UNIT 2B

URBAN AND RURAL CANADA: BUILDING SUSTAINABLE COMMUNITIES

Part 1: Where Do Canadians live?

- The majority of Canadians live in cities.
- •WHY? Because cities...
 - 1. Provide more services for people

2. Large enough to support universities, sports teams, and other major cultural activities

3. Source of most technological innovation (large companies locate in cities)

4. Engines of economic growth for their province/territory or even the country

- There are a wide variety of communities in Canada...
 - •<u>Hamlet</u> -> Fewer than 200 people (Cavendish)
 - •<u>Village</u> -> 200-800 people (Blaketown)
 - <u>Town</u> ->1,000-10,000 people (Carbonear)
 - •<u>City</u> -> Greater than 10,000 people (St. John's)
 - <u>Census Metropolitan Area (CMA)</u>-> Greater than 100,000 people
- •Examples of these communities exist throughout Canada

- <u>Urban</u> -> an area where lots of people live at a high density
- <u>**Rural</u>** -> People are spread out at a low density</u>
- CMA is the largest and may contain both urban and rural areas
 - Therefore, with the 2011 census, Statistics Canada created the term population centre to more specifically define urban areas
 - Population Centre: An area with at least 1,000 people and a density of at least 400 people per square kilometre
- Where do you live????

- •**Population Centres** are divided into *THREE* categories
 - •Small Population Centre
 - •Between 1,000 and 29,999 people
 - Medium Population Centre
 - •Between 30,000 and 99,999 people
 - •Large Population Centre
 - •100,000 people or more

- •OK, now back to CMAs
- •A CMA is made up of one or more neighbouring municipalities located around the urban core
- •Example...St. John's
 - Closely surrounded by which municipalities?
- •A CMA must have at least 100,000 people total and at least 50,000 in its core
- Does St. John's and surrounding areas qualify as a CMA???

- Canadians continue to move to CMAs
- 10 fastest growing CMAs in Canada:
 - Calgary, Alberta
 - Edmonton, Alberta
 - Saskatoon, Saskatchewan
 - Kelowna, BC
 - Moncton, NB
 - Vancouver, BC
 - Toronto, ON
 - Ottawa-Gatineau, ON
 - St. John's NL
 - Brantford, ON



City Wise

- •Canada is one of the largest countries in terms of land area. However, it has a small population for its size. Why???
- Difficult to build cities in many areas
 - •Ex: Northern Canada
 - •Ex: Swamplands surrounding Hudson Bay
- •Some places are better suited for resource development than city building

City Wise

- Some people choose to live in rural areas, but most decide to live in urban areas
- 81% of Canadians live in large population centres
- The three largest are:
 - Toronto
 - Montreal
 - Vancouver



35% of all Canadians live in these three population centres!!!!

City Wise

- •See Figure 5.2 on page 200
- •Over 80% of Canadians live in less than 5 % of the country.
- •Therefore <u>Urbanization</u> is occurring in Canada
 - •Growing trend of increasing numbers of people choosing to live in cities
 - •Therefore, Canada is *urbanized*

CANADA'S HEARTLAND

- •Two areas (i) the **Golden Horseshoe** region in Southern Ontario and (ii) the Montreal region are very popular for settlement
- •Europeans were drawn here for its climate and rich soil
- Today it is known as
 <u>Canada's Heartland</u>



 Hub of Canada's economic and industrial activity

Western Canada

- Natural Systems contributed to western Canada's development
- Southern BC saw many ports developed
 - WHY?
 - Close to Pacific Ocean (Made trade easy)
 - Trade with Who????



Western Canada

- •Area also has a moderate climate and plenty of fish stocks
- •Many forests further inland
- •These reasons have lead to the growth of Vancouver and Victoria and they remain very popular

Resource-based Communities

- •20% of Canadians live in scattered rural communities
- Most of these communities have grown around a primary industry
 Fishing, forestry, mining
- •These communities face both major opportunities or major challenges...



The Business Cycle...Rules Resource-based Communities

- First, it often provides excellent employment:
 - Leads to opportunities for businesses in that community
- However, much profit from selling this resource doesn't come back to the community:
 - Back to shareholders of company
- There is little accumulation of capital in resource-based communities (money doesn't stay in the town)
- Also, resource could run out or demand for it could drop
 - Lead to serious economic challenges
- This is the business cycle of resource-based communities

Downside of Resource-based Communities

- •Many of these **small communities struggle** during these times
 - Struggle to retain infrastructure like schools and hospitals
- •Example...
 - •Cod Moratorium (1992)
 - Federal Government placed a moratorium (ban) on cod fishing
 - Many fish plants and employees without work (moved to larger urban centres)



Example...Labrador City & Wabush

- •Was experiencing significant economic growth when demand for iron ore (used to make steel) was high
 - Especially from China and India
- •Workers earned high wages and businesses in the area did well as a result.
- Competitive housing (very expensive to buy or rent)
- •Over the last 2 years, demand decreased greatly and the situation reversed



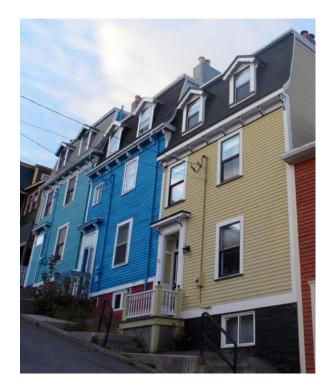
Part 2: URBAN LAND USE

- •<u>Land Use</u> is a term that geographers and planners use to identify the different areas where we live, shop, work, play, and go to school
- •There are six main types of land use in Canada:
 - Residential Land Use
 - Transportation Land Use
 - Commercial Land Use
 - Industrial Land Use
 - Institutional Land Use
 - Open Space and Recreational Land Use

1. Residential Land Use

- •Refers to land be used for living space
- •Examples
 - •Think of your community...
 - •What do you see?
 - Single-family houses
 - •Apartment buildings,
 - •Townhouses (attached houses, usually take up little room, but have several floors)





2.Transportation Land Use

- •Land used to move people from one place to another (Transportation Systems!)
- •Examples:
 - •Roads, Subways, Trains, Airports, etc.





3.Commercial Land Use

- Land being used for business activities, or buying and selling of goods and services
- •St. John's examples:
 - Shopping Mall
 - Stavanger Drive
 - Kelsey Drive
 - Water Street





4.Industrial Land Use

- Land used for secondary industries (Manufacturing)
- •Examples...
 - Factories
 - Warehouses
- Usually located near major routes or highways so goods can be transported easily





5.Institutional Land Use

•Land used for schools, hospitals, places of worship and government offices



6.Open Space and Recreational Land Use

- •Open Space
 - Land that has been left in its natural state
 - •Examples...
 - Forests, meadows
- Recreational
 - Land used for recreation activities
 - •Examples...
 - Playgrounds
 - Parks
 - •Golf courses
 - Fields



Part 3: Land Use Planning

- •We face big challenges in land use planning
- •We need to provide housing for a growing population and maintain prosperous urban economy
- However, we must also satisfy the need for green open space and protect wildlife habitats around urban places
- These decisions are made by urban and transportation planners, politicians, developers and citizens
- •There may be many issues in making these decisions

Canada's Booming Urban Centres

- •After World War II, many couples were reunited and decided to start families
- •At the same time, the use of automobiles became more common
- •This lead to many people moving outside cities into the surrounding areas
 - •This marked the birth of the <u>suburbs</u>
 - •Many banks, restaurants, hospitals, etc. moved to the suburbs with the people
 - Canadians no longer had to commute for all their needs

Urban Sprawl

- <u>Urban Sprawl</u> ->Outward expansion of urban centres to nearby bordering areas
- As cities grow, many issues arise...
 - Traffic congestion
 - Overburdened services
 - Air Pollution
 - Planning for efficient mass transit
 - Managing wastes
 - Containing urban sprawl
- As communities grow, many natural and human systems are at risk



Issue...Smog

- •<u>Smog</u> -> Combination of pollutants (gases, particles) that form a haze over a city
- According to Environment Canada,
 95% of smog is caused by burning fuels in vehicles
- •Urban areas need to be able to grow while remaining sustainable



Solution...HOV Lanes

- •One way cities have attempted to decrease smog is the availability of <u>High-Occupancy Vehicle (HOV)lanes</u>
 - Lanes solely used by buses and vehicles with at least two people
 - Designed to help move more people through busy areas
 - quickly
 - Help ease congestion in regular lanes
- HOV lanes currently exist in the Greater
 - Toronto area



Issue...Waste Management

- •As populations in urban areas increase, so does the amount of waste produced
- Many communities have a recycling and composting program in place to combat this
 "Curb It St. John's"
- •Although these programs exist, recycling is still an issue
 - •How can we fix this???
- •Other areas are also transporting their waste to other areas
- •The real solution is to *reduce*

Great Pacific Garbage Patch



Part 4: The Future of Cities

- Canada's cities are constantly changing
- •Many communities that grew into suburbs have become much more developed
- •There is a bigger focus on pedestrian walkways in cities today
 - WHY???
 - •Fitness
 - Environmentally friendly

Smart Growth Solutions

- •New designs for urban planning is called <u>Smart</u> <u>Growth</u>
 - Focuses on plans for urban expansion while also preserving the natural environment
- •Smart Growth focuses on placing more people in smaller areas
 - •Houses that take up less land area
 - Apartment buildings
 - Retail, schools, entertainment located very close by

Smart Growth Principles

1. Develop in existing communities, making them more compact and dense, rather than suburbs that spread into rural areas

2. Mix land uses: put homes, offices, stores and services in the same neighborhoods within walking distance

3. Create a range of housing opportunities that will bring together people of different ages, household types, incomes, ethnicities

Smart Growth Principles cont'd

4. Provide a variety of transportation choices, including public transit

5. Create places and routes for safe walking and biking

6. Protect green space, farmland, and ecologically sensitive land, such as wetlands

7. Protect wildlife habitat by creating natural corridors through urban areas, so wildlife can roam freely

Green Technologies

- Environmentally friendly ways of constructing buildings
 - Becoming very popular
- •Alternate forms of energy are being looked at for widespread urban use
 - EXAMPLES???
- Sustainability also exists in building homes
 - •Old tires to create rubber roofing tiles
 - Green roofs (Gardens on rooftops) are becoming more popular (Schools)
 - •Help soak up runoff that would carry pollutants to water supply

Telecommuting

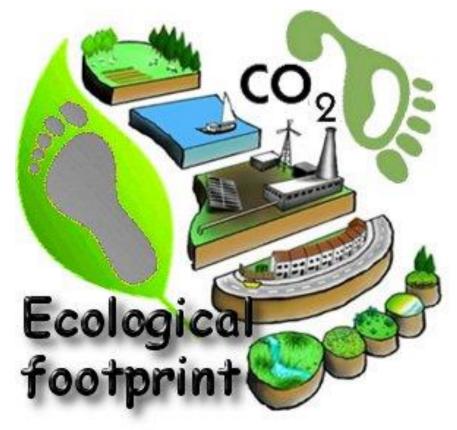
- •The process of commuting electronically to work
- Many people now use technology to connect with the workplace from home or on the road
 - Avoids traffic
- •1 million telecommuters working from home for one day a week saves
 - 250 million kg of Carbon Dioxide
 - \$40 million in fuel

Telecommuting cont'd

- •Many environmental benefits, most importantly:
 - Commuting is eliminated
 - Congestion and pollution levels drop
- •Smart phones, tablets and laptops make it much easier to connect with others
- •Online conferences can replace face to face meetings

How Big Is Your Ecological Footprint?

- Ecological footprint the amount of Earth's resources it takes to support your lifestyle
 - Measured in **hectares** (1 hectare can be measured as a square with 100 m sides)
- World average footprint: 2.2 hectares
 - Canadian average 7.0 hectares
 - What does this tell us?



Ecological Footprint

•Your footprint is made up of many factors:

- •Water use
- •Transportation use
- Space used for work or play
- •How much money you spend
- •How far food you eat is shipped
- •How much living space you have
- •How much garbage you create