



For hundreds of thousands of years, life was brutal. It still is for a good chunk of the planet. The technology and wealth we enjoy in North America is a very new development in history, and I think we miss the challenges of day-to-day survival in our comparatively easy modern lives.

Jeff Carlson

Setting the Boundaries



North America includes the US and Canada

- Sometimes called “Anglo America” because of its ties to Britain, but North America is increasing its cultural diversity through globalization and immigration.
- highly developed and wealthy
- in stage 4 of Demographic Transition



Physical Setting: Diverse



- eastern mountains
- Appalachians from 3,000-5,000 ft.
- western mountain hazards include earthquakes, volcanoes, alpine glaciers and erosion.
- Rockies exceed 10,000 feet.
- Great Plains in the Mid West
- arctic tundra in Alaska
- tropical forests in Hawaiian Islands



Physical Setting: Diverse



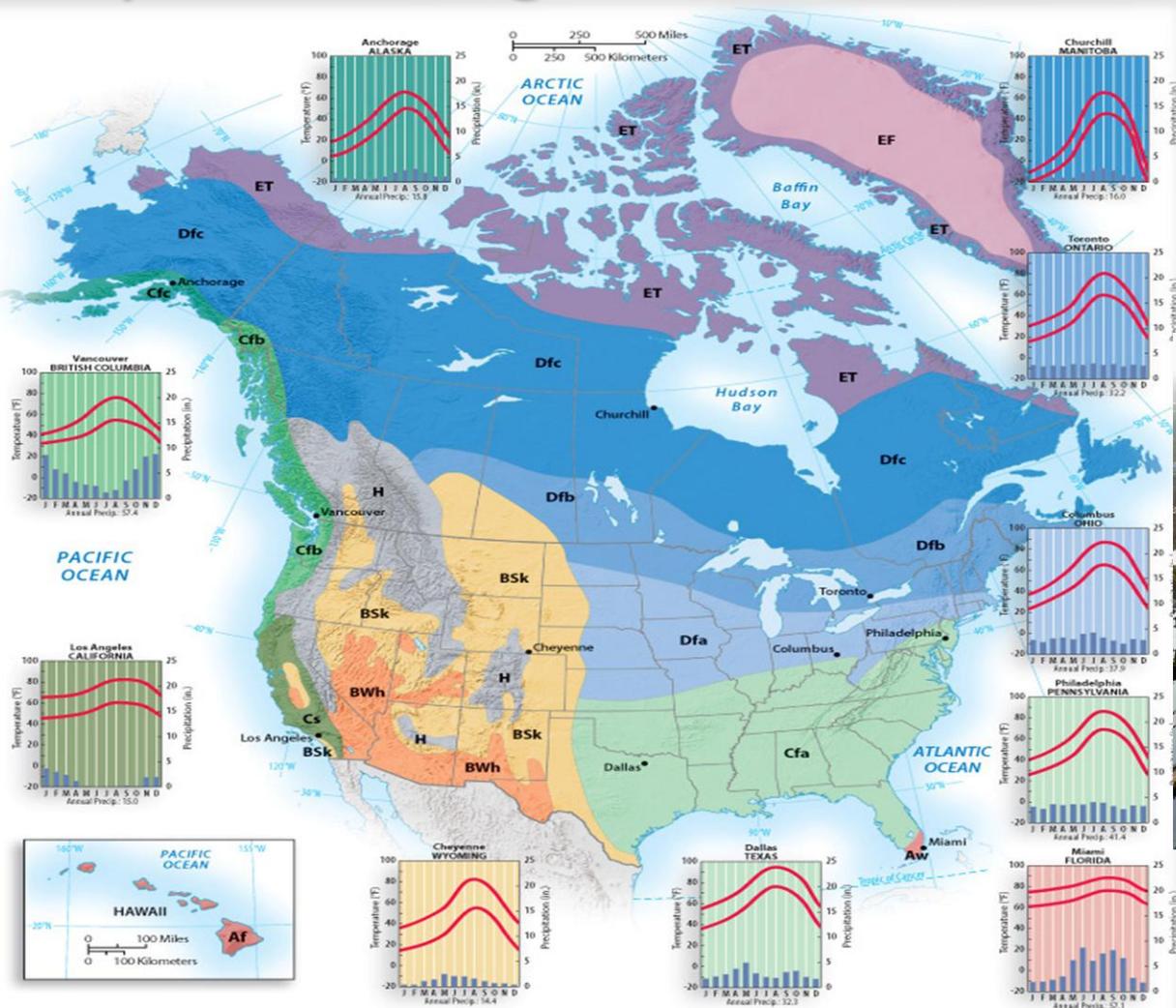
- **Patterns of climate and vegetation**
 - great variation in climate and vegetation because of latitudinal range, varied terrain (altitude) and oceans
 - maritime climates in coastal zones (moderated temperatures)
 - continental climate in the interior (great temperature range)
 - frequent winds, including tornadoes



Rocky Mountains
Satellite Image of
the Great Lakes



Physical Setting: North America's Climate



Hurricane Katrina caused levees to fail and allowed floodwaters to inundate many neighborhoods in New Orleans in August 2005.

A TROPICAL AND HUMID CLIMATES

- Af** Tropical wet climate
- Aw** Tropical savanna climate

B DRY CLIMATES

- BWh** Subtropical desert
- BSk** Midlatitude steppe

C MILD MIDLATITUDE CLIMATES

- Cfa** Humid subtropical, without dry season, hot summers
- Cfb** Marine west coast, without dry season, warm to cool summers
- Cfc** Marine west coast, short, cool summers
- Cs** Mediterranean summer—dry

D CONTINENTAL MIDLATITUDE CLIMATES

- Dfa** Humid continental, warm summers
- Dfb** Humid continental, cool summers
- Dfc** Subarctic

E POLAR CLIMATES

- ET** Tundra
- EF** Ice cap

H HIGHLAND

- H** Complex mountain climates

Physical Setting: Environmental Issues in North America



- **Transforming soils and vegetation**

- introduction of new species (wheat, cattle, horses)
- settlers cut down forests
- grasslands converted to grain and forage crops

- **Managing water**

- City dwellers use 170 gal/person/day.
- Agricultural/industrial users average 1,500 gal/person/day.
- Quality and quantity of water are both problems.
- Clean Water Act in US; Green Plan in Canada

- **Accelerated rates of human-influenced climate change**

- sea level rise
- coastal erosion
- glacial retreat

California's Salton Sea was created in 1905 when an irrigation diversion project failed, allowing the Colorado River to drain into the low-lying Salton Basin for 18 months.



Physical Setting: Environmental Issues in North America



● Altering the atmosphere

- Urban activities raise city temperatures above nearby rural temperatures.
- air pollution from factories, utilities and vehicles
- Acid rain occurs when airborne pollutants (sulfur and nitrogen) mix in chemical reaction to make acidic precipitation. Originates in industrial areas. Falls as rain and snow. Travels via wind across the continent.

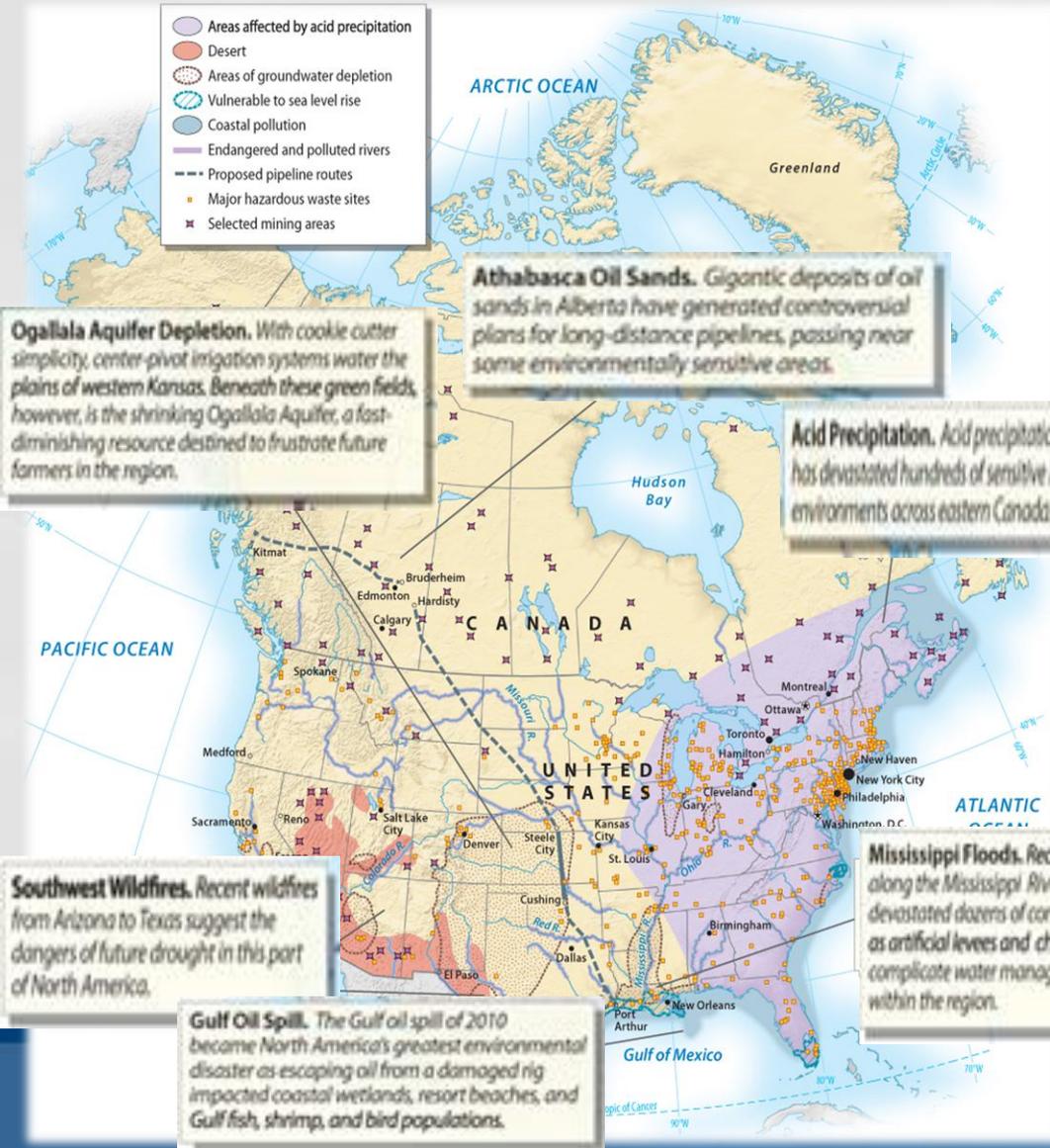
● The Price of Affluence

- North Americans use almost twice as much energy per capita as the Japanese and more than 16 times that of people in India.



Wind energy

Physical Setting: Environmental Issues in North America



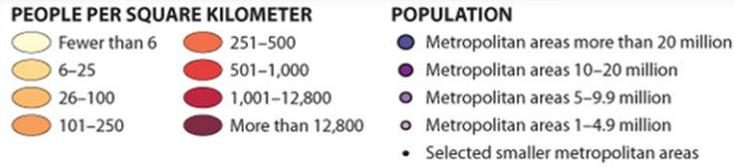
North America faces significant environmental challenges, including soil erosion, acid rain and air and water pollution.

The environmental issues reflect a **highly urbanized, post-industrial economy**. Both the US and Canada are taking steps to improve their environments.



Gulf Oil Spill

Population and Settlement: Modern Patterns



Modern spatial and demographic patterns

- total North American population: 359.3 million (2016)
- US: 323.9 million
- Canada: 35.4 million

Population and Settlement: Modern Patterns



- Creating Space
 - US broke cleanly, violently from Great Britain; Canada separated peacefully.
 - US purchased and conquered new lands.
 - Provinces of Great Britain joined Canada.

POPULATION INDICATORS

2016	Population (millions)	Population Density (people per square km)	Rate of Natural Increase (percent)	Total Fertility Rate (percent)	Percent Urban	Life Expectancy (years)
Canada	35.4	3.9	0.17%	1.6%	81.6%	82
United States	323.9	35.4	0.43%	1.9%	80.7%	80

Population and Settlement: Occupation



Occupying the land

- Indigenous people in North America for 12,000 years.
- Europeans arrived 400 years ago.
- European diseases and disruptions reduced Native American populations by 90% in some areas.

Population and Settlement: Occupation



European Settlement Expansion

- **Stage 1: 1600 - 1750:** colonial footholds on East Coast
- **Stage 2: 1750 - 1850:** in filled better eastern farmland, Canadian settlement slower
- **Stage 3: 1850 - 1910:** westward movement for gold rushes and other opportunities

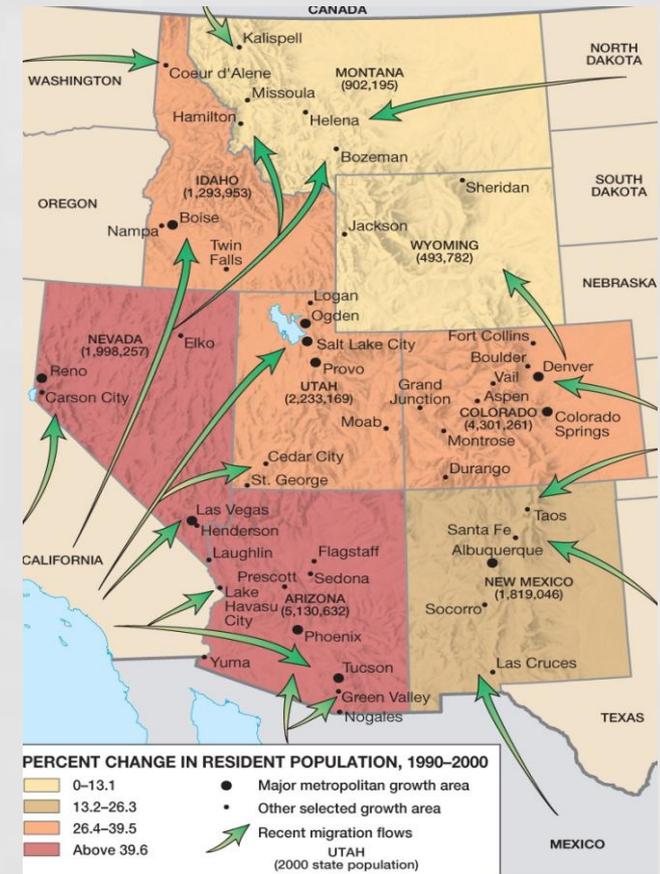


Population and Settlement: Intraregional Migration



westward-moving populations

- **Rain Shadow Effect** - Precipitation falls on the windward side of a mountain range, resulting in lush vegetation and a warm, moist climate on one side, but a desert area on the leeward side.
- By 1990, more than half the US population lived west of the Mississippi River.
- 2008-2009 saw an outmigration from the West because of the economic downturn.



Intermountain West Growth, 1990-2000

Population and Settlement: Intraregional Migration



- **Black exodus from the South**
 - In 1900, more than 90% of African-Americans lived in the South.
 - **The Great Migration:** Beginning in 1915, some six million black African Americans from the South joined an exodus to northern cities – Chicago, Detroit, Philadelphia, New York and many others.
 - movement north for jobs during and after WWII
 - Since 1970, more blacks moving from North to South than reverse.



Population and Settlement: Intraregional Migration



- **Rural to urban migration**

- 200 years ago, only 5% of North Americans lived in urban areas (2,500 or more population).
- Mechanization of agriculture reduced the demand for farm workers.
- Now more than 80% of North Americans live in cities.
- Large metropolitan areas dominate North America's population geography.
- uneven pattern of distribution



Downtown Dallas, Texas

Population and Settlement: Intraregional Migration



- **Growth of the Sunbelt South**

- fastest growing region since 1970
- some states growing by 20% (GA, FL, TX, NC)

- **The Counterurbanization Trend**

- Since 1970, people have moved to smaller cities and rural areas to avoid the perceived problems of urban life.

- **lifestyle migrants**

- population decline in many rural areas while in others population growth

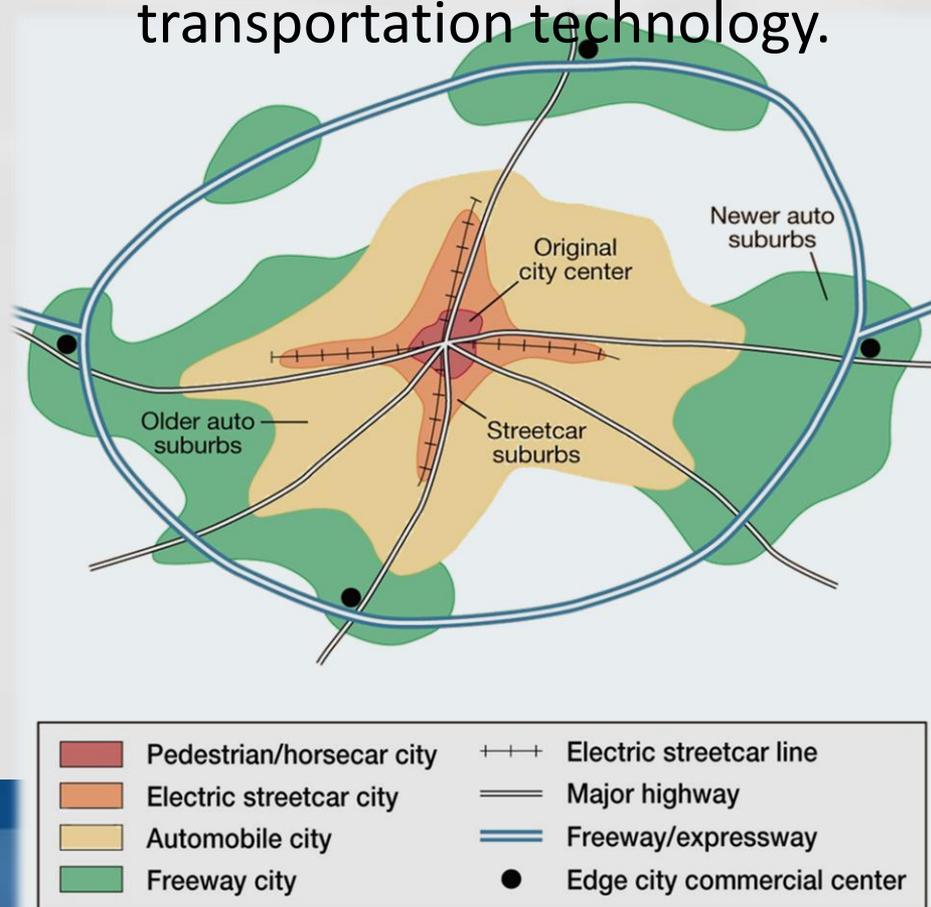


Sprawling Las Vegas

Population and Settlement: The Decentralized Metropolis



The **Adams Model of Urbanization** explains changes over time in the spatial form of cities. Adams based his model on changes in transportation technology.

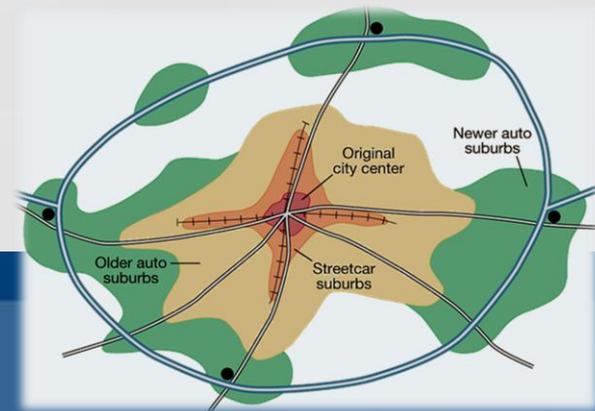


Population and Settlement: Adams Model of Urbanization



According to the model, cities' spatial development went through four stages.

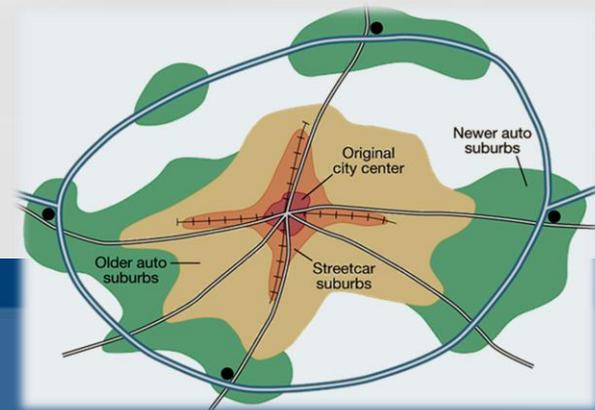
- **Walking, Horsecar Era (pre-1888)**
 - pedestrian city, horse drawn trolleys, compact urban structure (everything had to be within 30 minutes walking distance), grid pattern of cities (logical, tight structure)
 - little specialization of land use
 - no ethnically distinct neighborhoods
 - had to live near workplace



Population and Settlement: Adams Model of Urbanization



- **Electric Streetcar Era (1888-1920)**
 - streetcar meant you didn't have to walk everywhere
 - street travel widened
 - cities expanded beyond trolley lines
 - **starburst-shaped city** developed along roads
 - more differentiation of land use ... didn't have to live near work
 - city had industrial area and residential area



Population and Settlement: Adams Model of Urbanization

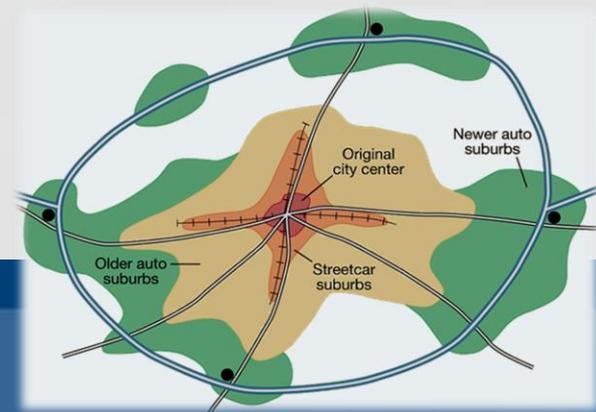


● Recreation Automobile Era (1920-1945)

- cars and highways, suburbanization, more individual mobility
- didn't have to live near transportation corridors
- filled in the starburst shapes
- center city at its peak ... Downtown
- mass suburbanization

- Residential areas broken up into distinct neighborhoods - tried to live near people like themselves and apart from people not like themselves.

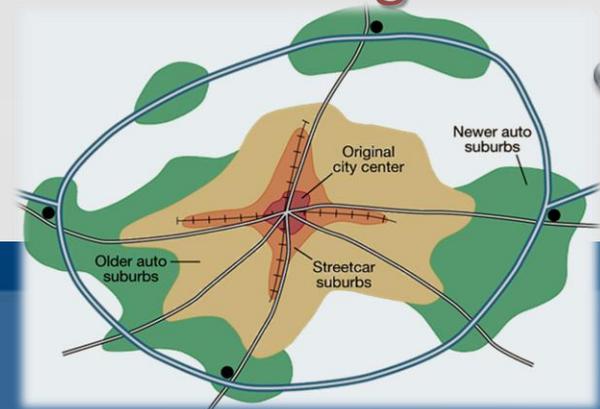
- Neighborhoods especially distinct by income.



Population and Settlement: Adams Model of Urbanization



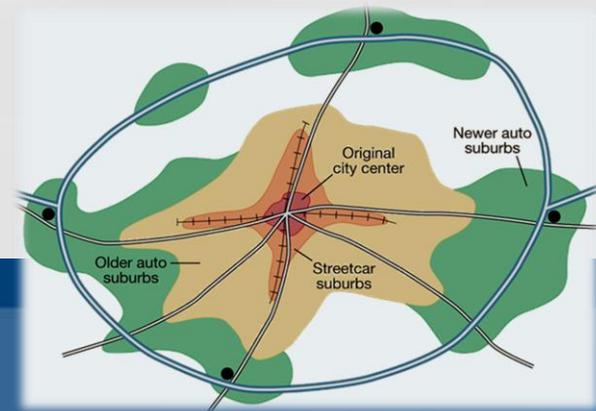
- **Freeway Era** (1945-1970s)
 - full impact of the automobile
 - high speed expressways
 - beltways bypassed cities altogether, businesses moved out as well
 - development of independent outer suburbs
 - **edge cities** - on perimeter of city limits
 - multi-centered metropolis



Population and Settlement: Adams Model of Urbanization



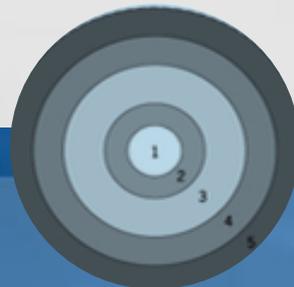
- Most dramatic change in cities (1970s-present)
 - **intra-urban expressway** - anywhere with equal availability
 - Advantages of **central business district** (CBD) eliminated because of intra-urban expressways.



Population and Settlement: The Concentric Zone Model



- **Concentric Zone Model:** urban land uses organized in rings around the central business district
- The concentric zone model, also known as the Burgess model or the CCD model, is one of the earliest theoretical models to explain urban social structures.
- The concentric zone model is a model of the internal structure of cities in which social groups are spatially arranged in a series of rings. It was the first model to explain the distribution of different social groups within urban areas. It was originally based on Chicago (although the model does not apply well to Chicago today).



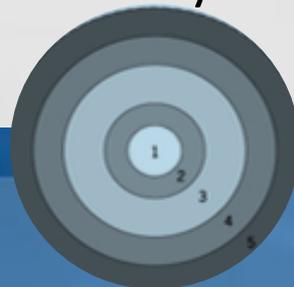
Population and Settlement: The Concentric Zone Model



The idea behind this model is that the city grows outward from a central area in a series of rings. The size of the rings may vary, but the **order always remains the same.**

The model suggests that the **social structure extends outward from the central business district**, meaning that the lower classes live closer to the city center, while the upper classes live farther away because they can afford the commute. As you get further away from the city, density decreases and rent tends to increase. Residents near the center are more likely to be renters.

The concentric zone model has its weaknesses. It does not take into account any physical barriers and it does not take into account gentrification - which may occur in these cities.

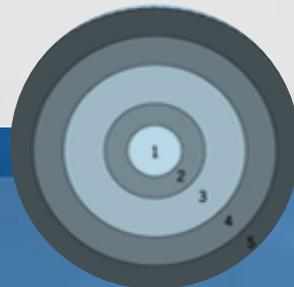


Population and Settlement: The Concentric Zone Model



An important feature of this model is the positive correlation of socio-economic status with distance from the CBD — more affluent households live at greater distances from the central city. Burgess described the changing spatial patterns of residential areas as a process of **invasion and succession**.

As the city grew and developed over time, the CBD would exert pressure on the zone immediately surrounding it (the zone of transition). Outward expansion of the CBD would invade nearby residential neighborhoods causing them to expand outward. The process was thought to continue with each successive neighborhood moving further from the CBD. He suggested that inner-city housing was largely occupied by immigrants and households with low socio-economic status.

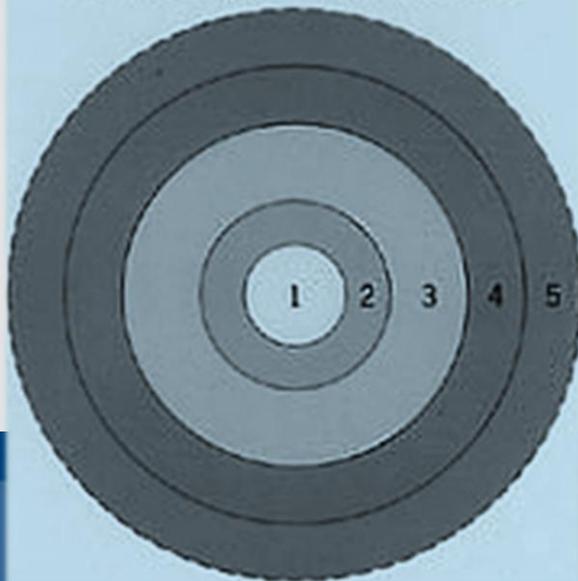


Population and Settlement: The Concentric Zone Model



1. **Central Business District (CBD)** - This area of the city is a non-residential area, called *downtown* in the US and *city center* in Europe. It has a developed transportation system to accommodate commuters coming into the CBD. Due to the high land cost in this area, a lot of sky scrapers are built in order to take full advantage of the land. Most government institutions, businesses, stadiums and restaurants chose this area to build on due to its accessibility. This area also includes the factory zone.

CONCENTRIC ZONE MODEL

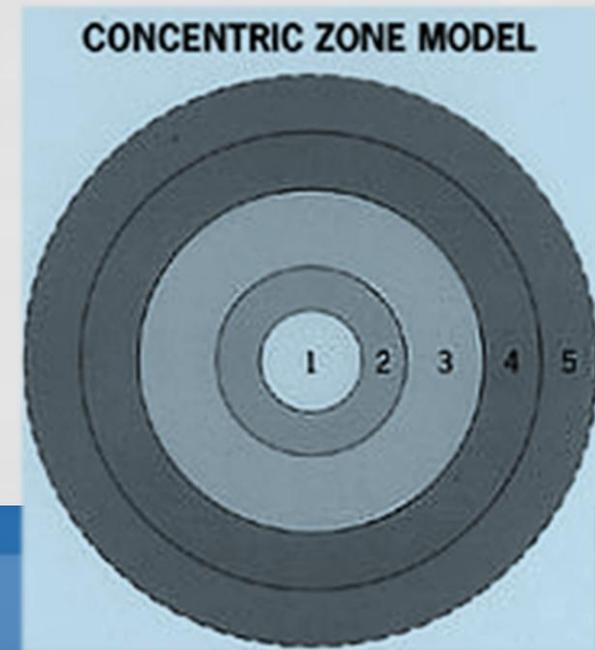


2. **Zone of Transition** - The zone of transition contains industry and has poorer-quality housing available. Immigrants, single individuals and the working poor tend to live in this area in small units, frequently created by subdividing larger houses into apartments. Most people in this area rent.

Population and Settlement: The Concentric Zone Model



3. **Zone of the Working Class** - This area contains modest older houses occupied by stable, working class families. A large percentage of the people in this area rent.
4. **Zone of Better Residence** - This zone contains newer and more spacious houses. Mostly families in the middle-class live in this zone. There are a lot of condominiums in this area and residents are less likely to rent.
5. **Commuter's Zone** - This area is located beyond the built-up area of the city. Mostly upper class residents live in this area. This area is also known as the suburbs in the US.



Population and Settlement: The Urban Realms Model



The Urban Realms Model or *Edge Cities*: New suburbs with a mix of retail, office complexes and entertainment

In the urban realms model, each realm is a separate economic, social and political entity that is linked together to form a larger metro framework.

Urban realms have become so large they even have not just suburbs, but also exurbs.

Exurbs are suburbs that are so far away from a city they really can't be called suburbs any more.

The model works extremely well with the San Francisco Bay area, for example, but it neither describes nor explains Phoenix, Arizona, which means it is not a universal model.

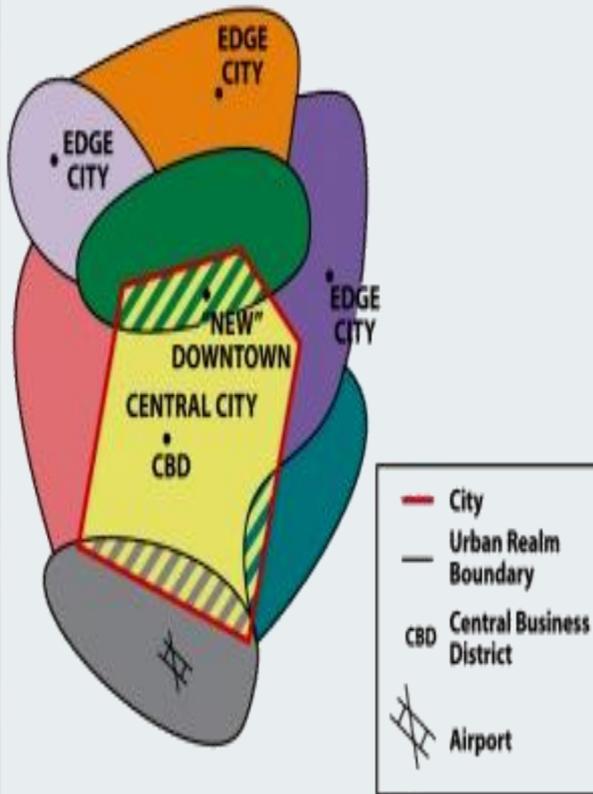


Tysons Corner VA
example of an edge city

Population and Settlement: The Urban Realms Model



URBAN REALMS MODEL



The urban realms model includes a **central business district**, which is not only the center of the city, but meshes with the surrounding realms to create a fluid transition into each separate realm. It also includes a **central city**; a **new downtown**, most likely an **edge city** that has become so urbanized that it mimics the central city without being the central city; and a **suburban downtown**, the center of the suburbs of that city.

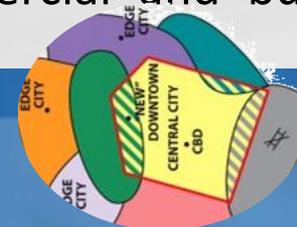
Each realm has a different purpose and serves separately from all other realms. Each realm is separate but all are linked together to make one large, fluid city. The city is automobile-dependent, which enables it to be as large as necessary for that city's purposes.

The model shows that the outer cities are not satellites of the central city, but are in fact becoming cities themselves and shaping the metropolis.

Population and Settlement: The Urban Realms Model



- The Urban Realms Model includes independent suburban downtowns as their foci, and yet they are within the sphere of influence of the central city and its metropolitan CBD. Each **urban realm depends on** four factors:
 - the overall size of the metropolitan region
 - the amount of economic activity in each urban realm
 - the topography and major land features, which help to identify each realm
 - the internal accessibility of each realm for daily economic functions and travel patterns
- An urban realm is **likely to become self-sufficient** if:
 - the size of the overall metropolis is large
 - there is a large amount of decentralized economic activity in the region
 - topography barriers isolate the suburban region
 - good internal accessibility for daily commercial and business travel exists (especially to airport)



Population and Settlement: The Decentralized Metropolis



- Changes in cities:
 - people and investment flee city for suburbs
 - perception of poverty, crime, racial tension in cities
- **Gentrification:**
 - movement of wealthier people to deteriorated inner-city areas; may displace low income residents
- **Suburban downtowns:**
 - similar to edge cities; suburbs becoming full-service urban centers with retail, business, education, jobs, etc.
- **New Urbanism** is an urban design movement which promotes environmentally friendly habits by creating walkable neighborhoods containing a wide range of housing and job types. It arose in the US in the early 1980s and has gradually influenced many aspects of real estate development, urban planning and municipal land-use strategies.



Gentrification in Fall
Creek Place,
Indianapolis IN

Population and Settlement: Rural North America



- North Americans historically have favored a dispersed rural settlement pattern.
- **Township-and-range survey system:** rectangular survey system introduced in 1785 in US for unincorporated areas; similar system in Canada
- Railroads opened the interior to settlement.
- Today, many rural areas are experiencing population declines, as family farms are replaced by corporate farms.



Settlement pattern in Iowa,
common in central North America

Cultural Coherence and Diversity: Heterogeneity

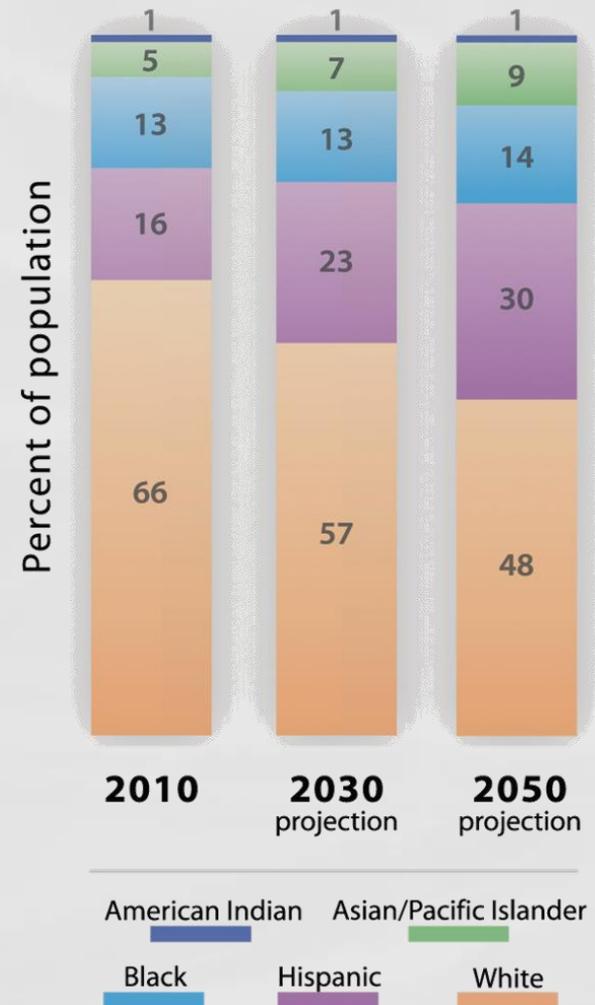


The Roots of a Cultural Identity

- Early dominance of *British* culture, then *Consumer* culture after 1920 provided common experience.
- Ethnicity** - group of people with a common background and history identify with one another (often as a minority group in larger society); both Canada and the US have many minorities

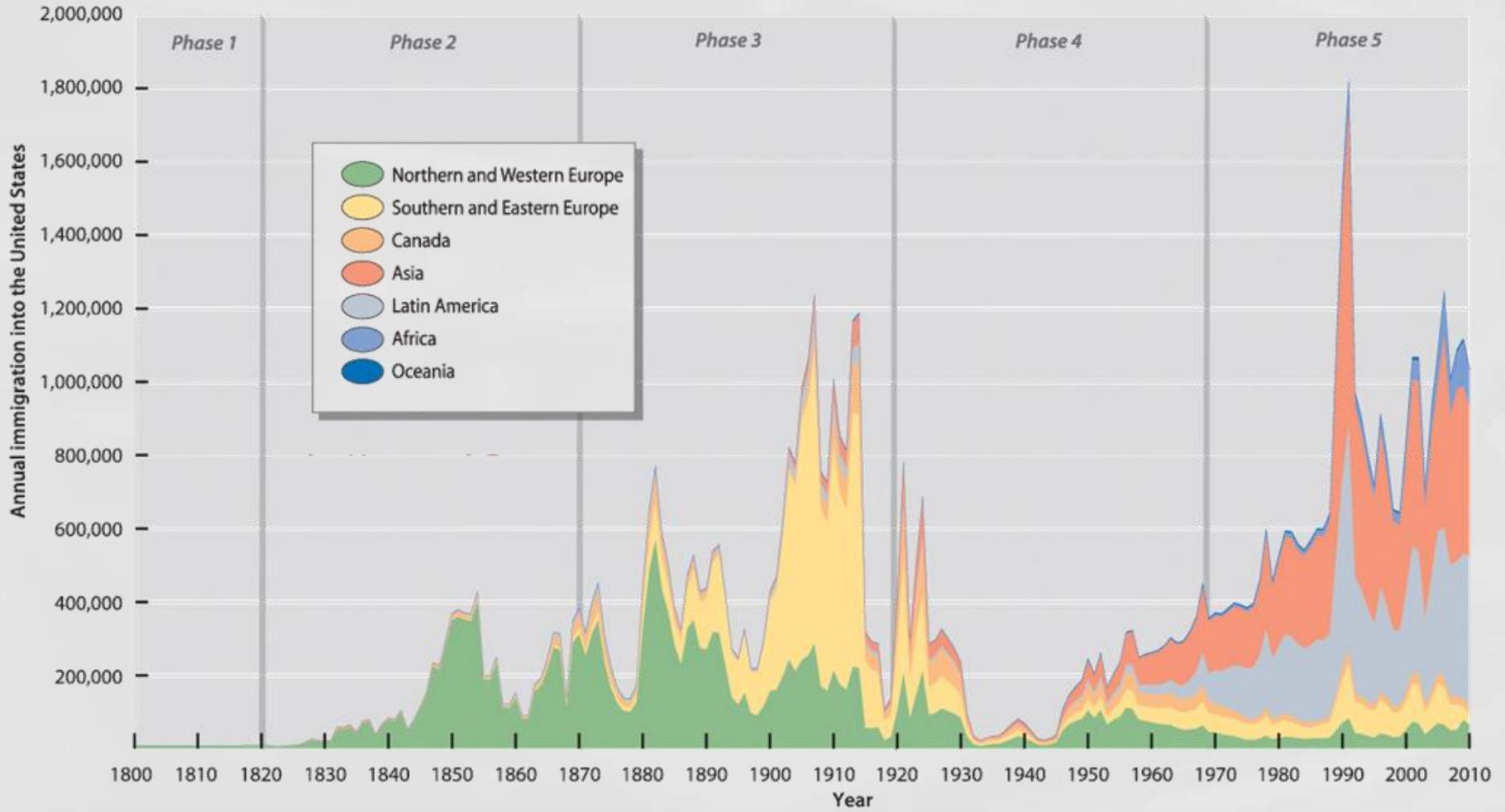
Peopling North America

- Cultural assimilation** - the process in which immigrants are absorbed by the larger host society



Projected US Ethnic
Composition, 2010– 2050

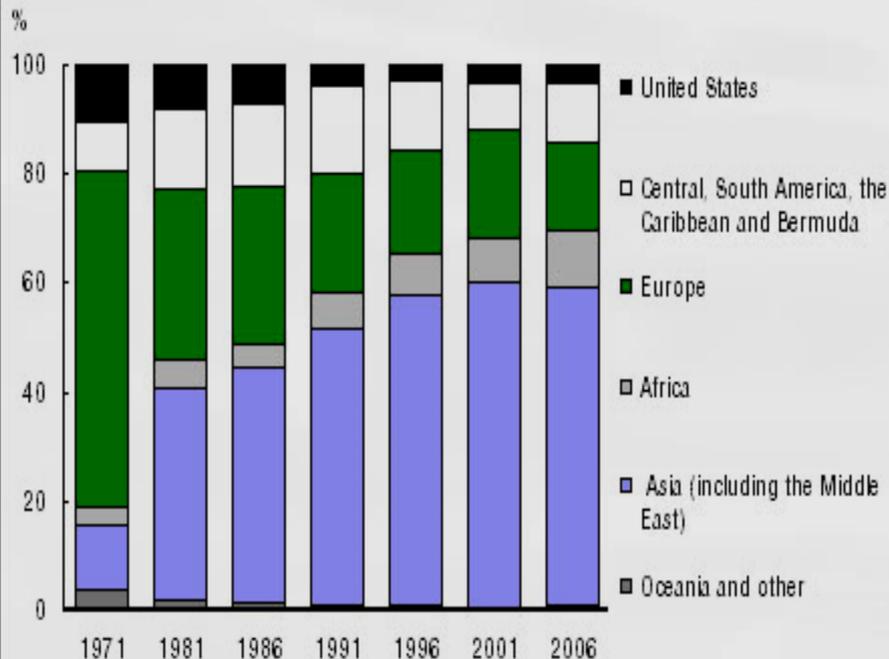
Cultural Coherence and Diversity: Heterogeneity



Cultural Coherence and Diversity: Heterogeneity



Recent immigrants to Canada, by region of origin



Note: 'Recent immigrants' refers to landed immigrants who arrived in Canada within five years prior to a given census. 'Other' includes Greenland, St Pierre and Miquelon, the category 'other country', as well as a small number of immigrants born in Canada.

Source: Statistics Canada, censuses of population, 1971 to 2006.

The Canadian Pattern

- Early European immigration was dominated by the French.
- Today, similar to US, but with larger French presence
- 16% in Canada are foreign-born.
- 60% of Canada's immigrants are Asian.

Cultural Coherence and Diversity : Culture and Place in North America



Persisting Cultural Homelands

- French-Canadian Quebec
- Hispanic Borderlands
- African-Americans in the “Black Belt”
- Cajuns in Southern Louisiana
- Native American Reservations

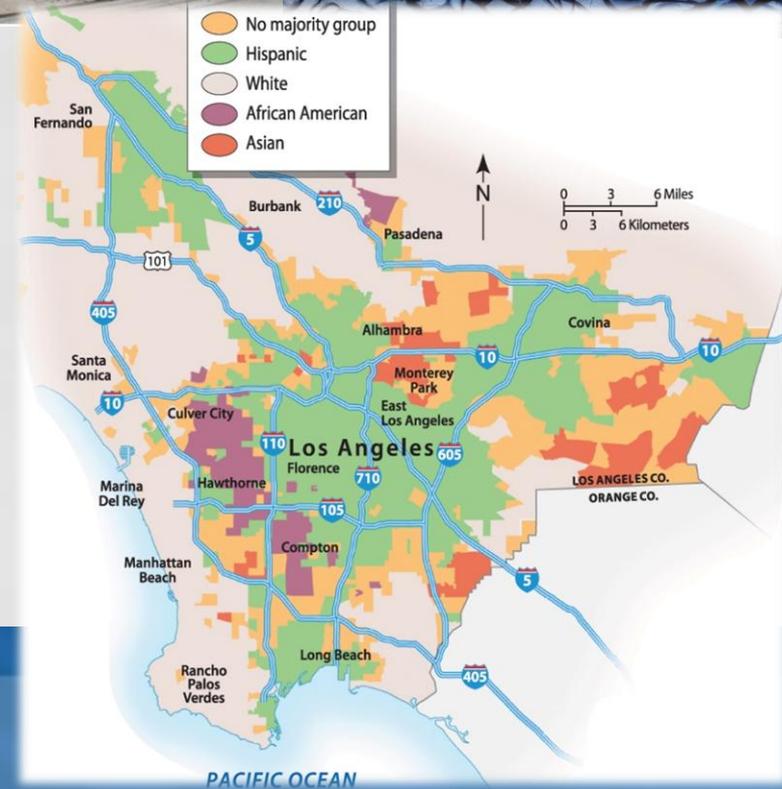


Cultural Coherence and Diversity: Heterogeneity



North America's cultural diversity is expressed geographically in two ways:

- People with similar backgrounds congregate near one another.
- Distinctive cultures leave their mark on the everyday scene.



Cultural Coherence and Diversity: Heterogeneity



- North America possesses a highly educated population and considerable natural resources, and it remains a seat of global corporate and political power.
- In a remarkably short time period, a unique mix of varied cultural groups from around the world has contributed to the settlement of a huge and resource-rich continent that is now the world's most urbanized region.



Cultural Coherence and Diversity: Heterogeneity



- North Americans produced two closely intertwined societies that still face distinctive national political and cultural issues.
- In Canada, the nation's identity remains problematic.
- For the US, social problems linked to ethnic diversity, immigration issues, health-care costs and enduring poverty remain central concerns.



Cultural Coherence and Diversity: Globalization



- **The Globalization of American Culture**
 - The US shapes contemporary culture around the world.
 - many international tourists, students in the region
 - the global diffusion of US culture
 - Mixed influences flow in many directions at once.
 - Spanglish
 - internet access and social media
 - resistance to US cultural influence



Geopolitical Framework: Patterns of Dominance and Division



- Continental Neighborhoods - North America is home to two of the world's largest states.
 - coexist in a close relationship of mutual economic and political interdependence
 - federal states (US) and unitary states (Canada)
 - long **boundary** between US and Canada
 - many cross-boundary issues
 - water resources, transportation, environmental quality
 - North American Free Trade Agreement (NAFTA)



The clear cut US Canada Border



Geopolitical Framework: Patterns of Dominance and Division



- Four key issues
 - disagreements concerning how many legal immigrants should be allowed into the country
 - tightening daily flows of undocumented immigrants
 - drug related violence along the border of Mexico and the US
 - There is no political consensus on a policy to deal with existing undocumented workers.



Geopolitical Framework: Protecting the US-Canada Border



Officials worry that security along the 4,000 mi. (6,440 km) border is not as tight as it needs to be.

Blaine, Wash.

Mowing the lawn can trigger Border Patrol sensors at a B&B next to the borderline

Thousand Islands, St. Lawrence River

Agents chase local "River Rats" smuggling cigarettes, liquor, drugs

Derby Line, Vt.

Haskell Free Library and Opera House straddles border



Pasayten Wilderness Area, Wash.

Agents ride horses to patrol the backcountry

Mont., Minn.

Border residents fear cold weather has frozen motion detectors

✈ Customs, Border Protection air wings

- Bellingham, Wash.
- Great Falls, Mont.
- Grand Forks, N.D.
- Plattsburg, N.Y.

Borders compared	Length	Federal agents	Bordering U.S. states
U.S.-Canada	4,000 mi. (6,440 km)	Less than 1,000	10
U.S.-Mexico	1,970 mi. (3,140 km)	12,000	4

NOTE: The 4,000-mile border does not include Alaska



Geopolitical Framework: A Diverse People



- **The Legacy of Federalism**

- **federal states:** those that allocate considerable power below the national level
- **unitary states:** those with centralized power at national level

- **Quebec's Challenge**

- French-speakers consider secession from Canada.
- native peoples and national politics
- in the US, Indian Self-Determination and Education Assistance Act (1975) and the Indian Gaming Regulatory Act (1988)
- in Canada, Native Claims Office (1975) and Nunavut Territory



The Province of Québec today is only a portion of what was once called New France but it is still Canada's largest province, twice the size of Texas. Québec City, founded in 1608, is one of the oldest European settlements in North America.

Geopolitical Framework: A Global People



- A Global Reach
 - US's geopolitical reach is beyond its borders.
 - Monroe Doctrine (1824) asserted US rights in the Western Hemisphere.
 - WWII and Truman Doctrine gave US wider world role.
 - North Atlantic Treaty Organization (NATO), Organization of American States (OAS)
 - other international involvement: Korea (1950–1953); Vietnam (1961–1973); Afghanistan and Iraq



Economic and Social Development: Abundance and Affluence



- North America has the world's most powerful economy and its wealthiest population.
- An Abundant Resource Base
 - Direct extraction of natural resources makes up 3% of the US economy and 6% of the Canadian economy.
 - opportunities for agriculture
 - highly mechanized and productive
 - Agriculture employs 2.4% of US and 3.3% of Canadian labor force.
 - Geography of farming in North America is determined by (1) diverse environments; (2) continental and global markets for food; (3) historical patterns of settlement and agriculture.



high-tech agriculture

Economic and Social Development: Abundance and Affluence



- **An Abundant Resource Base**

- industrial Raw Materials
- North America has abundant resources, but still imports raw materials.
- US produces 12% of the world's oil and consumes 25%.

- **Creating a Continental Economy**

- Connectivity fosters economic growth.
- **connectivity**: how well regions are linked together by transportation and communication

Economic and Social Development: Abundance and Affluence



- **Creating a Continental Economy**
 - **Sectoral transformation:** the evolution of the nation's labor force from primary sector activities to secondary, tertiary and quaternary activities
 - **Primary:** natural resource extraction; **Secondary:** manufacturing/industrial; **Tertiary:** services; **Quaternary:** information processing
 - Today, tertiary and quaternary activities employ more than 70% of the US and Canadian labor force.



Growing basil in Florida, primary activity



Silicon Valley in California

Economic and Social Development: Abundance and Affluence



- **Creating a Continental Economy**
 - regional economic patterns
 - **location factors:** the various influences that explain why an economic activity is located where it is

Major Economic Activities of North America

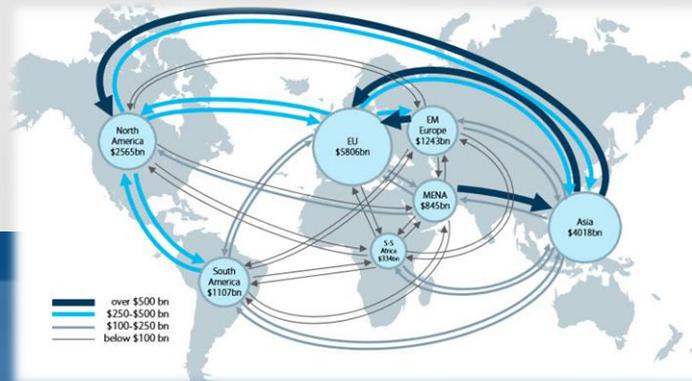


Economic and Social Development: The Global Economy



North America plays a pivotal role in the global economy.

- Spurred the creation of the International Monetary Fund (IMF), the World Bank and the World Trade Organization (WTO).
- The US and Canada are members of the Group of Eight (G-8): states that regularly confer on world political and economic issues (with Japan, Germany, Great Britain, France, Italy, Russia).
- Patterns of Trade
 - North America is prominent in both the sale and purchase of goods and services in the international economy.



Economic and Social Development: The Global Economy



North America and the Global Economy

- **Doing Business Globally**
 - Foreign capital comes to North America as investments in North American stocks and bonds and as foreign direct investment (FDI).
 - Many US firms have established businesses abroad.
 - US pension dollars invested in Japan, Europe

DEVELOPMENT INDICATORS

State	GNI Per Capita, Atlas Method (current US\$) 2015	Percent Pop living on less than \$2 / day	GDP Avg Growth (annual %) 1962-2016	Mortality Rate, under-5 (per 1,000) 2015	Adult Literacy Rate (age 15 and older)
Canada	\$51,630	0%	3.21%	4.9	100%
United States	\$55,200	0%	3.22%	6.5	100%

Economic and Social Development: Social Issues



Wealth and Poverty

- The global economic downturn of the late 2000s profoundly affected North America's economic geography, particularly in many regions that were hit hardest by the housing crisis and by rising rates of unemployment.
- Strong contrasts among communities and ethnicities
 - Black household incomes are 62% of the national average and Hispanic incomes are 71% of the national average.
- Regional contrasts
 - In the US, the Northeast and West are the richest regions.
 - In Canada, Ontario and British Columbia are the wealthiest.

Economic and Social Development: Social Issues



21st Century Challenges

- North American poverty rates have fallen.
 - Problems still remain in rural and inner city areas.
 - **Digital divide:** The region's poor and underprivileged have less access to Internet connections.
- The US and Canada's social indicators compare favorably, but concerns persist - jobs, education, health care, chronic disease and aging, gender gap.
- Conclusions
 - North America enjoys abundance, but must work with diverse populations to address challenges.



THE END



Globalization

By Gulle3691