

Analyzing Land Use

What makes a city an enjoyable place? Is it how many movie theaters or restaurants it has? Is it a good transportation network? Is it lots of stores? Think about your own community. Do you wish there were more parks, pools, or basketball courts? Do you wish you lived closer to a mall? Do you wish traffic weren't quite so bad? If you had been in charge of planning how the land in and around your town is used, would you have done things differently?

In the past, many towns were developed without a formal planning process. Today, to foster orderly development, many communities have planning boards or zoning commissions that decide how land is used. Planning boards work to regulate land use in a way that balances the interests and needs of businesses, industry, and citizens. For example, a zoning board may set aside some land for industrial development to provide jobs for people. However, these industrial zones usually are situated away from residential areas to protect residents from noise, traffic, and pollution. Similarly, planning boards determine the location of parks and open spaces to improve the quality of life in residential areas.

Properly planning a city is no easy task. City planners must decide how to accommodate growth without needlessly compromising the quality of life. City planners also must consider how their decisions affect the infrastructure of a city. For example, a poorly located large development may cause severe traffic problems and accelerate the wear and tear of existing roads.

In this activity, you will use maps of your community to analyze how land is used. You will pay particular attention to open spaces, residential areas, and infrastructure. Finally, you will decide what changes you would make in the way land is used that might improve the standard of living in your community.

OBJECTIVES

Identify various land-use areas on a local map, including areas designated for industrial, residential, commercial, and recreational interests.

Estimate the amount of land designated for specific purposes in a city or town.

Discover patterns that exist for land use within a city or town.

Evaluate the land-use pattern in a city or town, and make suggestions for changes that would improve the quality of life for residents.

MATERIALS

- maps of your town or city
- pencils, colored

Analyzing Land Use *continued***Procedure**

1. Obtain a zoning map of your town or city. Spend a few minutes locating important sites you are familiar with, such as airports, shopping malls, and major highways. Study the map and map key to determine how land use is indicated. For example, parks and natural areas are often shaded in green.
2. Use colored pencils to identify areas in which land is used in a particular way. For example, you might outline residential areas in red, industrial areas in black, agricultural areas in brown, the downtown business district in orange, shopping areas and malls in purple, parks and other recreational spaces in green, and bodies of water in blue. Indicate important community facilities to which large amounts of land may be devoted, such as hospitals, schools and universities, and airports. Also indicate undeveloped areas and what uses have been planned for the future of these areas.
3. Estimate the total amount of area that is devoted to specific land uses and record your estimates in Table.

ESTIMATED LAND USE

Land use	Estimated percentage of devoted land
Residential areas	
Agricultural areas	
Industrial areas	
Commercial / shopping areas	
Parks and other green spaces	
Water bodies	
Schools / universities	
Hospitals	
Airports	
Highways and roads	

4. Total your estimated percentages. If the total is more or less than 100 percent, re-examine your original estimates, and make adjustments where necessary until the total equals 100 percent.

Analysis

1. **Describing Events** How difficult was it to use the map to identify areas where land is used in a particular way? How confident do you feel in the estimated percentages that you recorded?

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- 2. Examining Data** According to your estimates, what types of facilities or services occupy the greatest amount of land in your city or town?

- 3. Analyzing Results** List some of the specific industries, commercial interests, and major activities that contribute to the economic base of your city or town. What is the relationship between the amount of land devoted to these areas and their economic importance to your community?

- 4. Analyzing Data** In your opinion, does your community provide an adequate amount of open space? Explain your answer.

- 5. Examining Data** Are your community's residential zones evenly distributed, or are they concentrated in certain areas? What might explain the distribution?

Conclusions

- 6. Applying Conclusions** Suppose you had the power to rearrange your community in ways that would increase the standard of living for citizens. How would your redesigned map look? How would the percentages

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of land currently devoted to certain interests in your community change? How is the population expected to increase or decrease in the next 20 years?

7. Applying Conclusions On a separate sheet of paper, make a sketch showing the basic layout of your “redesigned” community. Be sure to use the same colors for the new map that you used in evaluating land use on the current map.

8. Interpreting Information How does the map of your “redesigned” community compare with the current map of your city or town?

9. Making Predictions Would it be difficult to convince residents of your town or city to agree to move to a “redesigned” community? Predict which aspects of your new design would be most appealing to residents and which might result in complaints. Give reasons for your predictions.

Extension

1. Research and Communications Critique a current redesign or zoning decision that is underway in your local community. This type of project could include the widening of a road, the building of a new residential area, or the rezoning of a section of land. Write a commentary addressing how this project might change the quality of life in your community, and submit it to your local newspaper after having it evaluated by your teacher.