



Blueprints for Economic Development

A NEWSLETTER FOR COMMUNITY LEADERS
FROM THE COOPERATIVE EXTENSION SERVICE,
OKLAHOMA STATE UNIVERSITY

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Threshold Analysis Made Easy

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Most people know that a town's population must reach a certain level before a McDonald's will locate in that community. McDonald's marketing specialists are using a technique referred to as *threshold analysis* to make these decisions. The concept is simple. The restaurant needs a sizeable market to be profitable.

If this kind of analysis works for fast food restaurants, it stands to reason that it would apply to other kinds of businesses as well. Next time you drive through a small town, take a look at the business mix. You will probably notice that even a small town of 3,000 people has 5 or 6 beauty or barber shops, 1 or 2 florists, a small grocery store, and a couple of antique shops. The small town probably will not have a furniture store, a shoe store, or a music/CD store. To be successful, different kinds of businesses need to have different size markets. Beauty shops do not require large market areas, but music stores do.

Dr. Kenneth Stone, professor of economics and an extension economist at Iowa State University, has worked for many years in the field of retail trade and community development. Stone, along with his colleague, Georgeanne Artz, has developed a fairly simple way to estimate how large a market needs to be for various types of retail establishments. They refer to this minimum market size as the *threshold level*. Stone and Artz define the threshold level for a type of business as the average number of people in the state per business.

For example, in 1997 Oklahoma's population equaled 3,314,259, and according to the 1997 Economic Census for Retail in Oklahoma, there were 1,137 food stores (both grocery and convenience stores.) Thus, in 1997 there were 2,915 people per store in Oklahoma. This is actually very close to what Stone and Artz found in Iowa. For Iowa in 1999, the threshold level for food stores was 2,869.

By using threshold levels as a general guide, it is possible to predict how many businesses of a certain type a community might support. Small towns can generally support several restaurants, which have a threshold of about 354. A camera and photographic equipment store, on the other hand requires a market of about 55,000.

Some of you may be interested in starting a new business or expanding your current business into other product lines. If

so, consider the following threshold levels as reported by Stone and Artz for Iowa in various categories. Is your community missing anything that it could possibly support? By the way, the Census 2000 population for all cities and towns in Oklahoma may be found at www.census.gov the Census web site. Keep in mind that the realistic market area for your town may actually be larger than the city limits, and may even include the entire county.

Threshold Levels for Iowa-1999

Restaurants/Taverns/Bars	354
Beauty/Barber Shop	442
Used Merchandise Store	688
General Automotive Repair	1,097
Sporting Goods	1,097
Clothing/Accessory Stores	1,614
Automotive Parts & Accessories	1,642
Plumbing/Heat & Air	1,684
Stationary/Gift/Novelty	1,837
Gas Station/Convenience Store	2,138
Photographic Studio	2,435

Editor's Note

This newsletter provides current information on rural economic development issues facing Oklahoma leaders. The audience includes Cooperative Extension Service staff and others such as city or county officials and employees, chamber of commerce members and staff, and business and community leaders.

Published four times a year, *Blueprints* includes brief articles on rural economic development (for example, success stories or informational articles); a list of publications, videotapes and other educational materials; and announcements for future conferences and meetings. Suggestions for articles and announcements are welcome.

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Electrical Contractors	2,518
New & Used Car Dealers	2,590
Hotel/Lodging Places	2,771
Printing and Related Businesses	2,834
Food Stores	2,869
Book and Stationary Store	3,116
Home Center/Builder Supply	3,315
Florists	3,507
Coin-Operated Laundry	3,796
Furniture Store	4,026
Jewelry Store	4,083
Lawn and Garden	4,286
Car Wash	4,312
Drug Store	4,789
Hardware Store	5,315
Funeral Services	6,073
Veterinary Services	6,138
Music Store	6,812
Shoe Store	10,122
Department Store	11,282
Dry Cleaning/Laundry Service	11,893
Watch, Clock, Jewelry Repair	35,239
Camera Store	54,891

According to Stone and Artz, the threshold levels mentioned above should be used as a general guide in determining how many businesses a town can support. For instance, it would probably be very risky to open a shoe store in a town with a population of 500; however, the same town could support a beauty or barber shop, but not more than one or two. Also, there are always exceptions to any "rule." A highly successful

watch, clock, and jewelry repair store may be located in a town of 2,500. In general, stores that buck the trend in this way are usually well established, well-operated and have usually been around for a long time.

If you are interested in finding out more about threshold levels, or would like more information about Kenneth Stone, visit www.econ.iastate.edu/faculty/stone/ Iowa State University's web site. The threshold limits listed above were not intended to serve in place of sound market analysis, but instead were designed to give you some "food for thought." Enjoy.

Reference:

Stone, Kenneth E. and Artz, Georgeanne M. "Threshold Levels for Selected Retail & Service Businesses in Iowa 1998-1999." Iowa State University Extension: Ames, IA. http://www.econ.iastate.edu/faculty/stone/Fi_thres98.pdf

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