on April 13, 2013 of Zip Code 73111 that came to many of the same conclusions regarding walkability.² The lack of sidewalks and curbs makes the area much less "walk-able" as there is no place to walk safely. Limited night lighting in many areas and physical obstructions like poles and support wires pose extra physical obstacles and a higher potential injury risk.

Food Access

The area is lacking in soft infrastructure components such as facilities that provide tangible goods and services needed to sustain healthy lifestyles. Only two full size grocery stores exist in the entire tri-clip area. Both stores offer limited fresh fruits and vegetables. Some residents shop at local convenience stores as an alternative. One-third, or 32.14%, of structured interview respondents listed convenience stores as a food source. Restaurants are limited to soul food and barbeque (cultural and ethnic for the most part) and fast food restaurants. The following represents data taken from a web-based database for evaluating community food access provided by the Policy Link, The Food Trust and Reinvestment Fund via their Healthy Food Access Portal.³

Quantitative Table 6-4

Food Desert US Department Of Agriculture Evaluation 2011			
Resource	73105	73111	73117
Full Service Grocery Stores	0	2	0
SNAP Retailers Other (Non-Full Service Grocery Stores)	3	27	9
Farmers Markets	1	2	0
Fast Food or Take Out Restaurants	8	8	0
Poverty Census Tracts	2 of 6	6 of 9	8 of 13

Source: Blight Study, City of Oklahoma City Planning Department.

Since 2011, the area has become more poverty stricken ⁴ and there remain only 2 grocery stores with the greatest access to food provided through corner convenience stores. Northeast Oklahoma City is a 'food desert', defined by the U.S. Department of Agriculture as:

"...urban neighborhoods and rural towns without ready access to fresh, healthy, and affordable food. Instead of supermarkets and grocery stores, these communities may have no food access or are served only by fast food restaurants and convenience stores that offer few healthy, affordable food options. The lack of access contributes to a poor diet and can lead to higher levels of obesity and other diet-related diseases, such as diabetes and heart disease."⁵

The Department of Agriculture further defines low access and low income to determine designation as a food desert. At least 20% of the population must be low income and at least 33% of the population must be further than one mile from the grocery store. The level of prosperity and access will affect food choices made by community members because of the ability to purchase foods. If income is low and there are few grocery stores within walking distance or close access, individuals may make food choices at smaller corner quick shop stores that have limited fresh produce and foods. As income decreases, residents consume more boxed and prepared foods because they are cheaper and more available at smaller convenience stores but are, unfortunately, more calorie-dense and less nutritious.⁶ This acts to increase the risk of obesity and subsequent related chronic diseases.

Over half of structured interview respondents said that improved access would help the population consistently consume a more nutritious diet. When asked the same question, all focus groups responded that access was needed in order to improve the eating habits of the population. Several focus groups declared a need for community gardens that provide fresh fruits and vegetables to local neighborhoods.

Table 6-5

Structured Interview - Where do people in Northeast Oklahoma City purchase food items?							
<i>Buy for Less</i>	<i>Otwell's</i>	<i>Convenience</i>	<i>Fast Food</i>	<i>Outside NE</i>	<i>Other</i>	<i>NA</i>	<i>Total Answers</i>
32%	19%	16%	9%	17%	7%	1%	114

Source: Lynn Qualitative Research.

Table 6-6

Structured Interview - What would help the people in Northeast Oklahoma City consistently eat a nutritious diet?			
<i>Access</i>	<i>Economics</i>	<i>Education</i>	<i>Total Answers</i>
38%	21%	41%	85

Source: Lynn Qualitative Research.

Table 6-7

Focus Group - What would help the people in Northeast Oklahoma City consistently eat a nutritious diet?
<i>Primary answer: Access</i>

Source: Lynn Qualitative Research.

HEALTHCARE ACCESS

An overwhelming percentage, 76.78%, of structured interview respondents answered 'yes' when asked if there was a need for more health care facilities or facilities in different locations. Specifically, qualitative study respondents confirmed a need for more urgent care facilities and facilities in different locations. Currently, Northeast Oklahoma City is home to only two urgent care facilities, both of which have limited operating hours. With many of the population working multiple jobs, it was stated that members of the community are unable to seek medical care during the typical work day, 8am-5pm, and with urgent care facilities only having limited operation hours, people have few choices and often seek treatment at emergency room facilities.

Table 6-8

Structured Interview - Is there a need for more health care facilities or facilities in different locations?						
<i>43 out of 56 responded Yes. Services needed listed below.</i>						
<i>Primary Care Physician</i>	<i>Outreach</i>	<i>Urgent Care</i>	<i>Low Cost Service</i>	<i>Location</i>	<i>Other</i>	<i>Total Answers</i>
11%	18%	29%	13%	22%	7%	45

Source: Lynn Qualitative Research.

Healthcare access needs documented in the qualitative review results are further substantiated when looking at the over-utilization of the Emergency room in the tri-zip area ²:

Quantitative Table 6-9

Area	Emergency Room Visits/ 1000 Residents
73105	795.6
73111	1112.1
73117	1040.8
OK County	519

Source: OK Wellness Score 2014, Oklahoma City County Health Department.

Health Care access is driven by multiple factors ⁸:

- Availability of services both in level of care and type of care needed.
- Abundance of need.
- Cultural attitudes toward seeking care.
- Healthcare provider bias toward community culture.
- Cost/ poverty.
- Location and accessibility.
- Insurance availability.

In Northeast Oklahoma City, many of these factors may be influencing the ability to receive care. This area has a great number of health care assets (Oklahoma Health Science Center with a large number of specialty clinics, emergency room, and hospital nearby, two urgent care centers with limited hours, one primary care physician office, mental health crisis, and clinics, etc.). However, the availability of transportation, hours of operations (many clinics open only during business hours), lean primary care availability, poverty, lack of insurance, and cultural and provider bias may be directly affecting the community's health care. Twenty three percent of all residents in Oklahoma County are uninsured.⁹ Given the poverty of the studied area combined with unemployment rates, it is assumed the uninsured percentage rate would be higher in this location. In addition, the nature of a teaching facility is that multiple providers rotate through specific areas for short periods of time making the continuity of care an issue for those who expect to be seen by the same clinician each time. Individuals who seek care and are not used to advocating for their own personal care may find this system overwhelming and confusing. Couple this with the paralyzing shame that can accompany poverty and the inability to take medical advice due to cost constrictions and the result can be an incredible disconnect between the need and the ability to receive.



ACTIVITY RESOURCES

Availability of recreation assets plays a role in health. The greater the access to recreation and park facilities, the more likely residents are to participate in physical activity which promotes health and well-being. Northeast Oklahoma City is in need of more facilities and infrastructure to promote active lifestyles. According to all qualitative information received, walking is the physical activity that the population would enjoy and be most likely to engage in on a consistent basis. All 12 focus groups named walking or jogging as an enjoyable activity for the community. Similarly, all 12 focus groups cited a need for parks, walking trails, or facilities such as recreation centers to promote activity. The majority of structured interview respondents also named walking as an enjoyable physical activity for the population and the interview respondents answered that facilities or infrastructure was needed to support the activity. Even though these parks and centers exist in the area, most 1) do not have night lighting, 2) have dirt or no parking lots, 3) walking trails are very short and unlit, 4) lack drinking fountains and, 5) provide few bathroom facilities. Parks with outdoor organized sports fields and courts have no equipment and often are without nets and feature uneven, broken paving. Existing recreation Centers are in older buildings with deteriorating interiors and exteriors. Classes and equipment are very limited.¹⁰ However, with some improvement in funding and resources, Northeast Oklahoma City's recreation facilities could become major assets in helping improve the health of the community. See Appendix for full list of available facilities.

Table 6-10

Focus Group - What type of physical activity/exercise do you think the NE would enjoy most and where can they do this activity?
Primary answer: Walking, infrastructure needed for walking

Source: Lynn Qualitative Research.

Table 6-11

Structured Interview - What type of physical activity/exercise do you think the NE population would enjoy most?							
<i>Park Activities</i>	<i>Organized Sports</i>	<i>Biking</i>	<i>Swimming</i>	<i>Walking</i>	<i>Classes</i>	<i>NA</i>	<i>Total Answers</i>
14%	24%	7%	5%	31%	17%	2%	105
Where can they do this activity?							
<i>Facilities/Infrastructure Needed</i>		<i>NE School/Park</i>	<i>Other</i>	<i>NA</i>	<i>Total Answers</i>		
61%		22%	4%	13%	54		

Source: Lynn Qualitative Research.

Given these results of the qualitative research and the associated inactivity data discussed in Section 3 of this report, the infrastructure combined with the inactivity rates suggest Northeast Oklahoma City's environment may not be conducive to good health.

CONTAMINATION

Pollutants in water, air, and soil also affect the health of a community. Exposure to contaminants can cause an increase in risk of disease depending on the source, amount, and type of toxic material. Homes, places of work, and recreation pose the greatest risk since these are the places where the most time is spent. Risk is also dependent on age and amount of the exposure. For example, children, due to developing and not yet mature bodies, are at greater risk when it comes to the amount of contaminant-to-size ratio, body surface area exposure, and length of exposure. Children who are very young and remain in a contaminated environment for much of their life will have a greater exposure interval."

Air pollution sources vary by community. In urban communities, like the tri-clip area, common air pollutants are exhaust fumes from commuters, businesses, and factories. These contaminants are expressed into the air via fumes and exhausts from cars and trucks, electrical utilities, manufacturers, solvents, chemicals in manufacturing processes, and the like. When these gases combine with other organic material in the air and water and are exposed to sunlight, ozone is created. The Oklahoma Department of Environmental Quality monitors the air quality based on the Environmental Protection Agency guidelines and issues advisories accordingly. The air quality changes depending on a number of factors and varies from day to day. For ozone, for example, the tri-clip area remained with an ozone moderate risk for the entire month of July 2015. Moderate means that people who are particularly at risk for respiratory problems, the elderly and children should remain indoors as much as possible and should refrain from extreme or long term exertion.

The tri-clip area also has known exposures to particulate (small particles of air contaminants released into the air) matter air pollution. The following represents the exposures expressed in exposure ranges.¹⁴

Quantitative Table 6-12

Particulate Air Pollution in 2013	73105	73111	73117
# Companies with Emissions in the minor range of emissions	1	2	2
# Companies with Emissions in the minor to significant range of emissions	0	1	6
# Companies with Emissions in the major range of emissions	0	0	1

Source: Oklahoma Department of Environmental Quality.

The zip code with the greatest particulate matter emissions is zip code 73117, which is physically closest to the interstate and has a number of manufacturing businesses. This is also the zip code with the highest chronic respiratory disease mortality/100,000 population.¹² A focus group conducted in 73117 cited air pollution as a primary health concern. Research participants discussed the consistent presence of a visible layer of particles on personal vehicles.

Water and soil contamination stem largely from chemical run off and brownfields. According to the environmental agency: "Brownfields are real property, the expansion, redevelopment, or reuse of which may be complicated by the presence or potential presence of a hazardous substance, pollutant, or contaminant."¹³ Contaminants common in the tri-zip area, are presences of dry cleaning chemicals from past dry cleaning businesses, presence of submerged gas tanks from past gas stations, and chemical and metal contamination from past businesses. Brownfields have been identified within the tri-zip area.¹³

BUILDING CONDITIONS

Deteriorating and old existing homes and buildings may contribute to environmental and health concerns in the area. Aging homes and buildings that are not maintained have mold, mildew, and dust. Buildings built before 1978 were likely painted with lead based paint. As the buildings age, the paint flakes, turns to dust, and can contaminate the building interior and surrounding soil and water. In addition, buildings constructed before 1986 had lead pipes that can contaminate drinking water.

Lead contamination can lead to ^{14,15}:

- Risk of low infant birth weight.
- Greater risk of infant mortality.
- Potential risk of lead poisoning in children and adults.
- Risk of learning difficulties and developmental issues in young children.
- Possible increased risk of some cancers.

During the qualitative interview process, urban blight was referred to as a primary issue contributing to the overall well-being of the population. Some structured interview respondents described the area as blighted or deteriorating. Two focus groups described the area as being "run down." Similarly, half of the focus groups felt that their community was "ignored or forgotten" by others within Oklahoma City.



Table 6-13

Focus Group - How do you think people outside Northeast Oklahoma City would describe your community?

Primary answers: Ignored, outsiders are afraid of the area

Source: Lynn Qualitative Research.

The buildings in the tri-zip area are old compared to the state as a whole and nation. The median year for houses to be built in the state was 1974 and 1976 in the United States.¹⁶ On the other hand, more than 30% of homes in 73105 and 73117, and more than 50% of the homes in 73111, were built prior to 1959.

Quantitative Table 6-14

Building Date Range of Houses	73105	73111	73117
% Of all housing units occupied by renters built prior to 1959	30.00%	56.40%	36.90%

Source: US Census Bureau, American Community Survey 2011- 2013.

The presence of vacant and abandoned buildings also poses the following additional risks to the community ^{18,20,21}:

- Increase in crime.
- Decrease property values.
- Increases risk and exposure to drugs and other unsafe behavior.
- Indirectly can cause further increase in poverty as residents relocate creating more abandonment.
- Indirectly can decrease jobs as businesses relocate to more profitable areas.
- Decrease in access to health care by increasing medical indigence.
- Decrease in the amount of green space for activity.
- Possible increase in rodent infestation and spread of disease.
- Resident exposure to dilapidated building physical hazards.
- Increase in social isolation as residents refrain from going out due to increased crime.
- Indirectly increase in obesity due to isolative inactivity, increased chronic diseases.

The "Blight Study", previously noted, was conducted for Northeast Renaissance Urban Renewal Area,²² which includes the tri- zip area, and the findings were:

- 139 vacant and abandoned buildings/ square mile compared to 19 per square mile in the rest of the city.
- Area had a negative 13% population change compared to a 30% increase population change to the city between 1990 and 2010.
- Percent of property value change to the area was negative 0.6% while the city had a 9% increase in property values.
- Average housing vacancy was 20% for the area versus 13.5% for the city.

An additional study of Oklahoma City was conducted by GSBS Richman Consulting called the "Vacancy and Abandonment Study" and revealed the following costs to city residents per year as a result of dealing with vacant structures ²³:

Quantitative Table 6-15

Vacancy and Abandonment Study	Additional Costs/year
<i>Police Additional Cost Associated with Abandoned Buildings</i>	<i>\$17,173,214</i>
<i>Fire Additional Cost Associated with Abandoned Buildings</i>	<i>\$48,564,774</i>
<i>Animal Control Additional Cost Associated with Abandoned Buildings</i>	<i>\$424,184</i>
<i>Total Costs Associated with Abandoned Buildings</i>	<i>\$66,162,172</i>

Source: GSBS Richman Consulting, Vacancy and Abandonment Study.

Urban blight, including the costs and risks associated with abandoned buildings, brownfields, and pollution clearly can impact community health. To address these issues, widespread clean up and policy issues may have to be addressed.

TRANSPORTATION

Half of the structured interview respondents answered "bus or borrow a ride from family/friends" when asked how members of the Northeast community travel to receive health care. Similarly, half of the focus groups stated that public transportation was inadequate in meeting the needs of the population.

Table 6-16

Structured Interview - How do you think people in Northeast Oklahoma City travel to receive health care?								
<i>EMSA</i>	<i>Bus</i>	<i>Borrow</i>	<i>Own</i>	<i>Taxi</i>	<i>Walk</i>	<i>Other</i>	<i>NA</i>	<i>Total Answers</i>
8%	32%	24%	22%	5%	5%	2%	2%	93

Source: Lynn Qualitative Research.

Current modes of transportation available to this community include public buses, personal automobiles, taxicabs, walking, and/or biking. There are limitations to the use of the public transportation system including hours of operation (less than 24 hours daily and with no availability on Sunday), cost, waits from 30-60 minutes at stops that frequently are without benches, curbs, lighting or cover (additional information about the public transportation system can be found in the assets section). For all and especially those who walk or ride bikes, crime can be a deterrent, particularly at night when some streets are poorly lit and lack sidewalks. Community health is predicated upon many factors including access to health care and nutritional food and exercise. If residents are unable to get to appointments, grocery stores, markets, and suitable places to exercise, transportation becomes a barrier to community health.

CRIME

A community is affected by how secure and safe its residents feel. Perception of safety and security of a community both by its residents and by those outside of the community can adversely affect the community's ability to become healthy. Crime can cause businesses to re-locate or never come at all. As businesses relocate for safer surroundings, residents often are left with more abandoned buildings, more crime and more community expense, diverting resources that could have been used to improve community health.

Crime can be a major barrier to health, restricting residents' everyday activities. High crime leads to ²⁴:

- Increase in fear and depression,
- Increase in social isolation,
- Decrease in physical activity,
- A further increase in the crime rate,
- Long term physical, mental and social problems.

Some of the most salient crime statistics ²⁵⁻²⁶ of the tri-zip area are:



Quantitative Table 6-17

Crime Comparison 2010-2012	73105	73111	73117	County	State	US
<i>Homicides/100,000 Population</i>	60.2	58.6	84.4	8.6	5.8	5.1
<i>Assaults/ 100,00 Population</i>	365	1197	424	210	242	636
<i>Gun Related Mortality/ 100,000 Population</i>	68.7	71.7	89.6	16.3	16.5	3.5

Source: Lynn Qualitative Research.

Quantitative Table 6-18

Crime 2014 Northeast Oklahoma City	73117	73111	73105
Burglary	165	394	125
Assault	170	320	99
Robbery	14	42	7
Larceny	227	499	121
Stolen Vehicle	104	199	79
Attempted Suicide	75	78	43
Signal 7 DOA	23	27	13
Child Molestation/abuse/abandonment	35	47	21
Rape	6	19	3
Domestic	669	1776	589

Source: Data from Oklahoma Police Department by zip code for the year 2014.

Both qualitative and quantitative data suggests crime is a major factor in the health of this community.

Crime Summary of Northeast Oklahoma City vs. comparisons:

- Crime statistics are all higher.
- 73111 is much higher in burglaries assaults, domestic and larceny calls.
- Homicide and gun related violence is highest in 73117.

People connected to Northeast Oklahoma City, whether residents or former residents, view the community positively. However, when asked how people outside of Northeast Oklahoma City view the community, 60.7% of responses related to crime. Words such as 'dangerous', 'scary', and 'violent' were often used descriptors. Several focus groups listed crime as a barrier to the population becoming healthy. Gang activity and drug use were cited in relation to crime activity in Northeast Oklahoma City. Although crime rates are higher in the tri-zip area than in other quadrants of Oklahoma City, some members of the community said they feel safe and that crime rates are misrepresented by local media.

Table 6-19

Structured Interview - How do you think people outside of Northeast Oklahoma City would describe your/ the community?						
<i>Resources/Infrastructure</i>	<i>Econ.</i>	<i>Positive</i>	<i>Crime</i>	<i>Race</i>	<i>NA</i>	<i>Total Answers</i>
28%	10%	8%	39%	14%	1%	87

Source: Lynn Qualitative Research.

The environment poses several barriers to the health of Northeast Oklahoma City. Environmental blight, contamination, aging and deteriorating buildings, abandoned buildings and the economics of the area pose major issues for residents' health and complicates everyday life. Crime is a major factor and poses significant threat to health both directly and indirectly as it isolates and prevents normal activity. Places to enjoy exercise are old and without lighting, supervision and essential water and bathroom facilities. Transportation for many is limited to walking during the hours when public transportation is not available and exposes the public to greater risk of crime in poorly lit and curbside areas with no sidewalks. The environment and all that it includes could be the single greatest antagonist to the health of Northeast Oklahoma City residents.

SECTION 7

NEXT STEPS AND COLLABORATIVE DESCRIPTION

The purpose of the Lynn Lifestyle Summary^o – Northeast Oklahoma City is to serve as a tool for the Collaborative to make sustainable health improvements within this vibrant community. The Healthy Community Collaborative – Northeast Oklahoma City will review the Lynn Lifestyle Summary^o, aided by experts for interpretation, and develop 10-year measurable health goals. Collectively they will further develop two-year objectives, designed to cumulatively work towards achievement of the 10-year goals. The Collaborative will share an aligned vision for Northeast Oklahoma City, serve without compensation or financial benefit to them individually or to their businesses/private interests. Members are selected for 10-year term with commitment to find their comparable replacement should they need to vacate.

COLLABORATIVE SECTOR MEMBERSHIP

The Collaborative membership will be developed through the leadership of Lynn, combined with other leaders within Northeast Oklahoma City and various influence areas. Membership may include, but is not limited to, one - two representatives from each of the following sectors:

- | | | | |
|-------------------|-------------------------------|----------------------------|-----------------|
| • Funder/Finance | • Public at large | • Education | • Medical |
| • Faith Community | • Health | • Business | • Food/Exercise |
| • Law Enforcement | • Elected Official/Government | • Marketing Communications | |

WORK OF THE COLLABORATIVE

- To review, understand, and interpret potential ramifications, barriers and opportunities of the Lynn Lifestyle Summary.
- To develop Collaborative membership broad enough to handle or know how to identify support for all Northeast Oklahoma City lifestyle issues but focused enough to have members committed to the work for a period of up to 10 years. Lifestyle Collaborative memberships will be staggered 2-year terms.
- The Collaborative will meet regularly and will hold itself accountable to achieve certain measurable goals identified by the Collaborative and in concert and support of the work of the Oklahoma City County Health Department and other health improvement institutions.

OBJECTIVES:

- To increase awareness of the lifestyle issues within Northeast Oklahoma City.
- To improve communications among those concerned and involved with the lifestyle issues of Northeast Oklahoma City.
- To provide a forum where like-minded people can work together to facilitate, develop and implement solutions for the lifestyle issues of Northeast Oklahoma City.
- To identify programs, services, and partnerships which can work together to improve the lifestyle issues of Northeast Oklahoma City.
- To provide a vehicle where all interested parties including the public at large, health providers, educators, churches, employers, government agencies, friends and neighbors, can help support lifestyle changes through their time, services, programs, or revenue.

The Lynn Healthy Community Team will serve as facilitators of the Collaborative. As designated by the Lynn Institute's Community Health Planning and Review Committee, Lynn staff will assist with organization of Collaborative meetings and serve as an informational resource for members of the Collaborative and the work they will implement. Once the Healthy Community Collaborative – Northeast Oklahoma City is active, the Lynn Healthy Community Team will begin similar qualitative and quantitative research in order to produce a Lynn Lifestyle Summary^o for another at-risk population within Oklahoma.

Appendix A – Research Methodology

LYNN HEALTHY COMMUNITY PLAN® RESEARCH METHODOLOGY

The foundation of Lynn Healthy Community Plans® is comprehensive research designed to define an overall situation through the compilation and evaluation of (1) Community assets; (2) Unique health/environmental conditions specific to particular groups, neighborhoods, or disease specific situations, and (3) Opinions and values explaining behaviors and lifestyle conditions.

The Lynn plan employed asset mapping (reviewing and summarizing the area's history and compiling asset lists), quantitative and qualitative research.

QUANTITATIVE RESEARCH

Quantitative Research highlights statistical data from government sources -- such as the Oklahoma City County Health Department, Oklahoma State Department of Health, and the Centers for Disease Control and Prevention -- to provide the base of the quantitative demographic data and a consistent, comparable reference set.

The process of determining the quantitative description of Northeast Oklahoma City involved detailed steps based on a literature search and subsequent tracking and review of over 1,000 references. Data directed by the literature search was gathered at zip code level from publications and accessible public domain databases. Original source data was developed if no public database was available. Sources from large databases were used as often as possible and include 856 data elements in addition to numerous rankings. In total, more than 4,000 data pieces were collected at the zip code, city, county, state and/or national level.

To provide zip code comparisons for the data facts only available at the county/state level, Lynn researchers developed a calculated formula for comparison purposes. Though small population estimates may have been used to configure the original county level statistics, data professionals validated methodology in projecting, interpreting the tri-zip. Analysis was then conducted by comparing data elements within the tri-zip area to like city, state, county, and national data wherever available or where calculated. Differences were noted as positive or negative and the most telling data elements were summarized.

QUALITATIVE RESEARCH

Qualitative Research describes explanations and comments gathered through in-depth structured interviews, informal interviews, and focus groups. The information is used to augment or explain quantitative data.

The Lynn Healthy Community Team obtained input from 56 influence leaders through structured interviews, 12 focus groups, and 61 informal interviews. Combined, this data identifies or explains critical issues, which may be either barriers or opportunities to improve the conditions within Northeast Oklahoma City. Questions for each qualitative research segment were based upon specific goals and objectives as determined by the vision and mission of the Lynn Institute for Healthcare Research, Inc. Structured Interviews included, but were not limited to, area professionals, church leaders, health care experts, and city officials while focus groups and informal interviews were comprised of Northeast Oklahoma City residents. Each focus group lasted one hour and was conducted at a variety of Northeast locations. The Lynn Healthy Community Team served as facilitators and encouraged each focus group member to participate.

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Appendix C – Assets

ASSETS 1 - BUSINESSES & GOVERNMENT

There are 1,567 businesses; 241 different types of businesses. Zip code 73105 has 847 businesses, 73111: 625, and 73117: 332. These businesses include light industrial and manufacturing, customer services, and minimal retail. Business Service providers include:

BUSINESSES IN NORTHEAST OKLAHOMA CITY			
Business Type	No.	Business Type	No.
Accounting	11	Liquor Stores	5
Automotive Repair	17	Membership Organizations	61
Banks & Credit Unions	9	Natural Gas Pipelines (73105)	21
Commercial & Heavy Contractors	20	Oil & Gas Exploration/Production/Field Services	15
Commercial Printers	10	Plumbing & HVAC Contractors	22
Insurance Agencies & Brokers	24	Radio/TV/Newspaper	10
Janitorial & Carpet Cleaning Services	20	Truck Rental, Trucking & Truck Load Carrier Organizations	1
Landscaping	10	Water & Sewer Utility	1
Laundry/Dry Cleaners	3	Wholesale Sector Organizations	30
Legal Services	29	Liquor Stores	5
Manufacturing	79		

SERVICE/SHOPS/RELATED BUSINESSES:

There are five Hardware/Building Supply Stores, four Clothing/Uniform Stores, 27 Hairdressers/Barbers, four Nail Salons, two Pest Controls, three Florists, four Furniture Stores (three Manufacturers/one Store), one Jewelry Store, four Discount Stores, two Laundry & Dry Cleaning, and four Appliance Stores, three Bookstores, and two Sports Equipment Stores.

Minority Owned -- Of the 1,567 business, Women own 119; 46 are owned by Women/Minority, and 87 are owned by Male or Female Minorities.

BUSINESS OWNED BY	73105	73111	73117	TOTAL
Women	45	51	23	119
Women & Minority	15	21	20	46
Minority Owned (male & female)	20	38	29	87

MEMBERSHIP ORGANIZATIONS: The list includes 61 membership organizations.

MEMBERSHIP ORGANIZATIONS	73105	73111	73117	TOTAL
	41	13	7	61
American Legion Auxiliary of Oklahoma Inc.	Lupus Foundation of America, OK Chapter	Oklahoma Hawks Basketball Association		
Ayeni International Incorporated	National Electrical Contractors Association	Oklahoma Engineering Foundation		
Birth Parent Association	OK Bureau of Narcotics Employee Assn	Oklahoma Nursing Home Association		
Blessed to Give Outreach Ministries	Oklahoma Aggregates Association	Oklahoma Osteopathic Association		
Bonnie Helen Colbert Irrevocable trust	Oklahoma Association for Justice	Oklahoma Republican Party		
Boulton Foundation	Oklahoma Association of Carrier Technology Education	Oklahoma Society to Prevent Blindness		
Camp Burge Youth Adolescent	Oklahoma Association of Youth Services	OU Energy Mngt Alumni Assoc		
Community Adolescent & Rehabilitative Effort	Oklahoma Black Caucus Foundation	Positive Attitudes A Step to Success		
Disabled American Veterans	Oklahoma City Muskogee Creek Association	Prevent Blindness Oklahoma		
Drake Gungoll Foundation	Oklahoma City Muskogee Association	Propaneorist		
Earthy Ministry Foundation	Oklahoma City Northeast Inc	Republican County Headquarters		
Frezpark Homes	Oklahoma Co Medical Society - Community Foundation	Rhonda K Hutson Foundation		
Friends of Mansion	Oklahoma Congress of Parents & Teachers	Sylvanus G. Felix Foundation		
Friends of the Oklahoma History Center	Oklahoma County Farm Bureau	Thoroughbred Racing Association of Oklahoma		
Horseman Benevolent Protective Association	Oklahoma County Immunization Coalition, Inc.	Top Ladies of Distinction, Central Ok Chapter		
Jim Thorpe Association	Oklahoma Democratic Party	Urban League of Greater Oklahoma City, Inc.		
Kappa Alpha PSI Fraternity, Inc.	Oklahoma Educational Television Authority	Veterans of Foreign Wars		

GOVERNMENT	73105	73111	73117	TOTAL
Agencies	122	39	15	176
Buildings	42	17	11	70

Additionally, there are five Oklahoma City/County related agencies: Oklahoma City County Health Department, Oklahoma County Health Department, Oklahoma State Department of Health, Department of Human Services, and the Oklahoma City Housing Authority.

ASSETS 2 - HEALTH CARE & EMERGENCY SERVICES

HEALTH CARE: The three zip codes studied surround zip code 73104, home to the Oklahoma Health Center which includes the University of Oklahoma Health Sciences Center (includes College of Medicine, Dentistry, Pharmacy, Nursing, Allied Health, Public Health & Research), three hospitals including the Veterans Administration Medical Center, and more than 40 other major health agencies.

HEALTH CARE SERVICES	No.	HEALTH CARE SERVICES	No.
Adult Day Care Centers (total capacity 120)	2	Inpatient Psychiatric Facilities	2
Alcoholics Anonymous Club House	1	Lions Eye Bank	1
Ambulatory, General & Specialty Clinics	6	Mental Health/Substance Abuse clinics/ Agencies	12
Assisted Living Public Senior Housing	3	Occupational Health Clinic	1
Associated agencies: Oklahoma Hospital Association, Ok Board of Examiners, Veterans Affairs Dept., Dept. of Mental Health & Substance Abuse	4	Pharmacies	2
Chiropractic Center	1	Pharmacy 3rd Party Service	3
Chiropractic Center	1	Physical Therapy	1
Dialysis Center	1	Public Health Associations	2
Disability/ADL Clinic	1	Skilled Nursing/Nursing homes (c446 beds)	5
Home Health	1	Urgent Walk-In clinics	2

Other healthcare services include 35 dentists, five dental clinics, two free or reduced fee dental clinics; 37 social service agencies, and seven funeral services, one grief counseling and no cemeteries.

FIRE & RESCUE: Oklahoma City Police Department, Highway Patrol Office (also chief of staff and Highway Patrol Training facility), two Oklahoma City Fire Department Stations, and one Correctional Facility: Kate Barnard Community Corrections Center, state operated adult community corrections center with a capacity of 260 female offenders. Of those, 60 are work release.

ASSETS 3 - FAMILY & CHILD RELATED SERVICES

There are 76 licensed childcare centers/homes with a capacity for 2,071 children in the area, with 44 % having a rating of two stars (descending rating scale starting with 3, 2, 1+, and 1).

CHILD CARE BY RATING & LOCATION									
LOCATION	TOTAL	IN HOMES	CENTERS	CAPACITY	*NO DHS SUBSIDY	3 STAR	2 STAR	1+ STAR	1 STAR
73105	18	10	8	438	2	0	15	0	3
73111	38	21	17	1043	3	3	27	2	6
73117	20	13	7	590	0	3	11	1	5
TOTAL	76	44	32	2071	5	6	53	3	14
*Centers that do not have a DHS Contract subsidy.									

<http://www.okdhs.org/programsandservices/cc/star/docs/starfactsheet.htm> www.okdhs.org

Additionally, there are four Head Start pre-schools and one Even Start Family School; 31 Agencies in Support of Families and Children; one Youth Homeless Shelters, and nine Summer Camps.

ASSETS 4 - EDUCATION

	73105	73111	73117
K-12 Public	Dave Elementary (Special Focus)	Northeast Enterprise Middle & High Thelma R. Parks Elementary Martin Luther King Elementary Harper Academy (Special Focus) Millwood k-8 and 9-12	Douglass High School Double Middle Moon Elementary Edwards Elementary Kipp College Prep (Special Focus)
K-12 Private	Sweet Smiles Learning Academy Sky Foundation, Inc.	St. Johns Christian Heritage Academy Metro Career Academy Parkview Adventist Academy Harper Academy Rose Academy	
GED	OIC of Oklahoma County Cope, Inc.	Northeast High School Martin Luther King Elementary Metro Technology Center Oklahoma City Public School Services	
Graduate/ Higher Ed	Langston University	Metro Technology Centers Metro Career Academy Metro Tech Health Careers Center	OU Colleges of Medicine, Dentistry, Nursing, Pharmacy, Allied Health, Public Health
Afterschool Programs	Okla. Afterschool Network After School Program Okla. Arts Council Dave Science Academy Elementary School OK City/County Health Dept.	NE Academy for Health Sciences Urban League of Greater OKC Bethlehem Star Baptist Church St. John Christian Heritage Academy Metro Career Academy	Nova Ministries Moon Elementary Academy Kipp Reach College Prep Douglas Mid-High School Edwards Elementary School School

EMPLOYMENT SERVICES: There are three employment services, all in zip code 73105: Metro Technology Centers, Olsten Staffing Services, and Principal Technologies.

ASSETS 5 - CHURCHES

17 in 73105, 43 in 73111, 35 in 73117. Two provide Healthcare Clinics and many others provide healthcare classes or forums, four of the Churches have Gymnasiums for Congregational and Community use, and many provide grief counseling.

PLACES OF WORSHIP AND FAITH BASED ORGANIZATIONS BY ZIP CODE		
73105	73111	73117
Christ the King Christian Center	Abundant Life	Allen Chapel AME
Christian Faith Missionary	Avery Chapel AME	Antioch Baptist
Church of God in Christ	Central Baptist	Antioch Fellowship
Church of the living God Temple 290	Central English Kingdom Hall Jehovah's Witness	Avery Chapel AME
Evergreen Presbyterian	Christ Apostle	Bread for Life
First Baptist Church of Moore	Christ Church	Christian Life Fellowship
God's Time, A Tabernacle of Joy and Peace	Christ Temple	Church of the Living God PG of T
Good Shepard Missionary Baptist	Church of God in Christ	Corpus Christi Catholic Church
Greater Gethsemane Baptist	Church of Redeemer	Del Baptist Temple
Greater St Paul Cogie	Creston Hills Church of Christ	East Sixth Street Christian Church
Jehovah's Witness Kingdom Hall	Deliverance and Praise	Edmond Church of Christ
Open Door Cathedral	Ebenezer Baptist	Everlasting Life Ministries
Overcomers Church of god in Christ	Emanuel Baptist	Fairview Baptist
Rev Ephron Monson Rev/ Voice of Praise Baptist	Evangelistic Baptist Church of Christ	Garden Oaks Church of Christ
The Men of Joseph Ministry	Evangelistic Baptist	Gods Moving Ministry
Wildwood Baptist	Faith Memorial Baptist	Greater Marshall Memorial Baptist
Wilshire Church of Christ	Faith Works Baptist	Hope Adventist Fellowship Moore
	First AME Church	Howard Memorial Baptist
	Friendship Baptist	International Charismatic Victory Church
	Greater Shiloh Baptist	Life
	Highland Drive Church of God	Mount Triumph Baptist
	Holy Divine Baptist	Mt Lebanon Baptist
	Holy Temple Baptist	New Hope Baptist

PLACES OF WORSHIP AND FAITH BASED ORGANIZATIONS BY ZIP CODE (CONTINUED)		
73105	73111	73117
	<i>Holy United</i>	<i>Next Level Ministries</i>
	<i>Hope Memorial Baptist Church</i>	<i>Paradise Temple Pentecostal</i>
	<i>Love, Joy and Peace Church of God and Christ</i>	<i>Redeemer Lutheran</i>
	<i>Madison Street Church of God</i>	<i>Restoration World Outreach</i>
	<i>New Beth Church Cognac</i>	<i>Seventh Day Adventist</i>
	<i>New Bethel Baptist</i>	<i>Siloam Baptist</i>
	<i>New Covenant</i>	<i>Souls for Christ Ministry</i>
	<i>Northeast Church of Christ</i>	<i>St Mary's CME</i>
	<i>Oklahoma Assembly of the Church of God</i>	<i>Tabitha Baptist</i>
	<i>Page Sanctuary Church of God in Christ</i>	<i>Trinity Church of God in Christ</i>
	<i>Providence Church of the Nazarene</i>	<i>Truck Stop Ministries</i>
	<i>Quayle Methodist</i>	<i>Victory Temple Church of God</i>
	<i>Rainbow Church of God in Christ</i>	
	<i>Redeemed Baptist Church</i>	
	<i>Rising Star Baptist</i>	
	<i>Royal Host Christian Ministries</i>	
	<i>Shield of Faith Missionary Baptist</i>	
	<i>St John Missionary Baptist</i>	
	<i>The Secret Place Community Church</i>	
	<i>Unity Baptist</i>	
17	43	35

ASSETS 6 - PARKS, RECREATION CENTERS, FITNESS CLASSES, SWIMMING POOLS, ATTRACTIONS, ARTS, EVENT VENUES, GOLF COURSES, HOTELS/MOTELS

RECREATION CENTERS: Northeast Oklahoma City has four Recreation Centers (included in list of Parks below) and 16 public parks. Three fitness centers are for children and adults – Pitts Recreation Center, Northeast Recreation Center, and Douglass Recreation Center.

Public Parks have a variety of resources and are in varied states of use due to either need for upkeep, need for lights, security issues, etc.

PARK RESOURCES BY ZIP CODE		
73105	Dolphin Wharton Park	Baseball Field - no lights, 1/2 court Bball - no lights, 4 picnic areas w/grills, Playground
	McNabb Park	2 Picnic Tables
	Nichols Court Park	
	Woodland Park	
73111	Creston Hills Park	Basketball Goals, Playground
	E.W. Perry Park	Metal Playground Equipment, Junior Pool, Kid Friendly Park
	Glen Eilyn Park	Playground
	John F. Kennedy Park	Playground, Baseball field, Junior Pool
	L.D. Lacy Park	
	Northeast Center	Basketball goals, Playground (1994), Picnic Area, Rec Center, Swimming Pool, Walking Path, Restrooms
	Phillips Park	Basketball Goals, Playground (1997), Picnic Pavilion – 12 tables, Portable Restrooms, Sidewalk: .2 mi
	Pitts Park	2 Baseball Fields – no lights, Playground (1999), Rec Center/Community Center/Gym; 2 Tennis Courts – Lighted, 1 Basketball Court – 2 Goals
	Rhode Island Park	
73117	Culbertson Park	
	Edwards Park	Playground Rental Pavilions, Outdoors Basketball Courts. .5 mile concrete walking path, Volleyball Court (no net/ball), 2 Adult Baseball/softball practice fields w/lights, "Close to Home" Fishing Lake, Portable Toilets
	Washington Park	Basketball Court - 2 goals, 1 football field, Playground (1998), 8 picnic tables, 1 picnic shelter, 3 soccer fields - 6 goals, Portable Restroom

INDEPENDENT FITNESS CENTERS: YMCA of Greater OK City (senior center) 73111; Mr. JT Fitness 101 (73111).

WALKING TRAILS:

73105	73111	73117
Katy Trail	Oklahoma City Zoo	Edwards Park
Oklahoma State Capitol Buildings	Pitts Rec Center	Douglas Park
OKC County Health Department	Metro Technology Center	

FITNESS CLASSES: (in addition to Recreation Centers)

73105	73111
Lincoln @ Central Park Apartments	YMCA of Greater OKC Senior Center
OKC/County Health Dept	Metro Tech Center, and Mr JT's

COMMUNITY POOL: Northeast Park (73111).

ATTRACTIONS: Some of Oklahoma's biggest tourist attractions are located in Northeast Oklahoma City, including the OKC Zoo.

73105	73111	73117
Oklahoma Veterans Memorial	Coles Garden	Ambassador's Concert Choir
	Metro Technology Center	Bricktown Hotel & Convention Center
	Oklahoma Adventure District	Douglas Park
	Oklahoma City Zoo	Twin Fountains RV Park
	Remington Park Horse Racing & Casino	
	Woodland Park	

MUSEUMS:

73105	73111	73117
Harn Homestead	45 th Infantry Museum	National Cowboy & Western Heritage Museum
Jim Thorpe Association, Inc.	Amateur Softball Association of America	Oklahoma Railway Museum
Oklahoma Black Museum	American Pigeon Museum & Library	Oklahoma State Firefighters Museum
Oklahoma Historical Society	Gymnastics Hall of Fame	Science Museum of Oklahoma
Oklahoma History Museum		

EVENT VENUES: Credit Union House of Oklahoma, Coles Garden, Jamil's Steak House, Metro Technology Center & Metro Technology Center's Business Conference Center, Remington Park, Oklahoma History Center, Zoo Amphitheater.

GOLF COURSES: James E. Stewart Golf Course – 73117; Lincoln Park Golf Course West, Lincoln Park Golf Course East – 73111.

HOTELS/MOTELS:

73105	73111	73117
Oxford Inn	Howard Johnson Inn- Remington Park (Park Hill Inn & Suites)	Medical Inn
Whitten Inn of Oklahoma (Lincoln Inn)	Ramada Inn	Bricktown Hotel & Convention Center
		Econo Lodge Inn & Suites Bricktown
		Motel 6 Bricktown

ART & MUSIC: There are four Performing Arts Companies, two Motion Picture Production & Distribution Companies, three Music Production & Distribution companies, and one Film & Video.

ASSETS 7 - FOOD & BEVERAGE

LIQUOR STORES: One in 73105, three in 73111, and one in 73117.

BARS & NIGHTCLUBS: Two in 73105.

GAS/CONVENIENCE STORES/GAS STATIONS/TRUCK STOPS: 31

73105	73111	73117
Capital Square Station	A 1 Convenience Store	7-eleven
KM 66	Brandi's Family Store	Phillips 66 Terminal
Quick Gas Stop	Chilli-G's	Checkers Truck Stop
Lincoln Food Mart	Circle K Store	Pilot Travel Centers
	Community Food Mart	Citgo Petroleum
	Express Foods 1 & 2	Flash Mart 3
	Han D Sak	Lottie Mart
	How About That One Stop Shop	Petro Oklahoma City
	Kelly's Market	Take N Go
	Plus 4 Petro	Travel Centers of America
	T & N Happy Food	
	The Corner Market	
	Valero Gas Station	

RESTAURANTS: 56 total; five Casual, 14 Fast Food or Quick Service, 30 Restaurants two Specialty Eateries, one Food Truck, one Restaurant supplier.

73105	73111	73117
Arby's	A Family Affair Soulfood	Subway/Checkers Truck
Bedlam Bar B Q	Beef & Bun	Waffle House
Burger King	Big Smokey BBQ	McDonald's
Church's Chicken	Bob's Fish & Seafood	Chick-Fil-A
Grandy's	BoBo's Chicken	Iron Skillet 16
Happy George's Hog BBQ	Bricktown Brewery Remington Park	
High Way Snack Bar	Carican Flavors	
Hunan Garden Express Chinese	Church's Chicken	
Jamili's Tbone	Dining on Persimmon Hill	
Papa Dino's Pizza & Grill	Florence's	
	Gabriella's	
	Geronimo's Bakery	
	Haunted House	
	Henry Hudson's	
	KFC	
	Leo's BBQ	
	Mama E's Wings & Waffles	
	McDonalds	
	Mera Cafe	
	Silks	
	Smitty's House of Music	
	Sonic - 2315 MLK	
	Sonic - 6101 MLK	
	Subway	
	TJ's Seafood	
	Woody's Sports Bar & Grill	

GROCERY STORES:

73105	73111	73117
	Buy for Less	L & M Oriental Store
		Otwell's

GROCERY STORE OFFICES/SUPPLY HOUSES/RESTAURANT SUPPLY:

73105	73111	73117
<i>HAC, Inc.</i>		
<i>Homeland Acquisition Corporation</i>		
<i>Continental Carlisle</i>		

CATERERS:

73105	73111	73117
<i>Dell on the Commons</i>	<i>Haunted House</i>	<i>B & B Catering</i>
<i>George's Happy Hog Bar B Q</i>	<i>Leo's Bar B Q</i>	<i>Cholitas Mexican Restaurant</i>
<i>Jamil's Steakhouse</i>	<i>The County Line Barbeque</i>	<i>City Beach</i>
<i>Ricky's Café</i>		<i>Tom's Barbecue & Catering</i>
		<i>Wallace Catering</i>

NE OKC FOOD WHOLESALERS:

73105	73111	73117
<i>Kelley Brokerage, Inc.</i>	<i>Topshelf Coffee & Tea</i>	<i>Honest Tea & Coffee</i>
<i>Kemp Juice LLC</i>		
<i>Mondelez Global</i>		

NE OKC Fresh Produce Wholesalers:

73105	73111	73117
<i>Vinyard Fruit & Vegetable Company, Inc.</i>	<i>Freshpoint Oklahoma City LLC</i>	<i>Price Fres Pak, LLC</i>

ASSETS 8 - TRANSPORTATION

Public: Embark City Bus Transportation System - Monday-Saturday, single fare = \$ 1.75; Stops every 30/60 Minutes; seven Routes affect NE OKC. Greyhound Bus Station, Taxis.

Private Auto Related Businesses: two Auto Supply/Parts Stores, two Tire/Wheel Shops, one Car Wash, 20 Auto Repair Shops, and one Used Car Dealer.

ASSETS 9 - ANIMAL SERVICES

There are three Veterinary Services: including one equine, two Governing Boards, and one Pet Supply store.

ASSETS 10 - MEDIA & INFORMATION TECHNOLOGY

There are 12 Radio & TV Related Businesses: one TV Production & Distribution Company, one newspaper, "The Black Chronicle", five Publishing Companies, one Directory Publisher, Associated Press, one Public Library, one OUHSC Library, and 15 Technology Related Businesses: five Information Technology Services, seven Managed Application & Network Services, two Wireless Equipment Manufacturing Companies, and one Wireless Services Company.

ASSETS 11 - INFRASTRUCTURE

There are two Utility Companies: one Water & Sewer, one Electric Utility; four Waste Management Companies: one Solid Waste Services & Recycling, one remediation & Environmental Clean Up, and two Hazardous Waste Removal Companies. There are four Highway Street & Bridge Construction Contractors, and one Power Line and Telecommunications Construction Companies.

73105	73111	73117
<i>First Star, Inc. - Sanitation</i>		<i>Stericycle Inc. - Sanitation</i>
<i>OG&E – Utility</i>		<i>Wastewater Treatment Plant - Utility</i>
<i>Burns Paving Co., Inc. – Contractor</i>		<i>GFS Storm Shelter – Contractor</i>
<i>Miller-Tipens Construction Company</i>		<i>Godwin Formwork Solutions - Contractor</i>

ASSETS 12 - NON-RESIDENT FOUNDATIONS & ASSOCIATIONS ACTIVE IN NE OKLAHOMA CITY

<i>A Chance to Change</i>	<i>CASA of Oklahoma CO</i>	<i>Girl Scouts</i>	<i>Neighborhood Services Org</i>	<i>Soeual Care, Inc.</i>
<i>American Heart Assoc</i>	<i>Catholic Charities</i>	<i>Goodwill Industries</i>	<i>Northcare</i>	<i>Sunbeam Family Services</i>
<i>American Lung Assoc</i>	<i>Celebrations Preschool</i>	<i>Health Alliance for the Uninsured</i>	<i>Oklahoma Foundation for the Disabled</i>	<i>TEEM (The Education & Employment Ministry)</i>
<i>American Red Cross</i>	<i>Citizens Caring for Children</i>	<i>Heartline, Inc</i>	<i>Oklahoma Halfway House</i>	<i>Tinker AFB Youth Center</i>
<i>Areawide Aging Agency</i>	<i>Coffee Creek Riding Center for the Handicapped</i>	<i>Homeless Alliance</i>	<i>Oklahoma Medical Research Foundation</i>	<i>Upward Transitions/ Travelers Aid</i>
<i>Arthritis Foundation</i>	<i>Community Literacy Centers</i>	<i>Integrus Hospice</i>	<i>Oklahoma United Methodist Circle of Care</i>	<i>Urban League of Greater OKC</i>
<i>Bethesda, Inc.</i>	<i>Consumer Credit Counseling Service of Central OK</i>	<i>John W. Keys Speech & Hearing Center</i>	<i>Positive Tomorrows</i>	<i>Variety Care</i>
<i>Big Brothers Big Sisters</i>	<i>D-Dent</i>	<i>Latino Community Development Agency</i>	<i>Possibilities Inc</i>	<i>YMCA</i>
<i>Boy Scouts of America</i>	<i>Daily Living Centers</i>	<i>Legal Aid Services of OK</i>	<i>RSVP of Central OK</i>	<i>Youth & Family Services</i>
<i>Boys & Girls Club</i>	<i>Dale Rogers Training Center</i>	<i>Mental Health Association</i>	<i>Safe Kids Oklahoma</i>	<i>Youth Cornerstone</i>
<i>Calm Waters Center</i>	<i>EARC, Inc.</i>	<i>Metropolitan Better Living Center</i>	<i>Salvation Army</i>	<i>Youth Services of OK</i>
<i>Camp Fire USA</i>	<i>Family Builders, Inc.</i>	<i>Moore Youth & Family Services</i>	<i>Skyline Urban Ministry</i>	<i>YWCA</i>

Appendix D – Qualitative Data

The foundation of Lynn Healthy Community Plans® is in-depth research designed to identify the unique health risks and exact needs of particular groups, neighborhoods, or disease specific situations. Data sets from essential sources such as the Oklahoma City-County Health Department and the Centers for Disease Control and Prevention provide the base of the quantitative data which is augmented by Lynn's qualitative research. The Lynn Healthy Community Team has attained input from more than 50 influence leaders through structured interviews. The opinions of area residents were recorded through in-person surveys and focus groups. The qualitative data adds a narrative to the numbers obtained through quantitative research. All together this data identifies critical environmental issues which may be either barriers or opportunities to improve the health conditions within Northeast Oklahoma City. Responses that indicated common themes among the research participants are highlighted.

Common Themes

- Area is identified as exhibiting extreme levels of poverty
- Primary health concerns are hypertension, diabetes, obesity, and heart disease
- Most receive health care at ER, OU, or health departments
- Lack of health education
- No resources, no access to health care, no access to fresh food
- Institutionalized racism
- Poverty Tax
- Cultural traditions do not support healthy lifestyles
- Empower the population from within to sustain long-term behavior change
- Infrastructure needed to support walking and group activities
- Outsiders label the area as high crime and blighted
- Community members are proud to be a part of Northeast Oklahoma City

	Public Opinion	Influence Leader
Buy For Less - Aug. 2014	30	
Buy For Less - Nov. 2014	17	
Informal Interviews – Pitts & Lincoln Centers	14	
Sister in Motion - Dec. 2014	6	1
Metro Tech Focus Groups - Dec. 2014	30	4
JFK Neighborhood Association	16	
Christ Church	13	1
Community Leaders		50
Total	126	56

STRUCTURED INTERVIEWS

Objective: Identify general health concerns and needs.

Goal: Improve the overall health of the community with population specific solutions.

1. How would you describe your/the community?

Resources/Infrastructure	Economics	Positive	Crime	Total Answers
33	20	31	9	93

Objective: Identify general health concerns and needs.

Goal: Improve the overall health of the community with population specific solutions.

2. How do you think people outside of NE OKC would describe your/the community?

Resources/Infrastructure	Economics	Positive	Crime	Race	NA	Total Answers
24	9	7	34	12	1	87

Objective: Identify general health concerns and needs.

Goal: Improve the overall health of the community with population specific solutions.

3. Would you say that in general NE OKC is a physically and mentally healthy community?

6 out of 56 responded Yes

50 out of 56 responded No

Objective: Identify general health concerns and needs.

Goal: Improve the overall health of the community with population specific solutions.

4. What health issues are most important to you and your/the community?

Diabetes	Obesity	Hypertension	Heart	Nutrition	Mental	Substance	Resources	NA	Other	Total Answers
27	26	22	14	18	9	10	16	1	9	152

4b. If free programs were offered regarding these topics, how would we encourage community members to attend?

Media/Education	Church/School	Incentives	Role Models	Other	Total Answers
16	30	9	17	2	74

Objective: Identify general health concerns and needs.

Goal: Improve the overall health of the community with population specific solutions.

5. Where do you think the population obtains health-related information?

Church	Health Facility	Each Other	Media	Not	NA	Total Answers
7	26	18	27	10	1	89

Objective: Identify general health concerns and needs.

Goal: Improve the overall health of the community with population specific solutions.

6. Data shows people in OK have more health related issues than people in other states.

Why do you think this is the case specifically of NE OKC community?

Resources/Infrastructure	Economics	Education	Culture	NA	Other	Total Answers
29	25	15	24	1	4	98

Objective: Identify the accessibility of healthcare.

Goal: Improve accessibility to healthcare, more doctor visits, less ER visits.

7. Do you think people in NE OKC have a personal doctor and get annual physicals?

11 responded Yes and No

2 responded Yes

1 NA

42 said No. Reasons listed below.

Resources/Infrastructure	Economics	Education	Culture	Other	Total Answers
16	26	3	11	1	57

Objective: Identify the accessibility of healthcare.

Goal: Improve accessibility to healthcare, more doctor visits, less ER visits.

8. Do you think people in NE OKC use the ER for their 'regular' health care?

4 out of 56 responded No

4 out of 56 responded Maybe

48 out of 56 responded Yes. Reasons listed below

Resources/Infrastructure	Economics	Education	Culture	Other	Total Answers
17	24	6	16	5	68

Objective: Identify the accessibility of healthcare.

Goal: Improve accessibility to healthcare, more doctor visits, less ER visits.

9. How do you think people in NE OKC travel to receive health care?

EMSA	Bus	Borrow	Own Car	Taxi	Walk	Other	NA	Total Answers
7	30	22	20	5	5	2	2	93

9b. How far do you think they travel?

OUHS	Out of Area	Clinics	Other	NA	Total Answers
34	11	7	4	9	65

Objective: Identify the accessibility of healthcare.

Goal: Improve accessibility to healthcare, more doctor visits, less ER visits.

10. Is there a need for more health care facilities or facilities in different locations?

43 out of 56 responded Yes. Services needed listed below.

PCP	Outreach	Urgent	Low Cost	Location	Other	Total Answers
5	8	13	6	10	3	45

Objective: Identify the accessibility of healthcare.

Goal: Improve accessibility to healthcare, more doctor visits, less ER visits.

11. Do you think people in NE OKC obtain and take prescriptions as ordered by physicians?

13 out of 56 responded IDK or Somewhat

11 out of 56 responded Yes

32 out of 56 responded No. Reasons listed below.

Cost	Access	Education	Culture	Total Answers
24	6	14	5	49

Objective: Identify infrastructure needed to promote healthy lifestyle.

Goal: Build a local environment that promotes a healthy lifestyle.

12. How often do you think the NE population engages in physical activity/exercise?

8 out of 56 responded Varies

48 out of 56 responded Never or Rarely. Reasons listed below.

Resources/Infrastructure	Time	Culture	Cost	Total Answers
22	13	20	3	58

Objective: Identify infrastructure needed to promote healthy lifestyle.

Goal: Build a local environment that promotes a healthy lifestyle.

13. What type of physical activity/exercise do you think the NE population would enjoy most?

Park Activities	Organized Sports	Biking	Swim	Walking	Classes	NA	Total Answers
15	25	7	5	33	18	2	105

13b. Where can they do this activity?

Facilities/Infrastructure Needed	NE School/Park	Other	NA	Total Answers
33	12	2	7	54

Objective: Identify eating trends within the community and accessibility to nutritious items.

Goal: Develop healthy eating programs and establish more food options such as grocery, farmers market, etc.

14. Do you think the NE OKC population attempts to consume a nutritious diet on a regular basis?

7 out of 56 responded Somewhat

7 out of 56 responded Yes

42 out of 56 responded No. Reasons listed below.

Economics	Access	Culture	Education	Total Answers
19	18	18	8	63

Objective: Identify eating trends within the community and accessibility to nutritious items.

Goal: Develop healthy eating programs and establish more food options such as grocery, farmers market, etc.

15. Where do people in NE OKC purchase food items?

BFL	Otwell's	Convenience	Fast Food	Outside NE	Other	NA	Total Answers
36	22	18	10	19	8	1	114

Objective: Identify eating trends within the community and accessibility to nutritious items.

Goal: Develop healthy eating programs and establish more food options such as grocery, farmers market, etc.

16. What would help the people in NE OKC consistently eat a nutritious diet?

Access	Economics	Education	Total Answers
32	18	35	85

Objective: Identify prevalence of tobacco use.

Goal: Incorporate smoking cessation in recommendations.

17. Do you think tobacco use is a prevalent health concern within the NE community?

9 out of 56 respondents do not think tobacco is a prevalent health concern.

47 out of 56 respondents do think tobacco is a prevalent health concern.

Objective: Identify prevalence of tobacco use.

Goal: Incorporate smoking cessation in recommendations.

18. Would people be interested in programs that support smoking cessation?

29 out of 56 respondents think that yes, people would be interested in quitting.

20 out of 56 respondents think that no, people would not be interested in quitting.

8 no response

18.b What type of program do you think would work best?

Education	Church	Incentive	Mentor	Media	NA	Total Answers
17	12	15	12	3	7	66

FOCUS GROUPS

Engagement Questions Objective: Introduce participants to and make them comfortable with the discussion topics.

Goal: Identify Health Concerns.

1. How would you describe your community? Pride, potential, united.

- More programs are happening, pride, roots
- Heartbeat of central OKC, NE is the center of the city, transition period, most unhealthy place in OKC
- Young, under educated, underserved, poor, somewhat community oriented and hopeful
- Unprotected, underserved, united, underappreciated
- Forgotten, lost, run down, potential, close knit
- Historic, proud, under educated, impoverished, no visual or performing arts, long suffering, safe
- Quiet, growing, functioning, organized, improving
- Neglected neighborhood community with a need for development, low income, few businesses but community has a very rich history with many "gems", very diverse, primarily black, young and eager to become more than they are presently, many who live in the area were born and raised here, feel blessed to be in the neighborhood and feel connected
- Love the community, room for improvement especially in some personal properties
- Get along well, work hard, good, ministry in the area is a drawing point
- Old, broken down, friendly, transient population, lots of moving
- Run down, individuals with pride in ownership, in need of help, poor

Engagement Questions Objective: Introduce participants to and make them comfortable with the discussion topics.

Goal: Identify Health Concerns.

2. How do you think people outside NE OKC would describe your community? Ignored, afraid.

- They don't know what is happening here
- People are intimidated by NE OKC because of perception, negative is more often highlighted, affects commercial business coming into the area
- Afraid of areas, not impressed with anything we have to offer, don't seem to care if the area exists
- Violent
- Crime ridden, scary, nothing because they have no reason to come so they have no opinion, poor
- Dangerous, fear, does not want to visit the area
- Not healthy, high unemployment, African American community

- Others see them as the ghetto, a place to get away from, city has chosen to ignore them, despite studies that show great need for improvement, members of this focus group felt they had been ignored and had a sense that the rest of the city would just like them to "go away"
- A mystery, a gold mine, lots of possibilities and development
- In need, poor, outsiders don't care
- Love the area with the zoo and Remington, old, scary
- Crime, gangs, black

Engagement Questions Objective: Introduce participants to and make them comfortable with the discussion topics.

Goal: Identify Health Concerns.

3. What health issues are most important to you and your community? Obesity, diabetes, hypertension, heart disease.

- Hypertension, cardiovascular disease, diabetes
- Diabetes, cardiovascular, mental health, access to healthy inexpensive food
- Children raising children without parenting skills, abandoned homes, obesity, diabetes, addiction, mental disorders, personal hygiene, risky behavior like unprotected sex, teen pregnancy
- Cancer, lupus, hypertension, diabetes, cardiovascular disease
- Hypertension, cardiovascular disease, drug and alcohol abuse, male illness due to lack of safety net because state assistance is easier for mother/child, safe drug rehab, racism, unjust incarceration
- Hypertension, diabetes, cancer, obesity, mental health
- Obesity, hypertension, diabetes, food access, walking trails and sidewalks needed
- Hunger, cleanliness and lack of support for those with disabilities were major issues, quality healthy foods are not available at good prices, and there is no preventive care, there is not enough exercise or safe public places to exercise, no or little support for those with addiction.
- Healthy and unhealthy, obesity, hypertension, parts of the community are active others are not, diabetes, weight control, communication, nutrition and meal planning, prevention, get health information from job or internet
- Diabetes, substance abuse, obesity
- Hypertension, drug and alcohol addiction, smoking
- Obesity, drugs, alcohol, chronic diseases

Engagement Questions Objective: Introduce participants to and make them comfortable with the discussion topics.

Goal: Identify Health Concerns.

4. Data shows people in OK have more health related issues than people in other states. Why do you think this is the case specifically for the NE OKC community? Lack of access and resources.

- Sidewalks needed and signage to get to places
- Economics, cost of health care, distrust in doctors, lack of access, don't have private practices or doctor offices, don't have resources or insurance, can't take off work for fear of losing job, don't want to know what is wrong
- Children raising children, no parenting skills, lack of education regarding health, no available healthcare to the poor due to lack of appointments for medically indigent, lack of insurance, males do not seek medical attention
- Complacency, racism, no resources, billboards send negative messages

- Lack of exercise and facilities, lack of public assistance for men, lack of insurance, cultural difference, black men do not go to the doctor unless very ill, racism, do not have the same privileges as whites
- No insurance, no access to care, poor economy
- Healthy food is not available, no spaces to walk, no trails, no sidewalks, no street lights
- Underserved medically and quality of care not the same for medically indigent as it is for those who can afford it, lack of education about what is needed to prevent disease, even though OU is near - "not a part of our community" by their design and so the educational piece that could be there if OU was invested is instead missing, participants stated that there may be some new medical facilities available like a new Urgent Care but physicians do not staff it, lack of quality low priced vegetables and fruits and prevention of disease is non-existent
- Not enough public parks or place to play, too much fast food, eating healthy is expensive, Washington Park need to be re-vamped, find a way to make health a priority, lack of education
- Lots of facilities have closed, no exercise programs, funding stopped
- Cultural differences, poor economy, education
- Economics, no preventative care, people don't care

Exploration Questions Objective: Identify the accessibility of healthcare and identify infrastructure needed to promote a healthy lifestyle.

Goal: Build a local environment that promotes a healthy lifestyle.

5. What barriers are keeping NE OKC from becoming a healthier population? Lack of resources, crime, and education.

- More recreational centers needed, more children activities, lack of education
- Lack of education, lack of access, low education, mishandling of money such as pay day loans, no side walks
- No recreation facilities that are free, lots of abandoned houses available for risky behavior, crime, poverty, lack of available medical resources especially at night, lack of education regarding healthy eating, lack of healthy food at reasonable cost, lack of parenting education resources
- No resources, no groceries, no fresh foods, not a lot of doctors
- Lack of prevention education, lack of help when sick, no or few public exercise facilities, recreation centers and pools have closed, resources available in other areas are not available here,
- Crime, parents are fearful so they keep children inside, high prescription costs, lack of prescription education - how to take and where to get, no resources
- Transportation
- Preventative medicine is missing, lack of public safe facilities to exercise, only one public pool still open but only on certain days and not after work, parks are underutilized because of fear and crime, drug problems, need better crime prevention and substance abuse prevention, education needed, felt the perception is that NE Oklahoma has gang crime but they really don't, perception was because crime committed elsewhere is often reported in NE neighborhoods so it appears the crime was committed there
- Not enough recreational facilities, education, affordable fresh and healthy food, too many fast food place that are more affordable
- Programs have gone away, no one is listening, infrastructure is gone, no plumbing in some places, funding stopped
- Drugs and gangs
- Gangs, drug problems, people have given up, lost enthusiasm, no one is listening

Exploration Questions Objective: Identify the accessibility of healthcare and identify infrastructure needed to promote a healthy lifestyle.

Goal: Build a local environment that promotes a healthy lifestyle.

6. Do you think people in NE OKC have a personal doctor and get annual physicals? If yes, who? If no... why not? ER due to cost.

- Yes - OU & health departments, people go to the ER because of cost, people do not go at all because of cost
- Taboo of not wanting to know if they are sick because they can't afford to take care of it and don't want to think about what it will do to their families, do they have disposable income or co-pay, take physicians out to meet the community so people are comfortable with them
- No - lack of insurance, lack of doctors especially after hours, cost, young mothers are covered post birth for six months and then do not receive care
- No - they go to the ER
- It is easier for women to have personal doctors, many do not because of lack of insurance and cost, denied care
- No - lack of insurance
- No - lack of insurance, people go to OU ER
- No, too expensive, many without insurance especially the men who do not have any safety net with no insurance, many wait until very sick and use the emergency room at various hospitals - not all OU
- No - too expensive, can't afford even if they have insurance, very difficult for retired people with limited income, preventative care should be the focus but it is not, many use the ER because it has easier access and open all the time, urgent care centers in the area are a joke, it is hard for people to get to the doctor
- No - only those able to go to VA, poor cannot afford to go
- No - cost and time, do not think about prevention
- No - no insurance or don't care

Exploration Questions Objective: Identify the accessibility of healthcare and identify infrastructure needed to promote a healthy lifestyle.

Goal: Build a local environment that promotes a healthy lifestyle.

7. How do you think people in NE OKC travel to receive health care? How far do you think they travel? Public transportation improvements needed.

- Need public transportation improvements - OU
- People don't go
- Own vehicle, ambulance, borrow rides, bus but only is available during the day
- Own vehicle, Saints
- Own vehicle, friends, walk, ambulance, no real public transportation
- Ambulance, borrow a ride from family or friends - OU
- Own vehicle - 8 to 15 miles
- Own vehicles, ambulance, borrow rides, bus but the bus is only available during the day
- Own vehicle, borrow a ride from family, ambulance - 5 to 20 miles many go to Shawnee or Norman, efficient urgent care facilities are needed, care should be equal regardless of ability to pay, many are not aware of existing facilities but also can't afford them
- Own vehicle or borrow rides
- Bus but it does not run at night
- Friends, walk, ambulance, not enough public transportation, bus doesn't run on Sunday

Exploration Questions Objective: Identify the accessibility of healthcare and identify infrastructure needed to promote a healthy lifestyle.

Goal: Build a local environment that promotes a healthy lifestyle.

8. What type of physical activity/exercise do you think the NE would enjoy most? Where can they do this activity? Infrastructure for walking needed.

- People don't exercise, walking, sidewalks needed, recreational centers needed
- Walking, trails needed, there are not any facilities with new equipment that are easily accessible
- Walking, walk-a-thons, more parks needed, free or inexpensive recreational facilities needed
- Walking, people are too busy, more recreation centers needed, community activities needed, re-open parks with tennis courts
- Walking, organized sports, parks for children, children's programming
- Biking and walking - bike lanes and walking trails are needed, remove societal stigma associated with biking and walking i.e. no transportation so you have to
- Walking - JKF neighborhood but no lights, trails behind Douglass
- Running, walking but there are few sidewalks and few lights, a pet park or a park that allows pets would be nice, bicycle trails and safe open recreation centers
- Walking clubs, group activities, boot camps available at all times so those with jobs can attend
- Pick-up games, Pitts Park, programs needed
- Walking, organized sports - walk in the streets, play pick-up games at local churches
- Run, jog, basketball - Park and Pitts Rec Center, getting to places is a problems, little or no recreation for children, no good areas that are safe

Exploration Questions Objective: Identify the accessibility of healthcare and identify infrastructure needed to promote a healthy lifestyle.

Goal: Build a local environment that promotes a healthy lifestyle.

9. What would help the people in NE OKC consistently eat a nutritious diet? Access.

- Education, lower costs, more stores
- More community gardens in plots that the city owns that aren't being used or at the schools, turn community garden into a social place where they want to walk
- Farmer's market, access to fresh fruits and vegetables, food festivals, healthy eating educational classes, more healthy food choices at restaurants and grocery stores
- Fresh food through the church, awareness, cost
- Farmer's market, better choices, more grocery stores
- Healthy restaurants, farmer's market, access to health food at a lower cost
- Education, access, food information
- Available fresh fruits and vegetables at affordable prices are needed, less fast food, and more education, grocery store personal helper that could educate on the fly and inquire if they had special needs could direct them to sale items that might fit their needs or educate them about new healthy products or recipes
- Most people go to Del City to shop, many walk or bike across the freeway to get to Wal-Mart, additional stores that carry fresh and inexpensive produce is needed, pedestrian walkway to get to stores outside the area
- More grocery stores, cheaper food
- Access to fruits and vegetables
- Better grocery stores with fresh choices, education

Exit Question Objective: Final thoughts and verify nothing was missed during the discussion.

Goal: Identify population specific solutions.

10. What would you do to improve the health of NE OKC? Empower from within and create resources that promote healthy lifestyles.

- Don't duplicate but collaborate, free health screenings, churches need to work together, get politically active, information campaign on the radio
- Starts with the family, show your children how to be healthy and get the family involved, show the significance of healthy foods, education, nutritional choices, need to know alternative methods for healthy food, time is a valuable resource, agency that helps with food prep because people who work long hours don't have time to think about healthy food, teaching proper food portions, understand how food has played a part in black culture, mom always to feed you and is upset when you don't enjoy her food, food is a part of the family identity, teach people how to lighten up family favorites
- Improve transportation by increasing bus stops and hours of operation, recreation centers especially during the summer, open and free classes held in neighborhoods/churches/community centers/schools, parenting classes required for youth, increased medical resources especially after hours and protect appointment times for medically indigent, farmer's markets, more availability of inexpensive fresh vegetables and fruits, more education on healthy lifestyle and disease prevention, incentives for health but not sure how this can be done
- Create a sense of security, keep parks open, empower the community from within, neighborhood association collaboration, education, learn how to engage people working multiple jobs
- NA - more recreational facilities, more resources
- Improve transportation, neighborhood alliances, multiple health sources in one location such as dietitian/trainer/physician/holistic specialist, community gardens and activities for children, fight institutional racism at OU, churches partner with dietician, non-smoking programs, community health outreach programs, empower from within, programs for the community managed by community members.
- Empower from within, community gardens, recycling plant pollution the air, prices are too high
- Education about healthy living in schools/grocery stores/library/churches/other gathering places, more investment from OU and other health facilities in the area, additional care options for the medically indigent, becoming economically self-sustaining like Bricktown, fresh fruits and vegetables at affordable prices, education and neighborhood gardens, Washing Park revitalized
- Education that starts in schools at an early ages, inexpensive and high quality preventative care, alcohol and drug education, increased tobacco prices, prevention of addiction, walkways, lighting, high quality inexpensive fresh foods
- Summer pools, summer programs for children, decrease crime
- Recreation for children, basketball programs, swimming pool
- Recreation for children, get people listening, educational programs, get people moving

INFORMAL INTERVIEWS

Engagement Questions Objective: Introduce participants to and make them comfortable with the discussion topics.

Goal: Identify Health Concerns.

1. How would you describe your community? Negative.

- Resources and infrastructure needed
- Needs help and more development
- Diverse, high crime
- No good

- Economically depressed, good people
- Ok
- Ok, gangs, poverty
- Lacking in proficiency
- Getting better, less violence
- Neglected
- Nice, needs to be rebuilt
- Fair
- Welcoming
- Ghetto, bad housing

Engagement Questions Objective: Introduce participants to and make them comfortable with the discussion topics.

Goal: Identify Health Concerns.

2. How do you think people outside NE OKC would describe your community? Crime, low income.

- People moving in and out of the community
- They don't know much about the area
- High crime
- Poor
- Low income
- Bad
- Low class, poor, black
- Lacking in proficiency
- Bad - but it is getting better
- Bad
- Run down
- Poor, high crime
- High crime
- Ghetto, bad housing

Engagement Questions Objective: Introduce participants to and make them comfortable with the discussion topics.

Goal: Identify Health Concerns.

3. What health issues are most important to you and your community? Nutrition, exercise, obesity.

- Food, transportation, exercise
- Hypertension, diabetes, obesity
- Exercise, diabetes, cancer, sickle cell
- Nutrition
- Obesity
- Stress, more jobs
- Nutrition, exercise
- Obesity, no healthy options
- Staying fit

- ~~Resources~~
- Transportation
- ~~Nutrition, exercise~~
- ~~Exercise~~
- ~~Obesity, diabetes, drugs, cancers~~

Engagement Questions Objective: Introduce participants to and make them comfortable with the discussion topics.

Goal: Identify Health Concerns.

4. Data shows people in OK have more health related issues than people in other states. Why do you think this is the case specifically for the NE OKC community? Access and nutrition.

- No ~~access~~
- Every community is ~~unhealthy~~
- Additional help needed, community is ~~ignored~~
- Bad ~~eating~~ habits
- Poor diet, ~~fast food~~
- NA
- No ~~access~~ to healthy food
- ~~Fast food~~
- No ~~resources~~
- ~~Access~~ needed
- ~~Resources~~ needed
- Bad ~~eating~~ habits
- NA
- Poor ~~diet~~

Exploration Questions Objective: Identify the accessibility of healthcare and identify infrastructure needed to promote a healthy lifestyle.

Goal: Build a local environment that promotes a healthy lifestyle.

5. What barriers are keeping NE OKC from becoming a healthier population? Access.

- ~~Resources~~ needed
- No ~~access~~, no facilities
- Crime
- ~~Ignored~~ by the city
- ~~Lack~~ of grocery stores
- ~~Access~~ to health
- Too many ~~fast food~~ restaurants
- Education, low income
- Lack of ~~resources~~
- Income
- Income
- ~~Lack~~ of health education
- Education
- Lack of ~~resources~~

Exploration Questions Objective: Identify the accessibility of healthcare and identify infrastructure needed to promote a healthy lifestyle.

Goal: Build a local environment that promotes a healthy lifestyle.

6. Do you think people in NE OKC have a personal doctor and get annual physicals? If yes, who? If no... why not? Depends.

- I do
- Yes
- Yes - OU
- Yes
- Rarely
- No - cost
- No
- No
- Most do
- Some do
- No - cost
- Yes - at the clinic
- Yes
- Yes

Exploration Questions Objective: Identify the accessibility of healthcare and identify infrastructure needed to promote a healthy lifestyle.

Goal: Build a local environment that promotes a healthy lifestyle.

7. How do you think people in NE OKC travel to receive health care? How far do you think they travel? Bus, OU, OCCHD.

- OU, Saints
- Personal vehicle, local primary care physicians
- Walk, borrow a ride - OU, Saints
- Borrow a ride - 3 miles
- Walk, borrow a ride
- Personal vehicle, borrow a ride - Norman
- Personal vehicle, taxi, bus - OU
- Bus - 10 miles
- Borrow a ride - OU, OCCHD
- Bus - 10th St
- Need better transportation - 10th St
- Bus - Mary Mahoney
- Bus, borrow a ride - 10th St
- 10th St

Exploration Questions Objective: Identify the accessibility of healthcare and identify infrastructure needed to promote a healthy lifestyle.

Goal: Build a local environment that promotes a healthy lifestyle.

8. What type of physical activity/exercise do you think the NE would enjoy most? Where can they do this activity? Group activities, facilities needed.

- Dancing, aerobics, sports, swimming, facilities needed
- Exercise for seniors, group activities, Lincoln Senior Center
- Walking - Shepherd Mall
- Swimming - pools needed
- Basketball - Pitts Park
- Basketball, football - community centers needed
- Basketball, football - community centers and outdoor gyms needed
- Running - community centers and parks needed
- Basketball - Pitts, YMCA
- Dancing
- Silver Sneakers
- Dancing, walking
- Dancing
- Walking

Exploration Questions Objective: Identify the accessibility of healthcare and identify infrastructure needed to promote a healthy lifestyle.

Goal: Build a local environment that promotes a healthy lifestyle.

9. What would help the people in NE OKC consistently eat a nutritious diet? Education and access.

- More grocery stores
- Too many fast food restaurants
- More church programs
- Education
- Education, access to fresh food
- Education
- Make health food more appealing
- Awareness, affordability
- Less fast food
- Better variety
- Advertising
- Education, better access
- Education
- Lower the cost

Goal: Identify population specific solutions.

10. What would you do to improve the health of NE OKC? Education and resources.

- Fix streets, more facilities
- More facilities, education, sidewalks needed
- More exercise
- Exercise
- Education, remove junk food
- Access to food, education
- Help based on needs
- Media, free events, education
- Events, education
- Education
- Programs
- Free programs
- Programs
- Programs at church

BUY FOR LESS – AUGUST 2014

1. If you could change two things about how you get your health care services, what would they be?

Access	Location	Price	Wait Time	NA	Total Answers
7	9	17	13	4	50

2. What is your most important health care need?

Hypertension	Diabetes	Obesity	Cardio.	Overall Health	Dental	NA	Total Answers
3	11	2	2	5	4	6	33

3. What would help you be able to eat healthier? Is there anything we could do to help you eat healthier?

Education	Cost	Access	NA	Total Answers
9	16	6	8	39

BUY FOR LESS – NOVEMBER 2014

Objective: Identify general health concerns.

Goal: Improve the overall health of the community with population specific solutions.

1. Would you say that in general you are a physically and mentally healthy individual?

12 out of 17 responded Yes

3 out of 17 responded No

2 NA

2. What health issues are most important to you and to members of your household?

Hypertension	Weight/Nutrition	Heart	Diabetes	Total Answers
7	4	2	3	24

3. Where do you obtain most of your health-related information?

Media	Health	Other	Total Answers
7	7	3	17

Objective: Identify infrastructure needed to promote a healthy lifestyle.

Goal: Build a local environment that promotes a healthy lifestyle.

4. How often do you engage in physical activity/exercise? Never or rarely...why?

16 out of 17 responded regularly

5. What type of physical activity/exercise do you enjoy most?

11 out of 17 responded Walking

6. Where do you purchase food items?

Buy for Less	Outside the NE	Total Answers
10	14	24

Appendix E – Quantitative Data

The Quantitative data was gathered from existing databases and reports through a process that first involved an extensive literature search of pertinent health, healthcare, and community health research that had been published within the past ten years with focus on the past five years. These publications then served as a guide to gathering data in the three chosen zip codes. In all, over 4000 (4087) individual data pieces were collected at the zip code, county, state and/or national level. Data available at the zip code level (over 1000) with comparisons at the county, state and/or national level were reviewed for outliers and the most significant have been summarized for the purpose of this report. All data have been amassed into a data compendium, which will be useful for the collaborative when setting priorities and goals. Some data, such as that contained within area maps could not be saved within the spreadsheet compendium of data and therefore are not counted among 4000+ data pieces. These area maps including building vacancy maps, zip code area maps, public housing location maps, park maps, blight maps and disease concentration overlays will be made available to the collaborative.

The following represents some of the core data taken by section and summarized after each table. The data is further discussed at the end of the data tables and the formula used to construct some behavior data that was not available at the zip code level is shown at the end. Data higher/lower than the comparisons are highlighted in gray while statistics significantly higher/lower than the comparisons are highlighted in black.

SECTION 1 - POPULATION, ETHNICITY, BASIC DEMOGRAPHICS¹

Factor	73105	73111	73117	County	State	US
Population	5,210	11,781	5,191	718,633	3,878,000	318,900,000
Sq Miles	4.96	8.82	4.53	718	69,899	3,794,083
Pop. Density (people/sq mi)	1050.4	1335.714	1145.916	1000.36	54.7	87.4
Age Distribution Median	41.2	40.5	38.8	34.3	36.2	37.2
Pop. under 5	5.7%	8.5%	8.3%	7.7%	7.0%	6.5%
# Children under age 5	299	1003	429			
Pop. 65 and over	16.0%	19.7%	15.0%	12.0%	13.5%	13.0%
# Adults over 65	831	2,321	781	86,236		
# People over 25	3,902	7,337	3,416	464,580	2,438,321	209,287,000
Caucasian	17.3%	8.0%	12.7%	64.6%	72.2%	72.4%
African American	73.2%	83.2%	76.4%	15.4%	7.4%	12.6%
Married	28.9%	30.4%	27.1%	48.8%	49.5%	51.0%
Divorced	14.6%	16.6%	16.3%	13.0%	13.2%	10.8%
Education <high school	27.6%	37.7%	39.6%	29.5%	31.7%	14.0%

* Black: Extremely Above OK County or OK State * Gray: Above Norm of OK County or OK State

- The US Census reports 22,182 people in the three zip codes: 5,210 in zip 73105; 11,781 in zip 73111, and 5,191 in zip 73117.
 - 17,582 -- 77% -- of the area residents are African American, making this the largest concentration of African Americans in the State of Oklahoma. Statistically, this ethnic group ranks highest in all major risk factors including health, quality of life, and economic well-being.
- Ages of residents in all three zip codes averages slightly higher than Oklahoma/US and all three average a higher percentage of population over age 65.

- There are 14,655 adults over age 25 in the combined zip codes and more than one third – 36% or 5,211 people -- do not have high school educations.
- The area averages a 29% marriage rate: 20% less than Oklahoma County, 21% less than the State and 22% less than the rest of the Country. Marriage rates impact economic conditions, employment, mental health, education and crime. The lower marriage rate also leads to a disproportionately high number of single households (discussed in Section 2, Economics).

SECTION 2 - ECONOMICS

Factor	73105	73111	73117	County	State	US
Residents in Poverty	23.2%	34.0%	42.3%	19.1%	16.8%	14.5%
Residents below 50%	11.7%	14.2%	22.3%	9.8%	7.4%	7.0%
Supplemental Nutritional Assistance Program	20.7%	34.5%	38.3%	17.0%	14.2%	13.6%
Free & Reduced Lunch	73.5%	43.7%	45.8%	64.5%	60.5%	48.1%
Household Size (People/H)	2.1	2.4	2.2	2.5	2.5	2.6
Median Income	\$36,002	\$22,495	\$19,918	45,215	\$43,225	53,045
% Change in Number of Households	713	(-)8.19	(-)7.46			
Median Year Built	1959	1954	1955	1965	1976	1974
Unemployment	8.00%	12.40%	18.20%	4.00%	5.50%	6.00%

* Black: Extremely Above OK County or OK State * Gray: Above Norm of OK County or OK State

- 1/3 of the population – 7,320 people – lives below the federal standards for poverty: \$ 11,770 for one person; \$ 24,250 for household of four.
 - 16% -- 3,549 residents in NE OKC -- exist at half or below the federal poverty level income standards defined in the previous note. This statistic translates to \$ 5,885 for an individual to live on in a year; \$12,125 for a family of four.
- Almost 1/3 of the population – 31.2% -- is on SNAP (Supplemental Nutritional Assistance Program, formerly "Food Stamps") and 44% of students are eligible for free or reduced lunch.
- Unemployment averages 13% compared with 5.5% for Oklahoma and 6% nationally.
- The area appears to be among Oklahoma's highest rate of single head of households: 71% compared to Oklahoma's average of 51%. This represents 15,749 of the 22,182 in the three zip codes living by themselves. This is significant due to risk factors associated with single households including reduced income, mental/social health issues, poorer nutrition and lower participation in healthy living habits, lower education gains, and higher unemployment. All of these issues are exacerbated if the single is also elderly.
- The area is blighted: There are many brownfield areas and many vacant homes and/or deteriorating structures and sites.
 - Homes are much older than the Oklahoma average and most have not been appropriately maintained. The average home was built in 1956 compared to Oklahoma County average of 1965 and Oklahoma's average of 1976.
 - There are 139 vacant and abandoned buildings per square mile compared to 19 per square mile in the City as a whole.
 - There was a 9% outmigration, significantly different from Oklahoma's increasing growth statewide.

SECTION 3 - DISEASE MORTALITY & MENTAL HEALTH

Factor	73105	73111	73117	County	State	US
Hepatitis C per 100,000	115.2	152.8	154.1		40	
Cardiovascular ²	335.4	433.2	519.5	269.1	228.5	174.4
Hypertension ¹	59.6	80	108.3	27.6	17.9	10
Diabetes ¹	***	46.8	59.5	27.7	28.4	21.2
Cerebrovascular ²	34.8	90.7	86.6	42	28.4	38
Chronic Lower Lung ²	21.3	30.8	85.1	60.7	64.2	42.1
All Cancer ¹	197.2	274.4	321.3	183.2	190.7	169.3
Breast Cancer ¹	***	21.8	***	14.8	13.1	13.3
Lung Cancer ¹	63.8	75.9	103.1	52.2	57.4	45.4
All causes Death ¹	925.4	1368.8	1578.8	935.3	915.5	747
Years of Potential Life Lost	115454.0	19898.6	21260.8	9175.0	9121.0	6874.19
Suicides/100,000 Population	***	321	***	16.6	17.5	12.3
Mental Health Visits	137.2	181.1	249.9	24		
Drug Visits	37.6	37.9	123.9	5.8		

* Black: Extremely Above OK County or OK State * Gray: Above Norm of OK County or OK State

² Disease Mortality should be thought of as the number of deaths per 100,000 people.

³ Missing data results when there are not enough cases to reliably adjust for 100,000 people. Therefore, the number fitting this element was either too small or did not occur.

- With only minor exceptions, the citizens of NE OKC have a higher morbidity rate in every single major disease than the comparison group of Oklahoma County, Oklahoma, and the US.
 - Exceptions: Chronic Lower Lung is not as high in two of the three zip codes; breast cancer statistics cannot be calculated for two of the three zip codes.
- Morbidity is higher in many cases apparently due to either lack of access to preventative care for common disease entities and/or lack of access to follow-up care.
- There is a significantly lower life expectancy as calculated in "Years of Potential Life Lost". The calculation is complicated but basically the rate in our area averages 16,921 years lost (not aging to 75) compared to 9,150 years lost for Oklahoma County. This indicates a significant number of individuals not living to the expected age of 75 or there are more deaths at a younger age.
- There is a significantly higher use of mental health and drug treatment facilities: the suicide rate is double the comparison data, mental health visits are eight times higher than Oklahoma County and drug treatment visits average 25 per 100,000 compared to Oklahoma County 5.8 rate.

SECTION 4 - MATERNAL/CHILD HEALTH

Factor	73105	73111	73117	County	State	US
Infant Mortality/ 1000 Live Births	26.2	***4	8.3	7	7.5	6.15
Teen Mom Births	12.7%	15.6%	16.5%	10.9%		
Low Birth Weight/ 1000 Live Births	12.4	16.1	14.8	8.7	8	8
Single Teen Mom HOH	9.7%	13.5%	19.2%	8.3%		
Maternal Education < HS	20.6%	26.6%	23.4%	23.0%		
Moms /c No Prenatal Care	3.4%	3.3%	1.9%	1.6%		
Moms Who Smoke	13.5%	19.3%	21.8%	15.0%		
Families in Poverty	14.4%	33.7%	38.0%	14.2%	24.0%	22.0%
Children <18 in Poverty	27.6%	65.9%	59.0%	27.5%	24.0%	23.0%
Children <5 in Poverty	32.5%	72.9%	69.0%	30.6%	28.0%	26.0%
# of substantiated Child Abuse Cases	572.6	1607.5	509.5			

* Black: Extremely Above OK County or OK State

* Gray: Above Norm of OK County or OK State

⁴ Missing data results when there are not enough cases to reliably adjust for 100,000 people. Therefore, the number fitting this element was either too small or did not occur.

- 18% of the births are to teen Moms compared to 3.5% in OK County; 14.4% of the births are low birth weights, compared to 8.7% in OK County; 14% of the teen Moms are single heads of household, compared to 8.3% for OK County.
- Smoking during pregnancy contributes to low birth weight babies and infant mortality: 18% compared to 15% OK County.
- Poverty rates for children and families is almost double the Oklahoma County or OK State averages: Families 28% in the NE OKC compared to 14% in OK County; Children under 18 are 51% compared to 24% in OK, and 65% of the children under five are living in Poverty in NE OKC, compared with 31% in OK County and 28% in OK.

SECTION 5 - CRIME

Factor	73105	73111	73117	County	State	US
Crime Score ⁵	73	2	47			
Homicides/100,000 Population	60.2	58.6	84.4	8.6	5.8	5.1
Assaults/ 100,00 Population	365	1197	424	210	242	636
Gun Related Mortality/ 100,000 Population	68.7	71.7	89.6	16.3	16.5	3.5

* Black: Extremely Above OK County or OK State

* Gray: Above Norm of OK County or OK State

⁵ Missing Data in these instances are because the County calculates it at rate per 1,000 not per 100,000 and therefore the reporting data is not comparable.

- This is a very high crime area which contributes to the 'lack of walkability' of the neighborhood.
- NE OKC is one of the highest crime areas in Oklahoma. Homicides and assaults are significantly greater than in Oklahoma County in general and in Oklahoma overall.
- Gun related mortality is extremely high: 78.6 rate to 16.3 rate in Oklahoma County.

SECTION 6 - BEHAVIORS

Factor	73105	73111	73117	County	State	US
Emergency Room Visits/1000 Population ⁶	795.6	112.1	1040.8	519		
Obesity	36.0%	35.7%	36.3%	29.4%	32.5%	27.1%
Fast Food Restaurants per zip code	9	6	2	8.6		
Grocery Stores	1	2	0			
Everyday Smoker	16.6%	16.7%	16.6%	15.2%	17.4%	13.4%
Sometime Smoker	10.6%	11.5%	11.0%	5.8%	6.3%	5.4%
Quit Smoking	15.7%	16.6%	14.9%	24.0%	24.5%	25.3%
Smoking, Current	27.2%	28.2%	27.7%	21.0%	23.7%	18.8%
Never smoked	57.0%	57.7%	57.3%	54.8%	51.8%	55.0%
Adults who are Inactive	38.3%	39.4%	38.8%	31.8%	33.0%	25.3%

* **Black:** Extremely Above OK County or OK State

* **Gray:** Above Norm of OK County or OK State

⁶ The Zip Code specific data for emergency room visits is based on published data; data for obesity, smoking, and activity behaviors is based on Lynn Institute developed formulas/calculations. By knowing the specific behavior characteristics of each race/ethnic group in central Oklahoma and knowing the race/ethnic groups in the zip codes, I could assume the behaviors would be similar and could therefore calculate a rate for each zip code. See Appendix B for calculation details.

- Emergency room visits for the area are almost double – 983 – as compared to OK County’s overall utilization rate of 519. There are two Federally Qualified Health Clinics, only one primary care physician, and numerous indigent care facilities (located primarily in Churches). Some Dental care is also available, 35 Dentists serve in the area. The new OK City County Health Department has outstanding facilities, which is located in the far northeastern segment of the target area, thus making it extremely difficult for residents to physically reach quickly.
- More than 1/3 of the population in these zip codes – 36.33% -- are obese as compared with 29.4% OK County, 32.5% Oklahoma and 27.1% US.
 - The NE OKC area is a food desert with extremely limited access to fresh fruits and vegetables and quality meats: there are only three grocery stores but there are 43 gas stations/convenience stores, and 17 fast food establishments in the target area.
- Smoking incidence is higher than Oklahoma County or OK state averages, both OK County & OK State are higher than the nation.
- The majority of the residents express spiritual or faith-based beliefs and Religious organizations are major influencers in the community including in the area of health and values. There are more than 26 Churches, Synagogues or Mosques in NE OKC.
- The majority of residents have transportation issues: it is not a community in which there is easy access/egress to health care, food sources, employment, school, and/or transportation. Further, the crime in the area reduces the walkability of the neighborhood. There is a lack of or inadequate network of sidewalks in the area.

NORTHEAST OKLAHOMA CITY QUANTITATIVE DATA SURVEY

1. POPULATION, ETHNICITY, BASIC DEMOGRAPHICS

- Concentrated age range 25-64 with rapid taper after age 65 and only 22-28% age 19 or younger.
- Population is primarily African American, with more single individuals than comparisons.
- Population density is highest in zip code 73111 and 73117 while the density in 73105 approaches the same level as the county. However, the county is among the most densely populated in the state.
- The median age is the highest in 73105, suggesting a larger population density in the middle range ages. All three zip codes are slightly older (4 -7 years) than the comparisons.
- 73111 and 73117 have a higher percentage of children under 5 than does 73105. However, the percentages in 73111 and 73117 are only slightly higher than the comparisons. Since 73105 has a smaller percentage by comparison to the county, state and US and an older median age, it might be that the children are past the 5-year mark. This would make sense if the population were more toward mid-life ages.
- All three zip codes have a higher percentage of population over age 65 with 73111 having the largest. 73105 and 73117 are the smaller communities so it may be of more importance to 73111 as they consider access to elder care.
- Education "less than high school" is highest in 73117 followed by 73111. 73105 compares better than the County and State but does not fare as well compared to the US. The entire state does not do well in terms of education levels as compared to the nation.

Additional interpretation when putting the data together:

- 73105 has only 2 areas of major concern which is the oldest median age and the second lowest percentage of married.
- 73111 has the biggest split in ages and the highest divorce rate, indicating more single head of households with children. With an increase in the percentage of age 65 and older, there may be access problems to elder care needs. Higher minority population indicates there may be greater risk to certain diseases and greater disease disparity.
- 73117 has the lowest percentage of married and a greater percentage of the population with less than a high school education. The latter may indicate less earning power and more single head of households. It is also denser with more children under the age of 5 and has the second highest divorce percentage.

2. ECONOMICS

- 23-42% live under the poverty level within the three zip codes. 73117 has the highest population percentage of poverty with 73111 close behind. 73105 is still one and a half times as high as the US as a whole so it also has significant poverty. In addition 73117 has the highest percentage of the population living at 50% below the poverty level again with 73111 and 73105 trailing respectively.
- Median income all lower than comparisons, high usage of food assistance programs, and high unemployment. The highest percentage of the population using the SNAP program is 73105 with 73111 and 73117 actually showing below the national percentage.
- The median income is the lowest in 73117 but all three zip codes are lower than Comparisons.
- Houses are the oldest in 73111 but all are older than comparisons and were built during the time period when there was no regulation on lead or asbestos.
- Growth has declined in 73111 and 73117 while 73105 is still showing a positive growth.
- Unemployment is the highest in 73117 (3x the national average) followed by 73111 (2x US average) and 73105.

Additional Interpretation when putting the data together:

- This is an area that is economically depressed especially 73111 and 73117.
- Zip Code 73105 poses a slightly different situation. There seems to be a mix of population with a distinct chasm between the wealthy and poor. The higher median income combined with the poverty level suggests that the incomes are at both extremes of the scale rather than centered in the lower range like 73111 and 73117. The lower unemployment rate in 73105 also supports this possibility, as does its positive household growth.

3. DISEASE MORTALITY AND MENTAL HEALTH

- All primary chronic disease mortality higher than comparisons especially cardiovascular disease.
- Chronic lower respiratory disease only higher in 73117.
- All cancer mortality greatly increased in 73111 and 73117 but all are higher than comparison.
- Breast cancer 2x higher in 73111.
- Lung cancers highest in 73117 but all are higher than comparisons.
- All causes mortality significantly higher in 73111 and more so in 73117.
- Years of potential life lost all higher than comparison with 73111 double the comparison and 73117.
- Suicides are triple the national average in 73111.
- Mental Health visits are much higher for all three zip codes than comparison.
- Drug visits are higher than comparison but significantly so in 73117.

Additional Interpretation when putting data together:

- All three zip codes have significantly higher mortality in almost every chronic disease.
- Zip code 73111 has a very high suicide rate that may mean additional factors besides what we have reviewed so far are coming into play.
- 73105 stands out some in that the disease mortalities are not as high as the other zip codes except for hypertension. Hypertension and cardiovascular disease can be associated with high stress in addition to obesity, inactivity, smoking, heredity, nutrition and ethnicity.
- Chronic lower lung diseases in 73117 only may signify a greater environmental element than comparisons, perhaps emission pollution, wind, mold or other manufacturing pollution.
- The "Year of Potential Life Lost" is high across the board. Since this measure takes into account the age of 75 and the age at time of death to calculate the number of years lost, one can only assume individuals living in these zip codes are dying far younger from these chronic diseases than the general population. The sooner an individual has a chronic disease in life, the sooner and more likely they will develop complications which may also be an explanation for high YPPL.
- Mental Health and Drug visits are all very high in these zip codes. Several factors have been checked with the Mental Health Association but have yet a definite explanation. Additional information is being requested to determine how many of these visits might be court ordered.

4. MATERNAL CHILD

- Infant Mortality is extremely high for zip code 73105 and much higher than comparisons.
- Teen mom birth rates and teen single head of household is higher in target zones, particularly 73111 and 73117.
- 73111 and 73117 have the highest low birth rate babies born.
- All zip codes rank higher in tobacco consumption and lack of prenatal care.
- 73105 has the highest rate of no prenatal care.

- Oklahoma ranks 49 out of 50 states as having the highest teen birth rate.
- Zip codes 73111 and 73117 have more moms with less than high school education.
- All public non-charter schools have the lowest letter grades.
- The educational index is the lowest (worst) in 73111 and 73117.
- Poverty in families is greatest in 73111 and 73117. 73106 has fewer children than the state and US.
- The largest number of children under 18 in poverty is 73111 followed closely by 73117. All three zip codes are higher than comparison.

Additional Interpretation when putting the data together:

- 73106 has the highest infant mortality and lowest percentage receiving adequate prenatal care.
- Children under 5 living in poverty are highest in 73111 and 73117 but all are higher than OK County, State, and nation. This shows the population with the highest risk for lasting consequences. Children under 5 are still undergoing brain development. Nutritional support is critical during this time. With poverty, the opportunity to provide adequate nutrition and social and developmental stimulation is severely limited.
- Confirmed child abuse cases are extremely high- they are the highest in the County.

5. CRIME

- Crime statistics are all higher in the target area.
- 73111 has the lowest crime index.
- Homicide and gun related violence is highest in 73117 but higher in all three.

Additional Interpretation when putting the data together:

- NE Oklahoma City has a very high crime rate that adds to the community's stress level. High stress levels can have a very debilitating and permanent effect on residents. Long-term exposure to crime leads to an increase in fear, an increase in crime, a decrease in physical activity, an increase in social isolation and long-term physical, mental and social problems.
- The crime score is most severe in 73111 and together with other factors such as poverty, single head of households, deteriorating and abandoned properties – this serves as significant risk to those in the community.

6. HEALTH BEHAVIORS

- All three zip codes have a calculated obesity rate higher than the comparisons with 73111 being the highest.
- The number of occasional smokers is twice as high as the comparisons.
- The numbers for quitting smoking are lower than the comparisons.
- The inactivity rates are nearly 10% higher across the board than the comparisons.

Additional Interpretation when putting it together:

- Obesity increases the risk of all major chronic diseases and associated mortality. 73111 and 73117 have the highest calculated obesity and highest disease mortality statistics.
- The occasional smoker levels may be associated with the economics of the area suggesting occasional smoking may be more affordable.
- A larger percentage of the population in the target area has never smoked compared to the general population.
- Inactivity also increases the risk of many of the chronic diseases associated mortality.

FORMULA FOR BEHAVIOR CALCULATIONS

The Formula:

- A. Total population x % of population >age 19 = total adults
- B. Total adults x % African American = Number of African Americans (A)
- C. Total adults x % Caucasians = Number of Caucasians (B)
- D. African Americans x African American central obesity percentage = X
- E. Caucasians x Caucasian central obesity rate = Y
- F. Add X + Y and divide by A+B = Obesity rate for each zip code.

FOOTNOTES

- 2 Disease Mortality should be thought of as the number of deaths per 100,000 people.
- 3 Missing data results when there are not enough cases to reliably adjust for 100,000 people. Therefore, the number fitting this element was either too small or did not occur.
- 4 Missing data results when there are not enough cases to reliably adjust for 100,000 people. Therefore, the number fitting this element was either too small or did not occur.
- 5 Missing Data in these instances are because the County calculates it at rate per 1,000 not per 100,000 and therefore the reporting data is not comparable.
- 6 The Zip Code specific data for emergency room visits is based on published data; data for obesity, smoking, and activity behaviors is based on Lynn Institute developed formulas/calculations. By knowing the specific behavior characteristics of each race/ethnic group in central Oklahoma and knowing the race/ethnic groups in the zip codes, I could assume the behaviors would be similar and could therefore calculate a rate for each zip code. See Appendix B for calculation details.

Appendix F – History of the Lynn Institute

After more than a decade conducting sleep research and clinical research studies, INTEGRIS Medical Center opted to reformulate these programs into independent entities, also using the opportunity to honor their retiring chief of medical staff, Thomas N. Lynn, M.D. It was 1997 when the Thomas N. Lynn Institute for Healthcare Research, Inc., (LIHR) a 501 (c)(3) non-profit, and it's wholly owned, for-profit subsidiary, Lynn Health Science Institute, Inc., opened as two free-standing corporations. INTEGRIS established the corporate entities by gifting \$750,000 to the then board and staff leadership team over a three-year period to support efforts toward complete independence from INTEGRIS. The new organizations proved to be very successful and between 1997 and 2012, the Lynn Institute for Healthcare Research, Inc. conducted internationally acclaimed basic science and medical investigator-initiated research with primary focus on sleep and GERD (gastroesophageal reflux disease).

Lynn scientists produced over 250 internationally acclaimed publications and presentations. Upon the retirement of its senior scientist in 2012, the Lynn Institute for Healthcare Research, Inc. began its transition toward creating sustainable community health research and planning with the mission "to measurably improve the health of the communities we serve." The Lynn Health Science Institute, Inc. has conducted more than 800 clinical trials and is now Oklahoma's largest independent clinical trials firm with offices in Norman, Little Rock, Colorado Springs, and Denver.



Appendix G – Board of Directors

The Lynn Institute for Healthcare Research, Inc., is a 501 (c)(3) non-profit organization, whose mission is to "improve the Health of the Communities We Serve."

Governing Board of Directors, Lynn Institute for Healthcare Research, Inc.

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The Lynn Institute for Healthcare Research, Inc., proudly oversees its wholly owned for profit, corporation: the Lynn Health Science Institute, Inc. LHSI is the largest, independent clinical trials research firm based in Oklahoma.

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Karen Vinyard Waddell

Appendix H – About the Authors



Karen Vinyard Waddell is the President/Chief Executive Officer for the Lynn Institutes: the Lynn Institute for Healthcare Research, Inc., and the Lynn Health Science Institute, Inc. She has more than 40 years of experience in hospital administration, community health planning, and healthcare leadership, specializing in organizational strategic planning. Prior to joining Lynn in 2011, Ms. Waddell served as Senior Vice President of Community Hospitals of Central California (Fresno, CA) and President, Community Hospitals Foundation; Regional Group Vice President for Hospital Corporation of America, Oklahoma-Texas-Arkansas, and Vice President of Presbyterian Hospital, Oklahoma City, and as Associate Vice President and Executive Director, the University of Oklahoma Health Sciences Center. She also served as President/Chief Executive Officer of Eckerd Youth Alternatives, a \$110 million corporation helping at-risk kids, based in Clearwater, Florida. Ms. Waddell is a recognized and honored community leader in Oklahoma, having been appointed in 2013 by Governor Mary Fallon to chair the State's Children and Family Issues Citizens Advisory Panel for the Oklahoma Department of Human Services and in 2012 as a Commissioner to the Oklahoma Department of Human Services Commission. She was a member and report author for the Special Review Committee studying deaths of children in foster care in 2011-12, and chairs the collaborative she founded, "Count Me In 4 Kids", a forum providing support for central Oklahoma's foster care providers, educators, legal, justice system, mental health and physical health providers. She is a graduate of the University of Oklahoma, a member of Leadership Oklahoma, Leadership Oklahoma City, S.A.L.L.T., Esther Women, and a Board member of the Ardmore Institutes of Health.



Angela Cozby is Director of Research & Planning for the Lynn Institute for Healthcare Research, Inc., and as such served as Lead for the Lynn Lifestyle Summary² - Northeast Oklahoma City. She developed and implemented the Qualitative Analysis Section of the Summary and oversaw the research, compilation, and analysis of the Quantitative section of the Summary. Ms. Cozby's work included the creation, development and implementation of the survey tools for both the focus groups and the more than 100 individual interviews conducted during the study period. She is a member of the Northeast Renaissance Stakeholder's Group, active in the Black Chamber of Commerce, and a member of Sisters-in-Motion, a Northeast Oklahoma City based walking group. Prior to joining Lynn in 2014, she served for six years as Festival of the Arts Director and was responsible for planning and implementing all aspects of the community event that attracts over 750,000 people annually. She has extensive experience with project planning, fundraising, program development, marketing, volunteer management, collaborating, and creating fiscally responsible budgets. Cozby is also an active Oklahoma City community volunteer and is a member of Leadership Oklahoma City LOYAL Class IV. She holds a Bachelor's Degree from the University of Central Oklahoma and a Master's of Business Administration from Oklahoma City University. Cozby was selected as one of "Forty under 40" by OKCBIZ 2009 and by Oklahoma Magazine 2010.



Cheryl Roswell served the Lynn Institute for the Healthcare Research, Inc. as Senior Research Specialist, bringing to Lynn almost 20 years of both national and local health data research, including analysis and feedback. Roswell's skills include: data abstraction, data entry, database design and query methods of large data sets. She has designed quality improvement objectives with results in improved patient care for Bayfront Health Hospitals and Cardiovascular Surgical Associates in St. Petersburg, FL, as well as serving as a national consultant for the Veteran's Administration Hospital System. Mrs. Roswell's role with the Lynn Lifestyle Summary² - Northeast Oklahoma City was as Lead over the Quantitative Section of the document. Her work included significant local and national data set review, identification of best practices and application of appropriate tools to be replicated for use in the Lynn Summary. Most importantly, Mrs. Roswell was responsible for the fidelity and integrity of the data sets selected, their accuracy, and the interpretation in current and future outcome situations. She also served as Lynn's representative to the Wellness Now Coalition, a project of the Oklahoma City County Health Department.



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