Central Place Theory

Models of Urban Development
The Central Place Theory
The Central Place Theory: Background

• Based off the observations of German Geographer Walter Christaller in 1933
  – Made observations based off Southern Germany

• Concluded two things
  – People gather together in cities to share goods and ideas
  – Cities exist for purely economic reasons
Christaller’s Assumptions

1. Humans will always purchase goods from the closest place that offers the good
2. Whenever demand for a certain good is high, it will be offered in close proximity to the population
   - Example: Groceries
3. Can only exist on Isotopic Plain with equal distance between units
4. Evenly distributed resources and population
Two Important Principles

• Threshold – The minimum number of people required to justify a certain good/service
• Range – The Maximum distance a consumer will travel for a good/service
Christaller’s Classifications

- Helps explain the distribution patterns, size, and number of cities/towns
- Categorizes cities into 5 levels
  - Regional Capital
  - City
  - Town
  - Village
  - Hamlet
Central Place Theory

• The central place is located at the vertexes of equilateral triangles that form into hexagons
  – Displays assumption customers will go to closest place
  – No overlapping of market influence, and no one left out of influence
The Three Principles in the Arrangement of the Central Place

1. The marketing principle (K=3 system)
   – The lower the order of the city the more of them there are. The bigger the city the bigger the market area
     • Ex. There will be 3 times more towns than city’s, but a city’s market size will be 3 times bigger
The Three Principles in the Arrangement of the Central Place

2. The transportation principle (K=4 system)
   – Arrangement of cities to connect as many important places as straightly and cheaply as possible
     • Lower order centers located along edges, not corners of hexagons
The Three Principles in the Arrangement of the Central Place

3. The administrative principle (K=7 system)
   – Theorized problems in sharing centers so lower order centers are located entirely within the hexagon of higher order centers
Application of the Central Place Theory

• Help us understand the reasoning for the location of retail in urban areas
  – Low Order Goods – Everyday items that can be purchased anywhere
    • Ex. Groceries
  – High Order Goods – Specialty items that people are willing to travel longer distances for
    • Ex. Automobiles
• Displays relationship between small towns and cities
The Central Place Theory Re-examined