

Design a Neighbourhood

Be an Urban Planner for a Week



Purpose: The purpose of this activity is to help students become aware of and understand the complexity of the issues surrounding sustainable transportation as it pertains to the urban prairie context.

Description: This weeklong mini-unit looks at the issues surrounding sustainable transportation in an urban prairie centre. The main activity of the mini-unit sees students taking on the roles of various groups with a vested “quality of life” interest in the future development direction of the city. Given an imaginary plot of empty or reclaimable land in their city, students are challenged to plan a sustainable transport friendly community that encourages active transport and high quality of life. Note: if there were an actual plot of land in your city that is awaiting development, it would be good to use a real-world example. To carry out the task students need to research the issues around urban sustainable transportation and apply them to their own community. Concept mapping as a student research and organizational tool is also presented.

- Materials:**
- Student sheets
 - Access to the World Wide Web for research
 - Map of the area of the city to be developed (check with the City planning department).

Grade Level and Curricular Connections: While the issues of urban planning are not directly addressed in the curricula for the Prairie Provinces, some general connections can be made in the following instances.

	Saskatchewan	Alberta
Social Sciences	<ul style="list-style-type: none"> • Grade 8 Unit 2- Citizenship • Grade 9 Unit 2 - Change 	<ul style="list-style-type: none"> • Grade 9 - Responding to Change
Science	<ul style="list-style-type: none"> • Grade 8 - Energy Resources in Saskatchewan 	<ul style="list-style-type: none"> • Grade 9 - Environmental Chemistry
Language Arts	<ul style="list-style-type: none"> • All strands of L.A. - Reading, writing speaking and listening. 	<ul style="list-style-type: none"> • Grade 9 - General Outcomes 3 and 5.
Health		<ul style="list-style-type: none"> • Grade 9 - Personal Health



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Preparation Time:

- Time for teacher to read and understand background material and prepare student sheets (30 to 60 minutes).
- Time to research real world land available in the city.
- Time for the teacher to contact guest speakers and arrange for students to present their plans to City Hall.

Activity Time:

Total of six or seven classes of 45-60 minutes each over a two-week time period

- Introduction and preliminary research - one class.
- Research and preparation of presentations - three to four classes.
- Presentation of designs - two classes.
- Debrief and assessment instructions - one class

Timeline:

Day 1

- Introduction and introductory letters
- Students indicate the 1st, 2nd, and 3rd choices of group roles
- Preliminary research
- Guest speaker from the City Planning Department to talk about some of the things the city has to consider in building a new neighbourhood

Day 2

- Teacher announces groups
- Group work begins (Brainstorming ideas)

Day 3

- Group work continues
- Research and rough draft of plan

Day 4

- Group work continues
- Oral and written presentations

Day 5

- Extra day if needed for polishing presentations

Day 6

- Students present their development plans

Day 7

- Assessment - Individual reflective assignment



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Vocabulary:

- **Urban sprawl** – *Many Definitions:*
 - *new development consuming land at a faster rate than the rate at which the population is growing.” Canadian Urban Institute*
 - *Haphazard growth or extension outward, especially that resulting from real estate development on the outskirts of a city:*
<http://www.goldcanyon.com/us/urbansprawl.html>
- **Active transport** – *Active transportation is any form of human-powered transportation. It is any trip made for the purposes of getting yourself, or others, to a particular destination - to work, to school, to the store or to visit friends. As long as it is "active", you can choose the mode - walking, cycling, wheeling, in-line skating, skateboarding, ice skating (eg. on a canal). Walking and cycling are the most popular forms of active transportation (Health Canada)*
- **Sustainable transportation** – *“A sustainable transportation system is one that is safe, efficient and environmentally friendly. Sustainable transportation is about integrating economic, social and environmental considerations into decisions affecting transportation activity. Economically, we need a transportation system that is efficient and competitive. Socially, our transportation system must be safe and accessible. In addition, we need a transportation system that respects the natural environment. It is not always easy to balance these three considerations - sometimes there are trade-offs but there are also win-win-win opportunities”. Taken from Transport Canada web site.*

(http://www.tc.gc.ca/programs/environment/most/faq.htm#what_st)



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TEACHER BACKGROUND

Teacher background is offered in two sections. The first is related to content and is a summary of the issues involved in the sustainable transportation debate. The second is related to process and outlines how Concept Mapping may be used in this mini-unit. For detailed background on Concept Mapping see the Concept Mapping lesson plan.



Teacher Sheet (an Invitation)

Note: If you wish to introduce the lesson in this manner and wish to use this sheet, modify it to include City or Town information. Be sure to remove or modify information included in '{ }'s.

Issues in Sustainable Urban Transportation:

Below is a list of suggested topics for background research into sustainable transportation issues.

1. Urban Sprawl
2. Dependency on Automobiles
3. Healthy Active Lifestyles
4. Greenhouse gas emissions

Concept Mapping:

For details on how to present concept mapping to your students see the Concept Mapping lesson plan.

Procedure:

Day 1

- ♦ Present the class with the Invitation letter (Teacher Sheet #1) inviting them to take part in planning the future direction of the city. Stress the need to include quality of life arguments. If you have access to a database it would be a nice touch to address the letters personally to the students using the Mail Merge function. The letter should include brief descriptions of the groups that wish to develop the land. Have the students choose the top three groups they would like to represent for the activity (See Student Sheet #1). They will participate in only one group but having three choices allows the teacher more flexibility in putting the groups together.



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Possible Groups:

- Commercial Developers
- Community oriented group –non-profit groups (parks, theatres, tourist attractions)
- Environmentalists
- Citizens against high-density residential areas.
- Citizens against Urban Sprawl (e.g. Sierra Club)
- Children

Teacher makes up groups of 3-5 students basing the group membership on the students' choices as indicated on Student Sheet #1 and the group dynamics of the class (ability, learning style and personality). It is best to try to give each student one of his or her top three choices.

Days 3 - 5

- ♦ Students research, develop ideas and create their presentations (oral and written) and maps of their development plan.

Day 6

- ♦ Student groups present their development plans in the class to appropriate invited guests or ideally, to the Municipal Planning Committee at City Hall.

Day 7

- ♦ Debrief and Assessment

Assessment

Hand-ins: (amend to suit)

Check off of the hand-ins at each stage of the process. Assign a nominal number of marks to each if desired.

- Research Questions
- Concept Map (of specific group research)
- Final Presentation
 - Map of (Development Plan)
 - Oral Presentation
- Written Report
- _____
- _____

Content:

Students complete the following reflective assignment:
 In no less than one page answer the following question: "Which plan (other than your own) would you choose and why." Feel free to put together parts of several development plans if you'd like. Explain why you chose the elements you did."



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Presentation:

The attached rubric for oral presentations can be used to assess the groups' oral presentation skills during the presentation of the development plans. All group members need to participate in the oral presentation.



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ORAL PRESENTATION RUBRIC

Criteria	Level 1	Level 2	Level 3	Level 4
Content	<ul style="list-style-type: none"> ◆ Too short or too long. ◆ Many required aspects missing 	<ul style="list-style-type: none"> ◆ Adequate length. ◆ Covers some required aspects 	<ul style="list-style-type: none"> ◆ Good length. ◆ Covers most required aspects 	<ul style="list-style-type: none"> ◆ Appropriate length. ◆ Covers all required aspects.
Comprehension	<ul style="list-style-type: none"> ◆ Unable to accurately answer relevant questions posed by classmates 	<ul style="list-style-type: none"> ◆ Able to accurately answer a few relevant questions posed by classmates 	<ul style="list-style-type: none"> ◆ Able to accurately answer some relevant questions posed by classmates 	<ul style="list-style-type: none"> ◆ Able to accurately answer almost all relevant questions posed by classmates
Preparation	<ul style="list-style-type: none"> ◆ Student does not appear at all prepared to present 	<ul style="list-style-type: none"> ◆ Student is somewhat prepared, but it is clear that rehearsal was lacking 	<ul style="list-style-type: none"> ◆ Student mostly prepared but could have rehearsed more 	<ul style="list-style-type: none"> ◆ Student is completely prepared and obviously well rehearsed
Clarity / Expression	<ul style="list-style-type: none"> ◆ Often mumbles or cannot be understood. ◆ Almost no variation in tone, volume & expression 	<ul style="list-style-type: none"> ◆ Speaks clearly & distinctly most (94-85% of the time. ◆ Some variation of tone, volume & expression 	<ul style="list-style-type: none"> ◆ Speaks clearly & distinctly most (100-95%) of the time. ◆ Enough variation of tone volume & expression for interest 	<ul style="list-style-type: none"> ◆ Speaks clearly & distinctly most (100-95%) of the time. ◆ Considerable variation of tone volume & expression keeps presentation interesting



Internet Resources

This is a list of Internet resources that may be appropriate for this lesson. It is recommended that the teacher review these pages before recommending them to students.

Transport Canada: <http://www.tc.gc.ca/programs/environment/most/menu.htm>

The Sierra Club: <http://www.sierraclub.org/sprawl/population/>
http://www.sierraclub.org/sprawl/get_involved/

Natural Resources Defense Council:
<http://www.nrdc.org/air/transportation/default.asp>
<http://www.nrdc.org/globalWarming/default.asp>

Smart Communities Initiative – Department of Energy, United States Government:
<http://www.sustainable.doe.gov/transprt/maxchoic.shtml>

Smart Growth Network: <http://www.smartgrowth.org/>



{ Teacher Sheet #1 - AN INVITATION }

{ Note: Remove or modify information within { } }

{Date}

{Your city or town name here}

{Address of the city or town}

{Province and Postal Code}

To whom it may concern:

Congratulations! You have been chosen to take part in discussions about the future growth direction of our city. The Planning Department along with {City / Town} Council has decided that our {city / town} is committed to healthy lifestyles and protecting the environment. As a result, we want our new neighborhoods to be planned to meet these objectives.

We are inviting interested groups to propose a plan for one of several underused blocks of land in the middle of the city. We look forward to your completing the enclosed form so we can plan for your input.

Sincerely,

Ms. Josephine Walker
City Clerk



STUDENT SHEET #1
Group Choice

Name: _____

Thank you for taking part in the planning discussions for the future growth of our city. Please read the following brief descriptions of the groups and choose which two most closely represent your views by writing 1, or 2, in the box beside the description. Please return this sheet to the City Clerk who will organize groups of like-minded citizens to create a development plan.

Note: Plans that do not include quality of life issues will not be accepted.

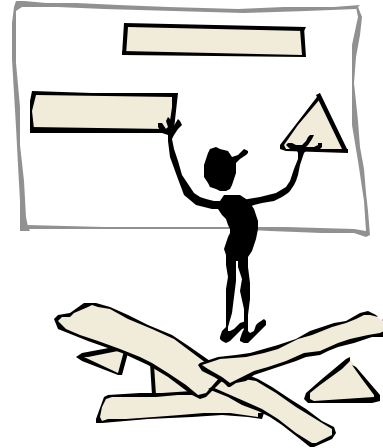
	Group	Choice
1.	<p>Developers <i>This group is most interested in making money from any development plan. They see shops, restaurants, office buildings as good things to build because they create revenue for themselves and bring tax money in to the city.</i></p>	<input type="text"/>
2.	<p>Environmentalists <i>This group is most interested in the kind of effect any development will have on the environment in the city. They want to reduce greenhouse gas emissions and reduce pollution in the city. They would be concerned about including walking and bike trails, useful bus routes and easily accessible services in the city.</i></p>	<input type="text"/>
3.	<p>Community groups <i>This group wants to make sure that any new development includes people places, places for the citizens to go and take part in activities. They might want to include a Farmers' Market, an outdoor theatre, and public park space as important for any development.</i></p>	<input type="text"/>
4.	<p>Children <i>This group hardly ever has a chance to express their opinion about how things should happen in the adult world. It's time they had a say in how the city will develop.</i></p>	<input type="text"/>
5.	<p>Citizens against Urban Sprawl <i>This group is concerned about the way cities seem to be growing in area away from the downtown centre. They worry about how dependent we have become upon automobiles because of the distances we have to travel in from the suburbs to find services.</i></p>	<input type="text"/>
6.	<p>Citizens against High Density Housing <i>This group likes the idea of single family dwellings on large lots. They are not in favour of large apartment blocks or condominium complexes in their suburban neighborhoods. They don't see a problem with using their cars to get to the services they need.</i></p>	<input type="text"/>
7.	<p>Other <i>Create a group that you feel would have important things to say about the growth of our city.</i></p>	<input type="text"/>



STUDENT SHEET #2 Presenting Your Development Plan

To ensure that your idea is clearly communicated to the Planning Commission we ask that you include the following parts.

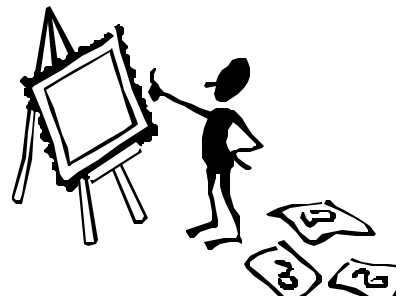
- **A large, scale map of your development plan on a full sheet of Bristol board.**



- **An oral and written presentation to the Municipal Planning Commission of your city/town.**

Be sure that all members of the group speak during the oral presentation. Be sure to address the following topics and questions in your presentations:

1. Describe the main features of your plan.
2. How will your plan provide opportunities to reduce the use of automobiles in the city?
3. How does your plan encourage active, healthy lifestyles for citizens of your city?
4. What services will the city need to provide in the neighbourhood? (Exact \$'s not needed just list the items that the city will need to provide that will cost money (roads, sewer services, electricity?))
5. What kinds of revenue might the city get from your development plan?
6. Who will live in your neighbourhood?
7. How will in the neighbourhood people get to the places they need to go?
8. Describe the three main benefits your plan has for the city.
9. Describe how your plan provides accessibility for people with disabilities.



Note: Presentations that do not include quality of life issues will not be accepted.

