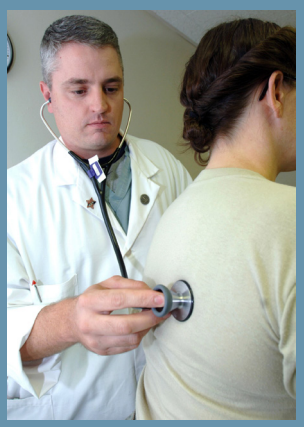
Community Health Needs Assessment 2013

Casey County Hospital



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UNIVERSITY OF KENTUCKY
College of Agriculture, Food and Environment

This Community Health Needs Assessment (CHNA) Implementation Strategy was prepared for Casey 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

Community and Economic Development Initiative of Kentucky

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Dear Community Resident,

Thank you for your interest in the 2012-2013 Casey County Hospital Community Health Needs Assessment (CHNA). These data reflected in this report werecollected from surveys and focus groups conducted in our community. The results are being reported along with health information collected from reputable national, state, and local data sources.

The assessment results from Casey County Hospital demonstrate the desire for individual and community health improvement. The results provide valuable information that will be used for planning purposes, service improvements and community outreach.

It is our hope that this assessment will help Casey County Hospital, in partnership with our community, to identify respective health concerns, measure the impact of current public health efforts and guide the appropriate use of local resources. We also hope that together, we can improve the health and well-being of our residents.

Sincerely,

Rex A. Tungate

Administrator/Chief Executive Officer

Casey County Hospital

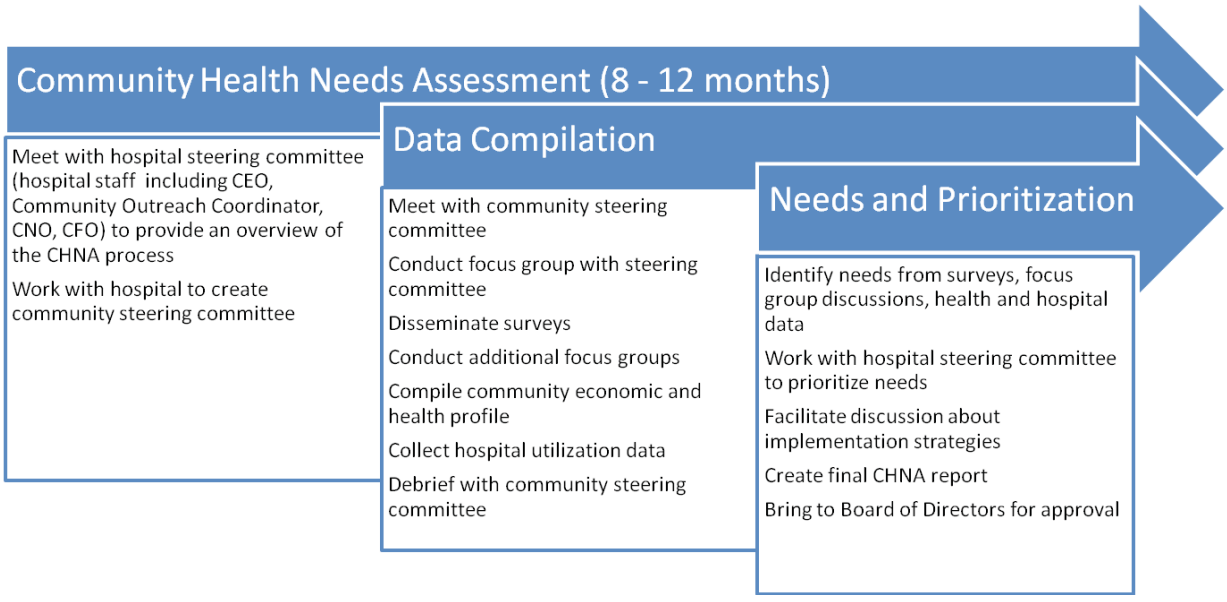
CHNA Background

Casey County Hospital contracted with the Community and Economic Development Initiative of Kentucky (CEDIK) in the summer 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.

Table of Contents

Introduction

Casey County Hospital has as its primary goal the provision of quality hospital services to the citizens of Casey County and the surrounding area.

Through its Quality Improvement, Utilization Review and Risk Management programs, Casey County Hospital pledges to assure a consistently acceptable level and quality of service in the hospital and to reduce the risk of injury to patients, visitors and employees. Organizational performance will be constantly reviewed and improved by effective processes, functions and services measured through continuous efforts by Quality Teams and activities such as staff, patient and community education.

Description of Community Served by Casey County Hospital

Casey County was established in 1809 and is named for Colonel William Casey, an early Kentucky pioneer and great-grandfather of Samuel L. Clemens, better known as "Mark Twain." Like many counties in Kentucky, Casey County grew from a wilderness outpost of settlers hoping to make a living off the land. Today Casey County's south central Kentucky location places it within one of the fastest growing regions in the state outside the "Golden Triangle."

Map created with Google Maps, 2013

Casey County is known for its unique topography—the "knobs," its Amish and Mennonite communities, the Casey County Apple Festival and most recently the Central Kentucky Ag/Expo Center.

Central Kentucky Ag/Expo Center

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)	Casey County	State of Kentucky	National Level
Total Population	15,909	4,369,356	313,914,040
Percent of Population under 18 years	23.5%	23.4%	23.7%
Percent of Population 65 year and older	16.3%	13.5%	13.3%
Percent of Population Non-Hispanic White	95.6%	86.1%	63.4%
Percent of Population Non-Hispanic African Amercian	0.6%	7.8%	13.1%
Percent of Population Hispanic	2.6%	3.2%	16.7%
Percent of Population other Race	0.6%	1.6%	6.8%
Percent of the Population not Proficient in English*	1.6%	1.1%	n/a
Percent of the Population that are Female	51.2%	50.8%	50.8%
Percent of the Population that are Rural**	100.0%	41.6%	n/a

*2007-2011 5 year estimate
**2010 Estimate

Social and Economic Factors

Indicator	Casey County	State of Kentucky	National Benchmark*
Median Household Income	$31,336	$41,682	n/a
High School Graduation Rate	75.1%	77.9%	n/a
Percent of Population with Some College Education	42.5%	56.1%	70.0%
Unemployment Rate	9.6%	9.5%	5.0%
Percent of Children in Poverty	41.9%	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	36.9%	33.6%	20.0%
Percent of Adults without Adequate Social Support	20.5%	19.9%	14.0%
Percent of the Population Spending More Than 30% of Income on Housing Costs	27.0%	28.0%	n/a
Violent Crime Rate (per 100,000 population)	72.1	264.4	66.0

Health Behaviors

Indicator	Casey County	State of Kentucky	National Benchmark*
Percent of Adults who Smoke Regularly	32.6%	26.4%	13.0%
Percent of Adults who are Obese (BMI>=30)	36.2%	32.9%	25.0%
Percent of Adults who are Physically Inactive During Leisure Time	36.7%	31.5%	21.0%
Percent of Adults who Drink Excessively (Heavy or Binge)	13.9%	11.5%	7.0%
Motor Vehicle Crash Deaths (per 100,000 population)	35.0	20.0	10.0
STDs: Chlamydia Rate (per 100,000 population)	125.4	377.4	92.0
Teen Birth Rate (per 1,000 females ages 15-19)	55.3	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	Casey County	State of Kentucky	National Benchmark*
Premature Death (Years of Potential Life Lost per 100,000 population)	10,495	8,768	5,317
Percent of Adults Reporting Poor or Fair Health	28.1%	21.4%	10.0%
Average Poor Physical Health Days in Past 30 Days	6.3	4.7	2.6
Average Poor Mental Health Days in Past 30 Days	5.1	4.3	2.3
Percent of Babies Born with Low Birthweight (<2500 grams)	8.3%	9.1%	6.0%
Percent of Adults with Diabetes	13.7%	11.6%	n/a
HIV Prevalence Rate (per 100,000 population)	36.4	140.0	n/a
Premature Age-Adjusted Mortality	529.6	444.5	n/a
Child Mortality (per 100,000 population)	163.7	66.9	n/a
Infant Mortality (per 100,000 population)	865.1	709.8	n/a

Access to Care

Indicator	Casey County	State of Kentucky	National Benchmark*
Percent Uninsured (< age 65 without health insurance)	24.2%	17.5%	11.0%
Percent of Uninsured Adults	30.0%	21.8%	n/a
Percent of Uninsured Children	9.7%	6.7%	n/a
Ratio of Population to Primary Care Physicians	7980:1	1587:1	1067:1
Ratio of Population to Dentists	16440:1	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	28.4%	17.0%	n/a
Rate of Preventable Hospital Stays (per 1,000 Medicare Enrollees)	181.4	102.8	47.0
Percent of Diabetics that Receive HbA1c Screening	81.6%	83.8%	90.0%
Percent of Women Receiving Mammography Screening	49.8%	61.7%	73.0%

Physical Environment

Indicator	Casey County	State of Kentucky	National Benchmark*
Pollution: Average Daily Measure of Fine Particulate Matter (micrograms per cubic meter)	12.8	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)	6.3	8.1	16.0
Food Access: Percent of Population Living in Poverty and >10 Miles from Grocery Store	3.6%	4.8%	1.0%
Food Access: Percent of all Restaurants that are "Fast Food"	37.5%	53.7%	27.0%
Percent of Workers who Commute Alone	77.3%	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 Casey County Hospital's patients and in particular where they come from, how they pay, and why they visited.

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

County of Origin	Discharges	Total Charges	Average Charges
Casey, KY	582	$5,328,399	$9,155
Lincoln, KY	56	$443,253	$7,915
Russell, KY	14	$150,810	$10,772
Adair, KY	10	$47,549	$4,755
Green, KY	5	$42,661	$8,532
Marion, KY	5	$37,204	$7,441
Pulaski, KY	2	$7,019	$3,509
Rockcastle, KY	2	$17,001	$8,500
Boyle, KY	1	$1,165	$1,165
Hardin, KY	1	$5,522	$5,522

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

Payer	Discharges	Total Charges	Average Charges
Medicare	506	$4,812,844	$9,512
Commercial - Mix	61	$439,917	$8,097
Self Pay	47	$279,685	$5,951
Kentucky Spirit Health Plan	31	$254,042	$8,195
Coventry Cares of KY	15	$101,262	$6,751
WellCare of Kentucky	13	$101,633	$7,818
Champus	7	$47,467	$6,781
Medicaid	3	$20,152	$6,717
VA	1	$2,671	$2,671

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

County of Origin	Discharges	Total Charges	Average Charges
Casey, KY	5,758	$2,967,418	$515
Lincoln, KY	607	$292, 577	$482
Adair, KY	81	$40,126	$495
Russell, KY	77	$45,905	$596
Marion, KY	49	$29,997	$612
Taylor, KY	48	$26,569	$554
Pulaski, KY	33	$17,737	$537
Boyle, KY	30	$10,684	$356
Fayette, KY	15	$13,661	$911
Hamilton, OH	12	$6,851	$571

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

Payer	Discharges	Total Charges	Average Charges
Self Pay	1,872	$853,780	$456
Medicare	1,590	$1,020,900	$642
Commercial - Mix	1,153	$743,147	$645
Kentucky Spirit Health Plan	717	$309,713	$432
Coventry Cares of KY	681	$264,157	$388
WellCare of Kentucky	664	$257,799	$388
Medicaid	56	$27,441	$490
Champus	50	$20,943	$419
Workers Compensation	30	$22,418	$747
VA	17	$9,803	$577
Passport Medicaid Managed Care	14	$3,873	$277

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

DRG Description (Top 10 for inpatient visits)	Discharges	Total Charges	Average Charges
Medicine – Pulmonary	290	$3,285,622	$11,330
Medicine – General	189	$1,298,850	$6,872
Medicine – Cardiovascular Disease	77	$560,559	$7,280
Medicine – Nephrology/Urology	76	$642,349	$8,452
Medicine – Neuro Sciences	13	$79,468	$6,113
Medicine – Orthopedics	12	$73,921	$6,160
Medicine – Otolaryngology	10	$35,136	$3,514
Surgery – General	5	$52,092	$10,418
Medical – Oncology	5	$26,869	$5,374
Psychiatry	3	$14,026	$4,675
Surgery – Cardiovascular & Thoracic	2	$36,172	$18,086
Medicine - Opthalmology	1	$5,958	$5,958
Chemical Dependency	1	$2,651	$2,651

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.

Casey County Hospital Community Steering Committee

Name	Organization
Rachyl Cundiff	Patient Care Coordinator, Lifeline Home Health
Beverly Curry	Care Transition Coordinator, Amedysis Home Health
Linda Hamilton	Board of Directors, Casey County Hospital
Jelanie Harlowe	Health Educator, Casey County Health Department
Kathy Hines	Director, Casey County Ambulance Service
Sue Ellen Johnson	Community Representative, Casey County
Rachael King	School District Health Nurse, Casey County School District
Rev. Greg Powell	Pastor, Mt. Olive Christian Church
Tina Sinclair	Admissions & Marketing Director, Kindred Nursing & Rehab
Blaine Staat	Director, Liberty/Casey County Chamber of Commerce
Katie York	Vice President, Casey County Bank

Casey County Hospital - CHNA Survey Results

Total number of respondents: 131

Households that have used the services of a hospital in the past 24 months: 76.2%

Table 1. Services used if household used the services of a hospital in the last 24 months:

Hospital Service	Number of Households	Percent of Households
Emergency Room – life threatening	12	11.5%
Emergency Room – non life threatening	52	50.0%
Outpatient Services	47	45.2%
Inpatient Services	41	39.4%

Respondents were asked how satisfied they were with the care they or someone in their household received at Casey County Hospital. With 1 being very satisfied and 4 being very dissatisfied, the average score was 1.65.

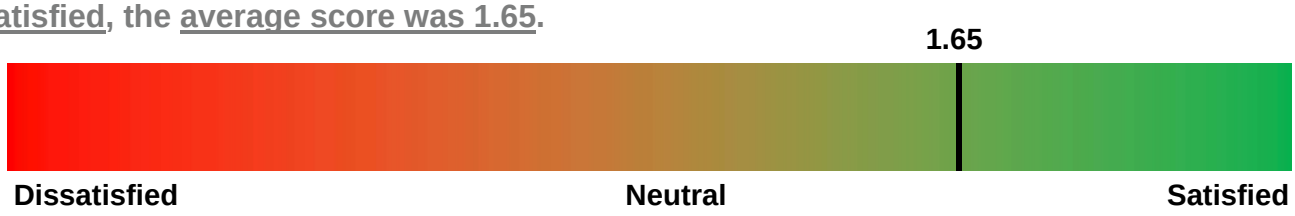


Table 2. Hospital used if household used the services of a hospital in the past 24 months:

Hospital	Number of Households	Percent of Households
Casey County	69	66.7%
Ephraim McDowell	46	44.2%
Taylor Regional	9	8.7%
Lake Cumberland Regional	5	4.8%
UK Medical Center	5	4.8%
St. Joseph	3	2.8%
Central Baptist	9	8.7%
Other	7	6.7%
If other where was it located (had to be mentioned at least twice)? Russell County (3)		

Table 3. Routine Medical Care:

Situation	Percent of Households
Household has a family doctor	86.2%
Households that get regular checkups of those with a family doctor	77.1%

Table 4. Reasons for using other hospital if household did not use Casey County Hospital:

Reasons	Number of Households	Percent of Households
Service wasn't available	27	34.6%
Physician referral	33	42.9%
Insurance required using a different hospital	2	2.6%
Prefer a larger hospital	3	3.8%
Other	24	30.8%

If other, why (had to be mentioned twice)? Location (10), primary physician works at another facility (4), better quality of care elsewhere (4)

Table 5. Households with someone receiving treatment for select conditions:

Condition	Number of Households	Percent of Total Households
Diabetes	16	13.1%
High Blood Pressure	49	40.2%
Cancer	7	5.7%

Table 6. Specialty services used:

Service	Number of Respondents Using the Service Anywhere	Number of Respondents Using the Service at Casey County Hospital
Emergency	64	43
Radiology	34	14
Acute Care Admission	14	7
Swing Bed Admission	10	9
Laboratory	59	31
Respiratory Care	12	6
Dialysis	0	0
Mammography	21	2
Physical Therapy	14	7

Table 7. Information on ability to pay for medical services:

Situation	Percent of Total Households
Delayed health care due to lack of money and/or insurance	22.7%
Are you or members of your household currently eligible for:	
Medicare	39.3%
Medicaid	18.0%
Public Housing Assistance	2.5%
SNAP (Food Stamp Program)	5.7%
Households with someone currently without health insurance	17.6%

- **Respondents who have utilized the services of Casey County Primary Care or Casey County Family Practice in the last 24 months: 49 (41.9%).**

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

  Hire better and more doctors (7), shorten waiting time (3), lower prices (3), more specialists (2)

Brief Description of Tables 5 and 7:

Table 5 provides some detail about the respondents' health risks. To ensure that there was broad community input, Casey County Hospital wanted to engage the medically needy population. The results in Table 5 suggest that 13.1% of the respondents or a member of the respondent's family has diabetes, 40.2% have high blood pressure, and approximately 5.7% of the respondents or a member of their family have cancer.

Table 7 provides evidence that the survey reached a lower-income population. Of the respondents, 22.7% stated that they had delayed health care due to a lack of money or insurance. Approximately 17.6% reported that they or someone in their household was without health insurance, while 18.0% and 39.3% were enrolled in Medicaid and Medicare, respectively. 5.7% of the households received SNAP (Supplemental Nutrition Assistance program) assistance, while 2.5% 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

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 participated in two focus groups onsite at their facilities, while other focus groups took place at the hospital.

Vision for a Healthy Community

- Community that is proactive about their health
- Smoke free community
- Access to physical fitness (gym, trails, sidewalks)
- Drug free Community
- Access to healthy foods
- Mental health services

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

- Community Outreach is good, but people are unsure of climate of health care changes
- Increase information and programs in the area of tobacco (smokeless tobacco & cigarettes)
- Increase information and programs in the area of obesity and physical activity
- Perception improves when people are admitted to hospital (they have preconceived idea if no prior experience with the hospital)
- "Band – aid" hospital
- Won't admit – have to go out of county
- Overutilization of swing beds
- Clean, professional, efficient staff and modern equipment

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

- Offer pediatrics
- More involvement with senior community and offer more senior services
- Help with assisted living

Focus Group Findings, continued

What can the hospital do to meet the health needs of the community, continued:

- Offer access to orthopaedics, neurology, oncology and other specialties
- Improve physician and staff attitudes
- Access for Hospice patients
- More educational programming and outreach
- Financial assistance and more affordable options for those without insurance

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 Casey 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 Casey County Hospital can influence long-term change, and the impact of the identified health needs on overall health.

Casey 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

- Physicians (more specialists and specialty services)
- Physician and Staff Attitudes
- Financial assistance and more affordable options for those without insurance
- More Services for Seniors
- Hospice Patients – need access to hospital
- More educational programming and outreach
- Patient Privacy

Implementation Strategy

Increase Access to Specialists and Access to Physicians

Goal 1: Increase access to specialists.

Strategies:

A. Meet with area physicians to ascertain availability of specialists and identify specialties not currently offered.

B. Increase marketing and promotion of current services provided.

1. Publish success stories with patients who utilize services of Casey County Hospital
2. Advertise new providers.

Community Partners identified to help with this priority: Casey County Hospital, Casey County Primary Care, Casey County Family Practice.

Educational Programs and Outreach

Goal 1: Increase Community Education Programs.

Strategies:

A. Work with local organizations and school system to increase access to educational programs for the community, particularly in area of physical activity (currently Casey County is 4% higher than state average for those who have BMI of over 30), smoking cessation, and breast cancer (10% fewer women report having mammograms compared to state average).

B. Work with senior center to offer monthly educational programs geared towards senior needs (examples - brown bag program with pharmacist, medication safety, health and wellness for seniors).

C. Offer community program on the Affordable Care Act and how it will impact the community and individuals and where they can receive additional information.

Community Partners identified to help with this priority: Casey County Chamber of Commerce, Casey County Health Department, Casey County Public Library, Casey County School System and Casey County Senior Citizens Center.

Implementation Strategy, continued

Financial Assistance

Goal 1: To provide information on financial assistance and programs that are currently available at Casey County Hospital.

Strategies:

A. Increase awareness within hospital.

1. By October 2013, meet with DSH (Disproportionate Share Hospital) coordinator at hospital to review criteria for financial assistance programs and meet with staff to review the criteria and brainstorm ways to get information to public.

2. Place pamphlets, flyers and signs in lobby that share information about financial assistance program.

3. Provide financial assistance program information to patients upon check in for procedures or discharge from in patient stay.

B. Increase awareness within community.

1. By October 2013, meet with local officials and social service agencies to discuss what is available for those without Medicaid and how will the Affordable Care Act impact the community.

2. Work with social service agencies and Family and Youth Service Resource Centers to provide flyers and financial requirements to receive financial assistance from Casey County Hospital.

Community Partners identified to help with this priority: Department for Community Based Services, The Protection and Permanency Office, and the Casey County Youth and Family Resource Centers.

Priorities that will NOT be addressed in this Community Health Needs Assessment (3 year cycle)

1. Hospice Patients – need access to hospital – It is not feasible at this time for Hospice patients to be admitted because we are not reimbursed for their care. There are currently hospitals within a 30 mile radius that will admit Hospice Patients.

2. Patient Privacy – Casey County hospital will continue to educate staff on HIPPA and patient privacy laws and reinforce the importance of patient privacy at staff meetings and other trainings.

3. Physician and Staff Attitude – Casey County hospital constantly strives to have the best staff possible and will continue to emphasize the importance of patient care.

Next Steps

This Implementation Strategy will be rolled out over the next three years, from Fiscal Year 2014 through the end of Fiscal Year 2016.

Casey 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, Casey 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-year Estimates	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-year Estimates	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-year Estimates	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-year Estimates	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-year Estimates	2007-2011
Percent of Population who Live Within Half a Mile of a Park	Environmental Public Health Tracking Network	2010

Casey County Hospital

We want 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. What is your ZIP code? _____

2. Do you have a family doctor? Yes _____ No _____

If YES, do you regularly visit your physician for a check-up? Yes _____ No _____

3. Have you or someone in your household used the services of a hospital in the last 24 months?
   Yes _____ No _____
   If YES, which hospital?

   _____ Casey County Hospital _____ Ephraim McDowell _____ Taylor Regional

   _____ Lake Cumberland Regional _____ UK Med Center _____ St. Joseph

   _____ Central Baptist _____ Other (please list)

4. If yes, what services did you use?

   _____ Emergency Room for life-threatening issue

   _____ Emergency Room for non-life threatening issue

   _____ Outpatient Service

   _____ Inpatient

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

   _____ Service I needed was not available

   _____ My physician referred me

   _____ My insurance requires me to go elsewhere

   _____ I prefer larger hospitals

   _____ Other (please explain) _____

6. If you received care at Casey County Hospital, how satisfied were you with your overall experience?
   _____ Very Satisfied _____ Satisfied _____ Dissatisfied _____ Very Dissatisfied

7. Have you utilized the services of Casey County Primary Care or Casey County Family Practice in the last 24 months?

_____ Yes _____ No

If YES, how satisfied were you with your overall experience?

_____ Very Satisfied _____ Satisfied _____ Dissatisfied _____ Very Dissatisfied

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

Check YES if care received anywhere		Check if care received at Casey Hospital
Emergency Room	_____ yes	_____ at Casey Hospital
Radiology	_____ yes	_____ at Casey Hospital
Acute Care Admission	_____ yes	_____ at Casey Hospital
Swing Bed Admission	_____ yes	_____ at Casey Hospital
Laboratory	_____ yes	_____ at Casey Hospital
Respiratory Care	_____ yes	_____ at Casey Hospital
Dialysis	_____ yes	_____ at Casey Hospital
Mammography	_____ yes	_____ at Casey Hospital
Physical Therapy	_____ yes	_____ at Casey Hospital

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

_____ Yes _____ No

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

_____ Yes _____ No

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

Approval

Casey County Hospital's Board of Directors supports the work of Casey County Hospital to improve the health of the community. The Board of Directors approves Casey 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.

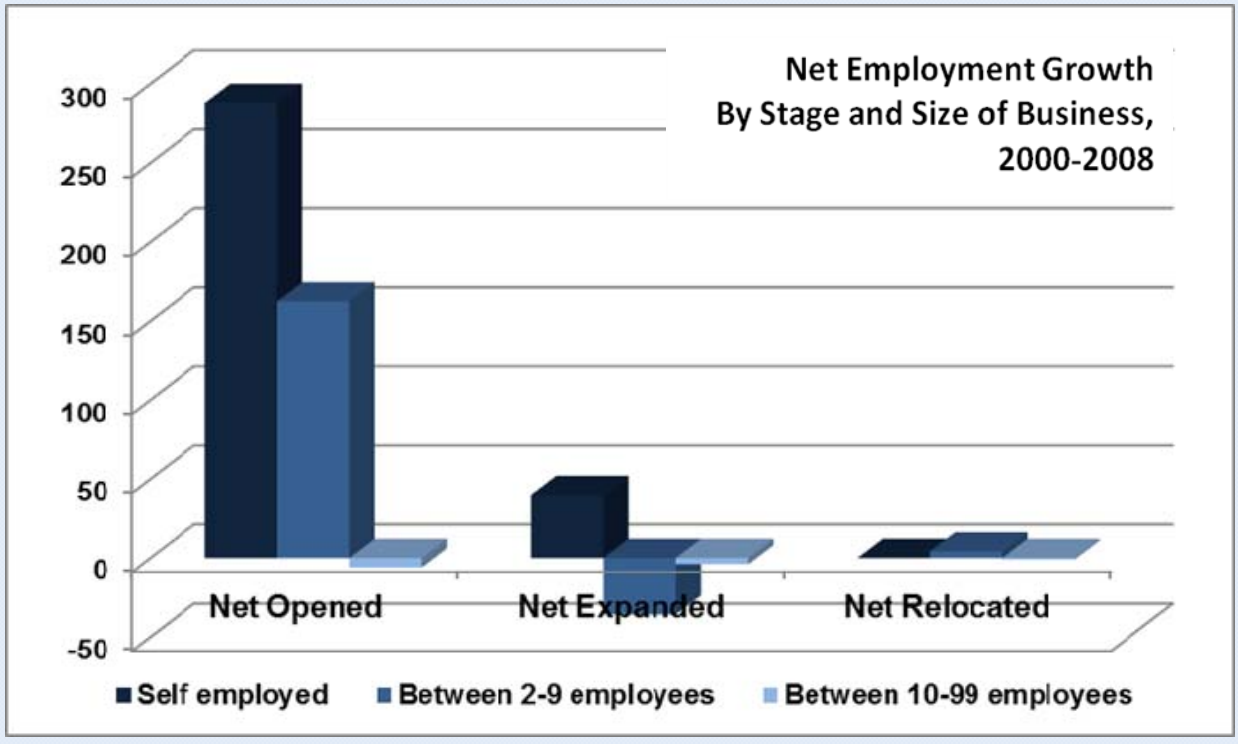
_____ _____

Chair, Casey County Hospital Board of Directors Date

Kentucky County Economic Profiles

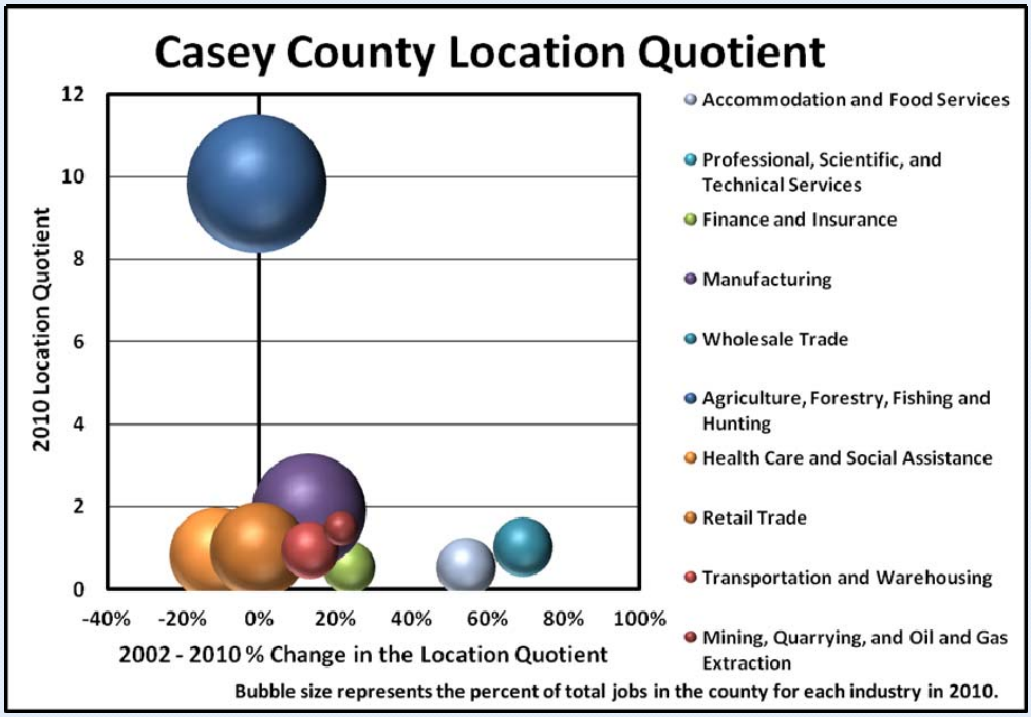
Casey County

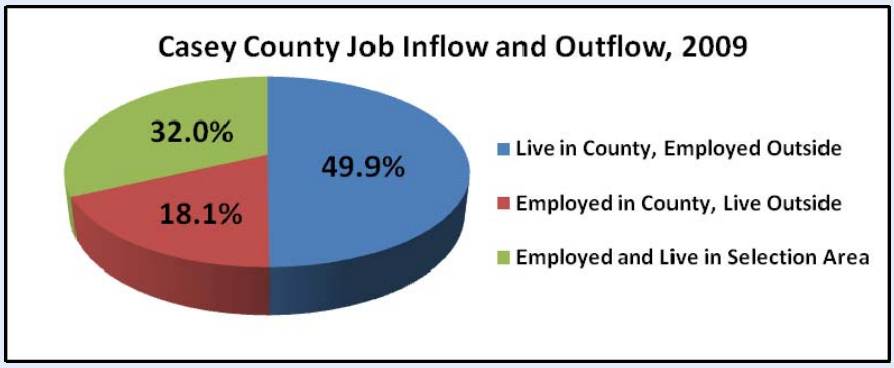
Demographics	Casey County		Kentucky		United States	
Percent Change in Total Population, 2000-2010 (Census)	3.3%		7.4%		9.7%	
Percent of the Population that is Non-white, 2010 (Census)	2.0%		10.6%		27.6%	
Percent of the Population that is Older than 64 years, 2010 (Census)	11.1%		13.3%		12.9%	
Percent of the Total Population in Poverty, 2009 Estimate (SAIPE)	25.8%		18.4%		14.3%	
Percent of the Total Population under 18 in Poverty, 2009 Estimate (SAIPE)	40.6%		25.3%		20.0%	
Teen births, Rate per 1,000 Women ages 15-19, 2003-2007 (KY Health Facts)	57.26		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)	53.6%	3.8%	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)	9.0%	2.4%	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)	42.3%	5.8%	28.2%	0.3%	35.1%	0.03%
Unemployment Rate, 2010 Annual Average (BLS)	11.1%		10.7%		9.3%	
Median Household Income, 2009 Estimate (SAIPE)	$27,247		$40,061		$50,221	



Data Source: www.YourEconomy.org, 2011

Casey County	Net Opened	Net Expanded	Net Relocated
Self Employed	288	40	0
Between 2-9 Employees	162	-36	4
Between 10-99 Employees	-6	-4	-1





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

Data Source: EMSI, 2010

Declining Industries

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

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)

Accommodation and Food Services
Finance and Insurance

Anchor Industries

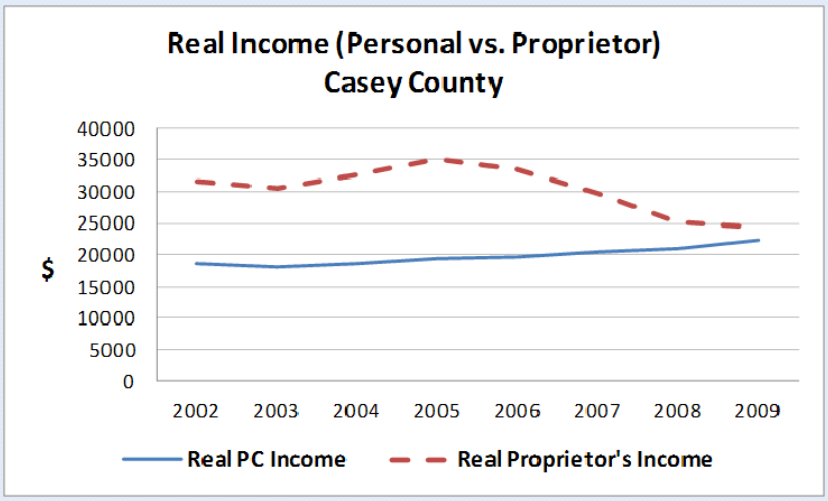
The industry is relatively concentrated in the county (LQ >1.5) but neither expanding or declining

Agriculture, Forestry, Fishing and Hunting

Top 10 Industries by Employment 2008

NAICS Code	Description	Casey County
930	Local government	652
238	Specialty Trade Contractors	368
333	Machinery Manufacturing	339
722	Food Services and Drinking Places	203
423	Merchant Wholesalers, Durable Goods	203
321	Wood Product Manufacturing	196
811	Repair and Maintenance	182
813	Religious, Grantmaking, Civic, Professional, and Similar Organizations	168
332	Fabricated Metal Product Manufacturing	167
623	Nursing and Residential Care Facilities	159
	Total Top 10	**2,637**
	Total jobs in Casey County	**5,491**

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.

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Kentucky County Workforce Profiles

Casey County - Employment & Earnings

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

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

Occupation	Kentucky (2012)	Lake Cumberland Development District (2012)	Casey County		
			Total (2012)	10 yrs. Change	5 yrs. Change
Office & Admin. Support	280,743	10,374	473	-7%	-17%
Sales & Related	172,198	5,838	282	-3%	-1%
Food Preparation & Serving Related	164,270	5,215	244	26%	14%
Production	163,167	8,676	673	3%	1%
Transportation & Material Moving	154,479	6,167	262	-5%	-7%
Healthcare Practitioners & Technical Occupations	113,924	4,273	214	7%	9%
Education, Training, & Library	104,956	4,730	293	1%	1%
Management	79,378	2,321	126	-9%	-20%
Installation, Maintenance, & Repair	78,644	2,814	205	24%	6%
Construction & Extraction	68,356	2,004	130	-3%	-14%

Source: EMSI 2012

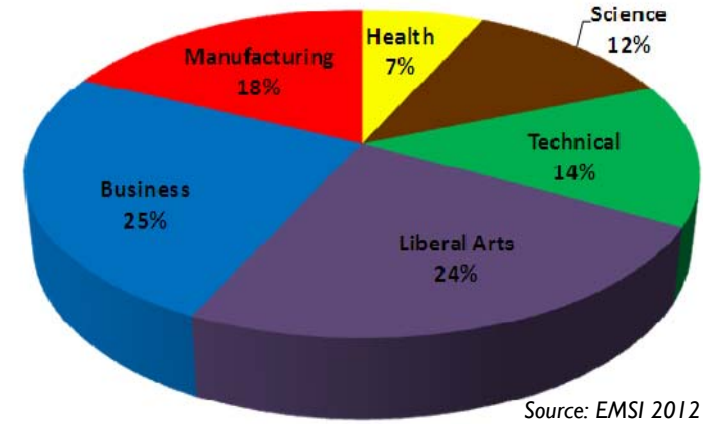
Distribution of Workforce by Education & Gender (2011)

Education	Gender	Distribution out of 100 people
Less than High School	Male	8
	Female	4
High School or equivalent	Male	19
	Female	15
Some college or Associate's degree	Male	12
	Female	14
Bachelor's degree or more	Male	8
	Female	10

Source: CENSUS/QWI 2011

Building and Grounds Cleaning and Maintenance was the fastest growing occupation in Casey County with 42% growth from 2007-2012.

Knowledge Distribution of Workforce Skills (2012)



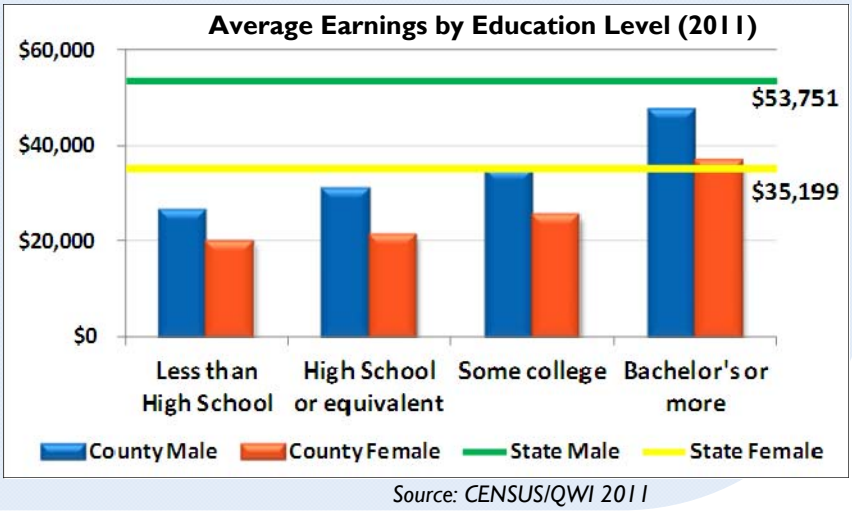
Source: EMSI 2012

Employment & Average Annual Earnings by Age (2011)

Age group	Total Employment	Overall Average Annual Earnings
14-21	256	13,233
22-34	826	24,803
35-44	791	31,332
45-54	785	31,722
55-64	576	31,872
>65	195	21,609

Source: CENSUS/QWI 2011

Average Earnings by Education Level (2011)



Source: CENSUS/QWI 2011

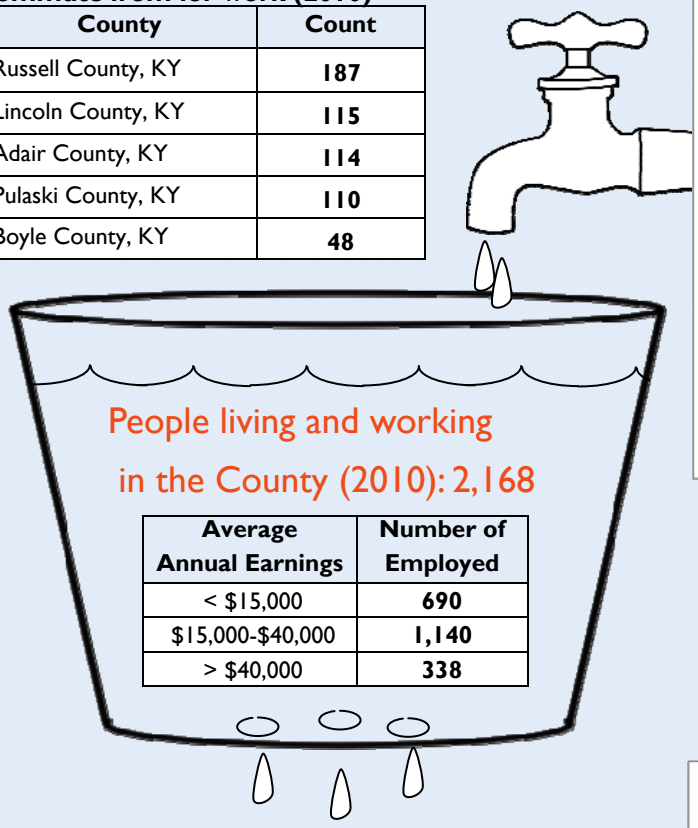
Of those employed in Casey County, 35% are in-commuters.
Of employed Casey County residents, 59% are out-commuters.

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

In-Commuters (2010): 1,146

Top 5 counties people commute from for work (2010)

County	Count
Russell County, KY	187
Lincoln County, KY	115
Adair County, KY	114
Pulaski County, KY	110
Boyle County, KY	48



Average Annual Earnings	Number of Employed
< $15,000	690
$15,000-$40,000	1,140
> $40,000	338

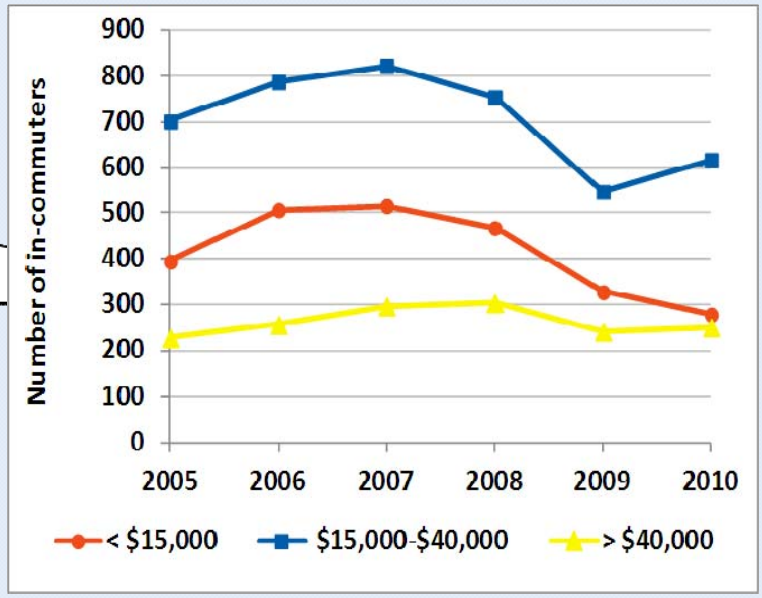
Out-Commuters (2010): 3,062

Top 5 counties people commute to for work (2010)

County	Count
Boyle County, KY	597
Pulaski County, KY	338
Russell County, KY	232
Taylor County, KY	195
Lincoln County, KY	191

*All data on this page are from CENSUS/OnTheMap

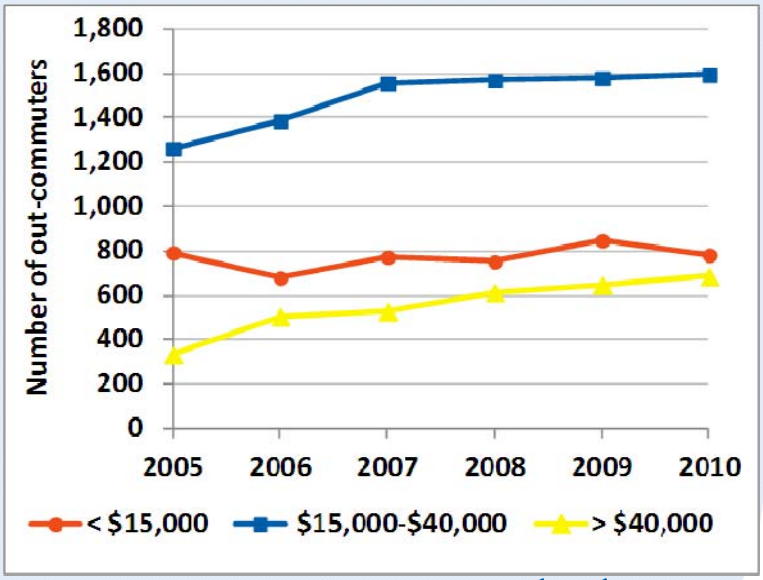
In-Commuters by Average Annual Earnings (2005-2010)



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

Since 2005, in-commuters had decreased by 13% and out-commuters increased by 28%.

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



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.

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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/.

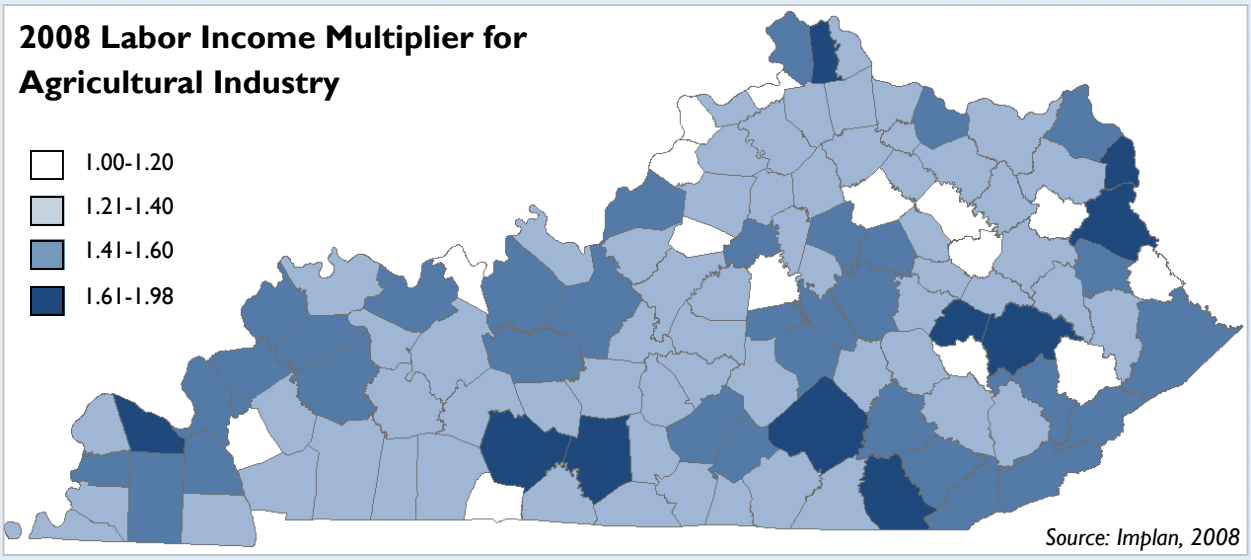
Kentucky County Ag and Food Profiles

Casey County - Agriculture

Farm Demographics	Casey County	Kentucky	United States
Total Farm Operations	1,286	85,260	1,522,033
Percent Full Owner	73.3%	76.8%	69.0%
Percent Part Owner	23.2%	19.4%	24.6%
Percent Tenant	3.5%	3.8%	6.4%
Total Number of Operators	1,800	123,971	3,337,450
Percent Female Operators	23.5%	26.9%	30.2%
Percent Non-white Operators	2.1%	2.7%	5.9%
Total Number of Hired Workers	753	74,444	2,636,509
Total Operations with Internet Access	36.2%	50.6%	56.5%
Total Operations with High Speed Internet Access	18.5%	29.1%	33.0%
Farm Economics			
Total Acres used for Farm Operations	191,609	13,993,121	922,095,840
Percent of Land Acreage used for Farm Operations	67.2%	54.1%	48.0%
Value of Ag Land, including Buildings	$388,393,000	$37,532,561,000	$1,744,295,252,000
Total Income from Farm Operations	$2,044,000	$288,008,000	$10,489,874,000
Total Income from Agritourism & Recreational Services	(D)	$3,332,000	$566,834,000
Vegetable Acres Harvested	255	7,776	4,682,588
Total Value of Animal Sales, Including Products	$18,420,000	$3,419,792,000	$153,562,563,000
Total Value of Crop Sales, Including Products	$7,372,000	$1,404,769,000	$143,657,958,000

(D) Withheld to avoid disclosing data for individual farms

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	Casey County	Kentucky	US
Percent of Total Households with no car and more than 1 mile from a grocery store, 2006	8.6%	4.1%	2.3%
Percent of Total Households with no car and more than 10 miles from a grocery store, 2006	0.6%	0.2%	0.1%
Percent of the Population that is low income and more than 1 mile from a grocery store, 2006	49.5%	53.0%	28.8%
Percent of the Population that is low income and more than 10 miles from a grocery store, 2006	5.4%	2.1%	2.0%
Percent of Children that are Eligible for Free Lunch, 2009	58.4%	47.4%	52.5%*
Percent of Children that are Eligible for Reduced Price Lunch, 2009	10.9%	8.4%	10.0%*

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

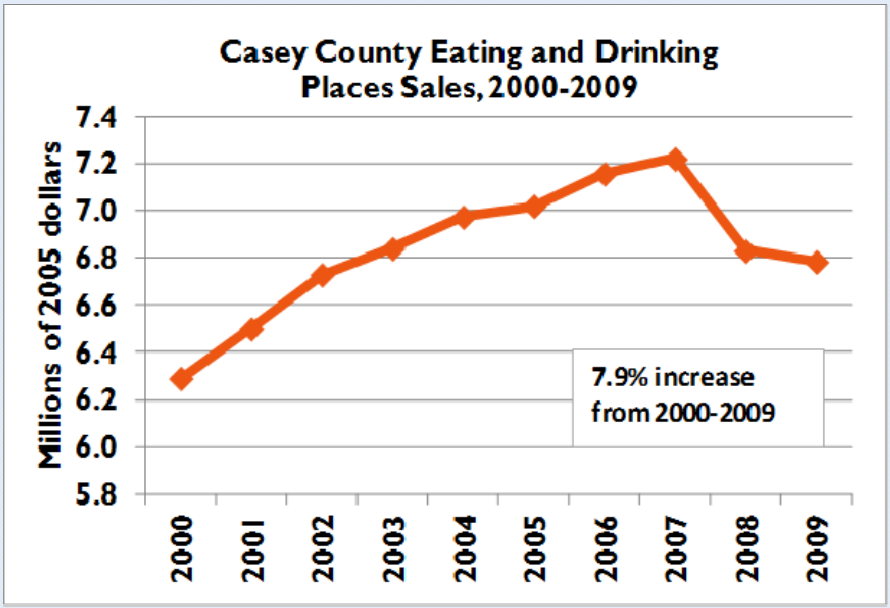
In 2010, 36.8% of all Casey County food and beverage sales were made in restaurants as opposed to retail food stores.

This is an increase from 1995 when the figure was 27.0%.

Source: Woods and Poole, 2011

Casey County	Total
Grocery Stores	8
Supercenters & Club Stores	0
Convenience Stores	13
Specialized Food Stores	1
SNAP authorized Stores (2010)	26
WIC authorized Stores (2011)	8
Fast Food Restaurants	4
Full Service Restaurants	7

Source: USDA Food Atlas, 2009 except where noted



Source: Woods and Poole, 2011

Local Food in/near Casey County

Farmers Markets	Community Supported Agriculture Farms (CSAs)	Kentucky Certified Roadside Farm Markets
		Hettmansperger's Greenhouse 3917 N Hwy 837, 42553 Todd's Greenhouse & Florist 35 Skyline Dr, 42567 Heavenly Haven Farm 230 Heavenly Ln, 42728 Haney's Appledale Farm 8350 KY 80, 42544

Sources: Kentucky Department of Agriculture, Kentucky Farm Bureau

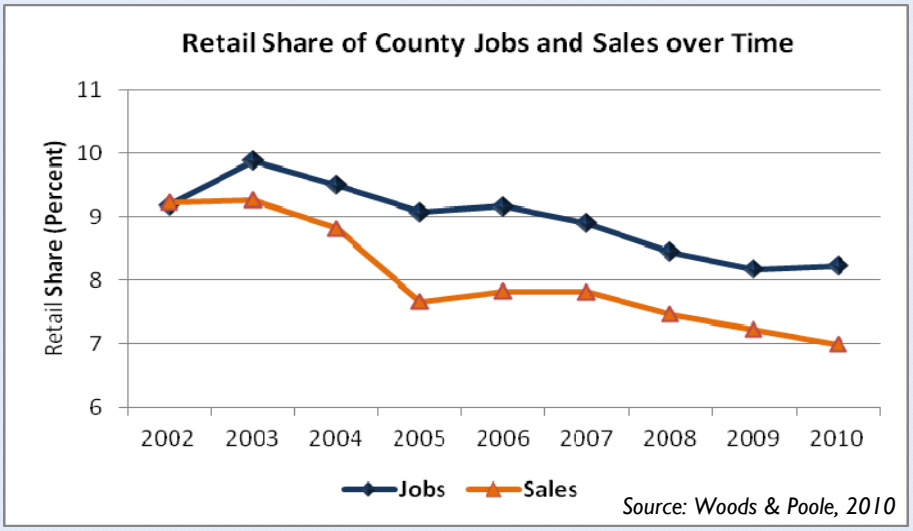
The data for this Profile was prepared by the Community and Economic Development Initiative of Kentucky (CEDIK) and the Appalachian Center, both at the University of Kentucky.
For questions on the data contained in this profile, contact Sarah Frank Bowker, Program Coordinator at 859.257.7272 x246 or sarah.frank@uky.edu.
Visit CEDIK's website for other county data profiles and our map collection of Kentucky data.

Kentucky County Retail Sector Profiles

Casey County

→ In 2010, 7.0% of county sales and 8.2% 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.



Source: Woods & Poole, 2010

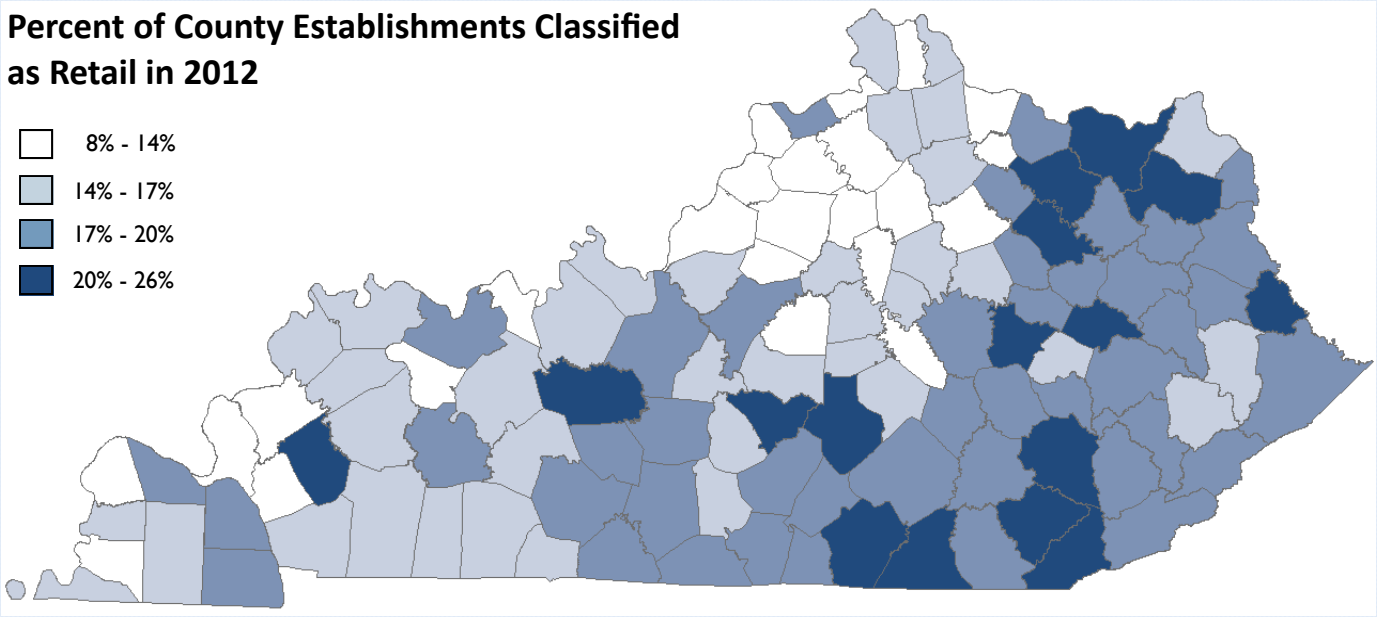
	Percent change between 2002-2010
Retail Sector Jobs	**2.7%**
Retail Sector Sales	**0.2%**

Source: Woods & Poole, 2010

2010 Retail Sector Employment Characteristics*	KY State	Lake Cumberland Area Development District	Casey 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**	**339**	**65**	**200**	**74**
Retail Share of Employment across All Sectors in 2010	**10.7%**	**9.7%**	**8.2%**	**17.0%**	**9.0%**	**9.4%**
New Hires in the Retail Sector in 2010	**134,835**	**1,960**	**215**	**64**	**116**	**n/a**
Retail Share of New Hires across All Sectors in 2010	**13.9%**	**8.7%**	**14.3%**	**12.9%**	**13.3%**	**n/a**
Change in Retail Employment in 2010	**286**	**-24**	**-8**	**n/a**	**n/a**	**n/a**
Average Annual Earnings per Employee	**$26,124**	**$23,612**	**$22,629**	**$11,718**	**$22,137**	**$34,032**

**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

	Casey County	State Average
Retail sector establishments	**106**	**208**
Retail sector establishments per 1,000 people	**6.6**	**5.6**
Percent of establishments classified as retail	**20.7%**	**16.8%**

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

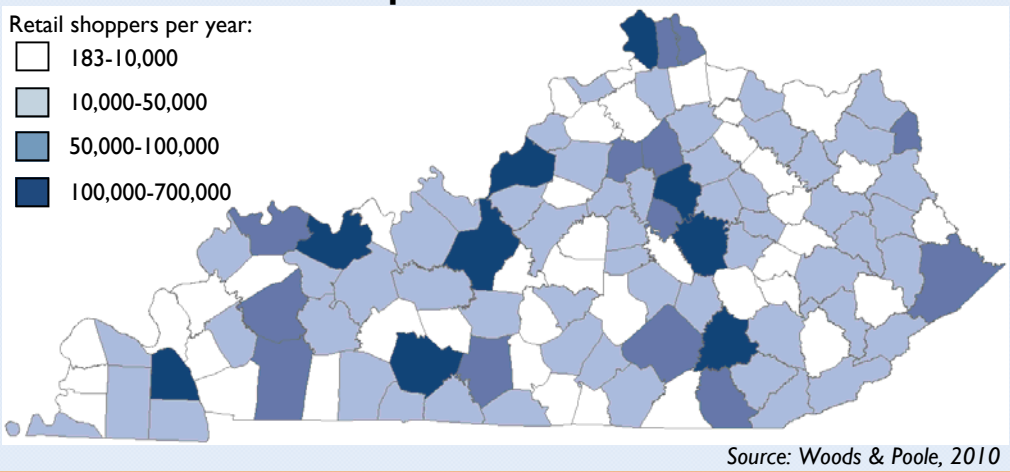
Trade Area Capture: This measure estimates the number of retail shoppers drawn to a county per year. Not surprisingly, urban counties have more shoppers, and thus, higher trade area captures.

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

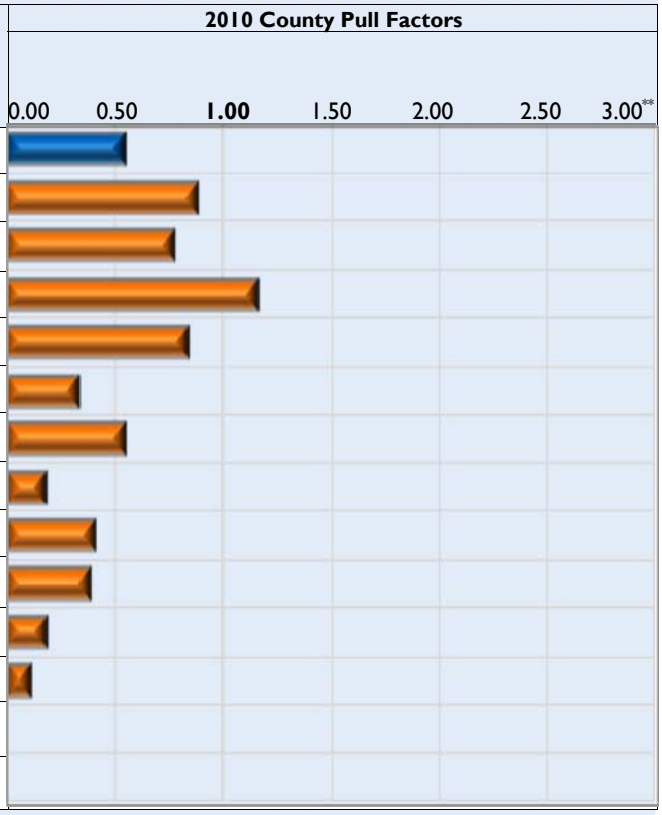


Source: Woods & Poole, 2010

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%	0.2%	1.00	1.08	0.54
Gasoline stations	1	22.2%	22.3%	1.53	1.16	0.88
Food and beverages	2	18.0%	-5.1%	1.01	1.15	0.77
Health & personal care stores	3	14.5%	6.3%	1.25	1.36	1.16
Building materials & gardening stores	4	13.2%	-5.0%	1.23	1.43	0.84
General merchandise stores	5	11.5%	0.3%	1.42	1.10	0.33
Eating & dining	6	10.2%	2.6%	1.07	0.83	0.54
Motor vehicles & parts dealers	7	4.9%	-33.5%	0.99	1.11	0.17
Clothing stores	8	2.7%	-8.2%	0.79	0.78	0.40
Miscellaneous	9	2.0%	-17.7%	1.29	1.27	0.38
Furniture stores	10	0.6%	-20.5%	0.90	0.75	0.18
Electronics & appliances stores	11	0.3%	-4.6%	0.73	0.48	0.1
Sporting goods	n/a	n/a	n/a	0.79	0.52	n/a
Non-store retail	n/a	n/a	n/a	0.53	0.50	n/a



** *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.