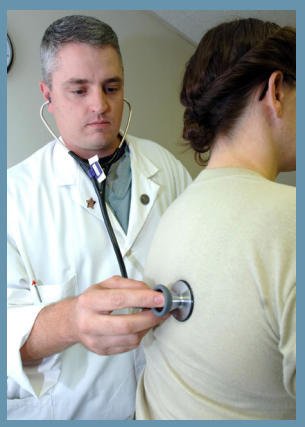
Community Health Needs Assessment

2013



WAYNE COUNTY HOSPITAL

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www.waynehosptial.org

UNIVERSITY OF KENTUCKY
College of Agriculture, Food and Environment

This Community Health Needs Assessment (CHNA) Implementation Strategy was prepared for Wayne County Hospital by the Community and Economic Development Initiative of Kentucky (CEDIK) at the University of Kentucky.

CEDIK's mission is to provide education, research and assistance to people, communities and organizations so they are empowered to shape their own futures. CEDIK's vision is to be the key source of education and research to benefit the lives of Kentucky's individuals, families, businesses, organizations and communities through community and economic development.

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cedik

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To the Residents of Wayne County,

Welcome to Wayne County Hospital! The staff and I feel honored to have the privilege of providing for your healthcare needs. Our goal when you are here is to make you as comfortable as possible. Our mission is to provide quality healthcare with a personal touch.

I think you will be pleasantly surprised at all the services that we offer while providing an atmosphere that is community focused and high in personal touches you would expect. You may have family or close friends providing your care, and I think you will find that this is most comforting in a time of illness.

I would encourage you, your family and your friends to read the information provided on our website. Please read the section regarding your rights as a patient while in our hospital. Should you feel that your rights and needs are not being met, please do not hesitate to speak with the Chief Nursing Officer or with me. The Chief Nursing Officer may be reached at 1-606-340-3218. The hospital staff will contact her for you after hours. I may be reached by phone directly at 1-606-340-3283. We want to ensure that your needs are met in the most effective and efficient way possible.

Sincerely,

Joe Murrell

Chief Executive Officer

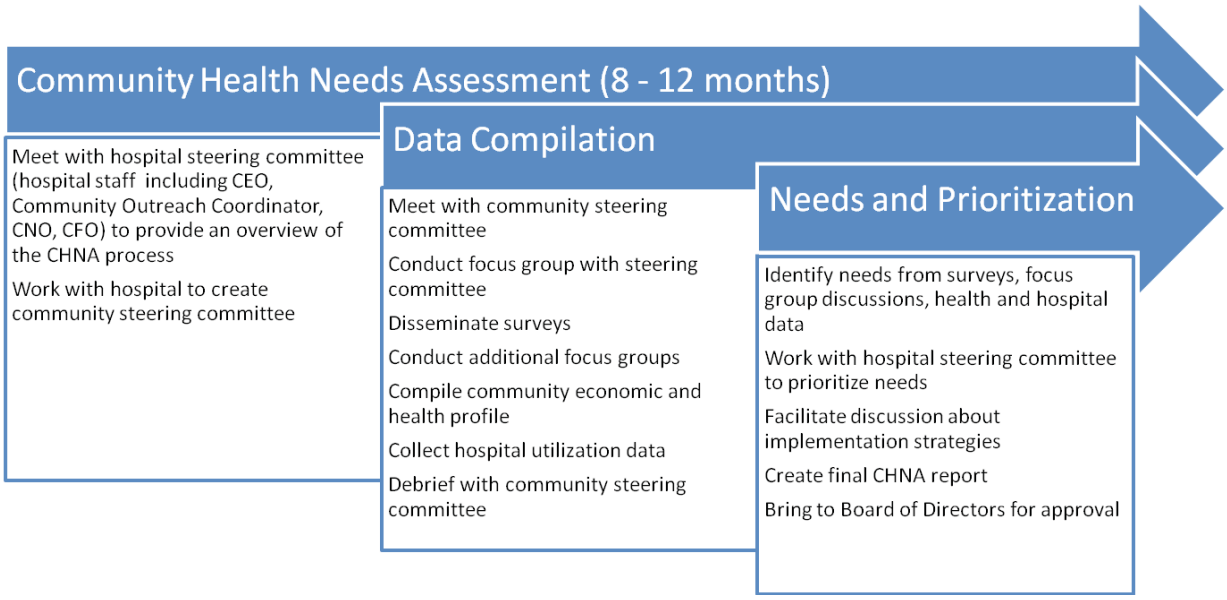
CHNA Background

Wayne County Hospital contracted with the Community and Economic Development Initiative of Kentucky (CEDIK) in the fall of 2012 to conduct a Community Health Needs Assessment (CHNA) in accordance with the Affordable Care Act (ACA). The Affordable Care Act (ACA), enacted March 23, 2010, added new requirements that hospital organizations must satisfy in order to be described in section 501(c)(3), as well as new reporting and excise taxes.

As the IRS develops the new forms and guidance to implement the ACA, the IRS goals will be to:

- Allow hospitals to clearly describe their activities and policies
- Minimize burden to the extent possible
- Capture compliance information as required for adherence with the statute

Here is an overview of the CHNA process that CEDIK used based on the IRS guidelines:



Background, continued

New Requirements for Charitable 501(c)(3) Hospitals

Section 501(r), added to the Code by the ACA, imposes new requirements on 501(c)(3) organizations that operate one or more hospital facilities (hospital organizations). Each 501(c)(3) hospital organization is required to meet four general requirements on a facility-by-facility basis:

- Establish written financial assistance and emergency medical care policies.
- Limit amounts charged for emergency or other medically necessary care to individuals eligible for assistance under the hospital's financial assistance policy.
- Make reasonable efforts to determine whether an individual is eligible for assistance under the hospital's financial assistance policy before engaging in extraordinary collection actions against the individual.
- Conduct a community health needs assessment (CHNA) and adopt an implementation strategy at least once every three years.

These CHNA requirements are effective for tax years beginning after March 23, 2012.

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Introduction

Wayne County Hospital is a 25-bed critical access hospital established in 1973 and located in Monticello, Kentucky. In 2003, renovations added the Rural Health Clinic and a state-of-the-art Physical Therapy/Rehabilitation Department to a full complement of laboratory and imaging services, as well as a new Emergency Department.

Wayne County Hospital is fully accredited by the Healthcare Facilities Accreditation Program (HFAP) and was selected as a HCIA "Top 100 Hospital" in 1995 and 1996.

Mission

The primary mission of Wayne County Hospital is to provide the patient and the community with a system for the delivery of high quality healthcare regardless of economic status, sex, race or religion. Wayne County Hospital will maintain high standards of quality in all aspects of care, and will strive to meet the patients' needs promptly and professionally with a friendly, caring attitude, and a personal approach in a safe environment.

Vision

Our vision is to strive to meet and exceed customer needs in a safe environment and be the healthcare provider of choice for Wayne County and surrounding areas.

Description of Community Served by Wayne County Hospital

Located in south-central Kentucky, Wayne County lies in both the Mississippian plateau and the Eastern Kentucky coal fields. Beautiful Lake Cumberland forms much of the northern border of Wayne County, while Tennessee forms the southern border.

Map created with Google Maps, 2013

Monticello, Kentucky is the county seat and serves as the gateway to Kentucky's southern lakes region, arguably among the most beautiful and unspoiled stretches of the Bluegrass State. Wayne County lies at the foothills of the eastern Kentucky Appalachian Mountains. While it contains remnants of Eastern Kentucky's rugged landscapes, mostly in the form of low foothills bordering Lake Cumberland, the area is mostly composed of ranch-quality farm lands and rolling landscapes along the southern border with Tennessee.

Assessment Process

The assessment process included collecting secondary data related to the health of the community. Social and economic data as well as health outcomes data were collected from secondary sources to help provide context for the community (see below). In addition, CEDIK compiled hospital utilization data to better understand who was using the facility and for what services (next section). Finally, with the assistance of the Community Steering Committee, input from the community was collected through focus group discussions and surveys (see appendix for summary). First we present the demographic, social, economic and health outcomes data that were compiled through secondary sources. These data that follow were retreived from County Health Rankings, April 2013. For data sources see appendix.

Demographics

Indicator (2011)	Wayne County	State of Kentucky	National Level
Total Population	20,969	4,369,356	313,914,040
Percent of Population under 18 years	22.3%	23.4%	23.7%
Percent of Population 65 year and older	16.6%	13.5%	13.3%
Percent of Population Non-hispanic White	93.9%	86.1%	63.4%
Percent of Population Non-hispanic African Amercian	1.5%	7.8%	13.1%
Percent of Population Hispanic	3.0%	3.2%	16.7%
Percent of Population other Race	0.8%	1.6%	6.8%
Percent of the Population not Proficient in English*	1.1%	1.1%	n/a
Percent of the Population that are Female	50.4%	50.8%	50.8%
Percent of the Population that are Rural**	67.7%	41.6%	n/a

*2007-2011 5 year estimate
**2010 Estimate

Social and Economic Factors

Indicator	Wayne County	State of Kentucky	National Benchmark*
Median Household Income	$30,954	$41,682	n/a
High School Graduation Rate	77.0%	77.9%	n/a
Percent of Population with Some College Education	39.1%	56.1%	70.0%
Unemployment Rate	13.6%	9.5%	5.0%
Percent of Children in Poverty	47.8%	27.2%	14.0%
Percent of Children Eligible for Free Lunch	61.9%	49.0%	n/a
Percent of Children Living in a Single Parent Household	34.7%	33.6%	20.0%
Percent of Adults without Adequate Social Support	24.3%	19.9%	14.0%
Percent of the Population Spending More Than 30% of Income on Housing Costs	28.1%	28.0%	n/a
Violent Crime Rate (per 100,000 population)	112.3	264.4	66.0

Health Behaviors

Indicator	Wayne County	State of Kentucky	National Benchmark*
Percent of Adults who Smoke Regularly	29.1%	26.4%	13.0%
Percent of Adults who are Obese (BMI>=30)	33.3%	32.9%	25.0%
Percent of Adults who are Physically Inactive During Leisure Time	41.7%	31.5%	21.0%
Percent of Adults who Drink Excessively (Heavy or Binge)	5.3%	11.5%	7.0%
Motor Vehicle Crash Deaths (per 100,000 population)	20.8	20.0	10.0
STDs: Chlamydia Rate (per 100,000 population)	158.6	377.4	92.0
Teen Birth Rate (per 1,000 females ages 15-19)	78.9	50.0	21.0

*National Benchmarks indicate the 90th percentile at the national level. "n/a" denotes where national benchamarks where not made available by County Health Rankings.

Health Outcomes

Indicator	Wayne County	State of Kentucky	National Benchmark*
Premature Death (Years of Potential Life Lost per 100,000 population)	8,228	8,768	5,317
Percent of Adults Reporting Poor or Fair Health	30.6%	21.4%	10.0%
Average Poor Physical Health Days in Past 30 Days	6.0	4.7	2.6
Average Poor Mental Health Days in Past 30 Days	5.6	4.3	2.3
Percent of Babies Born with Low Birthweight (<2500 grams)	7.7%	9.1%	6.0%
Percent of Adults with Diabetes	12.5%	11.6%	n/a
HIV Prevalence Rate (per 100,000 population)	n/a	140.0	n/a
Premature Age-Adjusted Mortality	386.7	444.5	n/a
Child Mortality (per 100,000 population)	122.7	66.9	n/a
Infant Mortality (per 100,000 population)	n/a	709.8	n/a

Access to Care

Indicator	Wayne County	State of Kentucky	National Benchmark*
Percent Uninsured (< age 65 without health insurance)	22.2%	17.5%	11.0%
Percent of Uninsured Adults	27.8%	21.8%	n/a
Percent of Uninsured Children	7.2%	6.7%	n/a
Ratio of Population to Primary Care Physicians	1603:1	1587:1	1067:1
Ratio of Population to Dentists	4236:1	1854:1	1516:1
Ratio of Population to Mental Health Providers	n/a	2634:1	n/a
Percent of Adults Reporting that They Could Not See a Doctor Due to Cost	20.2%	17.0%	n/a
Rate of Preventable Hospital Stays (per 1,000 Medicare Enrollees)	114.1	102.8	47.0
Percent of Diabetics that Receive HbA1c Screening	87.5%	83.8%	90.0%
Percent of Women Receiving Mammography Screening	56.7%	61.7%	73.0%

Physical Environment

Indicator	Wayne County	State of Kentucky	National Benchmark*
Pollution: Average Daily Measure of Fine Particulate Matter (micrograms per cubic meter)	13.3	13.1	8.8
Drinking Water Safety: People Exposed to Water Exceeding a Violation Limit in the Past Year	0.0%	10.9%	0.0%
Rate of Recreational Facilities (per 100,000 population)	4.8	8.1	16.0
Food Access: Percent of Population Living in Poverty and >10 Miles from Grocery Store	8.5%	4.8%	1.0%
Food Access: Percent of all Restaurants that are "Fast Food"	68.4%	53.7%	27.0%
Percent of Workers who Commute Alone	80.9%	81.9%	n/a
Percent of Population who Live Within Half a Mile of a Park	n/a	24.0	n/a

Hospital Utilization Data

The Tables below provide an overview of Wayne County Hospital's patients and in particular where they come from, how they pay, and why they visited.

Table: Hospital Inpatient Origin Discharges, 1/1/11-12/31/11

County of Origin	Discharges	Total Charges	Average Charges
Wayne, KY	719	$4,415,088	$6,141
Wayne, KY	26	$182,141	$7,005
Pulaski, KY	16	$82,429	$5,152
McCreary, KY	14	$90,715	$6,480
Henry, IN	1	$6,947	$6,947
Johnson, IN	1	$8,238	$8,238
Clay, KY	1	$3,021	$3,021
Cumberland, KY	1	$922	$922
Madison, KY	1	$4,774	$4,774
Russell, KY	1	$1,444	$1,444
Woodford, KY	1	$4,184	$4,184
Montgomery, OH	1	$8,462	$8,462

Table: Hospital Inpatient Payer Mix, 1/1/11-12/31/11

Payer	Discharges	Total Charges	Average Charges
Medicare	437	$8,733,415	$11,168
Commercial - Mix	133	$1,594,283	$8,480
Self Pay	56	$777,515	$7,934
Coventry Cares of KY	50	$585,574	$7,705
Commercial - Preferred Provider	29	$560,572	$8,759
Medicare Managed Care	29	$469,806	$9,212
Medicaid	19	$364,523	$9,347
Kentucky Spirit Health Plan	16	$293,043	$9,453
WellCare of Kentucky	11	$38,161	$7,632
Champus	4	$12,830	$12,830
VA	1	$6,044	$6,044

Table: Hospital Outpatient Origin Discharges, 1/1/11-12/31/11

County of Origin	Discharges	Total Charges	Average Charges
Wayne, KY	11,696	$10,208,178	$873
Pulaski, KY	423	$384,205	$908
Wayne, KY	330	$362,330	$1,098
McCreary, KY	298	$238,516	$800
Cumberland, KY	13	$10,643	$819
Russell, KY	11	$29,650	$2,695
Boone, KY	10	$8,469	$847
Fayette, KY	8	$5,440	$680
Hamilton, OH	7	$3,482	$497
Henry, IN	6	$5,205	$868
Marion, IN	6	$6,891	$1,148

Table: Hospital Outpatient Payer Mix, 1/1/11-12/31/11

Payer	Discharges	Total Charges	Average Charges
Medicare	2,956	$3,532,444	$1,195
Coventry Cares of KY	2,708	$1,702,181	$629
Commercial - Mix	2,554	$2,488,896	$975
Self Pay	2,199	$1,518,946	$691
WellCare of Kentucky	998	$650,248	$652
Kentucky Spirit Health Plan	525	$293,011	$558
Medicaid Managed Care	323	$433,012	$1,341
Commercial - Preferred Provider	235	$342,736	$1,458
Auto Insurance	151	$158,475	$1,050
Medicaid	122	$106,529	$873
Champus	113	$93,064	$824
Commercial - HMO	43	$33,362	$776
VA	18	$21,453	$1,192
Other	9	$8,995	$999
Passport Medicaid Managed Care	7	$6,035	$862
Commercial - Indemnity	6	$4,562	$760
Workers Compensation	4	$3,037	$759

Table: Hospital Inpatient Diagnosis Related Group, 1/1/11-12/31/11

DRG Description (Top 10 for inpatient visits)	Discharges	Total Charges	Average Charges
Medicine – General	393	$3,775,407	$9,607
Medicine –Pulmonary	358	$3,873,039	$10,819
Medicine – Cardiovascular Disease	184	$1,779,446	$9,671
Medicine – Nephrology/Urology	102	$918,928	$9,009
Medicine – Orthopedics	67	$467,424	$6,976
Medicine – Neuro Sciences	66	$512,504	$7,765
Surgery – General	53	$906,279	$17,100
Surgery - Gynecology	45	$594,260	$13,206
Medical – Oncology	24	$203,983	$8,499
Psychiatry	12	$75,296	$6,275

The Community Steering Committee

The Community Steering Committee is a vital part to the CHNA process. These individuals represent organizations and agencies from the service area and in particular, the individuals who were willing to volunteer enabled the hospital to get input from populations that were often not engaged in conversations about their health needs. CEDIK provided a list of potential agencies and organizations that would facilitate broad input.

The Community Steering Committee met twice as a group and each time a hospital representative welcomed and thanked the individuals for assisting in the process and then excused themselves if focus group discussion was being conducted. CEDIK asked that hospital representatives not be present during any focus group discussions or debriefing with the Community Steering Committee.

Wayne County Hospital Community Steering Committee

Name	Organization
Jeffrey Edwards	Mayor of Monticello
Brian Huckaby	Adanta Behavioral Health Services
Sandy Latham	Monticello Independent Schools
Cassie Munsey	Wayne County Cooperative Extension
Charles Peters	President, Chamber of Commerce, Monticello City Council Member
Leslie Randall	Wayne County School District
Greg Rankin	Wayne County Judge Executive
Tishana Rose	Lake Cumberland Health Department
Dennis Wheeler	Wayne County Ministers Association

Focus Group Findings

Five focus groups were conducted throughout the community and in conjunction with other meetings. The senior population and the underserved were targeted and they participated in two focus groups onsite at their facilities, while other focus groups took place at the hospital.

Vision for a Healthy Community

- Access to health care for everyone
- Increase awareness of community and public services that are currently available to the public
- A drug free community
- A walkable community
- More resources for children and seniors
- Wellness center that is accessible to community
- Less obesity, diabetes, heart disease

What is your perception of the hospital overall and of specific programs and services?

- The hospital is important for economic development in the community
- Provides necessary services for the community and for those who can't travel out of county
- Good people - while it is a small community, still access to great medical care

What can the hospital do to meet the health needs of the community?

- Promote the hospital and explain how the community can access services
- Provide more educational information after a patient has procedure or hospital stay
- Increased access to screenings
- Increased access to specialists
- Provide Mental Health services
- A Mother/Baby Unit and prenatal care
- Addiction Specialist to help with drug problem in community
- Access through extended hours
- Access for uninsured/underinsured (sliding payscale)

Wayne County Hospital - CHNA Survey Results

Total number of respondents: 66

Households that used the services of a hospital in the past 24 months: 83.1%

Table 1. Services used if household used a hospital in the past 24 months:

Service	Number of Households	Percent of Households
Emergency Room for life-threatening issue	10	18.2%
Emergency Room for not life-threatening issue	32	58.2%
Outpatient Services	13	23.6%
Inpatient Services	22	40.0%

Respondents were asked how satisfied they were with the care they or someone in their household received at Wayne County Hospital. With 1 being satisfied and –1 being dissatisfied, the average score was 0.72.

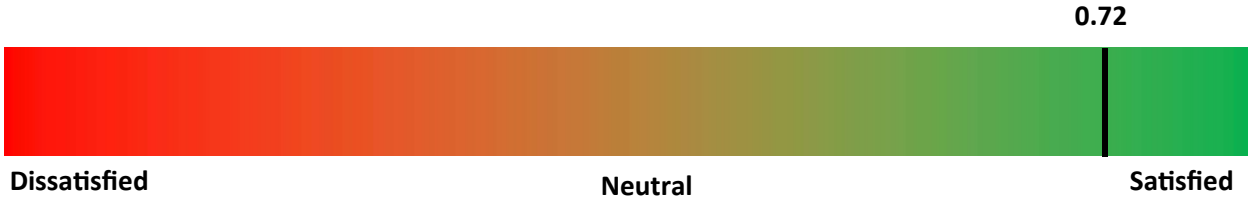


Table 2. Hospital used if household used the services of a hospital in the past 24 months:

Hospital	Number of Households	Percent of Households
Lexington	20	60.6%
Louisville	2	6.1%
Richmond/Berea	0	0.0%
Nashville	0	0.0%
Somerset	11	33.3%
Knoxville	1	3.0%
Other	10	30.3%

If other, which hospital (had to be mentioned at least twice)? Glasgow Hospital (2), Somerset (2)

Table 3. Reasons for using other hospital if household did not use Wayne County Hospital:

Reasons	Number of Households	Percent of Households
Service wasn't available	23	74.2%
Prefer larger	0	0.0%
Insurance required using a different hospital	0	0.0%
Other	11	34.4%

If other, why (had to be mentioned twice)? Location (4), doctor referral (2), misdiagnosis/incorrect treatment (2)

Table 4. Households with someone receiving treatment for select conditions:

Condition	Number of Households	Percent of Total Households
Diabetes	12	18.8%
High Blood Pressure	37	57.8%
Cancer	6	9.4%

Table 5. Specialty services used:

Service	Number of Respondents Using the Service at Wayne County Hospital	Number of Respondents Using the Service at Another Facility
Cardiology	21	0
OB-GYN	18	0
Radiology (X-ray)	24	24
Neurology	2	0
Psychiatry	3	0
Oncology	4	1
Urology	8	2
Orthopedics	5	2
Pulmonary	3	2
Pediatrics	9	3
Medical Admission	13	10
Surgical Admission	14	8
Outpatient Surgery	16	13
Physical Therapy	11	14
Rural Health Clinic	18	36

Table 6. Information on ability to pay for medical services:

Situation	Percent of Total Households
Delayed health care due to lack of money and/or insurance	29.5%
Are you or members of your household currently eligible for:	
Medicare	26.6%
Medicaid	12.5%
Public Housing Assistance	3.1%
SNAP (Food Stamp Program)	3.1%
Households with someone currently without health insurance	12.7%

- **When asked, "What could the hospital do to better meet the community's health needs?" the following responses were given at least twice:**

  More specialists (3), Cardiology (2), Maternity Ward (2), X-ray services on site (2), more after-hours services /clinics (2).

Brief Description of Tables 4 and 6:

Table 4 provides some detail about the respondents' health risks. To ensure that there was broad community input, Wayne County Hospital wanted to engage the medically needy population. The results in Table 4 suggest that 18.8% of the respondents or a member of the respondent's family has diabetes, 57.8% have high blood pressure, and 9.4% of the respondents or a member of their family has cancer.

Table 6 provides evidence that the survey reached a lower-income population. Of the respondents, 29.5% stated that they had delayed health care due to a lack of money or insurance. Approximately 12.7% reported that they or someone in their household was without health insurance, while 12.5% and 26.6% were enrolled in Medicaid and Medicare, respectively. 3.1% of the households received SNAP (Supplemental Nutrition Assistance program) assistance, while 3.1% received public housing assistance. As a result of the characteristics of the survey sample, the needs that have been suggested throughout the surveys reflect the needs of those who have high health risks and don't necessarily have affordable access to health care.

Prioritization of Identified Health Needs

To facilitate prioritization of identified health needs, a ranking process was used. Health needs were ranked based on five factors:

1) The ability of Wayne County Hospital to evaluate and measure outcomes.
2) The number of people affected by the issue or size of the issue?
3) The consequences of not addressing this problem?
4) Prevalence of common themes.
5) The existence of hospital programs which respond to the identified need?

Health needs were then prioritized taking into account their overall ranking, the degree to which Wayne County Hospital can influence long-term change, and the impact of the identified health needs on overall health.

Wayne County Hospital will continue to work with the community to execute the implementation plan and realize the goals that have been positioned to build a healthier community.

Hospital Identified Needs

- Free screenings and increased educational programs
- Increased access to specialists
- Increased education in regards to follow up
- Access for the uninsured/underinsured
- Extended hours/increased access to medical care that is not "emergency"
- Addiction Specialist or access to addiction specialist or facilities
- Mental Health professional at the hospital
- Prenatal Care and mother/baby unit

Implementation Strategy

Free Screenings and Increased Educational Programs

Goal l: Investigate additional screening opportunities for prevalent women's and men's health issues that affect the community. Also, address obesity, smoking and inactivity (Wayne County is 10% higher in reporting inactivity among adults compared to state percentage) through increased educational programs and outreach.

Strategies:

A. Continue to participate in the multiple annual free screening opportunities already in place.

B. Offer free screenings at our Women's Health Conference, Nutrition Fair, and Community Health fair.

C. Work with community agencies and organizations to offer educational sessions, programs, lunch and learn opportunities to address health issues. Work with community partners to incorporate additional free Health Screenings over the next three years at planned community events.

D. Assess need for annual Men's Health Conference in 2014. Use conference to promote prostate cancer screenings for men.

Community Partners identified to help with this priority: American Cancer Society; Health Department; Local School System; Senior Groups; City/County Government.

Implementation Strategy, continued

Increased Access to Specialists

Goal l: Increase access to specialists by adding two additional specialty clinics in the next three years.

Strategies:

A. Meet with area Physicians and Hospitals to ascertain availability of specialists for remote clinics. Identify specialties not currently offered in a local clinic.

1. Establish Clinic start dates.
2. Review utilization and need to expand or change clinics offered.

Community Partners identified to help with this priority: Lake Cumberland Regional Hospital; Russell Springs Hospital; Baptist Health; St. Joseph Hospital.

Increased Education/Patient Follow Up

Goal l: Develop mechanism for ongoing patient access to health information (for post discharge / post observation care questions). In providing increased education to our patients post discharge/post observation, we hope this will decrease the likelihood for patients to be readmitted due to lack of health information.

Strategies:

A. Determine need to expand the patient follow-up program that is already in place. Investigate feasibility of website links to health resources, Health Information Help Line (call center), and additional printed education material for patients at the time of discharge.

1. Create communication log for follow-up calls to patients.
2. Determine and implement additional resources for patient inquiries following discharge.

Community Partners identified to help with this priority: Clinical Staff and Hospitalists will address this priority in-house.

Priorities that will NOT be addressed in this CHNA (3 year cycle):

1. Access for the uninsured/underinsured - Indigent care programs are already offered for ER, inpatient and many outpatient services. In 2011 we provided approximately $323,000 in free care.

2. Extended hours/increased access to medical care that is not "emergency" - Clinic hours were recently expanded to 7 days. The clinic is open from 9:00am to 9:00pm Monday – Saturday and 10:00am to 6:00pm on Sundays. Our ER is available 24 hours a day, 7 days a week.

3. Addiction Specialist or access to addiction specialist or facilities - Not feasible due to limited resources and lack of funding. Addiction Specialists and facilities are available within 25 miles.

4. Mental Health professional at the hospital - Not feasible due to limited resources and lack of funding. Mental Health Professionals are available within 25 miles.

5. Prenatal Care and mother/baby unit - Not feasible due to lack of reimbursement and out of current scope of service.

Next Steps

This Implementation Strategy will be rolled out over the next three years. Wayne County Hospital will kick off the Implementation Strategy by initiating collaborative efforts with community leaders to address each health priority identified through the assessment process. Periodic evaluation of goals/objectives for each identified priority will be conducted to assure that we are on track to complete our plan as described. At the end of fiscal year 2016, Wayne County Hospital will review the Implementation Strategy and report on the success experienced through the collaborative efforts of improving the health of the community.

Appendix

Sources for all secondary data used in this report:

Demographics*

Indicator (2011)	Original Source	Year
Total Population	Census Population Estimates	2011
Percent of Population under 18 years	Census Population Estimates	2011
Percent of Population 65 year and older	Census Population Estimates	2011
Percent of Population Non-hispanic White	Census Population Estimates	2011
Percent of Population Non-hispanic African Amercian	Census Population Estimates	2011
Percent of Population Hispanic	Census Population Estimates	2011
Percent of Population other Race	Census Population Estimates	2011
Percent of the Population not Proficient in English	American Community Survey 5-yr est.	2007-2011
Percent of the Population that are Female	Census Population Estimates	2011
Percent of the Population that are Rural	Census Population Estimates	2010
All "National Level" Demographics*	U.S. Census QuickFacts	2011

Social and Economic Factors

Indicator	Original Source	Year
Median Household Income	Small Area Income and Poverty Estimates	2011
High School Graduation Rate	State sources and the National Center for Education Statistics	Varies by state
Percent of Population with Some College Education	American Community Survey 5-yr est.	2007-2011
Unemployment Rate	Bureau of Labor Statistics	2011
Percent of Children in Poverty	Small Area Income and Poverty Estimates	2011

Social and Economic Factors, continued

Indicator	Original Source	Year
Percent of Children Eligible for Free Lunch	National Center for Education Statistics	2011
Percent of Children Living in a Single Parent Household	American Community Survey 5-yr est.	2007-2011
Percent of Adults without Adequate Social Support	Behavioral Risk Factor Surveillance System	2005-2010
Percent of the Population Spending More Than 30% of Income on Housing Costs	American Community Survey 5-yr est.	2007-2011
Violent Crime Rate (per 100,000 population)	Uniform Crime Reporting, Federal Bureau of Investigation	2008-2010

Health Behaviors

Indicator	Original Source	Year
Percent of Adults who Smoke Regularly	Behavioral Risk Factor Surveillance System	2005-2011
Percent of Adults who are Obese (BMI>=30)	National Center for Chronic Disease Prevention and Health Promotion, Division of Diabetes Translation	2009
Percent of Adults who are Physically Inactive	National Center for Chronic Disease Prevention and Health Promotion, Division of Diabetes Translation	2009
Percent of Adults who Drink Excessively (Heavy or Binge)	Behavioral Risk Factor Surveillance System	2005-2011
Motor Vehicle Crash Deaths (per 100,000 population)	National Center for Health Statistics	2004-2010
STDs: Chlamydia rate (per 100,000 population)	National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention	2010
Teen Birth Rate (per 1,000 females ages 15-19)	National Center for Health Statistics	2004-2010

Health Outcomes

Indicator	Original Source	Year
Premature Death (Years of Potential Life Lost per 100,000 population)	National Center for Health Statistics	2008-2010
Percent of Adults Reporting Poor or Fair Health	Behavioral Risk Factor Surveillance System	2005-2011
Average Poor Physical Health Days in Past 30 Days	Behavioral Risk Factor Surveillance System	2005-2011
Averal Poor Mental health Days in Past 30 Days	Behavioral Risk Factor Surveillance System	2005-2011
Percent of Babies Born with Low Birthweight (<2500 grams)	National Center for Health Statistics	2004-2010
Percent of Adults with Diabetes	National Center for Chronic Disease Prevention and Health Promotion, Division of Diabetes Translation	2009
HIV Prevalence Rate (per 100,000 population)	National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention	2009
Premature Age-adjusted Mortality	CDC WONDER mortality data	2008-2010
Child Mortality (per 100,000 population)	CDC WONDER mortality data	2007-2010
Infant Mortality (per 100,000 population)	CDC WONDER mortality data	2006-2010

Access to Care

Indicator	Original Source	Year
Percent Uninsured (< age 65 without health insurance)	Small Area Health Insurance Estimates	2010
Percent of Uninsured Adults	Small Area Health Insurance Estimates	2010
Percent of Uninsured Children	Small Area Health Insurance Estimates	2010
Ratio of Population to Primary Care Physicians	HRSA Area Resource File	2011-2012
Ratio of Population to Dentists	HRSA Area Resource File	2011-2012
Ratio of Population to Mental Health Providers	HRSA Area Resource File	2011-2012
Percent of Adults Reporting that They Could Not See a Doctor Due to Cost	Behavioral Risk Factor Surveillance System	2005-2011
Rate of Preventable Hospital Stays (per 1,000 Medicare Enrollees)	Dartmouth Atlas of Health Care	2010
Percent of Diabetics that Receive HbA1c Screening	Dartmouth Atlas of Health Care	2010
Percent of Women Receiving Mammography Screening	Dartmouth Atlas of Health Care	2010

Physical Environment

Indicator	Original Source	Year
Pollution: Average Daily Measure of Fine Particulate Matter (micrograms per cubic meter)	CDC WONDER Environmental data	2008
Drinking Water Safety: People Exposed to Water Exceeding a Violation Limit in the Past Year	Safe Drinking Water Information System	2012
Rate of Recreational Facilities (per 100,000 population)	Census County Business Patterns	2010
Food Access: Percent of Population Living in Poverty and >10 Miles from Grocery Store	USDA Food Environment Atlas	2012
Food Access: Percent of all Restaurants that are "Fast Food"	Census County Business Patterns	2010
Percent of Workers who Commute Alone	American Community Survey 5-yr est.	2007-2011
Percent of Population who Live Within Half a Mile of a Park	Environmental Public Health Tracking Network	2010

Health Needs

WAYNE COUNTY HOSPITAL

Wayne County Hospital wants to better understand your health needs and how the hospital and its partners can better meet those needs. Please take just 3-5 minutes to fill out this survey. Please do not include your name anywhere, all responses will remain anonymous.

1. Please tell us your zipcode _____

2. Have you or someone in your household used the services of Wayne County Hospital in the past 24 months?

   _____ Yes _____ No

3. If yes, what services did you use?

   _____ Emergency Room for life-threatening issue

   _____ Emergency Room for non-life threatening issue

   _____ Inpatient Service

   _____ Outpatient Service

4. How satisfied were you or someone in your household with the care you received at Wayne County Hospital?

   ____ Satisfied ____ Neutral ____ Dissatisfied

5. If you did not go to Wayne County Hospital, where did you go? (Check all)?

   ___ Lexington hospital ___ Louisville hospital ___ Richmond/Berea hospital

   ___ Nashville hospital ___ Somerset hospital ___ Knoxville hospital

   ___ Other _____

6. Why did you or someone in your household go to a hospital other than Wayne County Hospital?

   ___ Service I needed was not available at Wayne County Hospital
   ___ I prefer larger hospitals
   ___ My insurance requires me to go somewhere else
   ___ Other _____

7. Have you or someone in your household used any of the services below?

	Check yes if care received anywhere	Check if care received at Wayne County Hospital
Cardiology	____ Yes	____ at Wayne County Hospital
Obstetrics/Gynecology	____ Yes	____ at Wayne County Hospital
Radiology	____ Yes	____ at Wayne County Hospital
Neurology	____ Yes	____ at Wayne County Hospital
Psychiatry	____ Yes	____ at Wayne County Hospital
Oncology (Cancer Care)	____ Yes	____ at Wayne County Hospital
Urology	____ Yes	____ at Wayne County Hospital
Orthopedics	____ Yes	____ at Wayne County Hospital
Pulmonology (Lung care)	____ Yes	____ at Wayne County Hospital
Pediatrics	____ Yes	____ at Wayne County Hospital
Medical Admission	____ Yes	____ at Wayne County Hospital
Surgical Admission	____ Yes	____ at Wayne County Hospital
Outpatient Surgery	____ Yes	____ at Wayne County Hospital
Physical Therapy	____ Yes	____ at Wayne County Hospital
Rural Health Clinic	____ Yes	____ at Wayne County Hospital

8. Have you or someone in your household delayed health care due to lack of money and/or insurance?

_____ Yes _____ No

9. Do you or someone in your household receive treatment for any of the following conditions?

_____ Diabetes

_____ High blood pressure

_____ Cancer

10. Are you or members of your household currently eligible for

____ Medicare?

____ Medicaid?

____ Public Housing Assistance?

____ SNAP (food stamp program)?

11. Are you or anyone in your household without health insurance currently?

_____ Yes _____ No

12. What could Wayne County Hospital do to better meet you and your household's health needs?

Approval

Wayne County Hospital's Board of Directors supports the work of Wayne County Hospital to improve the health of the community. The Board of Directors approves Wayne County Hospital's Community Health Needs Assessment and will utilize this document as a roadmap to collaborate with the community to address the priorities, particularly for the most vulnerable.

Chair, Wayne County Hospital Board of Directors

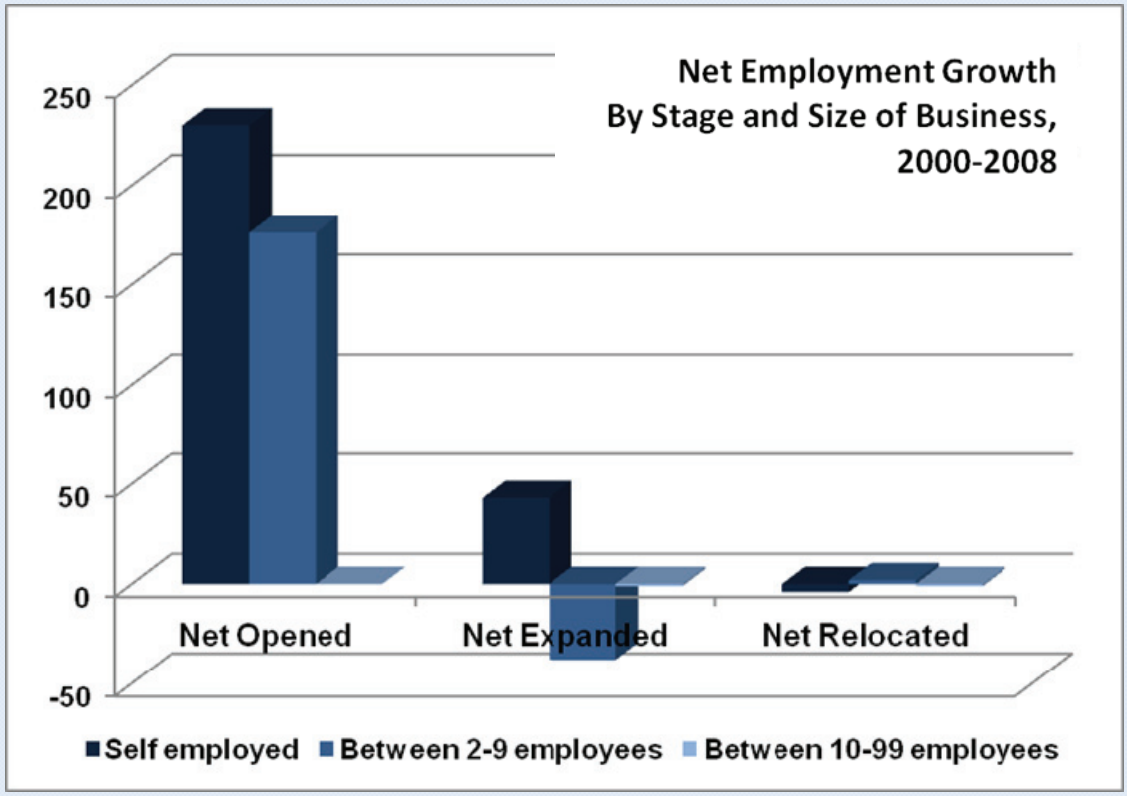
8/16/13

Date

Kentucky County Economic Profiles

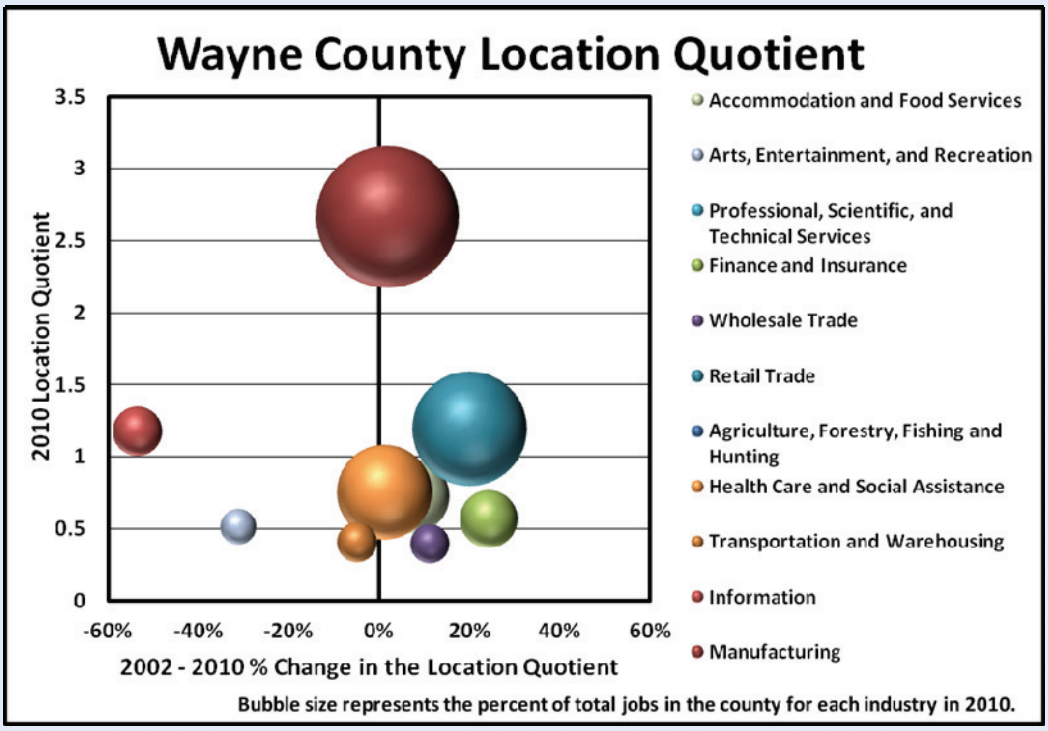
Wayne County

Demographics	Wayne County		Kentucky		United States	
Percent Change in Total Population, 2000-2010 (Census)	4.5%		7.4%		9.7%	
Percent of the Population that is Non-white, 2010 (Census)	3.7%		10.6%		27.6%	
Percent of the Population that is Older than 64 years, 2010 (Census)	13.1%		13.3%		12.9%	
Percent of the Total Population in Poverty, 2009 Estimate (SAIPE)	27.3%		18.4%		14.3%	
Percent of the Total Population under 18 in Poverty, 2009 Estimate (SAIPE)	38.8%		25.3%		20.0%	
Teen births, Rate per 1,000 Women ages 15-19, 2003-2007 (KY Health Facts)	77.41		52.11		41.50	
	Estimate	MOE	Estimate	MOE	Estimate	MOE
Percent of the Population 25 and Older that have a High School Diploma, GED, or more, 2005-2009 Estimate (ACS)	58.6%	3.6%	80.3%	0.2%	84.6%	0.1%
Percent of the Population 25 and Older that have a Bachelor's Degree or more, 2005-2009 Estimate (ACS)	9.1%	2.2%	20.0%	0.2%	27.5%	0.1%
Percent of Workers who Travel 30 minutes or more one way, to work, 2005-2009 Estimate (ACS)	31.3%	5.0%	28.2%	0.3%	35.1%	0.03%
Unemployment Rate, 2010 Annual Average (BLS)	13.1%		10.7%		9.3%	
Median Household Income, 2009 Estimate (SAIPE)	$27,210		$40,061		$50,221	

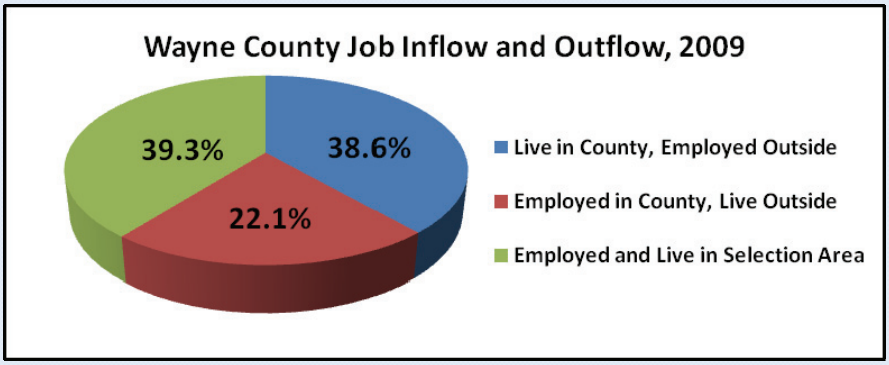


Data Source: www.YourEconomy.org, 2011

Wayne County	Net Opened	Net Expanded	Net Relocated
Self Employed	230	43	-4
Between 2-9 Employees	176	-38	2
Between 10-99 Employees	0	-1	-1



Data Source: EMSI, 2010



Data Source: U.S. Census Bureau, Center for Economic Studies, 2011

Declining Industries

The industry is declining compared to the nation (change in LQ < -20%)

Arts, Entertainment, and Recreation
Information

Emerging Industries

The industry is growing compared to the nation (Change in location quotient >20%) but not necessarily largely concentrated in the county (LQ <1)

Finance and Insurance
Professional, Scientific, and Technical Services

Anchor Industries

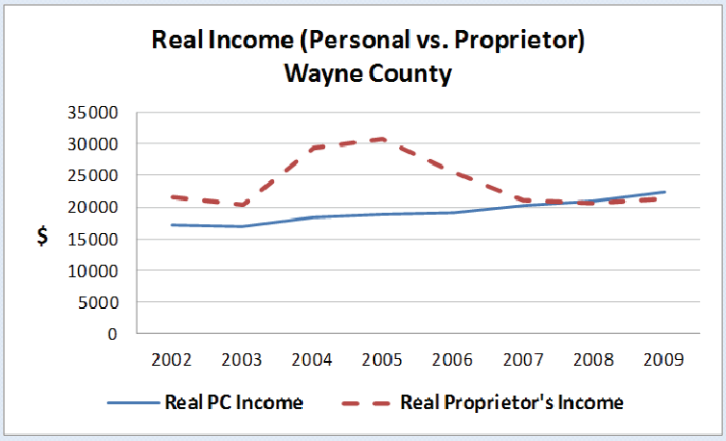
The industry is relatively concentrated in the county (LQ >1.5) but neither expanding or declining

Agriculture, Forestry, Fishing and Hunting
Manufacturing

Top 10 Industries by Employment 2008

NAICS Code	Description	Wayne County
930	Local government	875
321	Wood Product Manufacturing	770
722	Food Services and Drinking Places	373
452	General Merchandise Stores	328
336	Transportation Equipment Manufacturing	322
335	Electrical Equipment, Appliance, and Component Manufacturing	270
314	Textile Product Mills	252
541	Professional, Scientific, and Technical Services	211
621	Ambulatory Health Care Services	202
238	Specialty Trade Contractors	199
	Total Top 10	**3,802**
	Total jobs in Wayne County	**6,783**

Source: EMSI Complete Employment - 4th Quarter 2010



Data Source: Bureau of Economic Analysis

The data for this Profile was prepared by the Community and Economic Development Initiative of Kentucky at the University of Kentucky. For questions, contact Sarah Frank Bowker, Program Coordinator, at 859.257.7272x 246, or sarah.frank@uky.edu. CEDIK wishes to thank Foundation for a Healthy Kentucky for providing the funding for this profile.

UNIVERSITY OF KENTUCKY

cedik
Community and Economic Development Initiative of Kentucky
www.ca.uky.edu/CEDIK

Kentucky County Workforce Profiles

Wayne County - Employment & Earnings

Economic development planning relies upon a good understanding of your county's workforce. The information below describes Wayne County's current workforce.

Occupational Data for Major Kentucky Occupations (by 2 Digit SOC codes)

Occupation	Kentucky (2012)	Lake Cumberland Development District (2012)	Wayne County		
			Total	10 yrs.	5 yrs.
Office & Admin. Support	280,743	10,374	768	-15%	-21%
Sales & Related	172,198	5,838	483	-12%	-6%
Food Preparation & Serving Related	164,270	5,215	381	-6%	-13%
Production	163,167	8,676	960	-26%	-23%
Transportation & Material Moving	154,479	6,167	380	-23%	-16%
Healthcare Practitioners & Technical Occupations	113,924	4,273	231	-13%	-8%
Education, Training, & Library	104,956	4,730	388	-12%	-12%
Management	79,378	2,321	182	-25%	-32%
Installation, Maintenance, & Repair	78,644	2,814	182	-14%	-19%
Construction & Extraction	68,356	2,004	129	-40%	-40%

Source: EMSI 2012

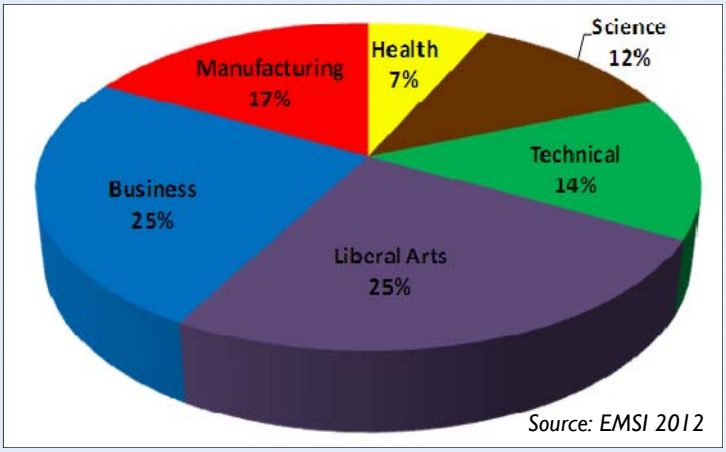
Distribution of Workforce by Education & Gender (2011)

Education	Gender	Distribution out of 100 people
Less than High School	Male	6
	Female	5
High School or equivalent	Male	17
	Female	17
Some college or Associate's degree	Male	13
	Female	15
Bachelor's degree or more	Male	8
	Female	10

Source: CENSUS/QWI 2011

Personal Care and Service was the fastest growing occupation in Wayne County with 20% growth from 2007-2012.

Knowledge Distribution of Workforce Skills (2012)



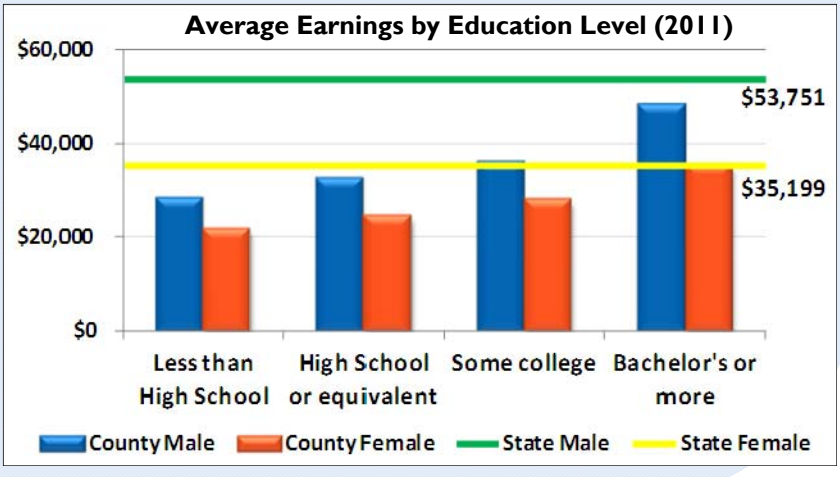
Source: EMSI 2012

Employment & Average Annual Earnings by Age (2011)

Age group	Total Employment	Overall Average Annual Earnings
14-21	359	12,236
22-34	1,350	25,032
35-44	1,205	32,439
45-54	1,218	33,684
55-64	798	32,499
>65	192	26,568

Source: CENSUS/QWI 2011

Average Earnings by Education Level (2011)



Source: CENSUS/QWI 2011

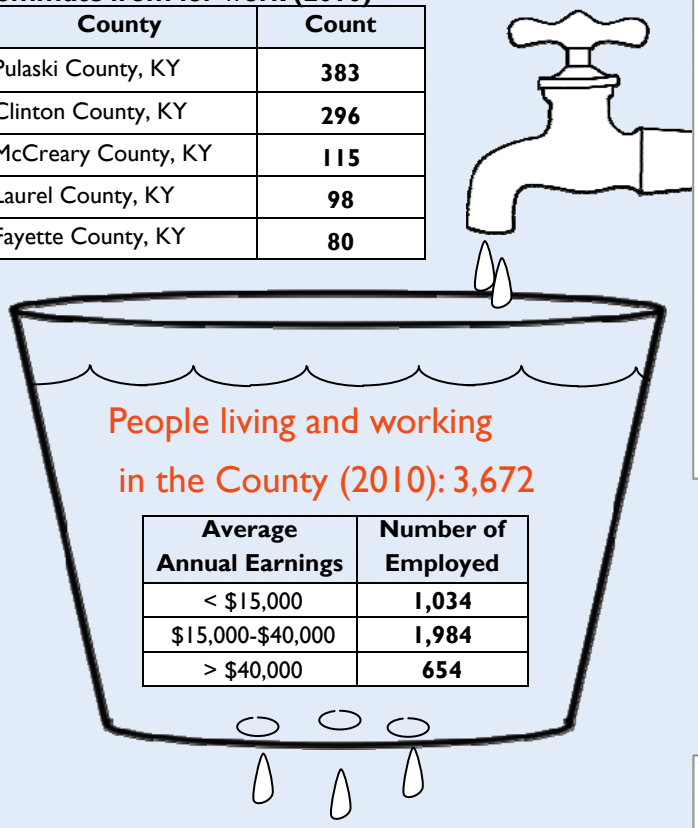
Of those employed in Wayne County, 37% are in-commuters.
Of employed Wayne County residents, 47% are out-commuters.

In-Commuters: Individuals living outside Wayne County who are employed inside Wayne County.
Out-Commuters: Individuals living in Wayne County who are employed outside Wayne County.

In-Commuters (2010): 2,184

Top 5 counties people commute from for work (2010)

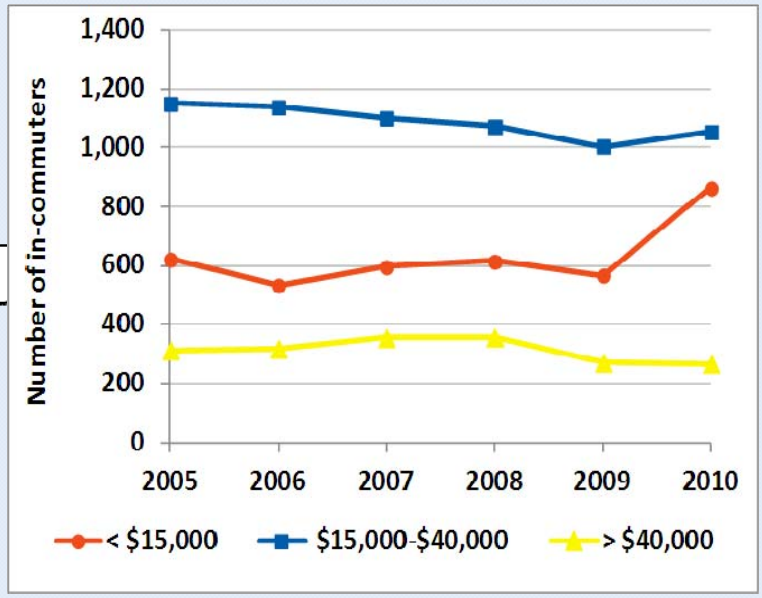
County	Count
Pulaski County, KY	383
Clinton County, KY	296
McCreary County, KY	115
Laurel County, KY	98
Fayette County, KY	80



People living and working in the County (2010): 3,672

Average Annual Earnings	Number of Employed
< $15,000	1,034
$15,000-$40,000	1,984
> $40,000	654

In-Commuters by Average Annual Earnings (2005-2010)



In 2010, Wayne County had fewer in-commuters than out-commuters.

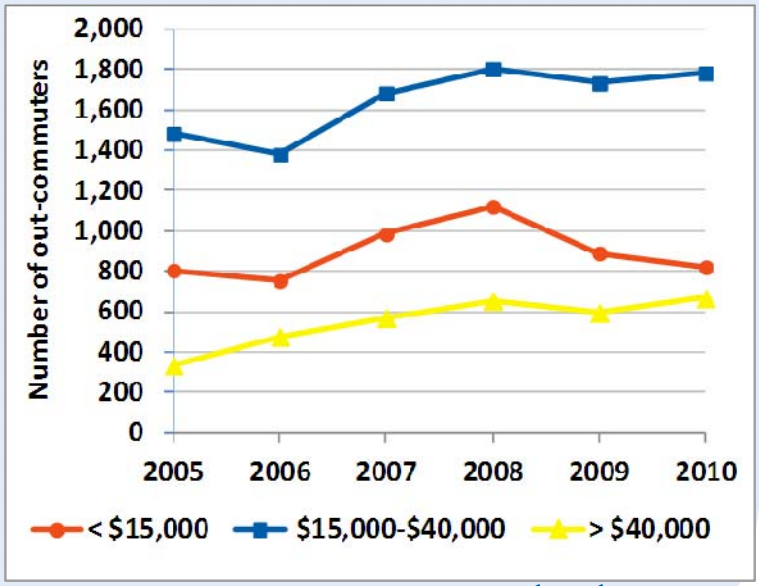
Since 2005, in-commuters had increased by 5% and out-commuters increased by 25%.

Out-Commuters (2010): 3,272

Top 5 counties people commute to for work (2010)

County	Count
Pulaski County, KY	794
Clinton County, KY	479
Jefferson County, KY	239
Fayette County, KY	226
Laurel County, KY	130

Out-Commuters by Average Annual Earnings (2005-2010)



*All data on this page are from CENSUS/OnTheMap

The data for this Profile were prepared by the Community and Economic Development Initiative of Kentucky (CEDIK) at the University of Kentucky. For questions on the data contained in this profile, contact James E. Allen IV, Research Director, at 859.257.7272 x253 or james.allen4@uky.edu.
Special thanks to Simona Balazs, CEDIK Research Assistant, for her work on this profile.

Kentucky County Workforce Profiles
Insights for Data Interpretation

Prepared by: Simona Balazs, CEDIK Research Assistant

July 2013

CEDIK's Workforce Profile is comprised of four sections. The first page contains "Occupational Data," "Knowledge Distribution," and "Workforce Demographics" while the second page describes "Commuting Patterns." In an effort to provide as much data as possible on two pages, precise definitions of some measures were not included. Thus, questions may arise including: What does this number represent exactly? How can I interpret this? This short overview provides additional clarification to the meaning of the selected measures in the profile.

1. Occupational Data

The table in this section provides 2012 employment numbers for the top ten occupations in the state of Kentucky, ranked from the highest to smallest. For example, Office and Administrative Support occupations are the most common, providing over 280,000 jobs in the state. Employment within these occupations is also reported at the regional Area Development District and county level. In addition to 2012 employment numbers, a percent change in employment is also provided at the county level for both a 10-year time period (2002-2012) and a 5-year period (2007-2012). If the percent change is positive, then county employment has increased for this occupation within the given time period. Conversely, if the percent change is negative, then county employment has declined. Both the minor and major recessions that started in 2002 and 2007, respectively, may also have impacted employment in these areas. Data for this table were acquired from Economic Modeling Specialists Inc. (EMSI). The occupations are classified based on the Standard Occupational Classification (SOC) system and are reported at the two-digit level.

2. Knowledge Distribution

Data representing the county's knowledge distribution are presented as a pie-chart on the first page of the profile. At its most basic level, the knowledge distribution is reported into six categories: Manufacturing, Healthcare, Science, Technical, Liberal Arts, and Business knowledge. Each slice of the pie chart reflects the corresponding percentage for those 6 categories based on the occupations that are currently present in your county. The premise for the knowledge distribution is that every occupation requires a certain mix of skills that are determined by worker experience, job requirements, and work attributes. To calculate the knowledge distribution, each occupation is "assigned" to a certain skill set. Because the knowledge distribution only considers 2012 employed occupations, the pie chart reflects the knowledge distribution of the 2012 workforce and not the training or experience of its potential workforce. Therefore, if a large manufacturing plant closed in your county last year, this will be reflected in a smaller manufacturing knowledge distribution, though a large manufacturing knowledge base may still remain in your county.

CEDIK also retrieved these data from EMSI, though it originates from O*Net, the Occupational Information Network developed with the sponsorship of the U.S. Department of Labor/Employment and Training Administration. O*Net is a free online occupational database that is updated on an annual basis. For more information on the collecting methodology and types of data please visit O*Net at http://www.onetcenter.org/dataCollection.html.

3. Workforce Demographics

Two tables and a graph provide demographic information about the people employed in your county. These workforce demographic data are collected from the U.S. Census Bureau's Quarterly Workforce Indicators (QWI). QWI is an application of the Census's Longitudinal Employer-Household dynamics and is reported in several ways. For this profile, county-level data are organized by education level, gender, and age groups. Employment numbers are defined based on the receipt of wages. Because the wages are not reported as full-time, part-time, long-term or temporary, people working for more than one employer in a quarter can be counted twice. Further, because employment is recounted quarterly, someone employed all year with one employer will be counted four times. For this reason, CEDIK reports in the tables the average total employment for the four quarters of 2011.

The first table is the percent distribution of workforce by education and gender, and it contains exactly 100 human figures among its 8 categories. Each human figure represents one percent of the workforce. Thus, for example, if there are 6 human figures in the first category, then 6% of your workforce is made up of males who have not attained a high school degree. Alternatively, the information in the table can be read as "Out of 100 people in the county workforce, 6 are male with less than a high school degree."

The second table in the lower left corner contains employment and average annual earnings (all in U.S. dollars) for the workforce, divided by age groups. As previously stated, it is not clear whether these annual earnings represent part- or full-time employment, though this may explain the significantly lower wages among age groups 14-21 years and >65 years, both of which are more likely to work part-time. Additionally, while this second table is divided by six age groups, QWI data are divided into eight groupings. For those age groups where the data were aggregated (specifically, age groups 14-21 and 22-34), the average annual earnings were weighted based on percent employment distribution in that aggregated group. For example, average annual earnings for the 14-21 age group is in fact an average of average annual earnings for two groups (i.e., 14-18 years old and for 19-21 years old), but properly adjusted since the latter group makes up a larger percentage of the workforce.

Finally, the bar graph in the lower right corner presents the average annual earnings by education level and gender. The eight bars in the figure represent county-level annual earnings. Blue bars represent male earnings and orange bars represent female earnings, each subdivided among four different education levels. Additionally, the two lines represent the overall average annual

earnings for the state of Kentucky, but split by gender (not education); male and female are shown as a green and yellow line, respectively. While the figure differs for every county, each bar chart reveals a clear income gap between men and women within each education level and also at the state level. The figure also allows for comparison between county earnings and the state average. For example, if the blue bar for the education level of "Bachelor's or more" exceeds the green horizontal line for state average earnings for male, then the county's male workers a four-year college degree earn more on average than the typical male employee in Kentucky. Conversely, if the blue bar for "Less than High School" is less than the green horizontal line, this indicates that men without a high school degree earn less on average than the typical Kentucky male. The same logic applies to the orange bars and yellow line representing female earnings.

4. Commuting patterns

The second page of the workforce profile describes commuting patterns of workers in and out of county. Visually, the page is divided into three spaces. The top table and graph pertain to information about people living outside of your county but who are employed inside, who we refer to as in-commuters. Inside the "bucket" in the middle of the page, information is presented for those who both reside and work in your county. Finally, the bottom of the page mirrors the information provided on the top of the page, but for out-commuters—those people that reside in your county but work outside of it. The image of the "leaky bucket" easily illustrates the "flow" of commuters in and out of your county. If your county has more in-commuters than out-commuters, then it fills the bucket more than it leaks, which is called a positive net job flow. Conversely, if your county has fewer in-commuters than out-commuters, then it leaks more than it is being filled: a negative net job flow.

For any county, how many people in-commute and out-commute affects the county's economy. In both cases, it is likely that commuters will spend part of their earnings in their county of work and some in their county of residence. In-commuters may shop and dine in your county (especially on lunch break), but they would likely spend more locally if they resided in your county too. Similarly, out-commuters may pay property tax in your county, but ideally, you'd like them to work in your county where they would spend less money on transportation and more on local businesses. Since ideal commuting patterns are unique for each county and region, we also provide the top five counties of origin for in-commuters and top five counties of destination for out-commuters by 2010 employment. With this information, you can explore how your county can best capture the business of your commuters.

Another important aspect of commuting patterns relates to the question: who are your in-commuters and out-commuters? Does your county import or export highly paid workers, who are often highly educated and/or experienced? To answer this, study the two graphs on the second page that provide information about in-commuters and out-commuters, respectively, over time (2005-2010) and grouped by average annual earnings into three categories. Within the two graphs, the three income categories are: people with annual earnings of less than $15,000, between $15,000-$40,000, and more than $40,000. Examine the top graph for in-commuters. If the number of people that commute into the county for work is higher for the >$40,000 average annual earnings category, then it is likely that your county attracts more highly skilled people to work in your county. This is good, but also begs the question: why aren't these highly skilled individuals living in your county? On the other hand, in the bottom graph of out-commuters, if the number of people with average annual earnings >$40,000 is greater than the other two categories, then your county is losing/exporting highly trained workers. Combining this information with the top five counties of origin/destination may help you to understand who are the in-commuters and out-commuters in your county.

The data for this section are provided by the U.S. Census Bureau's OnTheMap, a mapping application that generates information about where people work and where they live for the year 2010. More information about commuting patterns can be found at http://onthemap.ces.census.gov/.

Conclusion

Information on the top Kentucky occupations, workforce demographics, and commuting patterns in your county raises several important policy-related questions. What type of workers does your county want to retain from the local workforce and/or attract from outside counties? What types of occupations are provided in your county and what are the ones that the county would like to have but are underrepresented? Does the local workforce appear to be skilled for desired economic growth? How does the commuting patterns of your county affect the county's economy and can commuters be used a source of potential growth? While the data in this profile can start to answer these questions, they can only truly be answered in the local context.

If your community is interested in addressing these issues, please contact CEDIK to see what community and economic development resources we may be able to offer you.

References:

Economic Modeling Specialists Inc. (EMSI) for Occupational Data and Knowledge Distribution, retrieved from http://www.economicmodeling.com/;

CENSUS/Longitudinal Employer-Household Dynamics/Quarterly Workforce Indicators for Workforce Demographics, retrieved from http://lehd.ces.census.gov/applications/qwi_online/;

CENSUS/Longitudinal Employer-Household Dynamics/OnTheMap for Commuting Patterns, retrieved from http://onthemap.ces.census.gov/.

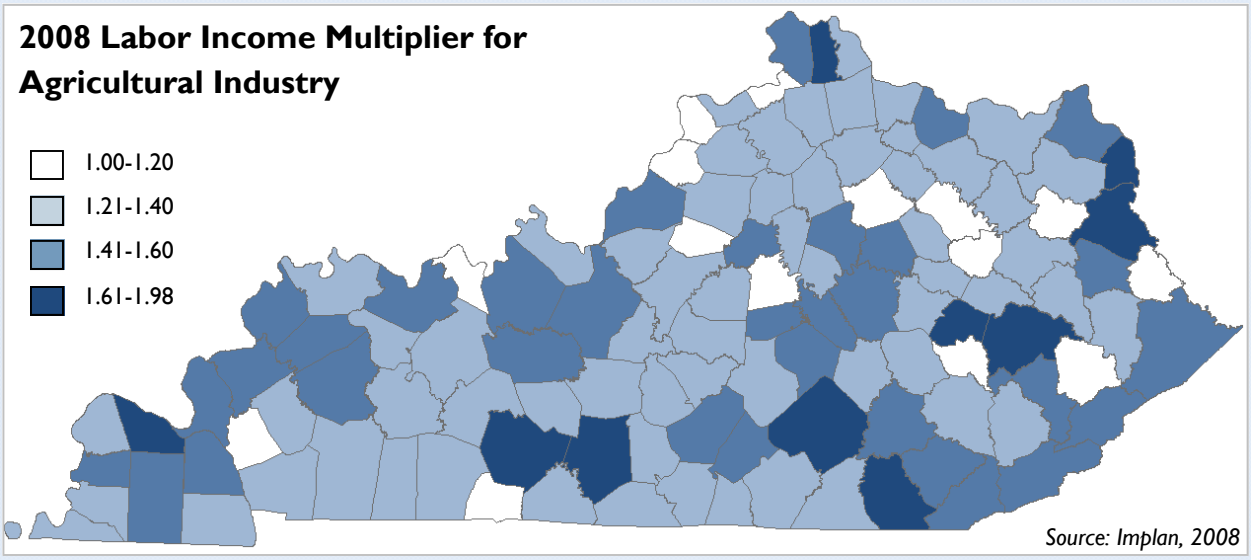
Kentucky County Ag and Food Profiles

Wayne County - Agriculture

Farm Demographics	Wayne County	Kentucky	United States
Total Farm Operations	781	85,260	1,522,033
Percent Full Owner	74.4%	76.8%	69.0%
Percent Part Owner	21.4%	19.4%	24.6%
Percent Tenant	4.2%	3.8%	6.4%
Total Number of Operators	1,123	123,971	3,337,450
Percent Female Operators	22.5%	26.9%	30.2%
Percent Non-white Operators	4.2%	2.7%	5.9%
Total Number of Hired Workers	778	74,444	2,636,509
Total Operations with Internet Access	44.3%	50.6%	56.5%
Total Operations with High Speed Internet Access	30.9%	29.1%	33.0%
Farm Economics			
Total Acres used for Farm Operations	142,827	13,993,121	922,095,840
Percent of Land Acreage used for Farm Operations	46.1%	54.1%	48.0%
Value of Ag Land, including Buildings	$291,878,000	$37,532,561,000	$1,744,295,252,000
Total Income from Farm Operations	$1,408,000	$288,008,000	$10,489,874,000
Total Income from Agritourism & Recreational Services	*	$3,332,000	$566,834,000
Vegetable Acres Harvested	66	7,776	4,682,588
Total Value of Animal Sales, Including Products	$62,380,000	$3,419,792,000	$153,562,563,000
Total Value of Crop Sales, Including Products	$6,077,000	$1,404,769,000	$143,657,958,000

** No data available*

Sources: 2007 Census of Agriculture, NOAA



Labor income includes employee wages and benefits as well as income from self-employment. This multiplier estimates the total change in a county's labor income resulting from a $1 increase of labor income in its agriculture industry due to transactions between ag and non-ag industries, and household spending. Thus, a higher labor income multiplier suggests a stronger linkage between agriculture and the county's other industries.

Food Access	Wayne County	Kentucky	US
Percent of Total Households with no car and more than 1 mile from a grocery store, 2006	7.8%	4.1%	2.3%
Percent of Total Households with no car and more than 10 miles from a grocery store, 2006	0.4%	0.2%	0.1%
Percent of the Population that is low income and more than 1 mile from a grocery store, 2006	45.1%	53.0%	28.8%
Percent of the Population that is low income and more than 10 miles from a grocery store, 2006	2.0%	2.1%	2.0%
Percent of Children that are Eligible for Free Lunch, 2009	62.0%	47.4%	52.5%*
Percent of Children that are Eligible for Reduced Price Lunch, 2009	11.6%	8.4%	10.0%*

*Sources: USDA Food Atlas, *USDA National School Lunch Program Participation Rates*

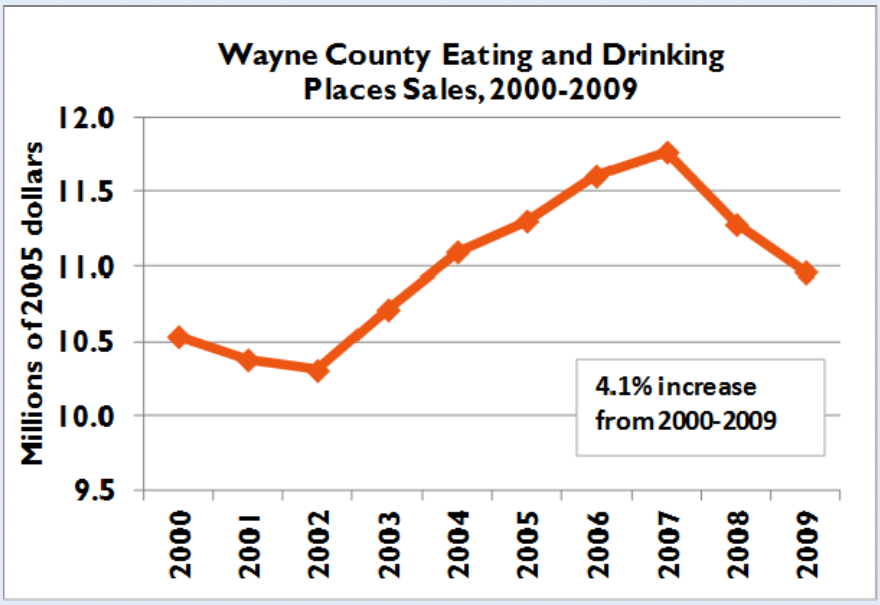
In 2010, 24.6% of all Wayne County food and beverage sales were made in restaurants as opposed to retail food stores.

This is an increase from 1995 when the figure was 20.2%.

Source: Woods and Poole, 2011

Wayne County	Total
Grocery Stores	6
Supercenters & Club Stores	1
Convenience Stores	11
Specialized Food Stores	2
SNAP authorized Stores (2010)	29
WIC authorized Stores (2011)	4
Fast Food Restaurants	15
Full Service Restaurants	7

Source: USDA Food Atlas, 2009 except where noted



Source: Woods and Poole, 2011

Local Food in/near Wayne County

Farmers Markets	Community Supported Agriculture Farms (CSAs)	Kentucky Certified Roadside Farm Markets
Wayne County Farmers Market 40 South Main Street 42633	**Wilson's Cedar Point Farm** http://wilsonscedarpointfarm.com	Frenchvalley Farms 1842 N. Main St, 42629

Sources: Kentucky Department of Agriculture, Kentucky Farm Bureau

Kentucky County Retail Sector Profiles

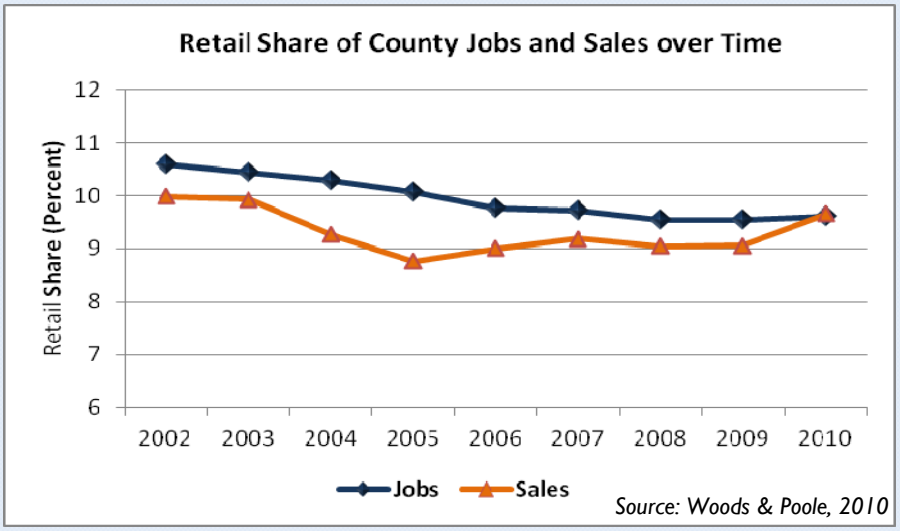
Wayne County

→ In 2010, 9.7% of county sales and 9.6% of county jobs were attributable to the retail sector.

The retail sector comprises businesses engaged in selling merchandise to the general public—the final step in the distribution of these goods and services. Examples include grocery, department and specialty stores, gas stations, and restaurants, among others.

	Percent change between 2002-2010
Retail Sector Jobs	-1.1%
Retail Sector Sales	1.1%

Source: Woods & Poole, 2010

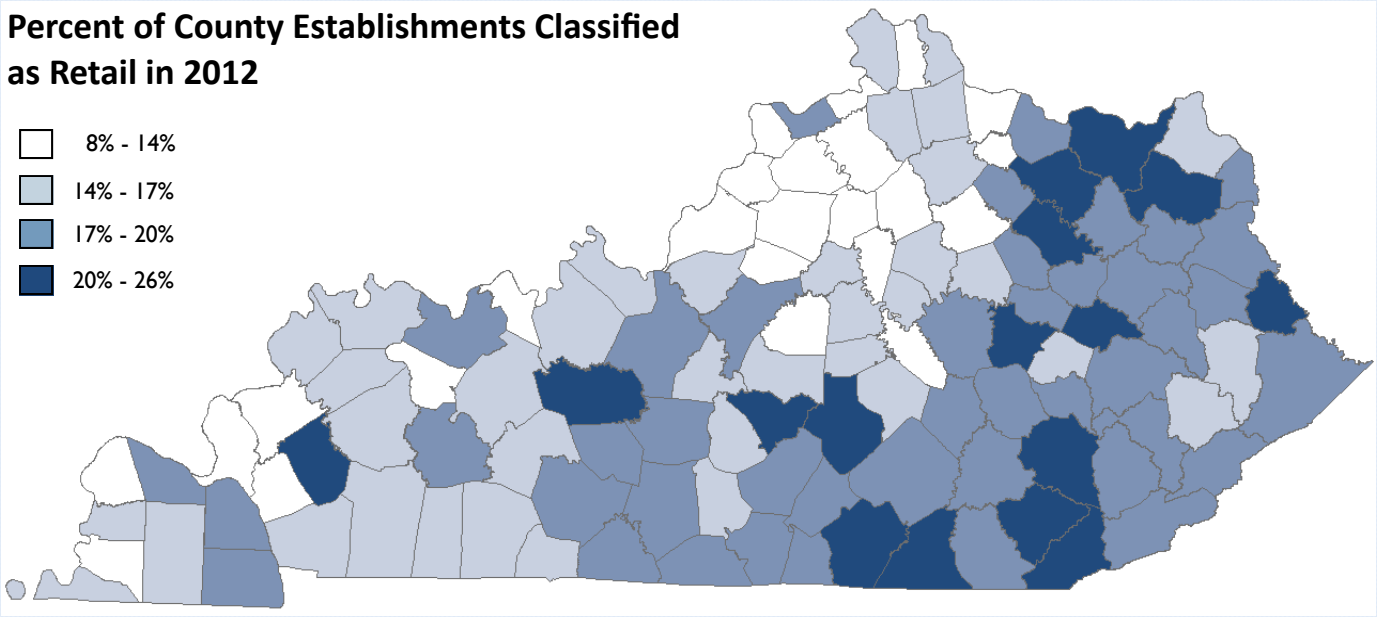


Source: Woods & Poole, 2010

2010 Retail Sector Employment Characteristics*	KY State	Lake Cumberland Area Development District	Wayne County	Age Breakdown within County		
				≤ 24 years old	25-54 years old	≥ 55 years old
Employment in the Retail Sector in 2010	205,562	7,876	700	156	396	148
Retail Share of Employment across All Sectors in 2010	10.7%	9.7%	9.6%	21.2%	10.9%	14.3%
New Hires in the Retail Sector in 2010	134,835	1,960	91	128	152	n/a
Retail Share of New Hires across All Sectors in 2010	13.9%	8.7%	2.9%	10.3%	8.9%	n/a
Change in Retail Employment in 2010	286	-24	5	n/a	n/a	n/a
Average Annual Earnings per Employee	$26,124	$23,612	$28,413	$12,679	$23,731	$37,561

**For detailed descriptions of data in this table visit http://www2.ca.uky.edu/CEDIK/data_profiles/retail_sector*

Source: US Census Longitudinal Employer-Household Dynamics, 2010



Source: ESRI/Community Analyst, 2012

	Wayne County	State Average
Retail sector establishments	133	208
Retail sector establishments per 1,000 people	6.4	5.6
Percent of establishments classified as retail	21.8%	16.8%

Source: ESRI/Community Analyst, 2012; US Census, 2010

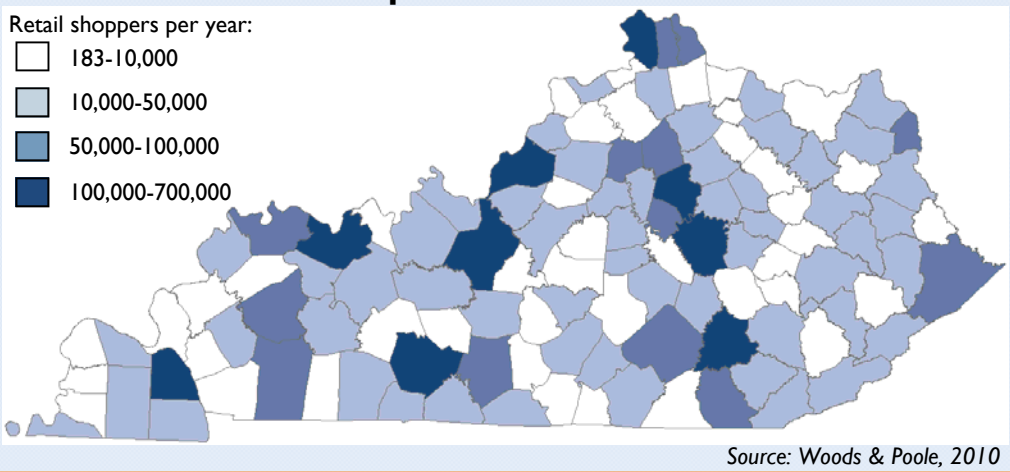
Trade Area Capture: This measure estimates the number of retail shoppers drawn to a county per year. Not surprisingly, urban counties have more shoppers, and thus, higher trade area captures.

State sales tax for KY is 6%, with no local tax. Except for VA and WV, the other neighboring states have a higher combined average sales tax rate (state + local).

	State sales tax	Local sales tax range
IL	6.25%	0.00% - 4.25%
IN	7.00%	0.00%
KY	6.00%	0.00%
MO	4.225%	0.50% - 6.625%
OH	5.50%	0.00% - 2.25%
TN	7.00%	1.50% - 2.75%
VA	4.00%	1.00% - 1.50%
WV	6.00%	0.00% - 1.00%

Source: Sales Tax Institute, 2012

Trade Area Capture for the Retail Sector

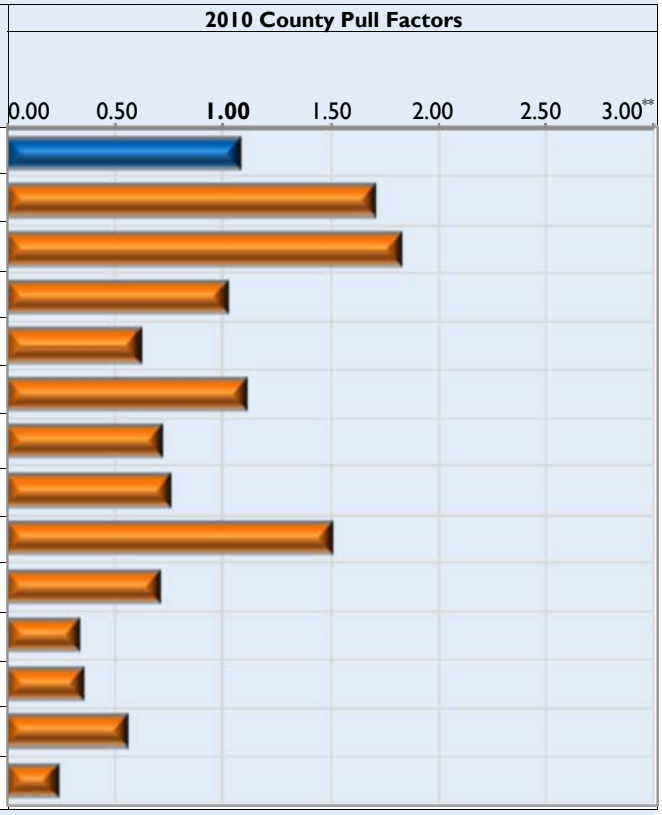


Source: Woods & Poole, 2010

Pull Factor Analysis: By dividing a county's trade area capture by its population, a pull factor measures a county's ability to attract shoppers in the retail sector. If the pull factor is less than 1, its own residents are shopping in other counties. If greater than 1, the county is pulling in retail shoppers from other counties.

Pull Factors by Retail Subsector

Retail Subsector	Rank	Share of total Retail	Change in Sales 2002 - 2010	KY Pull Factor	Lake Cumberland ADD* Pull Factor	County Pull Factor
All subsectors	-	100%	1.1%	1.00	1.08	1.07
General merchandise stores	1	29.3%	5.5%	1.42	1.10	1.70
Food and beverages	2	21.3%	-0.1%	1.01	1.15	1.82
Gasoline stations	3	12.8%	28.6%	1.53	1.16	1.01
Motor vehicles & parts dealers	4	8.8%	-30.0%	0.99	1.11	0.61
Health & personal care stores	5	6.9%	11.8%	1.25	1.36	1.10
Eating & dining	6	6.8%	8.0%	1.07	0.83	0.71
Building materials & gardening stores	7	5.9%	-0.1%	1.23	1.43	0.75
Miscellaneous	8	3.9%	-13.4%	1.29	1.27	1.50
Electronics & appliances stores	9	1.1%	0.1%	0.73	0.48	0.70
Clothing stores	10	1.1%	-3.4%	0.79	0.78	0.32
Non-store retail	11	1.0%	18.7%	0.53	0.50	0.34
Sporting goods	12	0.7%	-12.2%	0.79	0.52	0.55
Furniture stores	13	0.4%	-16.2%	0.90	0.75	0.22



** *The highest 2010 PF for a Retail Subsector in KY was estimated at 7.19*

* *ADD = Area Development District*

Source: Woods & Poole, 2010

The data for this Profile was prepared by the Community and Economic Development Initiative of Kentucky (CEDIK) at the University of Kentucky. For questions on the data contained in this profile, contact James E. Allen IV, Research Director, at 859.257.7272 x253 or james.allen4@uky.edu.

Special thanks to Simona Balazs, CEDIK Research Assistant, for her work on this profile.

Kentucky County Retail Sector Profiles
Insights for Data Interpretation

Prepared by: James Allen, CEDIK Research Director

February 2013

CEDIK's Retail Sector Profile is comprised of four sections. Page one is a description of "Retail Sector Trends," "2010 Retail Sector Employment Characteristics," and "Retail Establishments." Page two showcases "Trade Area Capture and Pull Factors" for the retail sector. In an effort to provide as much data as possible on two pages, precise definitions of some measures were not included. Thus, questions may arise including: What does this number represent exactly? How can I interpret this? This short overview provides additional clarification to the meaning of the selected measures in the profile.

1. Retail Sector Trends

Both a table and a figure make up the profile's first section regarding trends in the retail sector, and each uses different data to describe how the retail sector has changed in your county over time. The table on the left showcases two numbers: the percent change in number of retail jobs and the percent change in amount of retail sales, covering the years 2002 to 2010. This measure is meant to suggest an overall decline or increase in the actual number of retail jobs or annual retail sales in your county. However, what is not shown was whether this change was gradual, sudden, significant, or inconclusive. For example, was this change the result of a clear increase or decline in retail or nothing more than one might expect from normal year-to-year volatility? This table does not answer that question, but it helps identify the overall trend.

The Retail Sector profile figure on the right side of the page charts out retail's share of total jobs and sales in the county over time. In other words, of all the jobs held or sales generated in the county, what percentage is attributable to the retail sector? This measure is meant to highlight the relative importance of the retail sector to your county's economy and how that has changed over time. If the retail share has increased over time, this implies that the retail sector is either growing faster than the rest of the economy or shrinking slower than the rest. Using the percentage change given in the left table and the overall trend of the retail share in the figure, the chart below may help to interpret how together these two measures can explain recent trends in your county's retail sector relative to rest of the economy (described in the table as simply "economy").

2. 2010 Retail Sector Employment Characteristics

Data represented in the table comes from the Quarterly Workforce Indicators compiled and published by the U.S. Census, which takes a snapshot of employment across various sectors and demographic distributions. The Census reports these snapshots quarterly, though CEDIK wanted to present data that represent the entirety of the calendar year 2010. Thus, to utilize this table, one must understand how Census defines these measures and how CEDIK aggregated them across all quarters.

Census defines employment as the sum of workers per business who were employed at the beginning of a quarter and received wages in the previous quarter. Employment is defined by the receipt of wages, so it can be full-time, part-time, long-term, or temporary. Further, because employment is recounted quarterly, someone employed all year with one employer will be counted four times. For this reason, CEDIK took the average of retail employment across the four quarters of 2010; this is the number reported in the table. However, one limitation is that those working with more than one retail employer in a given quarter are counted twice—once for each position. The retail share of employment is simply the 2010 quarterly average of employment in the retail sector (just defined above) divided by 2010 quarterly average of employment across all sectors.

Next, Census defines new hires as the total number of workers who starting receiving wages in a given quarter from an employer whom they had not worked for in the past year. Again, because hiring is defined by a receipt of wages, the hire could be fired either twenty years or two days later and be counted equally. Every quarter begins anew, so CEDIK calculated the total number of new hires for 2010 as the sum of quarterly new hires. This measure should NOT be interpreted as the number of new jobs created because many jobs, especially in retail, have relatively quick turnover rates.

How measures of employment and new hires are defined may produce results that seem counterintuitive, such as if the table reports more new hires than workers employed. To understand how this may happen, consider the following example. First, Chloe graduated from the University of Kentucky over the summer of 2010 and looked for a job to launch her career in the 3rd quarter. After an unsuccessful month, she started work as a grocer clerk to pay the bills. Two weeks later, and still in the same quarter, she landed a morning manager position at a retail outlet and quickly quit her grocer position. Thus, when employment was calculated for the 4th quarter, she was counted. Since employment is averaged across all four quarters, Chloe only adds .25 to county employment, but she will add 2 to new hires since she received wages from two new employers in

		Change in Retail Share		
		Positive	**Zero**	**Negative**
Percentage Change	**Positive**	Retail has grown faster than economy	Retail has grown at the same speed as economy	Retail has grown but economy grew faster
	Zero	No change in retail but economy has declined	No change in retail or in rest of the economy	No change in retail but economy has grown
	Negative	Retail has declined but economy declined faster	Retail has declined at the same speed as economy	Retail has declined faster than the economy

2010. If many county residents face similar circumstances—which are feasible among younger age groups—this may result in new hires outnumbering workers employed.

To calculate the change in retail employment for 2010, CEDIK took the difference between retail employment from the beginning of quarter one in 2011 and the beginning of quarter one in 2010. A positive number represents the total number of additional workers who are considered employed one year later, and vice versa. In principle, this number should be equal to the total number of hires in 2010 (new hires plus any rehired by the same employer within a year) minus total separations. Therefore, this measure helps to provide some perspective to the reported number of new hires in 2010.

Average annual earnings are the sum of the Census's average quarterly earnings, which are only estimated for full-quarter employees. Thus, reported average earnings may include part-time wages, but not those who were hired or separated in that quarter. This measure provides some indication of the quality of retail jobs and how this might differ across age groups.

Finally, CEDIK has manipulated the Census data to breakdown each measure into three age groups within the county: those 24 and under, those 55 and older, and those in between. The measures are defined in the same way for the age breakdown, except that the result only applies to those within a particular age group. Unfortunately, data was not available for spaces marked "n/a".

References:
Longitudinal Employer-Household Dynamics, U.S. Census Bureau (2011). "LED: Quarterly Workforce Indicators 101." Retrieved from: http://lehd.ces.census.gov/doc/QWI_101.pdf

3. Retail Establishments

Retail establishments are featured in the profile's third section, which maps an interesting pattern in the percentage of county establishments classified as retail across Kentucky. This percentage could vary for many reasons, including economic diversification, prevalence of tourism, strong interest in retail entrepreneurship, or a smaller manufacturing/industrial economy. Below the map, county-specific information is provided, including the number of retail sector establishments, the number of establishments per 1,000 people, and state averages. In many counties, retail establishments and their accessibility to local residents is a good portion of what characterizes the community.

4. Trade Area Capture (TAC) and Pull Factors

Trade Area Capture (TAC) is used to estimate the number of customers who have shopped in a given area (e.g., county or state) within a one-year period. Specifically, it is calculated by dividing annual retail sales for that area by the state average of annual per capita spending on retail goods and services, which is further adjusted by a ratio of local-to-state per capita income (where applicable) to account for differences in average incomes. In other words, TAC is the ratio of total retail sales to the average amount of money that a retail shopper spends—adjusting for income differences—and thus estimates the number of shoppers for that area. Therefore, it is not surprising that Kentucky's more urban counties, which have higher populations, also have higher TACs (see map). One caveat is that the TAC assumes that local residents purchase goods and services at the same rate as the average state resident, though it allows for their average incomes to vary.

Pull Factors take retail analysis to the next level by dividing TAC by the local population. Thus, if the estimated number of shoppers for that area (i.e., TAC) is greater than the local population, the Pull Factor will be greater than one, and vice versa. In the Pull Factor table, CEDIK has calculated the Pull Factors for each retail subsector at the county-, Area Development District-, and state-level. Subsectors are also ranked by the greatest percentage of total retail sales in the county.

How can these figures be interpreted? A Pull Factor may be greater than a value of one for two reasons: 1) most often, the local area is attracting retail customers from outside its boundaries, and/or 2) local residents are spending more on retail than the average state resident. Conversely, if a Pull Factor is less than one then the reverse is true; the local area is losing retail shoppers to outside business, the residents are spending less than the state average, or both. Finally, a Pull Factor equal to a value of one indicates a balance of trade where purchases by local residents outside local boundaries are matched by sales made to non-local shoppers.

In addition to thinking about your county's retail subsectors when interpreting this table, it is also important to remember county commuting patterns and tourism. Both have a high potential for bringing in or sending out significant numbers of people for reasons completely unrelated to retail shopping. However, while working or travelling in a county other than where they reside, people are likely to purchase gas, eat at restaurants, buy gifts or clothes, etc. In other words, Pull Factors are not merely an indication of the strength or potential of the retail sector, but also how much the county is relied upon by its residents and outsiders for their retail shopping needs.

References:
Hustedde, Shaffer, and Pulver. "Community Economic Analysis: A How To Manual." (1993). Retrieved from: http://www.epa.gov/greenkit/pdfs/howto.pdf

Still have questions?

If you have further questions regarding the data in this profile, please contact CEDIK Research Director James Allen at (859) 257-7272 x253.