

## Business Development Series: *Oklahoma Trade Pull Factors*

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Trade pull factors reported in this Business Development series, are used to measure the effectiveness of retail market performance, and its ability to attract resident and non-resident consumers on taxable retail sales in each county or city of Oklahoma.

### County Trade Pull Factors

County trade pull factors (CTPF) in Oklahoma range from the minimum 0.14 in Osage county to the maximum 1.59 in Oklahoma county within the seventy-seven counties. County trade pull factors were not evenly distributed among these counties in Oklahoma. A total of nine counties, or 11.7% of Oklahoma's seventy-seven counties, had trade pull factors greater than 1.00 in the 2004 calendar year sustained through fiscal year 2002.<sup>1</sup>

Among the nine counties with trade pull factors greater than 1.00, Oklahoma and Tulsa took the lead; each have trade pull factors equal to 1.59 and 1.51 respectively. The lead of these two counties was partially accounted for by their diverse retail trade and large metropolitan areas, which attracted a wide majority of consumers. Other counties with trade pull factors greater than 1.00 include Beckham & Woodward (1.32), Garfield & Carter (1.13), Washington (1.10), Custer (1.07), and Payne (1.01). These nine counties are shaded in dark blue in the county trade pull factor map on page 8.

The county trade pull factor map (page 8) displays five different color codes that group counties with the same range of trade pull factors under a given color coding. Counties with strong trade pull factors are highlighted in dark blue, which has a trade pull factor of 1.00 and higher. Counties with trade pull factors varying from 0.80 to 1.00 are colored in light blue. A total of thirty-eight counties have a trade pull factor that falls between the two extreme, ranging from 0.40 to 0.79, which are presented in white. The remaining counties with trade pull factors ranging from 0.32 to 0.39 are shaded in orange, and counties with trade pull factor lesser than 0.32 in light green.

Additionally, there are three numbers reported for each county on the map, where the first number represents the county's population for the 2004 calendar year; the second number refers to the trade pull factor for the given county; while the last number signifies the trade capture area.<sup>2</sup> Trade capture area represents the number of 'full time equivalent' consumers making retail purchases in the region.<sup>3</sup>

There were ten counties that have trade pull factors scoring between the range of 0.80 - 1.00. These counties are shaded in light blue on the county trade pull factor map, namely Kay (0.97), Pontotoc (0.93), Jackson (0.92), Comanche (0.91), Muskogee (0.90), Woods (0.89), Cleveland & Stephens (0.86), Pittsburg (0.84), and Pottawatomie (0.80). With the exception of

### *What Are Trade Pull Factors?*

Trade pull factors are used to measure the relative strength of a region's ability to capture retail trade minus any leakage.

### *Why Are They Important?*

They can be used to identify local retail trade performance or how well a community is able to pull-in more trade into the region. Regions with ability to attract more non-resident consumers, could 'capture' more dollars that in turn would stimulate local economic expansion and community development as well as government finance.

### *How Are the Numbers Calculated?*

The first step to compute per capita sales is to divide sales subject to sales tax (SSTST) in a given geographic region by its respective population.

Once per capita sales figures are computed, county trade pull factors can be derived by dividing the county per capita sales by per capita sales of the state. Similarly, city trade pull factors are computed by dividing the city per capita sales by per capita sales of the state.

### *How Are They Interpreted?*

Counties or cities with per capita sales greater than the per capita sales of the state would result in a trade pull factor greater than 1.00. Trade pull factors greater than 1.00 represent the local retail businesses that are able to attract or capture more trade from its local region's border.

Counties or cities with per capita sales equal to the per capita sales of the state would result in a trade pull factor equal to 1.00. A trade pull factor equal to 1.00 represents that the county or city is able to sustain its retail businesses from local community. Likewise, trade pull factors equal to 1.00 also indicate that the region attracts as many

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Cleveland and Pottawatomie counties that are located in or near the Oklahoma City metropolitan area, each of these ten counties are some distance from the major metro areas, and each has at least one city serving as a central shopping location. These were Ponca City in Kay county; Ada in Pontotoc county; Altus in Jackson county; Lawton in Comanche; Muskogee in Muskogee county; Alva in Woods county; Norman in Cleveland county; Duncan in Stephens county; McAlester in Pittsburg county; and Shawnee in Pottawatomie county.

The eleven counties shaded in orange have a population less than thirty seven thousand people. Counties in this grouping include Greer and Lincoln (0.38); Pawnee (0.37); Tillman, Logan, Washita and Pushmataha (0.35); Alfalfa (0.34), Grant (0.33); Nowata and Jefferson (0.32). The last grouping of counties had relatively small trade pull factors in the 2004 calendar year. These counties were Coal (0.31); Okfuskee and Johnston (0.30); Love (0.29); Adair (0.28); Beaver and Cotton (0.27); Wagoner (0.24); and lastly Osage (0.14).

#### Trade Pull Trend & Analysis

In 2004, seven of the following eight counties: Oklahoma, Tulsa, Beckham, Woodward, Garfield, Carter, Washington, and Custer, managed to maintain a trade pull factor higher than 1.0 since the previous fiscal year 2002.<sup>3</sup> Comparing the trade pull factor performance of these counties, Oklahoma and Tulsa both declined 0.01 and 0.03 points respectively between fiscal year 2002 and calendar year 2004. Five counties had better trade pull performance, where Beckham gained a higher trade pull factor of 0.12, Woodward gained 0.10, Carter and Washington each gained 0.02, Custer gained 0.04, and Garfield maintained the same share compared to last study period.

Payne county had successfully squeezed into a higher trade pull grouping (1.00 or greater), from 0.99 in fiscal 2002 to 1.01 in calendar year 2004; whereas, Kay county's trade pull factor performance dropped from 1.02 in fiscal year 2002 to 0.97 in calendar year 2004. Comanche scored 0.09 point increase from fiscal year 2002.

While trade pull factors measure the relative strength of the retail business market, trade capture areas measure the number of consumers that the community retailers captured. Trade capture area is computed by multiplying the region's population by its trade pull factor<sup>5</sup> (refer to table on page 5 - 7). According to the table, Oklahoma county drew the largest consumer base in the state. While generating a total market share of 30.77, Oklahoma county's trade capture area topped 1.08 million people.

In addition, Tulsa County earned 24.43% of the market share with 0.86 million people in trade capture area in 2004. Other huge trade capture areas include Cleveland (0.19 million people and 5.44% of market share), Comanche (0.1 million people and 2.85%), and Payne (70.5 thousand people and 2%).

Table 1 includes additional trade measure information. The second-to-last column represents per capita personal income (PCPI) of the 2003 calendar year, and the last column represents county

nonresident consumers as it loses resident consumers to other regions by replacing dollars that leak from the region with captured dollars.

Similarly, counties or cities with per capita sales less than the per capita sales of the state will result in a trade pull factor less than 1.00. This indicates that the region loses its resident consumers to other regions through retail purchases.

Trade pull factor analysis further assumes that per capita incomes are equal across all regions and that people consume the same amount of taxable goods and services in each of the regions. An additional measurement includes per capita income assumption, at which per capita income will be adjusted to account for per capita income differences between the counties.<sup>4</sup>

### *Who Benefits From This?*

Trade pull factors are one of the tools that business entrepreneurs, bankers, economic developers, and local government officials can use to assess relative strengths and weaknesses of the retail market within a geographic region. One can also implement trade pull factors with other analysis tools to assess opportunities & threats within a given region.

### *Why Do Bankers Benefit?*

It benefits commercial lending bankers to utilize it as an additional tool to foresee the transparency of a business in the retail market.

### *Why Do Economic Developers Benefit?*

Economic developers can use it as a measurement tool to enhance their decision making process to estimate the relative strength of a region's performance. A trade pull factor higher than 1.00 in a region of less than ideal population reveals its potential from a retail business's point of view.

trade pull factors adjusted for per capita personal income (CTPF Adjusted for PCPI). The difference between the 'CTPF' and 'CTPF Adjusted for PCPI' is that the latter took into consideration income differences between counties.

### City Trade Pull Factors

In addition to county trade pull factors, fifty cities' trade pull factors are documented in this report for readers or users convenience. Sales subject to sales tax (SSTST) information was obtained from the ORIGINS database. Table 2 (page 9-10) presents fifty cities' trade pull factors, where each city is organized into a different population grouping according to six different color codes. In 2004, the combined retail trade (SSTST) for these fifty cities accounted for 87% of the total retail trade business in the state of Oklahoma.

The color used in the cities' trade pull factor map (page 11) corresponds with the color grouping in table 2. Each city has two circles around it. The colored circle refers to the city's population, whereas the white circle represents the relative strength of the city's trade capture area. Therefore, if a city has an inner circle colored while surrounded by a white circle, this city is said to have a trade pull factor greater than one and vice versa. Under normal circumstances, a city's trade pull factor is usually greater than the county's trade pull factor where it is located. For example, Lawton had a trade pull factor of 1.09, while Comanche county had a weaker trade pull factor of 0.91. In this case, Lawton probably pulled-in more trade from other population areas than Comanche County did from surrounding counties.

In Table 2, the first grouping has a population of less than 10,000 people and is colored in grey. This group consists of ten cities with population ranging from 6,895 people in Seminole city to 9,907 in The Village, with an average trade pull factor of 1.39. These ten cities had trade pull factors greater than 1.00 with the exception of two cities Blackwell (0.77) and The Village (0.90). Poteau had the highest trade pull factor from in this grouping (2.02), and captured 0.53% (16,189 people) of the total market share.

The second grouping colored in light blue, consists of population ranging from 10,001 to 15,000 people. Nine cities fell into this group, with population ranging from 10,276 (Choctaw) to 14,780 (Durant), with an average trade pull factor of 1.34. Seven of the nine cities had trade pull factors higher than 1.00, topped by Elk City and Woodward with trade pull factors of 2.07 and 2.03 respectively. The two cities with trade pull factors less than 1.00, are Choctaw (0.55) and Jenks (0.96). Their low score can be partially attributed to their geographic regions, where both Choctaw and Jenks face stiff competition from their close proximity to Oklahoma City and Tulsa, the two largest metropolitan areas in Oklahoma.

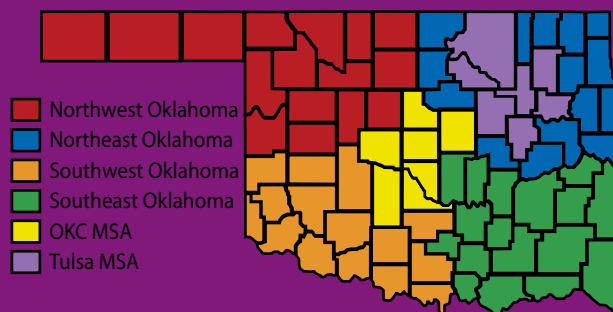
The third grouping (dark-blue) is comprised of eleven cities with population ranging from 15,168 (Mustang) to 19,871 (Bethany). The average of trade pull factors for these eleven cities was 1.36.

## Why Do Business Entrepreneurs/ Managers Benefit?

Business owners or managers can use it as a tool to locate the ideal business opportunity in the existing retail market. It helps business owners and managers identify the relative strength of the retail market in a region as well as its trade capture area.

## Where Is the Geographic Area?

This report presents trade pull factors that cover all 77 counties and 50 cities in Oklahoma.



## What Time Period?

The trade pull factors reported in this newsletter use 2004 population estimates from the US Census and 2004 sales subject to sales taxes (SSTST) figures from the ORIGINS database, as well as 2003 Per Capita Personal Income (PCPI) from the REIS database.

Cities with trade pull factors greater than or equal to 1.00 are Tahlequah (1.65), Ada (1.98), Chickasha (1.23), Claremore (1.98), Sand Springs (1.55), Bixby (1.00), McAlester (1.79), and Sapulpa (1.29). Cities that are located near the Oklahoma City metro area have trade pull factors less than 1.00 include Mustang (0.99), El Reno (0.99), and Bethany (0.56). Claremore is the only exception that has a trade pull factor greater than 1.00 in spite of its close proximity to the Tulsa metro area. To some extent, this could be partially due to the facts that Claremore and Tulsa are separated by a toll road and Claremore does not actually border Tulsa.

The forth grouping (green), has a population ranging from 20,393 (Altus) to 38,846 (Muskogee). The trade pull factors average for the ten cities in this group was 1.45. All of the cities have trade pull factors greater than 1.00 with one exception,

where Del City has a trade pull factor of 0.67. The second largest group has seven cities (dark-yellow) with population ranging from 40,001 to 100,000. Lawton (88,214 people) had the highest population base as opposed to Stillwater with the least population of 40,731 people in this grouping. Edmond had the largest trade capture area of 112,160 people among all of the cities that had trade pull factors higher than 1.00.

Two of the three cities in the last grouping include the Oklahoma City and Tulsa metro areas. This final group is presented in red color. Oklahoma City has the largest population base of 528,042 people and the highest trade capture area of 829,689 people or market share equal to 27.04% in 2004. However, Tulsa had a higher pull factor (1.73) than Oklahoma City (1.57). Norman's population increased from 97,831 in 2003 to 100,923 in 2004 with a trade pull factor of 1.38. The trade pull factor aver-

age of these three cities is 1.56. The Oklahoma City and Tulsa metro areas combined to attract 55% of the total consumers in the state.

All of the cities with trade pull factors less than 1.00 are situated near larger cities with stronger trade pull factors. It is apparent from the map (page 11) that the geographic location of cities with negative trade pull factors are located close to the Oklahoma City or Tulsa metro areas.

#### Endnotes:

1. Fiscal year 2002 refers to the period of July 1, 2002 to Jun 30, 2003.
2. Trade capture area is computed by multiplying population by trade pull factor.
3. While others may have made mention of 'full-time equivalent' shopper earlier, the first report we noticed the term used was written by David Darling at Kansas State University. David Darling. Leadership for Health Communities. Building a Healthy Retail Community: Lessons from Little Giants in Kansas. Kansas State University.
4. Chiappe, Jon & Nelson, Stephen. "Business Development Series Oklahoma Trade Pull Factors". SWOSU- Center for Economic and Business Development.
5. County with pull factor greater than 1.0, may not necessarily have the largest trade capture area.

Table 1: County Trade Pull Factors - 77 Counties in Oklahoma

| County    | 2004 SSTST (mil\$) | 2004 Population | County Per capita sales | County Trade Pull Factor | Trade Capture Area | Market share | PCPI     | CTPF Adjusted for PCPI |
|-----------|--------------------|-----------------|-------------------------|--------------------------|--------------------|--------------|----------|------------------------|
| Adair     | \$57.06            | 21,657          | \$2,634.72              | 0.28                     | 6,132              | 0.17%        | \$18,787 | 0.40                   |
| Alfalfa   | \$18.26            | 5,810           | \$3,142.79              | 0.34                     | 1,962              | 0.06%        | \$24,166 | 0.37                   |
| Atoka     | \$65.31            | 14,255          | \$4,581.72              | 0.49                     | 7,019              | 0.20%        | \$17,953 | 0.73                   |
| Beaver    | \$13.88            | 5,474           | \$2,535.37              | 0.27                     | 1,491              | 0.04%        | \$25,002 | 0.29                   |
| Beckham   | \$238.17           | 19,347          | \$12,310.19             | 1.32                     | 25,595             | 0.73%        | \$21,198 | 1.67                   |
| Blaine    | \$57.00            | 11,290          | \$5,048.47              | 0.54                     | 6,125              | 0.17%        | \$21,210 | 0.68                   |
| Bryan     | \$259.30           | 37,758          | \$6,867.31              | 0.74                     | 27,865             | 0.79%        | \$21,544 | 0.92                   |
| Caddo     | \$135.67           | 30,167          | \$4,497.22              | 0.48                     | 14,580             | 0.41%        | \$20,009 | 0.65                   |
| Canadian  | \$620.00           | 95,505          | \$6,491.81              | 0.70                     | 66,629             | 1.89%        | \$26,929 | 0.69                   |
| Carter    | \$494.70           | 47,087          | \$10,506.04             | 1.13                     | 53,163             | 1.51%        | \$23,587 | 1.28                   |
| Cherokee  | \$244.32           | 44,106          | \$5,539.40              | 0.60                     | 26,256             | 0.75%        | \$19,625 | 0.81                   |
| Choctaw   | \$86.89            | 15,451          | \$5,623.73              | 0.60                     | 9,338              | 0.27%        | \$19,258 | 0.84                   |
| Cimarron  | \$12.45            | 2,897           | \$4,297.23              | 0.46                     | 1,338              | 0.04%        | \$21,325 | 0.58                   |
| Cleveland | \$1,783.04         | 222,074         | \$8,029.04              | 0.86                     | 191,615            | 5.44%        | \$27,440 | 0.84                   |
| Coal      | \$17.08            | 5,928           | \$2,881.34              | 0.31                     | 1,836              | 0.05%        | \$16,777 | 0.49                   |
| Comanche  | \$935.26           | 110,514         | \$8,462.84              | 0.91                     | 100,508            | 2.85%        | \$25,545 | 0.95                   |
| Cotton    | \$16.25            | 6,514           | \$2,494.58              | 0.27                     | 1,746              | 0.05%        | \$23,164 | 0.31                   |
| Craig     | \$100.08           | 14,873          | \$6,729.13              | 0.72                     | 10,755             | 0.31%        | \$22,740 | 0.85                   |
| Creek     | \$355.10           | 68,666          | \$5,171.47              | 0.56                     | 38,161             | 1.08%        | \$22,212 | 0.67                   |
| Custer    | \$251.12           | 25,230          | \$9,953.31              | 1.07                     | 26,987             | 0.77%        | \$22,534 | 1.27                   |
| Delaware  | \$198.12           | 39,088          | \$5,068.47              | 0.54                     | 21,291             | 0.60%        | \$23,243 | 0.63                   |
| Dewey     | \$19.24            | 4,667           | \$4,123.06              | 0.44                     | 2,068              | 0.06%        | \$25,171 | 0.47                   |
| Ellis     | \$16.91            | 3,932           | \$4,300.12              | 0.46                     | 1,817              | 0.05%        | \$25,323 | 0.49                   |
| Garfield  | \$604.30           | 57,282          | \$10,549.61             | 1.13                     | 64,942             | 1.84%        | \$26,067 | 1.16                   |
| Garvin    | \$167.44           | 27,229          | \$6,149.35              | 0.66                     | 17,994             | 0.51%        | \$23,058 | 0.77                   |
| Grady     | \$235.67           | 48,176          | \$4,891.80              | 0.53                     | 25,326             | 0.72%        | \$22,956 | 0.61                   |
| Grant     | \$14.83            | 4,824           | \$3,075.14              | 0.33                     | 1,594              | 0.05%        | \$28,198 | 0.31                   |
| Greer     | \$20.81            | 5,849           | \$3,558.15              | 0.38                     | 2,237              | 0.06%        | \$22,841 | 0.45                   |
| Harmon    | \$11.85            | 2,997           | \$3,953.38              | 0.42                     | 1,273              | 0.04%        | \$22,222 | 0.51                   |
| Harper    | \$14.88            | 3,397           | \$4,379.23              | 0.47                     | 1,599              | 0.05%        | \$32,247 | 0.39                   |

*Table 1: County Trade Pull Factors - 77 Counties in Oklahoma*

| County     | 2004 SSTST (mil\$) | 2004 Population | County Per capita sales | County Trade Pull Factor | Trade Capture Area | Market share | PCPI     | CTPF Adjusted for PCPI |
|------------|--------------------|-----------------|-------------------------|--------------------------|--------------------|--------------|----------|------------------------|
| Haskell    | \$52.51            | 12,088          | \$4,343.96              | 0.47                     | 5,643              | 0.16%        | \$21,424 | 0.58                   |
| Hughes     | \$53.98            | 14,016          | \$3,851.25              | 0.41                     | 5,801              | 0.16%        | \$18,370 | 0.60                   |
| Jackson    | \$231.57           | 27,182          | \$8,519.42              | 0.92                     | 24,886             | 0.71%        | \$25,038 | 0.98                   |
| Jefferson  | \$19.11            | 6,460           | \$2,957.45              | 0.32                     | 2,053              | 0.06%        | \$19,464 | 0.44                   |
| Johnston   | \$29.22            | 10,440          | \$2,798.69              | 0.30                     | 3,140              | 0.09%        | \$19,333 | 0.42                   |
| Kay        | \$421.93           | 46,761          | \$9,023.17              | 0.97                     | 45,343             | 1.29%        | \$25,126 | 1.03                   |
| Kingfisher | \$91.12            | 14,176          | \$6,427.67              | 0.69                     | 9,792              | 0.28%        | \$27,503 | 0.67                   |
| Kiowa      | \$39.52            | 9,879           | \$4,000.75              | 0.43                     | 4,247              | 0.12%        | \$22,643 | 0.51                   |
| Latimer    | \$43.38            | 10,647          | \$4,074.30              | 0.44                     | 4,662              | 0.13%        | \$21,849 | 0.54                   |
| Le Flore   | \$228.95           | 49,161          | \$4,657.14              | 0.50                     | 24,604             | 0.70%        | \$20,832 | 0.64                   |
| Lincoln    | \$114.37           | 32,386          | \$3,531.58              | 0.38                     | 12,291             | 0.35%        | \$20,648 | 0.49                   |
| Logan      | \$118.39           | 36,301          | \$3,261.43              | 0.35                     | 12,723             | 0.36%        | \$26,236 | 0.36                   |
| Love       | \$25.00            | 9,133           | \$2,737.43              | 0.29                     | 2,687              | 0.08%        | \$21,697 | 0.36                   |
| McClain    | \$202.31           | 29,070          | \$6,959.48              | 0.75                     | 21,742             | 0.62%        | \$23,862 | 0.83                   |
| McCurtain  | \$178.17           | 34,046          | \$5,233.10              | 0.56                     | 19,147             | 0.54%        | \$20,483 | 0.73                   |
| McIntosh   | \$98.65            | 19,939          | \$4,947.81              | 0.53                     | 10,602             | 0.30%        | \$21,249 | 0.71                   |
| Major      | \$36.43            | 7,363           | \$4,947.42              | 0.53                     | 3,915              | 0.11%        | \$24,062 | 0.60                   |
| Marshall   | \$68.78            | 13,860          | \$4,962.16              | 0.53                     | 7,391              | 0.21%        | \$20,531 | 0.70                   |
| Mayes      | \$210.27           | 39,274          | \$5,354.01              | 0.58                     | 22,597             | 0.64%        | \$19,937 | 0.72                   |
| Murray     | \$72.88            | 12,682          | \$5,746.39              | 0.62                     | 7,832              | 0.22%        | \$20,426 | 0.81                   |
| Muskogee   | \$592.32           | 70,626          | \$8,386.70              | 0.90                     | 63,654             | 1.81%        | \$22,012 | 1.09                   |
| Noble      | \$56.55            | 11,233          | \$5,034.27              | 0.54                     | 6,077              | 0.17%        | \$22,438 | 0.64                   |
| Nowata     | \$32.02            | 10,717          | \$2,987.45              | 0.32                     | 3,441              | 0.10%        | \$18,158 | 0.47                   |
| Okfuskee   | \$32.87            | 11,637          | \$2,824.72              | 0.30                     | 3,533              | 0.10%        | \$17,206 | 0.47                   |
| Oklahoma   | \$10,087.31        | 680,815         | \$14,816.52             | 1.59                     | 1,084,038          | 30.77%       | \$30,891 | 1.38                   |
| Okmulgee   | \$222.55           | 39,890          | \$5,579.22              | 0.60                     | 23,917             | 0.68%        | \$19,418 | 0.83                   |
| Osage      | \$58.92            | 45,181          | \$1,304.12              | 0.14                     | 6,332              | 0.18%        | \$22,724 | 0.16                   |
| Ottawa     | \$176.27           | 32,737          | \$5,384.55              | 0.58                     | 18,943             | 0.54%        | \$20,784 | 0.74                   |
| Pawnee     | \$58.55            | 16,834          | \$3,478.00              | 0.37                     | 6,292              | 0.18%        | \$21,405 | 0.47                   |
| Payne      | \$656.04           | 69,675          | \$9,415.77              | 1.01                     | 70,502             | 2.00%        | \$22,433 | 1.21                   |



**Table 1: County Trade Pull Factors - 77 Counties in Oklahoma**

| County       | 2004 SSTST (mil\$) | 2004 Population  | County Per capita sales | County Trade Pull Factor | Trade Capture Area | Market share   | PCPI            | CTPF Adjusted for PCPI |
|--------------|--------------------|------------------|-------------------------|--------------------------|--------------------|----------------|-----------------|------------------------|
| Pittsburg    | \$342.42           | 43,950           | \$7,791.18              | 0.84                     | 36,799             | 1.04%          | \$21,723        | 1.03                   |
| Pontotoc     | \$304.46           | 35,007           | \$8,697.03              | 0.93                     | 32,719             | 0.93%          | \$22,422        | 1.11                   |
| Pottawatomie | \$496.67           | 67,111           | \$7,400.79              | 0.80                     | 53,375             | 1.51%          | \$22,563        | 0.94                   |
| Pushmataha   | \$37.73            | 11,715           | \$3,221.06              | 0.35                     | 4,055              | 0.12%          | \$18,528        | 0.50                   |
| Roger Mills  | \$19.57            | 3,259            | \$6,005.66              | 0.65                     | 2,103              | 0.06%          | \$24,599        | 0.70                   |
| Rogers       | \$408.54           | 79,042           | \$5,168.67              | 0.56                     | 43,904             | 1.25%          | \$24,703        | 0.60                   |
| Seminole     | \$133.89           | 24,679           | \$5,425.22              | 0.58                     | 14,388             | 0.41%          | \$19,699        | 0.79                   |
| Sequoyah     | \$178.44           | 40,578           | \$4,397.49              | 0.47                     | 19,176             | 0.54%          | \$19,977        | 0.63                   |
| Stephens     | \$341.22           | 42,826           | \$7,967.69              | 0.86                     | 36,670             | 1.04%          | \$24,034        | 0.95                   |
| Texas        | \$133.38           | 20,296           | \$6,571.68              | 0.71                     | 14,334             | 0.41%          | \$25,220        | 0.75                   |
| Tillman      | \$28.73            | 8,785            | \$3,270.35              | 0.35                     | 3,087              | 0.09%          | \$19,534        | 0.48                   |
| Tulsa        | \$8,009.38         | 569,148          | \$14,072.57             | 1.51                     | 860,731            | 24.43%         | \$35,470        | 1.14                   |
| Wagoner      | \$139.62           | 63,054           | \$2,214.31              | 0.24                     | 15,004             | 0.43%          | \$22,232        | 0.29                   |
| Washington   | \$500.56           | 49,027           | \$10,209.87             | 1.10                     | 53,793             | 1.53%          | \$29,984        | 0.98                   |
| Washita      | \$37.24            | 11,512           | \$3,235.11              | 0.35                     | 4,002              | 0.11%          | \$20,470        | 0.45                   |
| Woods        | \$70.82            | 8,570            | \$8,263.52              | 0.89                     | 7,611              | 0.22%          | \$25,515        | 0.93                   |
| Woodward     | \$230.14           | 18,741           | \$12,280.09             | 1.32                     | 24,732             | 0.70%          | \$21,581        | 1.63                   |
| <b>STATE</b> | <b>\$32,787.77</b> | <b>3,523,553</b> | <b>\$9,305.31</b>       | <b>1.00</b>              | <b>3,523,553</b>   | <b>100.00%</b> | <b>\$26,719</b> | <b>1.00</b>            |

1. SSTST = Sales Subject to Sales Tax

2. PCPI = Per Capita Personal Income

Source: US Census Bureau, ORIGINS, REIS

| Cimarron | Texas | Beaver |
|----------|-------|--------|
| 2.90     | 20.30 | 5.47   |
| 0.46     | 0.71  | 0.27   |
| 1.34     | 14.33 | 1.49   |

Example: Cimarron County

| Population in thousands | Trade Pull Factor | Trade Capture in thousands |
|-------------------------|-------------------|----------------------------|
| 2.90                    |                   |                            |
| 0.46                    |                   |                            |
| 1.34                    |                   |                            |

Trade Pull Factor

- 1.00 +
- 0.80 - 1.00
- 0.40 - 0.79
- 0.32 - 0.39
- 0.00 - 0.31



Table 2: City Trade Pull Factors - 50 Cities in Oklahoma

|                  | City         | 2004 SSTST<br>(mil\$) | 2004 Population | Per Capita Sales | City Trade Pull<br>Factor | Trade Capture Area | Market<br>Share |
|------------------|--------------|-----------------------|-----------------|------------------|---------------------------|--------------------|-----------------|
| Less than 10,000 | Seminole     | \$107.33              | 6,895           | \$15,566.57      | 1.67                      | 11,534.43          | 0.38%           |
|                  | Blackwell    | \$52.76               | 7,357           | \$7,171.97       | 0.77                      | 5,670.33           | 0.18%           |
|                  | Poteau       | \$150.64              | 8,024           | \$18,774.28      | 2.02                      | 16,189.12          | 0.53%           |
|                  | Cushing      | \$86.52               | 8,325           | \$10,393.18      | 1.12                      | 9,298.26           | 0.30%           |
|                  | Clinton      | \$103.72              | 8,368           | \$12,394.31      | 1.33                      | 11,145.84          | 0.36%           |
|                  | Sallisaw     | \$119.36              | 8,536           | \$13,983.46      | 1.50                      | 12,827.38          | 0.42%           |
|                  | Pryor        | \$134.17              | 9,173           | \$14,626.88      | 1.57                      | 14,418.90          | 0.47%           |
|                  | Warr Acres   | \$135.21              | 9,551           | \$14,156.33      | 1.52                      | 14,530.10          | 0.47%           |
|                  | Weatherford  | \$135.06              | 9,736           | \$13,872.28      | 1.49                      | 14,514.34          | 0.47%           |
|                  | The Village  | \$82.93               | 9,907           | \$8,370.54       | 0.90                      | 8,911.79           | 0.29%           |
| 10,001 - 15,000  | Choctaw      | \$52.93               | 10,276          | \$5,150.58       | 0.55                      | 5,687.86           | 0.19%           |
|                  | Elk City     | \$201.62              | 10,442          | \$19,308.10      | 2.07                      | 21,666.67          | 0.71%           |
|                  | Guthrie      | \$101.47              | 10,505          | \$9,659.40       | 1.04                      | 10,904.74          | 0.36%           |
|                  | Guymon       | \$116.22              | 10,730          | \$10,831.70      | 1.16                      | 12,490.08          | 0.41%           |
|                  | Woodward     | \$224.11              | 11,864          | \$18,890.23      | 2.03                      | 24,084.49          | 0.78%           |
|                  | Jenks        | \$107.44              | 12,079          | \$8,894.98       | 0.96                      | 11,546.36          | 0.38%           |
|                  | Okmulgee     | \$151.19              | 12,854          | \$11,762.25      | 1.26                      | 16,247.91          | 0.53%           |
|                  | Miami        | \$151.94              | 13,464          | \$11,285.12      | 1.21                      | 16,328.61          | 0.53%           |
|                  | Durant       | \$238.46              | 14,780          | \$16,134.08      | 1.73                      | 25,626.40          | 0.84%           |
| 15,001 - 20,000  | Mustang      | \$139.83              | 15,168          | \$9,219.05       | 0.99                      | 15,027.38          | 0.49%           |
|                  | Tahlequah    | \$241.11              | 15,710          | \$15,347.74      | 1.65                      | 25,911.32          | 0.84%           |
|                  | Ada          | \$292.19              | 15,840          | \$18,446.60      | 1.98                      | 31,400.78          | 1.02%           |
|                  | El Reno      | \$146.74              | 15,952          | \$9,199.10       | 0.99                      | 15,769.91          | 0.51%           |
|                  | Chickasha    | \$187.81              | 16,463          | \$11,407.78      | 1.23                      | 20,182.69          | 0.66%           |
|                  | Claremore    | \$312.53              | 16,994          | \$18,390.62      | 1.98                      | 33,586.21          | 1.09%           |
|                  | Sand Springs | \$254.12              | 17,642          | \$14,404.53      | 1.55                      | 27,309.64          | 0.89%           |
|                  | Bixby        | \$164.25              | 17,729          | \$9,264.26       | 1.00                      | 17,650.77          | 0.58%           |
|                  | McAlester    | \$296.11              | 17,783          | \$16,651.27      | 1.79                      | 31,821.54          | 1.04%           |
|                  | Sapulpa      | \$238.45              | 19,803          | \$12,041.17      | 1.29                      | 25,625.27          | 0.84%           |
|                  | Bethany      | \$102.88              | 19,871          | \$5,177.41       | 0.56                      | 11,056.09          | 0.36%           |

*Table 2: City Trade Pull Factors - 50 Cities in Oklahoma*

|                  | City          | 2004 SSTST<br>(mil\$) | 2004 Population | Per Capita Sales | City Trade<br>Pull Factor | Trade Capture Area | Market Share |
|------------------|---------------|-----------------------|-----------------|------------------|---------------------------|--------------------|--------------|
| 20,001 - 40,000  | Altus         | \$225.18              | 20,393          | \$11,041.87      | 1.19                      | 24,198.74          | 0.79%        |
|                  | Yukon         | \$306.93              | 21,596          | \$14,212.54      | 1.53                      | 32,984.80          | 1.08%        |
|                  | Del City      | \$136.74              | 22,029          | \$6,207.46       | 0.67                      | 14,695.27          | 0.48%        |
|                  | Duncan        | \$285.30              | 22,029          | \$12,951.31      | 1.39                      | 30,660.37          | 1.00%        |
|                  | Owasso        | \$376.10              | 22,582          | \$16,654.93      | 1.79                      | 40,417.94          | 1.32%        |
|                  | Ardmore       | \$434.52              | 24,341          | \$17,851.22      | 1.92                      | 46,695.53          | 1.52%        |
|                  | Ponca City    | \$336.61              | 25,224          | \$13,344.71      | 1.43                      | 36,173.63          | 1.18%        |
|                  | Shawnee       | \$448.95              | 29,746          | \$15,092.72      | 1.62                      | 48,246.42          | 1.57%        |
|                  | Bartlesville  | \$471.24              | 34,638          | \$13,604.60      | 1.46                      | 50,641.60          | 1.65%        |
|                  | Muskogee      | \$533.24              | 38,846          | \$13,727.01      | 1.48                      | 57,304.84          | 1.87%        |
| 40,001 - 100,000 | Stillwater    | \$544.12              | 40,731          | \$13,358.91      | 1.44                      | 58,474.28          | 1.91%        |
|                  | Moore         | \$446.59              | 46,208          | \$9,664.69       | 1.04                      | 47,992.58          | 1.56%        |
|                  | Enid          | \$587.99              | 46,626          | \$12,610.71      | 1.36                      | 63,188.27          | 2.06%        |
|                  | Midwest City  | \$652.83              | 54,822          | \$11,908.15      | 1.28                      | 70,156.52          | 2.29%        |
|                  | Edmond        | \$1,043.68            | 73,080          | \$14,281.38      | 1.53                      | 112,159.90         | 3.66%        |
|                  | Broken Arrow  | \$800.19              | 84,399          | \$9,481.01       | 1.02                      | 85,992.52          | 2.80%        |
|                  | Lawton        | \$898.50              | 88,214          | \$10,185.41      | 1.09                      | 96,557.24          | 3.15%        |
| 100,001 +        | Norman        | \$1,292.93            | 100,923         | \$12,811.08      | 1.38                      | 138,945.66         | 4.53%        |
|                  | Tulsa         | \$6,178.93            | 383,764         | \$16,100.85      | 1.73                      | 664,021.16         | 21.64%       |
|                  | Oklahoma City | \$7,720.51            | 528,042         | \$14,621.02      | 1.57                      | 829,688.75         | 27.04%       |
|                  | STATE         | \$32,787.77           | 3,523,553       | \$9,305.31       | 1.00                      | 3,523,553.00       | 100.00%      |

1. SSTST = Sales Subject to Sales Tax

Source: US Census Bureau, ORIGINS database, &amp; REIS database

# Oklahoma Trade Pull Factors: 50 Oklahoma Cities

