

Environmental Case Study

continued

Design a Sustainable City

For Investigation

What type of transportation works best in a city? Sustainable transportation works best where houses are close to transit lines, where there are safe routes for people to use for biking and walking, and where buildings are close together.

Form a team of two to four students. Imagine that you are urban planners. Design a city that provides sustainable transportation for commuters.

What to Do

1. Plan your city. Think about what types of transportation you would like to encourage there. What kind of public transit will your city have? How will you enable people to walk and bike? What kinds of road systems will your city have?
2. Think about where houses, businesses, schools, and parks will be in relation to transportation routes. Where will you locate the police station, fire station, and hospital?
3. Draw a rough sketch of how your city will be laid out. Look over your sketch and review your plan. Can people easily get to schools, work, and shops? Can police officers, ambulance drivers, and firefighters get to all parts of the city quickly? Make any changes before you paint your model city.
4. Draw or paint your design on a poster board. Label the buildings, parks, and other elements. Use one color for businesses and another color for houses. Color-code the transportation routes. Use a different color to indicate how each route will be used.
5. Add a color-coded key to your city plan.
6. Present your planned city to the class.

Materials

- paper
- pencils
- poster board
- markers or paints

Assessment Checklist

Assess your city design using the checklist below:

- Shows the location of homes, schools, and businesses
- Shows the location of the police station, fire station, and hospital
- Shows transportation routes for pedestrians, bicyclists, and public transit
- Transportation routes and buildings are labeled or color-coded with a key
- Is neat and easy to read
- People, including police and other officials, can reach all parts of the city easily