

Lincoln County Community Health Needs Assessment 2012



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The Lincoln County Health Department wishes to thank the Lincoln County Medical Center for its assistance with the sections Access to Health Care/Health Indicators (lcmctroy.com).





LINCOLN COUNTY HEALTH DEPARTMENT

The Lincoln County Health Department presents its 2012 Community Health Needs Assessment, with hopes it will be an informative and useful tool. The information within was compiled from public and private datasets, and includes results from questionnaires completed by our patients, clients and other community partners.

We recognize—and embrace—that effective public health policies and interventions require an integrated approach, and thus welcome comments, questions and other inputs from our healthcare partners and consumers on how this assessment can best serve its purpose...to help advance good health and well-being of our community.

Yours,

A handwritten signature in blue ink, which appears to read "Brett Siefert". The signature is stylized and fluid.

Brett Siefert
Administrator, Lincoln County Health Department

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Purpose

A community health assessment is a systematic method of reviewing the current health status of a selected community as a whole. Just as a doctor monitors the health of an individual, the health department monitors the health of a community. The assessment will present existing data concerning Lincoln County provided by state and federal sources followed by results from a public survey. The combined data will be compared to identify strengths, weaknesses and priority areas for overall improvement. The findings of the health assessment will produce a snapshot of the health status of Lincoln County that will lead to agreed priorities and resource allocation by concerned stakeholders in an attempt to improve health and reduce inequalities for county citizens.

Summary of Key Findings

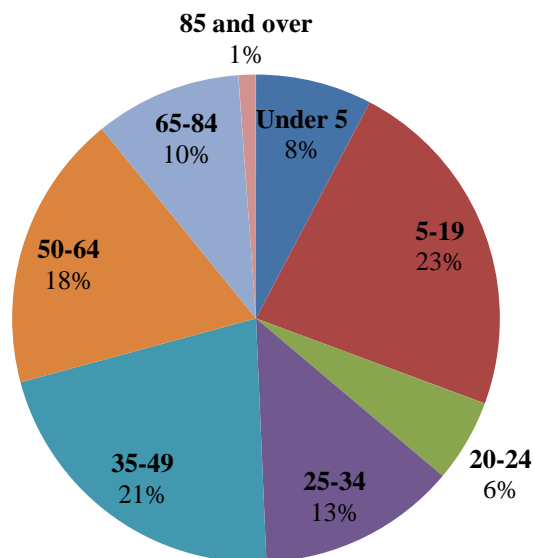
After reviewing the data from the survey, there are three important key findings to note. First, of the individuals surveyed 60% said they see a doctor regularly for health care. Additionally, when asked the questions if they see a dentist or an eye doctor regularly for checkups, 60% answered positively. This means that only 60% are getting regular health, dental, and eye care, which illustrates an evident lack in appropriate health maintenance of the individual. Second, the survey data shows that almost 70% of individuals regularly or occasionally go outside of Lincoln County for healthcare. Last, when asked what the three most important areas of need in Lincoln County, the top responses were medical, activities, and planning and zoning. The top three health issues that individuals responded with were general healthcare, hospital and medical facilities, and drugs and alcohol.

Methods

Several state and federal sources were consulted to obtain the pre-existing data utilized in this assessment. The survey was issued to citizens throughout the county. There were 530 individual respondents to the survey, approximately 1% of the county population. Identified areas of concern are reviewed in order to assess resources presently available in the county and assist in planning for the future. Statistical data on current health issues and trends were reviewed in order to track changes in areas such as population, health care concerns, and health status indicators.

The US Census (2010) indicates Lincoln County consists of 15 cities and towns including Cave, Chain of Rocks, Corso, Elsberry, Foley, Fountain N' Lakes, Hawk Point, Moscow Mills, Old Monroe, Olney, Silex, Troy, Truxton, Whiteside, and Winfield. The population of Lincoln County in 2011 was 53,076 inhabitants, which is a 35% increase in population since 2000 (US. Census). Lincoln County is considered to be the second fastest growing county in Missouri. The population growth can be explained by the natural increase of 366 more births than deaths between 2010 and 2011 as well as the positive net domestic and international migration during the same time period.

Age Distribution



Source: US Census Bureau 2010

Racial Distribution

White		
Hispanic	1,032	2%
Non-Hispanic	49,364	93.9%
Asian	193	0.4%
Native Hawaiian/Pacific Islander	13	<0.1%
Black/African American	984	1.9%
American Indian/Alaskan Native	173	0.3%

Source: US Census Bureau

Includes topics such as addictive behaviors (tobacco, alcohol, drugs, gambling), chronic disease (mental health, cardiovascular disease, cancer, asthma, diabetes, arthritis, etc.), elderly wellness, family planning, infant, child & family health, nutrition, oral health, physical activity, pregnancy & birth, and wellness. Overall, according to County Healthⁱ Rankings, Lincoln County rates 108 out of 115 counties for health behaviors in 2012.

- Physical Activity and Nutrition:** County Health Rankings provides several health measures including: adult obesity, physical inactivity, limited access to health foods, and fast-food restaurants. In Lincoln County, the adult obesity rate is 36% compared to the state rate of 31% and national rate of 25%. The rate of physical inactivity is 27% which is one percent less than the state rate (28%). One-fifth of the population has limited access to healthy foods because they are faced with economic barriers and do not live close to a grocery store. Lastly, of all the restaurant establishments in Lincoln County, 44% are considered fast-food.
- Tobacco and Alcohol:** The County Health Rankings measures for tobacco and alcohol use include: adult smoking and excessive drinking. The smoking rate in Lincoln County is 31% and considered an area that needs attention. The state smoking rate is 24% while the national rate is 14%. The excessive drinking rate in Lincoln County is 13% which is lower than the state rate (17%) but higher than the national rate (8%).
- Chronic Disease:** According to the Missouri Department of Health and Senior Services (DHSS), death caused by heart disease, especially ischemic heart disease, is significantly higher in Lincoln County compared to the state rate of death. Emergency room (ER) visits due to stroke, chronic obstructive pulmonary disease, and arthritis/lupus are also significantly higher in Lincoln County than in the state overall.

Chronic Disease Comparison Profile*

	Deaths	Hospitalizations	ER Visits
Heart Disease	1,181	3,873	4,582
Ischemic Heart Disease	855	1,486	584
Stroke/Other Cerebrovascular Disease	231	652	291
All Cancers	895	863	-----
Smoking Attributable Diseases	712	-----	-----

Source: Missouri Department of Health and Senior Services *Data years vary (1999-2009).

- **Elderly Wellness:** In 2008, 10.7% of Lincoln County's residents were over 65 years of age as compared to 13.5% of Missouri residents. Census data from 2010 indicated 9% of Lincoln County seniors were living below poverty level as compared to 9.9% of Missouri seniors (U.S. Census Bureau). Lincoln County seniors had fewer diabetes related ER visits than Missouri but had more heart related ER visits. Lincoln County seniors also had a lower rate of full-time primary care physicians than Missouri seniors.

Indicators of Senior Health Status

	Lincoln County	Rate per 10,000 seniors	Missouri	Rate per 10,000 seniors
Hospitalization & ER visits for Diabetes, 2005-2007	119	81.2	16,994	72.6
Hospitalization & ER visits for Heart 2005-2007	2,030	1385.7	239,208	1022.6
Full-time primary care physicians 2008	22	4.12	10,531	13.08

Source: 2009 Missouri Senior Report

- **Child and Family Health:** Overall three areas where Lincoln County children have higher indicators of well being when compared to Missouri are: infant death, child death, and teen violent death. The increasing numbers of Lincoln County children qualifying for free or reduced lunches have increased since 2003 and these children continue to receive a nutritious meal each day while attending school. Aid for families including the Women, Infant, and Children program (WIC) and Temporary Assistance for Needy Families (TANF) are provided on a needs basis for low-income families. The Missouri Department of Health and Senior Services (DHSS) reports Lincoln County Health Department provided services for 12,251 clients (pregnant/post-partum/breast feeding women, infant, and children) for the fiscal year 2011, an average of 1,021 clients per month (DHSS, 2012). The same source reports Lincoln County provided TANF services for 4,057 families in 2011 which is an almost 10% increase from the year beforeⁱⁱ.

Indicators of Child Well-being in 2010

Indicator	Missouri	Percent	Lincoln County	Percent
Number of free lunch eligible	407,152	46.8	3,704	42.7
Child abuse & family assessments	45,441	31.9	411	27.9
Births to teenagers age 15-19	7,625	36.9*	61	32.2*
Receiving food stamps	533,309	37.4	4,875	33.1
Infant deaths	2,855	7.1*	28	7.3*
Child deaths	1,093	18.5**	12	20.2**
Teen violent deaths	1,291	61.2**	6	31.1**

Source: 2010 Missouri/Lincoln County Kids Count *per 1,000 **per 100,000 kids ages 1-14

Includes topics such as brain injury, disability, Emergency Medical System (EMS) trauma & system development, intentional injuries (violent & abusive behavior, suicide), occupational health & safety, and unintentional injuries (motor vehicle crashes, falls, poisoning, drowning, etc.).

- **ER:** Overall in 2009, Lincoln County had a significantly higher rate of ER visits for all diseases and conditions (426.3) than Missouri (372.68). Lincoln County continues to be higher than Missouri in ER visits related to heart and circulation, anxiety disorders, brain/spinal cord/eyes/ears, and injury and poisoning. The chart below illustrates the diseases and conditions that were treated in the emergency room in which the county rate was significantly higher than the state rate according to Missouri Information for Community Assessment (MICA). This extensive data illustrates that many residents go to the ER for preventable conditions including anxiety-related disorders and teeth and jaw disorders.

ER Visit Indicators 2009

Disease/Condition	Lincoln County		Missouri
	Number	Rate*	State Rate*
All Diseases Conditions	22,548	426.3	372.68
Mental Disorders	694	13.4	11.01
Anxiety-Related Disorders	236	4.5	2.82
Brain/Spinal Cord/Eyes/Ears	2,029	37.9	35.44
Headache/Migraine	729	13.8	10.36
Heart and Circulation	1,082	21.3	17.41
Heart Disease	850	16.7	12.85
Stroke/Other Cerebrovascular Disease	55	1.2	0.73
Chronic Obstructive Pulmonary Disease (COPD)	478	9.1	5.61
Digestive System	2,047	38.8	17.14
Teeth and Jaw Disorders	885	16.6	10.0
Bone/Connective Tissue/Muscle	1,694	32.1	25.06
Arthritis and Related Joint Disorders	390	7.5	5.78
Spinal/Back Problems	881	16.6	12.31
Injury and Poisoning	6,531	123.1	92.8
Fractures	783	14.9	11.19
Open Wounds	1,375	25.8	19.1
Sprains and Strains	1,512	28.5	21.99
Complications of Device/Surgery/Medical Care	123	2.3	1.76
Symptoms and Ill-Defined Conditions	2,462	46.6	41.09

Source: MICA[®] *ER visit rates are per year per 1000 population.

- **Disability:** There were 2,311 persons age 65 and older in the county who reported having a disability between 2008 and 2010 (43.2%). The corresponding Missouri rate is 37.8 percent, a reduction for both rates since 2000. Among the working age population (aged 16 to 64) in Lincoln County 4,702 reported some work disability, a rate of 43.2 percent compared to a state rate of 37.8 percent. Disabilities included: hearing, vision, cognitive, ambulatory, self-care, and independent living.

Individuals Living with a Disability in Lincoln County

	Number	Percent
Under 5 years	12	0.3
5-17 years	882	8.0
18-64 years	4,702	14.9
65 years and over	2,311	43.2
Total	7,907	15.3

Source: 2008-2010 American Community Survey

- **Intentional Injuries:** Lincoln County has a significantly higher total rate of hospitalization for self-inflicted injuries overall compared to Missouri. Although the primary ages at risk for these injuries are those individuals between the ages of 20-34 years of age, individuals ages 15-19 and 35 to 64 were also above the state rate.

Self-Inflicted Injury Indicators (1999-2009)

	Number of Events	County Rate	State Rate
Total Self-Inflicted Injury			
Death	65	13.2	12.85
Hospitalizations	376	7.6	6.44
Emergency Room Visits	260	0.5	0.6
Hospitalizations			
Under Age 15	6	0.5*	0.74
Age 15-19	44	11.5	9.98
Age 20-34	136	14.1	10.86
Age 35-64	183	9.2	7.92
Age 65-74	5	1.7*	1.52
Age 75 and Over	2	0.9*	1.19

Source: DHSS MICA^{iv} *Fewer than 20 events; rate is unstable.

- **Unintentional Injuries:** Excluding total deaths by unintentional injuries, the data below represents all indicators in which Lincoln County had significantly higher rates than the state including motor vehicle traffic, falls, poisonings, and fire/burns. Additionally, according to County Health Rankings, Lincoln County has a rate of 26 motor vehicle crash deaths compared to 19 state-wide and 12 nation-wide. The depth of these injuries illustrates a lack of preventative measures in this area.

Unintentional Injury Indicators (1999-2009)

	Number of Events	County Rate	State Rate
Unintentional Injuries			
Deaths	221	46.3	44.97
Hospitalizations	3,023	64.8	55.57
ER visits	63,304	125.1	92.19
Motor Vehicle Traffic			
Deaths	124	25.8	18.16
Hospitalizations	757	15.4	11.04
ER visits	6,355	12.7	10.64
Falls			
Hospitalizations	1,361	31.0	28.34
ER visits	16,482	33.0	25.81
Poisoning: Drugs/Alcohol			
ER visits	349	0.7	0.59
Poisoning: Gas/Cleaner/Caustic			
ER visits	201	0.4	0.3
Fire/Burn			
ER visits	1,048	1,048	1.69

Source: DHSS MICA

Includes topics such as air quality, drinking water protection, food safety, hazardous materials, hazardous waste, healthy homes, lead poisoning, nuisances, onsite wastewater systems, radon, radiological health, and vector control.

- **Air Quality:** The EPA Envirofacts database reports that there are thirteen facilities that produce and release air pollutants in Lincoln County in 2012^v. According to the Missouri DNR, the average ozone (O₃) level in 2010 was 0.079 ppm which is slightly over the standard of 0.075 ppm^{vi}. According to air quality map archives for 2012 on AirNow, Lincoln County tends to range from air quality index values of 0 to 150 which includes good, moderate, and unhealthy for sensitive group air quality categories^{vii}. Additionally, according to County Health Rankings, in 2012 there were zero unhealthy air quality days due to fine particulate matter but thirteen unhealthy air quality days due to ozone. Therefore, ozone is Lincoln County's largest problem in regards to air quality.
- **Water Quality:** There is very limited data on water quality and drinking water quality specifically in Lincoln County. However, there is data concerning violators of the Safe Drinking Water Program. According to the U.S. Environmental Protection Agency (EPA) in 2012 there were 41 systems that reported to the drinking water program^{viii}. Out of the 41 systems, 26 had one or more violations in the past three years and four had serious violations. According to the EPA Envirofacts database, 101 facilities in Lincoln County have permits to discharge into water^{ix}. Consistent data on what type and how much waste needs to be recorded before analyzing water quality.
- **Lead Poisoning:** According to the EPA, any housing built prior to 1978 may be considered suspect for higher lead levels, although pre-1950 housing are considered most likely to contain lead-based paint. In Missouri, an estimated 60% of dwellings built between 1960 and 1978 contain lead-based paint, with that number jumping to 80% for dwellings built between 1940-1959 and as high as 90% for pre-1949 dwellings (DHSS). The Department of Health and Human Services (DHSS) indicated the percentage of existing pre-1950 housing in Lincoln County to be 19%^x. Presently, DHSS indicates Lincoln County is considered a non-high risk county but suggests testing children at 12 and 24 months. In 2011, 554 children were tested in Lincoln County (16% of the population) and 0% of the children were positive for lead poisoning.
- **Hazardous Waste:** According to the DHSS there are no current National Priority List sites in Lincoln County. The EPA Envirofacts database states that 27 facilities in Lincoln County report hazardous waste activities^{xi} in 2012.

Statistics | Epidemics and Disease

Includes topics such as disease investigation, control & surveillance, HIV/AIDS, immunization, reportable diseases, sexually transmitted diseases, and tuberculosis (TB).

- **Immunization Rates:** The Lincoln County Health Department provides immunizations to county adults and children. In 2011, the health department provided immunizations to 4,236 individuals including 675 influenza immunizations. The health department had 23 influenza clinics in 2011. Private physician immunization numbers are not consistently reported to the state, affecting the actual rates of immunizations in the county.
- **Communicable Diseases:** According to a 2012 report completed by DHSS, the top five communicable diseases/conditions that were reported in the last five years in Lincoln County include animal bites, Campylobacteriosis, Hepatitis C, Salmonellosis, and TB infection. There were 157 total reported cases of communicable disease in 2010.

Communicable Disease Rates

	2010 Reported Cases	Five Year Median
Animal Bites	25	38
Campylobacteriosis	10	5
Hepatitis C, Chronic Infection	15	20
Salmonellosis	7	6
TB Infection	9	8

Source: DHSS WEBSURV

- **Sexually Transmitted Diseases:** According to the DHSS, Lincoln County reported 96 cases of Chlamydia, 13 cases of gonorrhea, and one case of syphilis in 2011. For the same year, the state of Missouri reported 13,717 cases of Chlamydia, 3,626 cases of gonorrhea, and 128 cases of syphilis (DHSS). According to County Health Rankings, the Chlamydia rate per 100,000 people was 195 in 2012 compared to the state rate of 438.

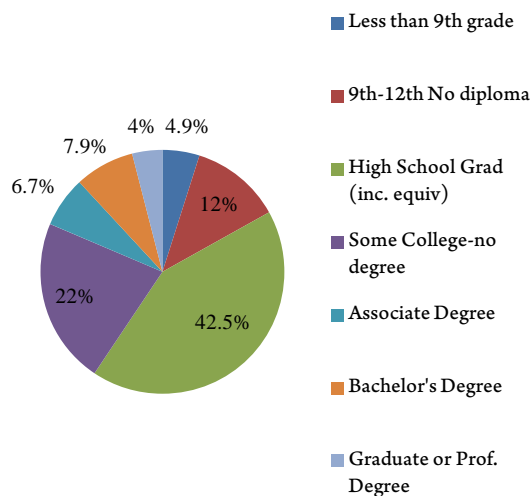
Includes topics such as communication networks, emergency planning, emergency response, recovery planning, risk communication, and surge capacity.

- Lincoln County has memorandums of understanding/mutual aid agreements with 28 in-county agencies and schools and six public health agencies outside of the county. These agreements provide for assistance to Lincoln County residents in the event of a disaster exceeding Lincoln County's response resources. Currently there is no data concerning the preparedness of individuals or of the community as a whole for disaster or emergency response. Looking toward the future, the community needs survey should include if and how households, businesses, and health officials have prepared to respond to an emergency.
- **Emergency Preparedness Programs:**
 - **Community Emergency Response Team (CERT):** Lincoln County CERT partners with the other Region C North CERTs (Pike and Warren Counties) and the Missouri Region C North Medical Reserve Corps to serve our communities in preparedness and response efforts. There are 56 Lincoln County CERT members (Feb. 2008). CERT training assists citizens' understanding their responsibility in preparing for disaster and increases their ability to safely help themselves, their family and their neighbors in responding to and coping with the aftermath of a disaster. CERT provides training for disaster in the areas of preparedness, fire suppression, medical operations (first aid, triage, and assessments), light search and rescue, psychology, and team organization^{xii}.
 - **Medical Reserve Corps (MRC):** As a member of the Missouri Region C North Medical Reserve Corps, Lincoln County presently has more than 75 volunteers in their MRC. The mission of the MRC is to improve the health and safety of communities across the country by organizing and utilizing public health, medical and other volunteers. MRC volunteers include medical and public health professionals such as physicians, nurses, pharmacists, dentists, veterinarians, and epidemiologists^{xiii}.
 - **Community Organizations Active in Disasters (COAD):** Lincoln County has an active COAD consisting of 25 members whose focus is on helping to connect those wanting to help with those needing assistance.
 - **Emergency Management Agency (EMA):** Lincoln County's EMA is a liaison between the State Emergency Management Agency and the Federal Emergency Management Agency. Lincoln County has an active EMA-locally government appointed-which addresses emergency needs of the county related to earthquakes, emergency water supplies, evacuation, fire safety, flooding, heat waves, thunderstorms, tornadoes, and winter storms^{xiv}.

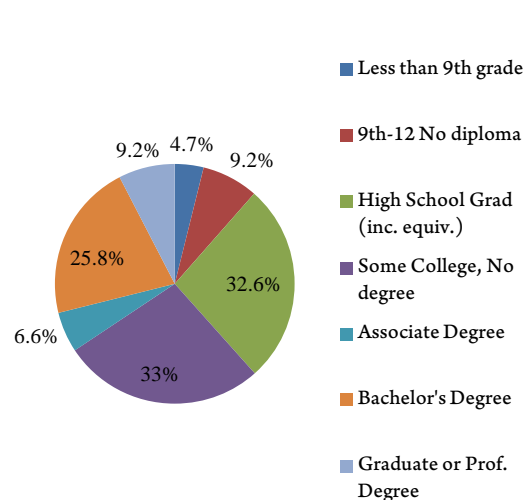
Includes topics such as access to quality health services, community engagement, evaluation, health facilities, health insurance, medical care, organizational capacity, planning, quality improvement, social determinants (e.g., education & poverty levels), transportation, and workforce.

- **Education:** There are four public school districts within Lincoln County: Silex-R, Elsberry R-11, Troy R-III, and Winfield R-IV, and five parochial schools: Troy Holiness, Sacred Heart, St. Alphonsus, Immaculate Conception, and First Baptist Christian Academy.
 - **Educational Attainment:** In Lincoln County, approximately 18.6 percent of residents aged 25 years and over were college graduates in 2011 compared with 31.6 percent statewide. An additional 22% of residents 25 and over in Lincoln County had some college education compared with 29% of all Missourians of that age. Lincoln County exceeds Missouri's percentages for high school graduates/GED. The high school graduation rate in Lincoln County (85.2%) in 2009 as reported by the Missouri Department of Education and Secondary Education/Kids Count 2010 was greater than the state rate (83%).

**Educational Attainment 25 and Older-
Lincoln County**
Total population 32,360

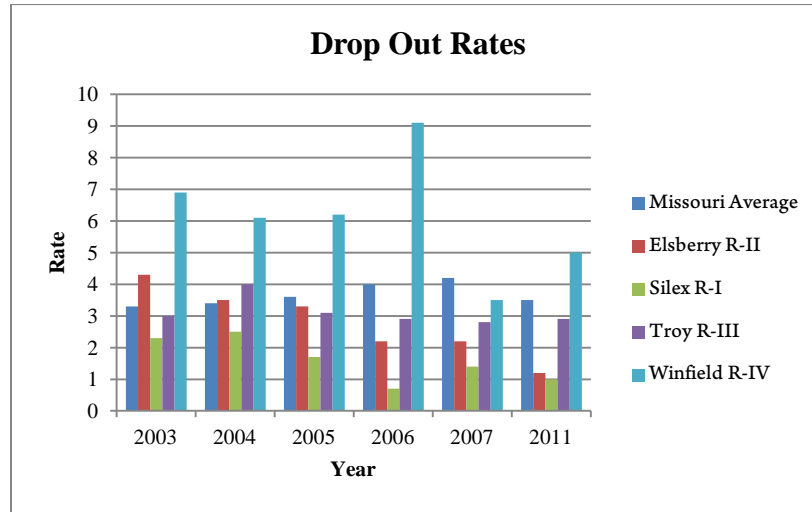


**Educational Attainment-25 and
Older-Missouri**
Total population 3,906,865



Source: US Census Bureau

- **Drop Out Rates:** High school dropout rate is calculated by a specific formula that includes enrollment at the start of the school year, the number of students who transfer in, the number of students who transfer out, and dropouts^{xv}. Disaggregated data is provided only for those groups that had 30 or more students enrolled in 9th-12th grades.



Source: Missouri Department of Secondary Education 2012.

- **Housing:**
 - **Housing Units:** According to the Census Bureau's estimates, there were 21,011 housing units in Lincoln County in 2010. The homeownership rate in 2000 was 90 percent compared to 70.3 percent statewide. The median value of owner-occupied housing units in 2010 was \$155,600 compared with a statewide median value of \$137,700.

Housing Units in 2010				
	Lincoln County	Percent	Missouri	Percent
Total Housing Units in 2010	21,011		2,712,729	
Occupied	18,906	90	2,375,611	87.6
Owner Occupied *	14,934	71.1	1,633,610	60.2
Renter Occupied *	3,972	18.9	742,001	27.4
Vacant	2,105	10	337,118	12.4
For seasonal or recreational use**	403	1.9	80,374	3
Median House Value, 2010	\$155,600		\$137,700	

Source: US Census Bureau *Percent of all occupied units. ** Percent of all vacant units.

- **Households:** There were approximately 18,906 households in the county according to the 2010 census. The average Lincoln county household size is 2.8 with family size being 3.10 compared to Missouri's average household size of 2.45 and family size of 3.01 (US Census Bureau).

Households by Type in 2010				
	Lincoln County	Percent	Missouri	Percent
Total Households	18,906		2,349,955	
Families	14,231	75.2%	1,546,509	65.8%
Married Couples	8,661	45.8%	1,171,854	49.9%
Married Couple w Own Children < 18	6,840	36.1%	468,922	19.9%
Grandparents responsible for children <18	453	2.3%	49,354	2%
Single Parent Families	1,975	10.4%	222,527	9.4%
Single Mothers	1,325	7%	51,709	2.2%
Single Fathers	650	3.4%	170,818	7.2%
Non-family Households	4,675	24.7%	803,446	34.2%

Source: US Census Bureau

- **Transportation**

- **Commuting:** In Lincoln County, 54.8 percent of workers commute outside their home county to work in 2010. Statewide, 33.4 percent of workers traveled between 30 and 60 minutes to work, while in Lincoln County 35.3 percent traveled as long. At the same time, 12.8 percent of workers traveled more than 60 minutes to work compared with 5.4 percent statewide. Additionally, the largest single outflow is to St. Charles County with 5,529 Lincoln County residents traveling there to work.

Commuting to Work 2008-2010				
	Lincoln County		Missouri	
	Number	Percent	Number	Percent
Total Workers Aged 16 and Over	22,826		2,756,948	
Workers 16+ who commute to work	22,362	98.0	2,639,100	95.7
Car, truck, or van who drove alone	18,656	81.7	2,225,774	80.7
Car, truck, or van who carpooled	3,060	13.4	280,653	10.2
Public transportation (excluding taxicab)	70	0.3	42,512	1.5
Walked to work	374	1.6	56,013	2.0
Other means of commuting	202	0.9	34,148	1.2
Worked at home	464	2.0	117,848	4.3
Mean travel time to work in minutes	34.9		23.2	

Source: ACS

Profile Report

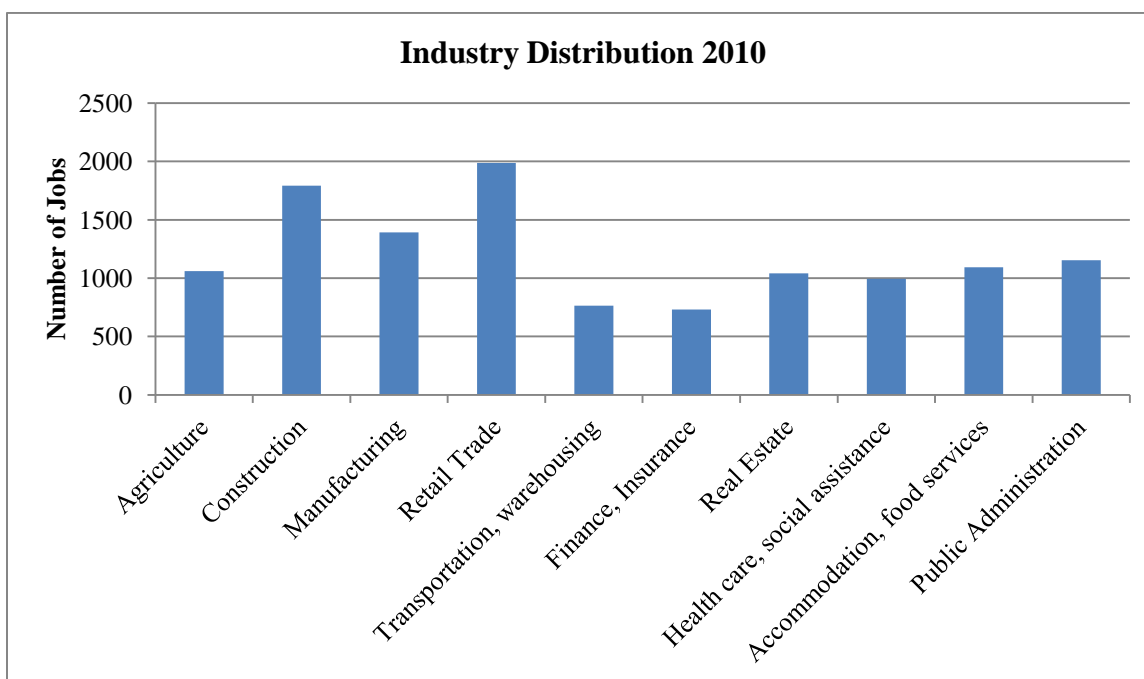
- **Vehicles Available:**

Vehicles Available 2008-2010				
	Lincoln County		Missouri	
	Number	Percent	Number	Percent
Occupied housing units	18,438		2,355,253	
No vehicles available	823	4.5	166,594	7.1
1 vehicle available	4,546	24.7	783,027	33.2
2 vehicles available	7,831	42.5	921,374	39.1
3 or more vehicles available	5,238	28.4	484,256	20.6

Source: ACS Profile

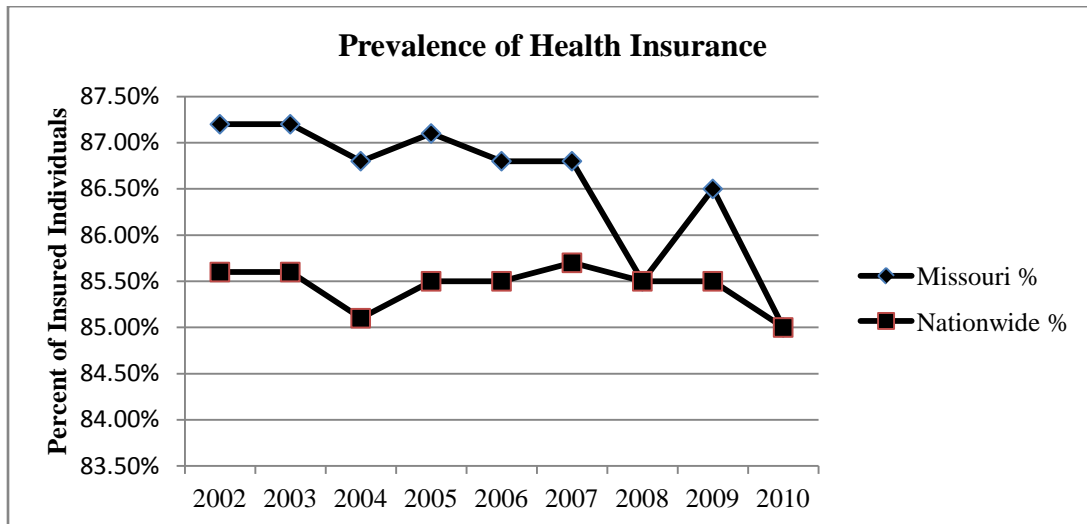
Report

- **Workforce** The 2011 unemployment rate was 10.2 percent compared to 8.4 percent statewide. Of the Lincoln County labor force, 89.8% (24,453) were employed as opposed to 91.4% (2,785,797) of the total workforce in Missouri. Average annual wage in 2011 was \$32,459 compared with the Missouri state average of \$31,170. Median household income in 2010 was \$50,307 compared to Missouri \$44,301^{xvi}.
 - **Industry Distribution:** There were 17,224 jobs in Lincoln County in 2010. Top industries in Lincoln County continue to be construction, real estate, manufacturing, and retail trade.



- **Poverty:** The poverty rate in Lincoln County in 2010 was 11.2 for adults and 15.2 for children under 18 years of age. In comparison the Missouri poverty rate in 2010 was 15.3.

- Health Insurance:** According to the American Community Survey (2008-2010) completed by the Missouri Census Data Center, 16.5 percent of adult men ages 18-64 and 16.1 percent of adult women of the same age did not have health insurance in Lincoln County. Additionally 4.1 percent of boys under the age of 18 and 5.2 percent of girls did not have health insurance. Source: Missouri Census Data Center, ACS Survey 2008-2010^{xvii}



Source: CDC-BRFSS

Conclusions

It is important to keep in mind the difference between the demographics of Lincoln County and of the survey results. The survey represents an overwhelming majority of white females between the ages of 16-35. Additionally, the majority of the residents who took the survey have lived in the country from one to 25 years. Therefore, the survey results are biased to this population.

One anomaly that can be seen in the survey results is the number of individuals with health insurance. Although 90 people are unemployed and 51 are working part-time, there are only 34 individuals who do not have health, dental or medical insurance. It is not evident where the other part of this population is getting health insurance.

One aspect that plays into this anomaly is the observation that only 60% of Lincoln County residents are receiving medical care. This is the same percentage for dental checkups and vision checkups. Therefore, according to this data residents have health insurance but are not getting adequate health care for other reasons.

Lastly, it is evident that county residents believe that the community has overwhelming medical needs. Although not very specific, residents are looking for better general health care including better or expanded hospital and medical facilities. Residents also feel a strong need to address the drug and alcohol problem that can be reinforced by the presented data. All in all by reviewing the survey results, the quality and quantity of health care seems to be a large issue that is not connected to the lack of health insurance of individuals in the county.

Reference Sources

The following websites provided data for this assessment:

- <http://www.countyhealthrankings.org/>
- <http://health.mo.gov/index.php>
- <http://health.mo.gov/data/mica/MICA/>
- <http://health.mo.gov/data/brfss/index.php>
- <http://www.epa.gov/>
- <http://www.dnr.mo.gov/>
- <http://www.census.gov/acs/www/>
- <http://www.census.gov/>
- <http://www.stats.indiana.edu/>

ⁱ <http://www.countyhealthrankings.org/app/missouri/2012/lincoln/county/1/overall>

ⁱⁱ <http://health.mo.gov/data/mica/TANFMICA/>

ⁱⁱⁱ <http://health.mo.gov/data/communitydatapfiles/>

^{iv} <http://health.mo.gov/data/mica/ASPSelfInflicted/header.php?cnty=113>

^v <http://oaspub.epa.gov/enviro/enviroFACTS.quickstart?minx=-91.104813&miny=38.931105&maxx=-90.864487&maxy=39.059183&ve=11,38.99539566040036,-90.98490142822266&pSearch=63379#remote-tab-2>

^{vi} <http://www.dnr.mo.gov/env/esp/aqm/foley.htm>

^{vii} <http://airnow.gov/index.cfm?action=airnow.mapsarchivecalendar>

^{viii} [http://www.epa-echo.gov/cgi-](http://www.epa-echo.gov/cgi-bin/ideaotis.cgi?name=134609717110125.txt&col=12&type=dc&coal=no&loadings=no&loadings_file=&ffeo=no&medical=no&idea_client=SDW&otis_custom_col=7,61,62,63,12,13,19,18)

[bin/ideaotis.cgi?name=134609717110125.txt&col=12&type=dc&coal=no&loadings=no&loadings_file=&ffeo=no&medical=no&idea_client=SDW&otis_custom_col=7,61,62,63,12,13,19,18](http://www.epa-echo.gov/cgi-bin/ideaotis.cgi?name=134609717110125.txt&col=12&type=dc&coal=no&loadings=no&loadings_file=&ffeo=no&medical=no&idea_client=SDW&otis_custom_col=7,61,62,63,12,13,19,18)

^{ix} <http://oaspub.epa.gov/enviro/enviroFACTS.quickstart?minx=-91.104813&miny=38.931105&maxx=-90.864487&maxy=39.059183&ve=11,38.99539566040036,-90.98490142822266&pSearch=63379#remote-tab-6>

^x <http://health.mo.gov/living/environment/lead/pdf/Cal0911.pdf>

^{xi} <http://oaspub.epa.gov/enviro/enviroFACTS.quickstart?minx=-91.104813&miny=38.931105&maxx=-90.864487&maxy=39.059183&ve=11,38.99539566040036,-90.98490142822266&pSearch=63379#remote-tab-4>

^{xii} <https://www.citizencorps.gov/cert/about.shtm>

^{xiii} <http://www.medicalreservecorps.gov/About>

^{xiv} <http://www.lcmo.us/emergencymanagementagency.htm>

^{xv} Number of dropouts divided by [(September enrollment plus transfers in) minus (September enrollment plus (transfers out minus dropouts)) divided by two]

^{xvi} http://www.stats.indiana.edu/uspr/a/us_profile_frame.html

^{xvii} http://mccl1.missouri.edu/cgi-bin/acsprofiles/acstabgen.py?period=2008_2010&geoids=05000US29113&basetables=C27001&basetables=B27001

Appendix A
Lincoln County Community Survey 2011

I. About You

Age _____ Sex _____ Zip code _____

Ethnicity: (circle one) White Black Hispanic
Native American Asian-Pacific Islander Alaskan Other: _____

How long have you lived in Lincoln County? _____ OR
If not a resident, how long have you worked in Lincoln County? _____

Choose one answer for each of the following questions about you

Employment : Full-time Part-time Full-time student Homemaker
Unemployed Retired Part-time student Retired, part-time employment
If employed, what is your occupation? _____

Education level (highest grade obtained):
< 12 years High school diploma/GED Some college College graduate Post-graduate

Number of people in your immediate household: _____ Adults _____ Children under 18

II. Insurance and Health Care-(please provide any additional information on the back)

Do you have:

	Medical Insurance	Dental Insurance	Vision Insurance
Me only			
Family coverage			
No insurance			
Spouse has own			
Children have their own			

Do you see a doctor regularly for health care? _____ No _____ Yes
Do any of your family members see a doctor for regular health care? _____ No _____ Yes
If yes, for what reasons/conditions _____

Do you go outside of Lincoln County for health care? _____ No _____ Yes _____ Sometimes
If yes or sometimes, why: _____
for what services _____

Do you see a dentist for checkups? _____ No _____ Yes (how many times a year _____)
Do you see an eye doctor for checkups? _____ No _____ Yes (how many times a year _____)

III. What Do You Think?

What do you feel are the three most important areas of need in Lincoln County?

1. _____
2. _____
3. _____

What do you feel are the three most important health issues for Lincoln County?

1. _____
2. _____
3. _____

PLEASE USE THE BACK OF THIS FORM FOR ANY ADDITIONAL COMMENTS

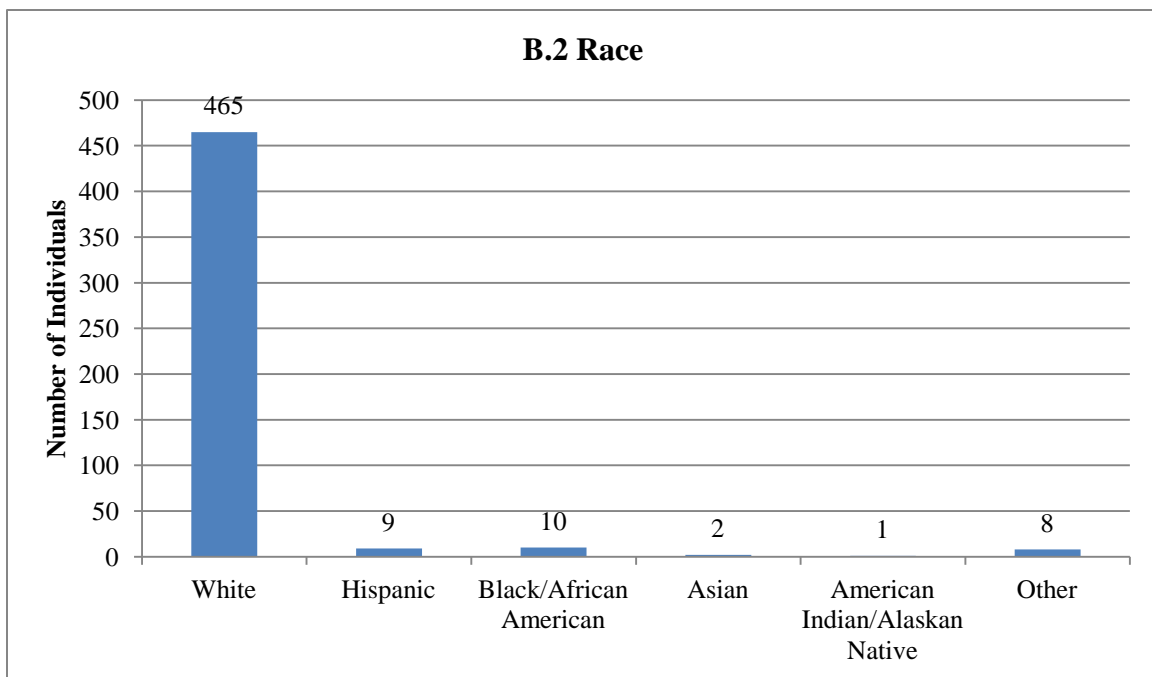
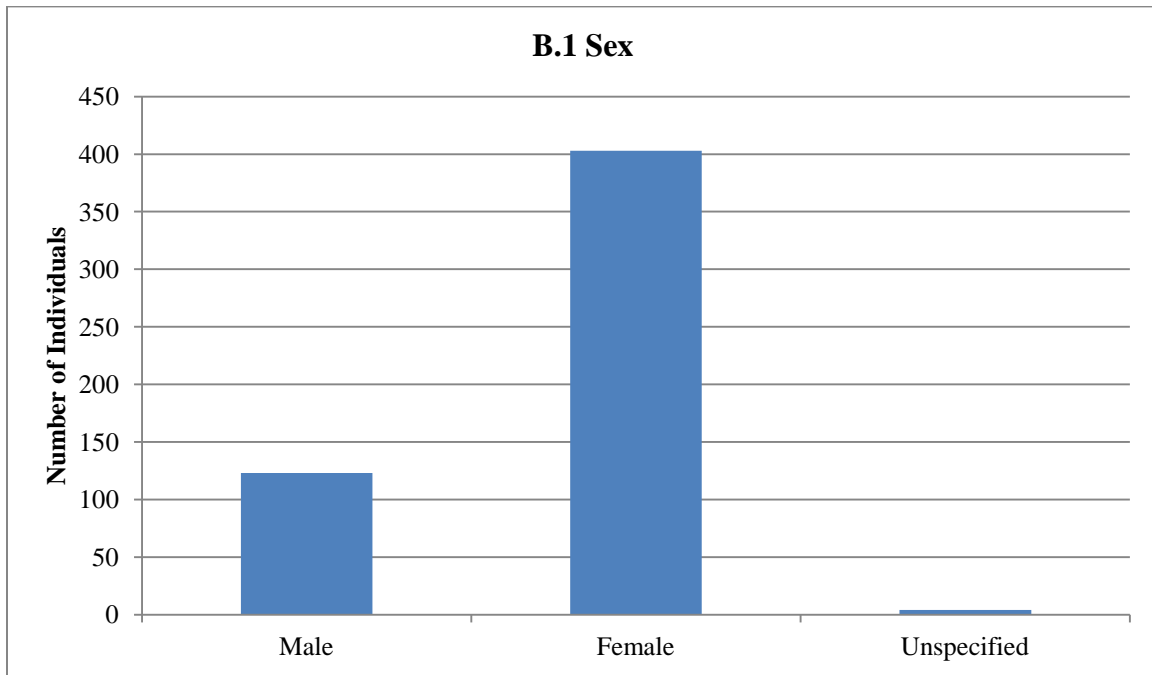
Please return this form by October 17, 2011 via fax (636-528-5262), in person or by mail to the Lincoln County Health Department, 5 Health Department Dr., Troy, MO 63379 **OR** by email www.lchdmo.org
Fall 2011/LCHD

Additional Comments or answers from the front of this page

Appendix B
Lincoln County Community Survey 2012

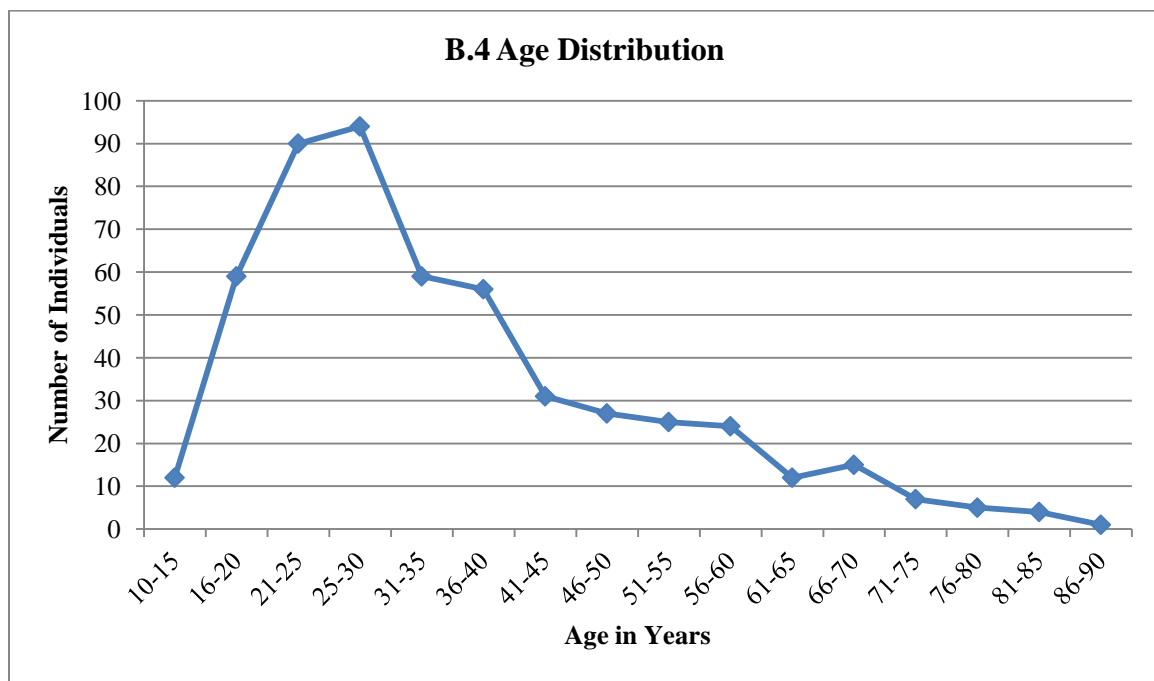
I. About You n=530

Sex: M=123 F=403 Unspecified=4



B.3 Age

10=2	20=21	30=17	40=15	50=5	60=3	70=2	82=1
12=1	21=11	31=16	41=11	51=3	61=3	71=4	83=1
13=1	22=19	32=7	42=8	52=5	62=2	72=1	84=1
14=1	23=19	33=13	43=4	53=4	63=2	73=1	85=1
15=7	24=19	34=9	44=5	54=4	64=3	74=1	86=1
16=11	25=22	35=14	45=3	55=9	65=2	76=1	
17=4	26=17	36=9	46=5	56=7	66=3	78=3	N/A=9
18=8	27=16	37=14	47=8	57=7	67=3	79=1	
19=15	28=21	38=6	48=2	58=4	68=4		
	29=23	39=12	49=7	59=3	69=3		



B.5 Zip code

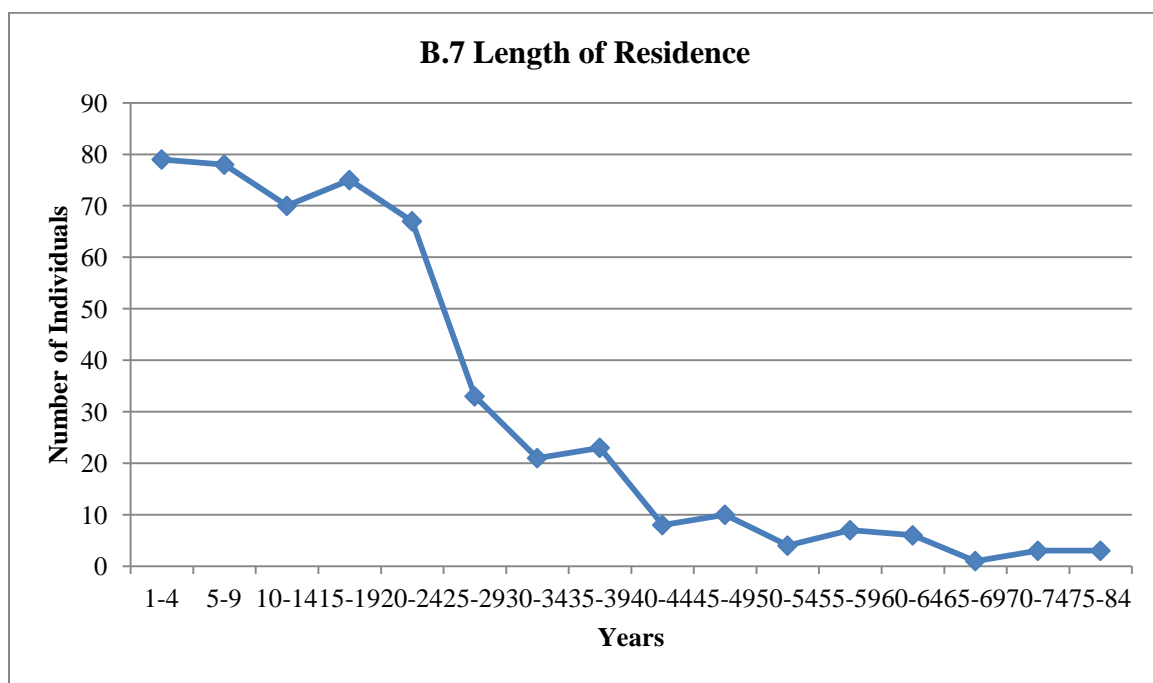
63005=1	Chesterfield	63336=1	Clarksville	63369=7	Old Monroe
63010=1	Arnold, MO	63343=30	Elsberry	63376=4	St. Peters
63033=1	Florissant	63344=3	Eolia	63377=16	Silex
63043=1	Maryland Heights	63345=1	Farber	63379=271	Troy
63109=1	St. Louis	63347=22	Foley	63381=1	Truxton
63114=1	St. Louis	63349=18	Hawk Point	63382=1	Vandalia
63301=4	St. Charles	63362=45	Moscow Mills	63383=6	Truesdale
63303=1	St. Charles	63366=3	O'Fallon	63385=7	Wentzville
63304=1	St. Charles	63367=7	Lake St. Louis	63389=53	Winfield
63333=1	Bellflower	63368=2	O'Fallon	63390=5	Wright City

Invalid zip codes=3

B.6 Length of Residence

1<2yr=34	9<10yr=10	17<18yr=8	24<25yr=8	40<45yr=8
2<3yr=12	10<11yr=24	17<18yr=8	25<26yr=13	45<50yr=10
3<4yr=22	11<12yr=8	18<19yr=8	26<27yr=8	50<55yr=4
4<5yr=11	12<13yr=12	19<20yr=13	27<28yr=4	55<60yr=7
5<6yr=23	13<14yr=9	20<21yr=17	28<29yr=4	60<65yr=6
6<7yr=17	14<15yr=17	21<22yr=7	29<30yr=4	65<70yr=1
7<8yr=15	15<16yr=30	22<23yr=12	30<35yr=21	70<75yr=3
8<9yr=13	16<17yr=8	23<24yr=23	35<40yr=23	75-84yr=3

n/a=54



B.8 Number of people in your immediate household

	1Adult	2 Adults	3 Adults	4 Adults	5 Adults	6 Adults	7 Adults
0 children	8	17	3	2	0	0	0
1child	25	80	23	9	2	1	0
2 children	18	90	11	3	1	0	0
3 children	20	37	6	2	2	0	0
4 children	6	21	0	1	0	0	1
5 children	1	7	0	0	0	0	0
6 children	1	2	0	0	0	0	0
7 children	1	1	0	0	0	0	0
11 children	0	1	0	0	0	0	0
12 children	0	0	0	1	0	0	0
Unspecified #	19	56	23	6	2	1	0

If not a resident, how many years have you worked in Lincoln County?

Less than 1yr=4 1-4yrs=35-10yrs=7 6-15yrs=6 >16 yrs=2

Choose one answer for each of the following questions about you

Employment : Full-time=227 Part-time=51 Full-time student=27 Homemaker=57

Unemployed=90 Retired =30 Part-time student=2

Retired, part-time=7

Full time employed/part time student=4

Part-time employed/full time student=3

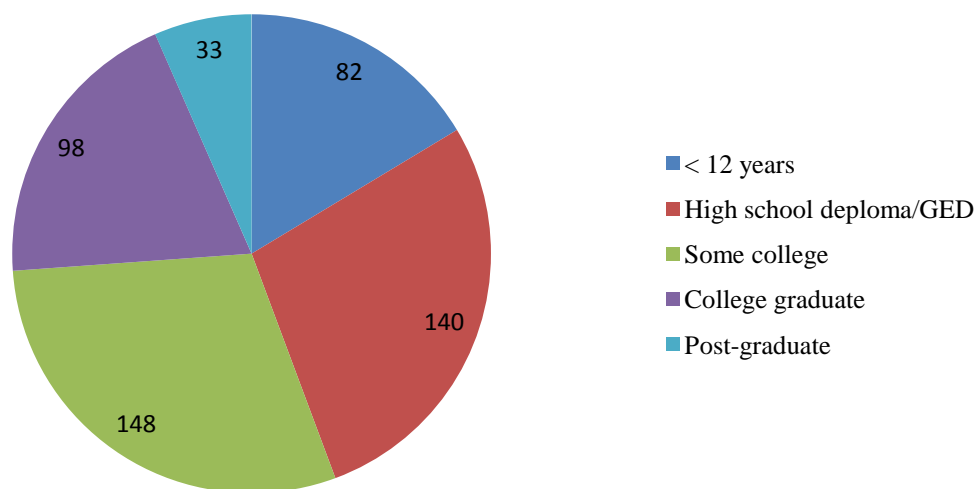
Part-time employed/part time student=2

Full-time student/homemaker or unemployed=2

B.9 Occupation

Occupation	Demographics	Occupation	Demographics
Accountant	F/T=3	Job Consultant	F/T=1, P/T=1
Administrator	F/T=1	Laborer	F/T & student=1
Analyst-material	F/T=1	Law enforcement	F/T=7
Auto dealer/auto business owner/technician	F/T=4	Legal advocate	F/T=1
Banking	F/T=6	Laundry aid	F/T=2
Bus driver	F/T=3, P/T=1	Machinist/tool & die	F/T & student=1
Business owner/consultant	F/T=2	Maintenance	F/T=2
Carpenter	F/T=1, F/Y & student=1	Manager	F/T=3
CNA	F/T=3, P/T=2, Ret/PT=1	Mechanic	P/T=1
Counselor	F/T=3	Medical Care Assist	F/T=1, P/T & student=1
Caseworker	F/T=1	Medical-other	F/T=3, Unspec=1
Cashier	P/T=8	Nurse aid/assistant	F/T=2
Childcare	F/T=1, F/T & student=1 P/T & student=2	Office	F/T=7
Clerical	F/T=2, Retired- P/T=1	Optician	F/T=2
Clerk	F/T=8	Painter-union	F/T=1
Concrete	F/T=2	Paramedic	F/T=10
Customer Service	F/T=4	Paramedic/ER	F/T=10
Cosmetologist/ Hairdresser	F/T=1, P/T=1	Pastoral	F/T=1
Disabled	Home-Maker=2,, Unemployed=1, Unsp=3	Physician office	F/T=1,P/T=1
Dispatcher	F/T=2	Plumber	F/T=1
Driver-truck/delivery	F/T=5, P/T=1	Probation & parole	F/T=1
Educator/teacher	F/T=9, Ret-adjunct prof=2, PreK=4, P/T-sub=3	Quality control	F/T=3
Glassblower	F/T=1	Retired	Retired=7
Executive	F/T=2, P/T=1	Retail-unspecified	F/T=3, P/T=2
Engineer	F/T=1	RN	F/T=13, P/T=1, Ret-P/T=1, Homemaker=1, Unemp=1, NP=1
EMT	P/T=2, P/T & student=2, P/T & Ref=1	Sales rep	F/T=3, P/T=1
Factory	F/T=2	Service tech	F/T=2
Financial advisor/consultant	P/T=1	Supervisor/manager/ director/superintendent	F/T=7, P/T=2
		Secretary	F/T=2, P/T=1
Fire Protection/EMT	F/T=8-firefighter Firefighter/EMT=2	Self-employed	F/T=3, Unemp=1
Food service/rest	F/T=3, P/T=9, P/T & student=1	Social worker	F/T=6
Govt	F/T=1	Stocker	F/T=1
Heating & plumbing	F/T=1	Student	FT-student=9
Insurance	F/T=2	Vet tech	F/T=3
Homemaker	Home-Maker=1	Unspecified	F/T=11, P/T=1
Housekeeper	F/T=2, P/T=2	F/T=full time, P/T=Part time	
Human resources/services	F/T=6, P/T=1		
Information Technology	F/T=1		
In-home aid	F/T=2		
Janitorial	F/T=2, P/T=1		

B.10 Education Level



II. Insurance and Health Care-(please provide any additional information on the back)

Do you have health insurance?

	Medical	Dental	Vision	Medical/ Dental	Dental/ Vision	Medical/Dental/ Vision	Medical/ Vision	Other
Me only	66	1	1	16	5	61	5	1
Family	54	1	0	37	1	157	1	0
None	5	3	1	0	4	34	4	0
Spouse has own	25	1	2	7	0	16	1	0
Children have own	63	3	1	5	4	47	0	1

Do you or your family see a doctor regularly for health care?

	No	Yes	Sometimes
You	208	311	4
Family Members	172	312	4

If yes, for what reasons/conditions:

Checkups=109	Cardiac/HTN=28	Pediatrics=38	Diabetes=12	OB/GYN=7
Check up for medical condition=5	Musculoskeletal=7	Cancer=6	Diabetes & medical conditions=3	Thyroid=2
Check up & immunizations=5	Asthma=5	Autism=2	Allergies=1	Cholesterol=1
Specialties=4	ADHD=4	Mental Health=3	Kidney=2	Disability=2
General Illness=2	Narcolepsy=2	Stroke=1	Seizures=1	GI issues=1
Uninsured care=1	Dermatology=1	Gout=1		

Do you go outside of Lincoln County for health care?

Yes=208 No=160 Sometimes=140

Services:	
Pediatrics	3
Dental	5
OB/GYN	12
Misc.	20
Specialty	27

Reasons:	
Location	70
Specialty	70
Preference/prior doctor	54
Perception of care	25
Pediatrician	19
Misc.	17
Insurance issues/affordability	8
Dental	8
Urgent care	6

Do you see a dentist for checkups?

		If yes, times per Year				
	Total	Once	Twice	Three	Four	Five
Yes	305	78	172	8	4	1
No	210					

Do you see an eye doctor for checkups?

		If yes, times per Year				
	Total	Once	Twice	Three	Four	Five
Yes	301	211	34	0	3	1
No	208					

III. What Do You Think? What do you feel are the three most important areas of need in Lincoln County?

Medical	185
Activities	100
Planning and Zoning	88
Social Services	72
Education	64
Jobs	64
Roads	60
Law Enforcement	26
EMS-Fire/Ambulance	21
Drug Related Issues	14
Transportation	11
Child Care	10
Senior Issues	4

What do you feel are the three most important health issues for Lincoln County?

Health Care-General	71
Health Care-Hospital and Medical Facilities	61
Drugs/Alcohol	57
Obesity	47
Doctors	45
Dental	40
Smoking/Tobacco Issues	18
STDs/Sex Education/Family Planning	15
Cold/Flu/General Illness	15
Children-Medical Issues	14
Mental Health	13
Immunizations	11
Sanitation	11
Water	9
Cardiac & HTN	8
Cancer	7
Diabetes	6
Lung/Breathing/Allergies	5
Abuse	2