

## Application: Retail Site Location

- **Age Report** – 1990, current-year estimates and five-year projections of population by age, sex, and percentage of population.
- **Household Trend Report** – combines data from the 1980 Census, the 1990 Census, and Claritas' annually updated estimates and projections. It includes population, households, families, housing units, group quarters population, household size, and various income variables. This report also includes percentage change (%Chg) columns, showing the rate of growth or decline in a variable between two points in time.
- **Demographic Overview Report** – provides a wide variety of demographic information, including income, education, industry, occupation, units in structure, year built, year moved into unit, vehicles, transportation to work, and travel time.
- **Shopping Center Report** (short) – provides selected data for each shopping center, along with a Shopping Center Summary for the report area.
- **Marketview Comparison Report** – 1990, current-year estimates and five-year projections for selected population, household, income, and housing characteristics in comparison format.

### 1. Age Report... Bulk Mail 55+... Hearing Aids



### 2. Household Trends... beyond "bricks and mortar"... ...e-commerce...



## Markets and Geography

The examples of marketing reports for "Retail Site Location" are case studies of the importance of geography in marketing. In each case, whether you are looking at an Age Report or at the Shopping Center Report... it is not enough to know what percent of the population is under 5 or over 55, you also need to know where those groups are located. Similarly, if you are a developer, knowing what competition for retail space is nearby is critical to the potential success of your project.

In the case of the Age Report... imagine that you are a maker of hearing aids. By far the largest potential customer base for your product is folks who are 55 years old or older – the age group where many people begin to experience some level of hearing loss. The darker green areas on the map at left show zip code areas where there are larger percentages of people who are 55+. The lightest ones show areas where there are very few older residents. If you are mailing information out, it would be better to target only the 2 or 3 darkest shaded zip codes... the cost of printing, paper and postage would be wasted in the other zip codes (yes, there are probably people in those areas that could use hearing aids, but the return on your investment would be very, very low.

In the case at left of "Household Trends"... this might be a report that a developer might use when considered the best location for a new shopping center. The darkest green areas on this map show the highest percentages of households that use online shopping for more than 50% of their shopping needs. Those areas would probably not be good places to site new retail space... the residents of those areas may not go there very often. This is an increasing problem even for existing shopping centers as "e-commerce" has made significant gains in market share for many of the things we buy that we do not feel like we need to see, touch or try on.

## Market Principles

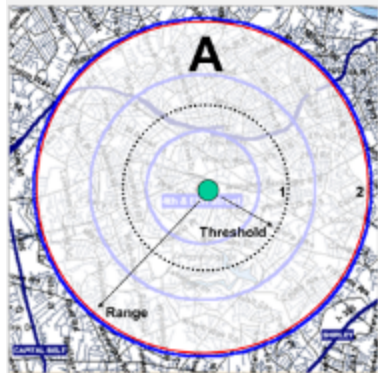
- **Central Place Function:** A good or service that a central place provides.
- **Range:** The maximum distance people are willing to travel to obtain a central place function.
- **Threshold:** The minimum market size needed to support a central place function.



There are three key elements to markets... the goods and services we sell and buy (called Central Place Functions), how far we are willing to go to get something (Range), and how many people a seller needs in order to sustain a profitable business (Threshold).

Anything that can be sold (or bartered) is a Central Place Function. Some are inexpensive, everyday items (paper towels, bananas, coffee), some are “fairly regular” and a bit more expensive purchases (gas, pizza, “weekly” grocery items), and some are expensive, “luxury goods” that we buy only very occasionally (cars, computers, real estate lawyers)... and, of course, there is a whole range from low to high.

A store selling the lowest “central places functions” has to be able to have its threshold population very close by (most of us aren’t willing to go very far for this stuff). If that store is located where the red dot on the map is, people looking for those services may only be willing to travel in the area inside the “1” circle. A real estate lawyer helping you close on a new home needs a larger population to support that service, but we are also willing to travel a greater distance to get a lawyer we like. People looking for those services might be willing to travel from the area bounded by the “3” circle in this case.

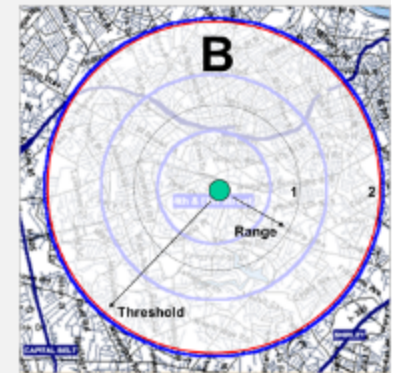


At LEFT: To think about... the green dot is where the good or service is offered...

A. If people are willing to drive from the area bounded by the “2” circle, and, there are enough people to support that business inside the “1” (or “2”) circle... that business’s chances of success are good – in this case, the threshold population is greater than the range...

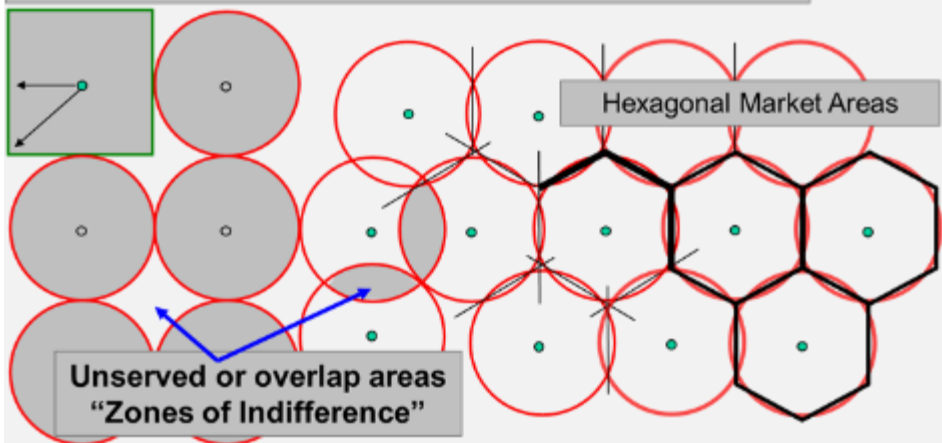
...but...

B. If people are willing to go only as far as from the area inside the “1” circle, but the number of people one would need has to include everyone in the area inside the “2” circle, then chances of success aren’t very good – because the threshold population is not found within the range of that good or service.



The section of the text that describes Central Place Theory deals with the idea that we want to be able to create “markets” that we can reliably measure – and, specifically, reliably measure how consumers of goods and service will behave. The “packing problem” can be broken down into 3 majors issues:

**The “packing” problem... How do you cover the land, evenly, with a fair representation of markets?**



- A. “Square” markets don’t really work because the distance from to the market is not equal for the consumer who lives at the middle of one side compared to the consumer who lives in one of the corners. This means we could not apply the rules of threshold and range properly.
- B. “Circular” markets would seem like the best choice, as everyone at the edge of the circle is the same distance to the market... but...
  1. If the circular markets don’t overlap, then we have “unserved” areas – the blank areas between where the circles touch are too far away (beyond the range) ...*or...*
  2. If the circular markets do overlap, then we have consumers who are “indifferent” – they are within the range of two or more markets. This affects estimating the threshold.

The idea of using hexagonal market areas eliminates the “unserved” or “indifferent” consumers, and minimizes the range problem – the difference is distance from the middle of a “side” versus from a “corner” is as small as one can make it. And the hexagon is the only geometric figure that will “fit together” and not leave any empty space.

ALL THAT SAID... one should note that there are no nice, neat, hexagonal markets in real life, and the best we can do is try to model the real world as closely as possible. Interestingly, this actually works better that one might think. Rather than any specific good or service, think about what a small town offers versus a small city versus a big city.

In the case of a small town, you are going to find a limited number of shops, most of which are likely to sell the “everyday” stuff, and maybe some slightly more expensive goods or services that we might purchase weekly or monthly. This describes Bridgewater. If you want more variety or something more specialized, you have to go to a bigger place... maybe... Quincy/Braintree. And for the “best” stuff or the very unusual... that’s going to take a trip into Boston.

We can further apply market geography to this example here in New England. There are lots of convenience stores (Bridgewaters). There are a fair number, but certainly not nearly as many malls (Quincy/Braintree, Providence, Worcester, Lowell/Lawrence, Burlington, Natick, Portsmouth, Portland).

And... there is only one Newberry Street. And... only one Boston.