

Urban Growth Models

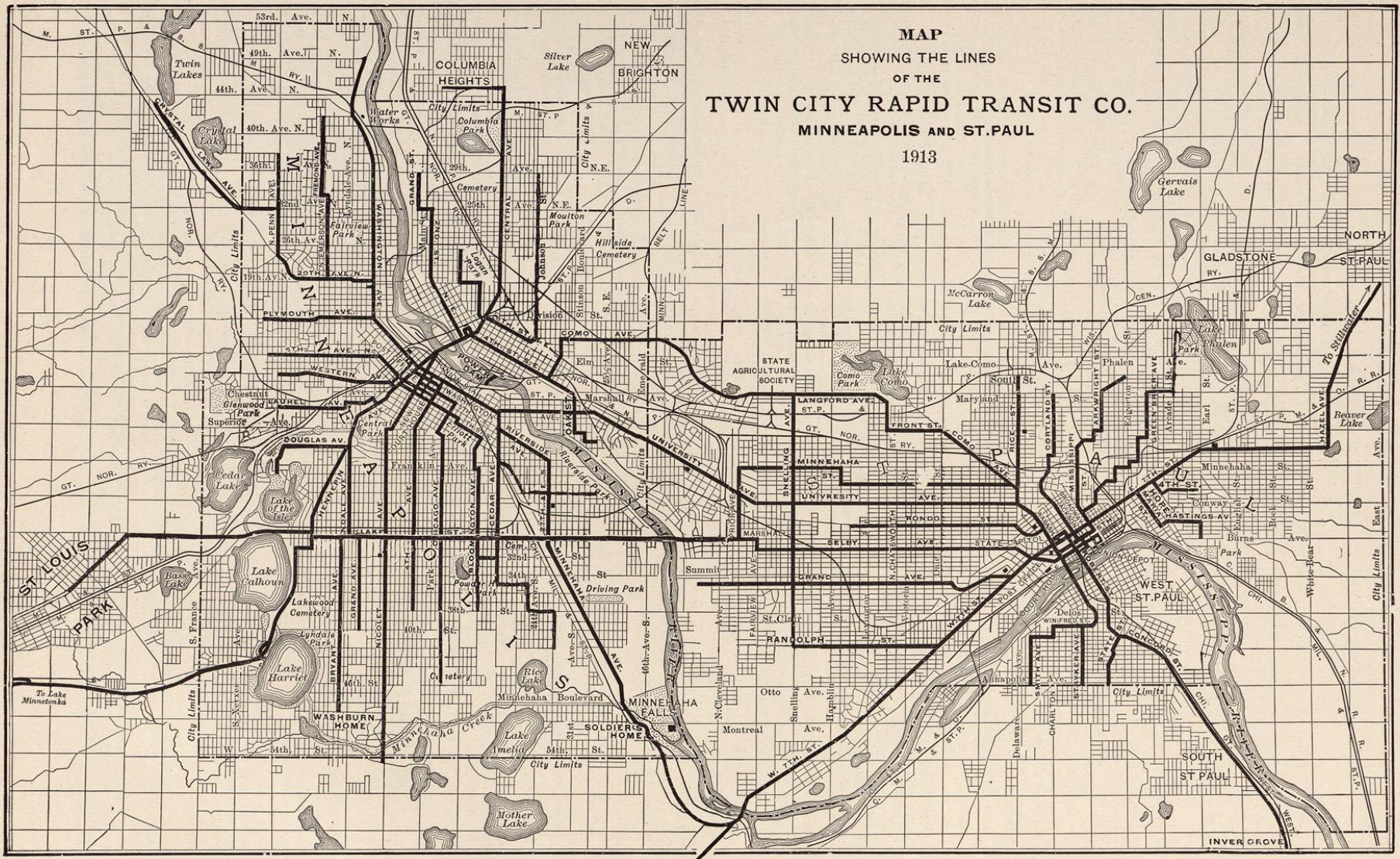
Models of Urban Development

Central Business District (CBD)

- The CBD is the focal point of a city and serves as its commercial, office, retail, and cultural center. It also usually is the center point for transportation networks.



(a)

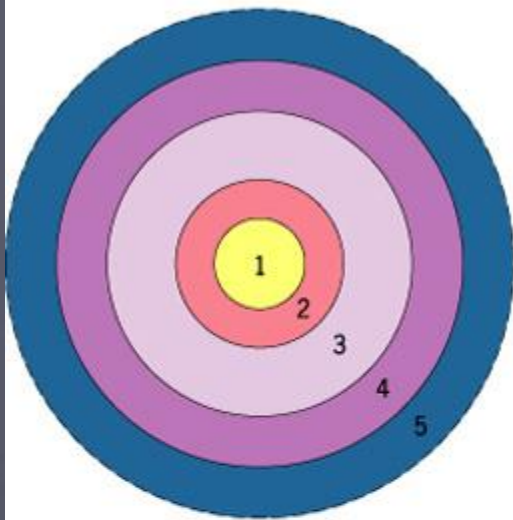


MAP
 SHOWING THE LINES
 OF THE
TWIN CITY RAPID TRANSIT CO.
MINNEAPOLIS AND ST. PAUL
 1913

— FROM POINT MARKED X TO EXCELSIOR LAKE MINNETONKA IS 12.6 MILES —
 — FROM “ “ “ Y “ THE CITY OF STILLWATER “ 13.3 MILES —

Models of Development

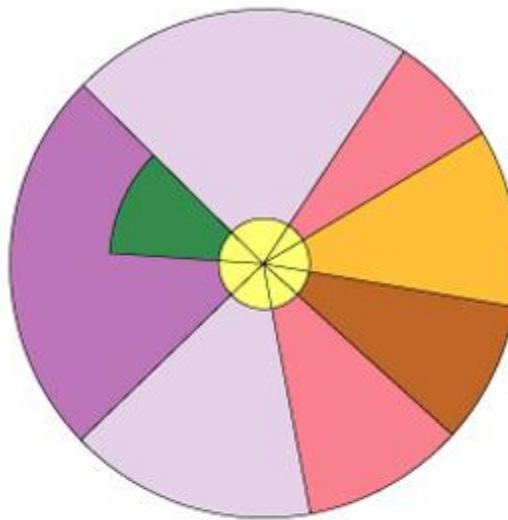
CONCENTRIC ZONE MODEL



A

- Central business district
- Zone of transition
- Zone of independent workers' homes
- Zone of better residences
- Commuters' zone

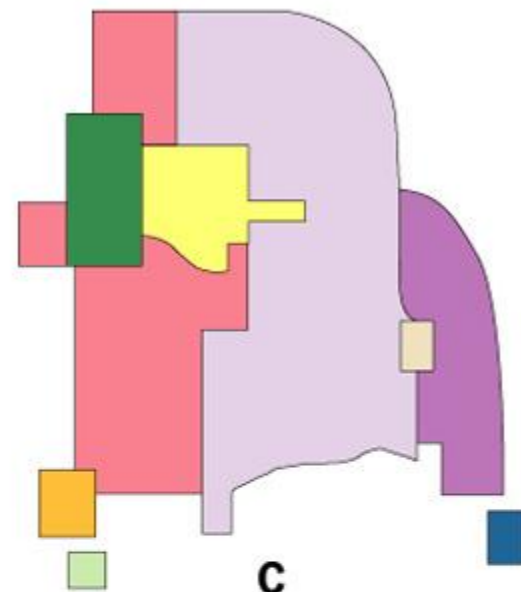
SECTOR MODEL



B

- High-rent residential
- Intermediate-rent residential
- Low-rent residential
- Education and recreation
- Transportation
- Industrial
- Core

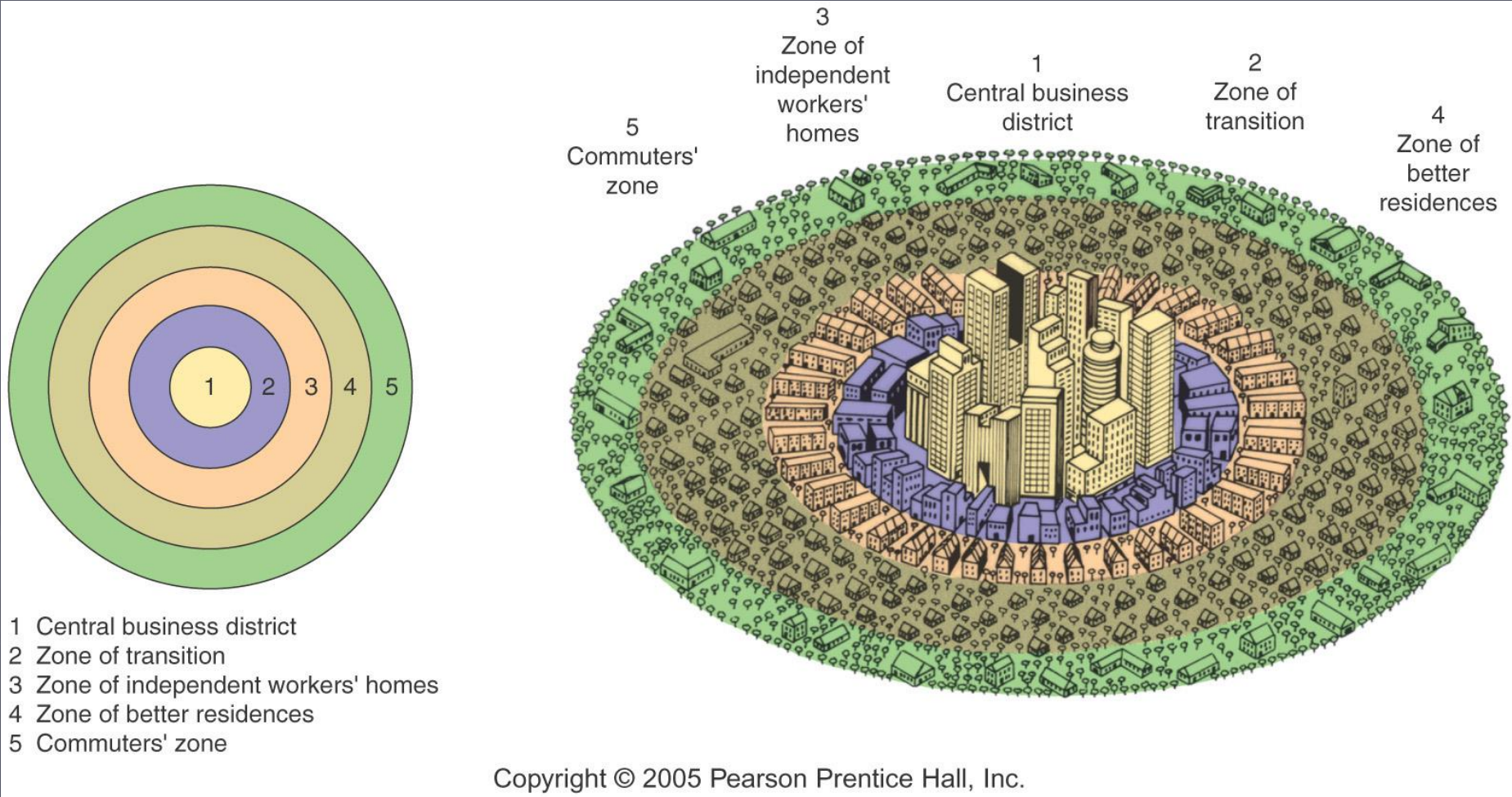
MULTIPLE NUCLEI MODEL



C

- Central business district
- Wholesale, light manufacturing
- Low-class residential
- Middle-class residential
- High-class residential
- Heavy manufacturing
- Outlying business district
- Residential suburb
- Industrial suburb

Concentric Zone Model



- Based off 1923 observations of Chicago

Concentric Zone Model

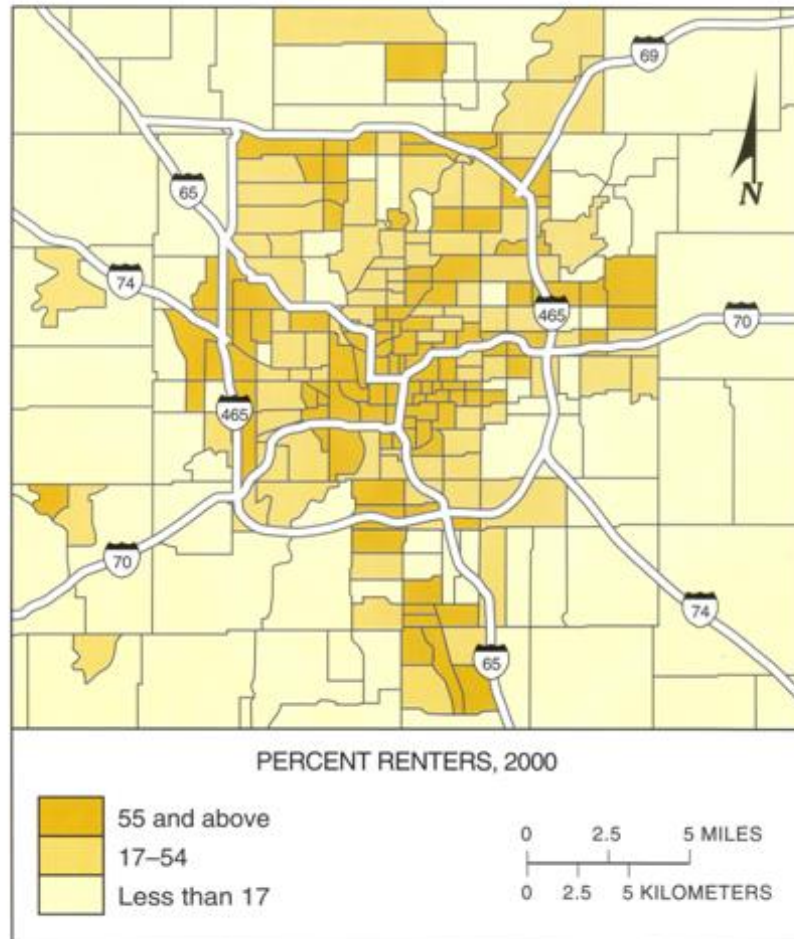
- Based off assumption that CBD is center of city and home values/rents increase as distance from city increase
- Again relies on isotopic plain void of natural obstacles
- Defied by process of gentrification and decentralization of industry and commercial sectors

Concentric Zone Model

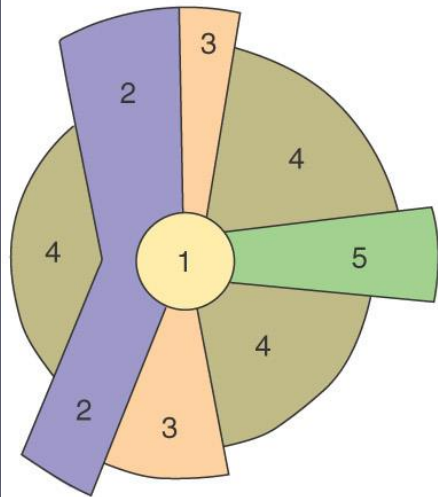
- Zone 1 - Central Business District (CBD)- Center of transportation to allow commuting. High cost of land leads to skyscrapers. Most government institutions, businesses, stadiums, and restaurants chose this area to build on due to its accessibility.
- Zone 2 – (Zone of Transition) Contains industrial areas 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.

Concentric Zone Model: Indianapolis, Indiana

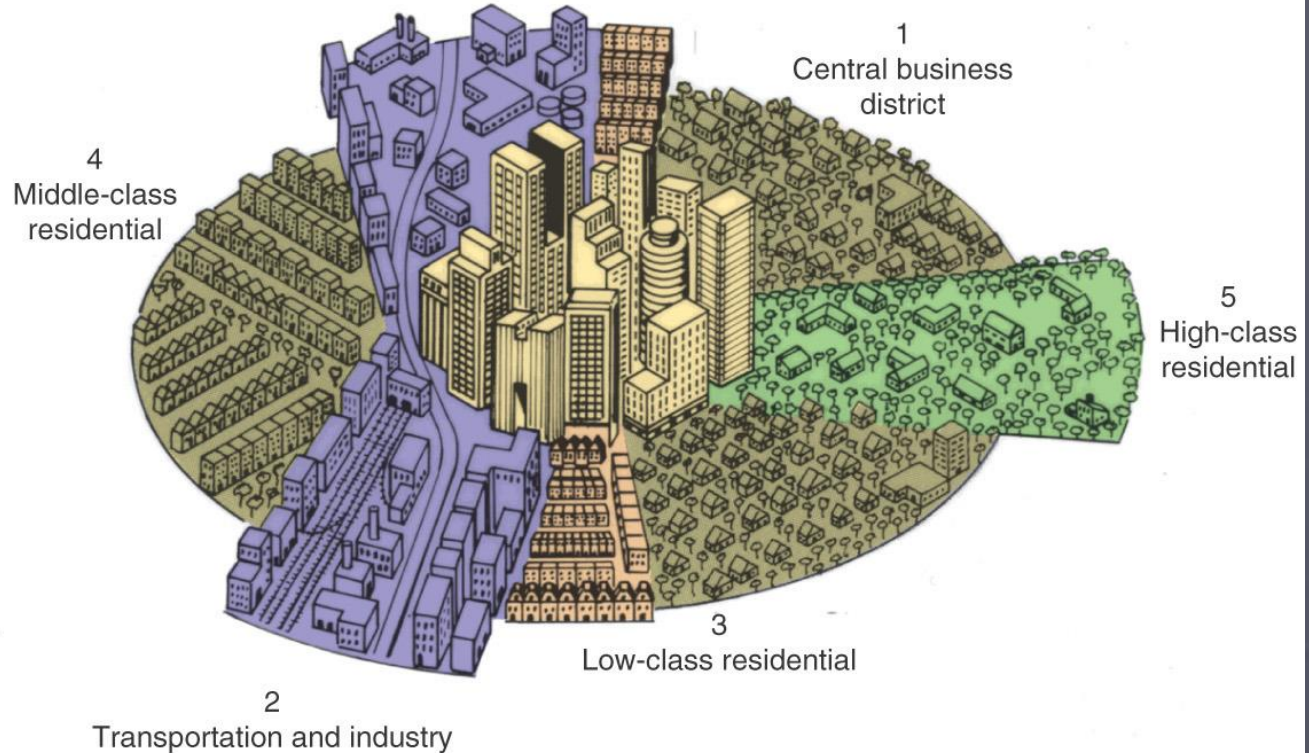
T-156 Figure 13-8 Example of concentric zone model, married couples in Indianapolis



Sector Model



1. Central business district
2. Transportation and industry
3. Low-class residential
4. Middle-class residential
5. High-class residential



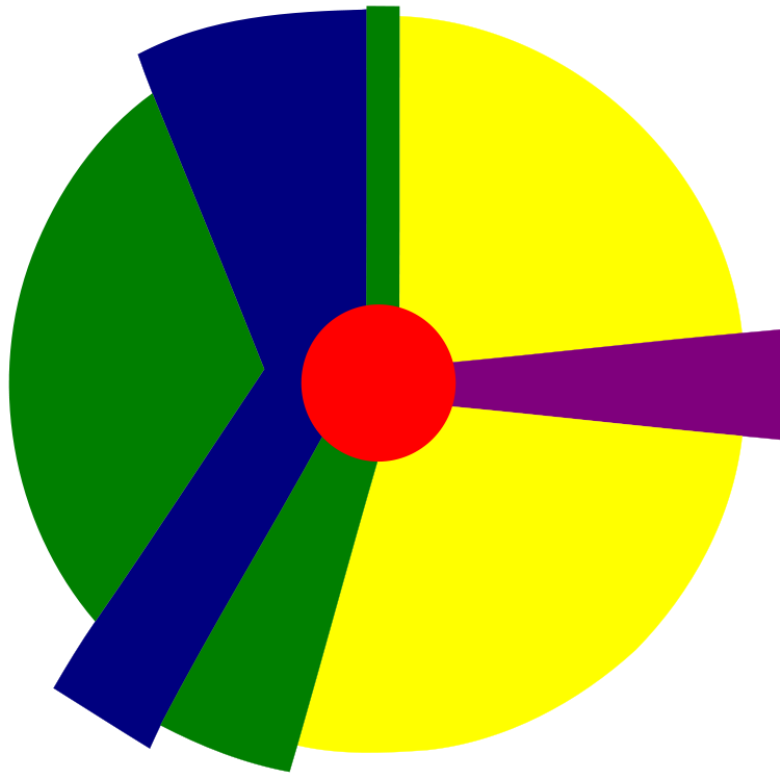
Copyright © 2005 Pearson Prentice Hall, Inc.

- Social groups are arranged around a series of sectors, or wedges radiating out from the central business district (CBD) and centered on major transportation lines.

The Sector Model

- Based off observations of 1939 Chicago
 - Accounts for transportation networks
- Different areas attract different activities by chance or environmental factors
- Different sectors grow out in wedge shaped areas away from CBD

The Sector Model

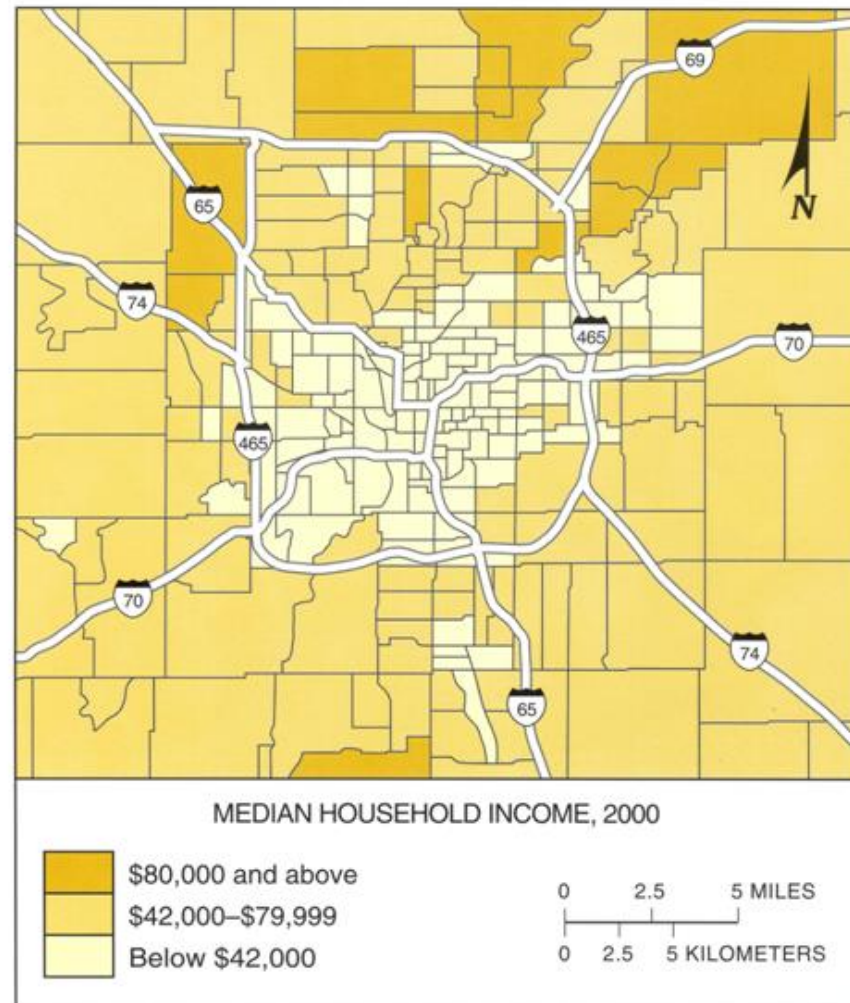


Hoyt Sector Model Key

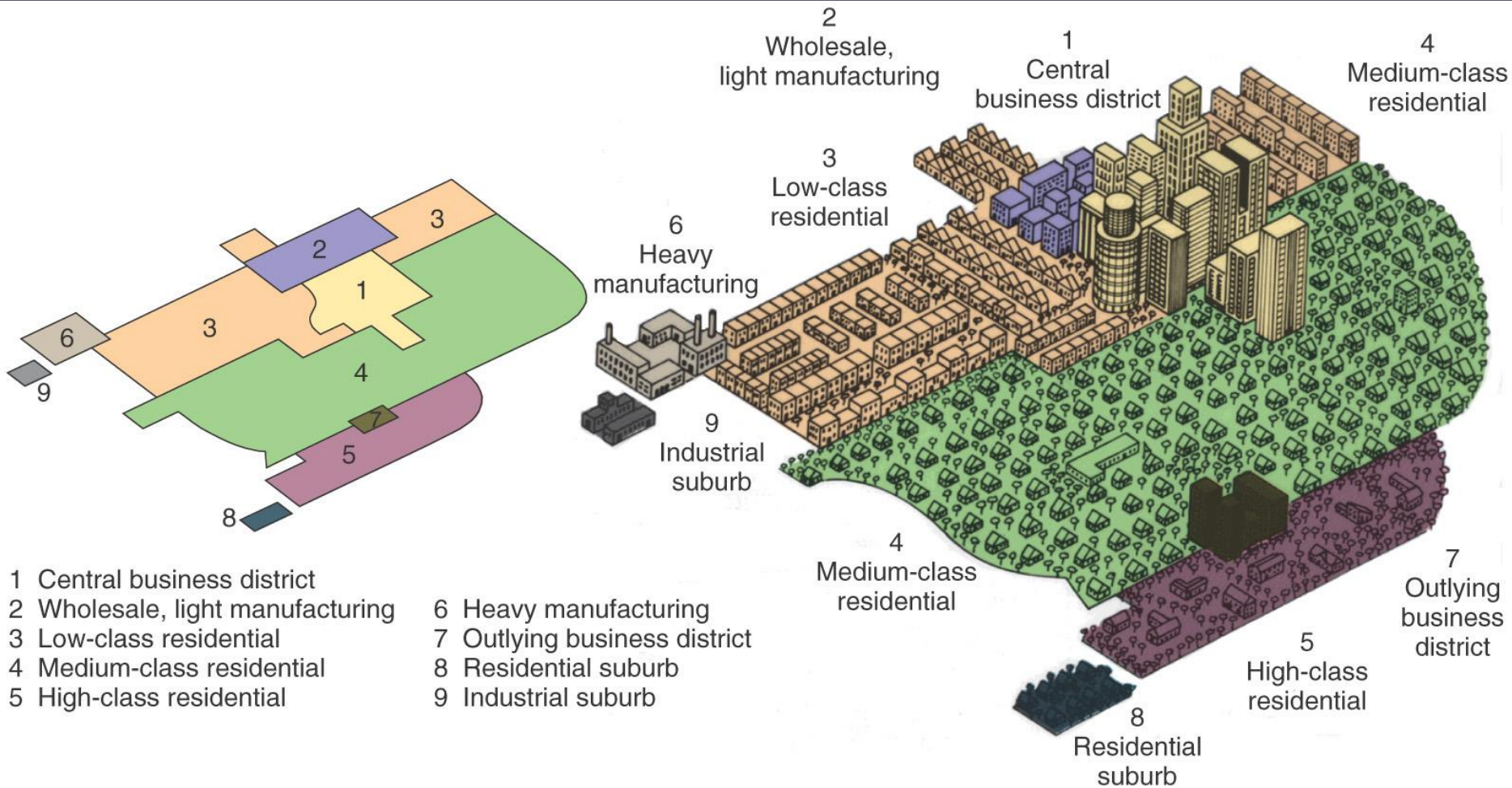
-  CBD
-  Factories/Industry
-  Low class residential
-  Middle class residential
-  High class residential

Sector Model: Indianapolis, Indiana

T-157 Figure 13-9 Example of sector model, high-income households in Indianapolis



Multiple Nuclei Model



Multiple Nuclei Model

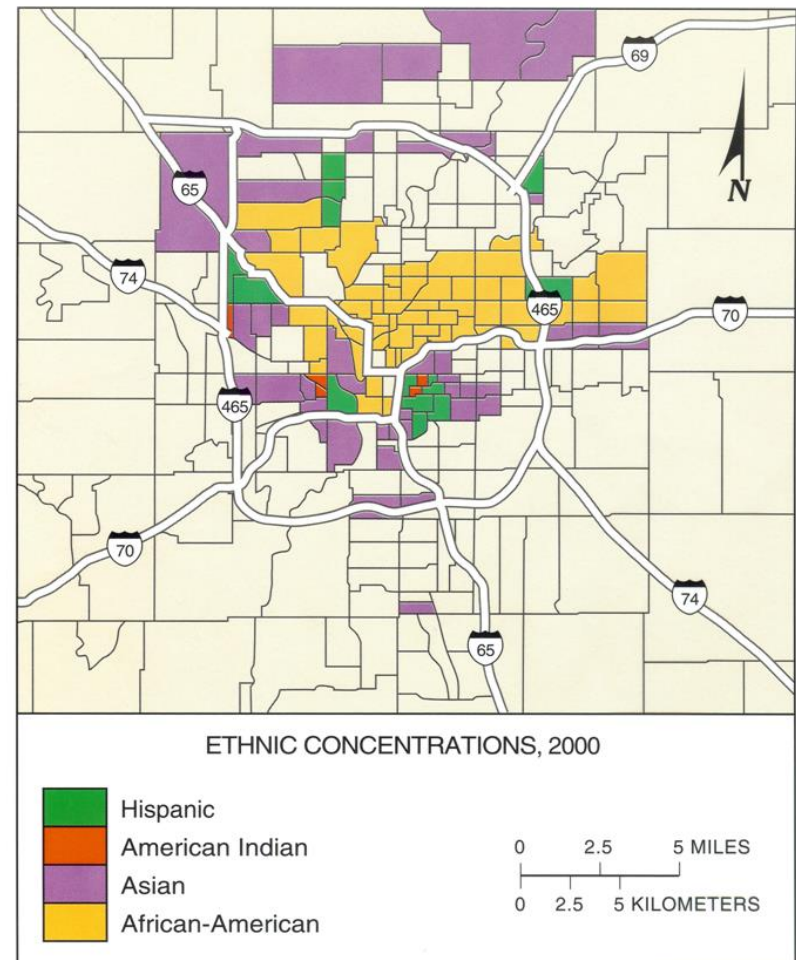
- Theorized in 1949 to account for growing importance of car and sprawl of urban areas
- Creation of different nuclei that support each other
 - Business districts to support suburbs
- Other districts develop to be further away from each other
 - Airports develop further away from cities

Multiple-Nuclei Model: Indianapolis, Indiana

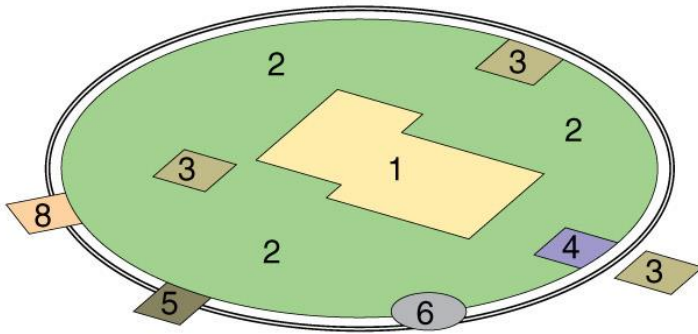
- Contains 9 Districts
 - Central business district
 - Light manufacturing
 - Low-class residential
 - Middle-class residential
 - Upper-class residential
 - Heavy manufacturing
 - Outlying business district
 - Residential suburb
 - Industrial suburb

T-158

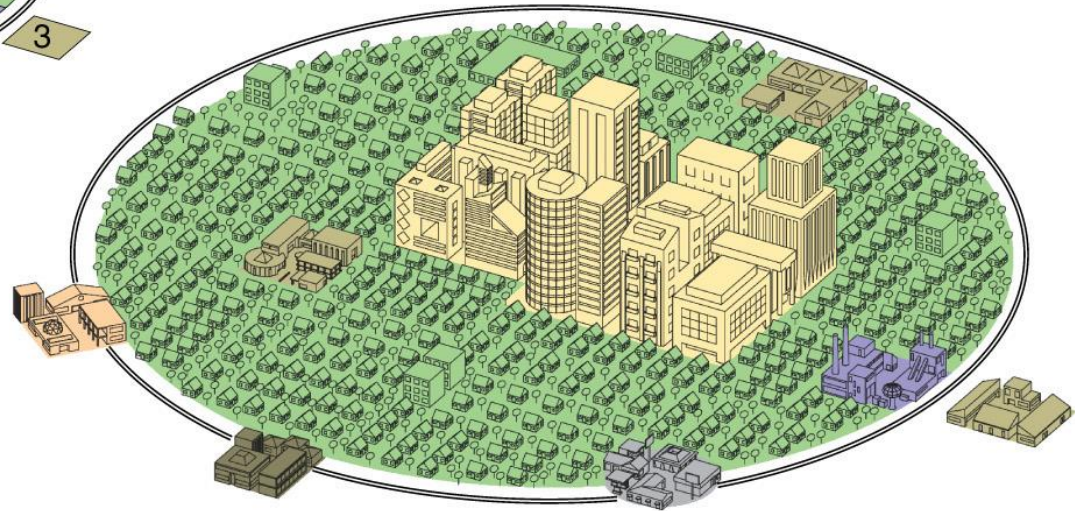
Figure 13-10 Example of multiple nuclei model, minorities in Indianapolis



Peripheral Model



1. Central City
2. Suburban Residential Area
3. Shopping Mall
4. Industrial District
5. Office Park
6. Service Center
7. Airport Complex
8. Combined Employment & Shopping Center

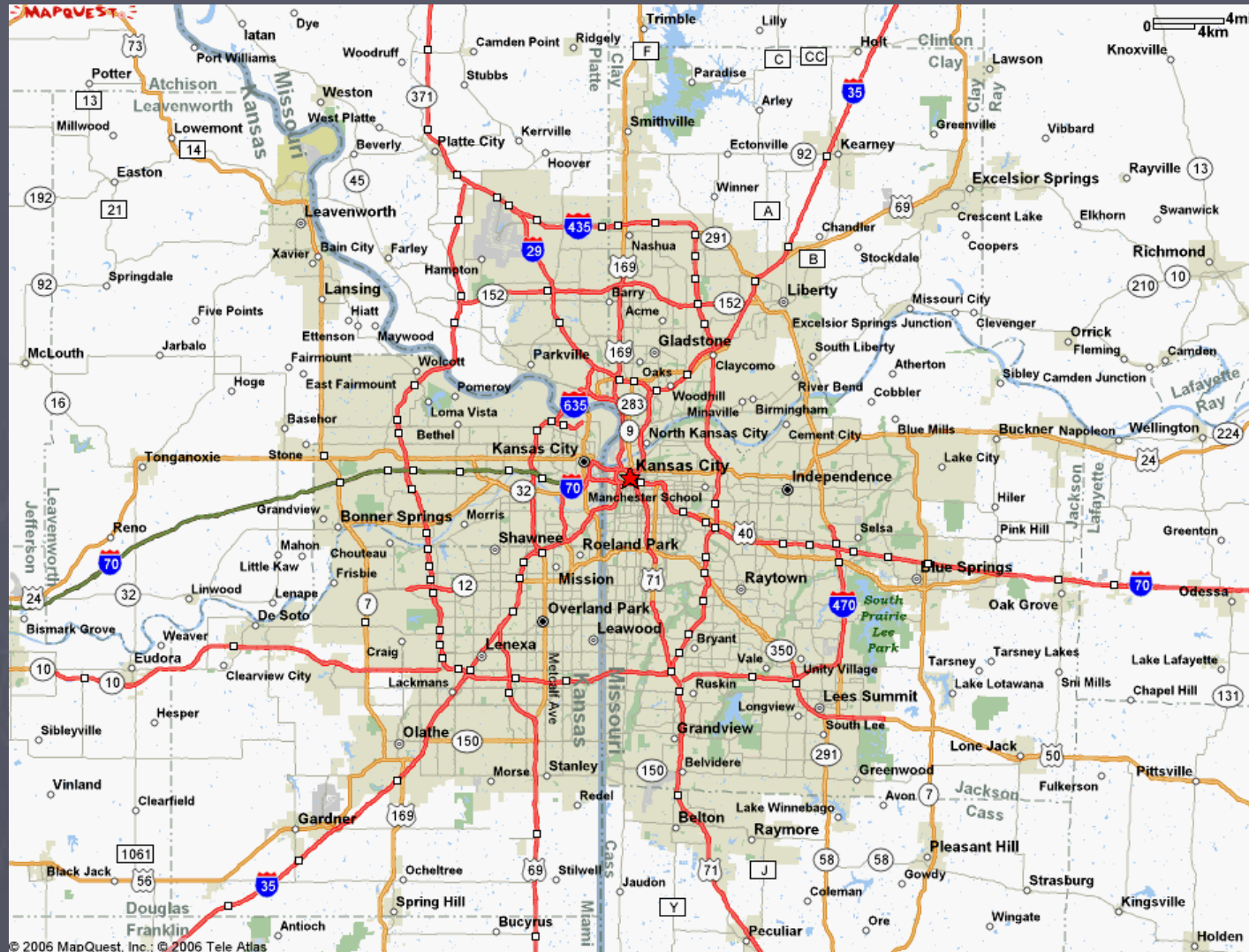


Copyright © 2005 Pearson Prentice Hall, Inc.

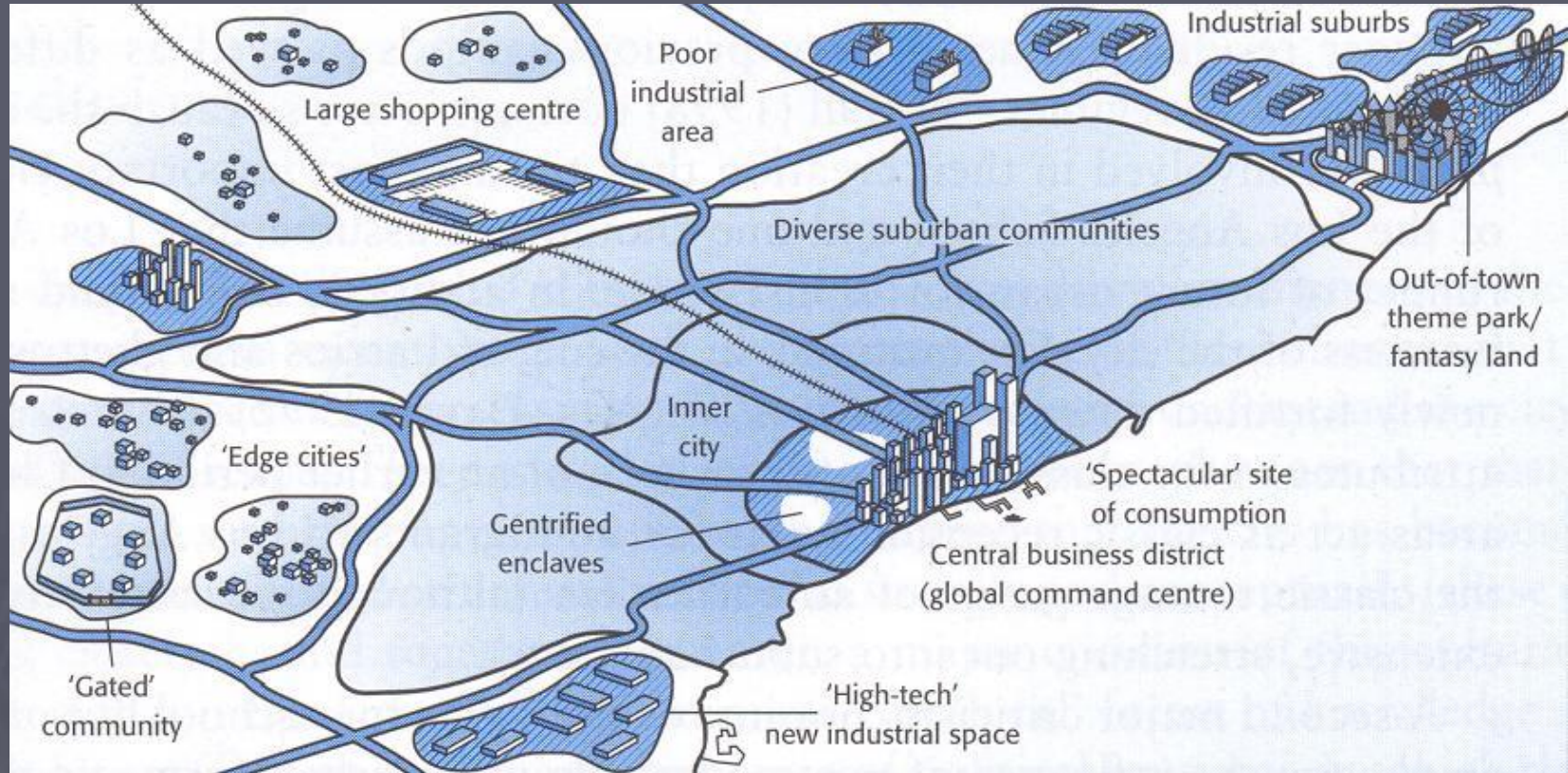
The Peripheral Model

- 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

Kansas City, Missouri and Kansas



Galactic City Model



Galactic Edge Cities: Mini edge city that is connected to another city by beltways or highways.