

Community Analysis

Summary Report for Physical Environment



BACKGROUND

ABOUT THE HEALTHY COMMUNITY STUDY


The Rockford Health Council (RHC) exists to build and improve community health in the region. To address this mission, RHC conducts a *Healthy Community Study*, which is designed to identify community needs and provide a foundation for planning and development to address these needs. The *Healthy Community Study* is designed to provide local health systems and community organizations with nimble, timely data to support reporting of community health needs, as well as support decision making regarding initiatives and efforts.

STUDY ELEMENTS

The *2014 Healthy Community Study* includes a Community Analysis, Healthy Community Survey, and Key Informant Questionnaire. This summary report focuses on the results of the Community Analysis, which uses extant data from secondary sources to provide an overview of community health, as well as demographic and socioeconomic characteristics, for Winnebago and Boone counties. State and national comparison data are also provided as appropriate.

DATA SOURCE(S)

The primary source of information for this Community Analysis is the *Full Health Indicators Report* for Boone and Winnebago County generated through Community Commons, an interactive utility designed to support, "...the broad-based healthy, sustainable, and livable communities' movement (Community Commons)." Community Commons relies on extant secondary sources, such as the U.S. Census Bureau. Specific data sources are noted for all tables and figures used in this summary and the related data resources.

 This report provides links to mapping resources. Wherever a red pin is situated within this report, it can be used to access an on-line, interactive map feature of relevant information.

The *Full Health Indicators Report* consists of the following six data categories: Demographics, Social & Economic Factors, Physical Environment, Clinical Care, Health Behaviors, and Health Outcomes. This summary report specifically focuses on Physical Environment.

PHYSICAL ENVIRONMENT

Data indicators categorized under Physical Environment are intended to represent elements of environment that affect a community's health. The expectation is that a safe, clean environment provides access to healthy food and recreational opportunities which are important to maintaining and improving community health.

Data indicators for Physical Environment include the following:

- Air Quality - Ozone
- Air Quality – Particulate Matter 2.5
- Fast Food Restaurant Access
- Grocery Store Access
- Liquor Store Access
- Low Income Population with Low Food Access
- Modified Retail Food Environment Index
- Park Access
- Population with Low Food Access
- Recreation and Fitness Facility Access
- SNAP – Authorized Food Store Access
- Use of Public Transportation
- WIC – Authorized Food Store Access

RESULTS

AIR QUALITY - OZONE

Note: This indicator is compared with the state average. Data breakoutst by demographic groups are not available.

Data Source: Centers for Disease Control and Prevention, [National Environmental Public Health Tracking Network](#); 2008. Additional data analysis by [CARES](#). Source geography: Tract

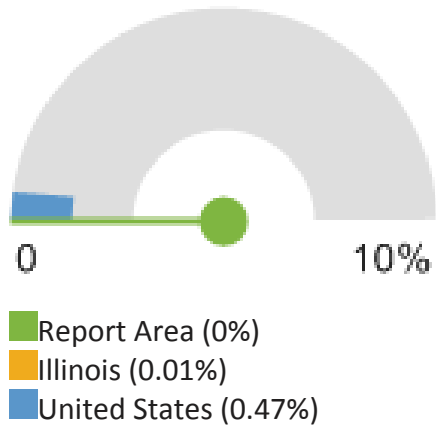
Within the report area, 0, or 0% of days exceeded the emission standard of 75 parts per billion (ppb). This indicator reports the percentage of days per year with Ozone (O3) levels above the National Ambient Air Quality Standard of 75 parts per billion (ppb). Figures are calculated using data collected by monitoring stations and modeled to include census tracts where no monitoring stations exist. This indicator is relevant because poor air quality contributes to respiratory issues and overall poor health.



Table 1: Air Quality - Ozone

	Total Population	Average Daily Ambient Ozone Concentration	Number of Days Exceeding Emissions Standards	Percentage of Days Exceeding Standards, Crude Average	Percentage of Days Exceeding Standards, Pop. Adjusted Average
Report Area	349,431	36.12	0	0%	0%
Boone County, IL	54,165	36.15	0	0%	0%
Winnebago County, IL	295,266	36.12	0	0%	0%
Illinois	12,830,632	35.28	0.03	0.01%	0.01%
United States	312,471,327	38.98	1.59	0.44%	0.47%

Figure 1: Percentage of Days Exceeding Standards, Population-adjusted Average



AIR QUALITY – PARTICULATE MATTER 2.5

Note: This indicator is compared with the state average. Data breakout by demographic groups are not available.

Data Source: Centers for Disease Control and Prevention, National Environmental Public Health Tracking Network: 2008. Additional data analysis by CARES.

Source geography: Tract

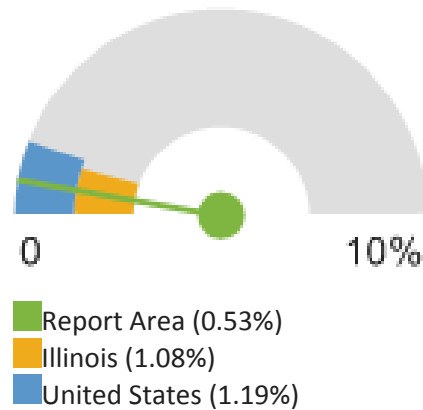
This indicator reports the percentage of days with particulate matter 2.5 levels above the National Ambient Air Quality Standard (35 micrograms per cubic meter) per year, calculated using data collected by monitoring stations and modeled to include counties where no monitoring stations occur. This indicator is relevant because poor air quality contributes to respiratory issues and overall poor health.



Table 2: Air Quality – Particulate Matter 2.5

	Total Population	Average Daily Ambient Particulate Matter 2.5	Number of Days Exceeding Emissions Standards	Percentage of Days Exceeding Standards, Crude Average	Percentage of Days Exceeding Standards, Pop. Adjusted Average
Report Area	349,431	11.30	1.93	0.53%	0.53%
Boone County, IL	54,165	11.27	1.71	0.47%	0.49%
Winnebago County, IL	295,266	11.30	1.95	0.53%	0.53%
Illinois	12,830,632	12.46	4.15	1.14%	1.08%
United States	312,471,327	10.65	4.17	1.14%	1.19%

Figure 2: Percent of Days Exceeding Standards, Population-adjusted Average



FAST FOOD RESTAURANT ACCESS

Note: This indicator is compared with the state average.

Data Source: US Census Bureau, [County Business Patterns](#): 2012. Additional data analysis by [CARES](#). Source geography: County

This indicator reports the number of fast food restaurants per 100,000 population. Fast food restaurants are defined as limited-service establishments primarily engaged in providing food services (except snack and nonalcoholic beverage bars) where patrons generally order or select items and pay before eating. This indicator is relevant because it provides a measure of healthy food access and environmental influences on dietary behaviors.



Table 3: Rate of Fast Food Establishments (Per 100,000 Population)

	Total Population	Number of Establishments	Establishments, Rate per 100,000 Population
Report Area	349,431	235	67.25
Boone County, IL	54,165	27	49.85
Winnebago County, IL	295,266	208	70.44
Illinois	12,830,632	9,591	74.75
United States	312,471,327	224,877	71.97

Figure 3: Rate of Fast Food Restaurants (Per 100,000 Population)

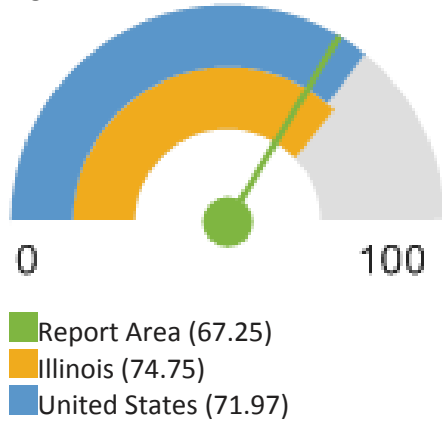
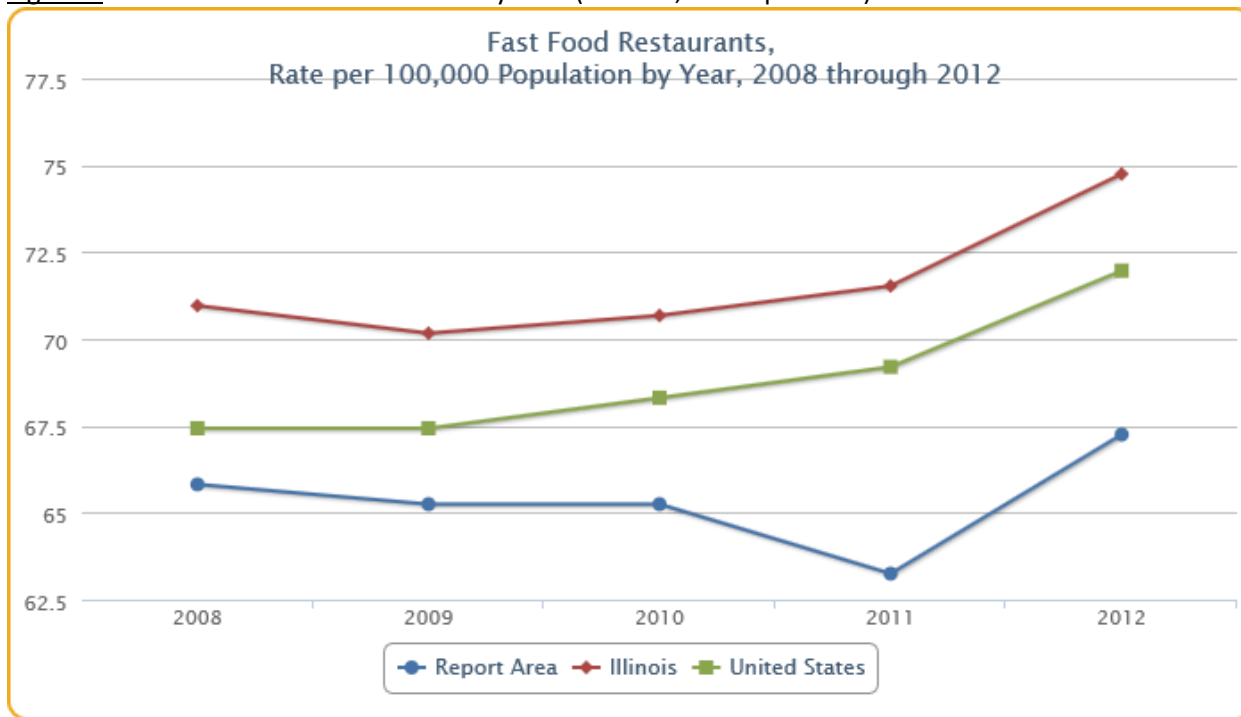


Table 4: Rate of Fast Food Restaurants by Year (Per 100,000 Population)

	2008	2009	2010	2011	2012
Report Area	65.82	65.25	65.25	63.25	67.25
Boone County, IL	44.31	48	51.69	48	49.85
Winnebago County, IL	69.77	68.41	67.74	66.04	70.44
Illinois	70.96	70.17	70.68	71.53	74.75
United States	67.43	67.43	68.31	69.2	71.97

Figure 4: Rate of Fast Food Restaurants by Year (Per 100,000 Population)



GROCERY STORE ACCESS

Note: This indicator is compared with the state average.

Data Source: US Census Bureau, [County Business Patterns](#): 2012. Additional data analysis by [CARES](#). Source geography: County

This indicator reports the number of grocery stores per 100,000 population. Grocery stores are defined as supermarkets and smaller grocery stores primarily engaged in retailing a general line of food, such as canned and frozen foods; fresh fruits and vegetables; and fresh and prepared meats, fish, and poultry. Included are delicatessen-type establishments. Convenience stores and large general merchandise stores that also retail food, such as supercenters and warehouse club stores are excluded. This indicator is relevant because it provides a measure of healthy food access and environmental influences on dietary behaviors.



Table 5: Rate Grocery Store Establishments (Per 100,000 Population)

	Total Population	Number of Establishments	Establishments, Rate per 100,000 Population
Report Area	349,431	62	17.74
Boone County, IL	54,165	9	16.62
Winnebago County, IL	295,266	53	17.95
Illinois	12,830,632	2,887	22.5
United States	312,471,327	66,047	21.14

Figure 5: Rate of Grocery Stores (Per 100,000 Population)

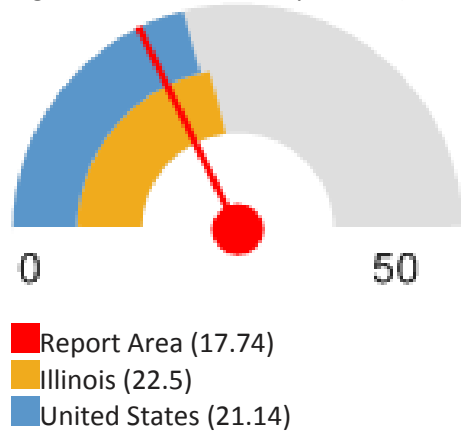
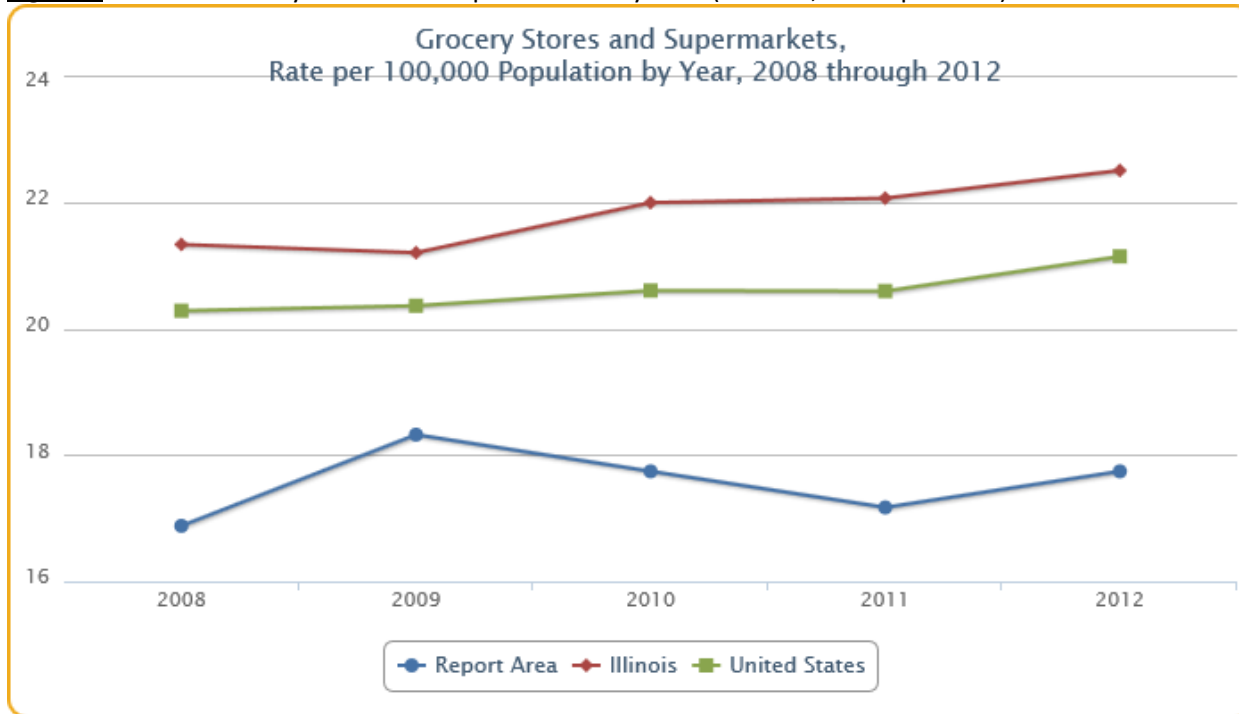


Table 6: Rate of Grocery Stores and Supermarkets by Year (Per 100,000 Population)

	2008	2009	2010	2011	2012
Report Area	16.88	18.32	17.74	17.17	17.74
Boone County, IL	11.08	16.62	14.77	16.62	16.62
Winnebago County, IL	17.95	18.63	18.29	17.27	17.95
Illinois	21.33	21.2	21.99	22.06	22.5
United States	20.28	20.36	20.6	20.59	21.14

Figure 6: Rate of Grocery Stores and Supermarkets by Year (Per 100,000 Population)



LIQUOR STORE ACCESS

Note: This indicator is compared with the state average.

Data Source: US Census Bureau, [County Business Patterns](#): 2012. Additional data analysis by [CARES](#). Source geography: County

This indicator reports the number of beer, wine, and liquor stores per 100,000 population, as defined by North American Industry Classification System (NAICS) Code 445310. This indicator is relevant because it provides a measure of healthy food access and environmental influences on dietary behaviors.



Table 7: Rate Liquor Store Establishments (Per 100,000 Population)

	Total Population	Number of Establishments	Establishments, Rate per 100,000 Population
Report Area	349,431	27	7.73
Boone County, IL	54,165	4	7.38
Winnebago County, IL	295,266	23	7.79
Illinois	12,830,632	1,326	10.33
United States	312,471,327	32,327	10.35

Figure 7: Rate Liquor Store Establishments (Per 100,000 Population)

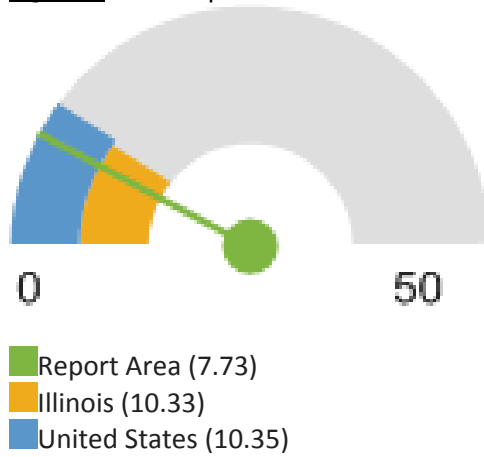
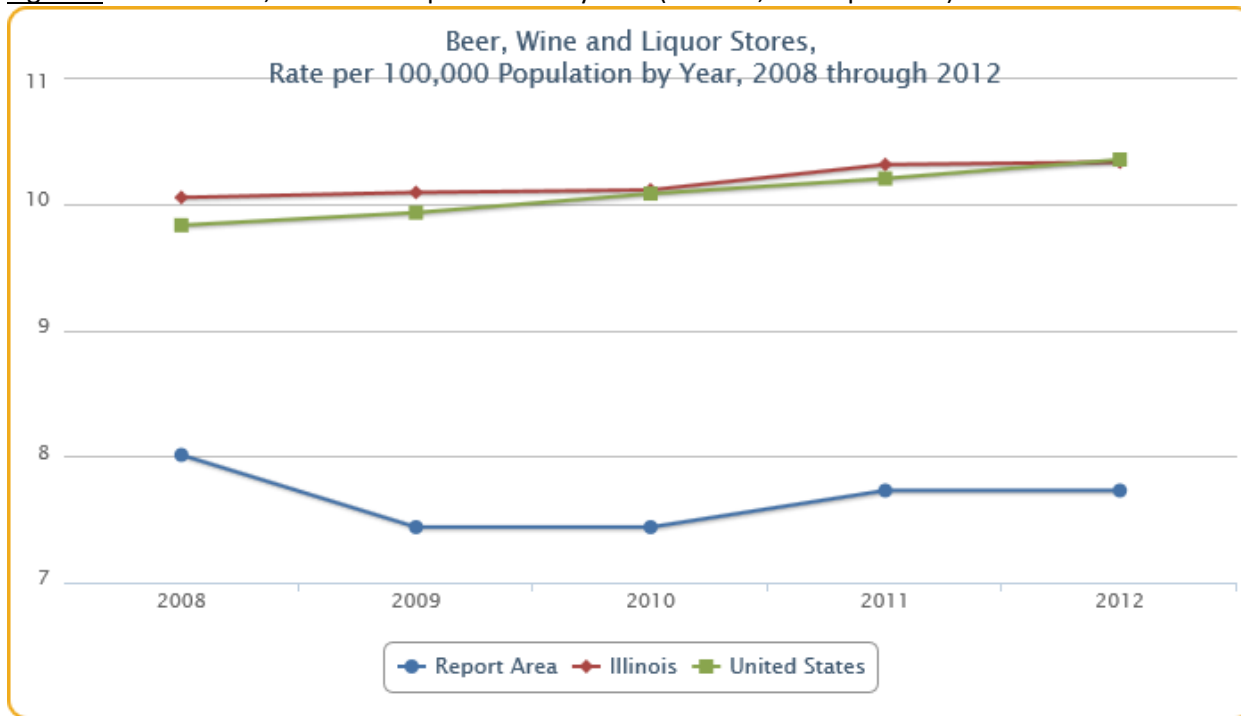


Table 8: Rate of Beer, Wine and Liquor Stores by Year (Per 100,000 Population)

	2008	2009	2010	2011	2012
Report Area	8.01	7.44	7.44	7.73	7.73
Boone County, IL	9.23	5.54	3.69	3.69	7.38
Winnebago County, IL	7.79	7.79	8.13	8.47	7.79
Illinois	10.05	10.09	10.11	10.31	10.33
United States	9.83	9.93	10.08	10.2	10.35

Figure 8: Rate of Beer, Wine and Liquor Stores by Year (Per 100,000 Population)





LOW INCOME POPULATION WITH LOW FOOD ACCESS

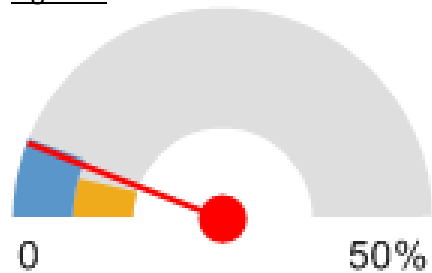
Note: This indicator is compared with the state average. Data breakout by demographic groups are not available.

Data Source: US Department of Agriculture, Economic Research Service, [USDA - Food Access Research Atlas](#): 2010. Source geography: Tract

Table 9: Percent of Low Income Population with Low Food Access

	Total Population	Low Income Population with Low Food Access	Percent Low Income Population with Low Food Access
Report Area	349,431	20,591	5.89%
Boone County, IL	54,165	2,995	5.53%
Winnebago County, IL	295,266	17,596	5.96%
Illinois	12,830,632	584,658	4.56%
United States	308,745,538	19,347,047	6.27%

Figure 9: Percent of Low Income Population with Low Food Access



- Report Area (5.89%)
- Illinois (4.56%)
- United States (6.27%)

MODIFIED RETAIL FOOD ENVIRONMENT INDEX

Data Source: Centers for Disease Control and Prevention, [Division of Nutrition, Physical Activity, and Obesity](#); 2011. Source geography: Tract

This indicator reports the percentage of population living in census tracts with no or low access to healthy retail food stores. Figures are based on the CDC Modified Retail Food Environment Index. For this indicator, low food access tracts are considered those with index scores of 10.0 or less.



Table 10: Percent of Population in Tracts with High Healthy Food Access

	Total Population	Percent Population in Tracts with No Food Outlet	Percent Population in Tracts with No Healthy Food Outlet	Percent Population in Tracts with Low Healthy Food Access	Percent Population in Tracts with Moderate Healthy Food Access	Percent Population in Tracts with High Healthy Food Access
Report Area	349,431	0.61%	28.75%	28.56%	34.23%	7.85%
Boone County, IL	54,165	0%	0%	40.68%	59.32%	0%
Winnebago County, IL	295,266	0.73%	34.02%	26.33%	29.63%	9.29%
Illinois	12,830,633	0.79%	21.04%	38.5%	36.13%	3.53%
United States	312,474,470	0.99%	18.63%	30.89%	43.28%	5.02%

Table 11: Racial Disparity Index of Population with Low or No Healthy Food Access

	Disparity Index Score <i>(0 = No Disparity; 1 - 15 = Some Disparity; Over 15 = High Disparity)</i>
Report Area	18.30
Boone County, IL	31.05
Winnebago County, IL	9.17
Illinois	18.61
United States	16.59

Figure 10: Racial Disparity Index of Population with Low or No Healthy Food Access

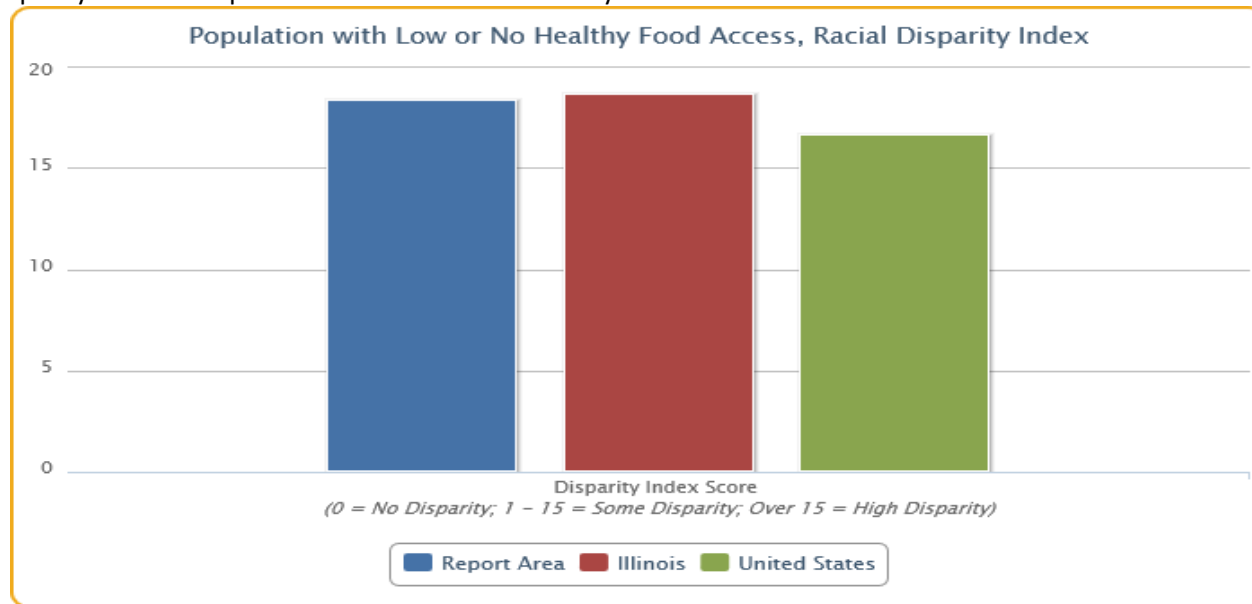


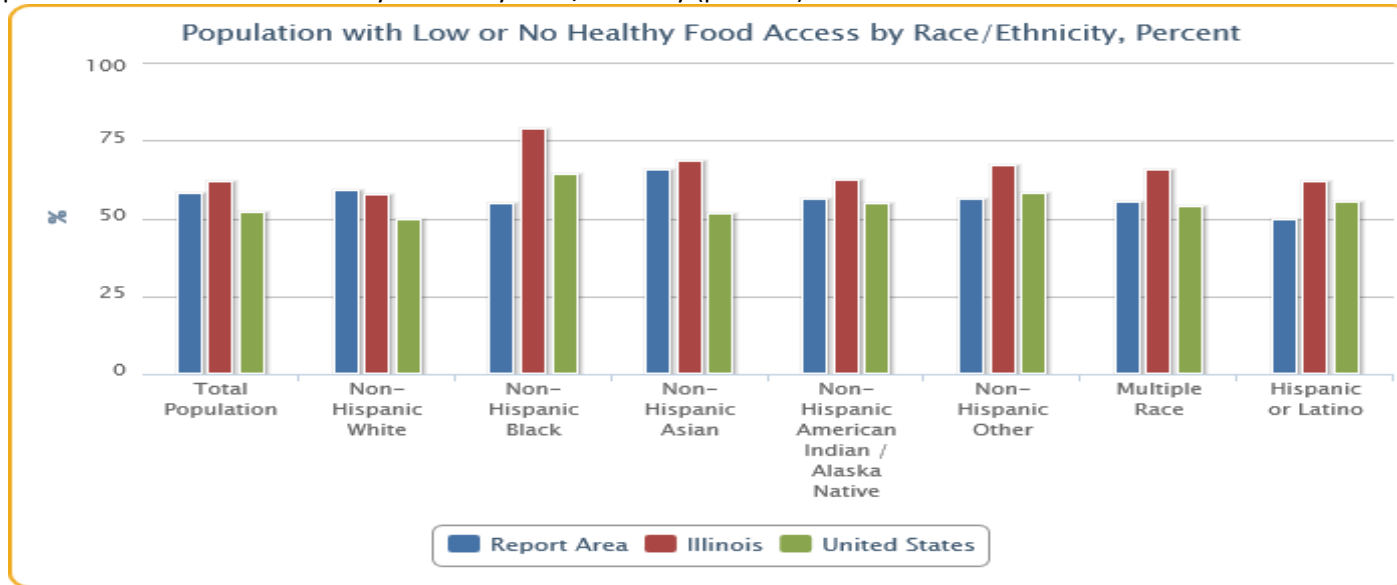
Table 12: Population with Low or No Healthy Food Access by Race/Ethnicity (count)

	Non-Hispanic White	Non-Hispanic Black	Non-Hispanic Asian	Non-Hispanic American Indian / Alaska Native	Non-Hispanic Other	Multiple Race	Hispanic or Latino
Report Area	150,729	16,007	3,234	377	128	2,283	12,104
Boone County, IL	14,263	206	64	32	10	182	3,188
Winnebago County, IL	136,466	15,801	3,170	345	118	2,101	8,916
Illinois	4,848,219	1,456,248	285,923	11,354	9,024	100,757	945,398
United States	95,978,903	21,776,320	5,189,224	1,128,698	270,921	2,468,453	19,410,660

Table 13: Population with Low or No Healthy Food Access by Race/Ethnicity (percent)

	Total Population	Non-Hispanic White	Non-Hispanic Black	Non-Hispanic Asian	Non-Hispanic American Indian / Alaska Native	Non-Hispanic Other	Multiple Race	Hispanic or Latino
Report Area	57.74%	58.8%	54.46%	65.7%	56.27%	55.9%	55.2%	49.56%
Boone County, IL	42.95%	40.14%	58.52%	31.53%	37.21%	76.92%	48.66%	61.08%
Winnebago County, IL	59.96%	61.8%	54.41%	67.18%	59.08%	54.63%	55.85%	46.42%
Illinois	61.67%	57.55%	78.46%	68.09%	62.28%	66.95%	65.43%	61.78%
United States	52.02%	49.33%	64.15%	51.26%	54.56%	57.92%	53.64%	54.98%

Figure 11: Population with Low or No Healthy Access by Race/Ethnicity (percent)



PARK ACCESS

Note: This indicator is compared with the state average. Data breakout by demographic groups are not available.

Data Source: [ESRI Map Gallery](#): 2013. [OpenStreetMap](#): 2013. Additional data analysis by [CARES](#). Source geography: Tract

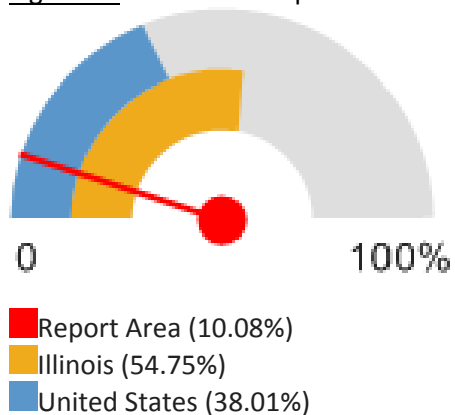
This indicator reports the percentage of population living within 1/2 mile of a park. This indicator is relevant because access to outdoor recreation encourages physical activity and other healthy behaviors.



Table 14: Population within 1/2 Mile of a Park

	Total Population, 2010 Census	Population Within 1/2 Mile of a Park	Percent Within 1/2 Mile of a Park
Report Area	349,431	35,231	10.08%
Boone County, IL	54,165	2,842	5.25%
Winnebago County, IL	295,266	32,389	10.97%
Illinois	12,830,632	7,024,779	54.75%
United States	308,745,538	112,471,792	38.01%

Figure 12: Percent of Population within 1/2 Mile of a Park



POPULATION WITH LOW FOOD ACCESS

Note: This indicator is compared with the state average. Data breakout by demographic groups are not available.

Data Source: US Department of Agriculture, Economic Research Service, [USDA - Food Access Research Atlas](#): 2010. Source geography: Tract

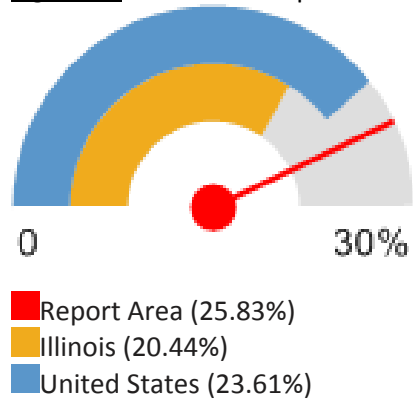
This indicator reports the percentage of the population living in census tracts designated as food deserts. A food desert is defined as a low-income census tract (where a substantial number or share of residents has low access to a supermarket or large grocery store. This indicator is relevant because it highlights populations and geographies facing food insecurity.



Table 15: Population with Low Food Access

	Total Population	Population with Low Food Access	Percent Population with Low Food Access
Report Area	349,431	90,273	25.83%
Boone County, IL	54,165	14,490	26.75%
Winnebago County, IL	295,266	75,783	25.67%
Illinois	12,830,632	2,623,048	20.44%
United States	308,745,538	72,905,540	23.61%

Figure 13: Percent of Population with Low Food Access



RECREATION AND FITNESS FACILITY ACCESS

Note: This indicator is compared with the state average.

Data Source: US Census Bureau, [County Business Patterns](#): 2012. Additional data analysis by [CARES](#). Source geography: County

This indicator reports the number per 100,000 population of recreation and fitness facilities as defined by North American Industry Classification System (NAICS) Code 713940. This indicator is relevant because access to recreation and fitness facilities encourages physical activity and other healthy behaviors.



Table 16: Rate of Recreation and Fitness Facilities (Per 100,000 Population)

	Total Population	Number of Establishments	Establishments, Rate per 100,000 Population
Report Area	349,431	29	8.3
Boone County, IL	54,165	3	5.54
Winnebago County, IL	295,266	26	8.81
Illinois	12,830,632	1,290	10.05
United States	312,471,327	29,511	9.44

Figure 14: Rate of Recreation and Fitness Facilities (Per 100,000 Population)

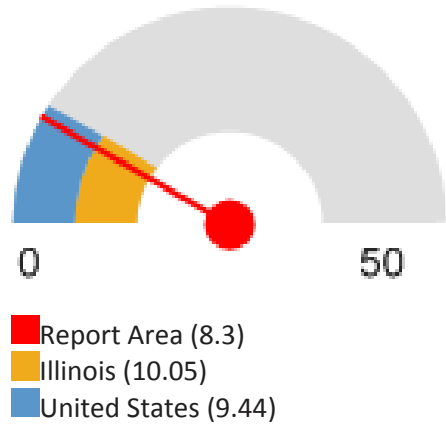
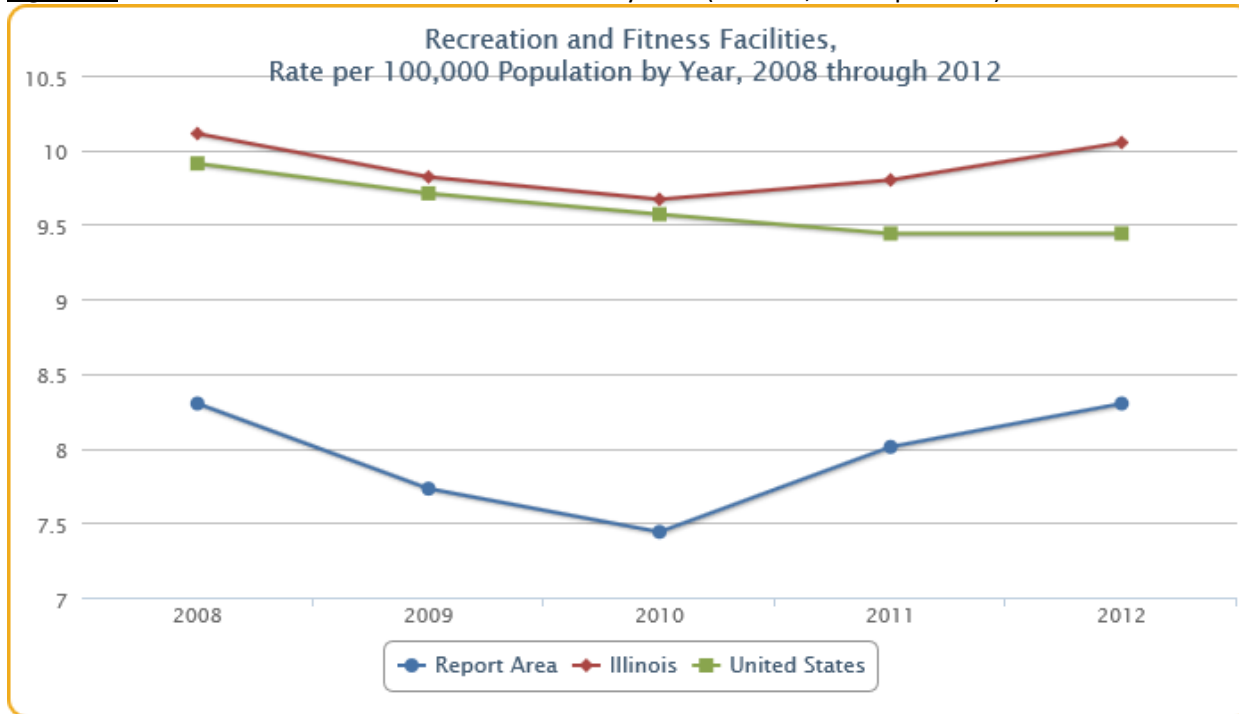


Table 17: Rate of Recreation and Fitness Facilities by Year (Per 100,000 Population)

	2008	2009	2010	2011	2012
Report Area	8.3	7.73	7.44	8.01	8.3
Boone County, IL	9.23	5.54	3.69	5.54	5.54
Winnebago County, IL	8.13	8.13	8.13	8.47	8.81
Illinois	10.11	9.82	9.67	9.8	10.05
United States	9.91	9.71	9.57	9.44	9.44

Figure 15: Rate of Recreation and Fitness Facilities by Year (Per 100,000 Population)



SNAP – AUTHORIZED FOOD STORE ACCESS

Note: This indicator is compared with the state average. Data breakout by demographic groups are not available.

Data Source: US Department of Agriculture, Food and Nutrition Service, [USDA - SNAP Retailer Locator](#): 2014. Additional data analysis by [CARES](#). Source geography: Tract

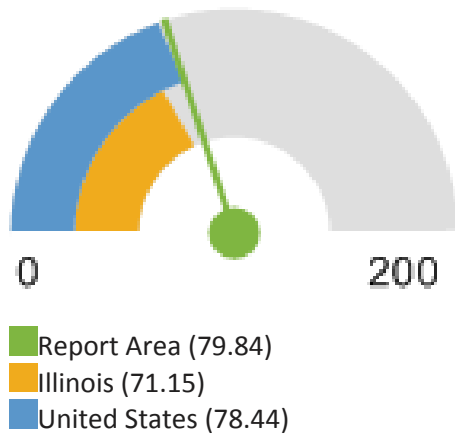
This indicator reports the number of SNAP-authorized food stores as a rate per 100,000 population. SNAP-authorized stores include grocery stores as well as supercenters, specialty food stores, and convenience stores that are authorized to accept SNAP (Supplemental Nutrition Assistance Program) benefits.



Table 18: Rate of SNAP Authorized Retailers (Per 100,000 Population)

	Total Population	Total SNAP-Authorized Retailers	SNAP-Authorized Retailers, Rate per 100,000 Population
Report Area	349,431	279	79.84
Boone County, IL	54,165	32	59.08
Winnebago County, IL	295,266	247	83.65
Illinois	12,830,632	9,129	71.15
United States	312,471,327	245,113	78.44

Figure 16: Rate of SNAP Authorized Retailers (Per 100,000 Population)



USE OF PUBLIC TRANSPORTATION

Note: This indicator is compared with the state average. Data breakout by demographic groups are not available.

Data Source: US Census Bureau, [American Community Survey](#): 2008-12. Source geography: Tract

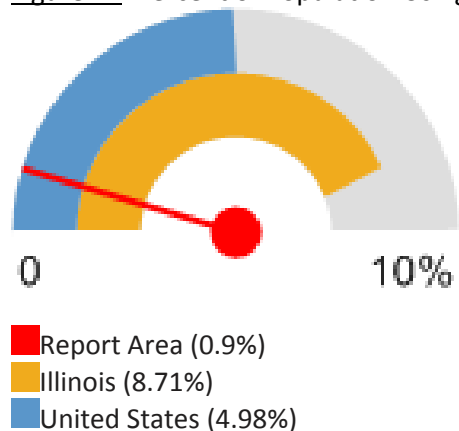
This indicator reports the percentage of population using public transportation as their primary means of commute to work. Public transportation” includes buses or trolley buses, streetcars or trolley cars, subway or elevated rails, and ferryboats.



Table 19: Population Using Public Transportation for Commute to Work

	Total Population Employed Age 16+	Population Using Public Transit for Commute to Work	Percent Population Using Public Transit for Commute to Work
Report Area	153,231	1,375	0.9%
Boone County, IL	23,973	36	0.15%
Winnebago County, IL	129,258	1,339	1.04%
Illinois	5,926,796	516,053	8.71%
United States	139,893,632	6,967,689	4.98%

Figure 17: Percent of Population Using Public Transportation for Commute to Work



WIC-AUTHORIZED FOOD STORE ACCESS

Note: This indicator is compared with the state average. Data breakout by demographic groups are not available.

Data Source: US Department of Agriculture, Economic Research Service, [USDA - Food Environment Atlas](#); 2011. Source geography: County

This indicator reports the number of food stores and other retail establishments per 100,000 population that are authorized to accept WIC Program (Special Supplemental Nutrition Program for Women, Infants, and Children) benefits and that carry designated WIC foods and food categories. This indicator is relevant because it provides a measure of food security and healthy food access for women and children in poverty as well as environmental influences on dietary behaviors.



Table 20: Rate of WIC-authorized Food Store (Per 100,000 Population)

	Total Population (2011 Estimate)	Number WIC-Authorized Food Stores	WIC-Authorized Food Store Rate (Per 100,000 Pop.)
Report Area	348,360	73	20.9
Boone County, IL	54,367	7	12.88
Winnebago County, IL	293,993	66	22.45
Illinois	12,936,505	2,390	18.4
United States	318,921,538	50,042	15.6

Figure 18: Rate of WIC-authorized Food Store (Per 100,000 Population)

