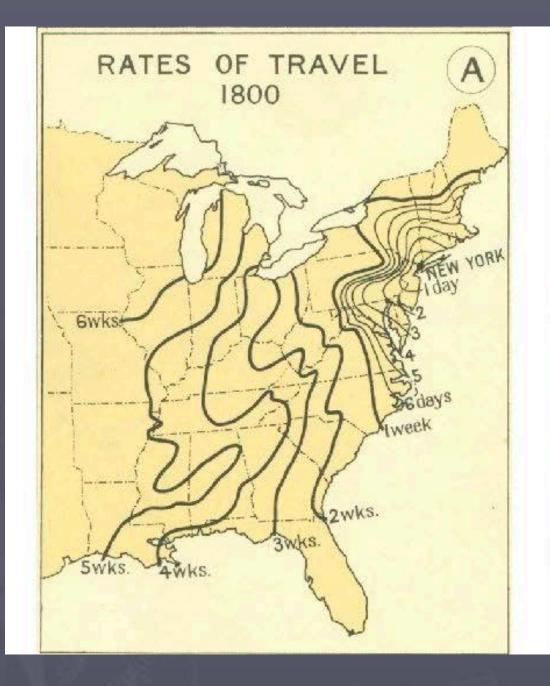
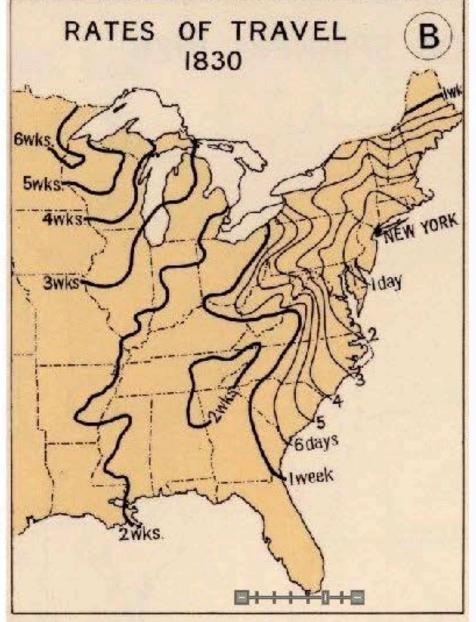
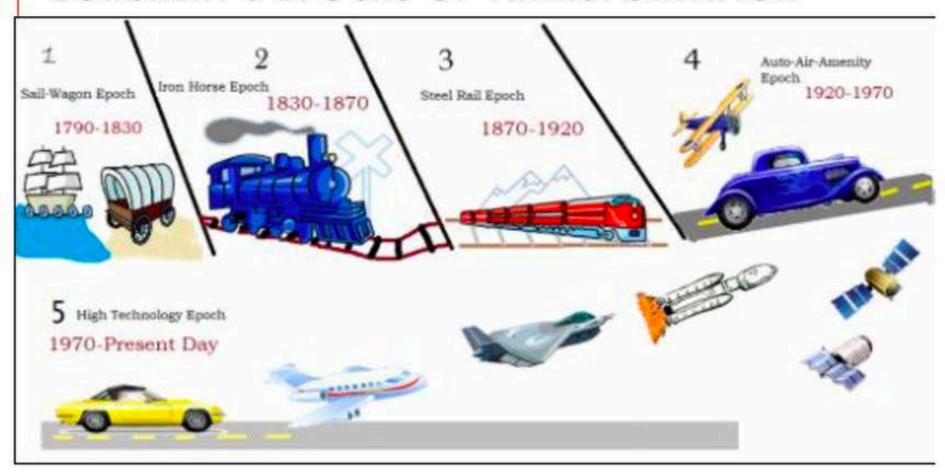
# Urban Structure



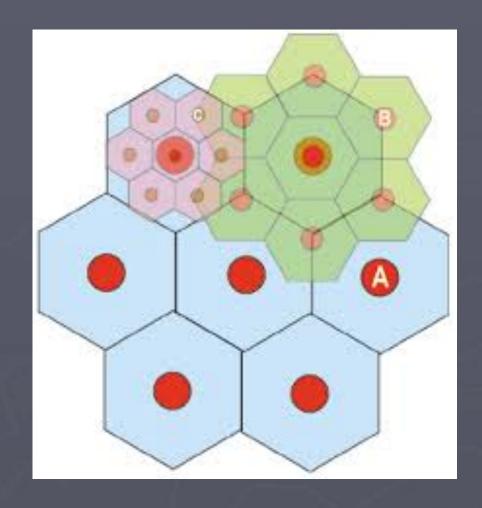


### BORCHERT'S EPOCHS OF TRANSPORTATION



## 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

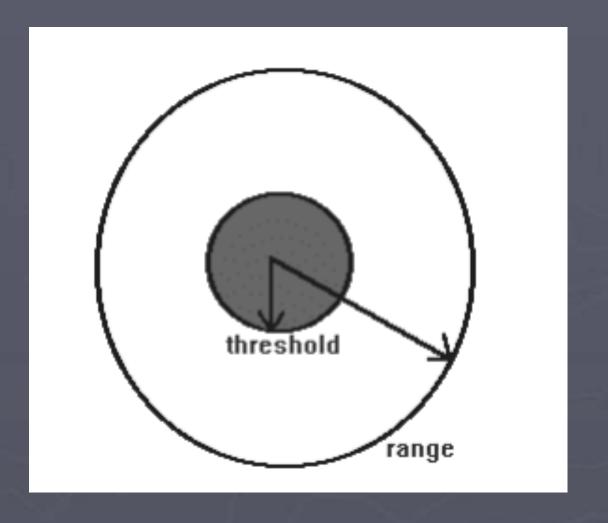


## Christaller's Assumptions

- 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

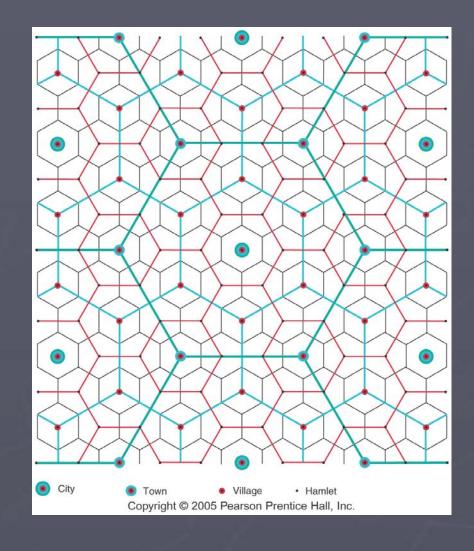
## Two Important Principles

- 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 patters, size, and number of cities/towns
- Categorizes cities into 5 levels
  - Regional Capital
  - City
  - Town
  - Village
  - Hamlet



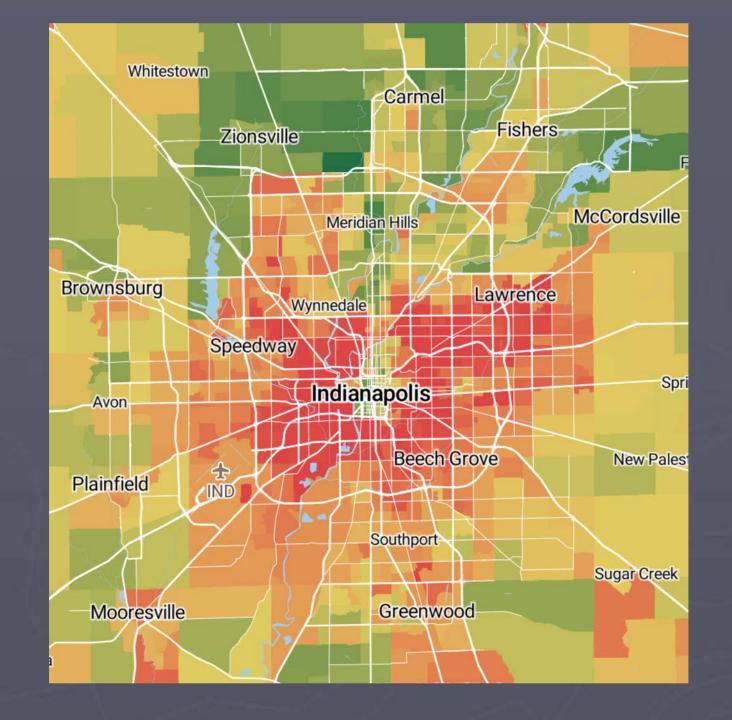
## Application of the Central Place Theory

- 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

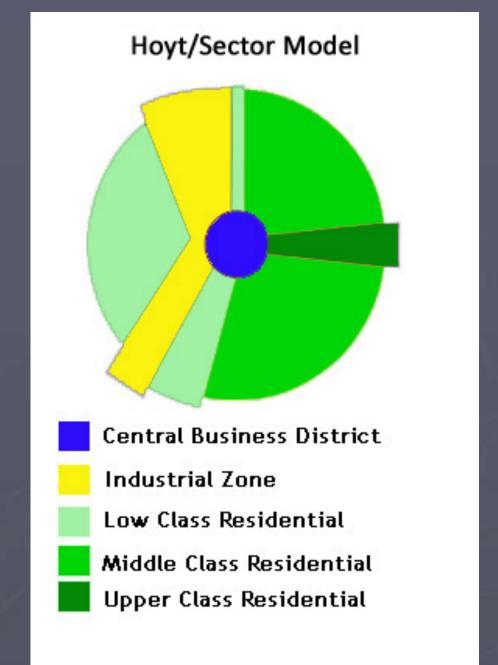
- Zone 1 Central Business District (CBD)- Center of transportation to allow commuting. High cost of land leads to skyscrapers. Most government institutions, businesses, stadiums, and restaurants chose this area to build on due to its accessibility.
- Zone 2 (Zone of Transition) Contains industrial eras and poorer-quality housing. Large percentage of people rent as they most often are immigrants or single individuals.
- Zone 3 (Zone of Independent Workers Homes)
   Primarily occupied by members of the working class.
   Contains modest older houses rented by stable, working class families.
- Zone 4 (Zone of better residence) Newer and more spacious houses occupied mostly by families in the middle-class. There are a lot of condominiums in this area and residents are less likely to rent.
- Zone 5 (Commuter's Zone) Located beyond the build-up area of the city. Mostly upper class residents live in this area.



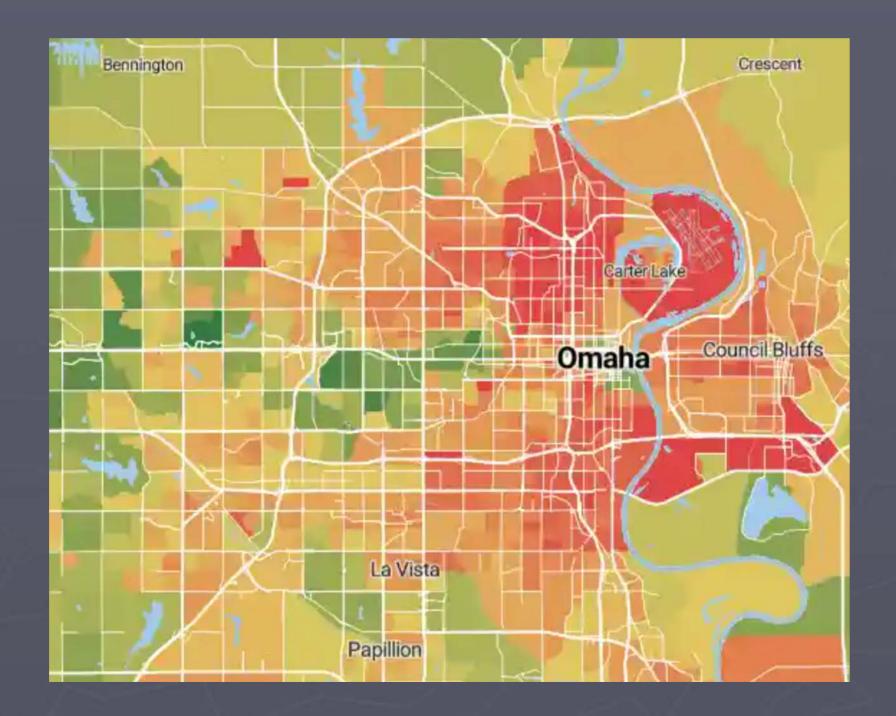
Indianapolis, IN Home Value Map



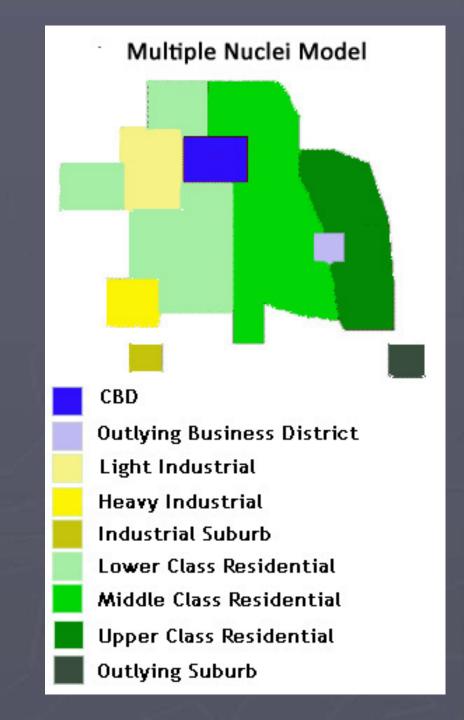
- Based off observations of 1939
   Chicago
  - Accounts for transportation networks
- Different areas attract different activities by chance or environmental factors
- Importance of transportation lines (interstates and railroads) making undesirable areas
- Different sectors grow out in wedge shaped areas away from CBD



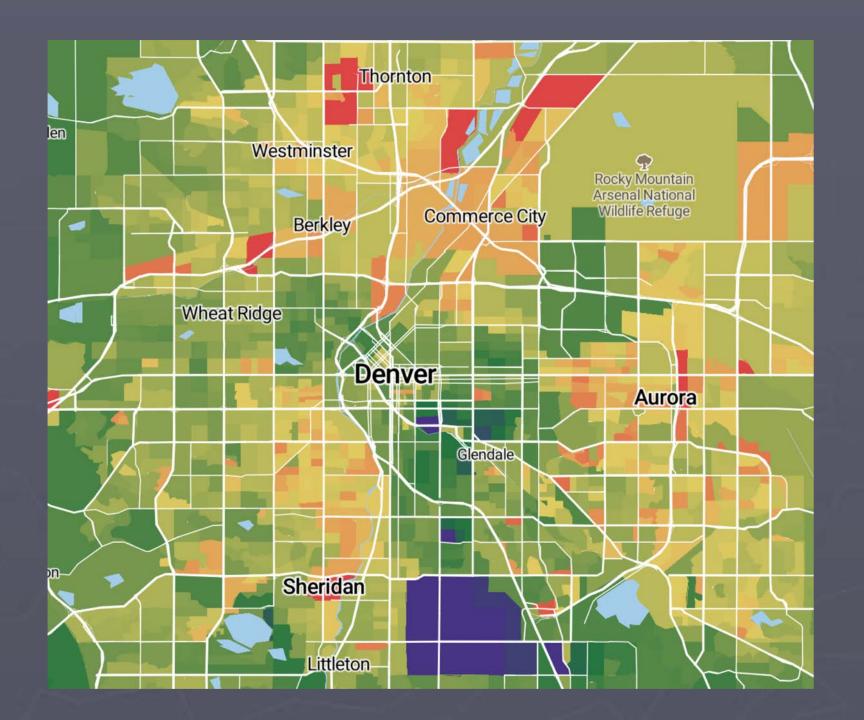
Omaha, NE Home Value Map



- Theorized in 1949 to account for growing importance of car and sprawl of urban areas
- Creation of different nuclei that support each other
  - Business districts to support suburbs
- Other districts develop to be further away from each other
  - Airports develop further away from cities



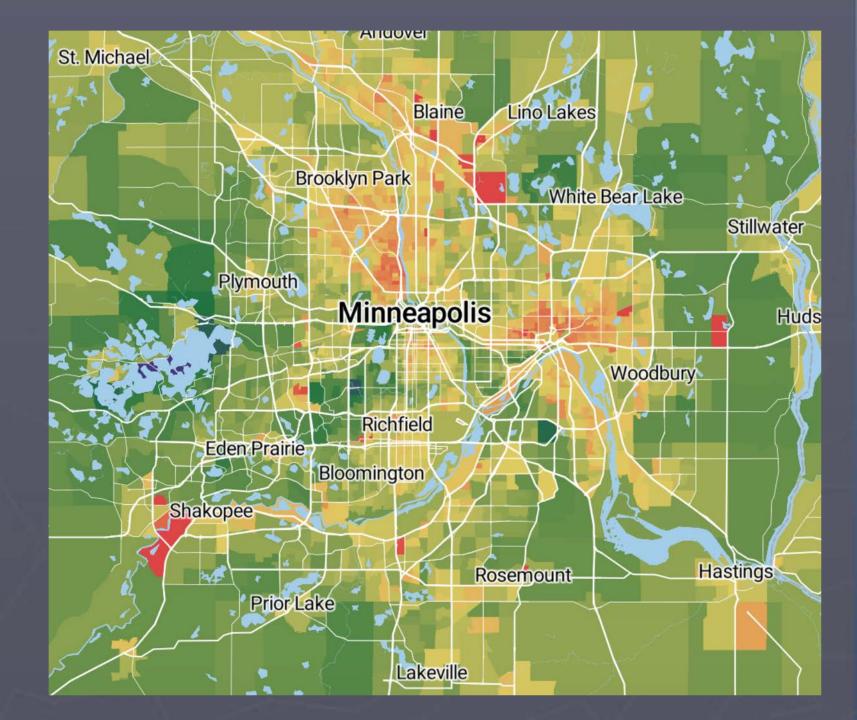
Denver, CO Home Value Map



- A model of North American urban areas consisting of an inner city surrounded by large suburban residential and business areas tied together by a beltway or ring road.
  - Different districts spread out away from CBD to meet needs of residential areas



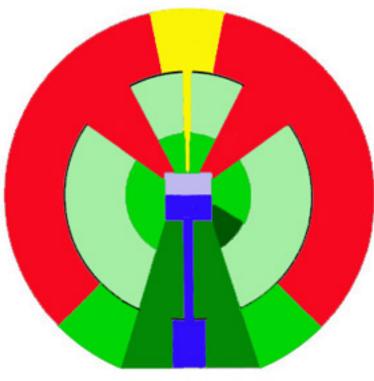
Minneapolis, MN Home Value Map







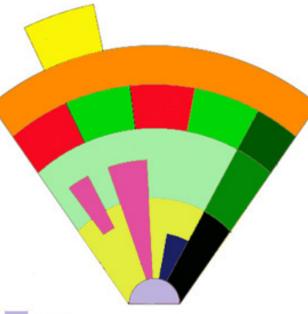




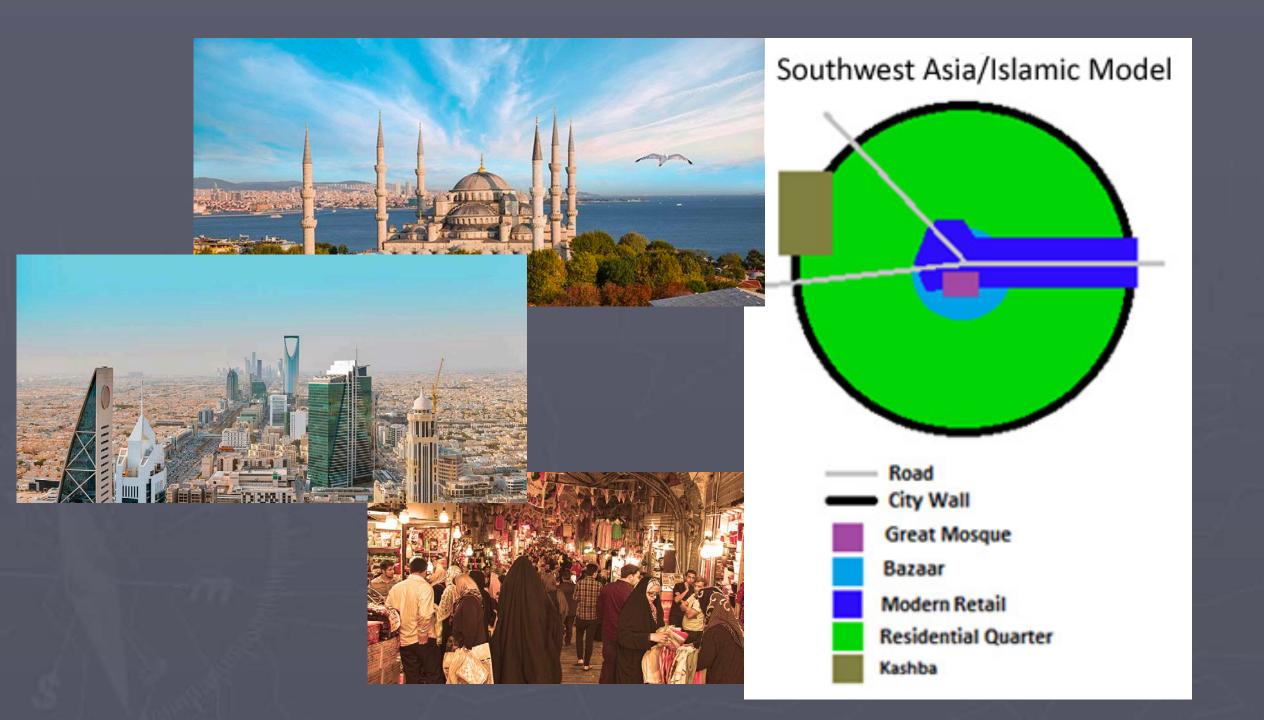
- CBD And Commercial Area
  - Market
  - Lower Class Residential
  - Middle Class Residential
  - Upper Class Residential
  - Gentrification Zone
- Squatter Settlements
  - Industrial District



#### Southeast Asia Model

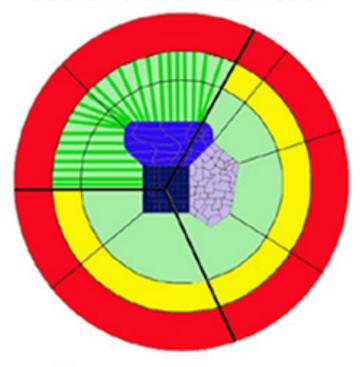


- Port
- Western Commercial Area
  - Alien/Chinese Commercial Area
- Government Zone
- Mixed Land Use Zone
- Industrial District
  - Middle Density Residential
- Suburbs
- Upper Class Zone
- Gentrification Zone
  - Squatter Settlements
- Market-Gardening Zone





#### Sub-Saharan Africa Model



Road
Large Road

Traditional CBD

Colonial CBD

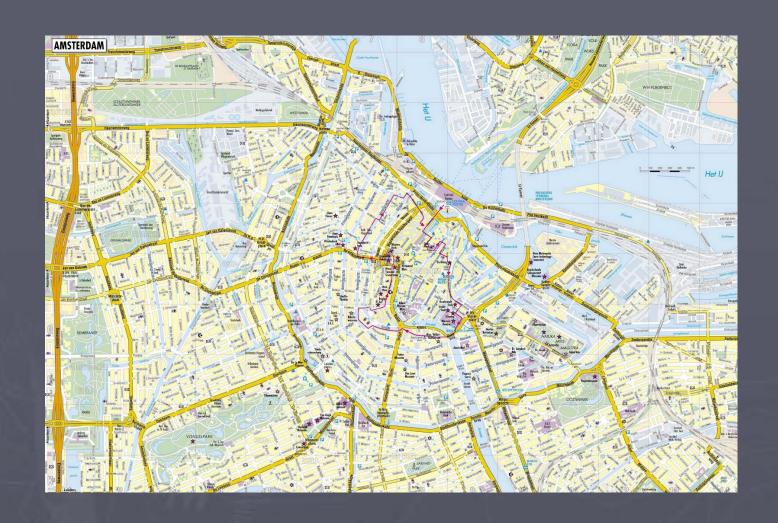
Market Zone

Ethnic Neighborhoods

Ethnic and Mixed Neighborhood

Mining and Industrial District

Informal Townships



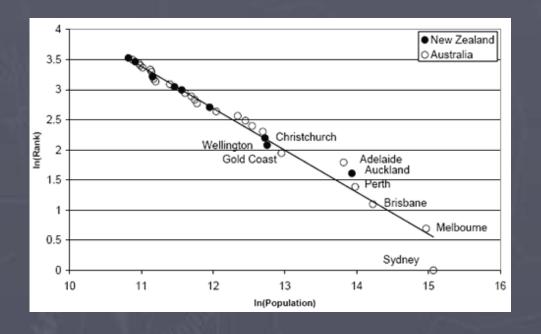
#### Western European Model



- Lower Class Residential
- Apartments and Mixed Housing
  - Middle Class Residential
- Gentrification Zone
- Upper Class Residential
  - Recent Migrant Residential
- Low Class Migrant Residential
- Industrial District
- Forest Belt

### The Rank-Size Rule

- If all cities in a country are placed in order from the largest to the smallest, each one will have a population half the size of the preceding city.
  - Zipf's law applied to distribution of cities (1935)



- Cities in a country are ranked according to their size in relation to the country's largest city
  - Rank 1 Largest City
  - Rank  $2 \frac{1}{2}$  the number of people as Rank 1 city
  - Rank 3 1/3 the number of people as Rank 1 city
  - Rank  $4 \frac{1}{4}$  the number of people as Rank 1 city
  - Rank 5 1/5 the number of people as Rank 1 city

### Problems with Rank-Size Rule

- In some countries the differences between a First Ranked and a Second Ranked city was much less than expected
  - Ex. New York City is only 1.3times larger than Los Angeles
- Some countries are dominated by Primate cities so the changes are larger than expected
  - Ex. Kinshasa is 8times larger than the next largest city Lubumbashi

### Uses for Rank-Size Rule

- Sets a general classification for Ranking cities by population in a country
- Measures degree of primacy for a particular city in a country
- Helps distinguish countries with special characteristics
  - Area, Wealth, etc...

### Primate City

 The largest city within a nation which dominates the country not solely in population size – being more than twice as large as the second city – but also it terms of Influence



"The primate city is commonly at least twice as large as the next largest city and more than twice as significant."

### Examples of Primate Cities

- Paris, at a population of 9.6 million is definitely the focus of France, while Marseilles has a population of 1.3 million.
- In the United Kingdom the area of London has a population of 7 million while the second largest city, Birmingham only has around one million people.
- Mexico City, Mexico has a population of 8.6 million while Guadalajara is only about 1/4<sup>th</sup> the size at 1.6 million.

### Advantages and Disadvantages

#### **Advantages**

- Magnetic attraction for businesses, services and people (cumulative effect)
- Can attract international trade and business
- Centralize transportation and communication
- Enhanced flow of ideas and information among larger populations
- Ability to offer high-end goods due to increased threshold

#### Disadvantages

- Urban-rural inequalities
- Imbalance in development
- Concentration of Power
- Has a parasitic effect, sucking wealth, natural and human resources into city.
- Become centers for unemployment, crime, pollution

## Bangkok: The Classic Primate City

- Over 40x larger than any other city in Thailand
- Political, Financial, Cultural, Communication center of Thailand
  - Much of economy of rural Thailand is in support of Bangkok

