Key Issue Four: Why do suburbs have distinctive problems?
KEY ISSUE 4: 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
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.
As you travel outward from the center of a city, you can watch the decline in the density at which people live. This density change in an urban area is called the density gradient.

According to the density gradient, the number of houses per unit of land diminishes as distance from the center city increases.

Two changes have affected the density gradient in recent years.

First, the number of people living in the center has decreased. The density gradient thus has a gap in the center, where few live.

Second is the trend toward less density difference within urban areas.
CLEVELAND, OHIO, 1900–1990

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.
In 1900 population was highly clustered in and near the central business district.
By 1930, population had begun to spread outward, leaving the core less dense.
CLEVELAND, OHIO
DENSITY GRADIENT, 1960

Outward movement had accelerated by 1960, leaving the original CBD core as the least densely populated area of the city.
By 1990, population was spread over a much larger area, there was less variation among rings, and the lowest densities were near the CBD.
New housing in the U.K. is likely to be in planned new towns, while in the U.S. growth occurs in discontinuous developments.
There is usually a sharp boundary between an urban area in the U.K., such as Northampton, and the surrounding rural area.
Some prime agricultural land may be lost through construction of isolated housing developments; in the interim, other sites lie fallow, while speculators await the most profitable time to build homes on them.

The low-density suburb also wastes more energy, especially because the automobile is required for most trips.

The supply of land for construction of new housing is more severely restricted in European urban areas . . . by designating areas of mandatory open space.

London, Birmingham, and several other British cities are surrounded by greenbelts, or rings of open space.

New housing is built either in older suburbs inside the greenbelts or in planned extensions to small towns and new towns beyond the greenbelts.

Restriction of the supply of land . . . has driven up house prices in Europe.
The modern residential suburb is segregated in two ways.

First, residents are separated from commercial and manufacturing activities.

Second, a given suburban community is usually built for people of a single social class, with others excluded by virtue of the cost, size, or location of the housing.

The homogeneous suburb is a twentieth-century phenomenon.

In older cities, activities and classes were more likely to be separated vertically rather than horizontally.

Poorer people lived on the higher levels or in the basement, the least attractive parts of the building.

http://www.youtube.com/watch?v=u4KfJztaJ5I
Once cities spread out over much larger areas, the old pattern of vertical separation was replaced by territorial segregation.

Large sections of the city were developed appealing to people with similar incomes and lifestyles.

Zoning ordinances, developed in Europe and North America in the early decades of the twentieth century, encouraged spatial separation.

They prevented mixing of land uses within the same district.

The strongest criticism of U.S. residential suburbs is that low-income and minority people are unable to live in them because of the high cost of the housing and the unfriendliness of established residents.

Legal devices, such as requiring each house to sit on a large lot and the prohibition of apartments, prevent low-income families from living in many suburbs.
CONTRIBUTION OF TRANSPORTATION TO SUBURBANIZATION

Urban sprawl makes people more dependent on transportation for access to work, shopping, and leisure activities.

More than half of all trips are work-related.

Shopping or other personal business and social journeys each account for approximately one-fourth of all trips.

Historically, the growth of suburbs was constrained by transportation problems.

People lived in crowded cities because they had to be within walking distance of shops and places of employment.

Cities then built street railways and underground railways.

Many so-called streetcar suburbs built in the nineteenth century still exist and retain unique visual identities.
MOTOR VEHICLES

The suburban explosion in the twentieth century has relied on motor vehicles rather than railroads, especially in the United States.

Rail and trolley lines restricted suburban development to narrow ribbons within walking distance of the stations.

Motor vehicle ownership is nearly universal among American households.

Outside the big cities, public transportation service is extremely rare or nonexistent.

The U.S. government has encouraged the use of cars and trucks by paying 90 percent of the cost of limited-access high-speed interstate highways (and) by policies that limit the price of fuel to less than one half the level found in Western Europe.
CARS: THE PREFERRED MODE OF TRANSPORTATION

The motor vehicle is an important user of land in the city.

An average city allocates about one-fourth of its land to roads and parking lots.

European and Japanese cities have been especially disrupted by attempts to insert new roads and parking areas in or near to the medieval central areas.

Technological improvements may help traffic flow.

Computers mounted on the dashboards alert drivers to traffic jams and suggest alternate routes.

On freeways, vehicle speed and separation from other vehicles can be controlled automatically.

The inevitable diffusion of such technology in the twenty-first century will reflect the continuing preference of most people in MDCs to use private motor vehicles rather than switch to public transportation.
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.
PUBLIC TRANSPORTATION

Because few people in the United States live within walking distance of their place of employment, urban areas are characterized by extensive commuting.

As much as 40 percent of all trips made into or out of a CBD occur during four hours of the day—two in the morning and two in the afternoon.

Rush hour, or peak hour, is the four consecutive 15-minute periods that have the heaviest traffic.

Public transportation is better suited than motor vehicles to moving large numbers of people.

But most Americans still prefer to commute by car.

Public transportation is cheaper, less polluting, and more energy-efficient than the automobile.

Its use is increasingly confined in the United States to rush-hour commuting by workers in the CBD.
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.
RUSH-HOUR COMMUTING

Automobiles have costs beyond their purchase and operation: delays imposed on others, increased need for highway maintenance, construction of new highways, and pollution.

Yet despite the obvious advantages of public transportation for commuting, ridership in the United States declined from 23 billion per year in the 1940s to 8 billion in 2002.

The number of U.S. and Canadian cities with trolley service declined from approximately 50 in 1950 to 8 in the 1960s.

General Motors acquired many of the privately owned streetcar companies and replaced the trolleys with buses that the company made.

Bus ridership declined from a peak of 11 billion riders annually in the late 1940s to 6 billion in 2001.

Commuter railroad service, like trolleys and buses, has also been drastically reduced in most U.S. cities.
NEW RAPID TRANSIT LINES

The one exception to the downward trend in public transportation is rapid transit.

Cities such as Boston and Chicago have attracted new passengers through construction of new subway lines and modernization of existing service.

Entirely new subway systems have been built in recent years in U.S. cities, including Atlanta, Baltimore, Miami, San Francisco, and Washington, D.C.

The federal government has permitted Boston, New York, and other cities to use funds originally allocated for interstate highways to modernize rapid transit service instead.

Subway rider-ship in the United States has increased 2 percent each year since 1980.
The trolley—now known (as fixed light-rail transit—is making a modest comeback in North America.

However, new construction in all 10 cities amounted only to about 200 kilometers (130 miles) since 1980, and rider-ship in all cities combined is 1 million a day.

California, the state that most symbolizes the automobile-oriented American culture, leads in construction of new fixed light-rail transit lines.

Los Angeles—the city perhaps most associated with the motor vehicle—has planned the most extensive new light-rail system but construction is very expensive, and the lines (will) serve only a tiny percentage of the region.
Low-income people tend to live in inner-city neighborhoods, but the job opportunities are in suburban areas not well served by public transportation.

Despite modest recent successes, most public transportation systems are caught in a vicious circle, because fares do not cover operating costs.

As patronage declines and expenses rise, the fares are increased, which drives away passengers and leads to service reduction and still higher fares.

The United States does not fully recognize that public transportation is a vital utility deserving of subsidy to the degree long assumed by European governments.
Brussels illustrates the integration of heavy rail and light rail in public transport.
The fragmentation of local government in the United States makes it difficult to solve regional problems of traffic, solid-waste disposal, and construction of affordable housing.

The large number of local government units has led to calls for a metropolitan government that could coordinate—if not replace—the numerous local governments in an urban area.

Most U.S. metropolitan areas have a council of government, which is a cooperative agency consisting of representatives of the various local governments in the region.

Strong metropolitan-wide governments have been established in a few places in North America.

Two kinds exist: federations and consolidations.
Toronto, Ontario, has a federation system.

The region’s six local governments are responsible for police, fire, and tax-collection services.

A regional government, known as the Metropolitan Council, or Metro, sets the tax rate borrows money for new projects.

Metro shares responsibility with local governments for public services, such as transportation, planning, parks, water, sewage, and welfare.
CONSOLIDATIONS

Several U.S. urban areas have consolidated metropolitan governments; Indianapolis and Miami are examples. Both have consolidated city and county governments.
Several U.S. states have taken strong steps in the past few years to curb sprawl, reduce traffic congestion, and reverse inner-city decline.

Legislation and regulations to limit suburban sprawl and preserve farmland has been called smart growth.

Maryland enacted especially strong smart growth legislation in 1998.

State money must be spent to “fill in” already urbanized areas. Oregon and Tennessee have defined growth boundaries within which new development must occur.

New Jersey, Rhode Island, and Washington were also early leaders in enacting strong state-level smart-growth initiatives.
Chapter 13

Urban Patterns

The End