



Building Healthy Communities

Department of Agricultural Economics

Analyzing Local Markets¹

David L. Darling

How many dollars in gross sales can a retail or service firm expect to generate if it locates in a given place? The answer is critical, but an accurate forecast is difficult to make. Some of the factors that determine business success include competition, local trade area population, area income levels, household spending patterns, per capita expenditures, and the relative strength of the local business community. Also, five major factors influence consumers' shopping patterns: convenience, service, selection, price and quality.

This publication is written to assist individuals who are advising people starting a new business or expanding one. Specifically, information is provided and a skill is taught that the reader will find useful when analyzing the feasibility of a new business venture in a specific place with a client.

Locating the Business

The central business district (CBD) of a community is typically a shopping center. The mix of businesses in a small CBD differs from the mix in a large CBD. Larger CBDs have more diversity and may exclude gas stations and grocery stores often found in small CBDs. It is important to consider what fits well into a CBD, a shopping center, or the broader community before locating a business. One convenient classification of CBD from small to large cities is shown in Table 1. The table indicates that a minimum convenience CBD serves a population of up to 1,000. This type of CBD may include a café, a convenience or grocery store, a gas station, a bank, an auto repair business and a post office. Larger towns will have a

hardware store, a florist, attorneys, a variety store, lumber yard and a library. One way to evaluate the downtown or any shopping district is to judge it using the following eight characteristics. Use a scale from one to five, with five being the best score, to evaluate a specific shopping location. Have area residents who shop locally complete the rating sheet. The results can then be presented to the local business owners and managers, city officials and others interested.

Compactness: Stores, banks, service businesses and government offices all fit tightly together. The downtown has a visual impact as a neatly laid out place.

Compatibility: When shopping, the layout of the town works well. Stores and offices are arranged in a way that minimizes shopping time. One type of business logically fits well next to another type.

Convenience: The town has parking in appropriate places. Curbs are cut for disabled people. The hours of stores and offices fit customer needs. The traffic patterns and roads in and out of downtown work well for traffic and cause no delays or irritation.

Coordination: Stores and offices work together so the downtown functions as a coordinated shopping center. Hours, advertising, sales days and overall attitudes are harmonized among all the businesses and offices in the downtown.

Cleanliness: The downtown is well kept. Streets and sidewalks are clean. Display windows are neat and attractive. Paint is fresh on storefronts. The downtown appearance is fresh and well cared for.

Courteousness: The sales people and office personnel who meet the public are pleasant and helpful. These people are trained in customer relations and salesmanship. Also, they are well informed on what the town has to offer a visitor who wishes to eat, shop, recreate or conduct other business in the area.

Colorfulness: The downtown is an interesting place to shop. Banners wave and store facades and window displays attract attention. Festivals and other events happen regularly in the downtown.

Creativity: The downtown has an original, interesting and attractive atmosphere. Individual and collective creativity is apparent. The downtown community is dedicated to the common effort of creating a vibrant place.

Trends Affecting Central Business Districts

In addition to knowledge of the CBD structure, the important

Table 1. Classification of CBDs in Kansas

Level	Typical Population Served
Minimum Convenience	under 1,000
Full Convenience	1,001–2,499
Partial Shopping	2,500–5,000
Complete Shopping	5,001–10,000
Wholesale–Retail	10,001–49,999
Major Regional Center	50,000+
Central City (Metro)	150,000+

¹ This publication is based on "Estimating Retail Market Potential" prepared by Timothy O. Borich and the Cooperative Extension Service, Iowa State University, Ames, IA. Revised May 1985 (Pm-1149g).

Table 2. Shopping Patterns in 23 Small Kansas Communities

Product	Average Percent Bought Locally	Number of Communities Surveyed	Prime Motivation	Second Motivation
Shoes	20.4	23	selection	price
Clothes for children	25.7	23	price	selection
Clothes for men	26.6	23	selection	price
Clothes for women	27.3	23	selection	price
Sporting goods	33.4	23	selection	price
Discount/variety items	40.0	9	price	selection
Books and magazines	42.7	19	convenience	selection
Furniture	43.0	23	selection	convenience
Crafts products	44.9	13	selection	convenience
New and used vehicles	46.9	23	convenience	price
Electrical appliances	54.5	23	convenience	price
Optometrist's services	56.9	16	convenience	service
Restaurant meals	61.9	23	convenience	selection
Photography	61.9	10	convenience	price
Dental services	64.1	23	convenience	service
Over-the-counter-medicine	68.4	17	convenience	price
Lawn and garden products	64.2	12	convenience	price
Physician's services	69.7	23	convenience	service
Accounting/bookkeeping	70.2	18	convenience	service
Tobacco products	70.4	13	convenience	price
Groceries	71.7	23	convenience	price
Auto and truck parts	72.4	21	convenience	price
Lumberyard products	73.1	23	convenience	price
Prescription medicine	75.1	22	convenience	price
Hardware items	75.6	23	convenience	price
Vehicle repairs	75.8	23	convenience	service
Insurance	78.6	23	convenience	service
Florist	79.9	10	convenience	service
Agricultural inputs	79.9	17	convenience	service
Alcoholic beverages	81.1	13	convenience	price
Hair care	82.6	21	convenience	service
Banking services	85.4	21	convenience	service
Fuel for vehicles	87.8	19	convenience	service
Plumbing services	89.6	12	convenience	service
Source: Darling and Tan, "Retail Trade Patterns of Rural Kansans," <i>CHOICES</i> , 1990.				

trends affecting these CBDs are worth considering. In Kansas, the trends affecting small and large CBDs have been dramatic. In our largest cities, the CBDs have lost department stores to suburban malls. In the smallest communities, drug stores and clothing stores have shut down forcing people to go to the county seat town or a regional mall to shop. New businesses such as convenience stores and fast food franchises are being established. However, they are not locating downtown. Instead,

they locate on the nearest highway to capture the trade from highway traffic.

On the other hand, vacant buildings in the downtown of Kansas's small cities are deteriorating while the CBD buildings in our larger cities are converted to specialty stores, professional offices and other service-business uses.

The more general trends that influence consumer patterns and retail businesses include:

- Technology such as shopping on the Internet;

- Population changes such as the aging factor and cultural diversity;
- Income changes due to changes in employment opportunities or markets for primary products such as oil, gas, timber and hogs;
- Natural resources supply changes such as ground water or timber stands;
- Changes in laws such as legalizing casino-style gambling;
- Changes in institutions such as new branch banking arrangements;
- Changes in consumer tastes and preferences;
- Changes in competition such as the introduction of new supersized stores.

Knowing these trends will help individual businesses avoid expensive mistakes.

Shopping Patterns

Outshopping patterns are documented in Table 2 and highlighted in Figure 1. Interesting findings from the Kansas shopping patterns surveys in 23 small towns include the following:

1. People shop at home for products based on a motivation of convenience.
2. People shop away from their hometown based on a motivation of selection and price.
3. Few categories listed in Table 2 are bought for the primary motivation of price; however, variety and discount store items include a large assortment of products.
4. More **services** are bought locally than away from town and all products bought out of town listed in Table 2 are **goods**. Figure 1 illustrates this pattern.

The implications and specific techniques used in applying market analysis in community economic development are considered in the case study example below.

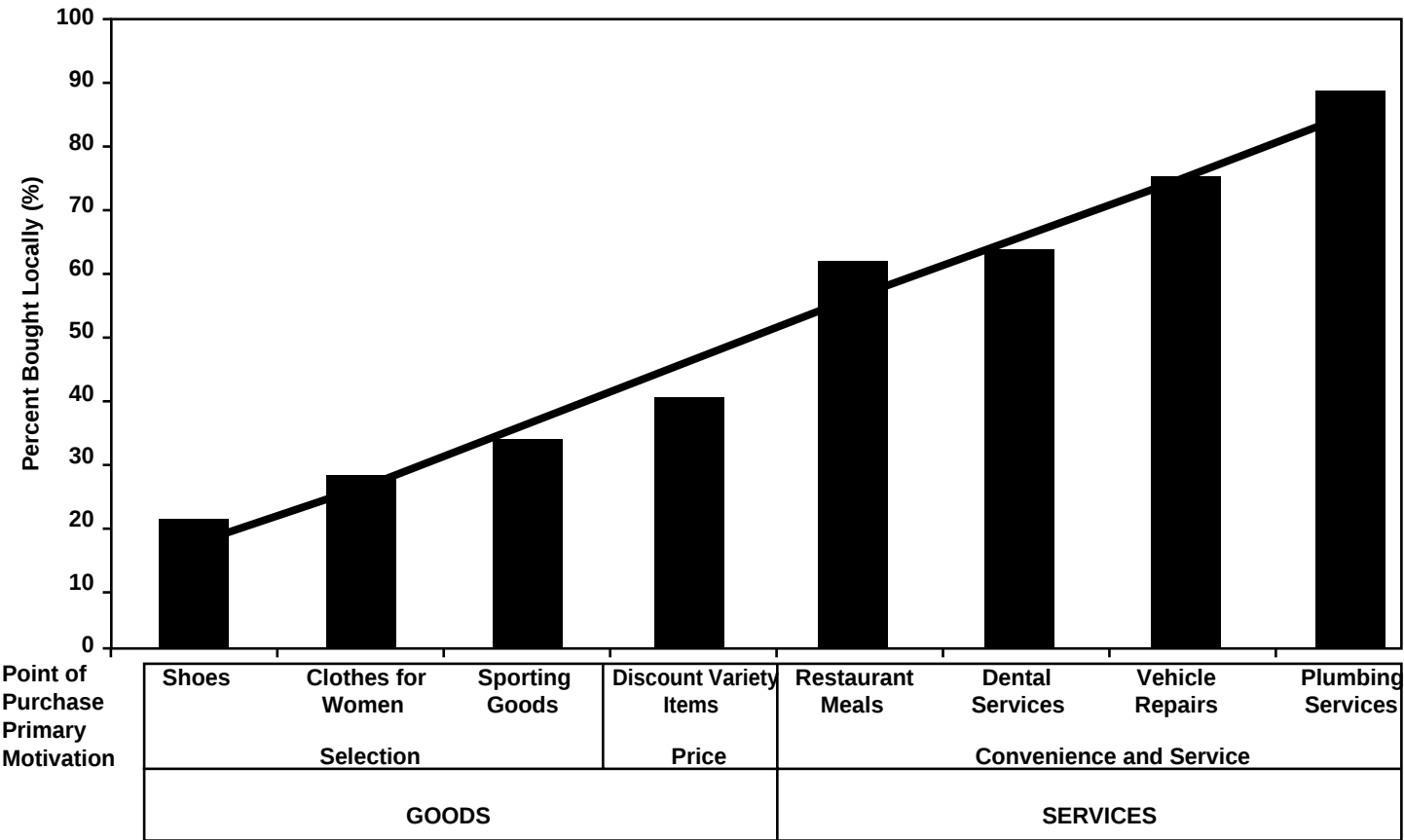


Figure 1. Shopping Patterns in Small Towns (Under 11,000)
Source: Darling and Tan, "Retail Trade Patterns of Rural Kansans," Choices, 1990.

Case Study

A person calls from a community in a non-metropolitan county. He discussed the details of starting a new business in a small town.

- The business venture—Auto Parts Store
- The location—A city with a population of 5,909 people

It is the largest city in the county. The county population is 12,674. There is **one** other auto parts shop in the city. There also is one in the next largest town, 10 miles to the east, and another in a smaller town, 20 miles south.

Calculating the Market Area

The basic variables used to analyze a market are the population numbers, trade pull factors, trade area capture estimates, local competition and the leakage factor. Certain types of businesses need a large population base, while others can survive with a small one. For example, firms providing hair care services such as barbers and beauty salons need a smaller population base than specialty retailers selling sporting goods.

The simplest way to show how all these variables fit together is to put everything into mathematical terms. Worksheet A illustrates how the computations are made.

Formulas for Analysis

1. $TAC_i = (PF_i) \cdot (POP_i)$
2. $\% CAP_j = \text{function of LB and CB}$
3. $TP_i = (TAC_j) \cdot (PCAP_b)$
4. $TS_j = (\% CAP_j) \cdot (TP_i)$
5. $MKTS_j = (TAC_j) \cdot (\% CAP_j)$

Where:

TAC_i = Trade Area Capture by the community of businesses in community i

PF_i = Pull Factor of community i

POP_i = Population of community i

$\% CAP_j$ = Percent of trade potential that can be captured by firm j

L_b = Leakage Factor of products sold by business type b
(See Table 3)

C_b = Competition among local businesses of type b

TP_i = Trade Potential in community i in dollars

$PCAP_b$ = Per Capita Sales in business type b (See Table 2)

TS_j = Total Gross Sales of firm j in dollars

$MKTS_j$ = Market Share Projection for firm j in number of customers

Additional information:

1. Pull Factor for the city is 1.10.
2. The Trade Area Capture for the city is 6,500 ($1.10 \times 5,909$)

3. Per Capita Sales by auto parts stores are \$176 per year. (See Table 3)
4. Typical annual taxable sales per auto parts firm is \$338,653. (See Table 3)
5. Typical population served by auto parts stores is about 1,929 in Kansas.
6. Average percent of auto parts purchases made locally by local residents is 72.4%. (See Table 2)
7. The prime motivation to buy locally is convenience and the next major reason is price. (See Table 2)

Question:

Does this business opportunity look promising? See analysis on worksheet A on page 4.

Develop a Market Plan

This publication has covered the important factors of community population, trade area capture and leakage, trends affecting the businesses located in central business districts, and per capita expenditures. A successful marketing strategy also must consider many other components, such as pricing and advertising.

First, define the business. What is being sold, for example, flowers or a service to convey one person's feelings toward another? Next, identify the customers and then target this group. Set gross sales goals, market share goals, and profit goals. Without a detailed marketing plan there is no basis on which to evaluate the performance of a business.

For more information on the subject, see the resources below.

1. Your nearest Small Business Development Center
2. A state Extension specialist in community economic development
3. **The Official Guide to Household Spending** by Margaret Ambry, New Strategist Publications and consulting, P.O. Box 242, Ithaca, NY 14851 or (607) 273-0913 (1993).
4. **Rural Retailers: A Profile of High-Profit, Medium-Profit and Low-Profit Firms** by Brenda Sternquist et al., a North Central Regional Extension Publication, Michigan State University, NCR 555, 1995.
5. **Community Trade Analysis Handbook** by Dean A. Bangsurd et al., Department of Agricultural Economics at North Dakota State University, Extension Publication No. 24, 1995.
6. **A Retail Trade Series** of publications by Wayne Williams, University of Arkansas, Little Rock, University Cooperative Extension Service.
7. **Community Economic Analysis: A How To Manual** by Ron Hustedde, Ron Shaffer and Glen Pulver, North Central Regional Center for Rural Development, Iowa State University, 1993.

Worksheet—A

EXAMPLE

Type of Business: Auto Parts			*	Owner(s) Mr. & Mrs. Jones	
1. TAC_i	=	(PF_i)	×	(POP_i)	
<u>6,500</u>	=	<u>1.10</u>	×	<u>5,909</u>	
2. $\%CAP_j$	=	Function of L_b and C_b			
<u>30%</u>	=	(Best judgement)			
3. TP_i	=	(TAC_i)	×	$(PCAP_b)$	
<u>\$1,144,000</u>	=	<u>6,500</u>	×		<u>\$176</u>
4. TS_j	=	$(\%CAP_j)$	×	(TP_i)	
<u>\$343,200</u>	=	<u>30%</u>	×	<u>\$1,144,000</u>	
5. $MKTS_j$	=	$(\%CAP_j)$	×	(TAC_i)	
<u>1,950</u>	=	<u>30%</u>	×	<u>6,500</u>	

Date: January 18, 1999

Community: County Seat Town

Advisor: Beverly Wong

* The newest city and county trade pull factors are posted on the World Wide Web>www.agecon.ksu.edu/ddarling>

ANALYZING LOCAL MARKETS

Worksheet—B

Type of Business: _____				Owner(s): _____	
1. TAC_i	=	(PF_i)	×	(POP_i)	
_____	=	_____	×	_____	
2. $\%CAP_j$	=	Function of L_b and C_b			
_____	=	(Best judgement)			
3. TP_i	=	(TAC_i)	×	$(PCAP_b)$	
_____	=	_____	×	_____	
4. TS_j	=	$(\%CAP_j)$	×	(TP_i)	
_____	=	_____	×	_____	
5. $MKTS_j$	=	$(\%CAP_j)$	×	(TAC_i)	
_____	=	_____	×	_____	

Date: _____

Community: _____

Advisor: _____

Table 3. Businesses in Kansas with Paid Employees, Selected Ratios for the Period July 97–June 98

Business Classification	Number of Reporting Firms	Taxable Sales FY 1998	Per Capita Sales	Estimation of sales/firm	Typical No. of Customers
Grocery Stores & Convenience Stores	1,891	3,357,424,374	1,291	1,775,476	1,375
Autos, & Other Vehicles	2,042	3,191,529,348	1,228	1,562,943	1,273
Department Stores	333	2,985,648,203	1,148	8,965,911	7,808
Restaurants & Cafeterias	4,930	1,791,159,918	689	363,318	527
Variety Specialty Stores	10,667	1,231,620,011	474	115,461	244
Vehicle Repairs & Small Engines	5,440	901,967,636	347	165,803	478
Building Material Dealers	697	878,390,953	338	1,260,245	3,730
Plumbing, Heating & Air Conditioning	2,833	746,992,304	287	263,675	918
Rentals & Leases	1,747	685,950,957	264	392,645	1,488
General Stores	155	653,192,788	251	4,214,147	16,774
Office Equipment, & Computers	1,130	536,548,058	206	474,821	2,301
Electronics & Music Stores	2,025	532,189,197	205	262,809	1,284
Furniture & Home Furnishings	1,250	504,256,970	194	403,406	2,080
Lunch Rooms & Taverns	1,670	485,295,980	187	290,596	1,557
Auto Parts & Tires	1,348	456,504,444	176	338,653	1,929
Motels & Hotels	816	340,797,513	131	417,644	3,186
General Building Contractors	2,698	333,238,932	128	123,513	964
Service Stations	1,264	327,535,318	126	259,126	2,057
Hardware, Paint, Oil, Varnish & Glass	652	266,434,102	102	408,641	3,988
Drug Stores & Medical Supplies	1,068	206,897,367	80	193,724	2,434
Sporting Goods, & Alike	1,235	204,650,526	79	165,709	2,105
Women's Clothes	495	164,620,597	63	332,567	5,253
Shoes & Boot Stores	224	146,861,393	56	655,631	11,607
Paint, Glass & Wallpaper	798	143,695,899	55	180,070	3,258
Electrical Equipment Supplies	291	129,659,355	50	445,565	8,935
Jewelry Stores	543	129,122,711	50	237,795	4,788
Household Appliances & Repairs	532	125,656,937	48	236,197	4,887
Laundry & Other Cleaners	482	99,716,931	38	206,882	5,394
Photographers, Cameras, & Graphic Arts	947	99,389,604	38	104,952	2,746
Second-Hand Stores	1,410	87,202,488	34	61,846	1,844
Bakeries & Dairy Products	422	51,605,491	20	122,288	6,161
Men's Clothes	252	44,687,874	17	177,333	10,317
Cigar Stores & Smoker Supplies	75	29,933,797	12	399,117	34,667
Dry Goods Stores	168	24,773,250	10	147,460	15,476
Candy & Confectionery	116	18,753,060	7	161,664	22,414
Luggage & Leather Goods	42	5,598,251	2	133,292	61,905
Fruit Stands	148	5,459,028	2	36,885	17,568
Shoe Repairs	94	4,185,711	2	44,529	27,660
State Population 2.6 million					

Dr. David Darling and Sara Logan, K-State Research and Extension. February 8, 1999

Publications from Kansas State University are available on the World Wide Web at: <http://www.oznet.ksu.edu>

Contents of this publication may be freely reproduced for educational purposes. All other rights reserved. In each case, credit David L. Darling,
Building Healthy Communities—Analyzing Local Markets, Kansas State University, September 1999.

Kansas State University Agricultural Experiment Station and Cooperative Extension Service

L-745

September 1999

It is the policy of Kansas State University Agricultural Experiment Station and Cooperative Extension Service that all persons shall have equal opportunity and access to its educational programs, services, activities, and materials without regard to race, color, religion, national origin, sex, age or disability. Kansas State University is an equal opportunity organization. Issued in furtherance of Cooperative Extension Work, Acts of May 8 and June 30, 1914, as amended. Kansas State University, County Extension Councils, Extension Districts, and United States Department of Agriculture Cooperating, Marc A. Johnson, Director.