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 2016
(July 2015 through June 2016)**

INTRODUCTION

The City Trade Pull Factor report provides different measures of retail market data for selected cities. This report is the 26th 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 2016, which represents the period July 1, 2015 through June 30, 2016. The department of revenue employs the following retail market measures.

1. City Trade Pull Factor (CiTPF)
The first measure is a quotient of retail trade captured by the city compared to the state, called *the City Trade Pull Factor* (CiTPF). The City Trade Pull Factor is computed by dividing the per capita sales tax of a city by the statewide per capita sales tax.[1] CiTPF values greater than 1.00 indicates that local businesses are pulling in trade from beyond their home city border. 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 a simple and well-known measure of the relative strength of the retail business community.

2. Income-Adjusted City Trade Pull Factor (IA-CiTPF)
The CiTPF is not adjusted for differing income levels in each business community. The department of revenue also provides a variation of the Trade Pull Factor, *the Income-Adjusted City Trade Pull Factor* (IA-CiTPF). The formula of this measure is given as follows:

$$\text{IA-CiTPF} = \text{CiTPF x } \frac{State's\ per\ capita\ Income}{City's\ per\ capita\ Income}$$

Any pull factor computed for a certain period of time must be treated carefully because it is subject to temporary distortions of the local economy. Lloyd (1995) suggests that local government practitioners should utilize information over the long-span by calculating trade pull factors for each year and looking for long-term trends. Lloyd notes "[p]ull factors increasing over time would indicate that the local area is becoming more efficient at competing for local retail sales. Decreasing pull factors would indicate that the local business community is losing sales to outside areas."

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[1] Sales tax denotes statewide sales tax. In fiscal year 2016, the statewide sales tax rate was 6.50%.

3. Trade Area Capture (TAC)

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.

4. Market Share (MS)

The *Market Share* (MS) is the percent the city's Trade Area Capture is of the state as a whole. MS is calculated by dividing the city's TAC by the stateside population.

5. Percent of County Trade (PCT)

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

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 45 cities account for 77.5% of all retail sales in the state and are home to 64.9% of the state's population.

Table 1 lists 25 cities classified as first class cities in Kansas (Group A). These are historical designations, used to identify the larger, more dominant cities in their respective counties. These cities account for 66.3% of the state's sales tax collections and 56.5% of the state's total population. Their combined CiTPF is 1.17, unchanged from FY 2015.

Table 2 lists cities that have populations exceeding 10,000 but are not 1st class cities (Group B). Twelve cities are included in this group and they have a wide variance in CiTPF. This group includes regional shopping centers (those with the higher CiTPF) and bedroom communities of neighboring cities (those with the lower CiTPF).

Table 3 lists non-1st class cities with a population less than 10,000 but their concentration factor is 75% or more (Group C), meaning that they are the retail centers for their county. There are 11 cities within this group. The pull factors are near or greater than 1.0 as would be expected being they are the retail centers for their home county.

Table 4 consists of a group of 6 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.

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.
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. This ongoing shift in the measures since destination sourcing was enacted is anticipated to continue with the growth of Internet shopping and the delivery of goods to the purchaser's address.
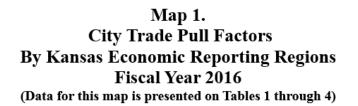
Data Sources

The data used in this report consists of city's per capita income, city population, state sales tax collections. Data on estimated per capita income (2011-2015) comes from US Census. City populations are from the U.S. Census Bureau as certified by the Division of the Budget July 1, 2016 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
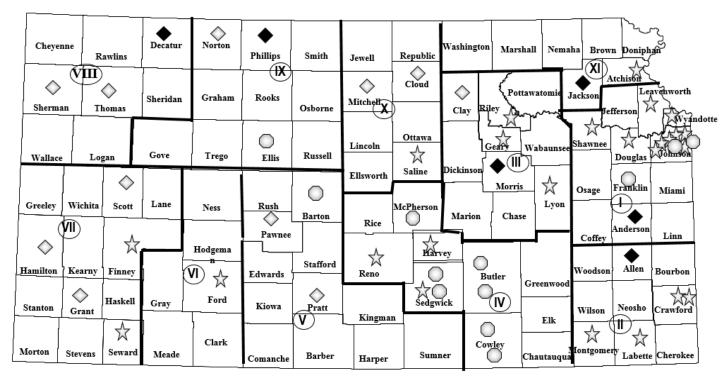
populations were deducted from the city and county totals. This was a change beginning with the FY 2012 report. In the past, group quarter data from the US Census was subtracted from the population data. This would consist primarily of nursing home populations. A review of the data shows that deducting 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.

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.

References
1. Lloyd, M., 1995, "Measuring Local Economic Development with Pull Factors," *Journal of Extension Vol.33*, Extension Journal, Inc.
2. US Census Bureau, US Census, <http://www.census.gov>.
3. Kansas Department of Revenue, *Pull Factor Reports*, <http://www.ksrevenue.gov>.

Map 1.
City Trade Pull Factors
By Kansas Economic Reporting Regions
Fiscal Year 2016
(Data for this map is presented on Tables 1 through 4)

Legend:
- ☆ 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

Table 1. FY2016 Trade Pull Factors by Group A Cities

	FY 2016 Collections	Adjusted Population	Per capita Sales Tax	CiTPF	IA-CiTPF	TAC	MS	PCT
Group A, 1st class cities								
Wichita	$ 405,242,351	389,965	$ 1,039	1.11	1.22	434,674	15.0%	74.3%
Overland Park	$ 247,909,906	186,515	$ 1,329	1.43	0.97	265,915	9.2%	35.1%
Kansas City	$ 114,395,014	151,306	$ 756	0.81	1.20	122,703	4.2%	88.4%
Topeka	$ 160,960,563	126,303	$ 1,274	1.37	1.55	172,651	6.0%	91.4%
Olathe	$ 153,891,691	134,305	$ 1,146	1.23	1.03	165,068	5.7%	21.8%
Lawrence	$ 96,231,492	93,917	$ 1,025	1.10	1.14	103,220	3.6%	93.3%
Shawnee	$ 57,939,074	65,046	$ 891	0.96	0.75	62,147	2.1%	8.2%
Manhattan (pt.)	$ 68,845,397	56,308	$ 1,223	1.31	1.49	73,845	2.5%	79.8%
Lenexa	$ 73,584,355	52,490	$ 1,402	1.50	1.05	78,928	2.7%	10.4%
Salina	$ 64,858,926	47,813	$ 1,357	1.46	1.62	69,569	2.4%	94.6%
Hutchinson	$ 48,220,165	39,724	$ 1,214	1.30	1.59	51,722	1.8%	84.1%
Leavenworth	$ 27,158,916	35,980	$ 755	0.81	0.93	29,131	1.0%	67.3%
Leawood	$ 42,477,391	34,579	$ 1,228	1.32	0.44	45,562	1.6%	6.0%
Dodge City	$ 29,515,511	27,912	$ 1,057	1.13	1.64	31,659	1.1%	91.3%
Garden City	$ 40,599,638	27,005	$ 1,503	1.61	2.06	43,548	1.5%	86.8%
Emporia	$ 26,411,496	24,649	$ 1,072	1.15	1.64	28,330	1.0%	92.6%
Junction City	$ 22,703,962	24,621	$ 922	0.99	1.19	24,353	0.8%	86.8%
Prairie Village	$ 14,205,099	21,877	$ 649	0.70	0.40	15,237	0.5%	2.0%
Liberal	$ 22,289,862	20,746	$ 1,074	1.15	1.57	23,909	0.8%	94.3%
Pittsburg	$ 21,193,136	20,409	$ 1,038	1.11	1.67	22,732	0.8%	72.8%
Newton	$ 16,404,790	19,216	$ 854	0.92	1.09	17,596	0.6%	67.4%
Atchison	$ 8,861,175	10,712	$ 827	0.89	1.21	9,505	0.3%	88.3%
Parsons	$ 9,658,016	10,090	$ 957	1.03	1.47	10,359	0.4%	73.2%
Coffeyville	$ 9,407,073	9,669	$ 973	1.04	1.56	10,090	0.3%	37.2%
Fort Scott	$ 8,309,562	7,838	$ 1,060	1.14	1.56	8,913	0.3%	89.3%
Total, Group A	$ 1,791,274,564	1,638,995	$ 1,093	1.17	N.A.	1,921,368	66.3%	N.A.
% of state wide	66.3%	56.5%						

Table 2. FY2016 Trade Pull Factors by Group B Cities

	FY 2016 Collections	Adjusted Population	Per capita Sales Tax	CiTPF	IA-CiTPF	TAC	MS	PCT
Derby	$ 27,259,397	$ 23,509	$ 1,160	$ 1.24	1.11	29,239.14	1.01%	5.0%
Hays	$ 33,508,956	$ 21,092	$ 1,589	$ 1.70	1.80	35,942.58	1.24%	86.8%
Gardner	$ 13,008,101	$ 20,868	$ 623	$ 0.67	0.71	13,952.83	0.48%	1.8%
Great Bend	$ 22,186,010	$ 15,717	$ 1,412	$ 1.51	1.82	23,797.29	0.82%	77.5%
McPherson	$ 17,432,251	$ 13,144	$ 1,326	$ 1.42	1.34	18,698.29	0.64%	64.6%
Ottawa	$ 13,727,341	$ 12,387	$ 1,108	$ 1.19	1.49	14,724.30	0.51%	77.4%
Arkansas City	$ 10,146,894	$ 12,136	$ 836	$ 0.90	1.28	10,883.82	0.38%	43.6%
Andover	$ 11,377,941	$ 12,745	$ 893	$ 0.96	0.73	12,204.28	0.42%	25.0%
El Dorado	$ 14,304,637	$ 11,359	$ 1,259	$ 1.35	1.60	15,343.53	0.53%	31.5%
Winfield	$ 9,766,184	$ 11,404	$ 856	$ 0.92	1.23	10,475.46	0.36%	42.0%
Merriam	$ 50,554,079	$ 11,288	$ 4,479	$ 4.80	4.49	54,225.62	1.87%	7.2%
Haysville	$ 3,666,685	$ 11,212	$ 327	$ 0.35	0.44	3,932.98	0.14%	0.7%
Group B Total	$ 226,938,477	176,861	$ 1,283	1.4	N.A.	243,420	8.4%	
% of Statewide	8.4%	6.1%						

Table 3. FY2016 Trade Pull Factors by Group C Cities

	FY 2016 Collections	Adjusted Population	Per capita Sales Tax	CiTPF	IA-CiTPF	TAC	MS	PCT
Goodland	$ 6,436,859	4,457	$ 1,444	1.55		6,904	0.2%	93.7%
Colby	$ 10,023,453	5,417	$ 1,850	1.98	2.24	10,751	0.4%	89.4%
Pratt	$ 9,496,748	6,849	$ 1,387	1.49	1.61	10,186	0.4%	85.8%
Concordia	$ 6,735,261	5,218	$ 1,291	1.38	1.82	7,224	0.2%	79.3%
Clay Center	$ 4,310,906	4,173	$ 1,033	1.11		4,624	0.2%	80.1%
Scott City	$ 4,008,791	3,838	$ 1,044	1.12		4,300	0.1%	85.9%
Beloit	$ 4,798,501	3,790	$ 1,266	1.36		5,147	0.2%	78.8%
Larned	$ 2,870,557	3,454	$ 831	0.89		3,079	0.1%	77.9%
Norton	$ 2,874,652	2,002	$ 1,436	1.54		3,083	0.1%	78.5%
Ulysses	$ 3,849,458	6,097	$ 631	0.68	0.76	4,129	0.1%	75.8%
Syracuse	$ 1,255,609	1,663	$ 755	0.81		1,347	0.0%	75.8%
Group C total	$ 56,660,794	46,958	$ 1,206.6	1.29	N.A.	60,776	2.1%	
% of Statewide	2.1%	1.6%						

Table 4. FY2016 Trade Pull Factors by Group D Cities

	FY 2016 Collections	Adjusted Population	Per capita Sales Tax	CiTPF	IA-CiTPF	TAC	MS	PCT
Holton	$ 4,713,338	3,263	1,444	1.5		5,056	0.2%	72.6%
Council Grove	$ 2,276,347	2,086	1,091	1.2		2,442	0.1%	70.7%
Garnett	$ 3,179,402	3,258	976	1.0		3,410	0.1%	73.6%
Iola	$ 7,313,443	5,470	1,337	1.4	2.1	7,845	0.3%	74.0%
Phillipsburg	$ 2,357,438	2,524	934	1.0		2,529	0.1%	66.0%
Oberlin	$ 1,042,626	1,761	592	0.6		1,118	0.0%	72.2%
Group D Total	$ 20,882,594	18,362	1,137	1.2	N.A.	22,399	0.8%	
% of Statewide	0.8%	0.6%						