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Arkansas Retail Trade Analysis

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Retail Pull Factors

Retail trade is the sale and distribution of merchandise to consumers through either a store location or non-store location such as internet, phone, catalog, or advertising.

Retail trade is one of the key economic indicators of regional economies. The retail strength of a county is a function of the customer base served, the buying power of the customer base, and the quality of the retail environment. Retail pull factors measure retail sales captured by counties across Arkansas in the nine sectors.

In 2018, according to the National Retail Federation (2020), 274,350 employees worked in the retail sector at 39,300 establishments across Arkansas. Employees in the retail sector earned an average wage of \$36,192 accounting to \$7.3 billion in direct labor income.

In 2021, as illustrated in Figure 1, in terms of percentage of retail sales by industry, the greatest amount of retail sales was in the auto dealers and gasoline services sector (28%), followed by general merchandise (24%), and miscellaneous retail (10%). Eating and drinking places as well as health and personal care each accounted for 9% of retail sales. Building materials accounted for 8%, and food comprised 7% of retail sales. Lastly, apparel and accessories accounted for 3% of retail sales and home furniture accounted for remaining retail sales (2%) in Arkansas.



Program Overview

CREATE BRIDGES (Celebrating REtail, Accommodations, Tourism, and Entertainment by Building Rural Innovations and Developing Growth Economies) is a pilot project designed for multi-county regions to raise the awareness of the role retail, accommodations, tourism. and entertainment businesses play in the local economy; determine challenges, barriers, and opportunities related to those businesses; and develop and implement strategies to strengthen the retail. accommodations, tourism, and entertainment sectors within a region. CREATE BRIDGES is a collaborative partnership between the Southern Rural Development Center, the University of Arkansas, The University of Illinois, the Kentucky, University of New Mexico State University, North Carolina State University and Oklahoma State University. It is currently active in eight regions throughout the six partner states.

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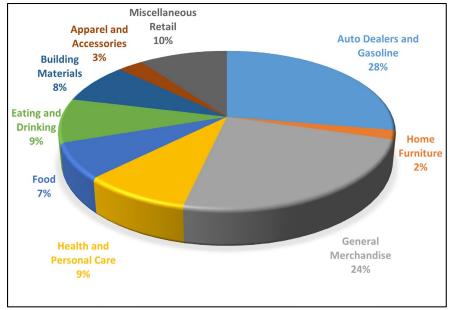
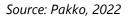


Figure 1. Retail Sales Breakdown in Arkansas by Detailed Industry, 2021



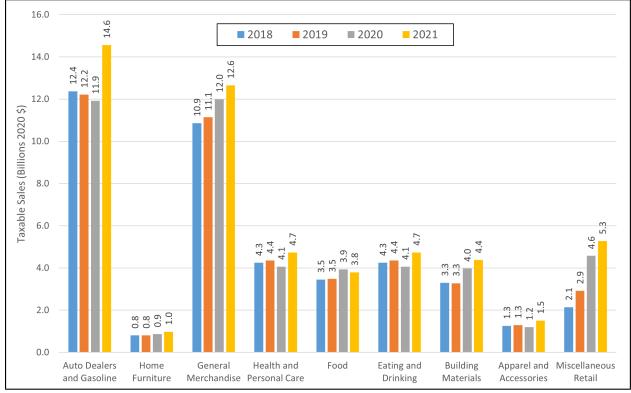


Figure 2. Comparison of Taxable Sales by Detailed Industry in Arkansas, 2018-2021

Source: Pakko, 2022

In terms of retail sales trends over the last four years (Figure 2), Arkansans spent the most (over \$14 billion) at auto dealers/gasoline service stations followed by general merchandise goods (over \$12 billion). The average retail expenditure ranged from \$3-4 billion in each of the sectors - health, food, eating and drinking places sectors along with the building materials sector experienced modest increases. Miscellaneous retail sector more than doubled in the last four years from \$2.1 billion (2018) to \$5.3 billion in 2021. Apparel and accessories expenditures ranged from \$1.2 to \$1.5 billion with slight changes. Retail expenditures on home furnishings were the least among all sectors in the range of \$0.8 (2018 and 2019) to \$1 billion (2021). All of these retail sales were adjusted for inflation and presented in 2020 dollars. Appendix B provides a detail of the retail trade classifications and the sectors or industries included in each category.

The retail sales data was obtained from the Arkansas Economic Development Institute (Pakko, 2022).

CREATE BRIDGES in Arkansas

In Arkansas, Celebrating REtail, Accommodations, Tourism, and Entertainment by Building Rural Innovations and Developing Growth Economies (CREATE BRIDGES) counties are found in the Ozark Foothills (Fulton, Izard, and Sharp counties) and the Cossatot Community Connection (i.e., 3C's) region (Howard, Little River, and Sevier Counties) as presented in Figure 3.



Figure 3. CREATE BRIDGES counties in Arkansas

In Table 1, total retail sales are summarized for Arkansas CREATE BRIDGES counties from 2018 to 2021. During this period, retail sales increased consistently for each county including the COVID-19 pandemic.

	2018	2019	2020	2021
Ozark Foothills				
Fulton	56.93	62.09	69.16	81.12
Izard	82.06	83.79	94.01	99.74
Sharp	176.29	181.28	210.12	222.12
3C's Region				
Howard	136.38	136.20	142.63	156.75
Little River	101.12	104.11	115.94	125.48
Sevier	149.89	150.17	162.17	177.81

Table 1. Summary of total retail sales in CREATE BRIDGES counties in Arkansas (millions 2020\$)

Source: Pakko, 2022

Arkansas County Retail Pull Factors

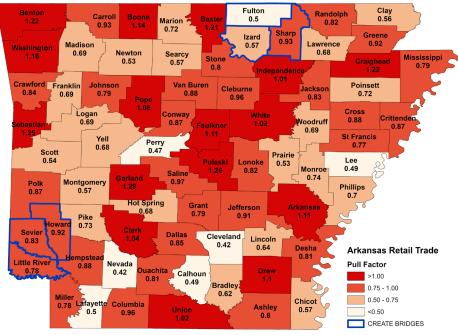


Figure 4. Arkansas County Retail Trade Pull Factors

Sources: Pakko, 2022; U.S. Census Bureau, 2022a; U.S. Census Bureau, 2022c

In 2021, 15 counties in Arkansas had a retail trade pull factor greater than 1 indicating either a gain in customers from other counties or residents spent more than the state average on retail purchases (Figure 4). On the other hand, 60 counties had a pull factor below 1 indicating residents either spent less than other counties or purchased more goods outside their county. Residents in Pulaski and Garland counties spent more than

the state average while Fulton, Lafayette, Lee, and Calhoun residents spent less than the state average on retail goods and services. In the Ozark Foothills region, while Fulton and Izard counties had moderate retail activity, Sharp County has strong retail environment. In the 3C's region: Howard, Sevier, and Little River counties indicated relatively strong retail activity. The equation to compute retail trade pull factor is as follows:

 $Pull \ Factor_{sector} = \frac{Retail \ sales_{county}}{Adjusted \ population_{county}} \div \frac{Retail \ sales_{state}}{Adjusted \ population_{state}}$

Market share is the percentage of retail trade area captured by a county with respect to the state. In other words, market share is the percent of the total customer base in Arkansas captured by the county's retail trade. Trade area capture is computed by multiplying the adjusted population with the pull factor for a region. Adjusted population is the county population less the number of people in institutions (hospitals, prisons, nursing homes, etc.). Trade area capture is a measure of the size of customer base. The equation to compute market share is as follows:

$$Market \ share_{sector} = \frac{Trade \ area \ capture_{county}}{Trade \ area \ capture_{state}} = \frac{Adjusted \ population_{county} * PF_{sector}}{Adjusted \ population_{state} * PF_{sector}}$$

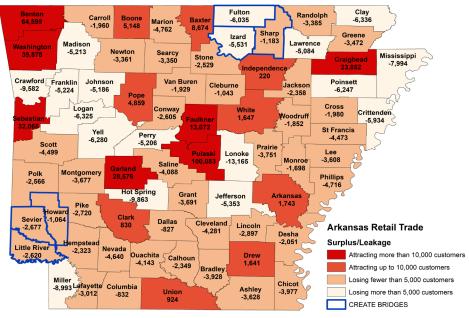


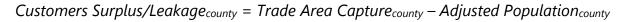


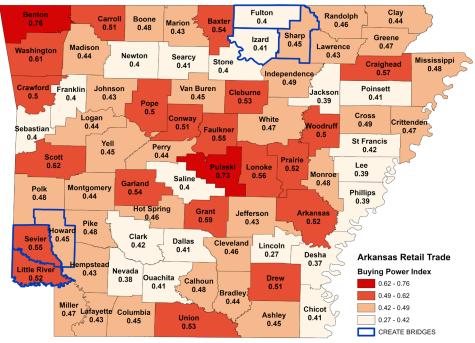
Figure 5. Estimated Retail Trade Customer Surplus/Leakage in Arkansas Sources: Pakko, 2022; U.S. Census Bureau, 2022a; U.S. Census Bureau, 2022c

While trade area capture estimates number of retail customers within a county, it does not factor in cross-county traffic of retail customers. Retail customers travel across county

borders to purchase goods and services. The net retail customers in a county are calculated by deducting the adjusted population (non-institutionalized population i.e., people that are not in hospitals, nursing homes, prisons) from the trade area capture. The map above (Figure 5) illustrates the estimated number of retail customers either coming into a county or leaving a county for retail purchases. While 15 counties in Northwest Arkansas and Central Arkansas displayed a net in-commuting pattern whereas all the other counties (60 counties) displayed a net out-commuting pattern. Pulaski, Benton, and Washington counties gained the most retail customers while Hot Spring, Crawford and Miller counties lost the most retail customers. The Ozark foothills region is estimated to have a net leakage of retail customers in the order of Fulton, Izard and Sharp. Similarly, it is estimated that the 3C's region experienced a net loss of retail customers in the order of Sevier, Little River and Howard counties. It is evident that metropolitan areas of Little Rock-Conway, Fayetteville-Springdale-Rogers, Jonesboro, and Hot Springs attracted retail customers. The counties adjacent to the metropolitan areas are losing the most retail customers. Another trend is the loss of retail customers in counties that are neighboring states of Texas, Tennessee, Oklahoma, Louisiana, Mississippi, and Missouri.

The estimated retail customer surplus or leakage are calculated as follows:





Buying Power Index

Figure 6. Buying power index of retail customers in Arkansas Sources: Pakko, 2022; U.S. Census Bureau, 2022b; U.S. Census Bureau, 2022c

The buying power index is a measure of the capability of the retail customers living in that county to buy retail goods as illustrated in Figure 6. The higher the index, the greater the ability to buy retail goods and support retail activity in the region. The buying power of retail customers in Pulaski County and Benton County are relatively higher than other counties. Retail customers in Lincoln and Nevada counties had the lowest buying power among all other residents in Arkansas. The buying power of customers in the Ozark Foothills region is about average while that of the 3 C's region is above average when compared to the state of Arkansas. Many communities in the Arkansas delta region, northern and central region have a relative low buying power compared to other counties.

The buying power index is calculated by the following equation:

Buying Power Index = (2* Population %) + (3*Retail Sales %) + (5*Per capita income %) 10 (sum of the weights)

Where Population % is the percentage of county population to that of the State of Arkansas. Retail Sales % is the percentage of retail sales in the county to that of the State of Arkansas. Per capita income % is the percentage of per capita income in the county to that of the State of the State of Arkansas.

Appendix A provides details on county trade pull factors, trade area capture, market shares, estimated retail customer surplus/leakage and buying power index for all the counties in Arkansas.

Summary and Conclusions

Retail trade is an important sector for Arkansas' economy supporting 274,350 employees working in 39,300 establishments across the State. The retail sector has exhibited robust growth over the years particularly in 2021 demonstrating a strong economic recovery from the COVID-19 pandemic. Retail expenditures on automobiles and parts, general merchandise, and miscellaneous retail sectors have been particularly noteworthy over the last five years.

Retail customers spent more than the state average in metropolitan areas in central region around Little Rock and the northwest region around the Fayetteville-Springdale-Rogers areas. Counties surrounding metropolitan areas have lost retail customers across the state. While Central and Northwest Arkansas are gaining retail customers, retail goods and services for residents along the delta region, northern and southern region could be better served.

One of the limitations of this study in calculating the retail measures is that the economy of the state is considered closed to any out-of-state customers buying retail goods and

services. It is also assumed that none of the retail customers within the state shop for retail goods and services outside the state. Of course, there is free movement of retail customers across the borders estimating which is beyond the scope of this study.

Serving rural retail customers and retaining their business is a particular challenge for the retail sector as illustrated through various retail measures. Addressing the needs of low-income consumers and hard to reach areas in specific regions of Arkansas can provide growth opportunities for the retail industry in Arkansas.

Retail trade activity in the CREATE BRIDGES region can be improved. The Ozark Foothills region borders Missouri and the 3 C's region borders Oklahoma indicating a potential to attract retail customers across the State. The retail pull factors for the counties in the CREATE BRIDGES region are relatively high but below 1 indicating the lack of anchor retail establishments that cater to the needs of retail customers in this area which also helps in stemming the loss of retail customers outside this region. The buying power of retail customers is relatively high indicating the willingness to pay for retail goods and services in the local area. Proximity to state highways is a strength of these communities which can be leveraged in terms of storage and distribution of retail goods and understanding the preferences of local retail customers will help in recruiting the appropriate retail outlets to these regions.

Both retail pull factors and market share were calculated based on taxable sales report data obtained from Arkansas Economic Development Institute. Taxable sales data consist of all sales reported by retail establishments. Taxable sales data does not include out-ofstate, catalog, internet sales or sales data in counties with fewer than six retail establishments. Despite these limitations, taxable sales data captures a majority of retail sales and is a good measure of retail activity.

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Appendix A

Retail Trade Pull Factor, Trade Area Capture, Market Share, Estimated Retail Customer Surplus or Leakage and Buying Power Index for Counties in Arkansas

County	County Trade Pull Factors	Trade Area Capture	Market Share	Retail Customer Surplus/Leakage	Buying Power Index
Arkansas	1.11	18,207	0.62%	1,743	0.522
Ashley	0.80	14,873	0.51%	-3,628	0.448
Baxter	1.21	50,423	1.71%	8,674	0.541
Benton	1.22	355,415	12.08%	64,599	0.760
Boone	1.14	42,479	1.44%	5,148	0.484
Bradley	0.62	6,285	0.21%	-3,928	0.443
Calhoun	0.49	2,262	0.08%	-2,349	0.479
Carroll	0.93	26,196	0.89%	-1,960	0.514
Chicot	0.57	5,314	0.18%	-3,977	0.414
Clark	1.04	19,719	0.67%	830	0.422
Clay	0.56	7,910	0.27%	-6,336	0.444
Cleburne	0.96	23,659	0.80%	-1,043	0.534
Cleveland	0.42	3,149	0.11%	-4,281	0.463
Columbia	0.96	20,043	0.68%	-832	0.451
Conway	0.87	18,079	0.61%	-2,605	0.514
Craighead	1.22	132,308	4.50%	23,852	0.568
Crawford	0.84	50,147	1.70%	-9,582	0.499
Crittenden	0.87	40,937	1.39%	-5,934	0.473
Cross	0.88	14,480	0.49%	-1,980	0.488
Dallas	0.85	4,770	0.16%	-827	0.410
Desha	0.81	8,954	0.30%	-2,051	0.369
Drew	1.10	17,738	0.60%	1,641	0.512
Faulkner	1.11	133,195	4.53%	13,072	0.550
Franklin	0.69	11,574	0.39%	-5,224	0.400
Fulton	0.50	5,929	0.20%	-6,035	0.398
Garland	1.29	126,788	4.31%	28,576	0.545
Grant	0.79	14,226	0.48%	-3,691	0.593
Greene	0.92	42,138	1.43%	-3,472	0.469
Hempstead	0.88	16,992	0.58%	-2,323	0.430
Hot Spring	0.68	21,104	0.72%	-9,863	0.457
Howard	0.92	11,456	0.39%	-1,064	0.451
Independence	1.01	36,857	1.25%	220	0.489
Izard	0.57	7,289	0.25%	-5,531	0.410
Jackson	0.83	11,830	0.40%	-2,358	0.386
Jefferson	0.91	54,349	1.85%	-5,353	0.432
Johnson	0.79	19,882	0.68%	-5,186	0.429

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Lafayette	0.50	3,025	0.10%	-3,012	0.428
Lawrence	0.68	10,660	0.36%	-5,084	0.428
Lee	0.49	3,416	0.12%	-3,608	0.388
Lincoln	0.64	5,137	0.17%	-2,897	0.275
Little River	0.78	9,170	0.31%	-2,620	0.523
Logan	0.69	14,308	0.49%	-6,325	0.439
Lonoke	0.82	60,890	2.07%	-13,165	0.559
Madison	0.69	11,669	0.40%	-5,213	0.440
Marion	0.72	12,041	0.41%	-4,762	0.428
Miller	0.78	32,266	1.10%	-8,993	0.465
Mississippi	0.79	30,869	1.05%	-7,994	0.484
Monroe	0.74	4,906	0.17%	-1,698	0.475
Montgomery	0.57	4,802	0.16%	-3,677	0.442
Nevada	0.42	3,373	0.11%	-4,640	0.375
Newton	0.53	3,777	0.13%	-3,361	0.401
Ouachita	0.81	17,781	0.60%	-4,143	0.414
Perry	0.47	4,601	0.16%	-5,206	0.445
Phillips	0.70	10,988	0.37%	-4,716	0.395
Pike	0.73	7,176	0.24%	-2,720	0.476
Poinsett	0.72	16,060	0.55%	-6,247	0.411
Polk	0.87	16,663	0.57%	-2,566	0.479
Роре	1.08	65,245	2.22%	4,859	0.503
Prairie	0.53	4,248	0.14%	-3,751	0.520
Pulaski	1.26	491,214	16.70%	100,083	0.726
Randolph	0.82	15,135	0.51%	-3,385	0.456
Saline	0.97	119,861	4.07%	-4,088	0.401
Scott	0.54	5,258	0.18%	-4,499	0.617
Searcy	0.57	4,449	0.15%	-3,350	0.406
Sebastian	1.25	158,575	5.39%	32,065	0.405
Sevier	0.83	12,995	0.44%	-2,677	0.554
Sharp	0.93	16,233	0.55%	-1,183	0.454
St. Francis	0.77	15,002	0.51%	-4,473	0.420
Stone	0.80	9,813	0.33%	-2,529	0.396
Union	1.02	38,792	1.32%	924	0.529
Van Buren	0.88	13,575	0.46%	-1,929	0.450
Washington	1.16	282,172	9.59%	39,878	0.611
White	1.02	75,116	2.55%	1,647	0.471
Woodruff	0.69	4,152	0.14%	-1,852	0.495
Yell	0.68	13,520	0.46%	-6,280	0.446

Appendix B

Retail Trade Classifications and Sectors Included

Apparel retail trade includes retail businesses that sell clothes, accessories, jewelry, luggage, leather and other personal goods for men, women, and children.

Automotive retail trade includes new and used car, recreational vehicle, motorcycle, boat and other motor vehicle dealers as well as stores selling automotive parts, tires and accessories. Automobile service stations, gasoline stations combined with convenience stores and car washes are included in this sector.

Building material retail trade includes building material supplies dealers, home centers, stores selling paint, wallpaper, lawn, garden equipment and outdoor power equipment. Nursery, garden center and farm supply stores are also included in this sector.

Eating and Drinking retail trade includes restaurants, fast food places, refreshment stands, and drinking places such as bars, pubs, and taverns. The sector includes food courts in malls, hotel owned restaurants as well as bars and restaurants owned by civic, social and fraternal associations.

Food retail trade includes grocery stores, supermarkets, convenience stores, specialty food stores including meat, fish, seafood, fruit, and vegetable markets. This sector includes bakery goods stores, confectionery and nut stores and all other specialty food stores. Beer, wine, and liquor stores are also included in this sector.

Furniture retail trade includes stores that sell furniture, upholstery, appliances, and floor covering. Window treatment stores and all other home furnishings are included in this sector. This sector also includes consumer electronics, music, computer software and musical instrument stores.

Miscellaneous retail trade includes florists, office supplies, stationery, gift, novelty and souvenir stores. Merchandise, pet supplies, art dealers are also included in this sector. This sector also includes manufactured home dealers, tobacco stores and other retail stores.

General merchandise retail includes department stores, discount stores and supercenters. These stores sell dry goods, apparel and accessories, furniture and home furnishings, food and hardware. Big box retail stores are included in this sector.