

# Exploring Air Issues: A Community Survey

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## National Academic Standards:

### Social Studies

Production, Distribution, and Consumption

Compare how values and beliefs influence decisions in different societies

Civic Ideals and Practices

Construct a policy statement and an action plan to achieve one or more goals related to an issue of public concern.

Participate in activities to strengthen the "common good," based on careful evaluation of possible options for citizen action.

**Grades:** 6-11

**Subjects:** Social Studies

### Objectives:

Develop, administer, and analyze a survey to determine attitudes toward transportation and air pollution.

Develop a policy statement and action plan to increase community awareness of air quality issues and potential solutions.

**Materials:** Pencil, paper

### Background:

Is air pollution a problem in your community? How do students travel to school? What do your neighbors think of carpooling? What are they willing to do to reduce pollution? How does your community compare to others in the state?

One method for investigating air issues in your school and community is through the use of a survey. It is an interactive process that requires preparation, involvement, and interpretation. The results can help lead students to take an active role in solving or reducing a problem in their community.

Several different methods can be used to study environmental issues. Here are three of them.

**Surveys.** A survey can be used to collect information about environmental conditions in your school and community. They focus on information about a specific problem in a certain area. Example: How many cars are in the school parking lot?

**Questionnaires.** These sets of questions focus on a particular subject and are given to a carefully selected population of people. They collect only the facts - not the person's opinion. Example: How many teachers carpool to school?

**Opinionnaires.** Opinionnaires are similar to questionnaires except that they measure the beliefs or opinions of people on certain subjects at a specific time. Example: Do you consider air pollution to be a problem in your community? Yes/No/Undecided

### Doing the Activity:

1. Before a method is selected it is important that students carefully decide the exact information that needs to be collected, the geographic area, and the target population that will be surveyed. A combination of methods can also be used.
2. Accurate collection of the information is next. The students should prepare a data summary sheet to record their information.
3. Once the data has been collected, students should summarize and analyze the survey responses.
4. After analyzing the survey responses, have your students come up with ideas that promote carpooling, bicycling, bus riding, and walking.



### Enrichment:

1. This activity works particularly well after students have conducted an AVO (Average Vehicle Occupancy) Study. You can also find this activity on the EB Web site in The Classroom.
2. Students can survey students and teachers, and then develop a trip reduction program for their school.
3. Students can survey businesses in the area to learn more about their efforts to encourage carpooling, use of mass transit, biking, and other air pollution prevention activities.

### Sample Opinion Poll:

Hello, *my* name is \_\_\_\_\_. I am a student at \_\_\_\_\_ School. I am doing research on air and transportation issues in our community. I would like to ask you some questions about this subject.

Person Responding:  Male  Female Age: \_\_\_\_\_

1. Do you consider air pollution to be a major health problem in your community?  
 Yes  No  Undecided
2. Do you consider industry to be a major contributor to air pollution in your community?  
 Yes  No  Undecided
3. Do you consider vehicles to be a major contributor to air pollution in your community?  
 Yes  No  Undecided
4. Do you consider other states to be a major contributor to air pollution in your community?  
 Yes  No  Undecided

**For each of the following statements, tell me whether you strongly agree, agree, neutral, disagree, or strongly disagree:**

1. People traveling to work should be required to carpool or take public transportation if it is available.  
 Strongly Disagree  Disagree  Neutral  Agree  Strongly Agree
2. Students should be required to carpool or take public transportation to school.  
 Strongly Disagree  Disagree  Neutral  Agree  Strongly Agree
3. The gasoline tax should be increased and the money used to support mass transit programs.  
 Strongly Disagree  Disagree  Neutral  Agree  Strongly Agree
4. The government should increase research support for the fuel cell.  
 Strongly Disagree  Disagree  Neutral  Agree  Strongly Agree

**Please rate on a scale of 1 (not important) to 5 (very important) the following statements:**

1. Automakers need to increase fuel mileage on all their cars and trucks.  
 1  2  3  4  5
2. Laws should be established to stop all open burning.  
 1  2  3  4  5
3. Developing countries need to address air pollution as a major environmental problem.  
 1  2  3  4  5
4. Communities should increase their construction of bike trails for workers and students to use.  
 1  2  3  4  5

### Additional Information:

A valuable book to assist you in developing and utilizing surveys is: Investigating and Evaluating Environmental Issues and Actions: Skill Development Modules by Harold Hungerford and others, Stipes Publishing Company, 10-12 Chester Street, Champaign, IL 61820.

Submit your survey results to Easy Breathers via our Web site!! [www.easybreathers.org](http://www.easybreathers.org)