

**Unit Description**

In the United States, we tend to believe that a person can do whatever she likes with her property, as long as it doesn't interfere with another person's property rights. At the same time — going back to the days when neighbors joined together in “barn-raising” parties — we recognize that neighborhoods and whole communities can be made better when citizens get together and agree on a plan for development. Planning and zoning are the ways that a city or county tries to ensure that development serves the interests of the whole community, without infringing on the rights of individual property owners, whether they be owners of homes, commercial establishments, or factories. The lesson introduces students to the basic concepts of city planning and explains the political process for implementing planning.

**Concepts**

Civics – infrastructure, planning, zoning, buffering, setback requirements

**Related Subject Area**

Social Studies – mapping  
Language Arts – debate

**Instructional Objectives**

Students will be able to:

- plan a community taking into consideration planning, zoning, and buffering.
- identify infrastructure problems associated with poor planning.
- state examples of city planning from their own experiences.

**Time Required**

2 class periods

**Materials Required**

- Reading 1, *Community Zoning*
- Reading 2, *The Politics of Zoning* (optional)
- Activity 1, *Community Buildings Cards* (copied and cut apart to provide one card per student)
- Activity 2, *Number Squares* (copied and cut apart to provide one number per student)
- Activity 3, *Infrastructure Cards* (copied and cut apart to provide one card per group)
- Activity 4, *Community Development*, one copy cut apart

Visual 1, *A Good City Plan*

Visual 2, *What's the Use?* (optional)

crayons or markers

pencils

butcher paper

drawing paper

bowl or container from which to draw numbers in Activity 2

index cards, one for each student

### Procedure

1. Distribute one card from Activity 1, *Community Buildings Cards* and drawing paper to each student. Have each student draw the picture assigned on the card.
2. When students have completed their drawings, have each one draw a number from the bowl. (Activity 2, Number Squares)
3. Set aside a large area of the floor, approximately 4' x 4'. Have students begin placing their drawings on the floor as their numbers are called. They may place them wherever and in whatever position they want.
4. When all buildings are placed, allow the students a few minutes to observe the community they have built. Have them pay particular attention to the location of homes relative to industry or shopping. Then ask the following questions:
  - a. What might be some safety concerns held by the homeowners? (Children may be attracted to play in unsuitable areas within walking distance of their homes. There may not be enough neighbors around to watch out for each other. There may be heavy traffic with large trucks around industrial and commercial buildings.)
  - b. What environmental concerns might the residents of this neighborhood have? (Smoke from the factories.)
  - c. Can children find a safe place to play in this neighborhood? (The placement of the park will determine the answer to this question. In general, if the park has been located near the factories, children might be endangered by the pollution or equipment nearby. If the park is located near the junkyard, children might be attracted to play amid the rusty metal.)
  - d. Is the shopping in this neighborhood convenient? (Answers will vary depending on where stores have been located. However, with the random placement, it is unlikely that the stores are situated together. This would cause some inconvenience, because shoppers must get in their cars to go from store to store.)

5. Tell students that they need to address the community's infrastructure. Remind students that infrastructure refers to the basic facilities and equipment needed for the community to function. Certain essential services must be provided in the community, even if they are provided by a private company. Some of these essential services are water, sewer, and electricity.
6. Explain that the provision of roadways is another of the essential services for which a community is responsible. In larger communities, it may be desirable to expand transportation infrastructure to include some form of mass transit. Where industry is present, the community's infrastructure will likely include rail service.
7. Explain that this community must include infrastructure, such as water, sewers, and electricity. It must also include transportation infrastructure, such as streets, rail service to factories, and a bus route. Place students into three groups. Give each group a piece of butcher paper and one card from Activity 3, Infrastructure Cards. Give students 15 minutes to draw a map of the community in its present layout. Have each group include the routes for which they are responsible on their maps.
8. Ask the rail group the following questions:
  - a. Are you able to find a path for the rail lines? (Answers will vary depending upon how the community has been designed.)
  - b. In what way would your line disrupt the community? (Answers will vary depending upon how the community has been designed.)
9. Ask the streets group the following questions:
  - a. Are your streets wide enough to accommodate hauling trucks for the factories and the businesses? (Answers will vary depending upon how the community has been designed.)
  - b. Why would the wide streets with heavy commercial travel cause concern for some homeowners? (Residents on or near such streets would be concerned about the safety of pedestrians and the safety of other vehicular traffic on these streets.)
  - c. Is the configuration of the streets safe, or are drivers likely to experience accidents? (Answers will vary, but students should discuss whether streets in commercial areas form straight lines on an orderly grid or twist and turn forming a confusing layout. While straight-line streets may facilitate traffic flow in commercial areas, winding streets may slow down traffic in residential areas and discourage commercial traffic and speeding.)

10. Ask the bus route group the following questions:
  - a. Are the routes convenient from workers' homes to factories and businesses? (Answers will vary, but students should discuss whether the route design causes commuters to have to transfer several times or take extremely time-consuming trips to work.)
  - b. Are the streets wide enough to accommodate buses? (Answers will vary depending upon how the community has been designed.)
11. Suggest that there may be a way to avoid the problems of an inadequate or poorly planned infrastructure, undesirable neighboring buildings, and dangerous situations for children, inconvenient shopping, and air quality problems.
12. Explain that many cities and counties engage in planning and zoning. A plan is a blueprint or guide for the orderly growth of a community. **Planning** is a method used to create a community that is a good place for its residents to live, work, go to school, and play.
13. Display Visual 1, A Good City Plan. As you present the list of elements that constitute a good city plan, ask students to suggest examples of good planning from their own neighborhoods. (For instance, an example of sound infrastructure may be a new sewer line installed to eliminate storm water collecting in the street.)
14. Give each student a copy of Reading 1, Community Zoning. Have him or her read about typical zoning procedures.

Note to teacher: For a more in-depth presentation on this topic, see Planning and Zoning by Jeffrey LaGarce in the Appendix. Additional information can be found on the CECH web site.

15. Place students into groups of three-to-four students. If possible, group students so that those in each group are from the same neighborhood. Give each group a piece of butcher paper, and ask the students to recreate their own neighborhood buildings. Suggest that they include no more than four to six square blocks (or an equivalent territory). On each building, have them write the type of zone to which the building should be assigned. Have them use "R" for residential, "C" for commercial, and "I" for industrial.
16. Ask the following questions:
  - a. What examples are there of a commercial building placed near residential buildings? (Answers will vary, but, in general, students may cite service stations and convenience stores.)

- b. Why would a service station or convenience store be situated near an area zoned residential? (These businesses offer services that residents would find convenient to have located nearby.)
  - c. What examples are there of an industrial building placed near residential buildings? (Although this is unusual, some students may have an industrial building located nearby. It is likely that this arrangement occurred before zoning procedures were established. Possibly, the factory was built and the workers moved nearby.)
17. Explain that although commercial and industrial buildings are sometimes located near residential buildings, this seldom occurs with careful planning. City and county planners consider a planning technique called buffering. Buffering is the practice of providing certain barriers between residential zones, commercial zones, and industrial zones.
18. Provide the following examples of buffering, and ask students from what elements of the commercial activity homeowners are being protected.
- a. A grove of evergreen trees is planted between the carwash and people's backyards. (*Homeowners are protected from bright lights and noise.*)
  - b. A privacy fence is built along the highway. (*Homeowners living along the highway are protected from noisy trucks, bright lights and horns.*)
  - c. A 50-foot to 100-foot "no build" zone separates the service station from homeowners. (*Homeowners are protected from bright lights and revving engines.*)
19. Explain that in addition to buffering, a city or county may have "setback requirements." Setback requirements state that a building can only be built a number of feet from the property line. In other words, someone building a home may be required to leave a 10-foot space between the sides of her home and her property line. By enforcing this rule, the city ensures that her neighbors have privacy.
20. Tell students that communities might also insist that commercial businesses close by a certain hour. For instance, a drive-in restaurant may be required to close by midnight so that people who live nearby don't have to put up with "Would you like fries with that?" blaring from the loudspeaker at three o'clock in the morning.
21. Display Visual 2, What's the Use? Explain that in applying its zoning rules, a city usually makes a distinction between permitted uses and conditional uses. Permitted use businesses pose no special problems for a particular zoning district, and so all that is needed is a business license from the city. Conditional use

businesses can pose traffic, noise, or other problems, and so must get special approval from the city’s governing body (the board of aldermen or the city council.) Examples of permitted use businesses in a commercial zone might be general office buildings, banks, or gas stations. Examples of conditional uses in a commercial zone might be grocery stores, any liquor sales establishment, or fast-food restaurants.

22. Ask students the following questions:
- a. Why would a grocery store be an example of conditional use? (*The grocery store would draw a lot of traffic.*)
  - b. Why would a bank be an example of permitted use? (*The bank is less likely to cause traffic or noise problems in the neighborhood.*)
23. Give each student an index card. Instruct students to write a large “P” on one side of the card and a large “C” on the other side. Explain to the students that you will give them examples of several types of businesses. Instruct students to hold up the “C” side of the card when they hear a business that would be zoned as conditional use. Instruct them to hold up the “P” side of the card when they hear a business that would be zoned as permitted use.
24. Read the following types of businesses aloud. As students respond with their cards, ask for volunteers to explain why they classified the business as indicated on their cards.

hardware store	permitted
pet shop	permitted
skating rink	conditional
post office	conditional
hospital	conditional
general retail sales	permitted
convenience store	conditional
dine-in restaurants	permitted

Note to teacher: The following three paragraphs are available as an optional student reading. See Reading 2, The Politics of Zoning.

25. Explain that a business that falls under the permitted use category may simply open and begin operating. This isn’t so for a business that falls under the conditional use category. An application for a conditional use permit goes to the city’s planning and zoning commission, which holds a meeting or “public hearing” at which anyone can speak for or against a business’s proposal for conditional use. The commission will make sure that the business has thought

about such issues as lighting, traffic flow, noise, and crime. After the hearing, the commission recommends to the city council either that the permit be granted or denied.

26. Explain that after the planning and zoning commission has made its recommendation, the city council (or board of aldermen) will hold its public hearing on the application. At this second hearing, the council will make sure that the business has addressed the concerns of all residents and nearby businesses before it is allowed to build and go into operation. After the hearing, the council will vote “yes” or “no” on the question of whether to grant the conditional use permit. Without the permit, the business cannot operate.
27. Explain that if the council votes no, it must have a very good reason for not letting the business open. If the property owner who wants to establish the business feels that the city is being unfair, the owner can sue the city, hoping that the judge who hears the lawsuit will force the city to issue the permit and even pay the owner for lost income for the time the business was not allowed to open.
28. Explain that in carrying out zoning and land use policy, city and county officials must weigh the interests of the property owner against the interests of the entire community. This balancing act is often controversial because residents want to be able to use their property the way they see fit, and at the same time, they want to have a zoning policy that produces a safe, attractive community. Achieving both goals at the same time is not always easy.

### **Closure**

Have the students return to the community they have arranged on the floor and retrieve their pictures. Instruct students to lay out the community again, this time being mindful of planning and zoning, buffering and setback requirements. Students may find it necessary to draw additional pictures depicting trees or fences for buffering. When they have completed their community, ask the following questions:

- a. How would you define setback requirements? (*Setback requirements state that a building can only be built a number of feet from the property line.*)
- b. What example of setback requirements can be found within the new community? (*Answers will vary.*)
- c. How would you define buffering? (*Buffering is the practice of providing certain barriers between residential zones, commercial zones, and industrial zones.*)
- d. What example of buffering can be found within the new community? (*Answers will vary.*)

- e. What is a community plan? (*A plan is a blueprint or guide for the orderly growth of a community. The plan is intended to guide the land-use decisions of individual property owners in order to promote the general well-being of the community.*)
- f. What is zoning? (*Zoning refers to the city's laws or ordinances that tell how land can be used in various parts of the community.*)
- g. Is there an example of zoning in the new community? (*Answers will vary.*)

**Assessment**

1. Separate the class into four groups. Give each group a card from Activity 4, Community Development. At the same time, display a visual of Activity 4 so that the groups understand each other's roles. Have each group prepare its case and present it to the Planning and Zoning Commission. There is no one "right" answer. Be sure students carefully consider the positive and negative aspects of each option. Of course, each group should stress the positive points of their proposal. However, they should be prepared to counter those who argue the negative aspects and compromise when necessary.

Check that students consider the following points:

- a. Service station with convenience store: positive points — property and sales tax revenue, convenient service to the neighborhood, jobs for local kids; negative points — bright lights, noise at all hours, increased traffic at all hours
  - b. Retirement apartments: positive points — property tax revenue, less in-and-out traffic than alternative proposals; negative points — some increase in traffic, possible increased noise
  - c. Ball field: positive points — a public good for the community, something for community kids to do and enjoy, possible revenue from concessions; negative points — no tax revenue, bright field lights at night, increased traffic and noise
2. Separate the students and have each one write a paragraph explaining the position her group took in the Activity 4, *Community Development*. In the paragraph, students should include examples of setbacks and buffering and should explain why this business is an example of a conditional-use business.

## **READING 1**

### **COMMUNITY ZONING**

A **plan** is a blueprint or guide for the orderly growth of a community. Cities may be responsible for some parts of the plan, such as building streets or laying water lines. Much of the plan, however, is carried out by individuals and businesses that buy property and build houses and stores and factories. The plan is intended to guide the land-use decisions of individual property owners in order to promote the general well-being of the community. Even though citizens usually support the idea of planning, specific planning decisions are often highly controversial because they affect what people can do with their property.

A city tries to make sure that the land use decisions people make fit the plan. The city does this by zoning. **Zoning** refers to the city's laws or ordinances that tell how land can be used in various parts of the community. In other words, cities use zoning to make sure that development fits within the plan. Like planning, zoning is intended to protect the health and safety of the city's residents, preserve property values in the community, and promote the city's economy.

There are three main kinds of zoning districts: (1) residential; (2) commercial; (3) industrial. Residential zoning designates where housing is located and which kind of housing may be built. For instance, a city may not allow apartments to be built in an area zoned for single family homes.

Commercial zoning is very much like residential zoning. Commercial businesses are retail establishments, meaning that goods and services are offered directly to consumers. Just as there are different types of residential buildings, there are different types of commercial businesses. There are small business offices with few customers, such as dental and legal offices. These are known as low-impact businesses because they create few traffic or noise problems. Some businesses have a large impact on neighborhoods. Grocery stores, restaurants, and gas stations generate lots of traffic, noise and trash. These businesses are placed well apart from residential areas. Finally, very large businesses such as movie theaters and shopping malls are seldom placed near residential areas. You can imagine why!

Industrial zoning is similar to residential and commercial zoning in distinguishing among different types of industrial businesses according to their impact on the community. Industrial businesses are those that manufacture or store a good. Some industrial businesses, like warehouses and truck depots, increase traffic and noise, but cause little other harm; however, some industrial businesses create smoke and fumes that irritate surrounding neighbors. It's important to have industry in a community because of the jobs industry creates. Communities try to keep industrial businesses away from residential areas.

Source: LaGarce, J. "Planning and Zoning". City of Ellisville, Missouri. 1997  
See the full LaGarce essay in the Appendix.

## **READING 2**

### **THE POLITICS OF ZONING**

Businesses falling under the heading of conditional use have to apply for a conditional use permit from the city government. Let's use a proposed fast-food restaurant as an example of a conditional use business.

#### **Planning and Zoning Commission**

An application for a conditional use permit goes to the city's planning and zoning commission, which holds a meeting or a "public hearing" at which anyone can speak for or against the restaurant's proposal for a conditional use permit. The commission will make sure that the restaurant has thought about such issues as lighting, traffic flow, noise, and crime.

The commission can set certain requirements. For instance, the commission can require that the fast-food restaurant's drive-through window stay open only until midnight so that neighbors won't be disturbed by excessive noise and lighting. The commission could even require that the restaurant pay for traffic lights on the street near its entrance. After the hearing, the commission recommends to the city council either that the permit be granted or denied.

#### **City Council**

After the planning and zoning commission has made its recommendation, the city council or board of aldermen (depending on what the city calls it) will hold its public hearing on the application. At this second hearing, the council will make sure that the restaurant has addressed the concerns of all residents and nearby businesses before it is allowed to build and operate its fast-food business. After the hearing, the council will vote "yes" or "no" on the question of whether to grant the conditional use permit. If the council votes yes, the restaurant may open. If no, the restaurant may not operate.

If the council votes no, it must have a very good reason for not letting the restaurant be opened. If the property owner who wants to build the restaurant feels that the city is being unfair, the owner can sue the city, hoping that the judge who hears the lawsuit will force the city to issue the permit and even pay the owner for lost income for the time the restaurant was not allowed to open.

Source: LaGarce, J. "Planning and Zoning". City of Ellisville, Missouri. 1997

**ACTIVITY 4**

**COMMUNITY DEVELOPMENT**

A farmer has decided to sell the last five acres of his farm. The other forty acres of what used to be his land are now occupied by 100 single-family homes. The land that he has for sale lies between a busy, four-lane street and the homes. You wish to build a service station with a carwash and convenience store. You would like your business to remain open 24 hours a day. The city will gain property tax revenue from your business and sales tax revenue on everything you sell.

A farmer has decided to sell the last five acres of his farm. The other forty acres of what used to be his land is now occupied by 100 single-family homes. The land that he has for sale lies between a busy, four-lane street and the homes. Your organization would like to build a 50-unit, three-story apartment complex for retired people on this site. The city would gain property tax revenue from the complex.

A farmer has decided to sell the last five acres of his farm. The other forty acres of what used to be his land is now occupied by 100 single-family homes. The land that he has for sale lies between a busy, four-lane street and the homes. You would like the area to become a roadside park with a ball field for community leagues. The teams would play on weekends and weeknights. There would have to be plenty of parking.

A farmer has decided to sell the last five acres of his farm. The other forty acres of what used to be his land is now occupied by 100 single-family homes. The land that he has for sale lies between a busy, four-lane street and the homes. You are members of the Planning and Zoning Commission. It will be up to you to make a recommendation on the use of this land to the city council.

**VISUAL 1**

**A GOOD CITY PLAN**

A good city plan provides:

sound infrastructure, a term that refers to the streets and highways, railways, and water and sewer lines within a community

safe, attractive residential areas that promote family life.  
shopping areas along major streets easily accessible to the public.

industrial areas that are close to major highways and rail or river terminals, but removed from residential areas.

open space and parks that preserve the beauty of the community and provide recreational opportunities for residents.

special areas for hospitals, schools, and other public buildings.

## **VISUAL 2**

### **WHAT'S THE USE?**

In applying its zoning rules, a city usually makes a distinction between **permitted uses** and **conditional uses**.

- **Permitted uses** pose no special problems for a particular zoning district, and so all that is needed is a business license from the city.
- **Conditional uses** can pose traffic, noise, or other problems and so must get special approval from the city's governing body (the board of aldermen or city council).

Note: Conditional uses generally have land uses that are more likely to cause problems than are permitted uses.

**Source:** LaGarce, J. "Planning and Zoning". City of Ellisville, Missouri. 1997  
See the full LaGarce essay in the Appendix.

