

Lecture 16 – Urban Environmental Management

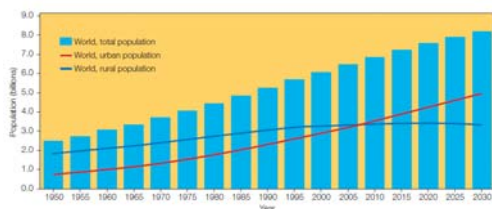
1. Urban Development Today
2. Environmental Issues in Cities
3. Sustainable Urban Development

Key Concepts

- Trends in Urban Development
- Trends in transportation
- Trends in waste management
- Trends in air pollution and related issues
- What is sustainable urban development and examples

1. Urban Development Today

- As of 2008:
- Estimated that, as of 2030:



The rural and urban population of the world, 1950-2030

Urban Development: Urban Form

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- e.g.: buildings
- e.g.:



Urban Development: Urban Sprawl

- Areas characterized by:



Urban Development: Housing

- 2001:



Urban Development: Housing (2)



Urban Development: Housing (3)

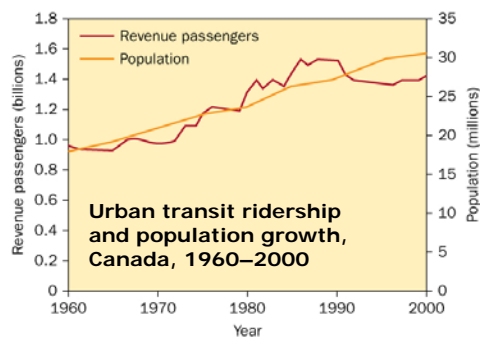


Urban Development: Transportation

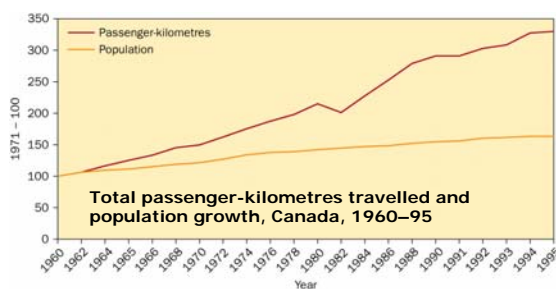
- Low-density urban development at the heart of environmental impacts of cities
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Urban Development: Transportation



Urban Development: Transportation (2)



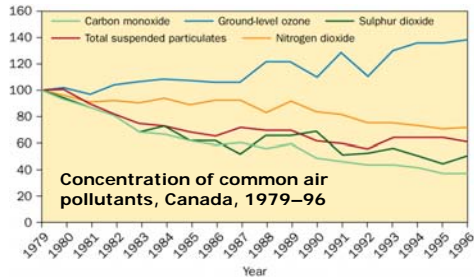
Urban Development: Waste Management

- Montreal and Calgary:
- Toronto:
- Halifax:
- Markham:



2. Environmental Issues in Cities: Air Pollutants

- Because of:



Environmental Issues in Cities: Air Pollutants (2)

- U of Alberta study has concluded that:



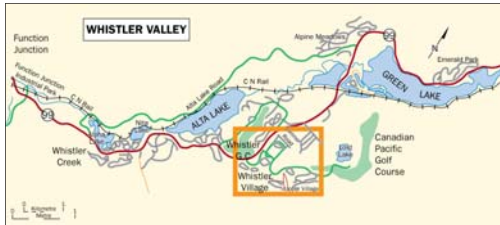
3. Sustainable Urban Development

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- includes integrated:
- maintain quality of life for future generations



The Whistler Challenge

- Energy use in tourism destinations is normally:



Energy Use & Whistler



Reducing Whistler's Footprint

- Transport plan:



Reducing Whistler's Footprint (2)

- New and redeveloped building energy efficiencies



Conclusion

- More than half of the human population lives in urban areas
- The patterns of urban development, and the issues related to transport are the source of major environmental issues
- The sustainable expansion of cities is possible but requires careful planning

TO DO!

1. Next lecture: *Video: e2 Transport: Portland: A Sense of Place*
2. Next Monday: Lecture 17 - Biodiversity and Protected Areas (Chapter 14; no podcasts)
3. Tutorials this week: **Only if announced by your TA**: Debates week #3.
 - Otherwise: no tutorial
