

# CREATING ECONOMIC OPPORTUNITIES

## Fall 2003 from K-State Research and Extension

### RETAIL TRADE ACROSS COUNTIES IN FISCAL YEAR 2003

#### Introduction

Every fall, K-State publishes retail market data on all 105 Kansas counties. This year's publication is CD Study Report No.221.

Retail market data is presented three ways. The first is a location quotient of retail trade called a *County Trade Pull Factor (CTPF)*. It is a measure of the relative strength of the retail business community. The reader should interpret a CTPF of 1.00 as a perfect balance of trade. The purchases of county residents who shop elsewhere are offset by the purchases of out-of-county customers. A CTPF value greater than 1.00 indicates that local businesses are pulling in trade from beyond their home county border. Thus, the balance of trade is favorable. A CTPF of less than 1.00 indicates more trade is being lost than pulled in. This is an unfavorable balance of trade.

Two other measures are produced. They are the *Trade Area Capture* and the *Percent Market Share* that the communities and businesses control from the total state customer base. The *Trade Area Capture (TAC)* of a county is a measure of the customer base served by a community. It is calculated by multiplying the county's population by the CTPF. The *Percent Market Share (MS)* is calculated by dividing a county's TAC by the sum of all 105 county TAC numbers. (See Table 1 and Map 1.)

In this report, the authors begin with the 2002 county population estimates from the

U.S. Census Bureau minus the 2000 U.S. Census Bureau numbers for those in institutions such as prisons and nursing homes. The Census counts are published on their Web site: [www.census.gov](http://www.census.gov).

#### Highlights

The 105 counties in Kansas can be divided into six regions: Northwest, Southwest, South Central, North Central, Northeast and Southeast.

The Northwest Region with 18 counties has three high CTPF values in FY 2003. They are found in Ellis (1.36), Sherman (1.07), and Thomas (1.09) counties. See Table 1 and Map 1.

The 22-county Southwest Region has only two this year, down from four high CTPF values. These are in Finney (1.00), and Seward (1.11) counties.

The 22-county South Central Region has four counties with high CTPF values: Barton (1.06), Reno (1.09), Pratt (1.11), and Sedgwick (1.20) counties.

The 16-county North Central Region has just two counties with high CTPF values: Pottawatomie (1.46, the Manhattan effect) and Saline (1.37) counties.

Next, the 15-county Northeast Region has only two: Johnson (1.52) and Shawnee (1.21) counties.

Finally, the 12-county Southeast Region has no CTPF values above 1.00. Neosho County has the highest CTPF in the region, 0.89. This is followed closely by Montgomery County at 0.84. Kansans living in the southeast shop in the malls and specialty shops in Johnson and Sedgwick counties. They also shop in other states, specifically in Joplin, MO; Bartlesville, OK; Miami, OK; and Tulsa, OK.

The *Trade Area Capture* (TAC) of businesses in all 105 counties is calculated by multiplying each adjusted population figure by the corresponding CTPF. The TAC value of each county is an absolute value and can be used to estimate the size of the local market. The CTPF should be used to estimate the relative strength of the business community, not the absolute strength. Therefore, Allen County has a TAC of 9,289 customers and this is calculated by multiplying the county population of 14,045 by the CTPF for Allen County, 0.66.

Johnson County has the highest TAC followed by Sedgwick County. Respectively, their customer bases are 717,651 and 548,316.

The *Percent Market Share* (MS) measures the percent of the total customer base in Kansas captured by the county's retail businesses. The total customer base is calculated by summing all of the TAC values. The MS is presented as a percentage. Thus, Johnson County controls 27 percent of the Kansas market. Sedgwick County controls 21 percent. This is the next largest MS.

### Example

To help the reader understand and use these three measures, K-State maintains a county *Rural-Urban Continuum Code*. This county classification system allows the reader to compare like counties with each other and with nearby counties that have a different classification. For example, Cloud and Mitchell counties are both classified as a 7, based on the *Rural-Urban Continuum Code*. Counties with a code of 7 are nonmetropolitan counties that have urban populations between 2,500 and 19,999. They are also nonadjacent to any metropolitan county such as Sedgwick County.

The CTPF numbers are the same, 0.86 for each county. CTPF is one of three measures that can be used to compare counties. Cloud County's TAC (8,224) is significantly larger than Mitchell County's (5,558). Their respective MS percentages also reflect the difference in TAC size, 0.31 and 0.21 percent, respectively.

To view the full report, CD Study #221, visit the K-State Web site: [www.agecon.ksu.edu/ddarling](http://www.agecon.ksu.edu/ddarling)  
Explore the C.D. Study Reports section.

The Kansas Department of Revenue's Web site is: [www.ksrevenue.org](http://www.ksrevenue.org)

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**Table 1. County Trade Pull Factors 2003**

<b>Name of Kansas County</b>	<b>Rural – Urban Continuum Code</b>	<b>Adjusted County 2002 Population</b>	<b>Pull Factors FY 2003</b>	<b>Trade Area Capture FY 2003</b>	<b>% Market Share FY 2003</b>	<b>Regional Identification</b>
Allen	7	14,045	0.66	9,289	0.35%	SE
Anderson	7	8,029	0.55	4,444	0.17%	SE
Atchison	6	16,370	0.63	10,284	0.39%	NE
Barber	10	5,020	0.74	3,729	0.14%	SC
Barton	7	27,304	1.06	29,024	1.09%	SC
Bourbon	7	14,966	0.63	9,381	0.35%	SE
Brown	7	10,299	0.53	5,506	0.21%	NE
Butler	2	58,780	0.63	36,943	1.39%	SC
Chase	8	2,817	0.33	941	0.04%	NC
Chautauqua	9	4,056	0.29	1,165	0.04%	SC
Cherokee	6	21,689	0.38	8,198	0.31%	SE
Cheyenne	10	3,069	0.45	1,368	0.05%	NW
Clark	9	2,336	0.28	659	0.02%	SW
Clay	7	8,539	0.60	5,096	0.19%	NC
Cloud	7	9,586	0.86	8,224	0.31%	NC
Coffey	7	8,776	0.56	4,905	0.18%	SE
Comanche	10	1,915	0.52	1,001	0.04%	SW
Cowley	4	35,481	0.65	22,975	0.87%	SC
Crawford	4	37,354	0.77	28,784	1.08%	SE
Decatur	10	3,287	0.36	1,172	0.04%	NW
Dickinson	7	18,814	0.67	12,528	0.47%	NC
Doniphan	8	8,121	0.26	2,138	0.08%	NE
Douglas	3	101,733	0.93	94,823	3.57%	NE
Edwards	9	3,278	0.35	1,163	0.04%	SW
Elk	8	3,052	0.35	1,059	0.04%	SC
Ellis	5	26,951	1.36	36,539	1.38%	NW
Ellsworth	7	5,608	0.49	2,733	0.10%	NC
Finney	5	39,495	1.00	39,683	1.49%	SW
Ford	5	32,160	0.97	31,321	1.18%	SW
Franklin	6	25,007	0.75	18,657	0.70%	NE
Geary	5	26,182	0.76	19,800	0.75%	NC
Gove	10	2,939	0.62	1,826	0.07%	NW
Graham	10	2,802	0.75	2,090	0.08%	NW
Grant	7	7,824	0.96	7,500	0.28%	SW
Gray	9	5,909	0.46	2,705	0.10%	SW
Greeley	10	1,445	0.47	675	0.03%	SW
Greenwood	6	7,490	0.43	3,237	0.12%	SC

Hamilton	10	2,615	0.51	1,330	0.05%	SW
Harper	10	6,110	0.66	4,022	0.15%	SC
Harvey	2	32,584	0.80	26,121	0.98%	SC
Haskell	9	4,256	0.47	2,017	0.08%	SW
Hodgeman	9	2,114	0.29	622	0.02%	SW
Jackson	6	12,527	0.60	7,571	0.29%	NE
Jefferson	8	18,416	0.28	5,130	0.19%	NE
Jewell	10	3,454	0.29	1,016	0.04%	NC
Johnson	0	472,761	1.52	717,651	27.02%	NE
Kearny	9	4,498	0.30	1,354	0.05%	SW
Kingman	6	8,228	0.48	3,933	0.15%	SC
Kiowa	9	3,047	0.58	1,763	0.07%	SW
Labette	7	21,690	0.62	13,420	0.51%	SE
Lane	9	1,977	0.39	766	0.03%	SW
Leavenworth	1	64,800	0.58	37,311	1.40%	NE
Lincoln	9	3,466	0.33	1,133	0.04%	NC
Linn	8	9,565	0.39	3,723	0.14%	SE
Logan	10	2,941	0.64	1,877	0.07%	NW
Lyon	5	35,478	0.87	31,010	1.17%	NC
Marion	6	12,917	0.45	5,825	0.22%	NC
Marshall	7	10,350	0.67	6,959	0.26%	NC
McPherson	6	28,755	0.79	22,684	0.85%	NC
Meade	9	4,506	0.42	1,904	0.07%	SW
Miami	1	28,298	0.66	18,554	0.70%	NE
Mitchell	7	6,453	0.86	5,558	0.21%	NC
Montgomery	5	34,750	0.84	29,334	1.10%	SE
Morris	9	6,007	0.53	3,205	0.12%	NC
Morton	10	3,303	0.65	2,154	0.08%	SW
Nemaha	7	10,009	0.55	5,517	0.21%	NE
Neosho	7	16,341	0.89	14,470	0.54%	SE
Ness	10	3,240	0.86	2,797	0.11%	SW
Norton	7	5,105	0.60	3,078	0.12%	NW
Osage	6	16,709	0.36	6,068	0.23%	NE
Osborne	10	4,123	0.62	2,569	0.10%	NW
Ottawa	9	6,117	0.29	1,776	0.07%	NC
Pawnee	7	6,298	0.61	3,852	0.15%	SC
Phillips	7	5,728	0.60	3,422	0.13%	NW
Pottawatomie	6	18,347	1.46	26,737	1.01%	NC
Pratt	7	9,397	1.11	10,425	0.39%	SC
Rawlins	10	2,837	0.39	1,098	0.04%	NW
Reno	4	60,837	1.09	66,029	2.49%	SC
Republic	10	5,328	0.51	2,700	0.10%	NC
Rice	7	10,348	0.45	4,650	0.18%	SC
Riley	5	61,053	0.67	41,065	1.55%	NC
Rooks	9	5,295	0.58	3,063	0.12%	NW

Rush	9	3,404	0.32	1,073	0.04%	SC
Russell	7	6,883	0.65	4,464	0.17%	NW
Saline	5	53,200	1.37	72,819	2.74%	NC
Scott	7	4,837	0.77	3,706	0.14%	SW
Sedgwick	2	458,000	1.20	548,316	20.65%	SC
Seward	7	22,846	1.11	25,419	0.96%	SW
Shawnee	3	166,671	1.21	201,203	7.58%	NE
Sheridan	10	2,597	0.48	1,255	0.05%	NW
Sherman	7	6,326	1.07	6,747	0.25%	NW
Smith	10	4,261	0.51	2,171	0.08%	NW
Stafford	9	4,592	0.37	1,712	0.06%	SC
Stanton	10	2,355	0.38	905	0.03%	SW
Stevens	7	5,272	0.56	2,942	0.11%	SW
Sumner	6	25,151	0.43	10,902	0.41%	SC
Thomas	7	7,974	1.09	8,711	0.33%	NW
Trego	9	3,031	0.60	1,812	0.07%	NW
Wabaunsee	8	6,603	0.26	1,704	0.06%	NE
Wallace	10	1,667	0.44	736	0.03%	NW
Washington	9	6,090	0.38	2,337	0.09%	NC
Wichita	10	2,477	0.40	1,003	0.04%	SW
Wilson	7	9,976	0.43	4,280	0.16%	SE
Woodson	10	3,554	0.39	1,397	0.05%	SE
Wyandotte	0	157,215	0.77	121,394	4.57%	NE

Statewide		2,670,488		2,655,842	100%	
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Economics  
Source: Sales Tax Data from Kansas Department of  
Revenue

105 County Average = 0.63

Maximum Value = 1.52

Minimum Value = 0.26

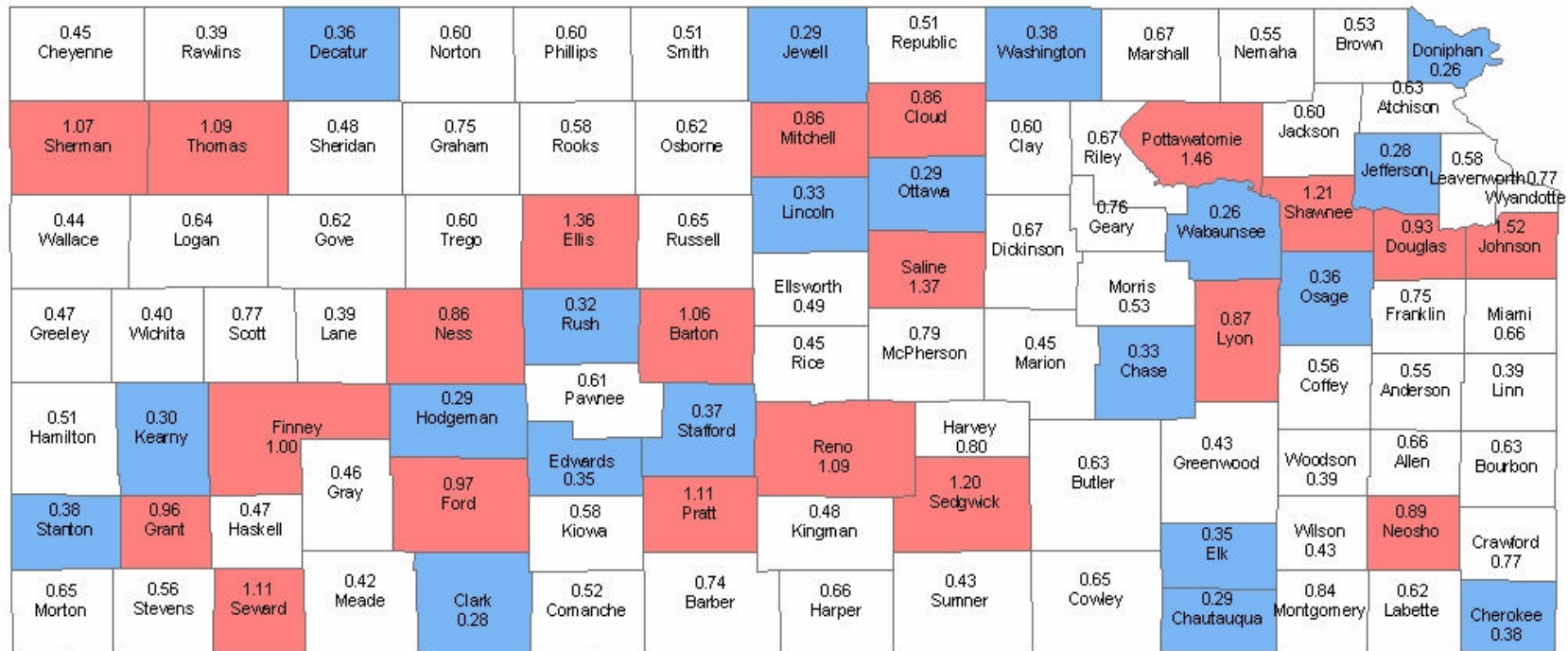
### MAP 1

## COUNTY TRADE PULL FACTOR 2003

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#### Legend

Counties in red are in top quintile  
 Counties in white are in the middle quintile  
 Counties in blue are in the bottom quintile

**Data Source:** The Kansas Department of Revenue - Sales Tax Revenue Report

**Maps Produced by:** K-State Research and Extension, Department of Agricultural Economics

