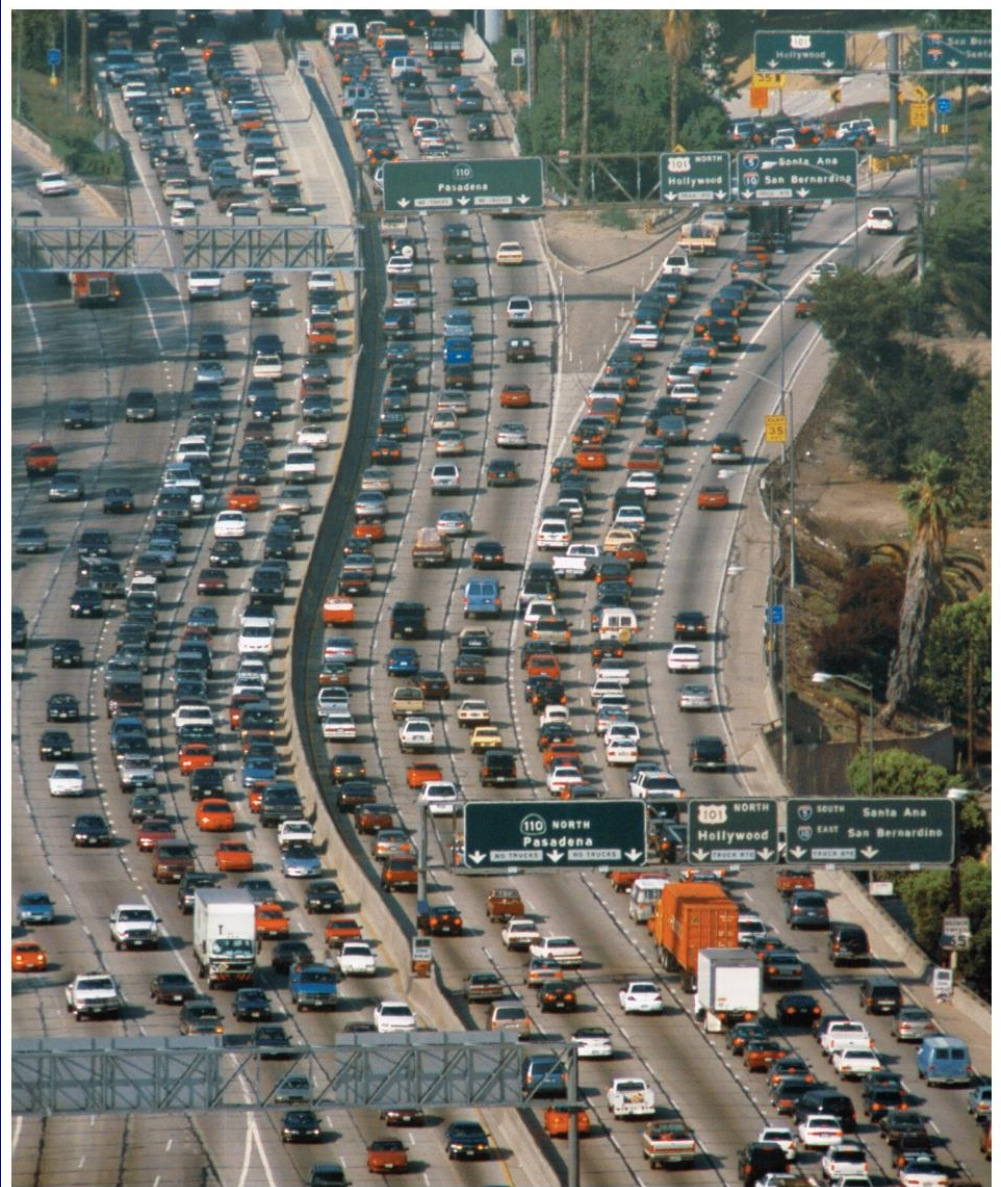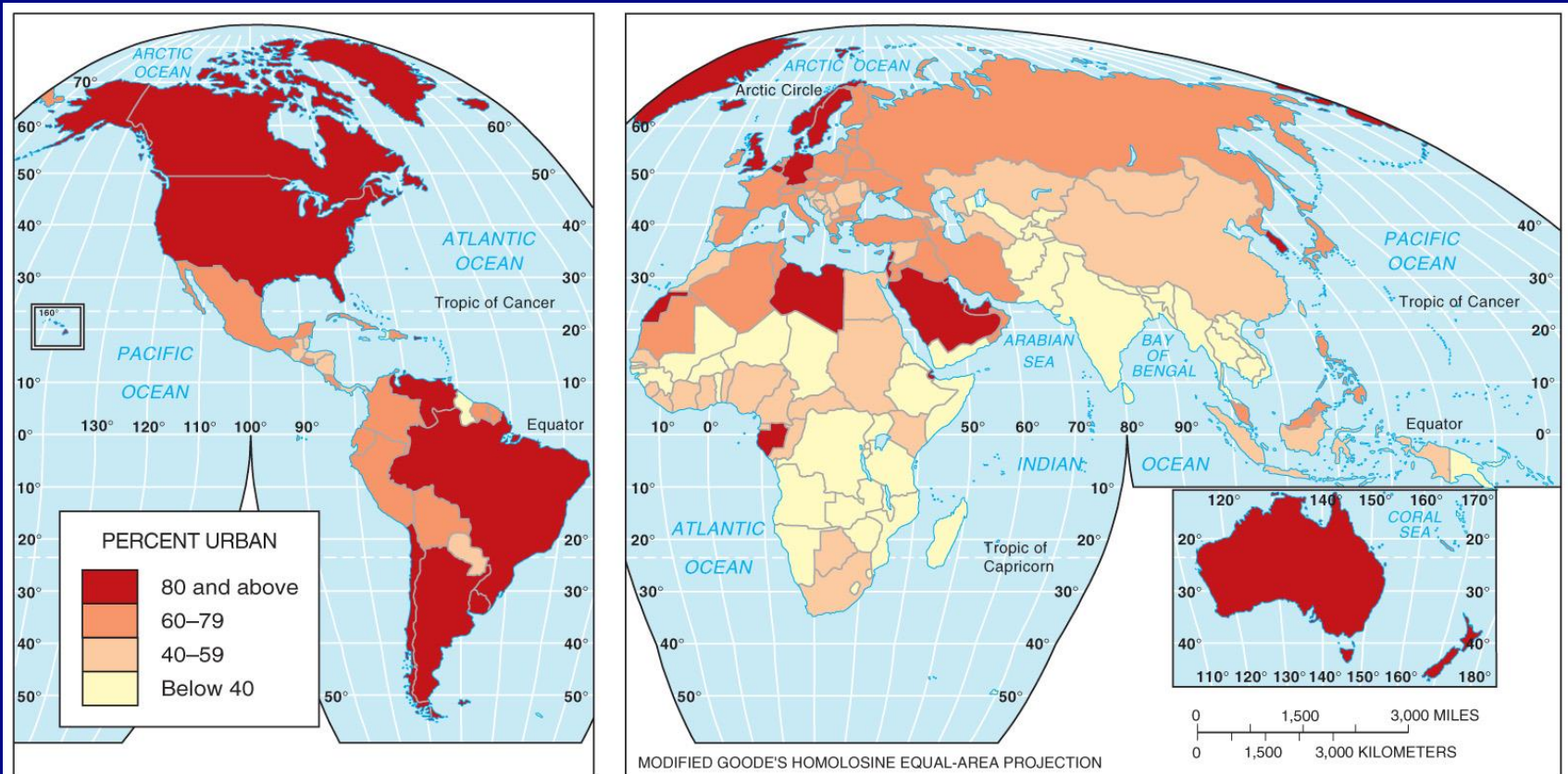*Chapter 13*

Urban Patterns

Urban Settlements

- Urbanization
  - Increasing urban percentage
  - Increasing urban populations

- Defining urban settlements
  - Social differences between urban and rural settlements
  - Physical definitions of urban settlements

Downtown Los Angeles Freeways

Percent Urban Population

Fig. 13-1: Percent of the population living in urban areas is usually higher in MDCs than in LDCs.

Large Cities
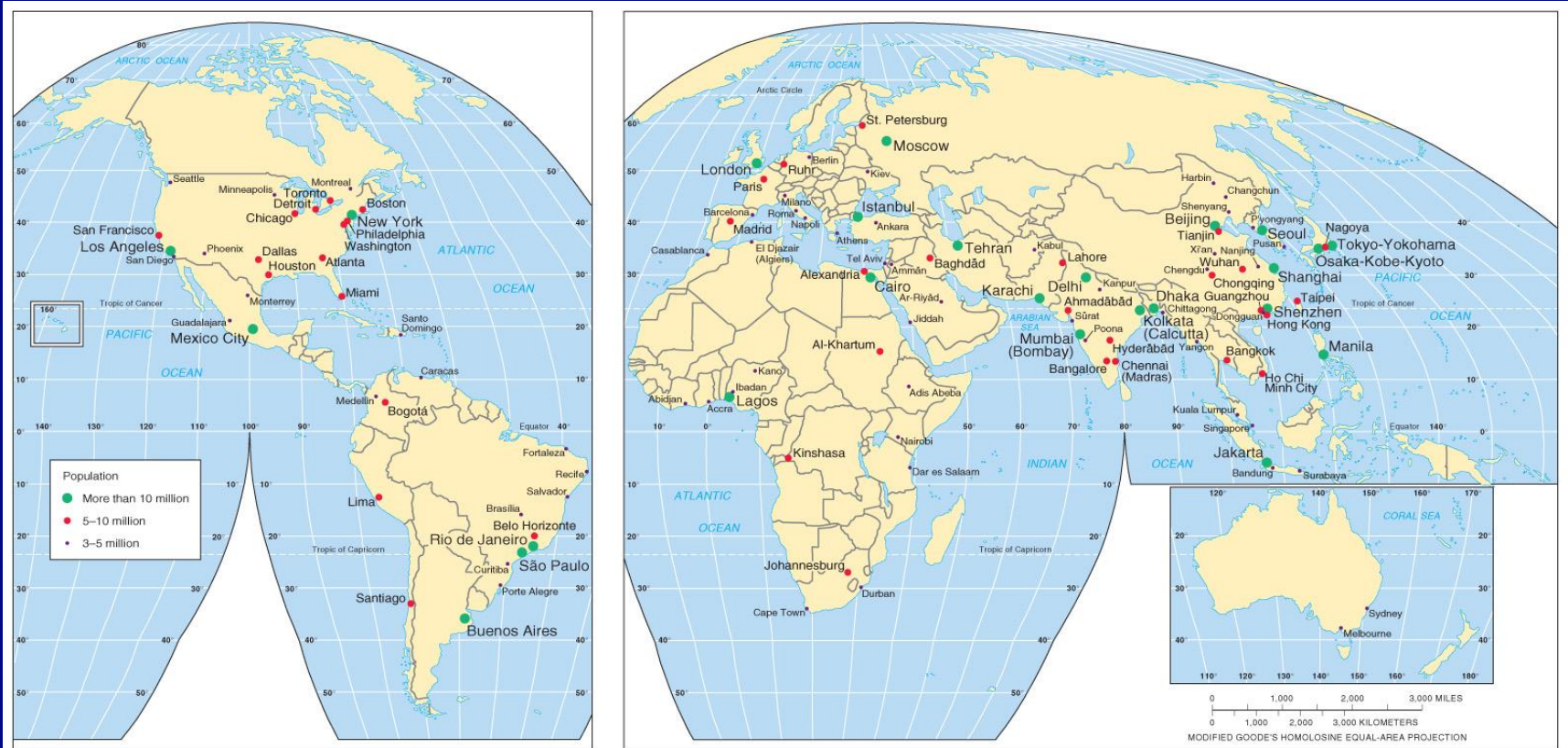
Fig. 13-2: Cities with 3 million or more people. Most of the largest cities are now in LDCs.
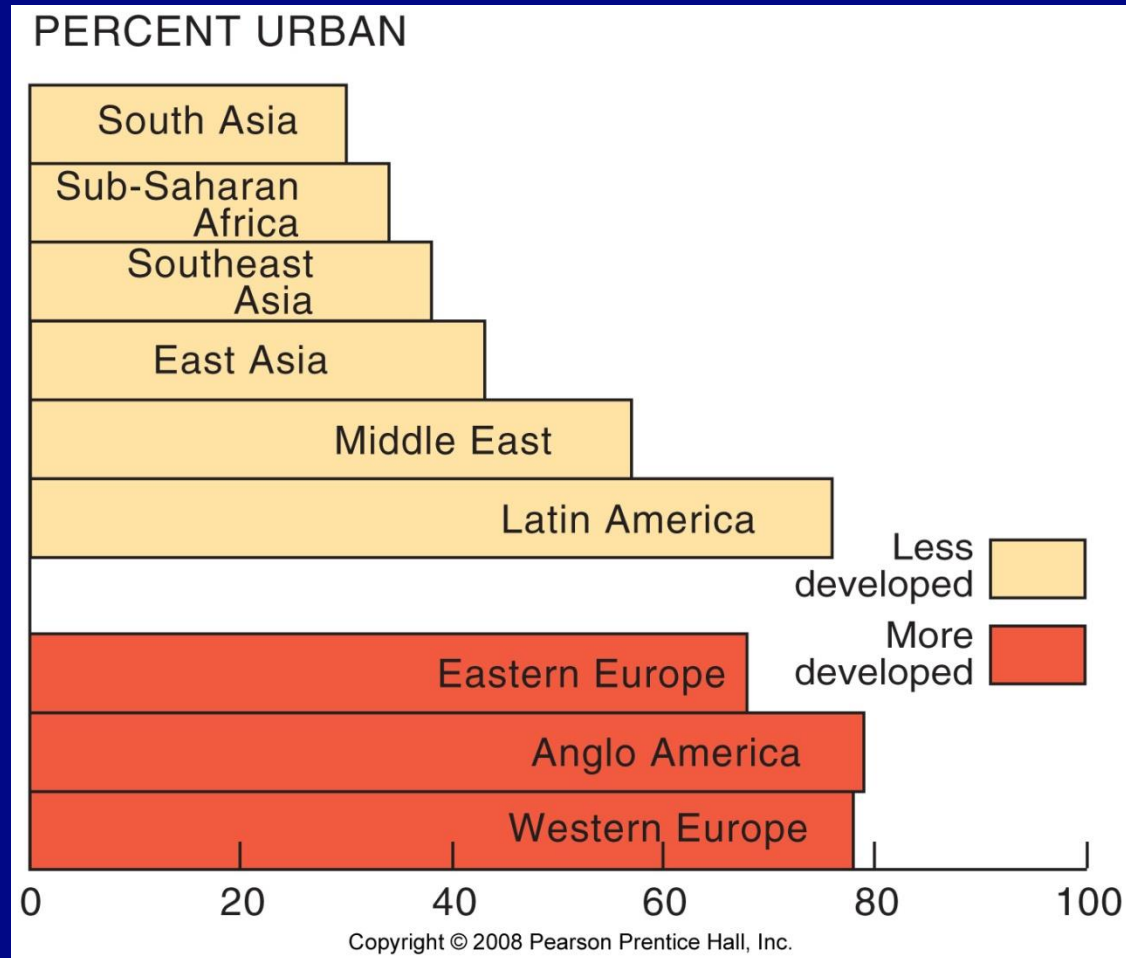
Percent Urban by Region

Fig. 13-2b: Over 70% of people in MDCs live in urban areas. Although under half of the people in most of Asia and Sub-Saharan Africa are urban, Latin America and the Middle East have urban percentages comparable to MDCs.

St. Louis Metropolitan Area

Fig. 13-3: The metropolitan area of St. Louis is spread over several counties and two states. It is also a diversified trade center, due to its position on the Mississippi River.

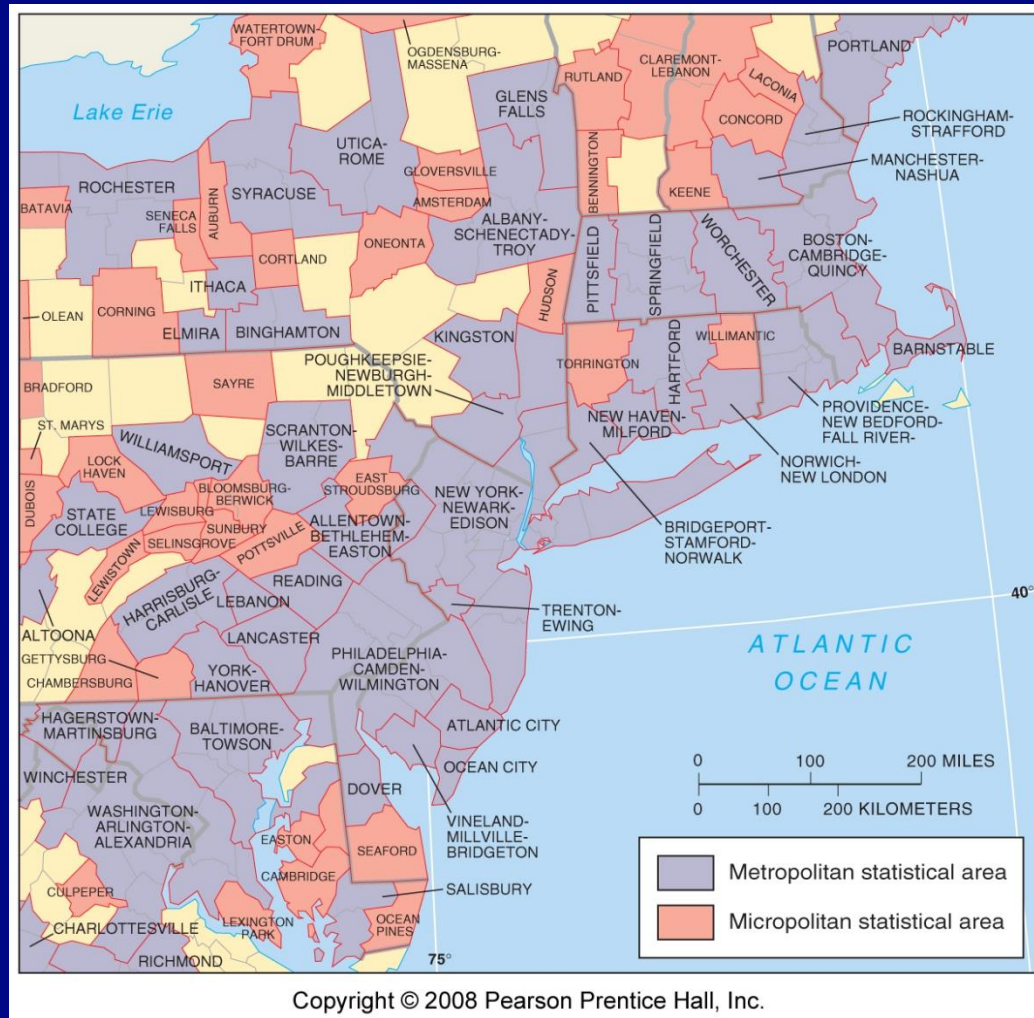Copyright © 2008 Pearson Prentice Hall, Inc.
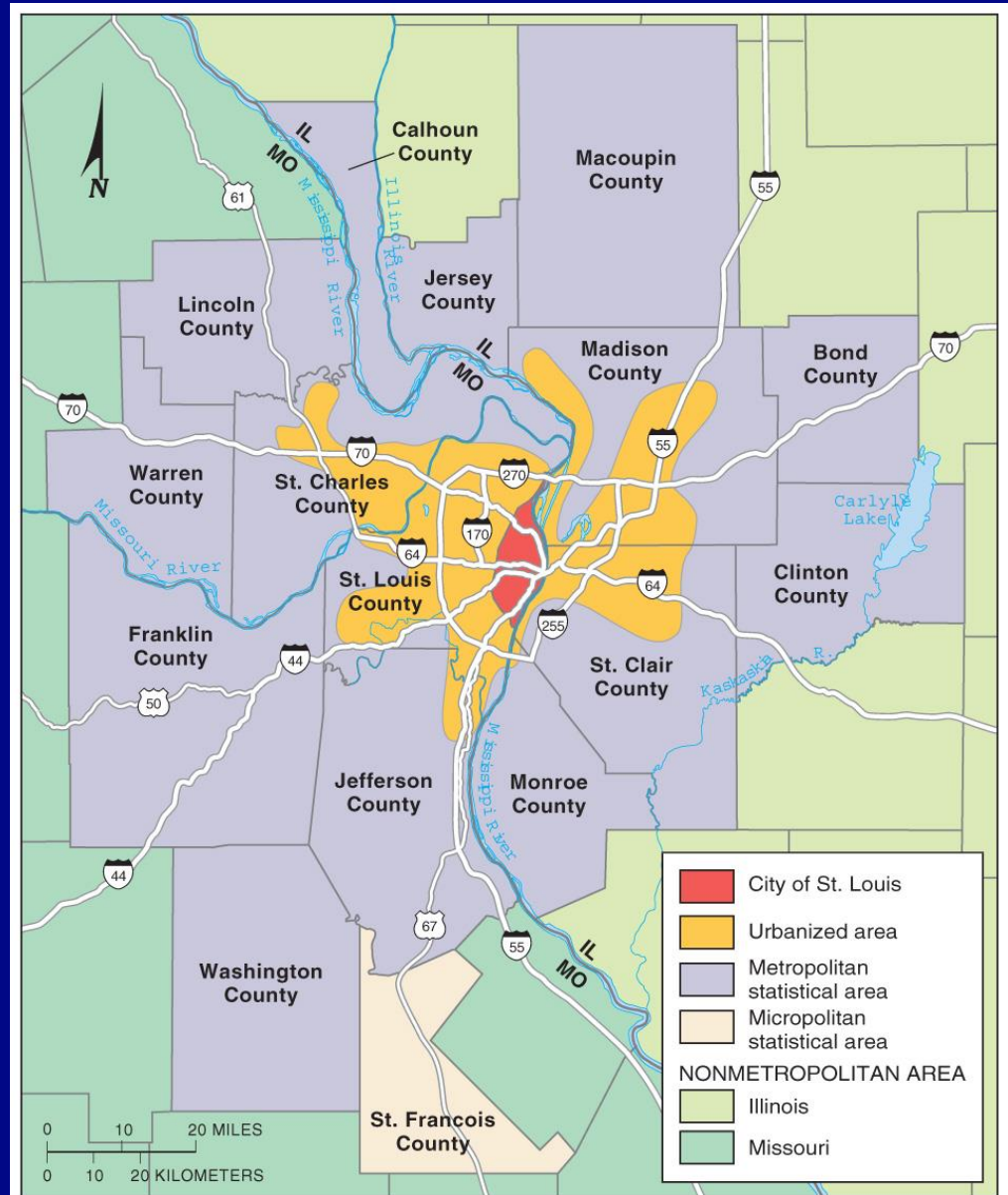
Megalopolis

Fig. 13-4: The Boston-Washington corridor extends over 700 km and contains about one-quarter of U.S. population.

Urban Structure

- Three models of urban structure
  - Concentric zone model
  - Sector model
  - Multiple nuclei model
  - Geographic applications

- Use of the models outside North America
  - European cities
  - Less developed countries

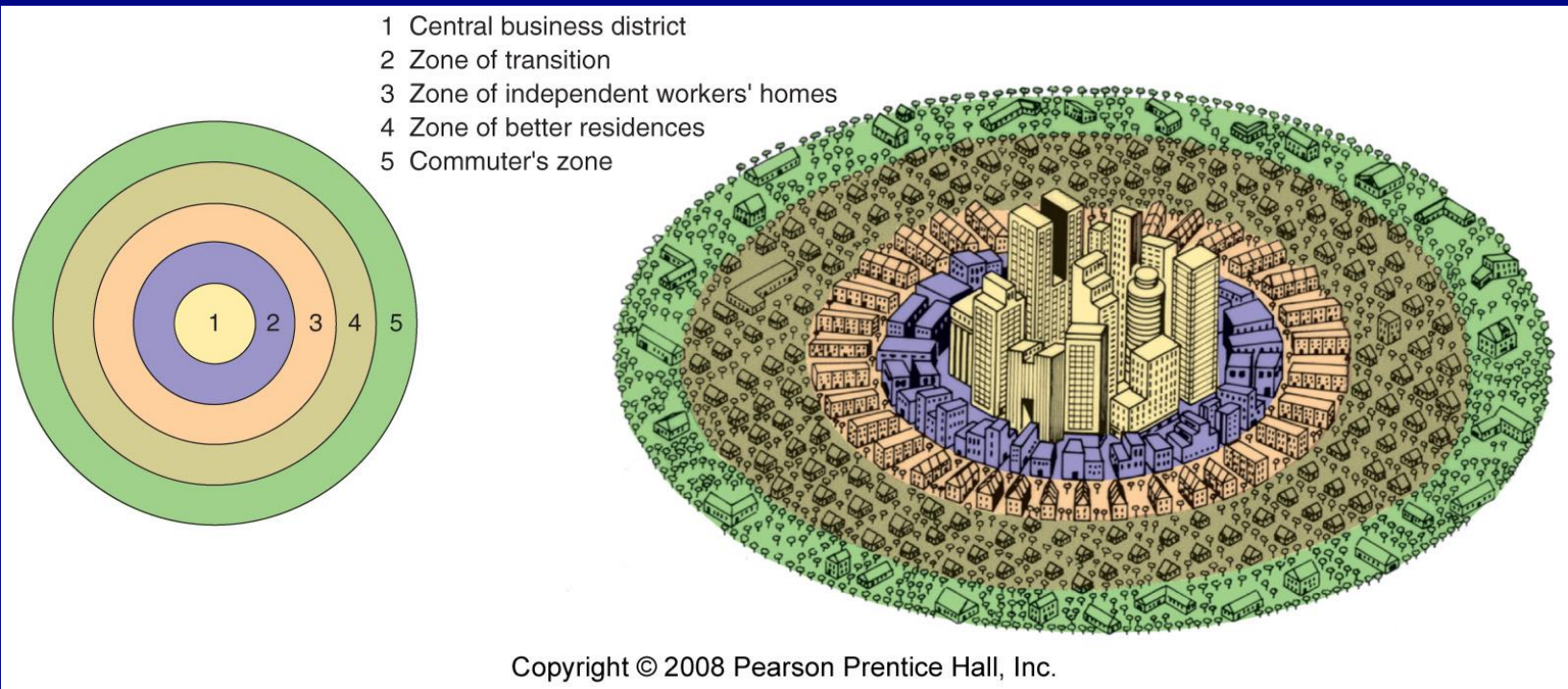# Concentric Zone Model

1 Central business district
2 Zone of transition
3 Zone of independent workers' homes
4 Zone of better residences
5 Commuter's zone

Fig. 13-5: In the concentric zone model, a city grows in a series of rings surrounding the CBD.

Sector Model

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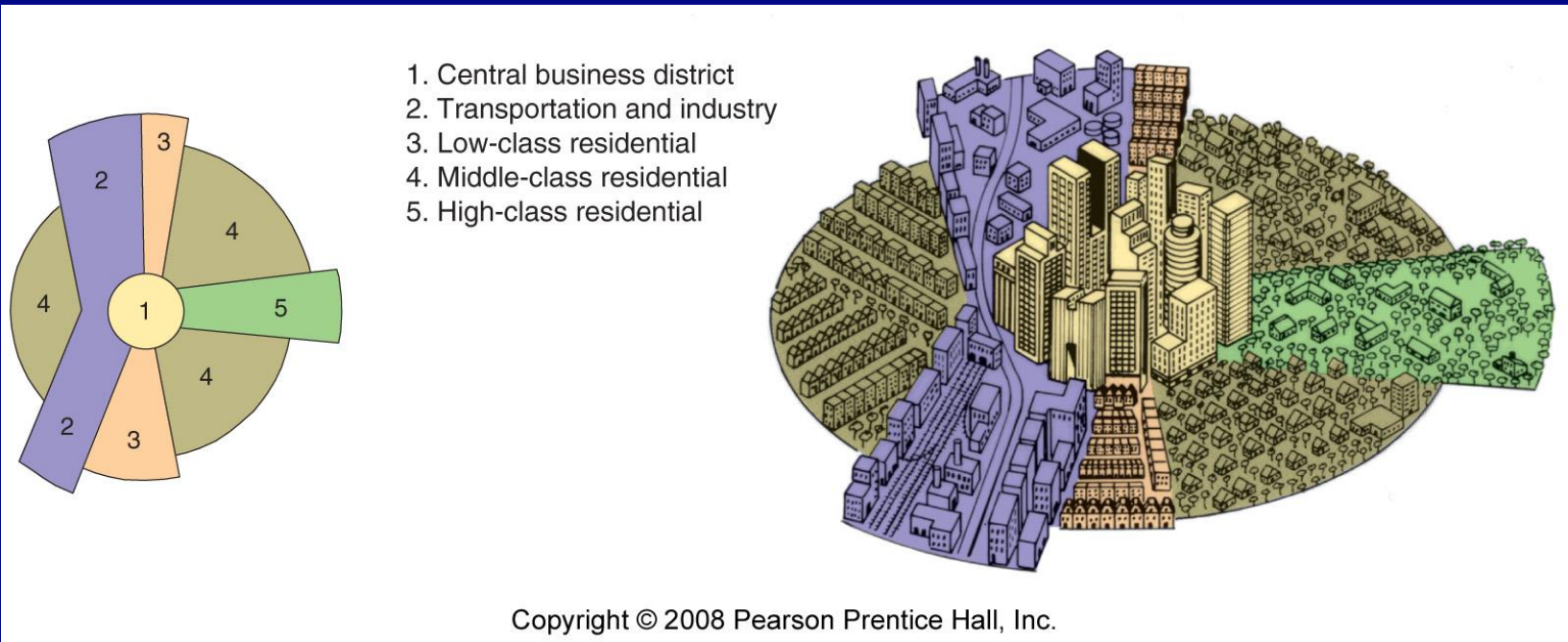4. Middle-class residential
5. High-class residential

Fig. 13-6: In the sector model, a city grows in a series of wedges or corridors extending out from the CBD.

Multiple Nuclei Model

1 Central business district
2 Wholesale, light manufacturing
3 Low-class residential
4 Medium-class residential
5 High-class residential
6 Heavy manufacturing
7 Outlying business district
8 Residential suburb
9 Industrial suburb

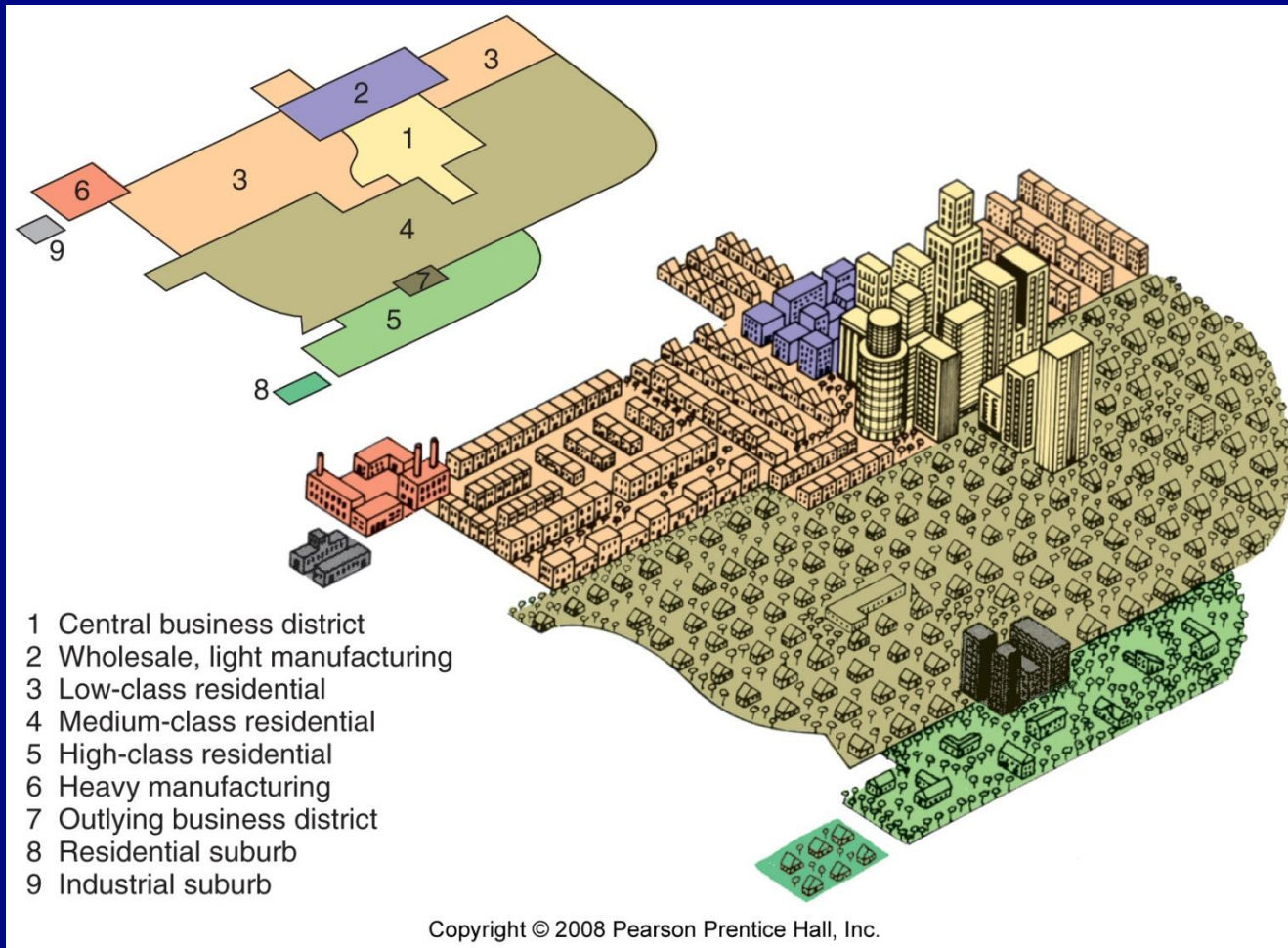Copyright © 2008 Pearson Prentice Hall, Inc.

Fig. 13-7: The multiple nuclei model views a city as a collection of individual centers, around which different people and activities cluster.
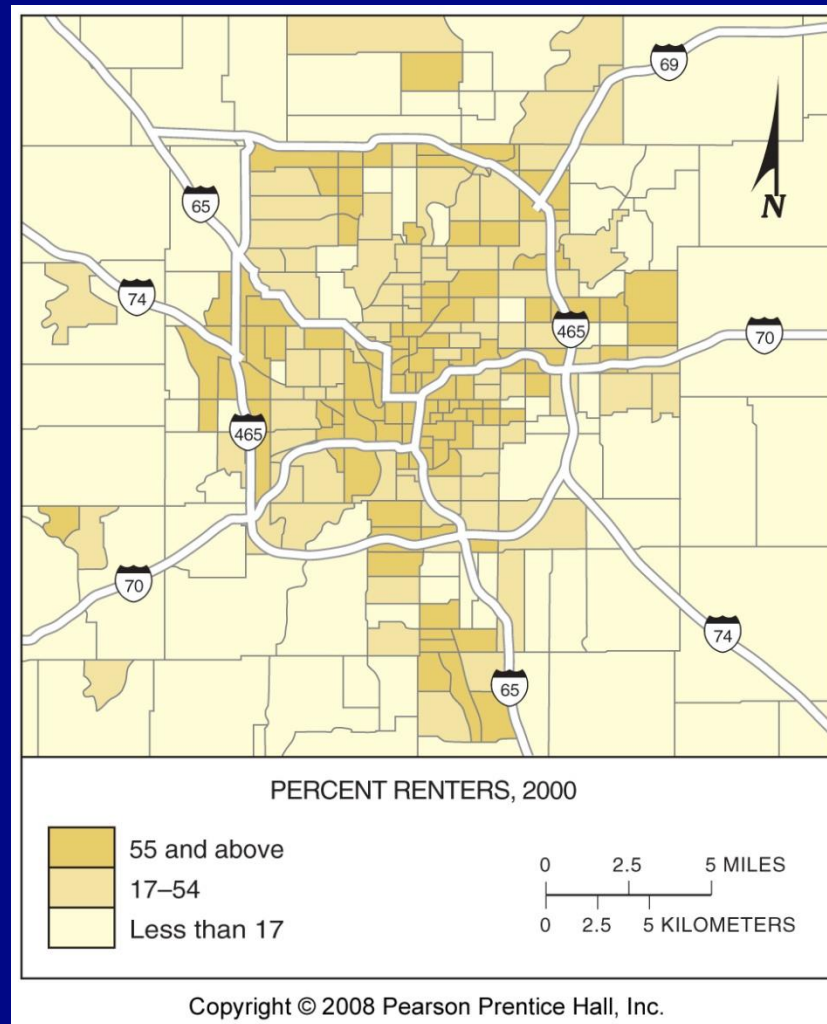
Indianapolis: Percent Renters

Fig. 13-8: The distribution of household renters in Indianapolis illustrates the concentric zone model.
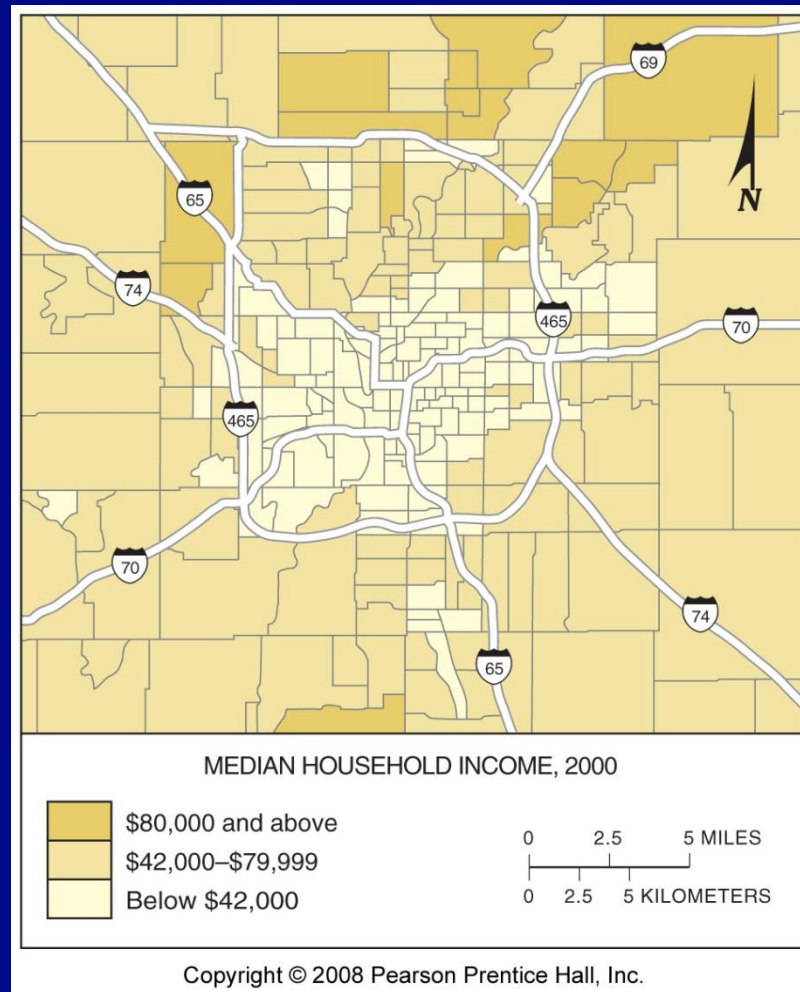
Indianapolis: Household Income

Fig. 13-9: The distribution of high income households in Indianapolis illustrates the sector model.

Indianapolis: Ethnic Patterns

ETHNIC CONCENTRATIONS, 2000

- Hispanic
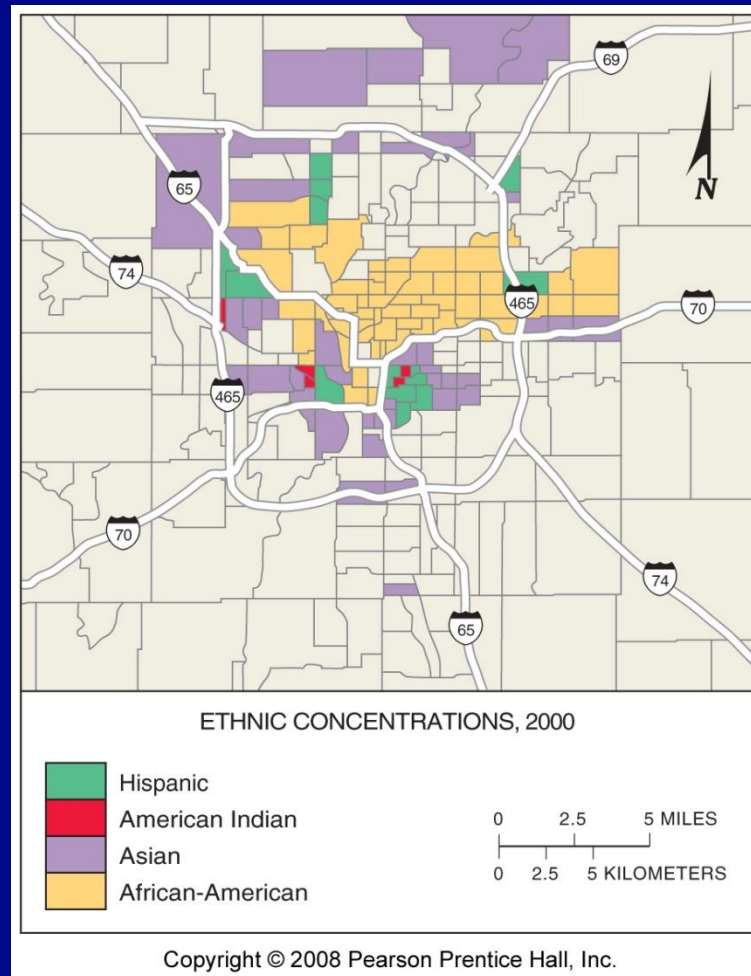- American Indian
- Asian
- African-American

Fig. 13-10: The distribution of minorities in Indianapolis is an example of a multiple nuclei model.
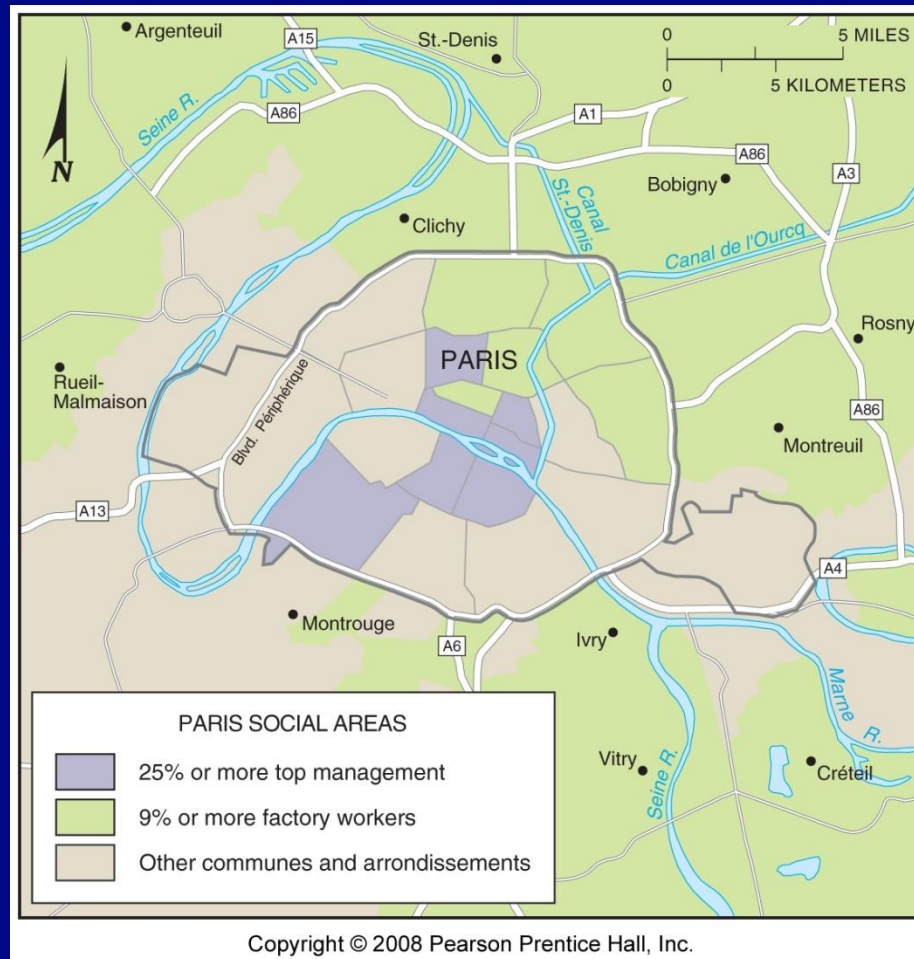
Social Areas in Paris

Fig. 13-11: Higher income professionals are likely to live in the center of Paris, while factory workers tend to live in the suburbs, in contrast to the pattern of many American cities.

African Immigrants in Paris

West African immigrants being removed from an apartment building in suburban Paris where they are accused of being squatters.

Mexico City

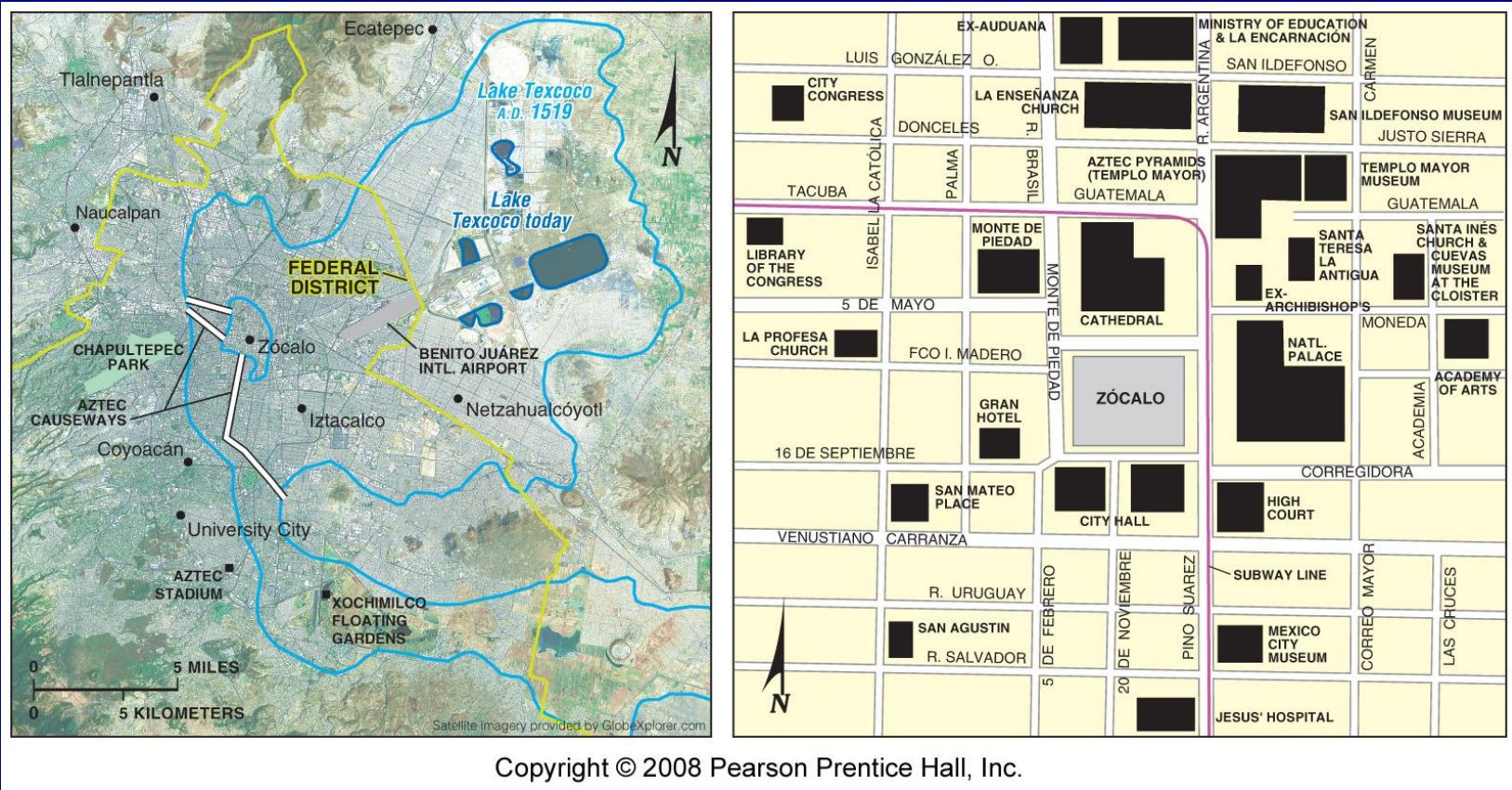Copyright © 2008 Pearson Prentice Hall, Inc.

Fig. 13-12: The Aztec city of Tenochtitlán was built on an island in Lake Texcoco. Today poorer people live on a landfill in the former lakebed, and the elite live to the west.

Aztec Features in Mexico City

Fig. 13-12a: The Aztec city of Tenochtitlán was built on an island in Lake Texcoco. Some features from the old Aztec city and region can still be identified.
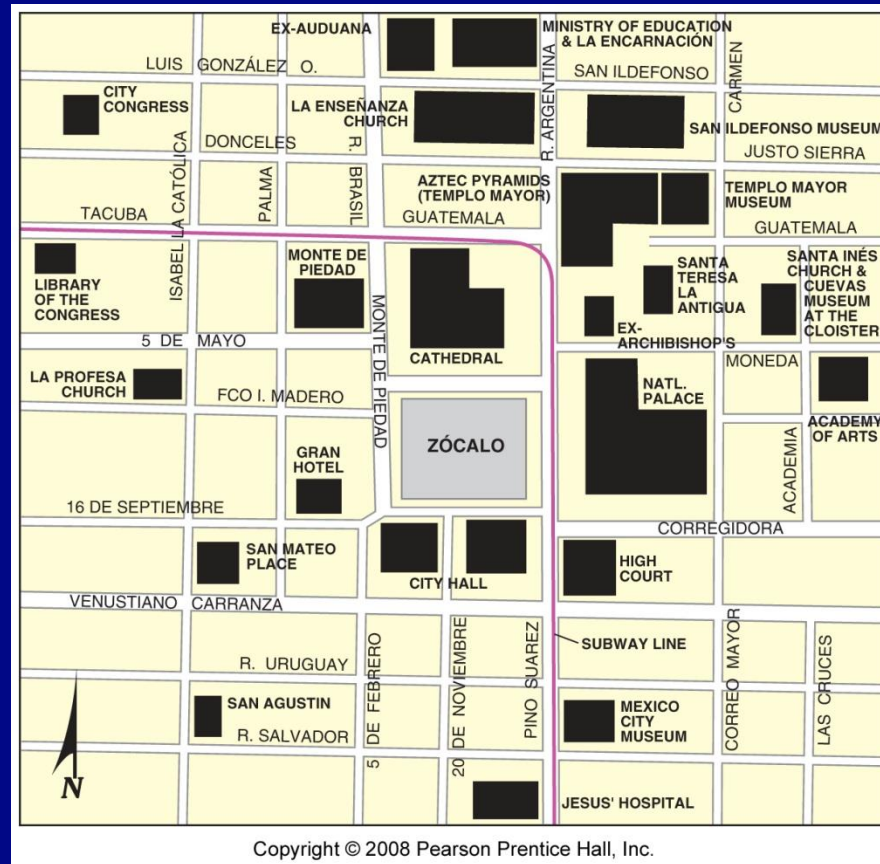
Downtown Mexico City

Fig. 13-12b: The main square in downtown Mexico City, the Zócalo, was laid out by the Spanish.

Mexico City, Oct. 2006

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The Zócalo in downtown Mexico City on Oct. 22, 2006 with 13,000 simultaneous games of chess in order to set a record.

Fès (Fez), Morocco
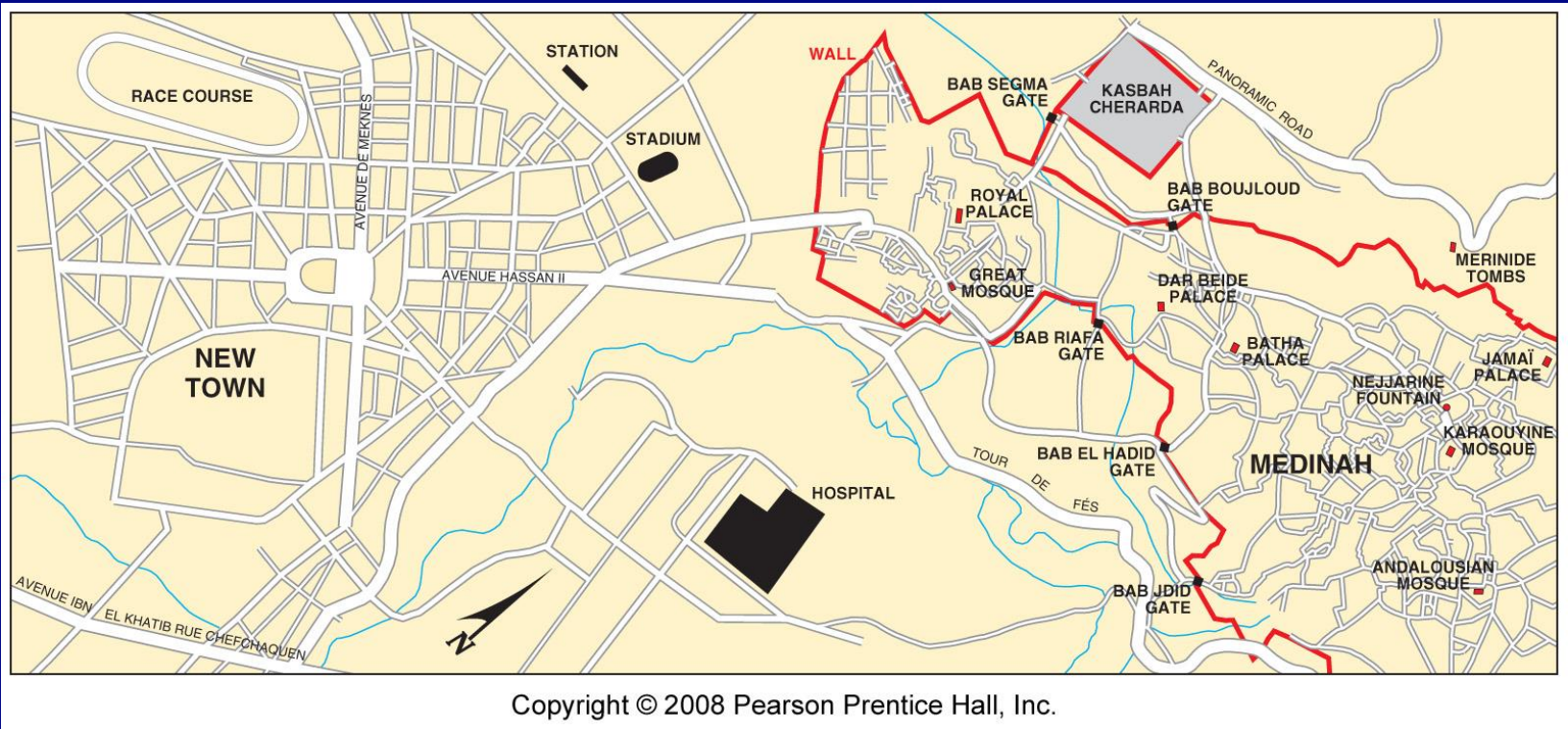

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Fig. 13-13: The old city in the east has narrow winding streets and dense population. The French laid out a new district to the west with a geometric street pattern.
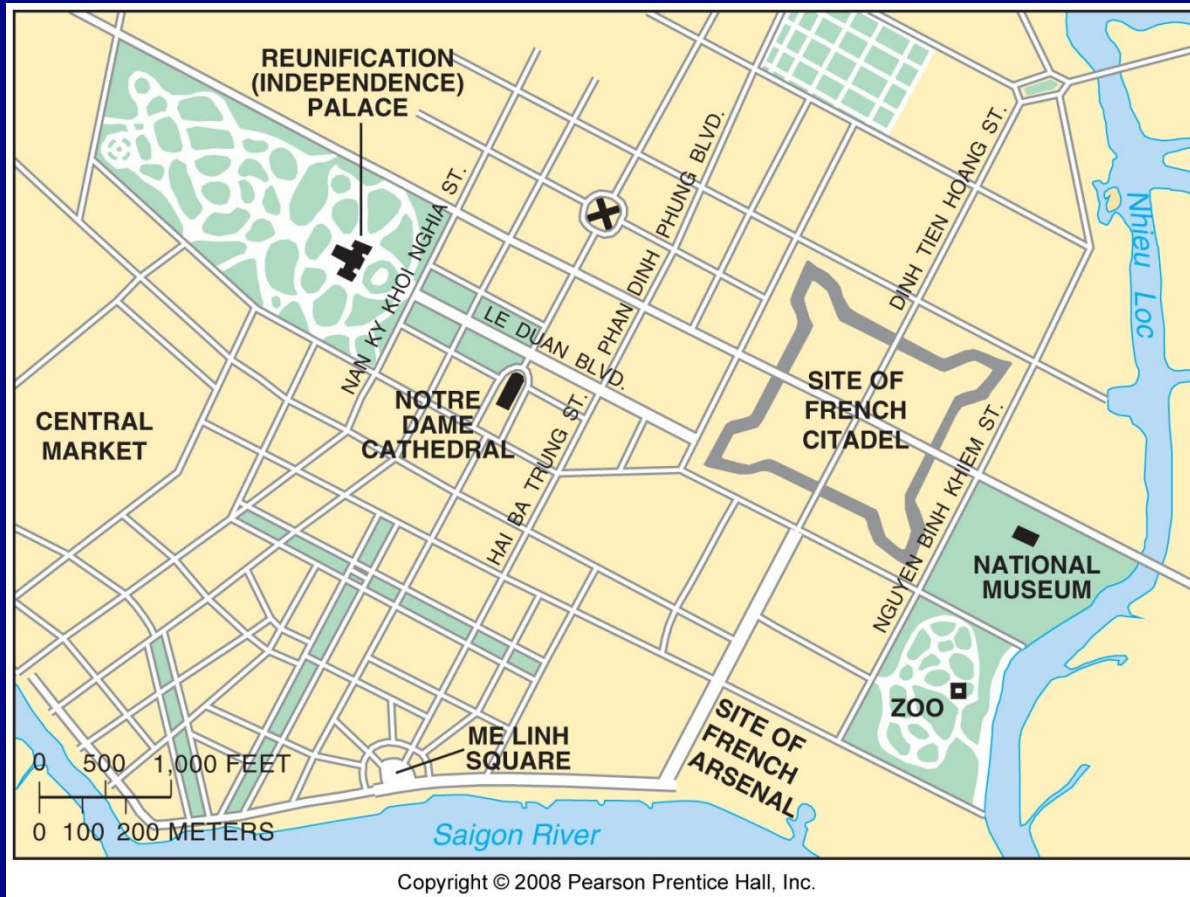
Ho Chi Minh City, Vietnam

Fig. 13-14: In Ho Chi Minh City (formerly Saigon), the French demolished the previous city and replaced it with a colonial design with boulevards and public squares.

Latin American City Model

Industrial Park

Disamenity

Periférico

Market

CBD

Spine

Mall

Commercial

Market

Industrial

Elite residential sector

Zone of maturity

Zone of *in situ* accretion

Zone of peripheral squatter settlements

Gentrification

Middle-class residential

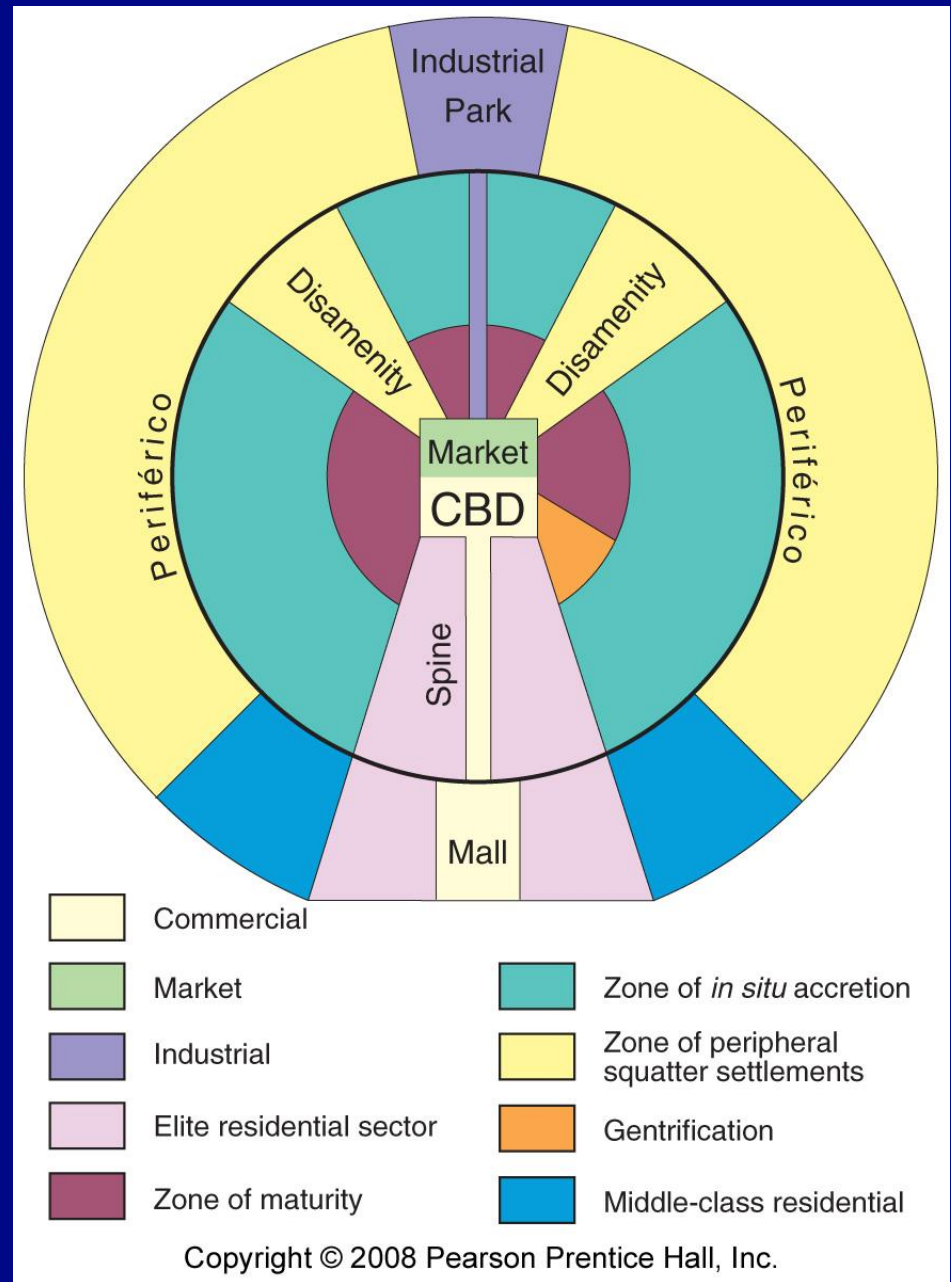Copyright © 2008 Pearson Prentice Hall, Inc.

Fig. 13-15: In many Latin American cities, the wealthy live in the inner city and in a sector extending along a commercial spine.

Rio de Janeiro, Brazil
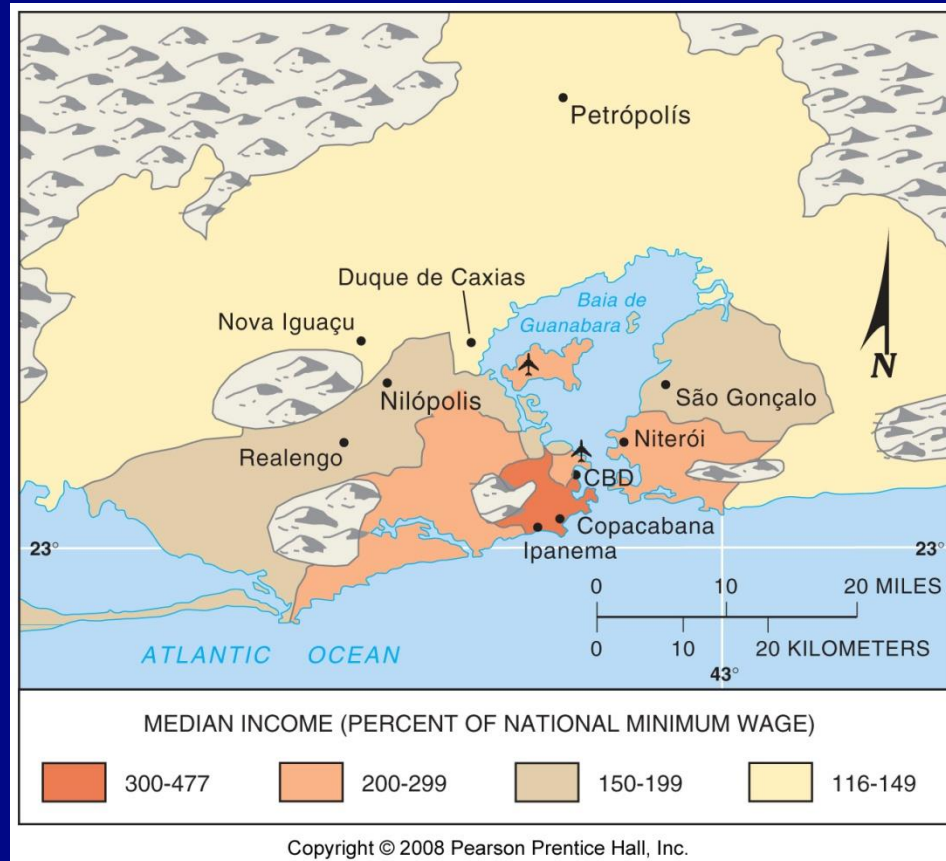## *High & Low Income Regions*

Fig. 13-16a: High income households in Rio de Janeiro live in the CBD and in a spine along the ocean. Low-income households often live in peripheral areas.
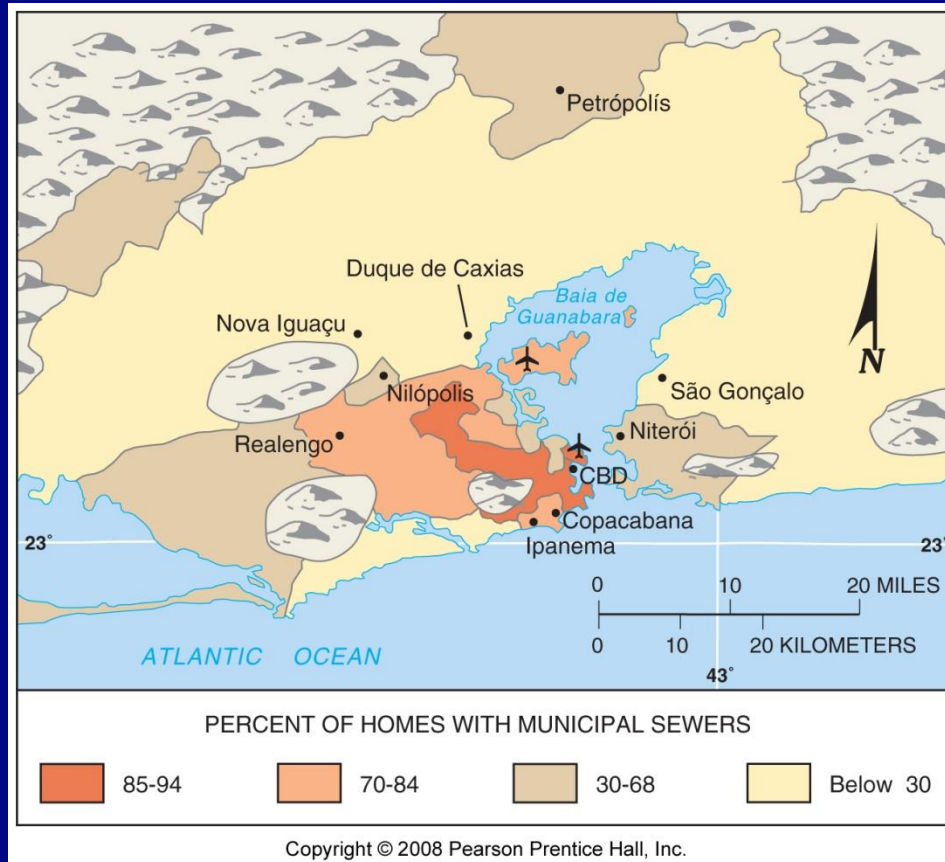
Rio de Janeiro
Areas with Sewers

Fig. 13-16b: High income households are attracted to central areas of Rio partly because these areas have access to services such as sewers.

Favela in Rio de Janeiro

Many poor immigrants live in squatter settlements, or *favelas*, many of which are on the hillsides around Rio.

Inner Cities

- Inner-city physical problems
  - Deterioration process
  - Urban renewal

- Inner-city social problems
  - Underclass
  - Culture of poverty

- Inner-city economic problems
 - Annexation

Gentrification in Boston

The Back Bay area near downtown Boston has attracted many wealthy residents.

Racial Change in Chicago
1980 - 2000

Fig. 13-17: Racial & ethnic change in Chicago, 1980-2000. Dots represent where race and ethnicity increased. White population increased in the inner city and North Side, while African American and Hispanic population increased in the outer city and inner suburbs.
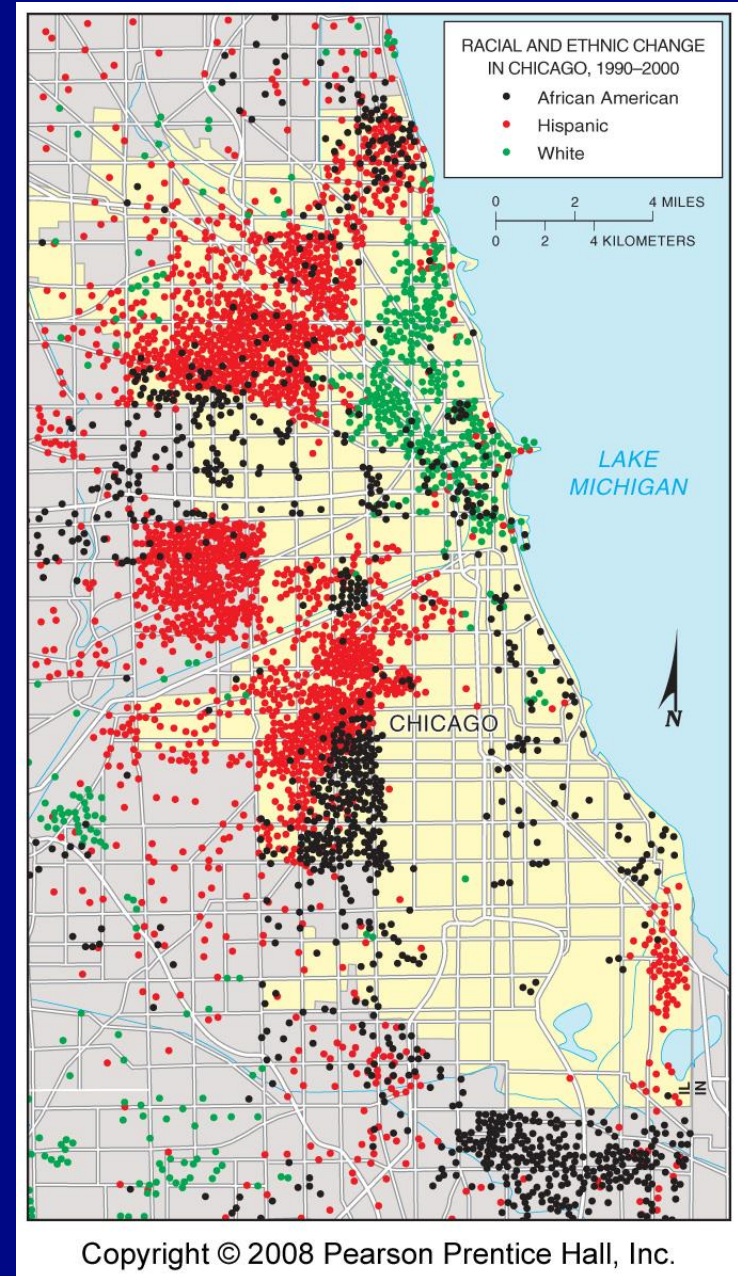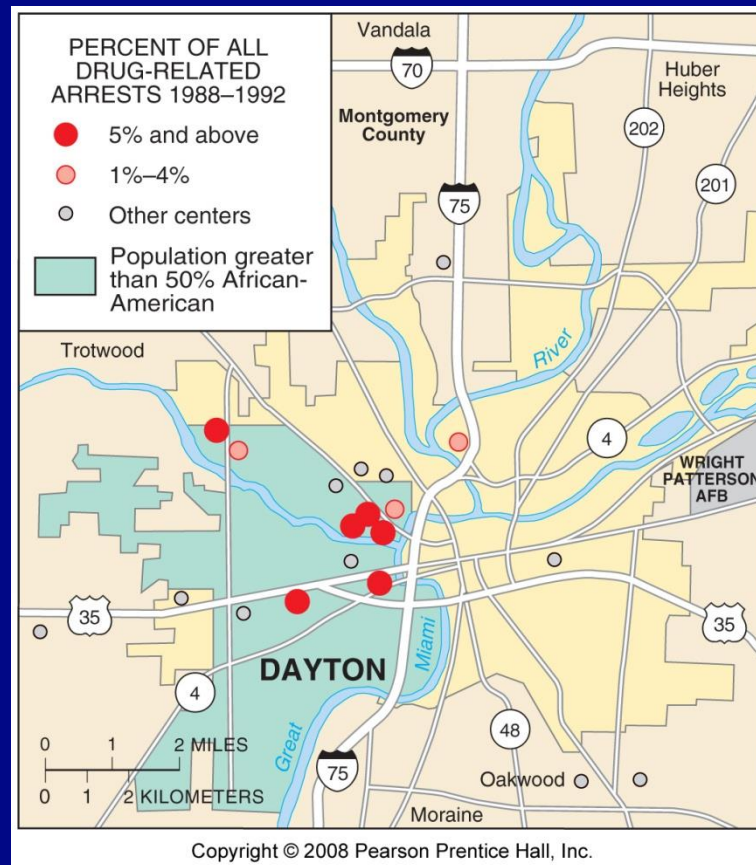
Dayton, Ohio
Drug-related Arrests

Fig. 13-18a: Drug-related arrests have been concentrated in the low income inner-west side of the city.
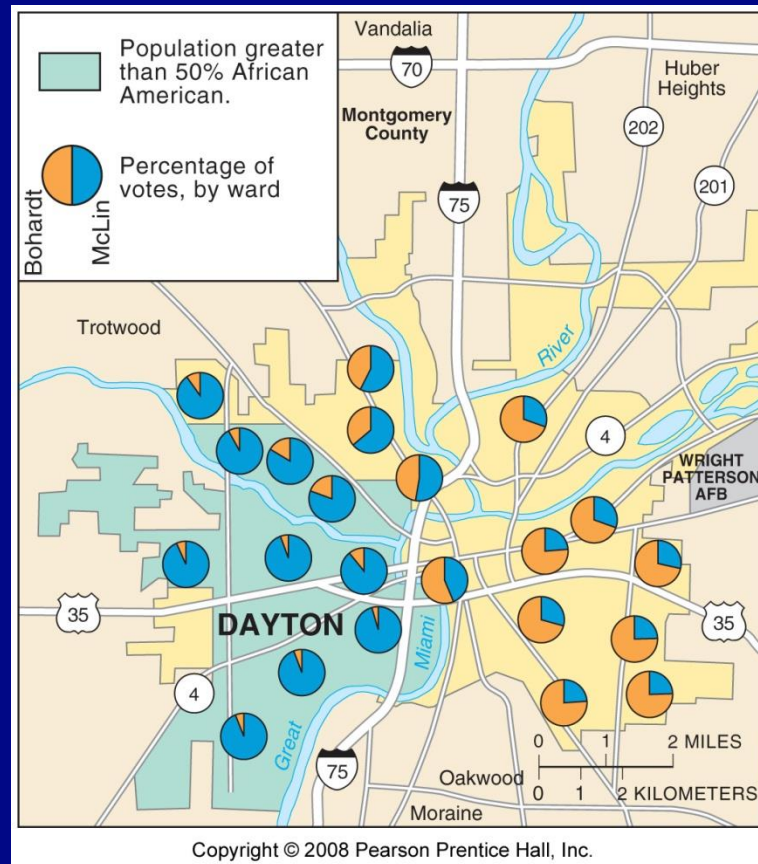
Dayton, Ohio
Race and Voting

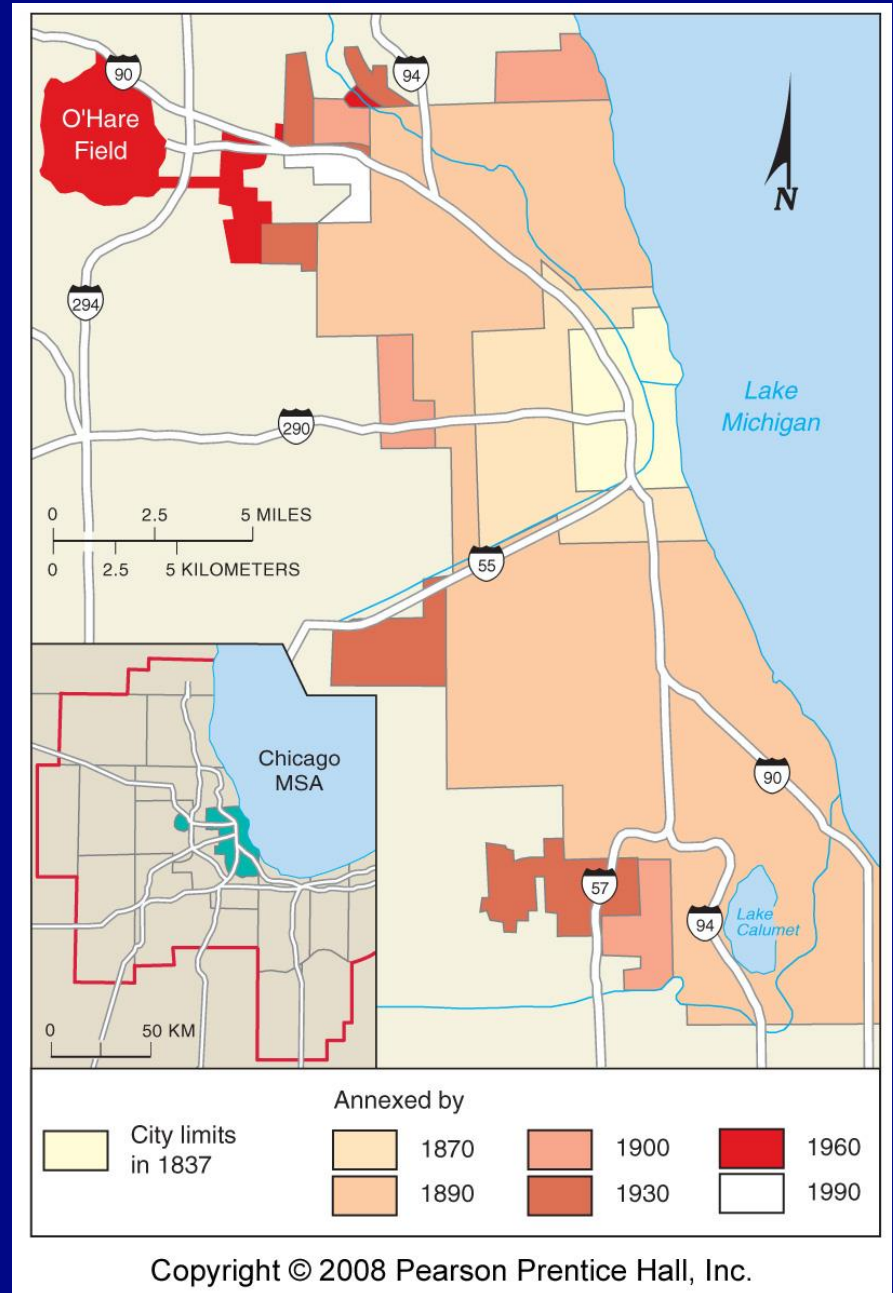
Fig. 13-18b: In the 2005 mayoral election, votes for Rhine McLin, an African American incumbent, concentrated in the African American west side of the city.

Problems of Suburbs

- The peripheral model
  - Density gradient
  - Cost of suburban sprawl
  - Suburban segregation

- Transportation and suburbanization
  - Motor vehicles
  - Public transportation

- Local government fragmentation
  - Metropolitan government
  - Growing smart

Growth of Chicago

Fig. 13-19: Chicago grew rapidly in the 19th century through annexation. In the 20th century the major annexation was for O'Hare Airport. The city of Chicago covers only a portion of the Chicago metropolitan statistical area (inset).

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Peripheral Model of Urban Areas

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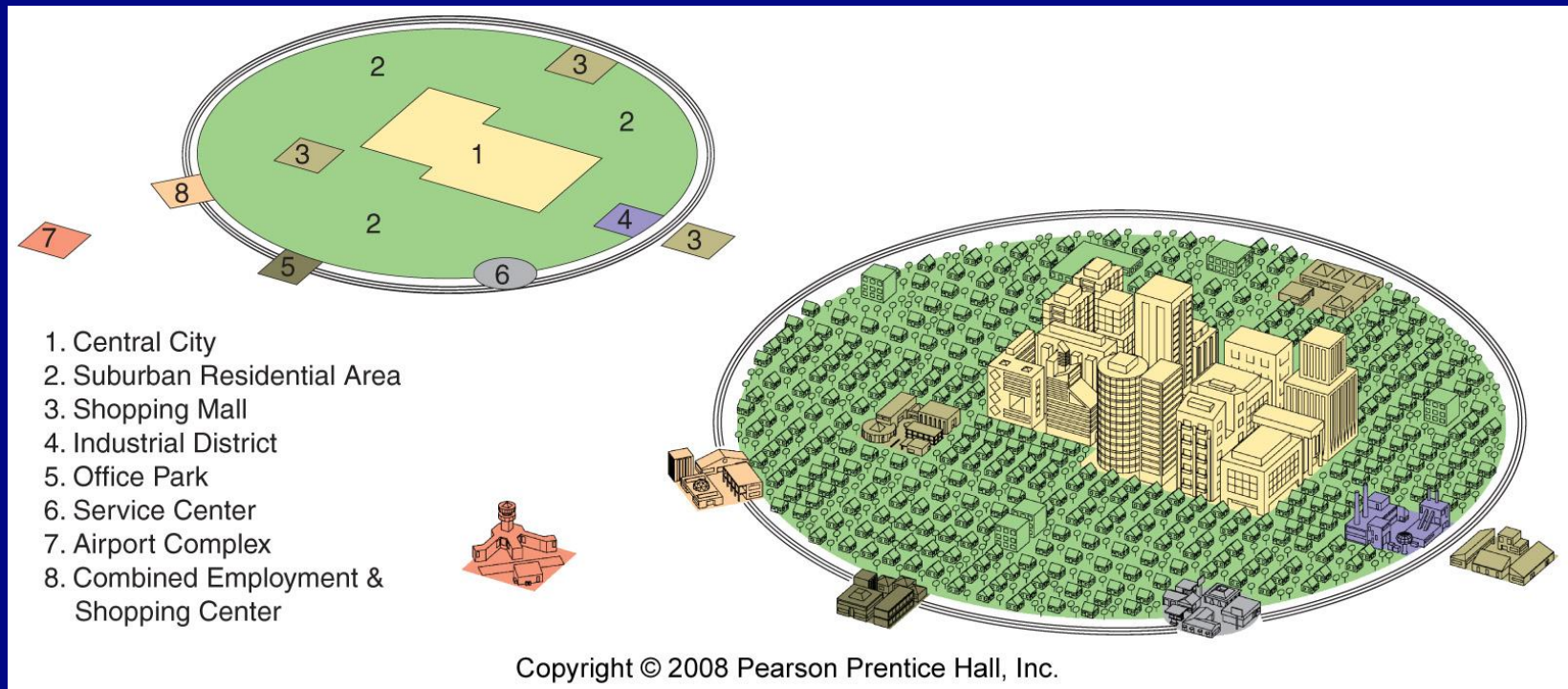8. Combined Employment &
   Shopping Center

Fig. 13-20: The central city is surrounded by a ring road, around which are suburban areas and edge cities, shopping malls, office parks, industrial areas, and service complexes.

Cleveland, Ohio Density Gradient *1900-1990*

Fig. 13-21: The density gradient in Cleveland shows the expansion of dense population outward from the city center over time. In 1990, population dispersed over a wider area with less variation in density than before.
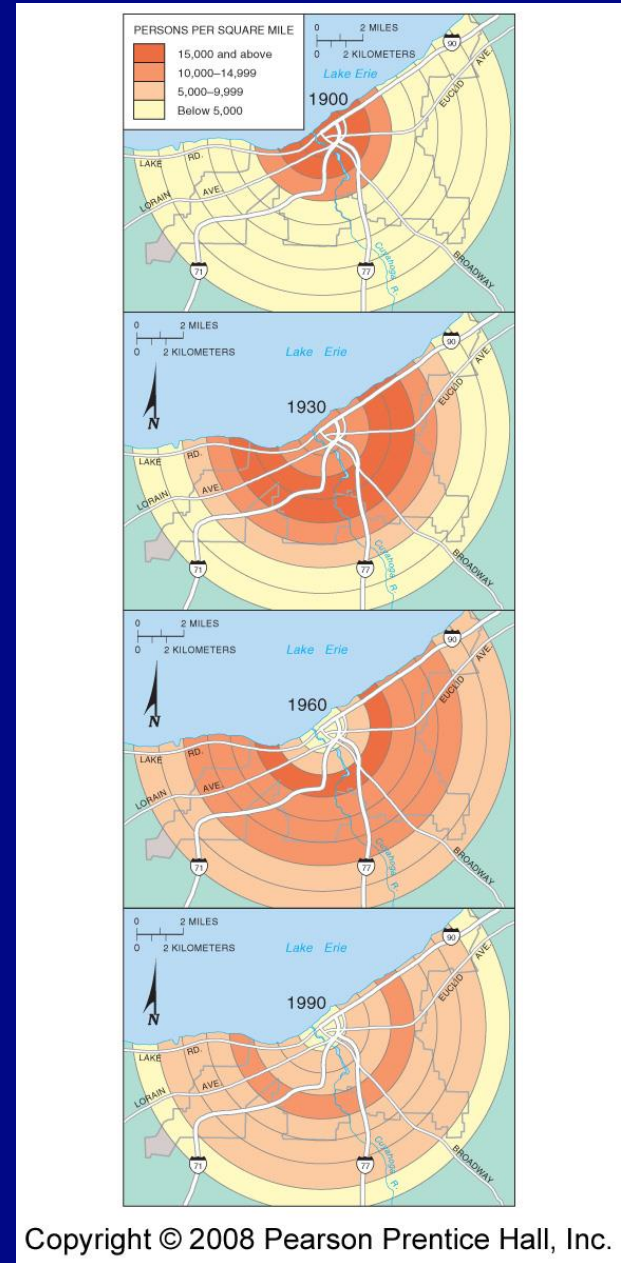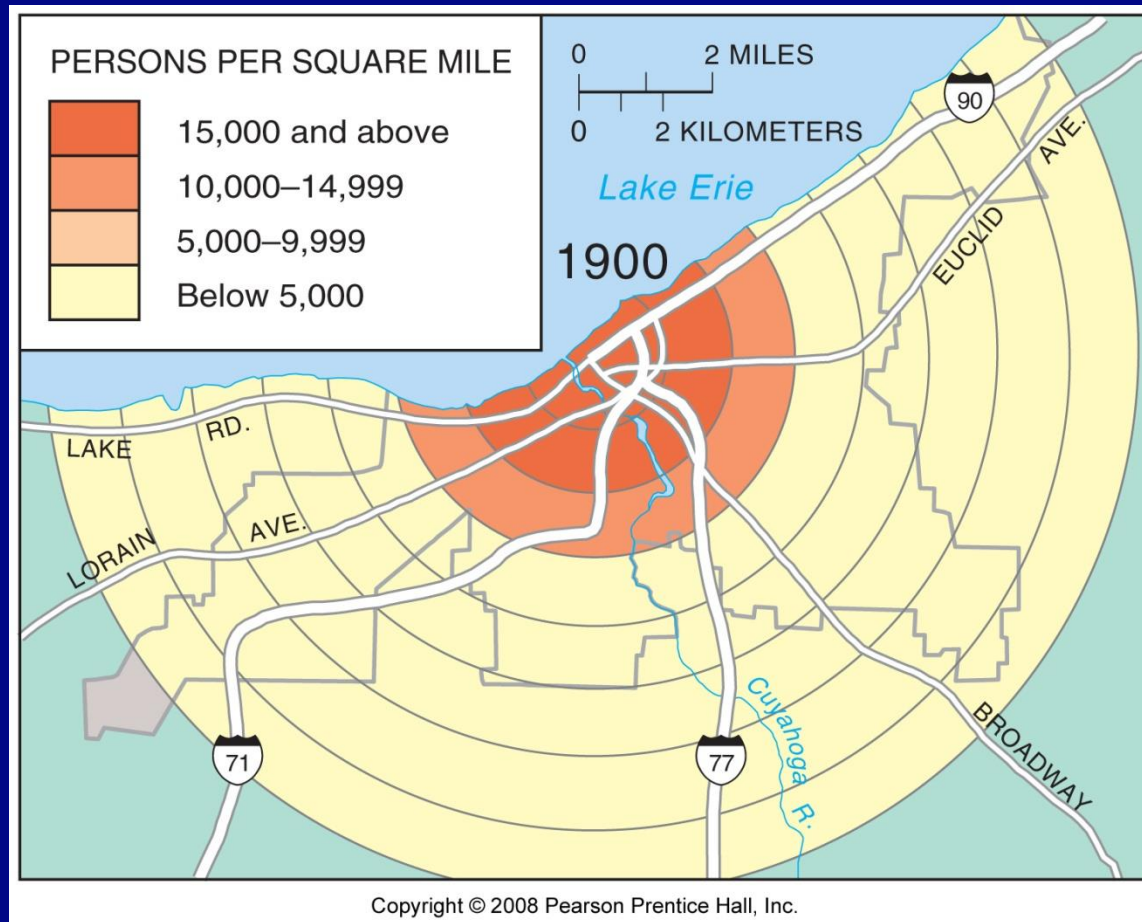
Cleveland, Ohio
Density Gradient, 1900

Fig. 13-21a: In 1900 population was highly clustered in and near the central business district.

Cleveland, Ohio
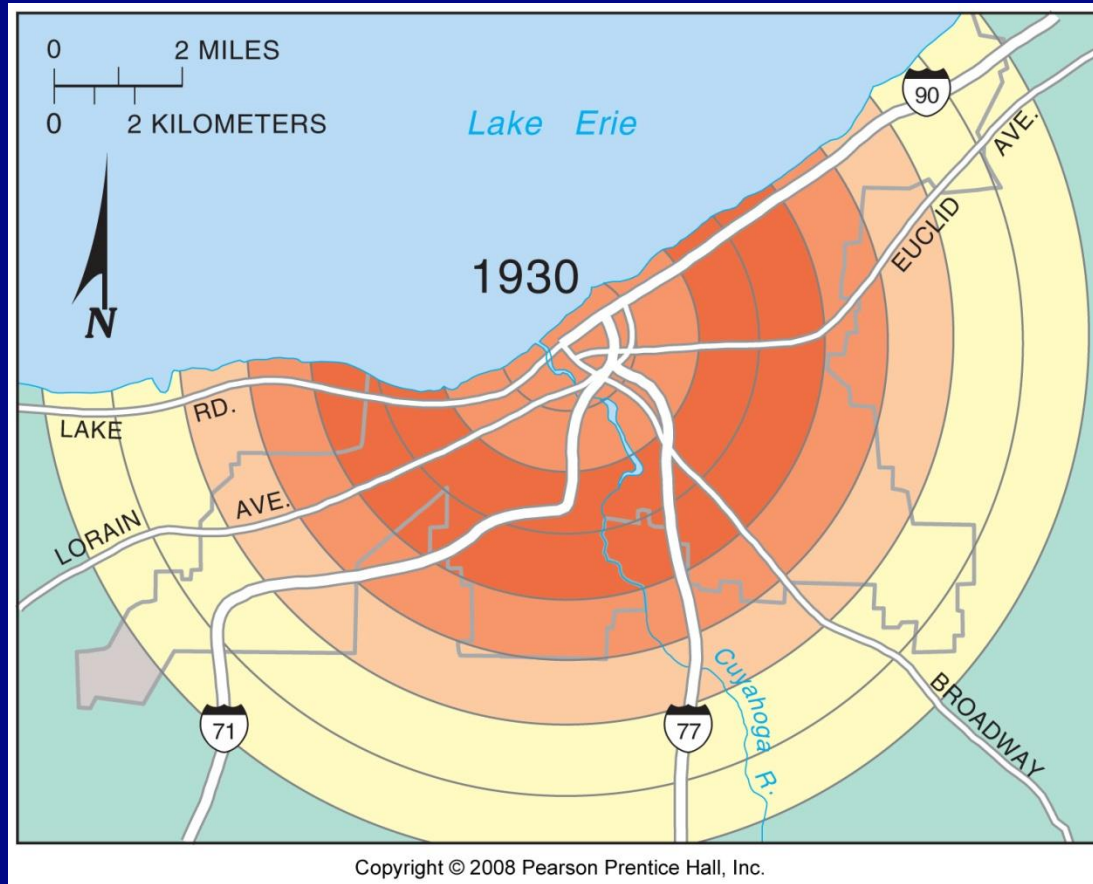## *Density Gradient, 1930*

Fig. 13-21b: By 1930, population had begun to spread outward, leaving the core less dense.
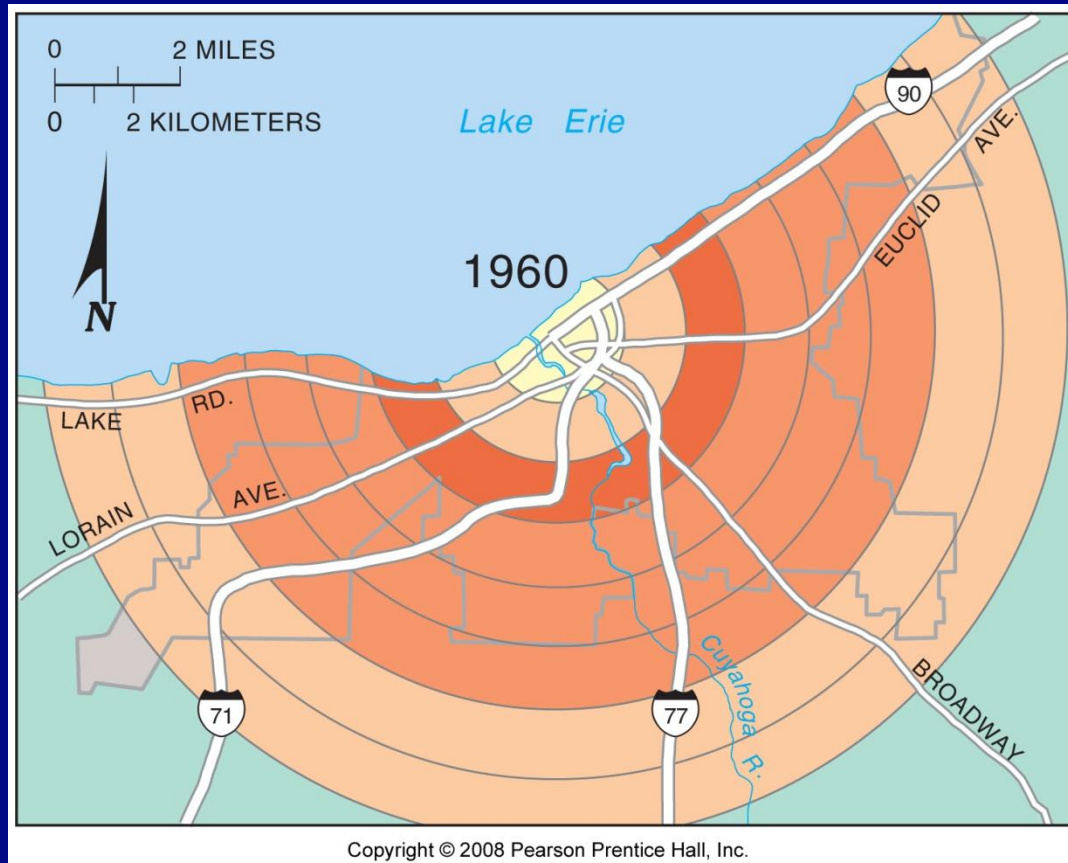
Cleveland, Ohio
Density Gradient, 1960

Fig. 13-21c: Outward movement had accelerated by 1960, leaving the original CBD core as the least densely populated area of the city.

Cleveland, Ohio
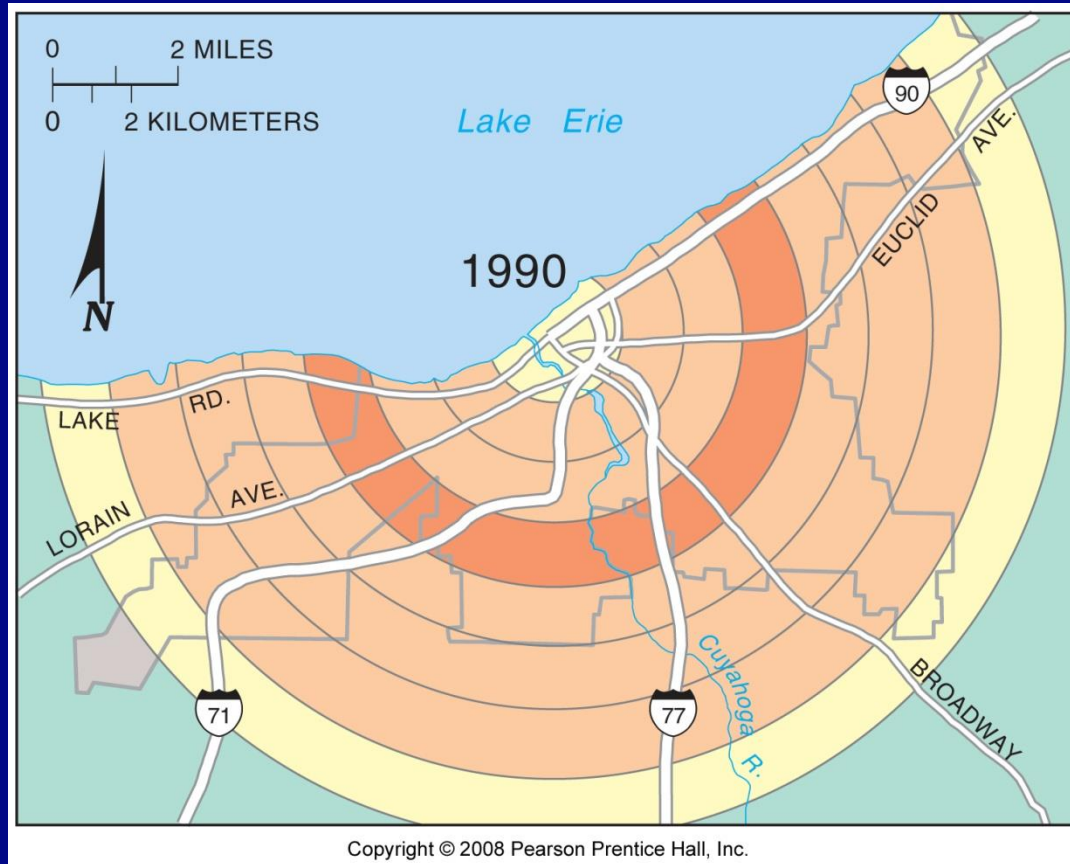## *Density Gradient, 1990*

Fig. 13-21d: By 1990. population was spread over a much larger area, there was less variation among rings, and the lowest densities were near the CBD.
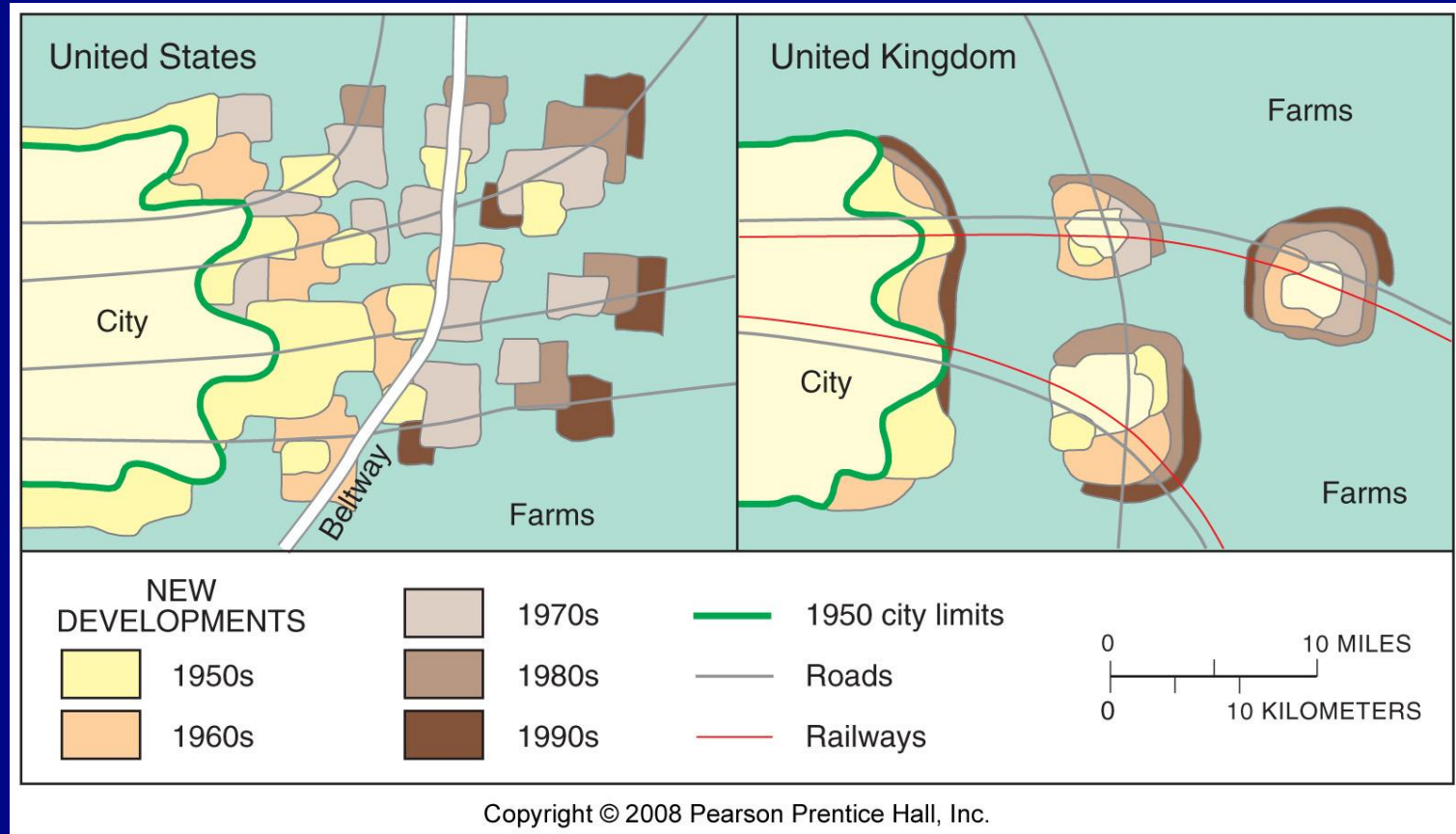
Suburban Development in the U.S. and U.K.

Fig. 13-22: New housing in the U.K. is likely to be in planned new towns, while in the U.S. growth occurs in discontinuous developments.

Northampton, United Kingdom

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There is usually a sharp boundary between an urban area in the U.K., such as Northampton, and the surrounding rural area.

Tokyo Subway

"Subway pushers" help push as many people as possible into subway cars during rush hour in Tokyo. Other passengers wait in orderly lines to board the next train.

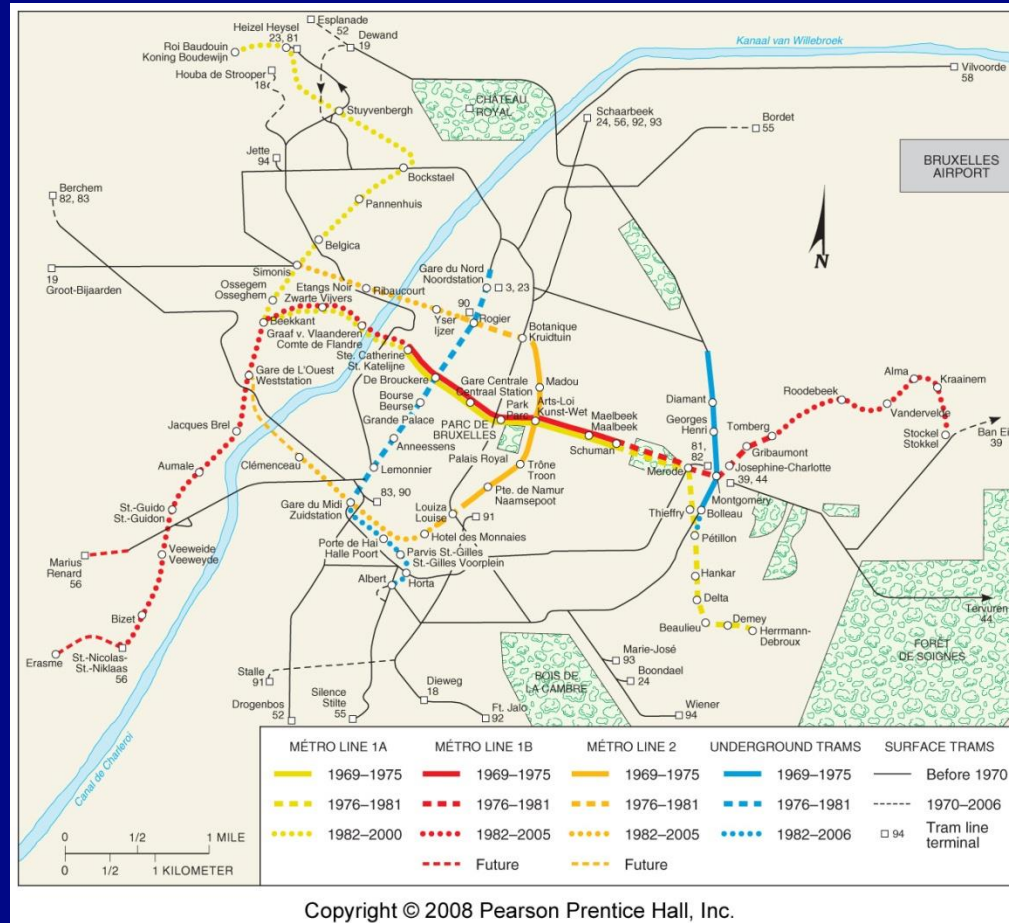# Public Transport in Brussels

Fig. 13-23: Brussels, Belgium illustrates the integration of heavy rail (Métro Lines 1 & 2) and light rail (trams) in European public transport.

Tram Line in Brussels

A Line 92 tram on the Rue Royale in Brussels.

Stressed School Districts in Cincinnati Metropolitan Area

STRESSED SCHOOL DISTRICTS IN CINCINNATI METROPOLITAN AREA

- Low spending & high cost
- Moderate spending & high cost
- High spending & high cost
- Low spending and low cost
- Moderate spending and low cost
- High spending and low cost

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Fig. 13-24: A high-cost school district has either a high percentage of students eligible for free lunches or a rapidly changing enrollment. Districts in the suburbs have high costs but low spending.
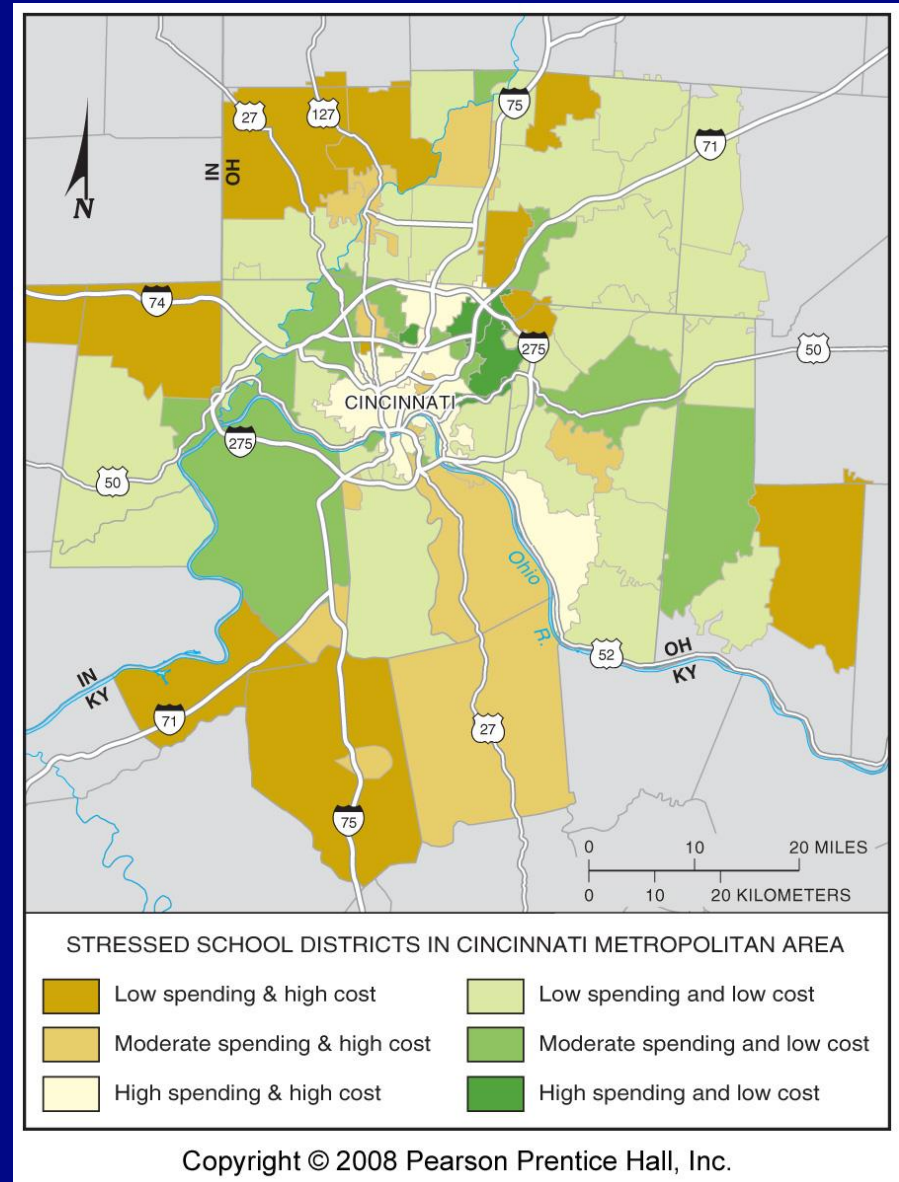
Central London Traffic Sign

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This sign near Marble Arch in London warns motorists that they are about to enter the Congestion Zone. A charge is levied for driving a private vehicle into central London from 7 AM to 6:30 PM.