A STUDY OF RETAIL TRADE IN CITIES ACROSS KANSAS

AN ANNUAL REPORT OF TRADE
PULL FACTORS AND TRADE
AREA CAPTURES

Annual report for Fiscal Year 2011

Kansas Department of Revenue
Office of Policy and Research
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INTRODUCTION

The City Trade Pull Factor report provides different measures of retail market data for selected cities. This report is the 21st annual report documenting city retail activity in Kansas' communities.

As published by Kansas State University the pull factor study reported on the first class cities of Kansas. The department expanded the report to include four groups of cities that many would consider to be regional centers for their communities. The cities are illustrated on Map 1. In addition to 1st class cities, the report also provides analysis for three other groups of cities that are not 1st class cities:
- cities with a population exceeding 10,000;
- cities generating 75% or more of their county's state sales tax collections; and
- cities generating 65-75% of the county's state sales tax collections.

The City Trade Pull Factor report provides different measures of retail market data for the cities for fiscal year 2011, which represents the period July 1, 2010 through June 30, 2011. Retail market data is presented three ways.

- The first measure is a location quotient of retail trade called the *City Trade Pull Factor* (CiTPF). It is a measure of the relative strength of the retail business community. The City Trade Pull Factor is computed by dividing the per capita sales tax of a city by the statewide per capita sales tax. A CiTPF of 1.00 is a perfect balance of trade. The purchases of city residents who shop elsewhere are offset by the purchases of out-of-city customers. CiTPF values greater than 1.00 indicates that local businesses are pulling in trade from beyond their home city border. Thus, the balance of trade is favorable. A CiTPF value less than 1.00 indicates more trade is being lost than pulled in, that residents are shopping outside the city. This is an unfavorable balance of trade.
- The *Trade Area Capture* (TAC) of a city is a measure of the customer base served by a community. It is calculated by multiplying the city's population by the CiTPF.
- The *Percent Market Share* (MS) is the percent the city's Trade Area Capture is of the state as a whole. TAC is calculated by dividing the city's TAC by the sum of all city TAC numbers.
- The *Percent of County Trade (PCT) is* a concentration factor that shows the percent capture of retail trade of the city within its county.

For historical data on this expanded list of cities, please refer to the prior reports. The fiscal year 2005 report contains data for fiscal years 2004 and 2003 in the appendixes.

Prior year reports and other community-related reports and can be found (or linked) at the Department of Revenue's web site, www.ksrevenue.gov .

DISCUSSSION AND ANALYSIS

Map 1 provides a graphic view of the cities that are included in the study. The state is divided into the 11 regions used in the Governor's Economic Development reporting. The inclusion of the additional groups of cities provides a greater overall view of where the retail activity is in the state and where it is concentrated. The 1st class cities are concentrated in eastern and central Kansas. By expanding the report to include three additional groups of cities, the report provides a more complete picture of retail activity across the state. These 60 cities account for 77.9% of all retail sales in the state and are home to 64.7% of the state's population.

There are 25 cities classified as first class cities in Kansas. These are historical designations, used to identify the larger, more dominant cities in their respective counties. These cities account for 66.2% of the state's sales tax collections and 55.5% of the state's population. Their combined CiTPF is 1.19, down slightly from 1.21 in FY 2010.

Table 1, Group A lists the first class cities, their pull factors, trade area capture, and concentration factor. The 1st class city with the highest city trade pull factor (CiTPF) in FY 2011 is Lenexa with a factor of 1.55. Lenexa's population in 2010 was 48,190. Overland Park is close behind with a CiTPF of 1.53. Lenexa is an example of a city with a relatively low population base having a strong retail presence. Combined, these two communities account for over $271 million of state sale tax collections or 12% of the statewide total. This high amount of retail sales is due to Johnson County's dense population and above average purchasing power.

The 1st class city with the highest trade area capture (TAC) is Wichita. This business community serves an estimated 426,691 customers and far surpasses Overland Park's TAC, calculated at 265,604 customers, due to the larger population base in Wichita. Wichita's state tax collections represent 15% of the total collections in the state.

There are several 1st class cities that dominant their county's retail trade and serve as regional retail centers. The following cities show a percentage of county sales exceeding 90%:

City	% of County Sales	City	% of County Sales
Salina	95.1%	Topeka	91.8%
Lawrence	92.8%	Dodge City	90.4%
Liberal	92.7%	Emporia	90.3%

Table 1, Group B lists cities that have populations exceeding 10,000 but are not 1st class cities. Twelve cities are included in this group and they have a wide variance in CiTPF. Merriam has a pull factor of 3.11 whereas Haysville's pull factor is 0.24. Merriam's location within Johnson County (Interstate 35 runs though the middle of the city) results in it having a much larger retail concentration and therefore a very high CiTPF even with a low population total.   The PCT also varies significantly among these cities, from a high of 82% for Hays to a low of 0.5% for Haysville. It shows that within this group of cities

we have regional trade centers such as Hays and Great Bend and population bedroom communities, such as Gardner, Haysville and Derby.

Table 1, Group C are non-1st class cities with a population less than 10,000 but their concentration factor is 75% or more, meaning that they are the retail centers for their county. There are 10 cites within this group compared to 12 cities in FY 2010's report. The CiTPF ranges from 2.05 for Colby to 0.91 for Ulysses. All of these cities have pull factors greater than 1.0 with the exception of Ulysses, as would be expected being they are the retail centers for their home county. The two cities that dropped out of this group in FY 2011 are Iola and Norton – both are in Group D.

Table 1, Group D consists of a group of 13 cities that also make out the majority of a county's sales tax. They are non-1st class cities with population less than 10,000 and PCT is between 65% and 75%. Many of these cities are the retail centers for their counties, several having pull factors near or greater than 1.0, indicating they are providing the retail needs for their residents. This group of cities shows the most change from year to year, as slight changes in collections and/or population can affect the city's PCT when it hovers near the 65% threshold.

CITY HISTORICAL ANALYSIS

Pull factors since fiscal year 2007 were reviewed to determine if there are any trends that can be identified in terms of pull factor changes and in city rankings. Table 2 provides the pull factors for the last five years. There are several noticeable changes in pull factors for some 1st class cities.

Three (3) 1st class cities had increases of 5% or more in their pull factors since fiscal year 2007. They are Leawood, Manhattan, and Garden City. Cities experiencing the greatest decrease are Junction City (-22.8) and Atchison (-14.7). The impact of destination sourcing has been reduced as it has been fully implemented throughout this 5-year period. The decreases in the pull factors can be attributed to the economic downturn being experienced throughout the nation. Additionally, for Junction City and Atchison the population increases in those cities without a similar percentage increase in tax collections contributed to the decrease in their pull factors.

Policy Implications

In 2003 the Kansas Legislature passed a law that placed Kansas in conformity with the Streamlined Sales Tax Agreement. This legislation required destination sourcing, under which retail businesses must collect sales tax based on the local rates in effect at the place where the customer takes delivery of a purchase. Vehicle purchases are excluded from the destination sourcing requirement. Prior to the change, only telecommunications and utility sales were taxed in this manner. Full reporting of destination sourcing was not required until January 2005. With the publication of the FY 2011 report, destination

sourcing has been in place for the entire study period and the effect is now longer as pronounced as it has been for the past several reports.

Destination sourcing results in charging the sales tax rate based on where delivery occurs and in some industries, this impacts how sales are recorded. For instance with furniture retailers, if the furniture is delivered to the purchaser's home, the sale is recorded as occurring at the taxing jurisdiction of the purchaser. The primary types of retailers affected by destination sourcing are furniture dealers, home improvement (lumber) stores, household and electronic appliance dealers, and certain repair service providers.
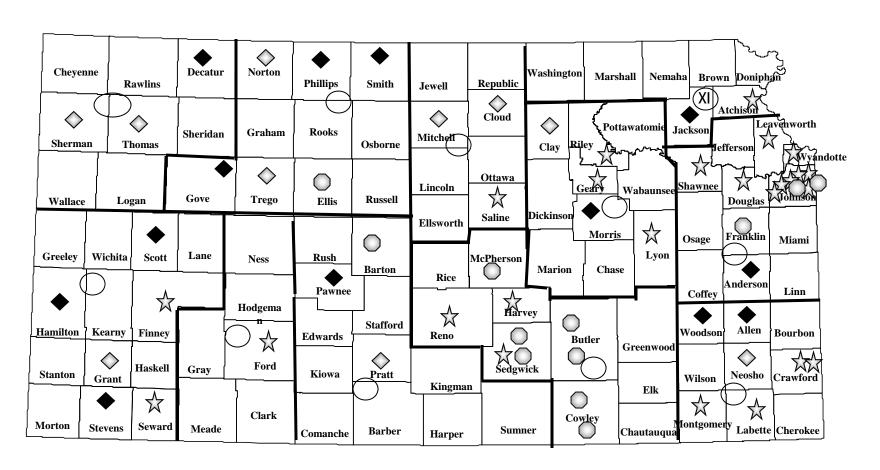
Destination sourcing affects the city trade pull factor because the measure is based on sales tax collections. Prior to the new law, all sales of a retailer were recorded based on the business location. With destination sourcing, sales that are delivered are recorded where the delivery occurred. If the sale were into a neighboring community, it would be recorded as such – resulting in a loss of sales tax collections in the city where the store is located. With a few exceptions, the overall impact of destination sourcing on most cities' total sales tax collections has not been significant, so determining if a change in a city's sales tax collections is a direct result of destination sourcing is challenging. Based on the changes seen in the historical data, many regional shopping areas' pull factors were staying constant or slightly decreasing. Likewise, smaller cities' pull factors showed slight increases. Cities near a population center are experiencing a greater increase in sales tax collections, which may be a combination of the effects of destination sourcing and new retail stores due to the out migration of the population from population centers to bedroom communities.

Data Sources

The data used in this report consists of city population and state sales tax collections. City populations are from the U.S. Census Bureau as certified by the Division of the Budget July 1, 2009 and published as the official population reports for the state of Kansas, adjusted to remove the institutionalized population. The institutionalized population does not trade within the retail community, so should not impact the computing of the measures. People in prisons are part of the institutionalized population. To arrive at the adjusted population data for this report, state and federal prison populations were deducted from the city and county totals. This is a change for the FY 2011 report. In the past, group quarter data from the US Census was subtracted from the population data. This would consist primarily of nursing home populations. A review of the data shows that deducting group quarter data has no impact on the pull factor and other statistics presented herein and therefore the decision was to only adjust prison population. The Census counts are published on their web site: www.census.gov.

State sales tax collections are generated by the Department of Revenue from sales tax returns filed by the state's retailers. The department has improved the data series used for this report. Sales tax reports issued by the department are available on the department's web site located at http://www.ksrevenue.org.

Map 1.
City Trade Pull Factors
By Kansas Economic Reporting Regions
Fiscal Year 2011

Cheyenne | Rawlins | Decatur | Norton | Phillips | Smith | Jewell | Republic | Washington | Marshall | Nemaha | Brown | Doniphan

Sherman | Thomas | Sheridan | Graham | Rooks | Osborne | Mitchell | Cloud | Clay | Riley | Pottawatomie | Jackson | Atchison | Leavenworth | Jefferson

Wallace | Logan | Gove | Trego | Ellis | Russell | Lincoln | Ottawa | Geary | Wabaunsee | Shawnee | Douglas | Wyandotte | Johnson

Greeley | Wichita | Scott | Lane | Ness | Rush | Barton | Ellsworth | Saline | Dickinson | Morris | Lyon | Osage | Franklin | Miami

Hamilton | Kearny | Finney | Hodgeman | Pawnee | Stafford | Rice | McPherson | Marion | Chase | Coffey | Anderson | Linn

Stanton | Grant | Haskell | Gray | Ford | Edwards | Kiowa | Pratt | Reno | Harvey | Butler | Greenwood | Woodson | Allen | Bourbon

Morton | Stevens | Seward | Meade | Clark | Comanche | Barber | Kingman | Sedgwick | Cowley | Elk | Wilson | Neosho | Crawford

Harper | Sumner | Chautauqua | Montgomery | Labette | Cherokee

⭐ 1st Class Cities

🛑 Non 1st Class cites, Population >10,000

◇ Non 1st Class cites, population <10,000, sales >75% of county

◆ Non 1st Class cites, population <10,000, sales 65%-75%% of county

City	FY 2011 Collections	FY 2011 Per Capita	Pull Factor	Trade Area Capture	Percent of County Sales	(certified 7/2010) 2010 Population less Institutionalized
Group A, 1st Class Cities						
Lenexa	$ 59,701,513	$ 1,238.9	1.55	74,775	10.6%	48,190
Overland Park	$ 212,062,096	$ 1,223.2	1.53	265,604	37.5%	173,372
Salina	$ 55,950,736	$ 1,172.8	1.47	70,077	95.1%	47,707
Garden City	$ 31,061,875	$ 1,165.2	1.46	38,905	82.7%	26,658
Manhattan	$ 58,977,164	$ 1,128.1	1.41	73,868	88.5%	52,281
Topeka	$ 141,709,332	$ 1,116.7	1.40	177,489	91.8%	126,904
Hutchinson	$ 43,459,370	$ 1,079.0	1.35	54,432	82.8%	40,278
Leawood	$ 34,245,560	$ 1,074.6	1.35	42,892	6.1%	31,867
Liberal	$ 20,143,669	$ 981.4	1.23	25,230	92.7%	20,525
Olathe	$ 121,201,230	$ 962.9	1.21	151,803	21.4%	125,872
Dodge City	$ 26,054,068	$ 953.0	1.19	32,632	90.4%	27,340
Junction City	$ 22,041,663	$ 943.8	1.18	27,607	85.8%	23,353
Pittsburg	$ 18,188,256	$ 898.9	1.13	22,781	75.5%	20,233
Wichita	$ 340,675,397	$ 891.0	1.12	426,691	76.0%	382,368
Emporia	$ 22,129,347	$ 888.2	1.11	27,717	90.3%	24,916
Fort Scott	$ 7,168,630	$ 886.4	1.11	8,979	87.0%	8,087
Coffeyville	$ 9,023,292	$ 876.5	1.10	11,302	38.4%	10,295
Lawrence	$ 74,699,896	$ 852.3	1.07	93,560	92.8%	87,643
Parsons	$ 8,557,723	$ 815.0	1.02	10,718	72.7%	10,500
Shawnee	$ 47,815,385	$ 768.6	0.96	59,888	8.5%	62,209
Newton	$ 13,505,332	$ 705.9	0.88	16,915	65.2%	19,132
Atchison	$ 7,602,898	$ 689.9	0.86	9,523	87.4%	11,021
Kansas City	$ 100,432,907	$ 688.9	0.86	125,791	88.3%	145,786
Leavenworth	$ 21,493,899	$ 609.7	0.76	26,921	67.3%	35,251
Prairie Village	$ 11,202,742	$ 522.3	0.65	14,031	2.0%	21,447
Total, Group A	$ 1,509,103,978	$ 953	1.19	$ 1,890,129		1,583,235
	$ 1			66.2%		55.5%
Statewide Total	$ 2,277,967,023	$ 798.41	1.00	$ 2,853,118		2,853,118

City	FY 2011 Collections	FY 2011 Per Capita	Pull Factor	Trade Area Capture	Percent of County Sales	(certified 7/2010) 2010 Population less Institutionalized
Group B, Not 1st Class Cities - population exceeds 10,000						
Derby	$ 22,043,094	$ 994.8	1.25	27,609	4.9%	22,158
Hays	$ 30,626,305	$ 1,493.2	1.87	38,359	82.1%	20,510
Gardner	$ 9,660,217	$ 505.2	0.63	12,099	1.7%	19,123
Great Bend	$ 20,535,075	$ 1,283.8	1.61	25,720	73.2%	15,995
McPherson	$ 15,133,308	$ 1,150.4	1.44	18,954	62.8%	13,155
El Dorado	$ 12,138,423	$ 932.2	1.17	15,203	32.8%	13,021
Ottawa	$ 11,043,600	$ 873.1	1.09	13,832	74.7%	12,649
Arkansas City	$ 9,025,020	$ 726.9	0.91	11,304	42.5%	12,415
Andover	$ 8,653,974	$ 733.9	0.92	10,839	23.4%	11,791
Winfield	$ 9,254,180	$ 795.9	1.00	11,591	43.6%	11,627
Merriam	$ 27,307,837	$ 2,481.9	3.11	34,203	4.8%	11,003
Haysville	$ 2,089,643	$ 193.0	0.24	2,617	0.5%	10,826
Total, Group B	$ 177,510,678	$ 1,019	1.28	$ 222,329		174,273
% of Statewide	$ 0			8%		6%
Subtotal, Groups A, B	$ 1,686,614,656	$ 960	1.20	$ 2,112,458		1,757,508
	$ 1			74.0%		62%
% of Statewide						
Group C, Not 1st Class Cities - sales tax collections make up 75% or more of the total county sales tax.						
Colby	$ 8,829,180	$ 1,639.0	2.05	11,058	88.2%	5,387
Pratt	$ 8,318,269	$ 1,217.0	1.52	10,419	86.6%	6,835
Concordia	$ 6,321,334	$ 1,171.7	1.47	7,917	82.1%	5,395
Goodland	$ 5,062,149	$ 1,127.7	1.41	6,340	81.3%	4,489
Chanute	$ 9,323,619	$ 1,022.4	1.28	11,678	79.4%	9,119
Clay Center	$ 3,852,497	$ 888.9	1.11	4,825	79.2%	4,334
Beloit	$ 4,047,704	$ 1,055.5	1.32	5,070	77.9%	3,835
Ulysses	$ 4,470,533	$ 725.6	0.91	5,599	77.1%	6,161
Norton	$ 2,533,158	$ 865.1	1.08	3,173	75.8%	2,928
WaKeeney	$ 1,726,120	$ 927.0	1.16	2,162	75.0%	1,862
Total, Group C	$ 54,484,564	$ 1,082	1.36	$ 68,241		50,345
% of Statewide	$ 0			2.4%		1.8%
Subtotal, Groups A, B, C	$ 1,741,099,220	$ 963	1.21	$ 2,180,699		1,807,853
	$ 1			76.4%		63.4%
% of Statewide						

City	FY 2011 Collections	FY 2011 Per Capita	Pull Factor	Trade Area Capture	Percent of County Sales	(certified 7/2010) 2010 Population less Institutionalized
Group D, Not 1st Class Cities - sales tax collections make up 65-75% of the total county sales tax.						
Holton	$ 4,226,974	$ 1,269.7	1.59	5,294	73.9%	3,329
Larned	$ 2,874,418	$ 709.0	0.89	3,600	73.8%	4,054
Iola	$ 6,567,697	$ 1,151.4	1.44	8,226	73.5%	5,704
Syracuse	$ 1,100,777	$ 607.5	0.76	1,379	72.6%	1,812
Scott City	$ 2,910,359	$ 762.7	0.96	3,645	72.1%	3,816
Garnett	$ 2,718,655	$ 796.1	1.00	3,405	72.0%	3,415
Council Grove	$ 2,042,029	$ 935.9	1.17	2,558	71.6%	2,182
Phillipsburg	$ 2,350,303	$ 910.6	1.14	2,944	70.0%	2,581
Hugoton	$ 2,498,276	$ 639.9	0.80	3,129	67.2%	3,904
Oakley	$ 2,229,497	$ 1,090.2	1.37	2,792	67.1%	2,045
Smith Center	$ 1,410,938	$ 847.4	1.06	1,767	66.0%	1,665
Yates Center	$ 1,010,936	$ 713.4	0.89	1,266	65.3%	1,417
Oberlin	$ 811,411	$ 453.8	0.57	1,016	65.2%	1,788
Total, Group D	$ 32,752,271	$ 868	1.09	$ 41,022		37,712
% of Statewide	$ 0			1.4%		1.3%
Subtotal, Groups A, B, C, D	$ 1,773,851,491	$ 961	1.20	$ 2,221,721		1,845,565
% of Statewide	$ 1			77.9%		64.7%

Table 2
Historical Pull Factors
FY 2005 through FY 2009

	Fiscal Year 2007			Fiscal Year 2011			
City Name	Pull Factor	Rank	City Name	Pull Factor	Rank		% change
Overland Park	1.60	1	Overland Park	1.53	2		-4.4%
Lenexa	1.58	2	Lenexa	1.55	1		-2.0%
Junction City	1.53	3	Junction City	1.18	11		-22.8%
Salina	1.48	4	Salina	1.47	3		-1.1%
Topeka	1.47	5	Topeka	1.40	5		-4.9%
Hutchinson	1.35	6	Hutchinson	1.35	6		-0.2%
Manhattan	1.28	7	Manhattan	1.41	18		10.0%
Olathe	1.28	8	Olathe	1.21	9		-5.8%
Leawood	1.26	9	Leawood	1.35	7		7.1%
Liberal	1.24	10	Liberal	1.23	8		-0.9%
Wichita	1.22	11	Wichita	1.12	13		-8.3%
Garden City	1.21	12	Garden City	1.46	4		20.2%
Pittsburg	1.16	13	Pittsburg	1.13	12		-3.1%
Dodge City	1.14	14	Dodge City	1.19	10		4.7%
Coffeyville	1.14	15	Coffeyville	1.10	16		-3.6%
Emporia	1.07	16	Emporia	1.11	14		3.7%
Fort Scott	1.06	17	Fort Scott	1.11	15		4.4%
Shawnee	1.04	18	Shawnee	0.96	20		-7.5%
Lawrence	1.02	19	Lawrence	1.07	17		4.6%
Atchison	1.01	20	Atchison	0.86	22		-14.7%
Parsons	0.99	21	Parsons	1.02	19		3.0%
Newton	0.98	22	Newton	0.88	21		-9.4%
Kansas City	0.89	23	Kansas City	0.86	23		-3.3%
Leavenworth	0.79	24	Leavenworth	0.76	24		-2.9%
Prairie Village	0.67	25	Prairie Village	0.65	25		-2.1%

Table 2
Historical Pull Factors
FY 2005 through FY 2009

	Fiscal Year 2007			Fiscal Year 2011			
City Name	Pull Factor	Rank	City Name	Pull Factor	Rank	% change	
Merriam	3.28	1	Merriam	3.11	1	-5.3%	
Hays	1.72	2	Hays	1.87	2	8.8%	
Great Bend	1.52	3	Great Bend	1.61	3	5.9%	
McPherson	1.24	4	McPherson	1.44	4	15.8%	
El Dorado	1.21	5	El Dorado	1.17	6	-3.7%	
Ottawa	1.14	6	Ottawa	1.09	7	-4.4%	
Derby	1.03	7	Derby	1.25	5	21.1%	
Winfield	1.00	8	Winfield	1.00	8	-0.3%	
Arkansas City	0.95	9	Arkansas City	0.91	10	-3.8%	
Gardner	0.69	10	Gardner	0.63	11	-7.6%	
			Andover	0.92	9	#DIV/0!	
			Haysville	0.24	12	#DIV/0!	
Colby	1.89	1	Colby	2.05	1	8.4%	
Pratt	1.63	2	Pratt	1.52	2	-6.6%	
Chanute	1.47	3	Chanute	1.28	6	-12.7%	
Concordia	1.40	4	Concordia	1.47	3	4.5%	
Goodland	1.29	5	Goodland	1.41	4	9.6%	
Beloit	1.25	6	Beloit	1.32	5	5.5%	
Clay Center	1.05	7	Clay Center	1.11	8	6.5%	
Larned	0.89	8				-100.0%	
			WaKeeney	1.16	7	#DIV/0!	
			Norton	1.08	9	#DIV/0!	
			Ulysses	0.91	10	#DIV/0!	

Table 2
Historical Pull Factors
FY 2005 through FY 2009

	Fiscal Year 2007			Fiscal Year 2011			
	Pull				Pull		
City Name	Factor	Rank	City Name		Factor	Rank	% change
Holton	1.74	1					-8.6%
Iola	1.23	2	Holton		1.59	1	17.2%
Phillipsburg	1.22	3	Iola		1.44	2	12.1%
WaKeeney	1.11	4	Oakley		1.37	3	5.1%
Council Grove	1.10	5	Council Grove		1.17	4	4.1%
Norton	1.02	6	Phillipsburg		1.14	5	3.9%
Garnett	1.02	7	Smith Center		1.06	6	-2.0%
Ulysses	0.97	8	Garnett		1.00	7	-1.5%
Oakley	0.91	9	Scott City		0.96	8	-1.4%
Smith Center	0.90	10	Yates Center		0.89	9	-1.5%
Scott City	0.74	11	Larned		0.89	10	
Syracuse	0.69	12	Hugoton		0.80	11	
			Syracuse		0.76	12	
			Oberlin		0.57	13	