

# Determining the Market for Your Goods & Services

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## Determining the Market for Your Goods and Services

One of the most common mistakes of new business people is not determining the potential sales for their goods and services. People typically start new businesses because they perceive a need for the goods or services to be offered. Usually they are right. There is a need, but the need may not be strong enough to generate sufficient sales for a decent profit for the owner.

There are ways to estimate potential sales for various goods and services. These estimates can be fairly precise for many of the businesses typically found in business districts. However, for many in-home businesses, accurate estimates of expected sales are more difficult to achieve. Still, "ball park" estimates are possible and are usually better than no estimate.

### The Starting Point - Population

The most important determinant of potential sales for a business is the population base for the area. The bigger the population base, the greater the potential sales. However, the competition with other business people is usually greater in more heavily populated areas. In rural areas, the competition is less, but so are the potential sales. The United States Census Bureau and some commercial firms provide us with fairly current population figures.

### Pull Factors

Trade area size varies for towns and cities according to population size. Trade area size also varies among merchandise groups according to population size. It is important to know the approximate size of your towns' trade area for your type of business. At Iowa State University, we have developed a measure of trade area size, called pull factor. Sales tax information from the Iowa Department of Revenue is used in computing pull factors.

Pull factors are based on the average expenditure by Iowans for various goods and services. For example, in fiscal year 1995 the average Iowan spent \$9,891.43 on retail goods and services. From this we can make a fairly accurate estimate of the retail expenditures of the residents of various size towns. For example, in a town of 2,500 population we could expect the residents to spend approximately \$24,728,575 ( $2,500 \times \$9,891.43$ ) on retail goods and services. If the town's actual sales are \$26,500,000, we can see that it probably sold goods and services to some people in the surrounding area. We can calculate the pull factor by dividing the actual town sales (\$26,500,000) by the expected sales of the town residents (\$24,728,575). In this case the pull factor is  $26,500,000 \div \$24,728,575 = 1.07$ . In simple terms, this means that the town is selling to the equivalent of all the townspeople plus 7 percent more, or in other words, to 107 percent of the

town population. In reality, not all the townspeople would make all their purchases in the town, but the pull factor is a fairly accurate measure of the relative trade area size (in terms of people).

Similarly, pull factors can be computed for merchandise groups or individual types of businesses. These vary by town size and merchandise group. For example, the home furnishings average pull factor for towns of 4,000-5,000 is 0.72 compared to 1.39 for towns of 20,000-40,000. A table at the end of this document lists average pull factors for various size towns and cities by merchandise group.

### Per Capita Expenditures

By using data from state sales tax reports, it is possible to calculate the average expenditure by Iowans in various types of stores. For example, in fiscal year 1995, the average Iowan spent \$28.81 in used merchandise stores. Obviously, some spent more than that; others spent less. However, using this average over a larger population yields a fairly accurate estimate of potential sales for a used merchandise store.

It is important to note that the per capita amounts are what people spend in a specific type of store. In the case of used merchandise, we know that many people purchase from garage sales, charity sales, friends, etc. The \$28.81 underestimates total used merchandise. It is the per capita amount actually purchased in used merchandise stores. This figure is very important in estimating potential sales.

### Income Levels

The income levels of people in an area play a role in their levels of expenditure. For example, in an area where incomes are high, average expenditures would probably be higher than in lower income areas. Generally, we can assume that the demand for higher quality merchandise is greater in a high income area compared to a low income area. At Iowa State University we have computed indices of income for all Iowa counties. They are calculated by dividing the county average income by the average state income. For example, in 1997 the effective buying income in Iowa was \$14,823. If County A had an average per capita disposable income of \$12,900, its index of income is  $\$12,900 \div \$14,823 = 87\%$ . In our market potential calculations, we would assume that County A residents would spend only 87% as much on retail sales as the average state resident.

### Expected Sales

For typical main street businesses and some in-home business, we can use the above information to estimate expected sales. The formula is:

$$\text{Expected Sales} = \left[ \frac{\text{Town}}{\text{Population}} \right] \times \left[ \frac{\text{Average}}{\text{Pull Factor}} \right] \times \left[ \frac{\text{Average Per Capita}}{\text{Expenditure}} \right] \times \left[ \frac{\text{Index of}}{\text{Income}} \right]$$

For example, assume that we want to calculate the potential sales for eating and drinking establishments in a town with a population of 3,525 in a county with a 87% index of income. The average pull factor for this merchandise group in this size town is 1.11, and average annual per capita expenditures are about \$741.

$$\text{Expected Sales} = 3,525 \times 0.98 \times \$741 \times .87 = \$2,227,012$$

In other words, we could say that expected sales are slightly above \$2.2 million. You then need to estimate what portion of the total market you can realistically expect to capture.

### Other Methods

Unfortunately, we do not have precise information on some smaller businesses. Estimating potential sales for these businesses sometimes requires ingenuity, common sense and conservativeness. For example, what kind of demand could you expect for home sewing? Since we do not have state per capita sales figures for home sewing, the task is more difficult. The following are some approaches that could be taken.

1. Estimate Per Capita Expenditures. Since many people do not have custom sewing done, the per capita average would be low. For example, the per capita expenditure would probably be less than \$10.00. If you assume the figure to be \$7.00 annually, you can estimate expected sales for a town of 3,525 as in the previous example. The pull factor for services would be 0.94. Therefore, expected sales would be:  $3,525 \times 0.94 \times \$7 \times .87 = \$20,180$ .
2. Common Sense Approach. Use your knowledge of the local area to make an estimate. For example, if you assume that most of your business will come from adult females, your reasoning could go like this: There are 3,525 people in town plus 475 in the surrounding area. Approximately one-fourth of these 4,000 people would be adult females, or 1,000 people. If you estimate that 40 percent of these people have custom sewing done, the last chore is to estimate how much each would spend on the average. If you assume the average expenditure to be \$50.00, potential sales would be:  $400 \times \$50.00 = \$20,000$ .

Survey of Customers. In cases where you have very little knowledge of business potential, a survey of the trade area can sometimes give fair results. It is preferable to have a disinterested party perform the survey rather than the prospective owner. This helps to eliminate bias on the part of both the interviewer and the respondent. There are several possibilities for interviewers. For example, a high school business class, a community college business student, a college student for a special project or other capable local people. Typically, surveys are performed by mail,

telephone, or in person. The sample of the population can be drawn from telephone directories, plat books, etc. It is best to consult someone knowledgeable about surveying before starting. Your county Extension director can put you in touch with such a person.

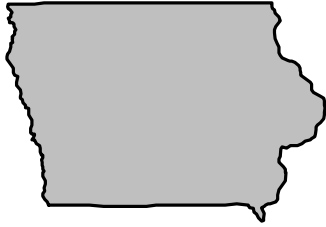
4. Average Number of Businesses. A recent study at Iowa State University determined the average number of businesses of various types for different size towns. By comparing your town's number of firms to the average, you can get a rough idea of the feasibility of your business. You might also be able to do some of your own research by consulting phone books or other directories. This will provide insight regarding your potential competition.

### *In the Final Analysis*

Fortunately, many businesses that are service oriented attract about as much business as the owner alone can handle. On the other hand, businesses that sell merchandise encounter much more market uncertainty .

The following guidelines are offered for small businesses:

1. Deal in unique products or services that are needed (in *demand*) in your community.
2. Go light on inventory until you are more familiar with demand.
3. Keep overhead low. This is the main advantage of small businesses over larger businesses.
4. Use effective, but inexpensive, advertising techniques such as notices on community bulletin boards, small ads in Shoppers or Advertisers, word-of-mouth, etc.
5. Above all, cater to the wants and needs of your customers.



**1998 Index of  
Income for Iowa  
Counties**

*This index is calculated by dividing county per capita income by state per capita income. It is a relative measure of income, with the base being 100. For example, if the index number is 120.0, it indicates that per capita income in the county is 20 percent above average.*

<u>COUNTY</u>	<u>INDEX #</u>	<u>COUNTY</u>	<u>INDEX #</u>
Adair	90.8	Jefferson	88.4
Adams	92.3	Johnson	113.4
Allamakee	80.2	Jones	82.5
Appanoose	77.4	Keokuk	87.8
Audubon	95.9	Kossuth	84.6
Benton	92.7	Lee	88.7
Black Hawk	98.5	Linn	113.5
Boone	96.9	Louisa	104.4
Bremer	97.2	Lucas	76.7
Buchanan	89.2	Lyon	83.1
Buena Vista	90.1	Madison	94.2
Butler	96.4	Mahaska	91.5
Calhoun	96.7	Marion	96.3
Carroll	91.2	Marshall	102.9
Cass	83.0	Mills	90.0
Cedar	100.7	Mitchell	87.8
Cerro Gordo	100.0	Monona	96.9
Cherokee	92.3	Monroe	87.6
Chickasaw	89.3	Montgomery	94.9
Clarke	85.0	Muscatine	104.3
Clay	90.3	O'Brien	83.0
Clayton	75.2	Osceola	84.1
Clinton	96.5	Page	90.1
Crawford	90.8	Palo Alto	90.0
Dallas	111.0	Plymouth	96.7
Davis	86.1	Pocahontas	91.3
Decatur	64.6	Polk	120.6
Delaware	87.2	Pottawattamie	92.5
Des Moines	97.8	Poweshiek	95.6
Dickinson	103.6	Ringgold	72.6
Dubuque	96.8	Sac	98.8
Emmet	85.2	Scott	102.7
Fayette	81.6	Shelby	90.7
Floyd	90.8	Sioux	86.7
Franklin	98.8	Story	98.2
Fremont	86.6	Tama	99.6
Greene	94.3	Taylor	78.1
Grundy	116.7	Union	81.2
Guthrie	87.5	Van Buren	83.5
Hamilton	85.3	Wapello	86.1
Hancock	100.8	Warren	103.7
Hardin	99.1	Washington	91.1
Harrison	102.8	Wayne	74.6
Henry	100.5	Webster	94.9
Howard	84.9	Winnebago	79.3
Humboldt	97.0	Winneshiek	87.0
Ida	99.9	Woodbury	107.8
Iowa	108.9	Worth	88.5
Jackson	82.7	Wright	84.3
Jasper	101.6	<b>State</b>	<b>100.0</b>

# State of Iowa Per Capita Taxable Retail Sales & Threshold Levels for Selected Goods and Services

FY98: April 1, 1997 to March 31, 1998

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*Threshold level* refers to the number of *people per business*, which can be used as a general guide for determining the "critical mass" necessary to support a business. These are broad averages for the state as a whole and do not reflect differences in income, tourism, agglomeration, establishment, etc. Further, the business counts are based on the number of sales tax returns filed and are converted to "full-time equivalents." Multiplying *people per business* by *sales per capita* yields average sales per firm.

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<i>Business Activity / Store Type</i>	<i>People Per Business</i>	<i>Sales Per Capita</i>
<b>Utilities &amp; Transportation Group</b>		
Communication Utilities	4,047	\$336.86
Electric & Gas Utilities	5,429	\$766.61
Water & Sanitation Utilities	3,012	\$108.93
Transportation Companies	3,352	\$30.28
<i>Utilities Group Total</i>		\$1,242.68
<b>Building Materials Group</b>		
Building Material Dealers	3,566	\$423.53
Paint & Glass Stores	17,041	\$22.81
Hardware Stores	5,658	\$91.34
Garden Supply Store	6,558	\$21.73
Mobile Home Dealers	57,956	\$1.39
<i>Building Materials Group Total</i>		\$560.80
<b>General Merchandise Group</b>		
Department Stores	13,432	\$776.74
Variety Stores	16,790	\$162.43
Misc. General Merchandise Stores	1,817	\$267.86
<i>General Merchandise Group Total</i>		\$1,207.03
<b>Food Dealers Group</b>		
Grocery Stores	3,009	\$405.73
Meat & Fish Markets	71,807	\$0.24
Fruit & Vegetable Markets	104,746	\$0.15
Confectionary Stores	30,528	\$3.36
Dairy Product Stores	42,444	\$4.12
Bakeries	14,009	\$2.55
Miscellaneous Food Stores	16,451	\$8.68
<i>Subtotal</i>		\$424.83
<i>X Adjustment for Untaxed Items</i>		3.2
<i>Food Group Total</i>		\$1,359.45
<b>Motor Vehicles Group</b>		
Automobile Dealers	3,356	\$134.19
Automobile Parts	2,098	\$152.58
Gas Stations	2,131	\$117.67
Recreational Vehicles	7,026	\$37.59
<i>Motor Vehicles Group Total</i>		\$442.03

<i>Business Activity / Store Type</i>	<i>People Per Business</i>	<i>Sales Per Capita</i>
<b>Apparel Group</b>		
Men's & Boys' Apparel Stores	27,645	\$16.02
Women's Apparel Stores	5,537	\$73.17
Family & Children's Apparel Stores	6,047	\$79.46
Shoe Stores	10,286	\$41.59
Other Apparel Stores	7,319	\$17.22
<i>Apparel Group Total</i>		<u>\$227.47</u>
<b>Home Furnishings &amp; Appliances Group</b>		
Furniture Stores	4,689	\$117.53
Home Furnishings Stores	5,016	\$53.42
Appliance, Entertainment Equipment Stores	1,999	\$185.57
<i>Home Furnishings Group Total</i>		<u>\$356.53</u>
<b>Eating &amp; Drinking Places Group</b>		
<i>Eating &amp; Drinking Group Total</i>	410	\$798.76
<b>Specialty Retail Stores Group</b>		
Drug Stores	5,225	\$84.68
Liquor Stores	28,687	\$11.62
Used Merchandise Stores	1,157	\$30.56
Sporting Goods Store	1,678	\$73.02
Books & Stationery Stores	4,894	\$50.56
Jewelry Stores	5,732	\$54.59
Hobby & Toy Stores	708	\$59.25
Gift & Novelty Stores	2,829	\$99.73
Mail Order Stores	18,326	\$7.42
Vending Machines	6,890	\$22.01
Direct Selling	1,936	\$23.81
Fuel & Ice Dealers	12,330	\$20.87
Florists	4,805	\$24.78
Other Specialty Shops	758	\$152.14
<i>Specialty Group Total</i>		<u>\$715.02</u>
<b>Services Group</b>		
Finance, Insurance and Real Estate	3,173	\$40.91
Hotels & Other Lodging Places	2,977	\$154.05
Laundry & Cleaning	2,750	\$43.57
Photographic Studios	3,886	\$19.71
Beauty Shops	554	\$67.28
Barber Shops	3,595	\$8.67
Shoe Repair Shops	34,390	\$1.28
Funeral Homes	6,487	\$28.98
Other Personal Services	2,107	\$25.05
Building Maintenance	2,556	\$33.27
Employment Agencies	25,657	\$14.44
Other Business Services	1,014	\$174.46
Automobile Rental & Storage	10,314	\$26.92
Automobile Repair & Services	599	\$202.56
Electrical Repair	3,530	\$29.95
Watch, Jewelry Repair	53,352	\$1.04
Furniture Repair	4,704	\$4.19



<i>Business Activity / Store Type</i>	<i>People Per Business</i>	<i>Sales Per Capita</i>
Miscellaneous Repairs	926	\$85.09
Motion Picture Theaters	18,356	\$19.67
Amusement Parks & Services	1,446	\$108.91
Education Institutions	17,729	\$11.91
Other Services	1,936	\$96.17
<i>Services Group Total</i>		<u>\$1,198.10</u>
<b>Wholesale Goods Group</b>		
Motor Vehicle	11,238	\$28.32
Furniture & Home Furnishings	113,043	\$2.30
Construction Material	2,091	\$269.94
Farm & Construction Machinery	1,004	\$382.90
Miscellaneous Durable Goods	12,397	\$17.29
Apparel, Piece Goods	131,234	\$0.70
Groceries & Farm Products	13,199	\$22.46
Miscellaneous Nondurable Goods	1,323	\$148.89
<i>Wholesale Group Total</i>		<u>\$872.81</u>
<b>Miscellaneous Group</b>		
Agriculture Production & Services	1,237	\$60.69
Mining	14,694	\$25.32
General Contractors	1,762	\$74.98
Plumbing & Heating Contractors	1,899	\$87.78
Painting Contractors	4,238	\$10.21
Electrical Contractors	3,052	\$53.88
Carpentry Contractors	4,474	\$20.04
Other Special Trade Contractors	2,407	\$86.38
Food Manufacturers	14,218	\$13.02
Apparel & Textile Manufacturers	67,161	\$3.29
Furniture, Wood, & Paper Manufacturers	7,074	\$36.42
Publishers of Books & Newspapers	12,602	\$7.72
Commercial Printers	4,763	\$50.72
Nonmetallic Product Manufacturers	7,591	\$61.75
Industrial Equipment Manufacturers	3,344	\$89.12
Miscellaneous Manufacturers	9,851	\$18.62
Temporary Retailers	2,928	\$12.78
<i>Miscellaneous Group Total</i>		<u>\$712.74</u>
Other		\$115.00
<i>Total</i>		\$8,873.80
<i>X Adjustment for Untaxed Items</i>		<u>1.15</u>
<b>Grand Total</b>		<u><u>\$10,204.87</u></u>