

# Responsive Management™



## **KNOWLEDGE AND PERCEPTION OF AIR QUALITY AMONG NORTHWEST INDIANA RESIDENTS: RESULTS OF SURVEY AND FOCUS GROUPS**

**Conducted for the  
Northwestern Indiana Regional Planning Commission**

**by Responsive Management**

**2017**

# **KNOWLEDGE AND PERCEPTION OF AIR QUALITY AMONG NORTHWEST INDIANA RESIDENTS: RESULTS OF SURVEY AND FOCUS GROUPS**

**2017**

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## **EXECUTIVE SUMMARY**

### **INTRODUCTION**

This study was conducted for the Northwestern Indiana Regional Planning Commission to determine Northwest Indiana residents' knowledge of air quality issues, the relative importance they place on air quality, their sources of information about air quality, and their awareness of and opinions on specific air quality campaigns. The study entailed a scientific telephone survey of Northwest Indiana residents—specifically, residents of Lake, Porter, and LaPorte Counties (see the map below)—as well as two focus groups with Northwest Indiana residents.

### **TELEPHONE SURVEY METHODOLOGY**

The telephone survey questionnaire was developed cooperatively by Responsive Management and the Commission, based on the research team's familiarity with natural resource issues, as well as a previous survey conducted in 2012 by AC Incorporated. Responsive Management conducted pre-tests of the questionnaire to ensure proper wording, flow, and logic in the survey. The sample of Northwest Indiana residents was obtained from Survey Sampling International, a firm that specializes in providing scientifically valid samples for survey research. Telephone surveying times are Monday through Friday from 9:00 a.m. to 9:00 p.m., Saturday from noon to 5:00 p.m., and Sunday from 5:00 p.m. to 9:00 p.m., local time. The survey was conducted in May 2017. Responsive Management obtained a total of 507 completed interviews.

### **FOCUS GROUP METHODOLOGY**

The focus groups were conducted in Merrillville (Lake County) on June 20, 2017, and Valparaiso (Porter County) on June 21, 2017. The groups entailed in-depth, structured discussions with small groups of Northwest Indiana residents (8 to 12 individuals). The groups were conducted using a discussion guide that allowed for consistency in the data collection (like the survey, the guide was developed cooperatively by Responsive Management and the Commission). Each focus group was moderated by one of Responsive Management's trained moderators, who kept the discussions within design parameters without exerting a strong influence on the discussion content. Responsive Management coordinated the recruiting of focus group participants and provided a monetary incentive to group attendees. Each group lasted approximately two hours and was recorded for further analysis.

## **MAJOR FINDINGS FROM THE SURVEY**

### **CONCERN ABOUT VARIOUS ISSUES IN NORTHWEST INDIANA AND THE IMPORTANCE OF AIR QUALITY AS AN ISSUE**

- The survey first asked Northwest Indiana residents about their concern with 11 items, one of which was *air quality*. For each one, residents rated their level of concern on a 0 to 10 scale, with 0 being not at all concerned and 10 being extremely concerned.
  - Of the 11 items presented, concern about air quality falls in the middle, with a mean rating of 7.1; 38% of residents rated their concern for air quality a 9 or 10. Residents gave the highest ratings of concern for healthcare and education, and the lowest ratings of concern for the unemployment rate and the housing market.
  - In a follow-up question, those who rated their concern about air quality 7 or lower were asked the reasons for their rating. The most frequent responses were that they think the air quality is good, that they do not live near industrial plants or other bad areas for air pollution, and that they do not think or hear much about the issue.
  - Likewise, residents who rated their concern 8 or higher were asked the reasons for their rating. The most frequent responses were that they live near industrial plants or mills and that air quality affects everything.
  
- In a direct question, Northwest Indiana residents rated the importance of air quality to them personally, using a 0 to 10 scale, where 0 is not at all important and 10 is extremely important. Their mean rating was 8.2, with 46% giving a rating of 10.
  - Groups most likely to rate the importance of air quality a 9 or 10 are African-American residents (62% rated it 9 or 10), those who do not have a frequent or daily commute (61%), residents 55 or older (58%), and those with an education level of at least a bachelor's degree (58%).
  - Similarly, residents were asked to say how much air quality affects them personally. The overwhelming majority (92%) say that it affects them at least *a little*, with 41% saying it affects them *a great deal*.

- Residents were asked to name the most important issues that negatively affect air quality in an open-ended question (that is, they were asked to give their top-of-mind responses without an answer set). Two-thirds of residents (67%) cited industry, mills, or refineries, and 27% cited vehicles or traffic. No other items were mentioned by more than 6% of residents.

## **OPINIONS ON AND RATINGS OF AIR QUALITY**

- Residents were asked their opinion about the air quality in their area in an open-ended question. There were nearly twice as many residents who stated that the air is good or better than at other places (44% gave a response to this effect) than who stated that the air is bad or polluted (24%).
- When asked to rate the current air quality in Northwest Indiana on a scale of excellent-good-fair-poor, the results are interesting in light of the above findings. The percentage of residents who rated the air quality as *excellent* or *good* (41%) was smaller than the percentage who rated it *fair* or *poor* (57%).
  - Groups most likely to rate the air quality as *excellent* or *good* are male residents (50%), residents 18-34 years old (48%), and white residents (47%).
  - Groups most likely to rate the air quality as *fair* or *poor* are African-American residents (76%), those with a frequent or daily commute (65%), and female residents (65%).
- The next three questions evaluated residents' perceptions of the trend in the air quality in their area. Specifically, they were asked, "How do you think the air quality in Northwest Indiana is now compared to [10 years ago / 5 years ago / a year ago]?" with the response options of *better*, *same*, or *worse*.
  - The percentage of those who answered that the air quality is the *same* increased substantially as the years of comparison got shorter. However, it is noteworthy that, although their "share" of the total response decreased over time, the percentage of those who said the air quality is *worse* steadily overtook the percentage who said it is *better*.
    - Compared to 10 years ago, 38% of residents said the air quality is the *same*, 31% said it is *better*, and 24% said it is *worse*.

- Compared to 5 years ago, 60% of residents said the air quality is the *same*, 18% said it is *better*, and 15% said it is *worse*.
  - Compared to a year ago, 81% of residents said the air quality is the *same*, 5% said it is *better*, and 9% said it is *worse*.
- In follow-up questioning, those who said the air quality had improved for any of the timeframes were asked why they felt that way.
- By far the top response was that industry has gotten better or more regulated (51% stated this), and the next highest response (11%) was similar (vehicle emissions are better). Other responses related to improved health or easier breathing and aesthetic observations that the air looks or smells better.
  - At the other end, those who said the air quality had gotten worse for any of the timeframes were asked why they felt that way. The top responses were related to more smog or pollution (41%), more vehicles (28%), and industry or mills (19%).

## **KNOWLEDGE OF AND INFORMATION ON AIR QUALITY IN NORTHWEST INDIANA**

- In a self-assessment, residents were about evenly divided between those who said they know *a great deal or moderate amount* about air quality in Northwest Indiana (48%) and those who said they know *a little or nothing at all* (51%).
- Crosstabulations show that the groups most likely to indicate they know *a great deal or moderate amount* about air quality are those 55 or older (66% of this group gave this response), those who do not have a frequent or daily commute (61%), and Porter County residents (56%).
  - Conversely, the groups most likely to indicate they know *a little or nothing at all* about air quality are Hispanic residents (75%), African-American residents (70%), and residents 18-34 years old (70%).
- Residents were asked, in an open-ended question, where they get their information on local air quality issues. The top responses were newspapers (39% stated this), television (30%), and websites (24%).



- Responses were similar when residents were asked to name the single best way to reach them with local air quality information: 21% stated newspapers, 18% stated television, and 17% stated email.
- Most residents (96%) have not observed billboards in the area with ads or information about air quality; only 4% said they have seen such billboards. Also, most of that small group who had seen a billboard said that they did not actively seek out more information after seeing the billboard.

### **AIR QUALITY CAMPAIGNS**

This portion of the survey focused on residents' awareness of and opinions on 10 specific campaigns or initiatives in Northwest Indiana. The campaign "NWI Clean Air: Think Green. Breathe Easy." was of particular interest to this study, so it is summarized in this Executive Summary. Each of the other campaigns is discussed separately in the body of the report.

- Residents were first asked, in an open-ended question, if they had seen or could name any campaigns or initiatives in Northwest Indiana that promote actions or programs to improve air quality. Most (91%) could not; none of the subject campaigns were named by over 1% of residents.
- When residents were read the names of the campaigns, however, recognition was substantial.
  - Two campaigns had awareness or recognition by a majority of residents: Household Hazardous Waste Collection (55% of residents were aware of this) and Ozone Action Days (51%).
  - At the next tier of awareness were NIRPC (35%) and Pace RideShare (33%). (Note that NWI Clean Air falls into this tier, with 26% of residents being aware of it.)
  - The least known campaigns were It All Adds Up to Cleaner Air (14%) and South Shore Clean Cities (15%).
  - Trend analysis shows that in all cases awareness has decreased since 2012, with the largest decrease occurring for Ozone Action Days (63% aware in 2012; 51% aware in 2017).

- Interestingly, the campaigns with the lowest levels of awareness had the highest mean ratings of effectiveness. Residents were asked to rate the effectiveness of each campaign (if they indicated they had heard of the campaign) on air quality education in Northwest Indiana, on a scale of 0 to 10, with 0 being not at all effective and 10 being extremely effective.
  - It All Adds Up to Cleaner Air was the top campaign with a mean rating of 8.0, followed by South Shore Clean Cities (7.3).
  - Compared to the 2012 study, there was a major increase in high ratings (10, 9, or 8) for It All Adds Up (37% in 2012; 66% in 2017) and a sizable increase for the NIRPC (31% to 43%). On the other hand, there were decreases for Pace RideShare (32% to 22%) and Asthma Awareness Days (45% to 38%).

### **NWI CLEAN AIR: THINK GREEN. BREATHE EASY.**

This campaign is of special interest to the study; therefore, additional questions were asked about this campaign that were not asked about the others.

- Prior to this survey, 26% of residents were aware of this campaign.
  - Groups most likely to be aware of the campaign are LaPorte County residents (36% were aware of the campaign), those with a frequent or daily commute (34%), residents 18-34 years old (29%), and those with children in the household (28%).
  - Among those who heard about the campaign, the most common source of information was newspapers or magazines (28% stated this), distantly followed by online ads (12%).
  - Residents who were aware of the campaign were asked to rate the effectiveness that the campaign could have on air quality education in Northwest Indiana, on a scale of 0 to 10, where 0 is not at all effective and 10 is extremely effective. The campaign received a mean rating of 7.1; 20% rated it 9 or 10.
- Those aware of NWI Clean Air were asked to give a general assessment of the campaign on a scale of excellent-good-fair-poor. The percentage who rated it *excellent* or *good* (51%) is double that of those who rated it *fair* or *poor* (25%).
  - Those who did not rate the campaign *excellent* most frequently said it was because they did not hear much about it or that it needs more advertising.

- Those who did rate the campaign *excellent* most frequently said it was because the campaign informs and educates people.
- Nearly all residents who have heard of NWI Clean Air (94%) do not remember any facts, tips, or details about the information; several said they only remember the slogan.

## **TAKING ACTION**

- In an open-ended question, residents were asked to name the most important action that they can personally take to improve air quality in their area. No response was dominant, but those most frequently mentioned were to use more fuel-efficient vehicles or keep their vehicle tuned up (16% gave a response to this effect), to combine trips or drive less (15%), to avoid burning trash or leaves (8%), and to carpool (8%).
- Residents were presented with a series of 14 actions that are beneficial to air quality, and they were asked to name the ones they currently undertake.
  - Four of the actions are common to most Northwest Indiana residents: conducting routine car maintenance (94% of residents do this), combining errands into one trip (91%), emissions testing or a clean air car check (85%), and recycling (84%).
  - At a lower tier of frequency, but still common, are reducing car idling (69%), getting gas when it is cool outside (46%), not topping off the gas tank (45%), and walking instead of driving (37%).
  - The least common of the listed activities are carpooling (26%), biking instead of driving (23%), mowing the lawn after 7 p.m. (20%), telecommuting (20%), taking public transportation (10%), and driving a hybrid car (9%).
  - Trend analysis found that participation in routine car maintenance, combining errands, emissions testing, and reducing car idling had a marked increase since 2012.
    - Those who engage in any of the activities most frequently stated they do so because it is the right thing to do or they are concerned about the environment.
    - Note that emissions testing is required in much of the study area.

- Residents were next asked how much each of the 14 actions does to improve air quality in their areas: *a lot, a little, or nothing at all.*
  - The actions seen by residents as the most beneficial to air quality are recycling and the various responses related to vehicle use and maintenance, such as conducting routine car maintenance, reducing car idling, walking or biking instead of driving, emissions testing, carpooling, and combining errands into one trip.
  - At the opposite end, the actions seen as least beneficial are not topping off the gas tank, mowing the lawn after 7 p.m., and getting gas when it is cool outside.
  
- Again considering these 14 actions, residents were asked to rate their likelihood of adopting each to improve air quality problems in their area, on a scale of 0 to 10, where 0 is not at all likely and 10 is extremely likely.
  - The actions with the highest mean ratings largely mirror those that had the highest participation rates, which may indicate that residents intend to continue current beneficial behaviors but might not be adopting new ones. The highest mean ratings are for recycling (mean rating of 8.9), conducting routine car maintenance (8.6), combining errands into one trip (8.2), and emissions testing (8.0).
  - At the bottom are telecommuting (3.0), driving a hybrid car (2.2), and taking public transportation (1.9).
  
- Residents were asked how much of an impact they personally feel they can make to better the air quality in their area, on a scale of 0 to 10, where 0 is “individually, I cannot make an impact on air quality at all” and 10 is “I can make a huge difference.”
  - The numerical responses were fairly evenly distributed, with the average ending up in the middle: the mean rating was 5.15 and the median was 5.
  - The groups most likely to give a 9 or 10 rating were African-American residents (23% gave a 9 or 10 rating), residents 18-34 years old (17%), and female residents (17%).
  - The groups most likely to give a 0 or 1 rating were those who do not have a frequent or daily commute (19%), white residents (19%), and residents 55 or older (19%).

## **COMMUTING**

- A majority of residents (63%) commute on a daily or frequent basis to and from work, school, or some other activity or responsibility. Still, a sizable number (37%) do not.
  - Those who commute on a daily or frequent basis travel a mean of 32.1 miles round-trip.
  - Two-thirds of commuters (67%) do so on a daily basis, with most of the remainder (30%) commuting several times a week.
  
- Most commuters (89%) drive a car to work or other destination.
  - Other commuters walk (5% stated this), carpool (3%), or take public transportation (3%).
    - Those who did *not* indicate above that they use public transportation were asked how often they use it: 2% said *frequently* and 4% said *sometimes*, whereas 20% said *rarely* and 74% said *never*.

## **MAJOR FINDINGS FROM THE FOCUS GROUPS**

### **GENERAL ISSUES OF IMPORTANCE FACING NORTHWEST INDIANA**

- **Air quality does not appear to be a top-of-mind concern among Northwest Indiana residents.**
  - Open-ended discussions at the beginning of each group found participants readily discussing crime, economic development and job opportunities, education, healthcare (with an emphasis on addiction treatment), and infrastructure. However, no one mentioned the issue of air quality unprompted.

### **OPINIONS ON AIR QUALITY IN NORTHWEST INDIANA**

- **Residents seem to consider air quality to be important, although it is generally thought of as a long-term issue that is “invisible” on a day-to-day basis.**
  
- **It is generally thought that there is less concern about air quality among Northwest Indiana residents now than there was in the past due to the emergence of more pressing issues of importance (e.g., economic development, crime, and healthcare).**

- **While some residents acknowledge that the air quality in Northwest Indiana is poorer than in other regions of the state and/or country, most seem to think that the air quality in Northwest Indiana is better today than it was five or ten years ago, and about the same as it was last year.**
  - Reasons cited for the improved air quality include regulations and requirements prohibiting engine idling in certain areas, vehicle emissions testing, and vehicle maintenance in general. Because of such requirements, there appeared to be less immediate concern among participants about air quality in their area. However, some participants complained about the cost, time, and effort required to meet these regulatory or legal standards.
  
- **Industry is seen as the major contributor to poor air quality; the collective impact from individual residents is not viewed as comparable to the effect from industry.**
  - Industrial mills were cited most often as the major detriment to air quality. Other named sources were hog and pig farms (particularly relating to smell), abandoned buildings (with concerns about lead and asbestos), and freight traffic that runs through Northwest Indiana. One important theme that surfaced during this discussion (and which a few people addressed in later comments) is frustration over out-of-state truckers impacting air quality in Northwest Indiana, despite the trucks being registered elsewhere (and thus not subject to the same emissions standards).

#### **ACTIONS TAKEN ON BEHALF OF AIR QUALITY**

- **Many Northwest Indiana residents appear to be somewhat resistant to idea of making a special personal effort to improve air quality, believing that the vast majority of air pollution comes from industrial mills and not individual residents.**
  - Presented in the context of personal actions on behalf of air quality, efforts such as carpooling, combining errands, recycling, getting gas or mowing the lawn after 7 p.m., or driving a hybrid car are often viewed as disproportionate burdens on residents. At the same time, the group discussions (along with the survey data) suggest that many residents do in fact take part in a number of these actions. However, it appears that efforts like

combining errands and carpooling are more often done out of convenience or common sense than out of specific concern about air quality.

➤ **Many residents resent emissions testing requirements.**

- Similar to the previous finding, some participants appear to perceive emissions testing as an unfair burden to Northwest Indiana residents—there is particular frustration in light of freight trucks and semis that may not have to meet such emissions standards regularly passing through the region.

### **SOURCES OF INFORMATION AND CREDIBILITY OF SOURCES**

➤ **Few if any Northwest Indiana residents actively seek out information on air quality.**

- Again, consistent with the initial discussions on important issues, air quality tends not to be a top-of-mind issue and therefore does not compel people to look for specific information on it.

➤ **Regarding the distribution of information on air quality, residents would trust nonprofit organizations and colleges or universities most.**

- The focus groups suggest that nonprofit organizations and colleges or universities are trusted the most in terms of reliable, unbiased information on air quality. Conversely, there was not much trust in the credibility of the state or federal government, although the Northwest Indiana Regional Planning Commission appeared to have reasonably good credibility among most participants (note, however, that many people were unfamiliar with the specific work of the Planning Commission).

### **MOTIVATIONS TO TAKE ACTION AND OPINIONS ON MESSAGES ABOUT AIR QUALITY**

➤ **Residents are favorable toward Air Quality Action Days / Ozone Action Days, although they tend to view them as primarily informational in nature—most people do not appear to think of them as efforts to encourage specific actions intended to mitigate the effects of extreme hot weather. Meanwhile, the Household Hazardous Waste Collection**

**and Gas Can Exchange initiatives were popular with residents, with several people mentioning that they have used these services.**

- **Many residents are confident that the issue of air quality has been resolved (or at least addressed) through regulations and requirements such as emissions testing.**
  - This is another obstacle in persuading residents to change their behavior in ways to benefit air quality in Northwest Indiana. The Commission will need to demonstrate with specificity why it is important for individuals to take action. One person suggested incentivizing responsible behavior as opposed to punishing those who do not take certain actions; another person recommended emphasizing air quality information in schools, reasoning that children are likely to influence their parents' behavior on this topic. One comment met with agreement from others was to avoid the use of hard copy direct mailings to promote air quality messages—this approach was described as wasteful (especially as it goes against “acting green”), with many likely to throw away such mailings without reading them.
- **The Top Ten Tips brochure was considered the most comprehensive and potentially effective marketing material (see the image on page 262 of the report).**
- **Participants were critical of some of the images used in the print ads featuring health statistics (see the images on page 260 of the report).**
  - According to several in the groups, the sunny, positive images (such as the hands forming a heart, the woman in the red coat smiling with open arms, and children jumping in unison) seemed at odds with the content of the messages regarding health problems from poor air quality.
- **Messages that employ graphic imagery may be effective because they are memorable—such images are more likely to go viral and stick in the popular consciousness.**
- **Some residents do not connect asthma and cardiovascular disease to air quality.**



- **The discussions suggest that, in terms of messaging about air quality, residents dislike being told to do things without reason or context.**
  - Many comments during the groups suggest that individual pieces of information alone will not be enough to convince Northwest Indiana residents to take action on behalf of air quality—many people will need to be persuaded that changing their behaviors will indeed result in better air quality in the region. Further, some people are frustrated by messages encouraging a specific action that does not apply to them or their area (e.g., a messaging encouraging walking or bike riding in an area without sidewalks or bike lanes).
  
- **Residents appreciate specific information on air quality (current status, historical trends, etc.), but not generalized slogans or exhortations to take action without context.**
  
- **Many residents do not see the point in changing their behavior, due to the perception that individual people do not impact air quality anywhere near to the extent that industrial interests in the region do.**
  - This mindset suggests that it will be a challenge to convince participants that their actions do indeed influence air quality—most people appear to view the effects from industrial mills, freight traffic, or other large-scale polluters as a more immediate and pressing problem. There is also frustration over the perception that industrial mills can pollute as much as they want, seemingly without any meaningful consequences, while regular citizens are encouraged to take special actions to mitigate harmful effects.
  
- **Messages and public service announcements that are primarily image-based should be placed on billboards, while text-heavy messages, including brochures, should be prominently featured in waiting areas (bus stops, auto mechanic waiting rooms, doctors' offices, etc.).**

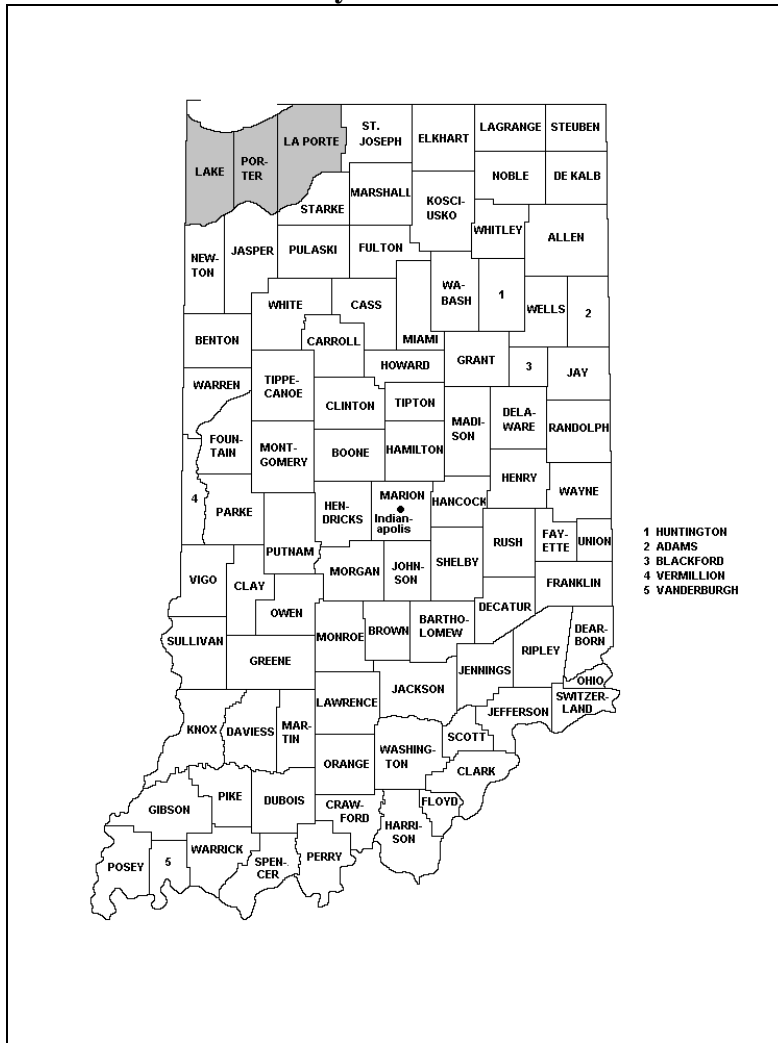
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## INTRODUCTION AND METHODOLOGY

This study was conducted for the Northwestern Indiana Regional Planning Commission (hereinafter referred to as the Commission or NIRPC) to determine Northwest Indiana residents' knowledge of air quality issues, the relative importance they place on air quality, their sources of information about air quality, and their awareness of and opinions on specific air quality campaigns. The study entailed a scientific telephone survey of Northwest Indiana residents—specifically, residents of Lake, Porter, and LaPorte Counties (see the map below)—as well as two focus groups with Northwest Indiana residents. Specific aspects of the telephone survey and focus group methodologies are discussed on the following pages.

### Northwest Indiana Study Area



## **SURVEY METHODOLOGY**

For the survey, telephones were selected as the preferred sampling medium because of the almost universal ownership of telephones among Northwest Indiana residents (both landlines and cell phones were called in their proper proportions). Additionally, telephone surveys, relative to mail or Internet surveys, allow for more scientific sampling and data collection, provide higher quality data, obtain higher response rates, are more timely, and are more cost-effective.

Telephone surveys also have better representation of the sample than mail or online surveys because those mediums systematically exclude those who are not literate enough to complete the surveys or who would be intimidated by having to complete a written survey—by an estimate of the U.S. Department of Education’s National Institute of Literacy (2016), up to 43% of the general population read no higher than a “basic level,” suggesting that they would be reticent to complete a written survey. Finally, telephone surveys also have fewer negative effects on the environment than do mail surveys because of reduced use of paper and reduced energy consumption for delivering and returning the questionnaires.

### **Questionnaire Design**

The telephone survey questionnaire was developed cooperatively by Responsive Management and the Commission, based on the research team’s familiarity with natural resource issues, as well as a previous survey conducted in 2012 by AC Incorporated. Responsive Management conducted pre-tests of the questionnaire to ensure proper wording, flow, and logic in the survey.

### **Survey Sample**

The sample of Northwest Indiana residents was obtained from Survey Sampling International, a firm that specializes in providing scientifically valid samples for survey research. The sample included both landlines and cell phones in their proper proportions. The sample used a probability-based selection process that ensured that each eligible resident had an approximately equal chance of being selected for the survey. At the request of the Commission, an effort was made to over-sample African-American and Hispanic residents of Northwest Indiana; final results were then weighted to ensure that these demographic groups were represented in their actual proportions within the survey area as a whole as well as within Lake, Porter, and LaPorte Counties.

### **Telephone Interviewing Facilities**

A central polling site at the Responsive Management office allowed for rigorous quality control over the interviews and data collection. Responsive Management maintains its own in-house telephone interviewing facilities. These facilities are staffed by interviewers with experience conducting computer-assisted telephone interviews on natural resource issues.

To ensure the integrity of the telephone survey data, Responsive Management has interviewers who have been trained according to the standards established by the Council of American Survey Research Organizations. Methods of instruction included lecture and role-playing. The Survey Center Managers and other professional staff conducted a project briefing with the interviewers prior to the administration of this survey. Interviewers were instructed on type of study, study goals and objectives, handling of survey questions, interview length, termination points and qualifiers for participation, interviewer instructions within the survey questionnaire, reading of the survey questions, skip patterns, and probing and clarifying techniques necessary for specific questions on the survey questionnaire.

### **Interviewing Dates and Times**

Telephone surveying times are Monday through Friday from 9:00 a.m. to 9:00 p.m., Saturday from noon to 5:00 p.m., and Sunday from 5:00 p.m. to 9:00 p.m., local time. A five-callback design was used to maintain the representativeness of the sample, to avoid bias toward people easy to reach by telephone, and to provide an equal opportunity for all to participate. When a respondent could not be reached on the first call, subsequent calls were placed on different days of the week and at different times of the day. The survey was conducted in May 2017.

### **Telephone Survey Data Collection and Quality Control**

The software used for data collection was Questionnaire Programming Language (QPL). The survey data were entered into the computer as each interview was being conducted, eliminating manual data entry after the completion of the survey and the concomitant data entry errors that may occur with manual data entry. The survey questionnaire was programmed so that QPL branched, coded, and substituted phrases in the survey based on previous responses to ensure the integrity and consistency of the data collection.

The Survey Center Managers and statisticians monitored the data collection, including monitoring of the actual telephone interviews without the interviewers' knowledge to evaluate the performance of each interviewer and ensure the integrity of the data. The survey questionnaire itself contained error checkers and computation statements to ensure quality and consistent data. After the surveys were obtained by the interviewers, the Survey Center Managers and/or statisticians checked each completed survey to ensure clarity and completeness.

Responsive Management obtained a total of 507 completed interviews. The total sample size on some questions is less than 507 because the survey asked some questions only of specific respondents in the survey. In particular, this was done when a follow-up question did not apply to some respondents. For instance, only those who knew about a specific air quality education campaign were asked follow-up questions about that campaign. Also, on several questions the sample size is less than the total because only a randomized portion of respondents received those questions; this was done to prevent the survey from being overly long for any individual respondent.

### **Telephone Survey Data Analysis**

The analysis of data was performed using IBM SPSS Statistics as well as proprietary software developed by Responsive Management. The results were weighted by demographic and geographic characteristics so that the sample was representative of Northwest Indiana residents as a whole. Geographic analyses were also conducted, which resulted in maps of the survey data. These maps are within the section on survey results.

### **Telephone Survey Sampling Error**

Throughout this report, findings of the telephone survey are reported at a 95% confidence interval. For the entire sample of Northwest Indiana residents, the sampling error is at most plus or minus 4.35 percentage points. This means that if the survey were conducted 100 times on different samples that were selected in the same way, the findings of 95 out of the 100 surveys would fall within plus or minus 4.35 percentage points of each other. Sampling error was calculated using the formula described on the following page, with a sample size of 507 and a population size of 585,803 Northwest Indiana residents.

### Telephone Survey Sampling Error Equation

$$B = \left( \sqrt{\frac{N_p(.25) - .25}{N_s}} \right) (1.96)$$

Where: B = maximum sampling error (as decimal)  
N<sub>P</sub> = population size (i.e., total number who could be surveyed)  
N<sub>S</sub> = sample size (i.e., total number of respondents surveyed)

Derived from formula: p. 206 in Dillman, D. A. 2000. *Mail and Internet Surveys*. John Wiley & Sons, NY.

**Note:** This is a simplified version of the formula that calculates the maximum sampling error using a 50:50 split (the most conservative calculation because a 50:50 split would give maximum variation).

### FOCUS GROUP METHODOLOGY

The focus groups entailed in-depth, structured discussions with small groups of adults (8 to 12 individuals) about their opinions on air quality issues in Northwest Indiana. The use of focus groups is an accepted research technique for the qualitative exploration of attitudes, opinions, perceptions, motivations, constraints, and behaviors. Focus groups provide researchers with understanding and insights into the thought processes of discussion participants.

Focus groups allow for extensive open-ended responses to questions; probing, follow-up questions; group discussion; and observation of emotional responses to topics—aspects that cannot be measured in a quantitative survey. Qualitative research sacrifices reliability for increased validity. This means that, although focus group findings cannot be replicated statistically as can a survey (high reliability), they provide researchers with a more valid understanding of the topics or issues of concern in the study (high validity).

The focus groups were conducted using a discussion guide that allowed for consistency in the data collection (the guide is included in the report appendix). Each focus group was moderated by one of Responsive Management's trained moderators, who kept the discussions within design parameters without exerting a strong influence on the discussion content. In this sense, the focus groups were non-directive group discussions that exposed the spontaneous attitudes, insights, and perceptions of the participants regarding the study topics. Each focus group discussion was recorded for further analysis.

### **Group Locations and Dates**

The focus groups were conducted in Merrillville (Lake County) and Valparaiso (Porter County), Indiana. Responsive Management coordinated with each host facility to ensure that the focus group rooms were set up appropriately for maximum interaction and that each room had adequate seating. Responsive Management also ensured that the recording equipment was properly set up and in working order. Each group lasted approximately two hours, and dinner was provided to participants. The Merrillville group was conducted on June 20, 2017, and the Valparaiso group was conducted on June 21, 2017.

### **Participant Recruiting**

Responsive Management coordinated with the host facilities in each location to recruit participants for the focus groups. Recruiting staff randomly contacted area residents to provide a summary of the focus group topic; those interested in participating were asked a series of screener questions and, if qualified, were provided instructions for attendance. Note that, during the recruiting process, area residents were *not* made aware that the focus groups were part of a research study on air quality—rather, the focus groups were presented as a research initiative on behalf of the Northwestern Indiana Regional Planning Commission examining general issues of importance facing Northwest Indiana.

Responsive Management developed a recruiting screener with a list of essential questions assessing participant characteristics (the recruiting criteria were carefully reviewed with the host facilities). To participate in the focus groups, residents had to be at least 18 years old; a resident of Lake, Porter, or LaPorte Counties for at least three years; and *not* employed by a marketing or advertising firm. An effort was made to recruit participants representing both genders and a wide range of ages.

The recruiting managers maintained contact with recruited participants as necessary and provided confirmation information including the date, time, and location of the focus group, as well as a map and directions to the focus group facility. To encourage participation, a monetary incentive was given to participants.



During the recruiting process, the recruiting managers maintained progress tables for each focus group that included participant names, addresses, contact telephone numbers, and essential participant characteristics. Responsive Management carefully reviewed each recruiting status update to ensure that confirmed participants met the criteria for the group. Each focus group's target was approximately 8-12 people. Reminder calls and interaction with potential participants prior to the groups helped ensure their attendance, resulting in quality participation.

The recruiting tables showing the makeup of each focus group are provided below.

### **Merrillville Focus Group Recruiting Table**

<b>Participant</b>	<b>County of residence</b>	<b>Years lived in county</b>	<b>Age</b>	<b>Gender</b>
Mari P.	Lake	3	33	Female
JaNina E.	Lake	8	38	Female
Porchea A.	Lake	23	30	Female
Shanel W.	Lake	8	38	Female
Ralph D.	Lake	62	62	Male
Don C.	Lake	17	62	Male
Chris Z.	Lake	28	28	Male
Jeremy S.	Lake	3	42	Male
David H.	Lake	30	46	Male

### **Valparaiso Focus Group Recruiting Table**

<b>Participant</b>	<b>County of residence</b>	<b>Years lived in county</b>	<b>Age</b>	<b>Gender</b>
Janice H.	LaPorte	30	55	Female
Adrienne L.	LaPorte	8	30	Female
Kathy L.	Porter	40	60	Female
Deborah L.	Porter	30	59	Female
Edwin B.	Porter	20	55	Male
John V.	Porter	6	32	Male
Ron A.	Porter	12	42	Male
Will H.	Porter	13	28	Male
Mark M.	Porter	12	45	Male
Moelinda B.	Porter	17	28	Female
April V.	LaPorte	20	64	Female
Steven H.	Porter	6	46	Male

## **Discussion Guide and Analysis**

Each focus group was conducted using a discussion guide that allowed for consistency in the data collection. The discussion guide included general questions on issues of importance facing Northwest Indiana as well as more specific questions addressing opinions on air quality, actions taken on behalf of air quality, and awareness of messages about air quality. The discussion guide is shown in the report appendix.

Responsive Management conducted qualitative analyses of the focus groups in three phases. The first phase was the direct observation of the discussions by the moderator and the notes taken during and immediately after the focus groups. The second phase of the analysis consisted of the review of the recordings and transcriptions of the focus group discussions by other researchers. The development of findings into the report itself entailed the third phase of the focus group analysis.

## **INFORMATION ABOUT THE PRESENTATION OF RESULTS IN THE REPORT**

In examining the results, it is important to be aware that the survey questionnaire included several types of questions:

- Open-ended questions are those in which no answer set is read to the respondents; rather, they can respond with anything that comes to mind from the question.
- Closed-ended questions have an answer set from which to choose.
- Single or multiple response questions: Some questions allow only a single response, while other questions allow respondents to give more than one response or choose all that apply. Those that allow more than a single response are indicated on the graphs with the label, "Multiple Responses Allowed."
- Scaled questions: Many closed-ended questions (but not all) are in a scale, such as excellent-good-fair-poor.
- Series questions: Many questions are part of a series, and the results are primarily intended to be examined relative to the other questions in that series (although results of the questions individually can also be valuable). Typically, results of all questions in a series are shown together.

Most graphs show results rounded to the nearest integer; however, all data are stored in decimal format, and all calculations are performed on unrounded numbers. For this reason, some results may not sum to exactly 100% because of this rounding on the graphs. Additionally, rounding may cause apparent discrepancies of 1 percentage point between the graphs and the reported results of combined responses (e.g., when “excellent” and “good” are summed to determine the total percentage in the top half of the excellent-good-fair-poor scale). Also note that many graphs will show 0% for a response; this is often due to values below 0.5% that rounded down to 0 rather than a true 0%.

For most questions the report first shows a graph of overall results, followed by a 3-bar graph of results by county and another 3-bar graph of results broken out by white, African-American, and Hispanic residents. These crosstabulations allow the reader to easily observe differences between the resident groups; however, the report narrative only discusses overall results.

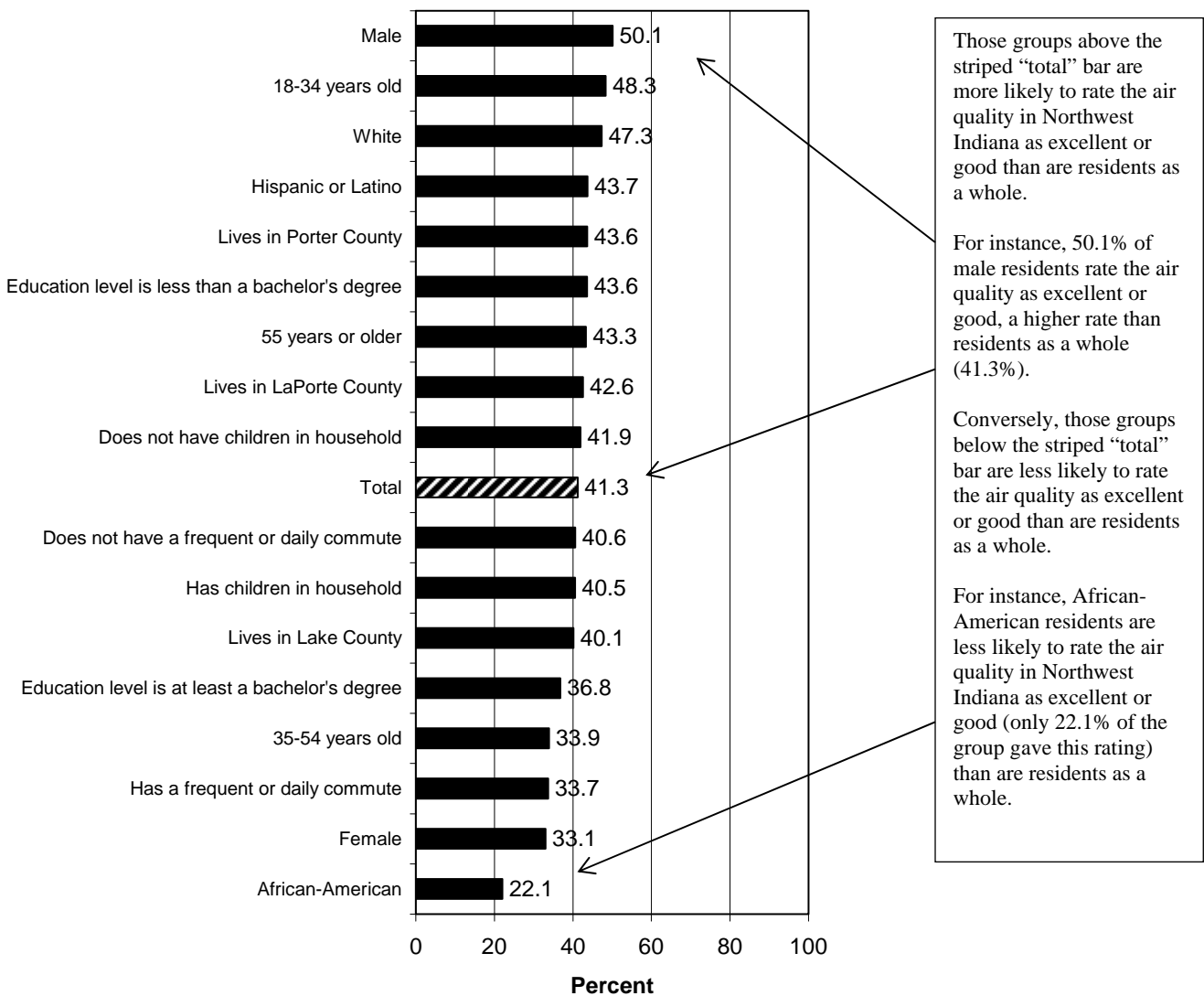
On certain questions a trend graph also is included, comparing the results of this survey to those from the aforementioned study conducted in 2012 by AC Incorporated. Additionally, some sections include a GIS map of Northwest Indiana (or several such maps) illustrating the distribution of opinion within the region for the survey question or series of questions—these maps are similar to the maps included in the report by AC Incorporated from the 2012 study.

Finally, on certain questions an additional graph will be included that shows the overall question result compared to those from several demographic groups. These demographic correlation graphs are explained further on the following page.

### INTERPRETING DEMOGRAPHIC CORRELATION GRAPHS

Graphs are presented for some questions that show the percentage of various groups who gave a certain response. For instance, one question asked respondents to rate the current air quality in Northwest Indiana, with four possible answers: excellent, good, fair, or poor. Among all respondents, 41.3% rated the air quality as excellent or good, as indicated below by the striped bar. The text box to the right of the graph explains how to interpret the graph.

**Percent of each of the following groups who rated the current air quality in Northwest Indiana as excellent or good:**



## **SURVEY RESULTS**

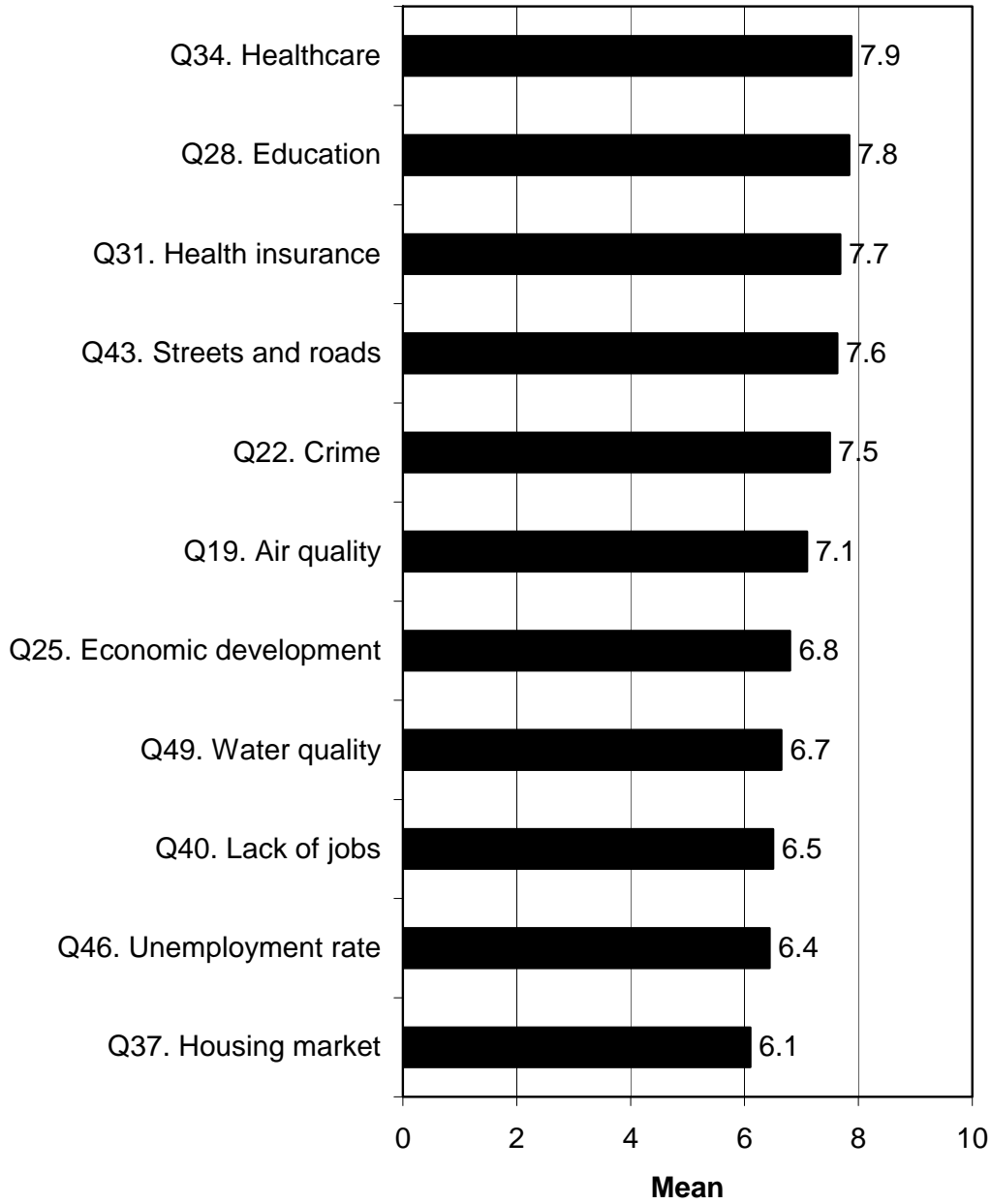
This part of the report examines the results of the survey. It includes graphs of all the questions as well as maps of the data for some of the questions.

### **CONCERN ABOUT VARIOUS ISSUES IN NORTHWEST INDIANA AND THE IMPORTANCE OF AIR QUALITY AS AN ISSUE**

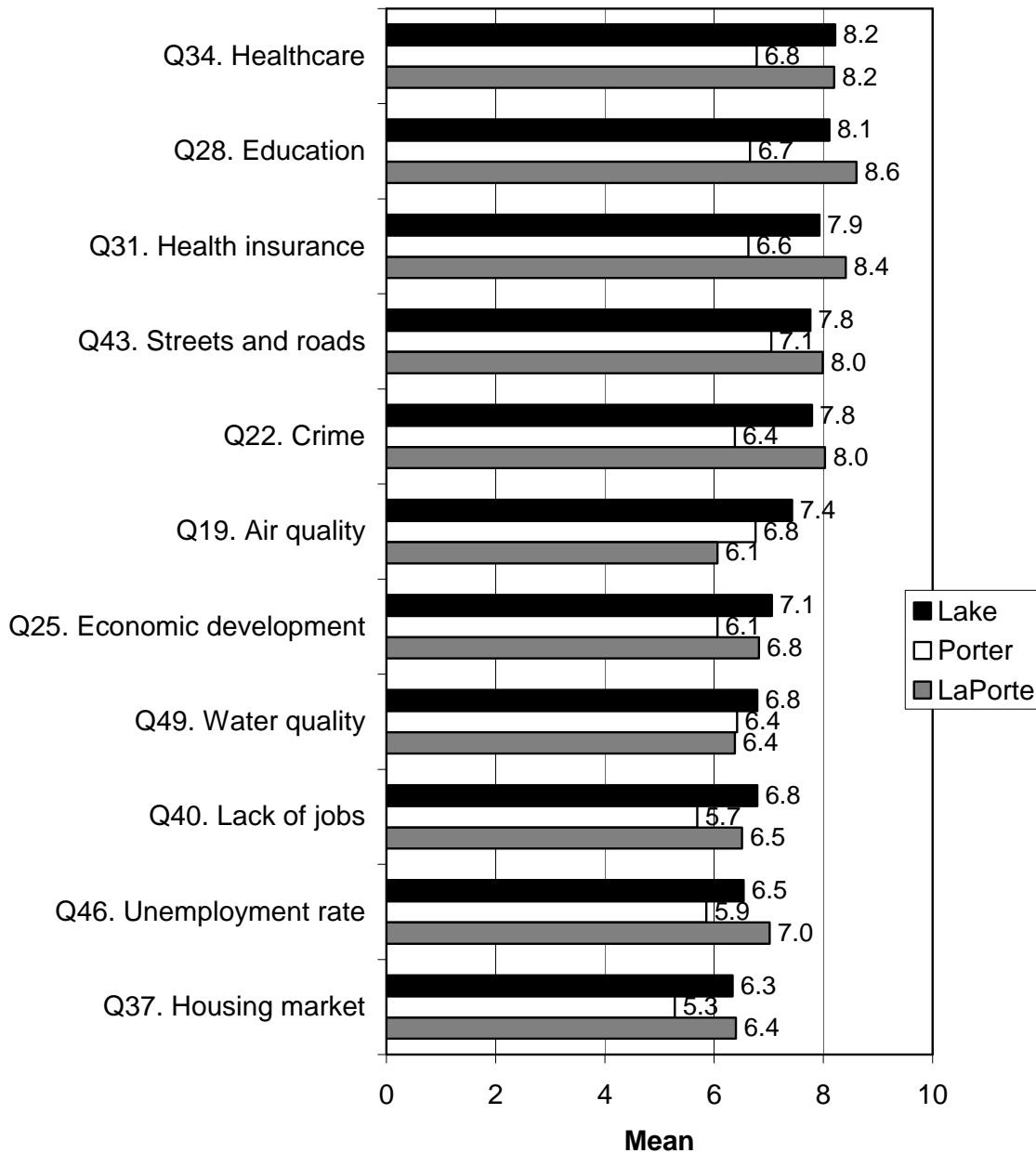
- The survey first asked Northwest Indiana residents about their concern with 11 items, one of which was *air quality*. For each one, residents rated their level of concern on a 0 to 10 scale, with 0 being not at all concerned and 10 being extremely concerned. This series provides a look at where air quality falls among the myriad issues presented in the survey.
  - Two graphs are presented of the overall results: one graph shows the mean ratings (giving an overall look), the second graph shows the percentage giving a rating of 9 or 10 (i.e., a high rating, which shows the percentage who have strong feelings about the issues).
    - Of the 11 items presented, concern about air quality falls in the middle, with a mean rating of 7.1; additionally, 38% of residents rated their concern for air quality a 9 or 10. Residents gave the highest ratings of concern for healthcare and education and the lowest ratings of concern for the unemployment rate and the housing market.
    - In a follow-up question, those who rated their concern about air quality 7 or lower were asked to give their reasons for not rating their concern higher. The most frequent responses were that they think the air quality is good, that they do not live near industrial plants or other bad areas for air pollution, and that they do not think or hear much about the issue.
    - Likewise, residents who rated their concern 8 or higher were asked the reasons for their high rating. The most frequent responses were that they live near industrial plants or mills and that air quality affects everything.

- Two trend graphs are shown, comparing 2012 and 2017 responses on concern about the entire series and on concern about air quality specifically.
  - The first shows a comparison of high levels of concern (ratings of 10, 9, or 8) for all 11 issues. In all cases, high ratings of concern decreased since 2012, with major decreases in the issues related to economic stress or uncertainty (such as the unemployment rate, lack of jobs, and housing market).
  - The second trend graph is specific to ratings of concern about air quality. The high ratings (10, 9, or 8) decreased slightly since 2012 (58% in 2012; 52% in 2017).
  - Note that “don’t know” responses were not included in the 2012 report, so those responses were omitted from the 2017 results (and the percentages recalculated) to allow for a more direct comparison. For this reason, 2017 values shown in the trends graphs are slightly different than those shown in the main graphs. Also note that the 2012 study used a rating scale of 1 to 10, whereas this study used a scale of 0 to 10.
  - Also shown in this section is a GIS map of Northwest Indiana illustrating the distribution within the region of those rating their concern about air quality as a 10, 9 or 8.
  
- In a direct question, Northwest Indiana residents rated the importance of air quality to them personally, using a 0 to 10 scale, where 0 is not at all important and 10 is extremely important. Their mean rating was 8.2, with 46% giving a rating of 10.
  - The groups most likely to rate the importance of air quality a 9 or 10 are African-American residents (62% rated it 9 or 10), those who do not have a frequent or daily commute (61%), residents 55 or older (58%), and those with an education level of at least a bachelor’s degree (58%).
  - Similarly, residents were asked to say how much air quality affects them personally. The overwhelming majority (92%) say that it affects them at least *a little*, with 41% saying that it affects them *a great deal*.
  
- Residents were asked in an open-ended question to name the most important issues that negatively affect air quality (that is, they were asked to give their top-of-mind responses without an answer set). Two-thirds of residents (67%) cited industry, mills, or refineries, and 27% cited vehicles or traffic. No other items were mentioned by more than 6% of residents.

**Mean ratings of concern about the following issues  
in Northwest Indiana, on a scale of 0 to 10, where 0  
is not at all concerned and 10 is extremely  
concerned:**

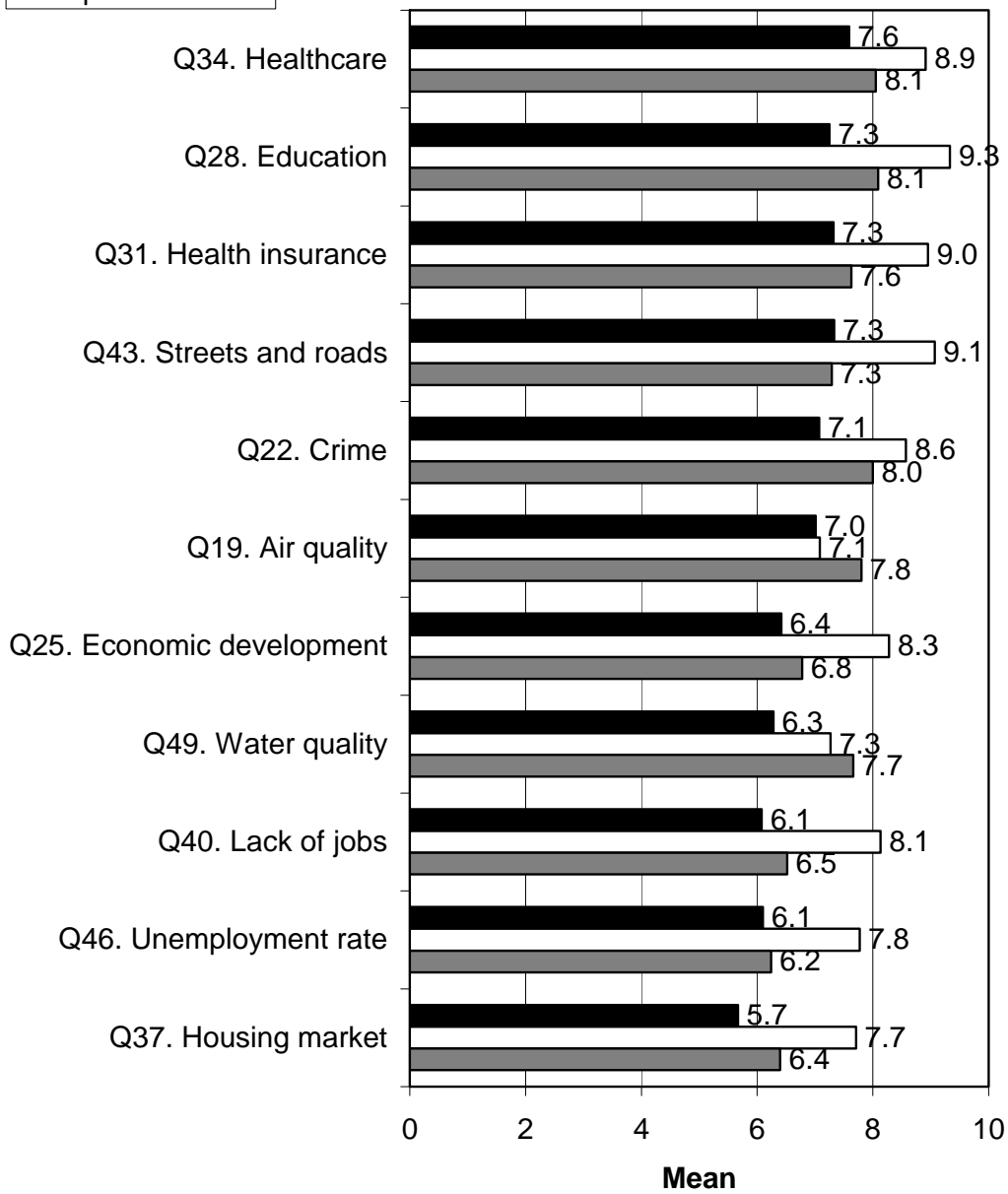
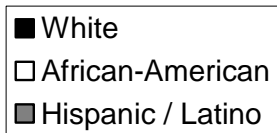


**Mean ratings of concern about the following issues  
in Northwest Indiana, on a scale of 0 to 10, where 0  
is not at all concerned and 10 is extremely  
concerned:**

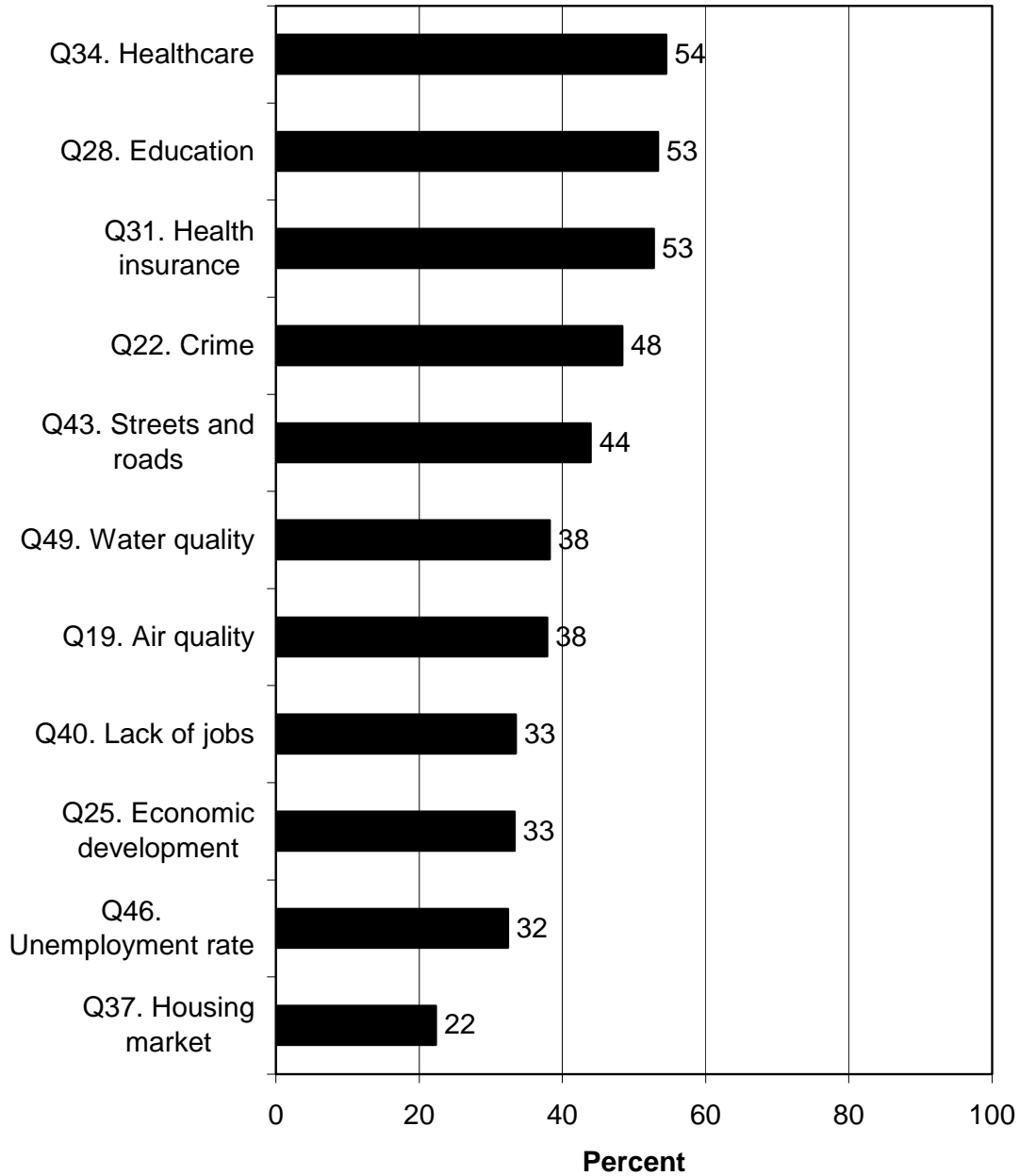




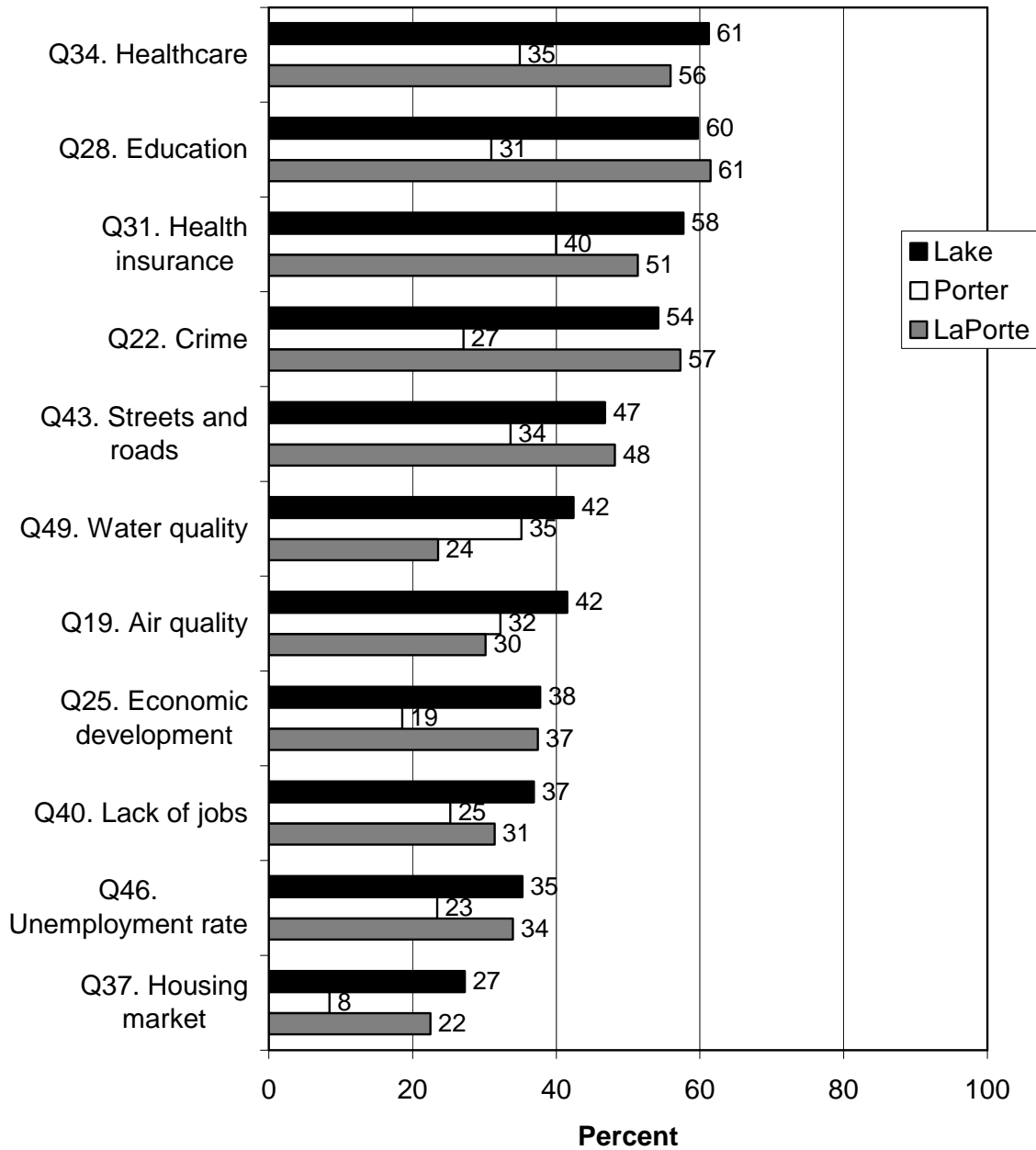
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in Northwest Indiana, on a scale of 0 to 10, where 0  
is not at all concerned and 10 is extremely  
concerned:**



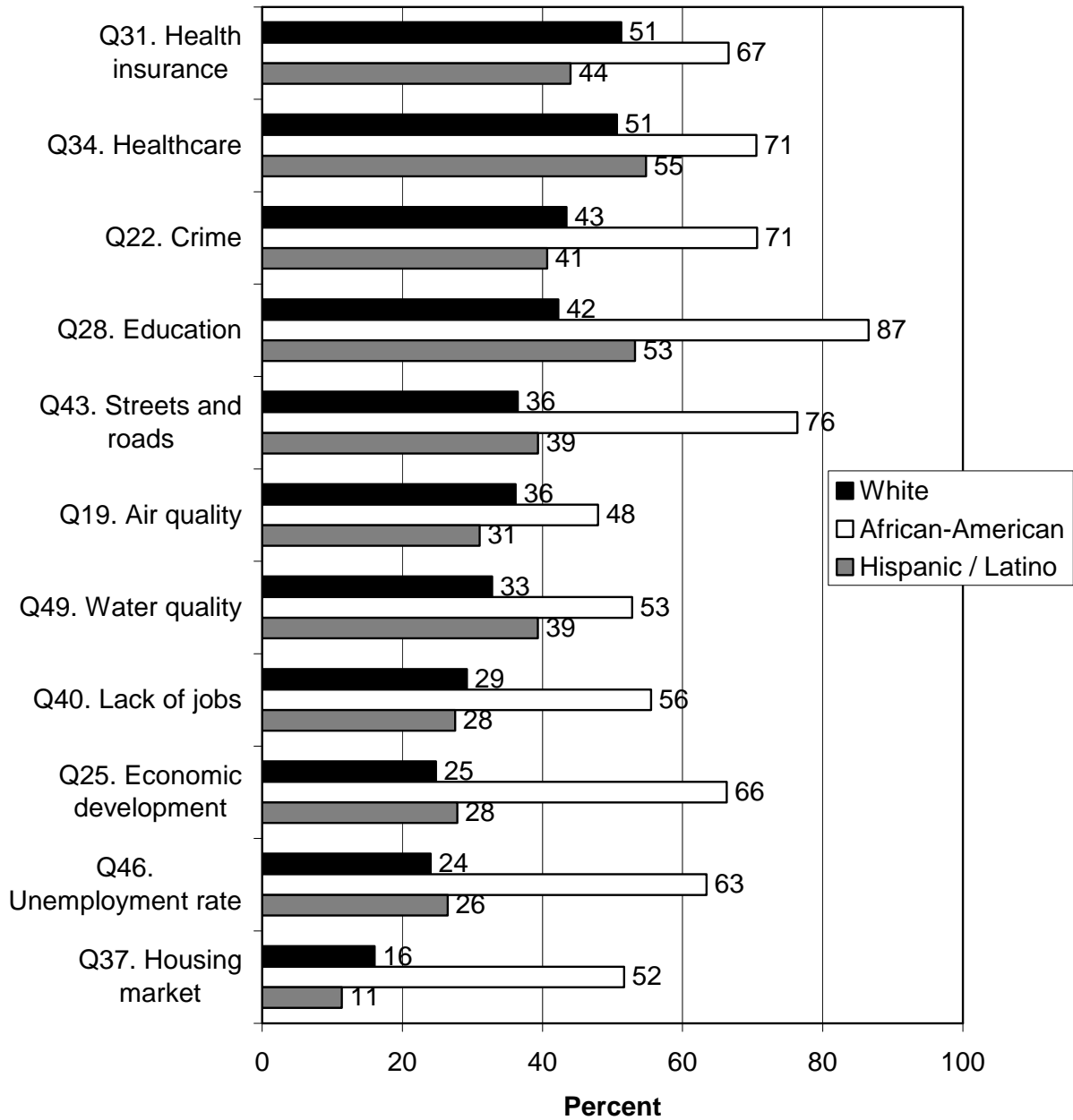
**Percent who rated their concern about the following issues in Northwest Indiana a 9 or 10, on a scale of 0 to 10, where 0 is not at all concerned and 10 is extremely concerned:**



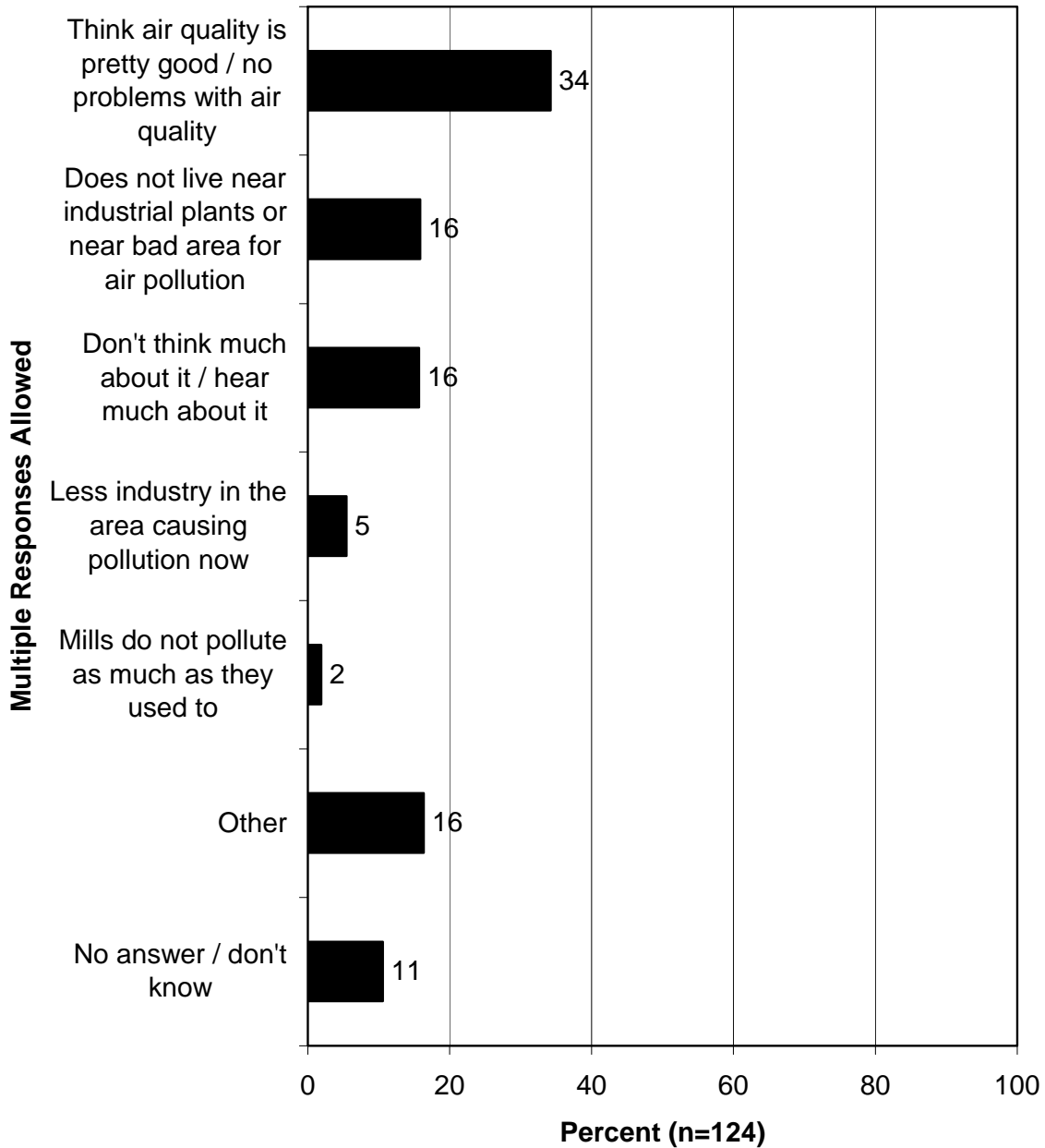
**Percent who rated their concern about the following issues in Northwest Indiana a 9 or 10, on a scale of 0 to 10, where 0 is not at all concerned and 10 is extremely concerned:**



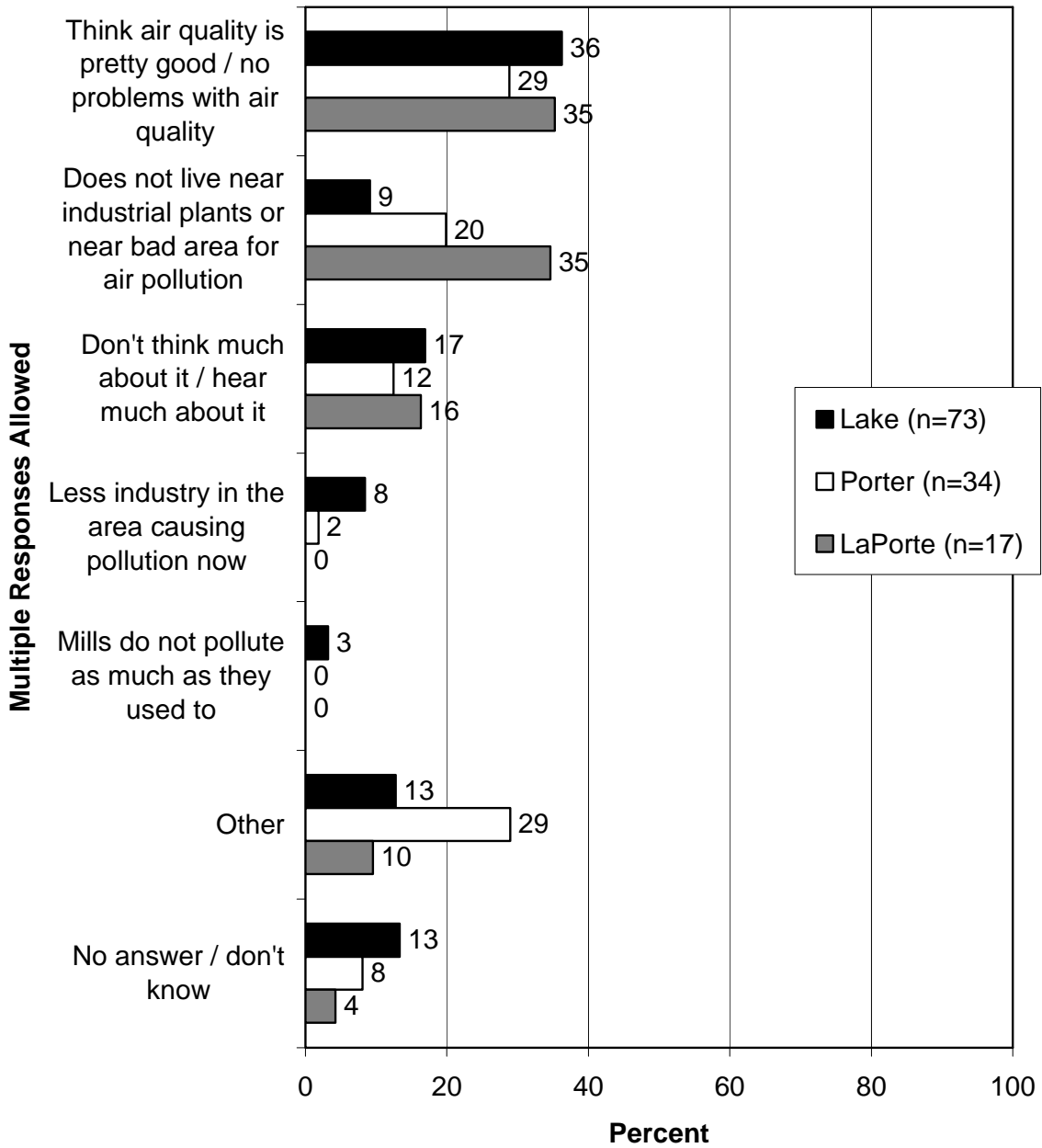
**Percent who rated their concern about the following issues in Northwest Indiana a 9 or 10, on a scale of 0 to 10, where 0 is not at all concerned and 10 is extremely concerned:**



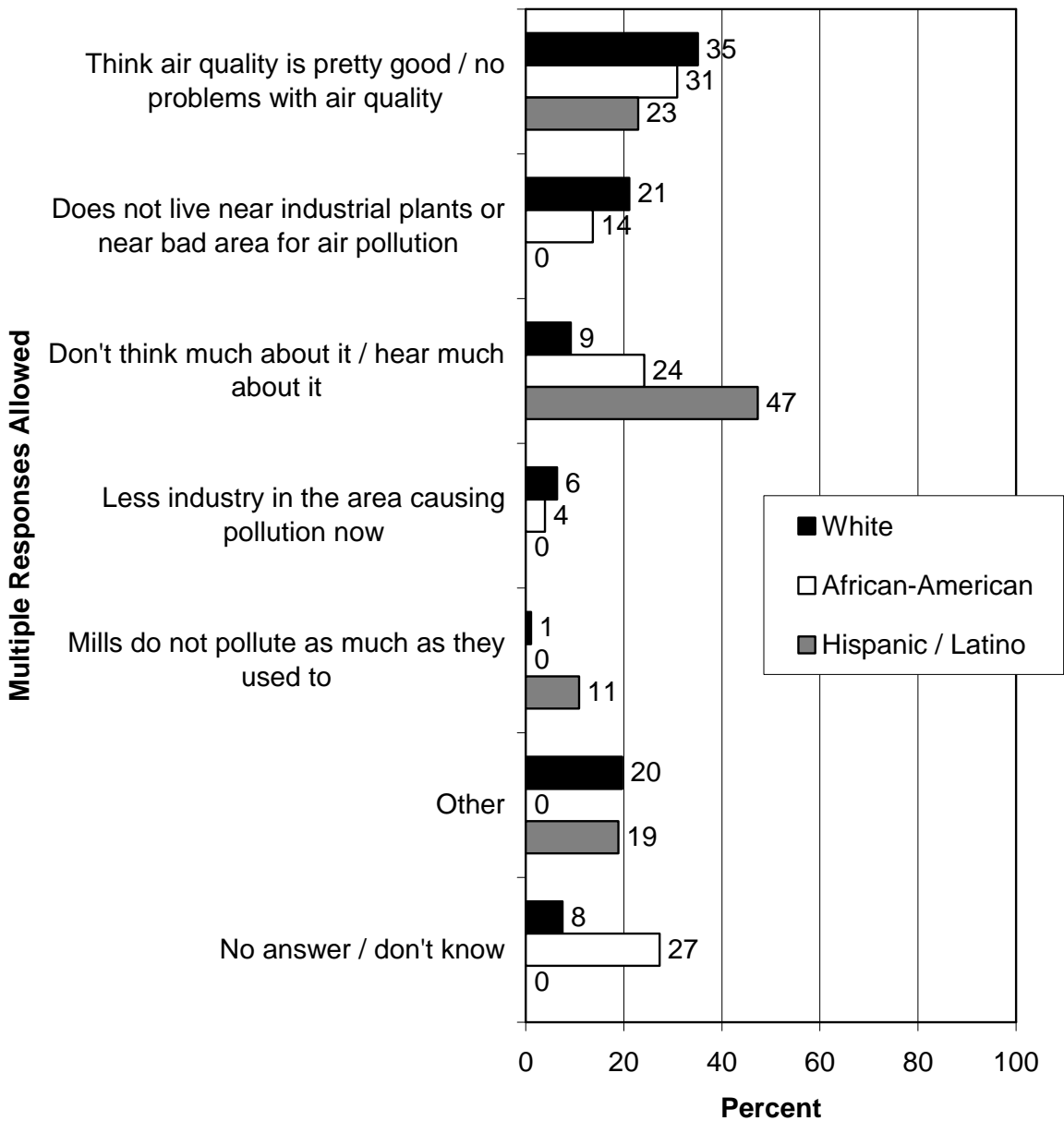
**Q53. What are the reasons you didn't rate your concern higher for air quality or not as high as other items on the list? (Asked of those who rated it 7 or lower.)**



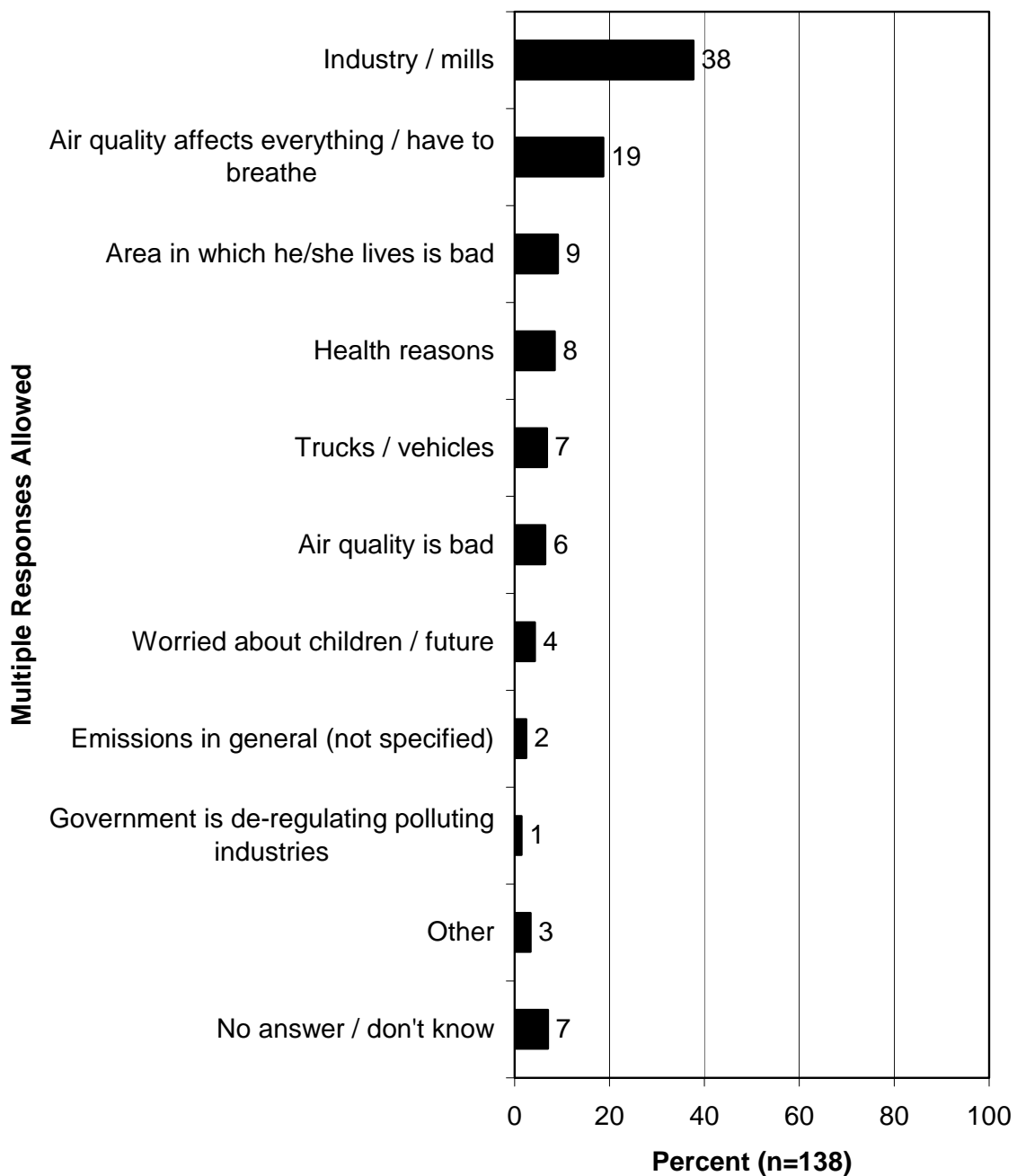
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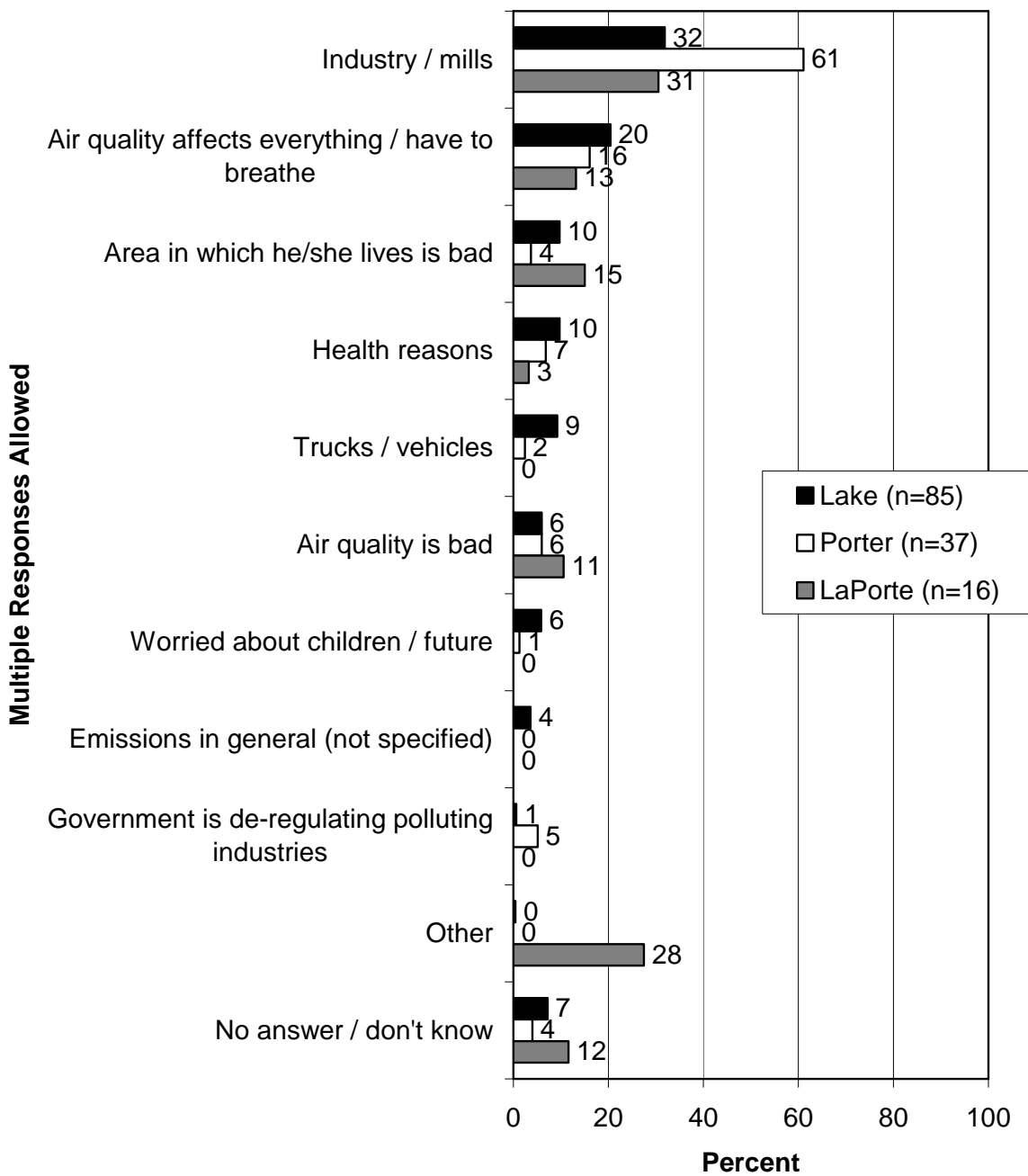


**Q54. What are the reasons you rated your concern for air quality a(n) [RATING GIVEN]? (Asked of those who rated it 8 or higher.)**

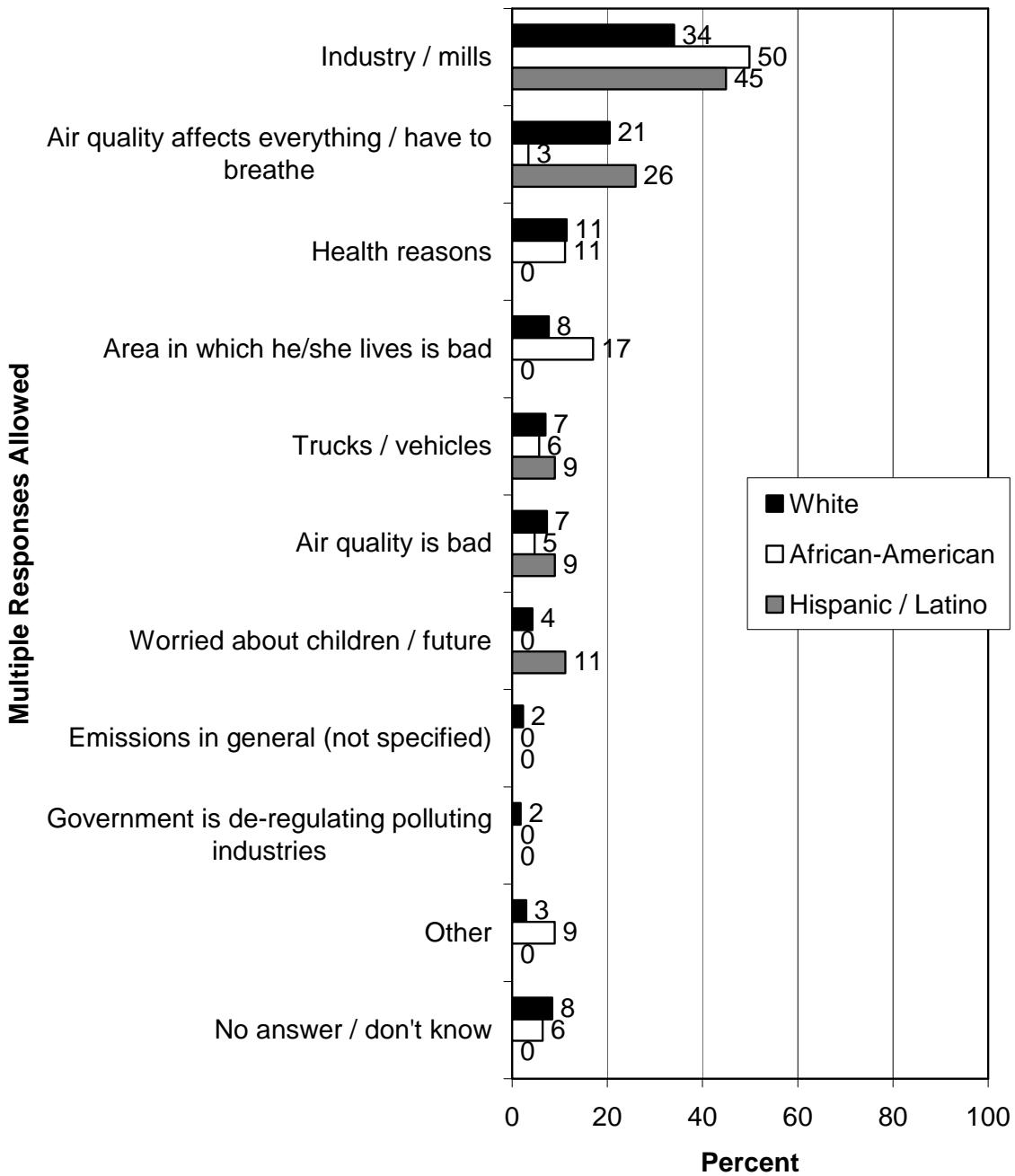


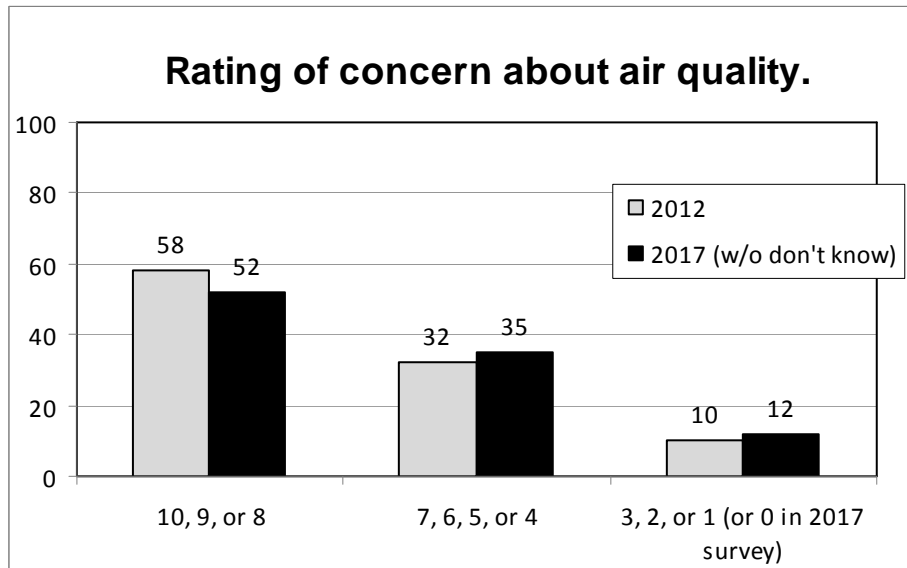
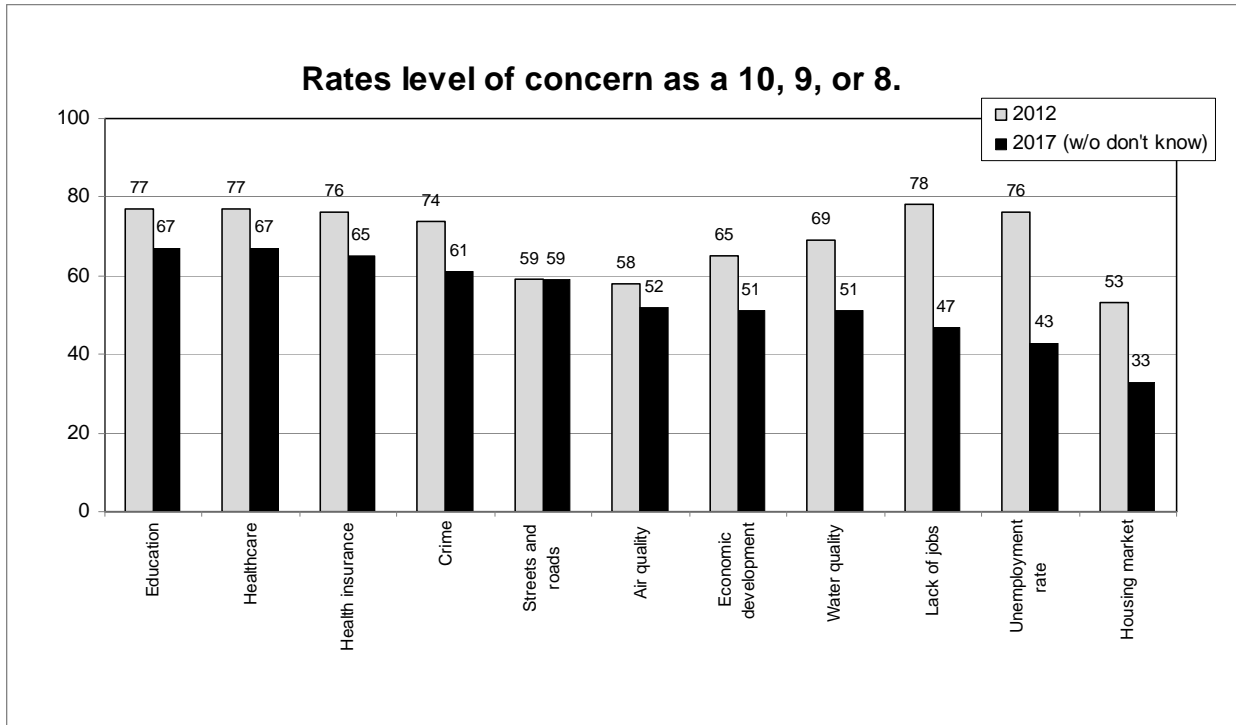


**Q54. What are the reasons you rated your concern for air quality a(n) [RATING GIVEN]? (Asked of those who rated it 8 or higher.)**



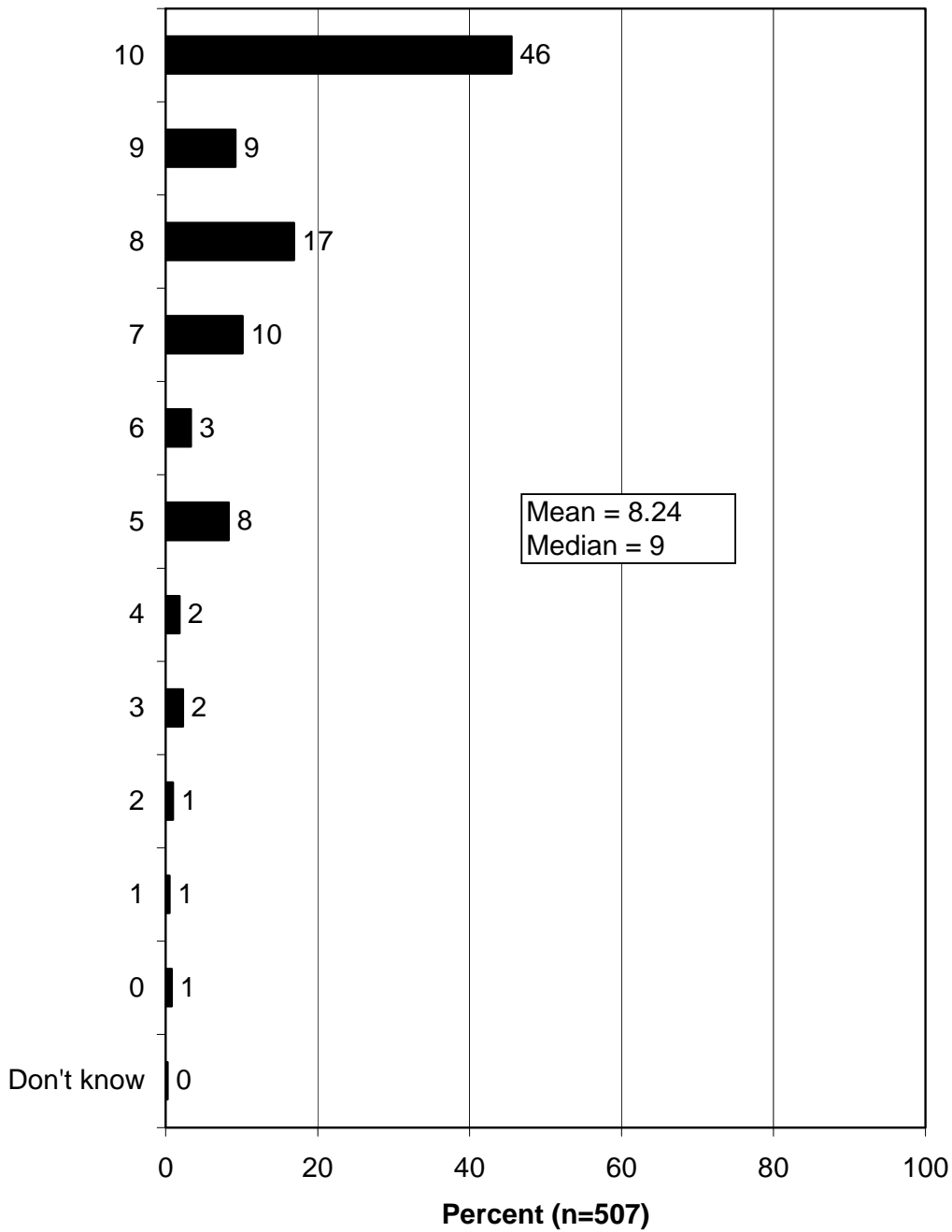
**Q54. What are the reasons you rated your concern for air quality a(n) [RATING GIVEN]? (Asked of those who rated it 8 or higher.)**



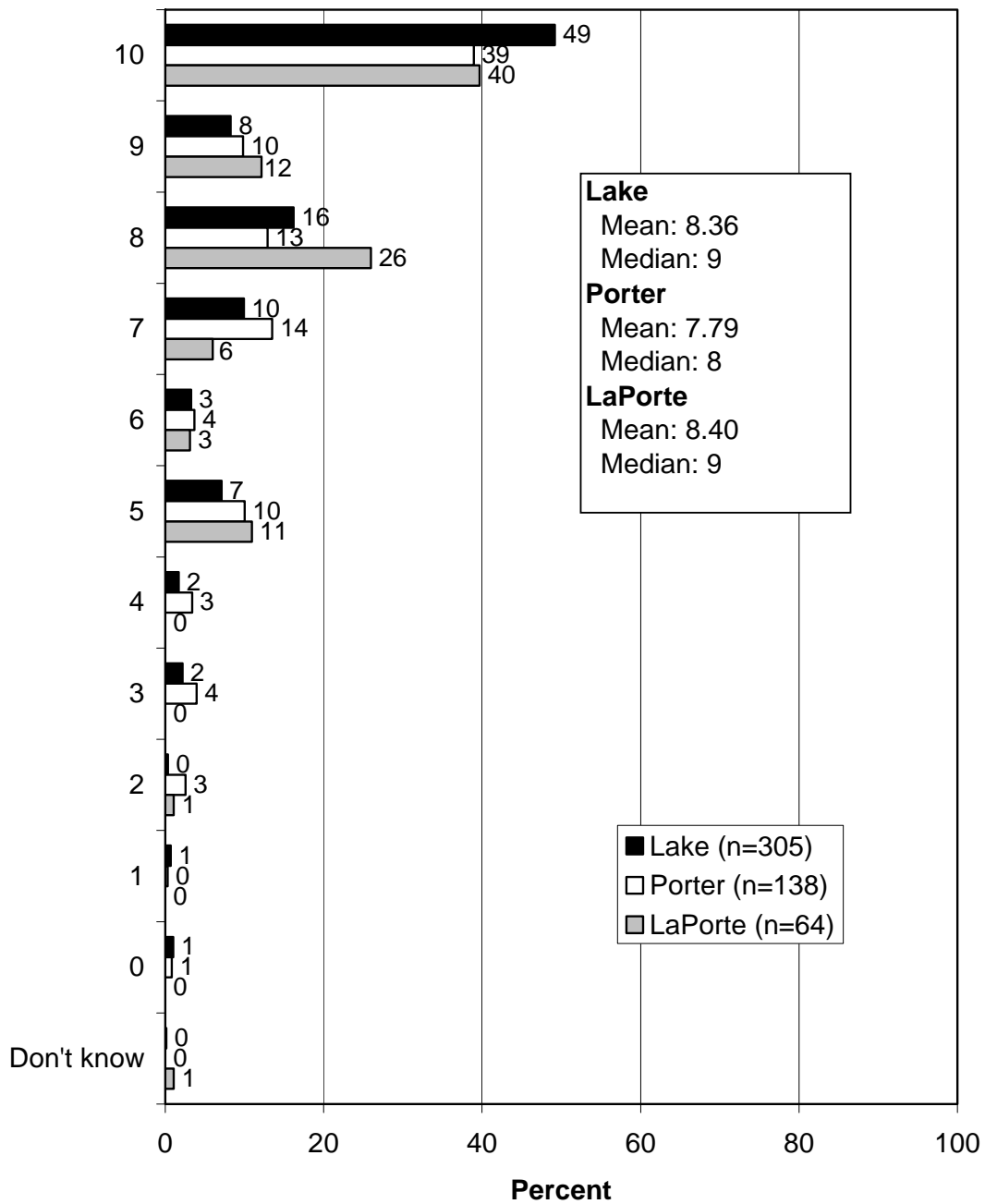




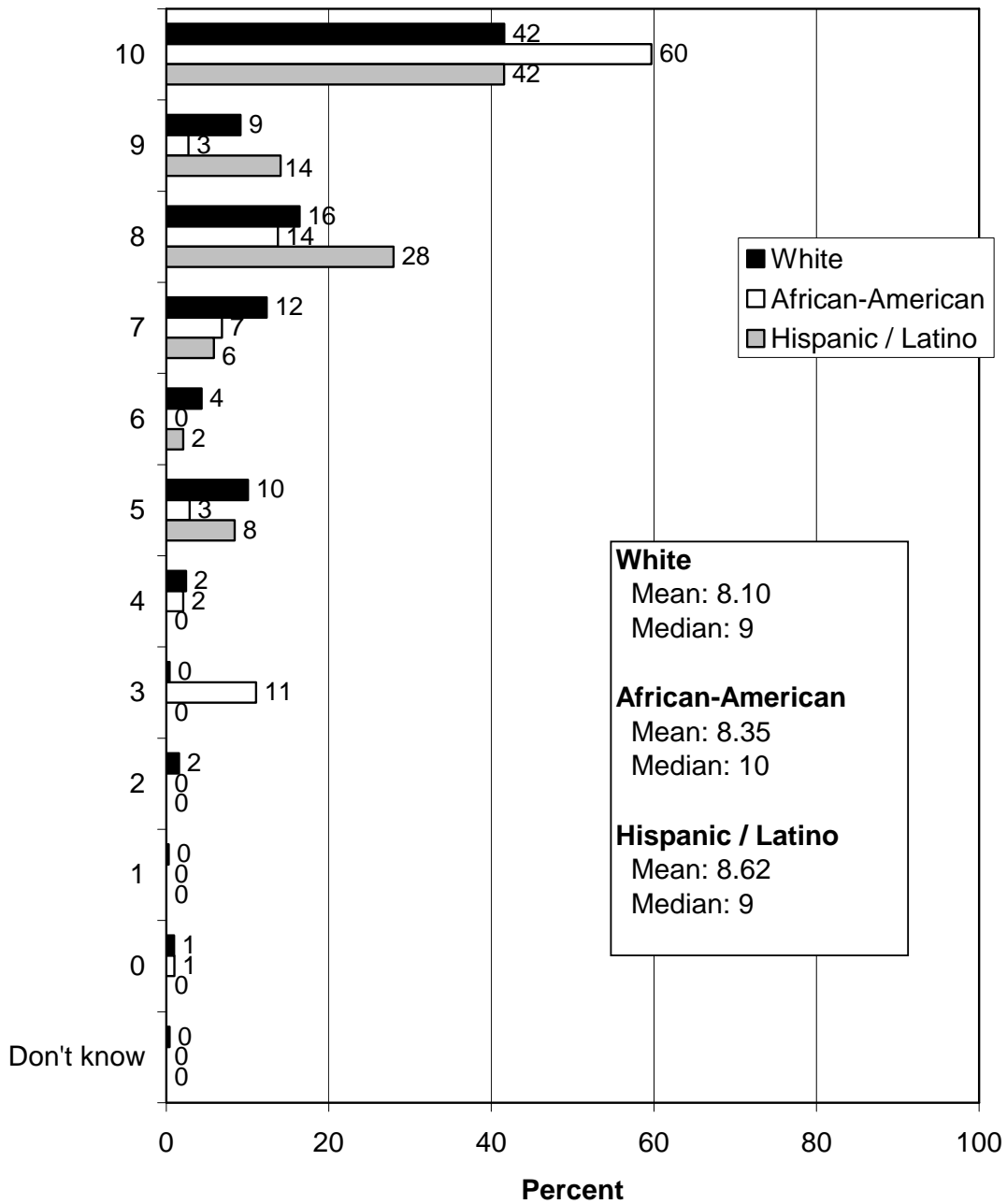
**Q65. How important to you, personally, is air quality in Northwest Indiana, on a scale of 0 to 10, where 0 is not at all important and 10 is extremely important?**



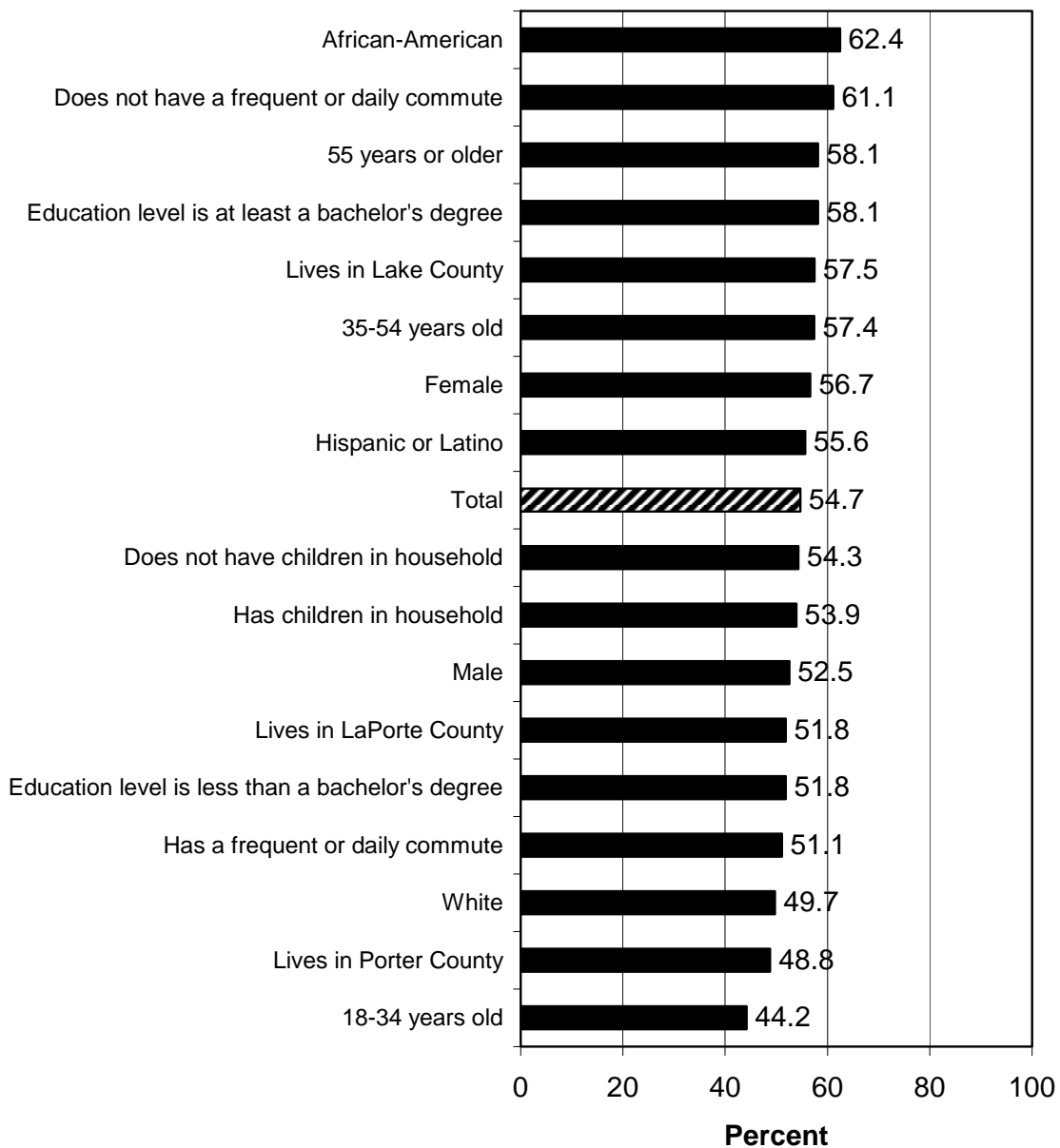
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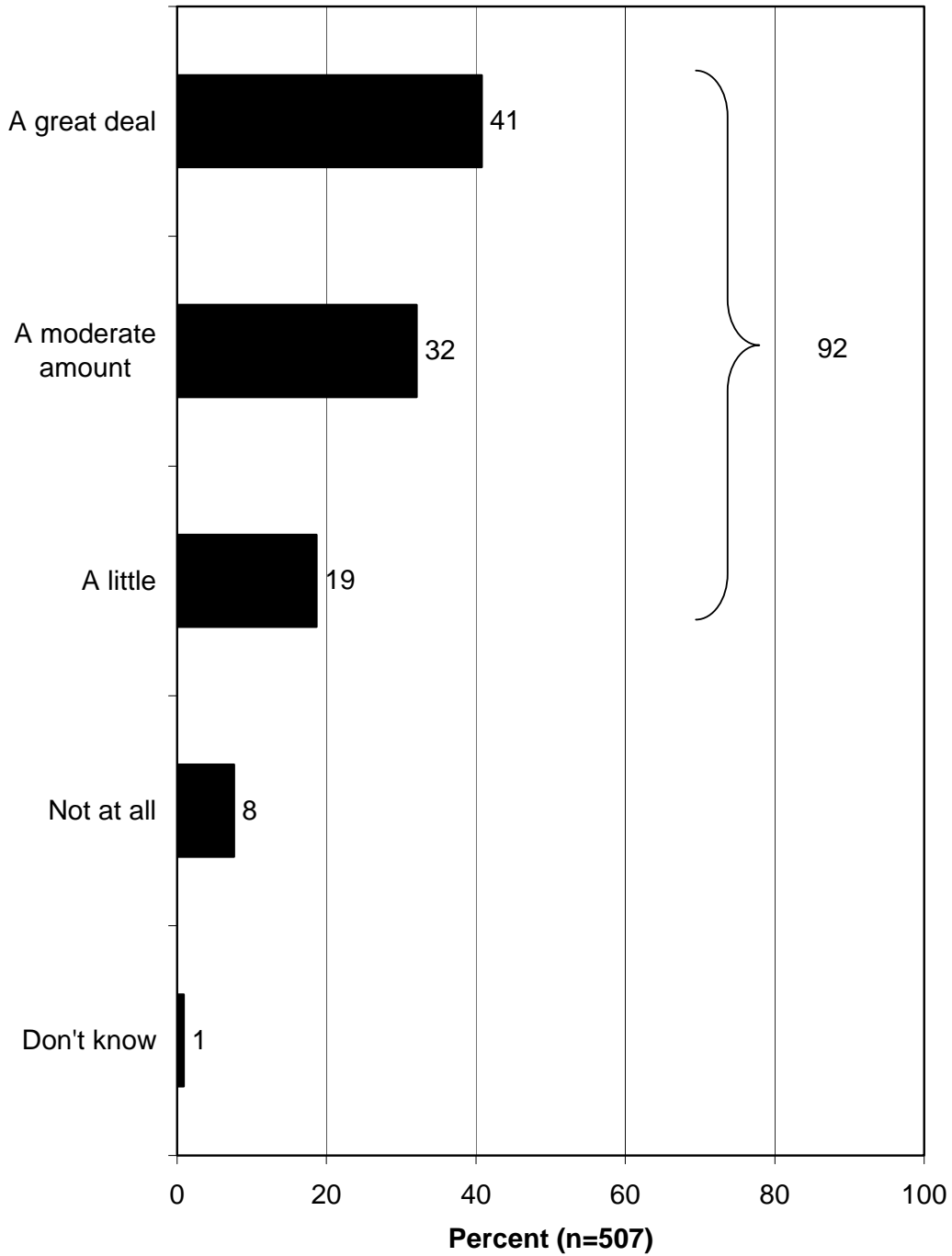


**Percent of each of the following groups who rated the importance of air quality in Northwest Indiana to them personally as a 9 or 10, on a scale of 0 to 10, where 0 is not at all important and 10 is extremely important:**

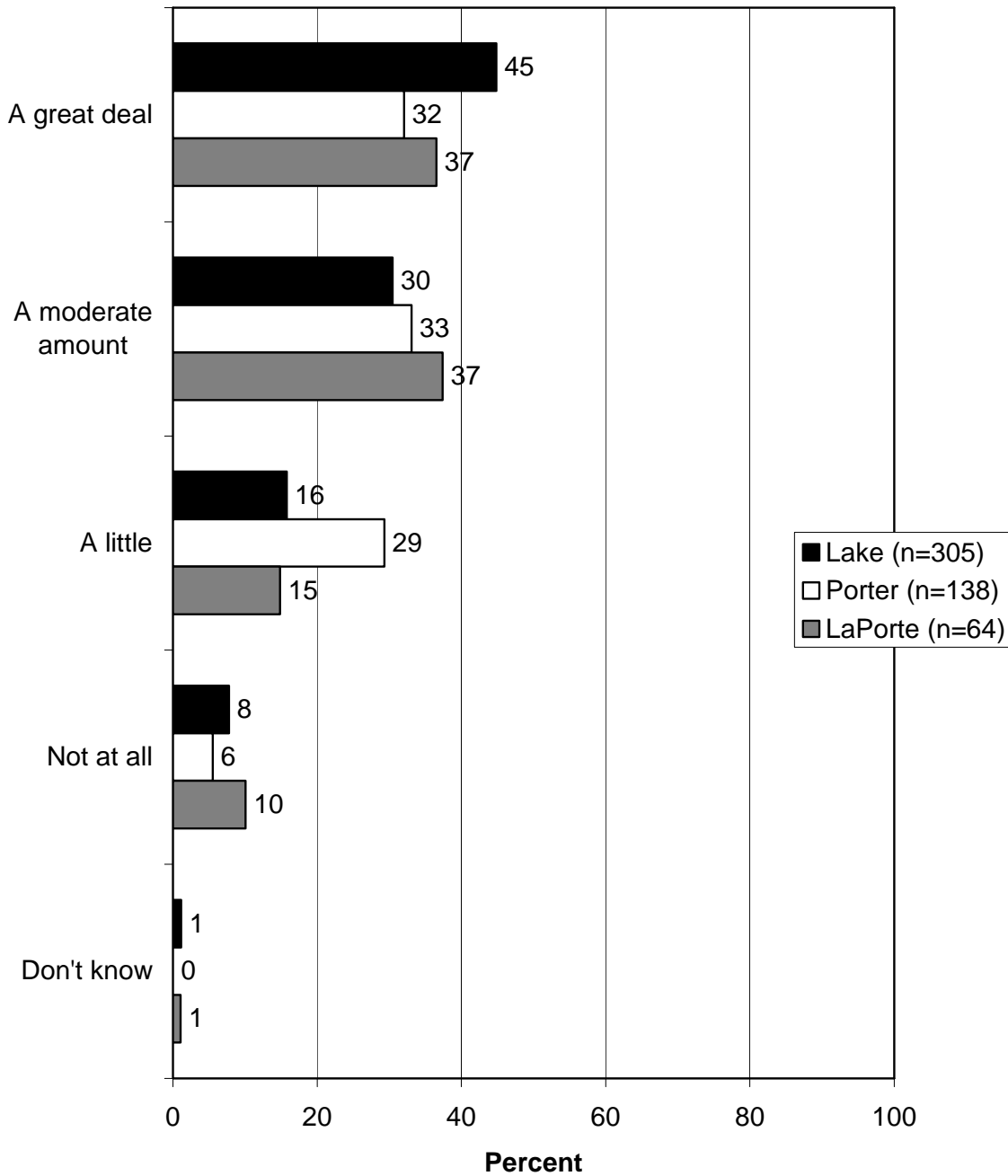




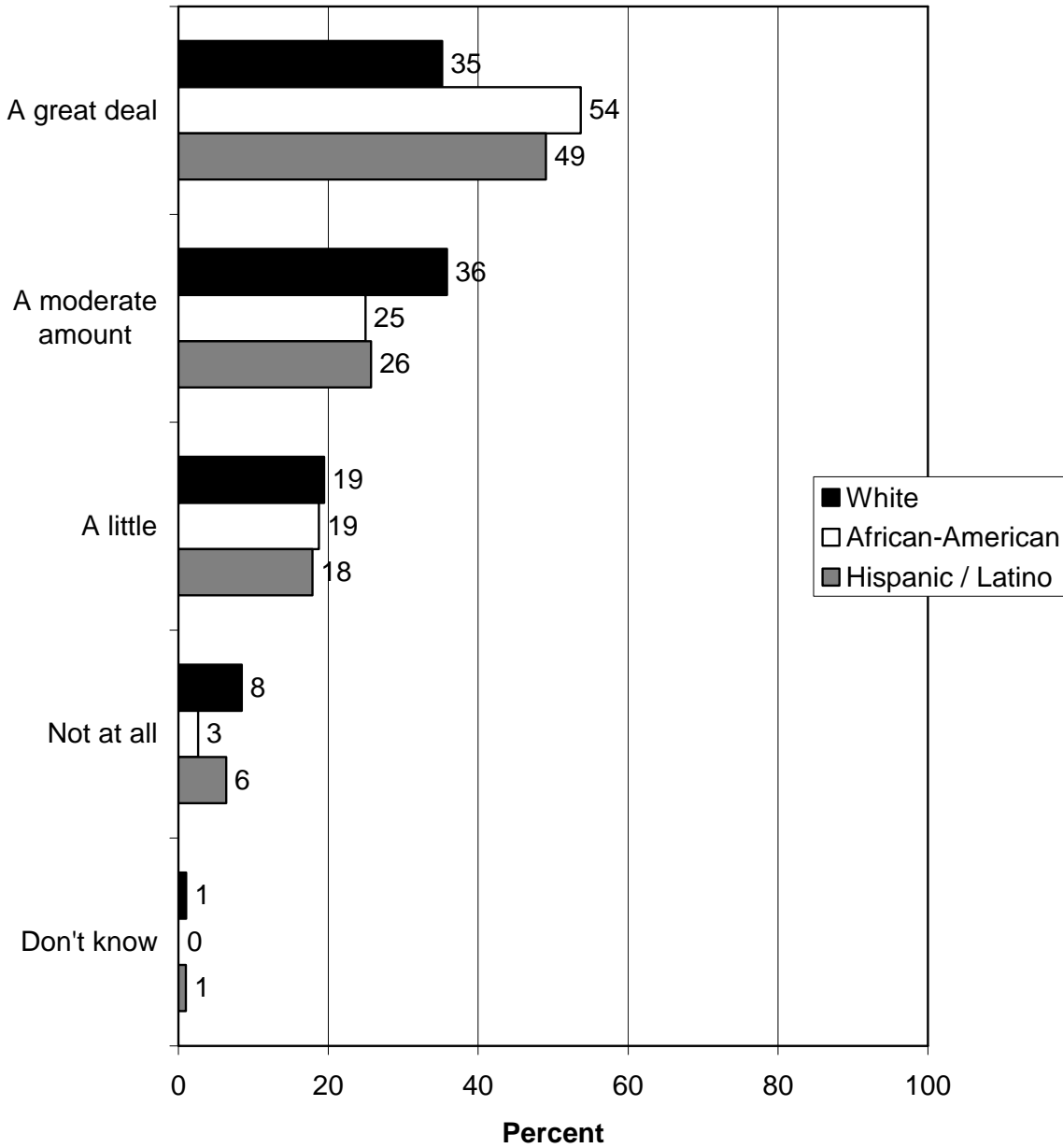
**Q68. How much would you say air quality affects you, personally?**



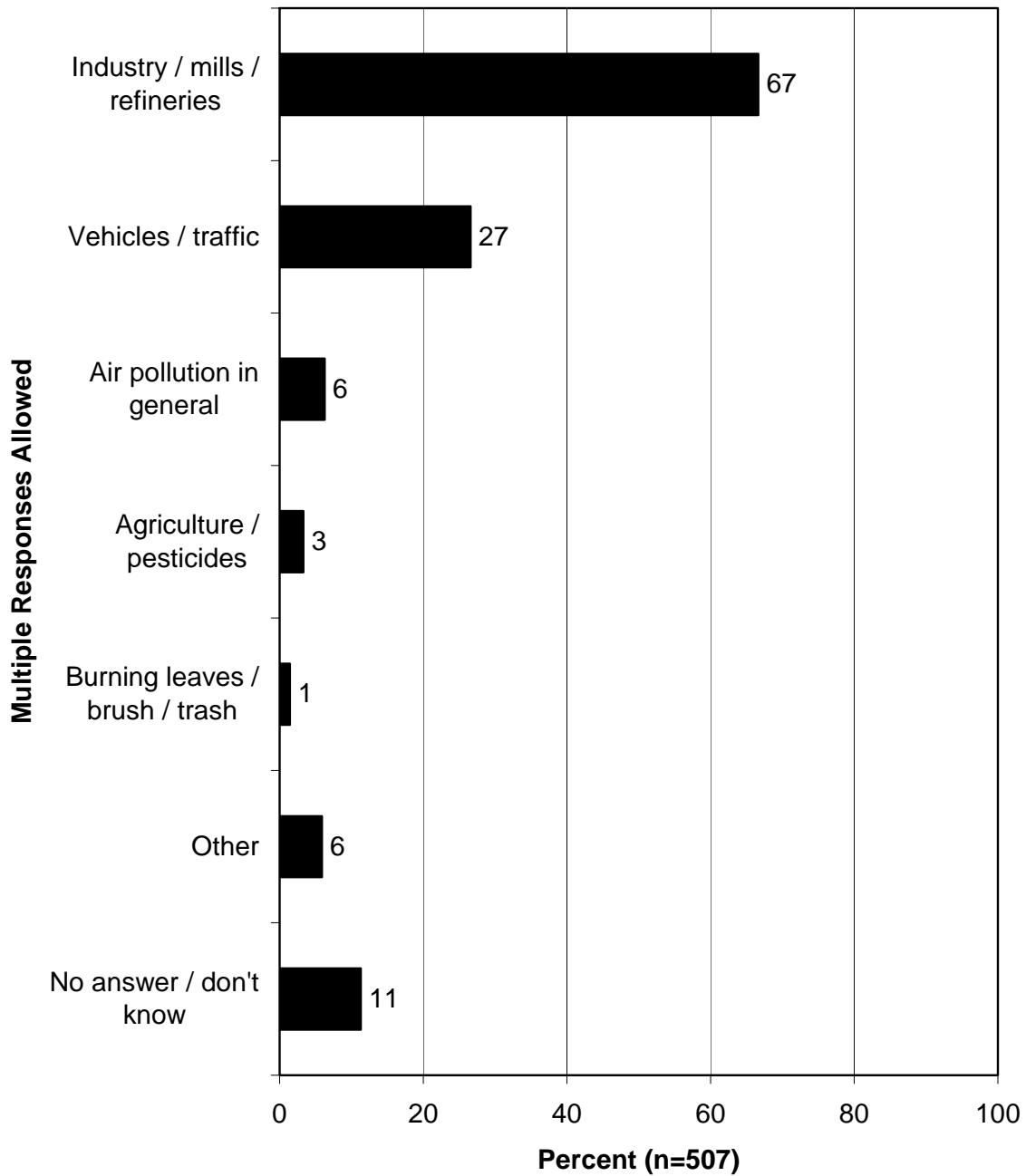
**Q68. How much would you say air quality affects you, personally?**



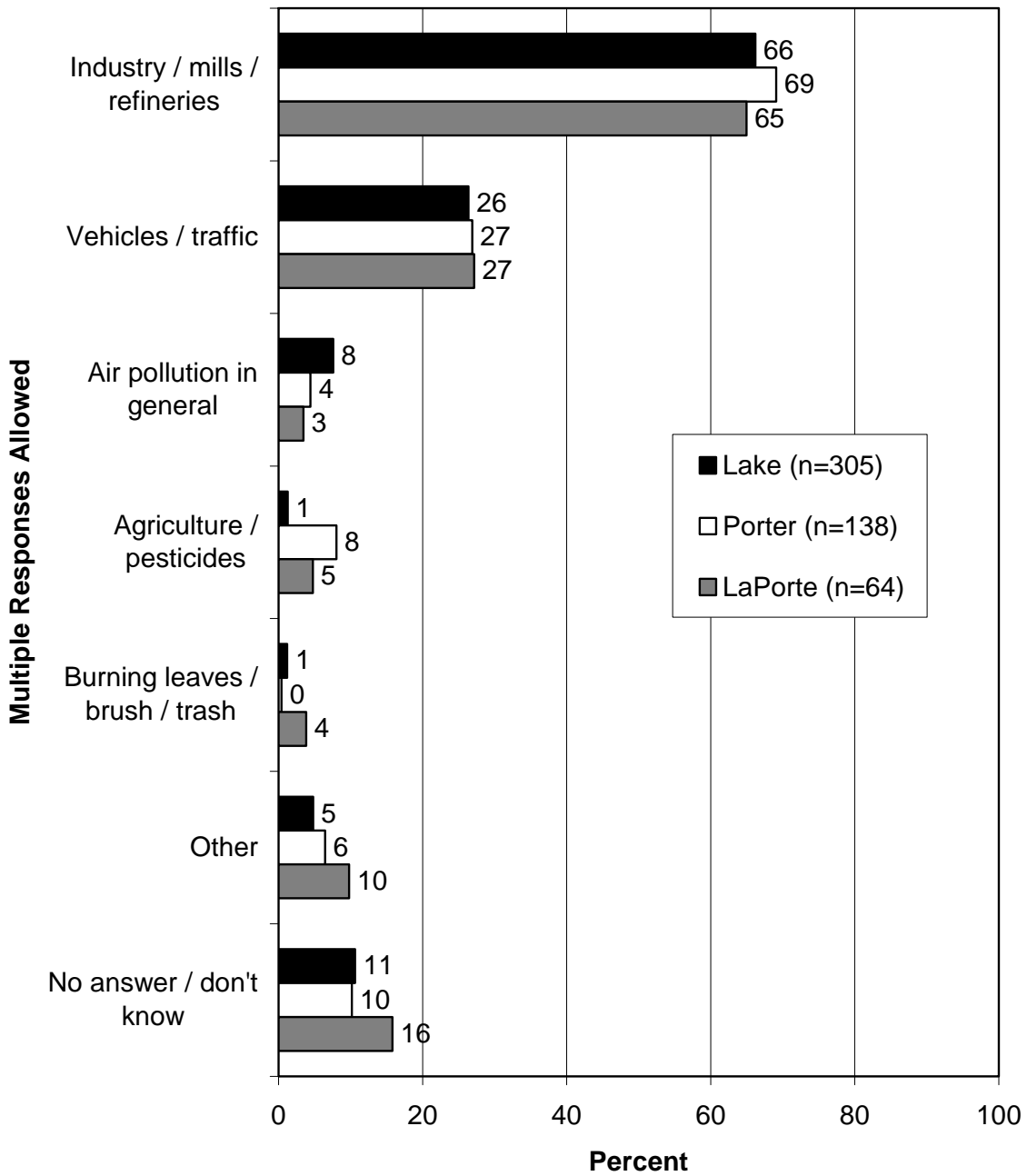
**Q68. How much would you say air quality affects you, personally?**



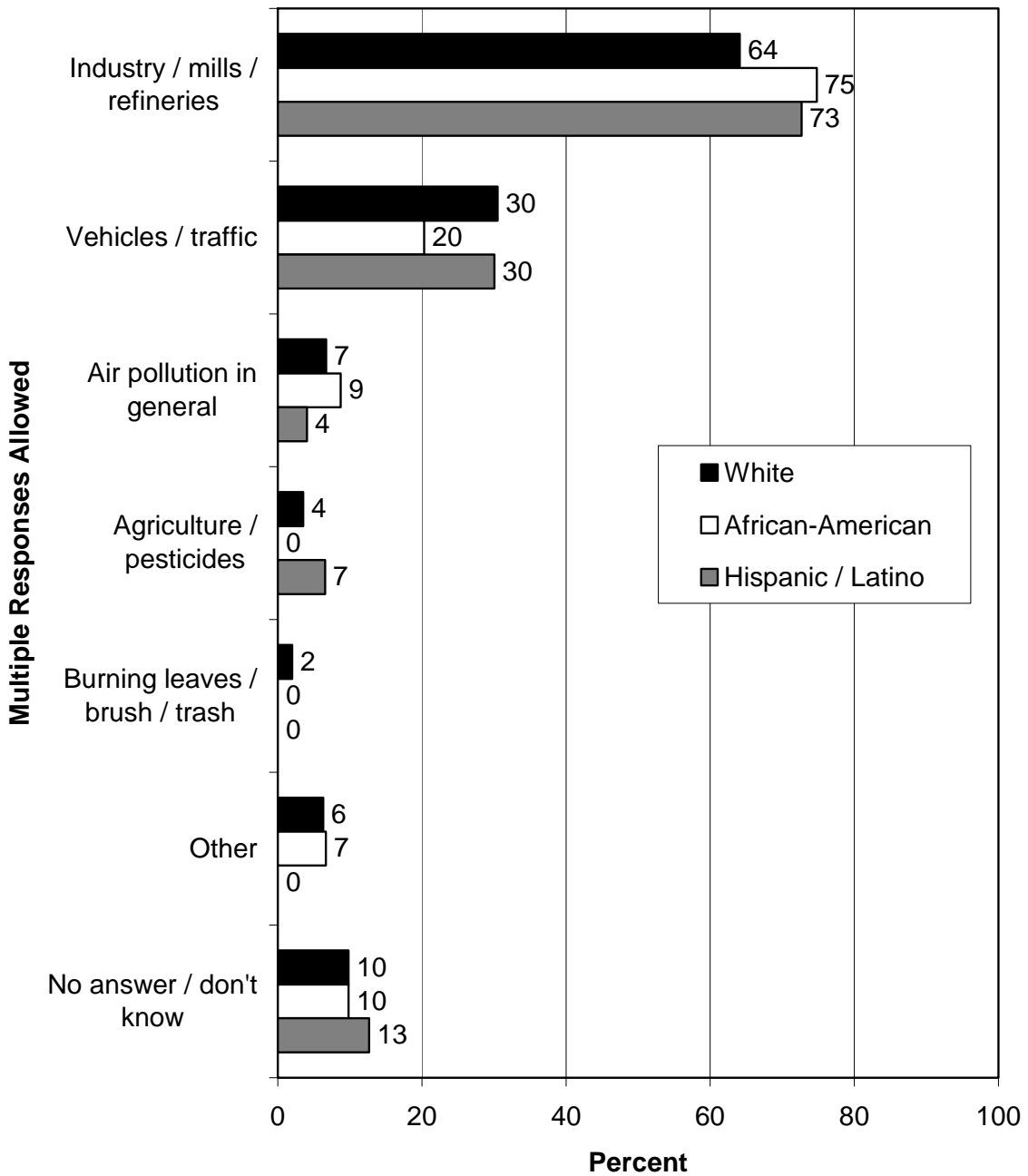
**Q69. In your opinion, what are the most important issues that negatively affect air quality in Northwest Indiana?**



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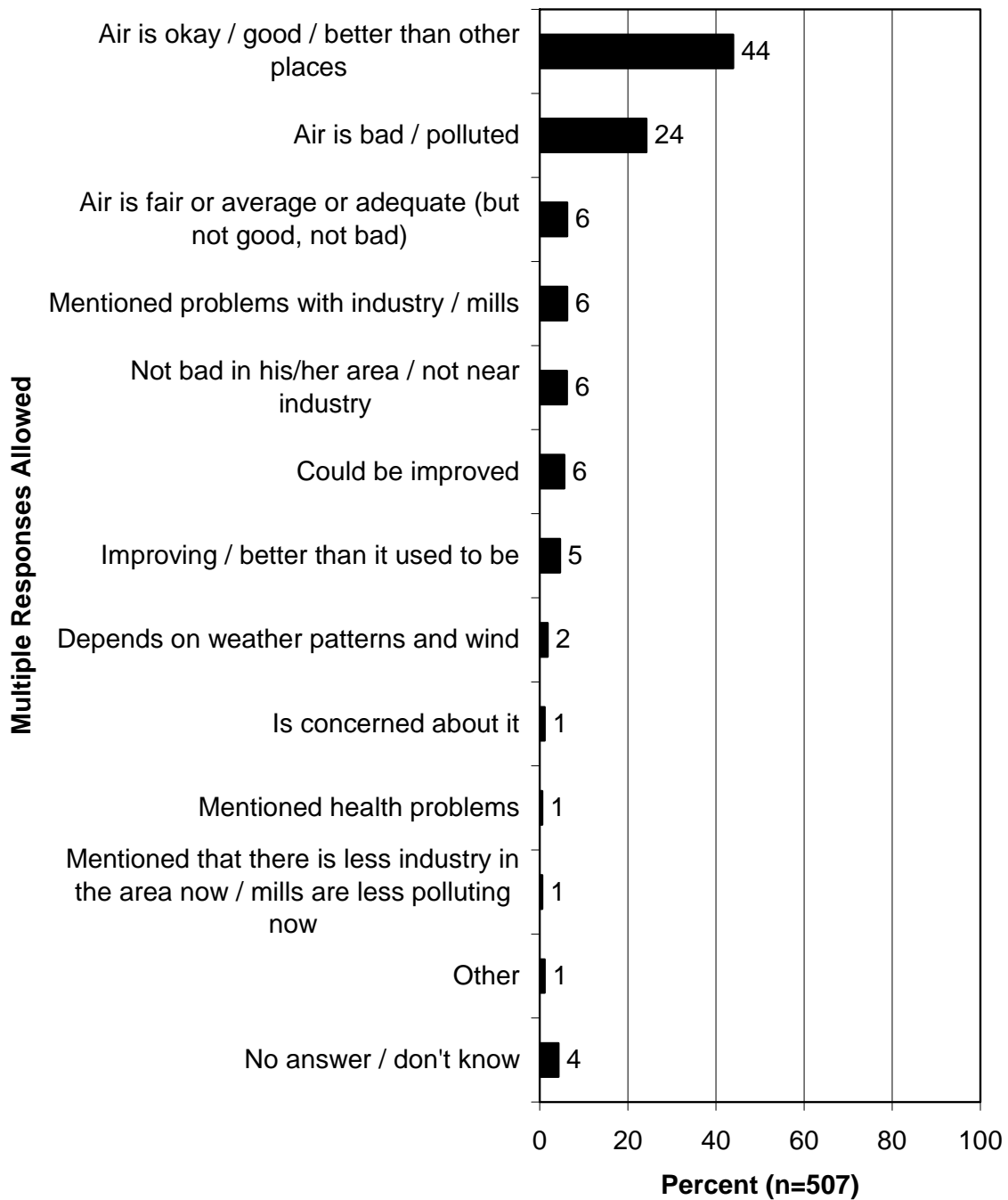
## **OPINIONS ON AND RATINGS OF AIR QUALITY**

- This portion of the survey assessed residents' opinions on the air quality in Northwest Indiana. First, residents were asked their opinion about the air quality in their area in an open-ended question.
  - There were nearly twice as many residents who stated that the air is good or better than at other places (44% gave a response to this effect) than who stated that the air is bad or polluted (24%). No other responses were given by more than 6% of residents; however, as shown on the graph the other comments had a mix of positive and negative aspects related to air quality.
  
- When asked to rate the current air quality in Northwest Indiana on a scale of excellent-good-fair-poor, the results are interesting in light of the above findings. The percentage of residents who rated the air quality as *excellent* or *good* (41%) was smaller than the percentage who rated it *fair* or *poor* (57%).
  - The groups most likely to rate the air quality as *excellent* or *good* are male residents (50%), residents 18-34 years old (48%), and white residents (47%).
  - The groups most likely to rate the air quality as *fair* or *poor* are African-American residents (76%), those with a frequent or daily commute (65%), and female residents (65%).
  
- The next three questions evaluated residents' perceptions of the trend in the air quality in their area. Specifically, they were asked, "How do you think the air quality in Northwest Indiana is now compared to [10 years ago / 5 years ago / a year ago]?" with the response options of *better*, *same*, or *worse*.
  - The percentage who answered that the air quality is the *same* increased substantially as the years of comparison got shorter. However, it is noteworthy that, although their "share" of the total response decreased over time, the percentage who said the air quality is *worse* steadily overtook the percentage who said it is *better*.
    - When looking at air quality now compared to 10 years ago, the most common answer is that the air quality is the same (38% said this). Otherwise, a greater percentage said it is *better* (31%) than said it is *worse* (24%).

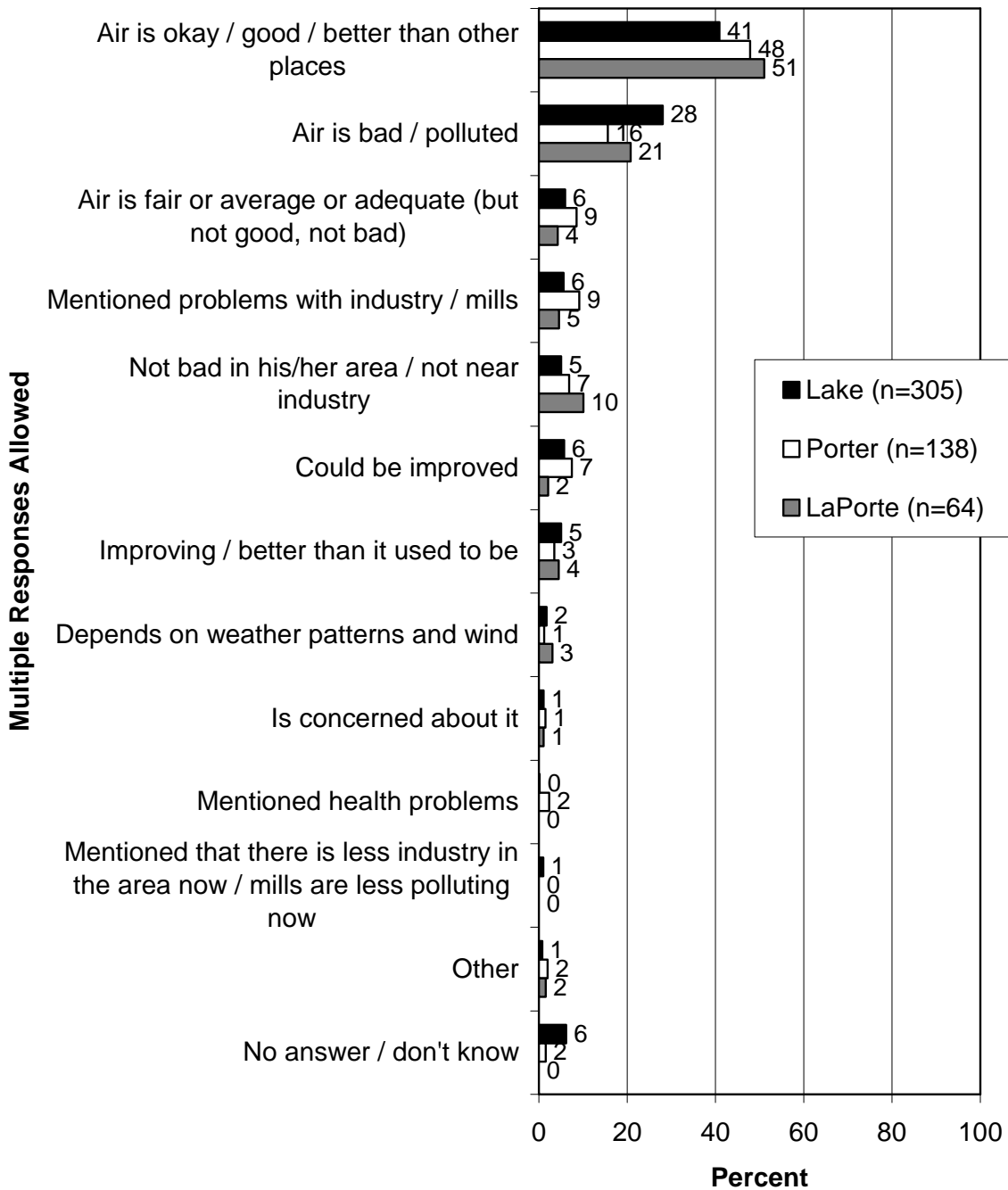
- When comparing air quality now to 5 years ago, 60% of residents said the air quality is the *same*. Otherwise, those saying *better* (18%) only slightly exceed those saying it is *worse* (15%).
  - Finally, when looking at air quality now compared to a year ago, the overwhelming majority of residents (81%) say it is the *same*. Otherwise, the percentage saying *better* (5%) is slightly less than the percentage saying it is *worse* (9%).
  - The results of these questions are compared to those from the 2012 study. For all three questions, the percentages who think air quality is getting *worse* is slightly higher than those from 2012. (Note that the 2012 report did not include “don’t know” responses, so those responses have been removed from the 2017 data, with the percentages recalculated, to allow for a more direct comparison. For this reason, there are minor differences between the 2017 values shown in the trend graph and those in the main graphs.)
  - Also shown in this section are a series of GIS maps of Northwest Indiana illustrating the distribution of opinion within the region for these survey questions.
- In follow-up questioning, those who said the air quality has improved for any of the timeframes were asked why they felt that way.
- By far the top responses were related to the perception that industry has gotten better or more regulated (51% gave a response within this category), and the next highest response category was similar—that vehicle emissions are better (11%). Other responses related to improved health or easier breathing and aesthetic observations that the air looks or smells better.
  - At the other end, those who said the air quality had gotten worse for any of the timeframes were asked why they felt that way. The top responses were related to more smog or pollution (41%), more vehicles (28%), and industry or mills (19%).



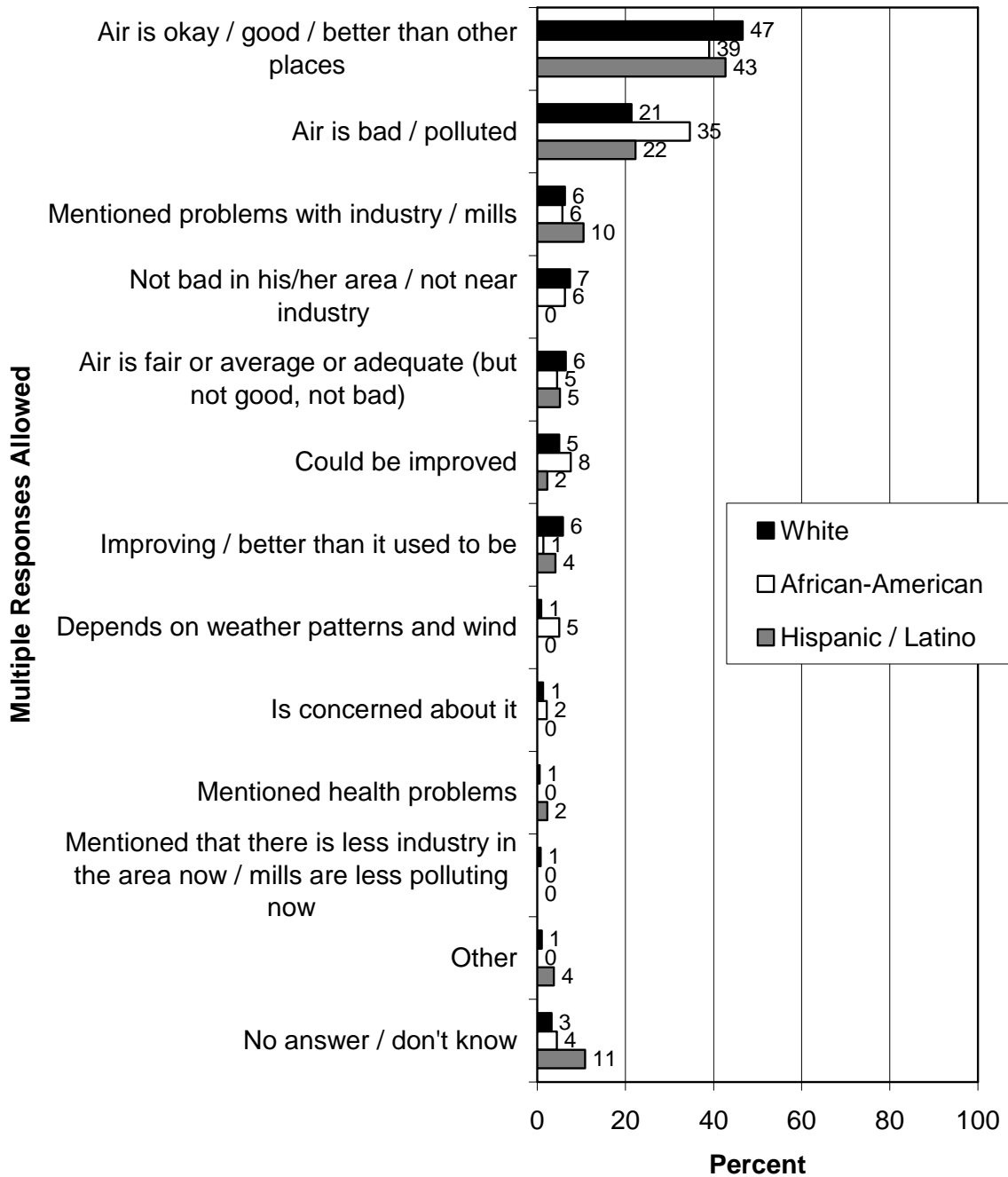
### Q56. In general, what do you think about the air quality in your area?



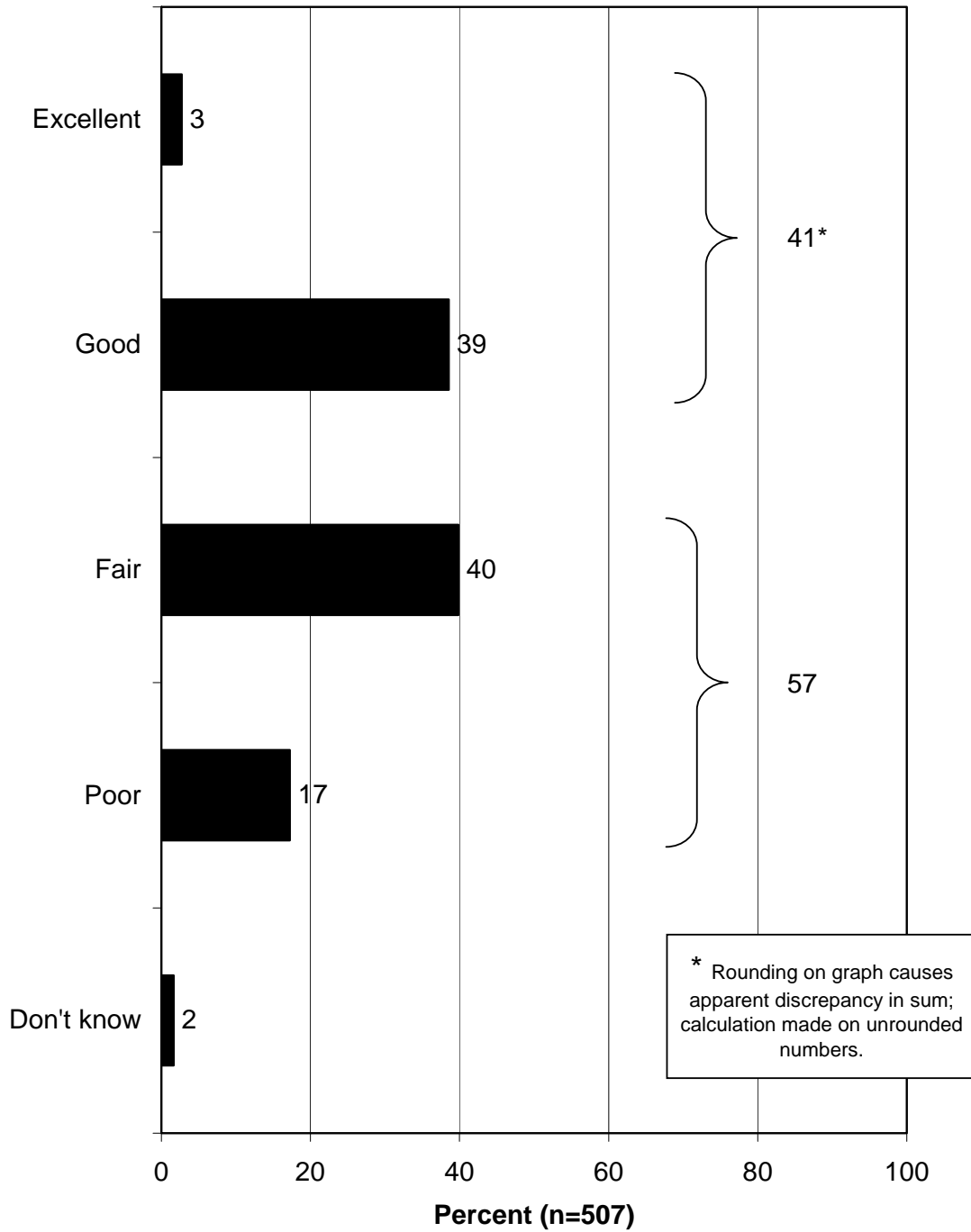
### Q56. In general, what do you think about the air quality in your area?



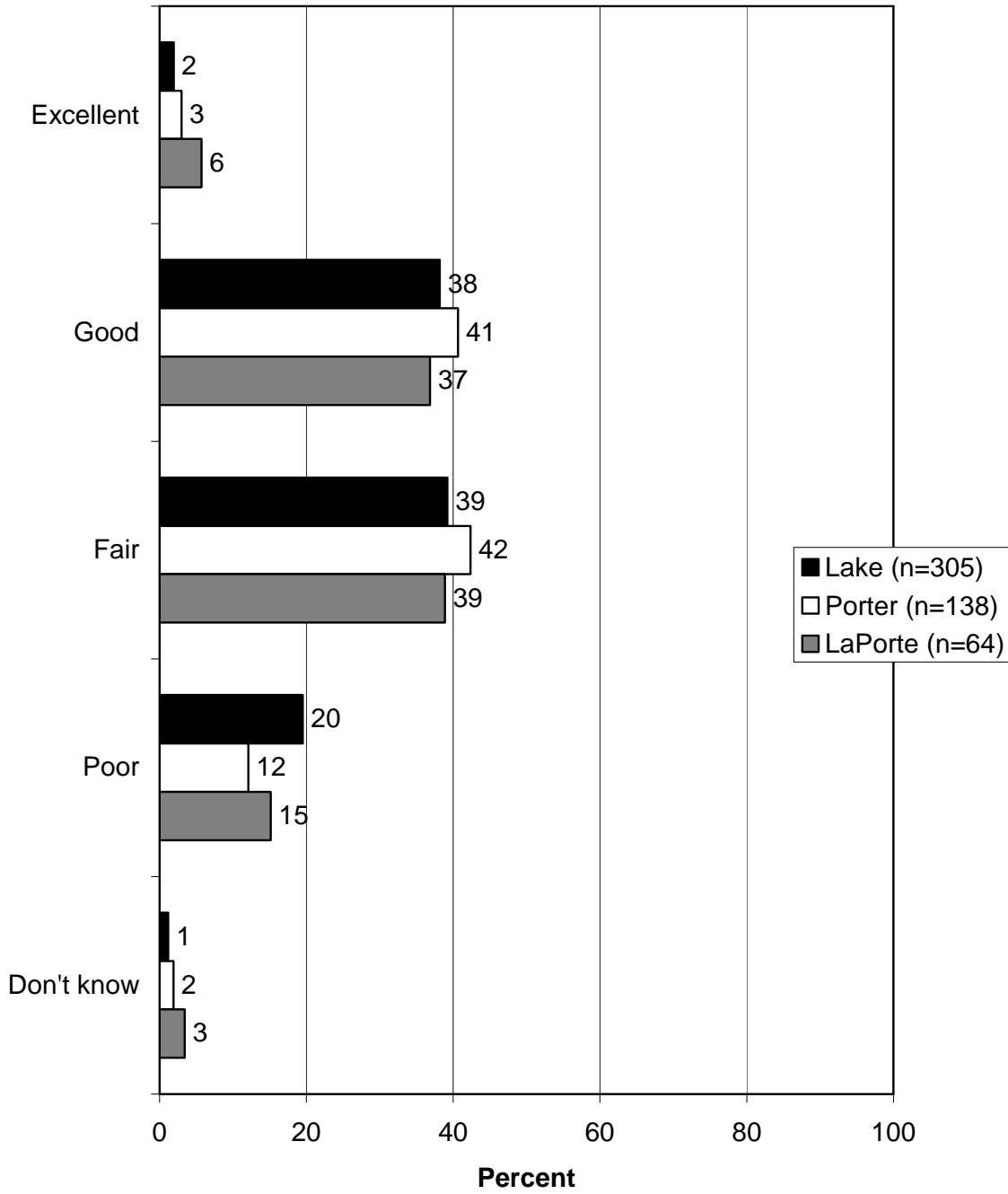
### Q56. In general, what do you think about the air quality in your area?



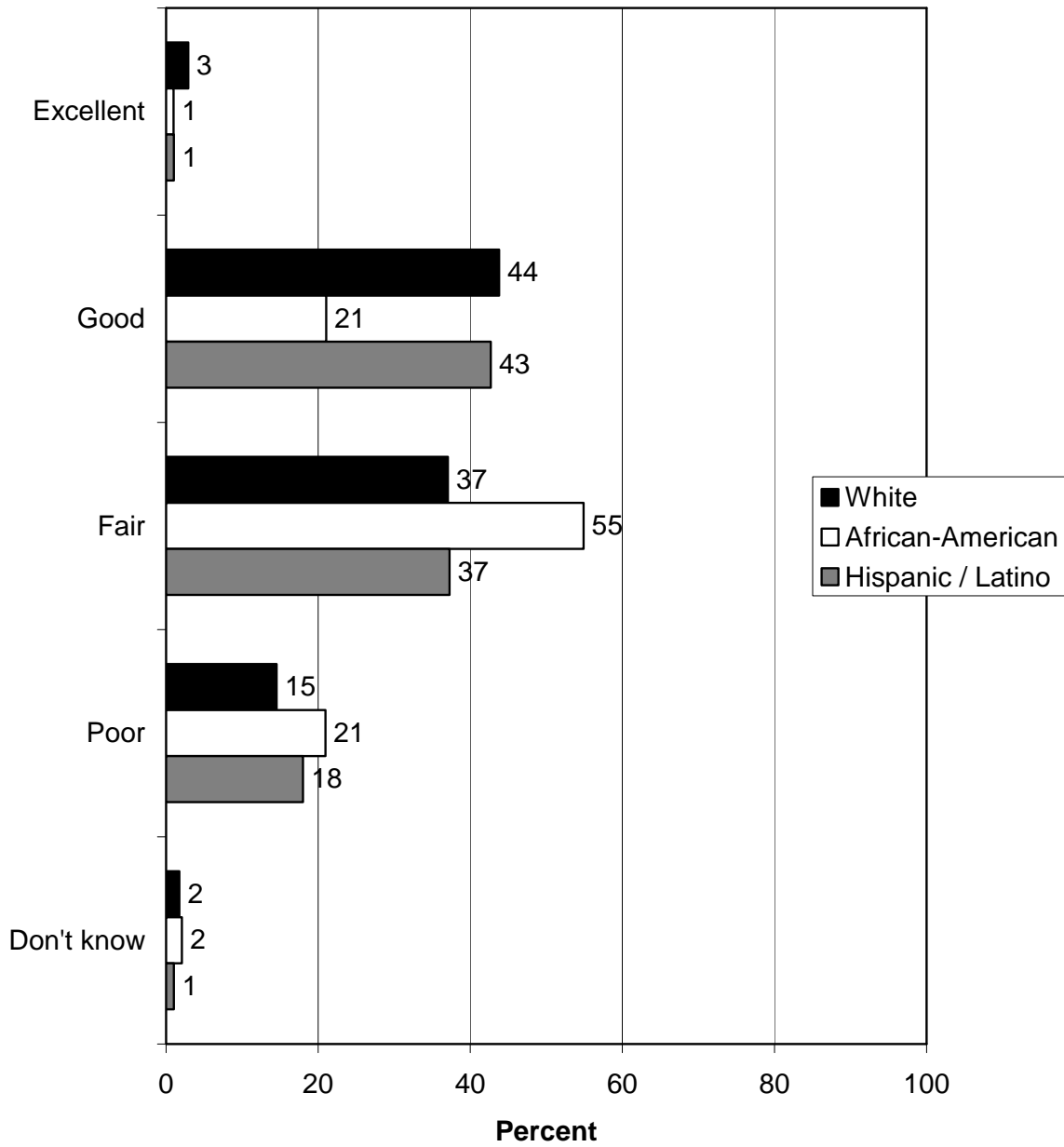
### Q57. How would you rate the current air quality in Northwest Indiana?



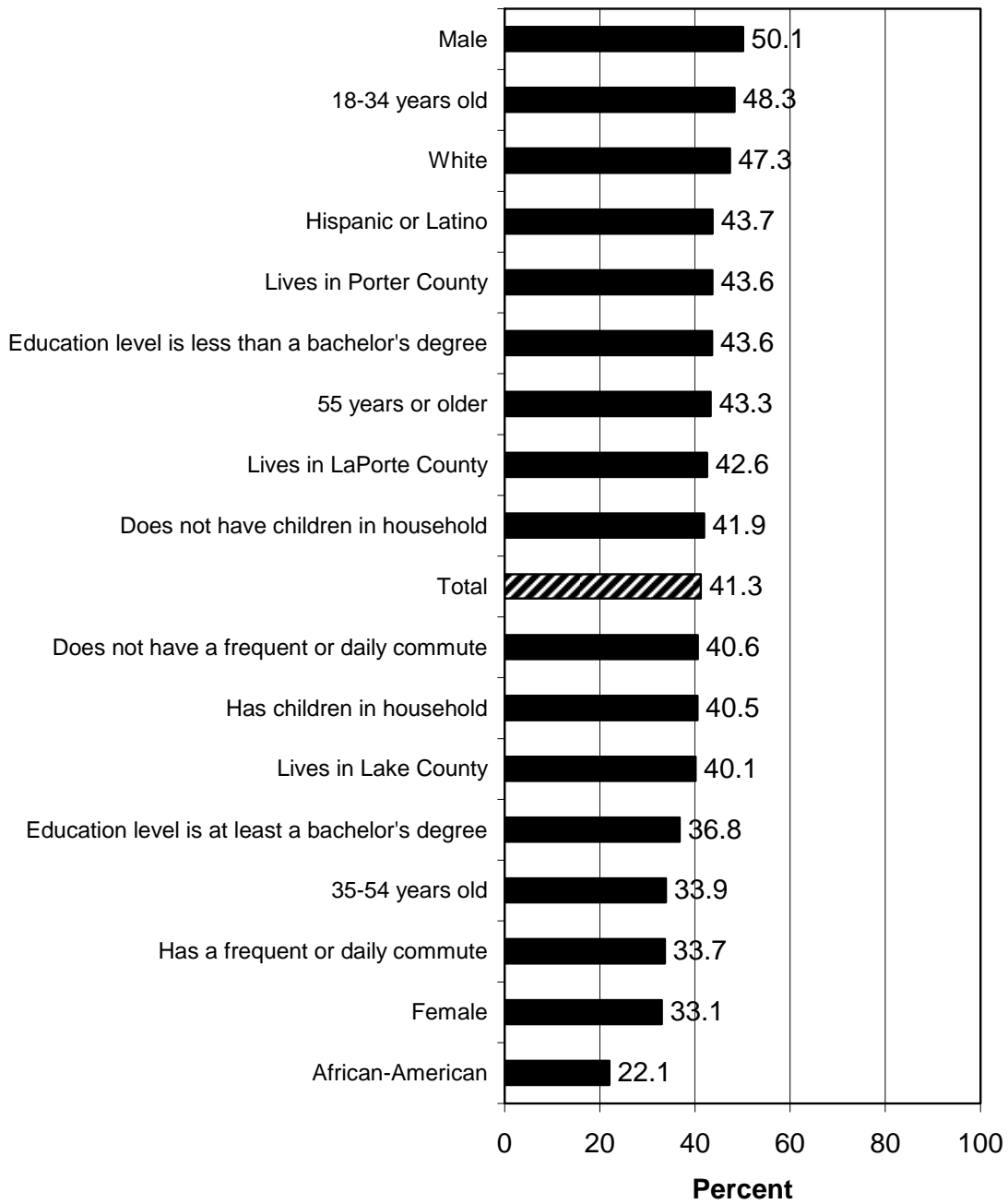
### Q57. How would you rate the current air quality in Northwest Indiana?



**Q57. How would you rate the current air quality in Northwest Indiana?**

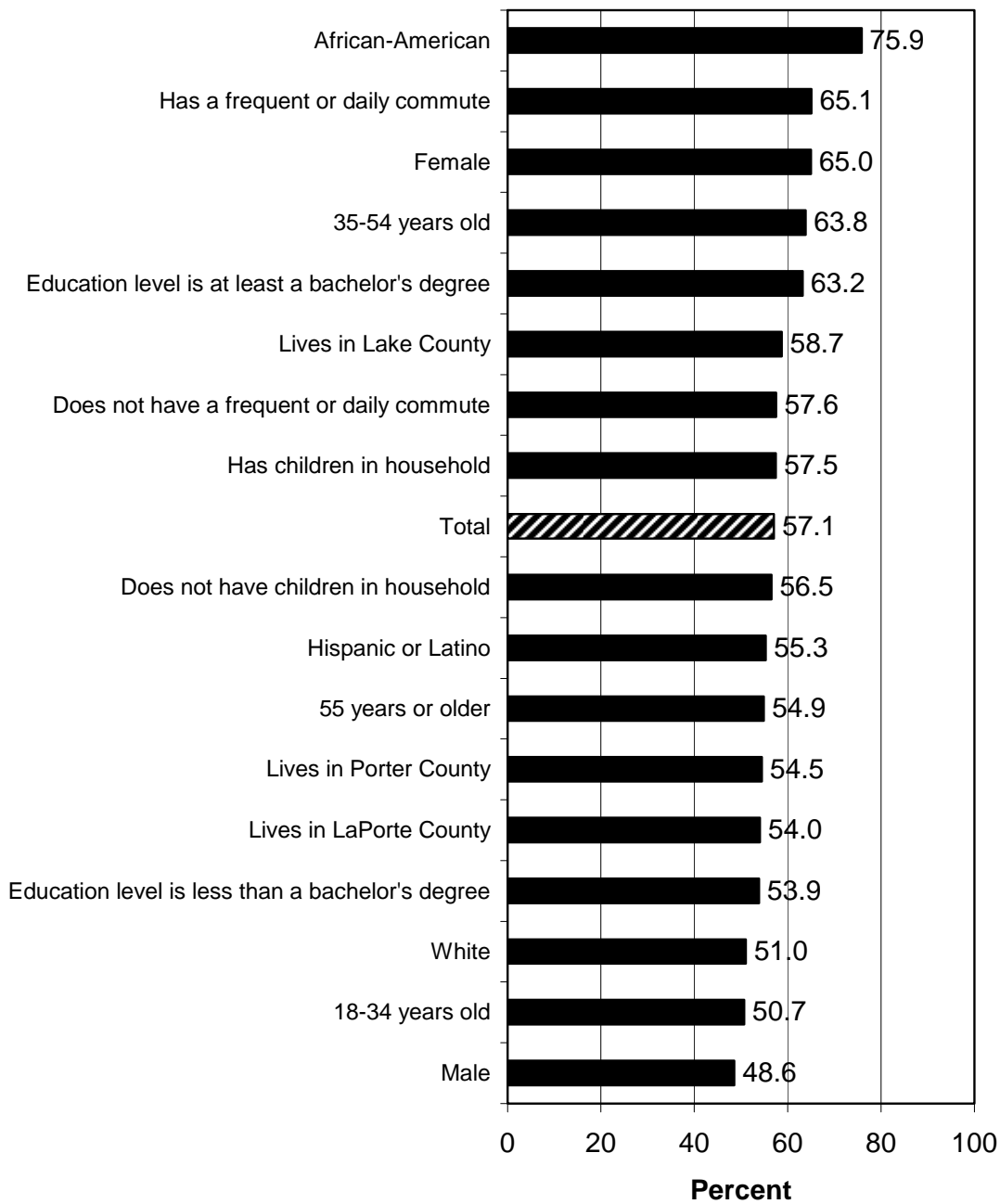


**Percent of each of the following groups who rated  
the current air quality in Northwest Indiana as  
excellent or good:**



An explanation of how to interpret demographic correlation graphs is included on page 10.

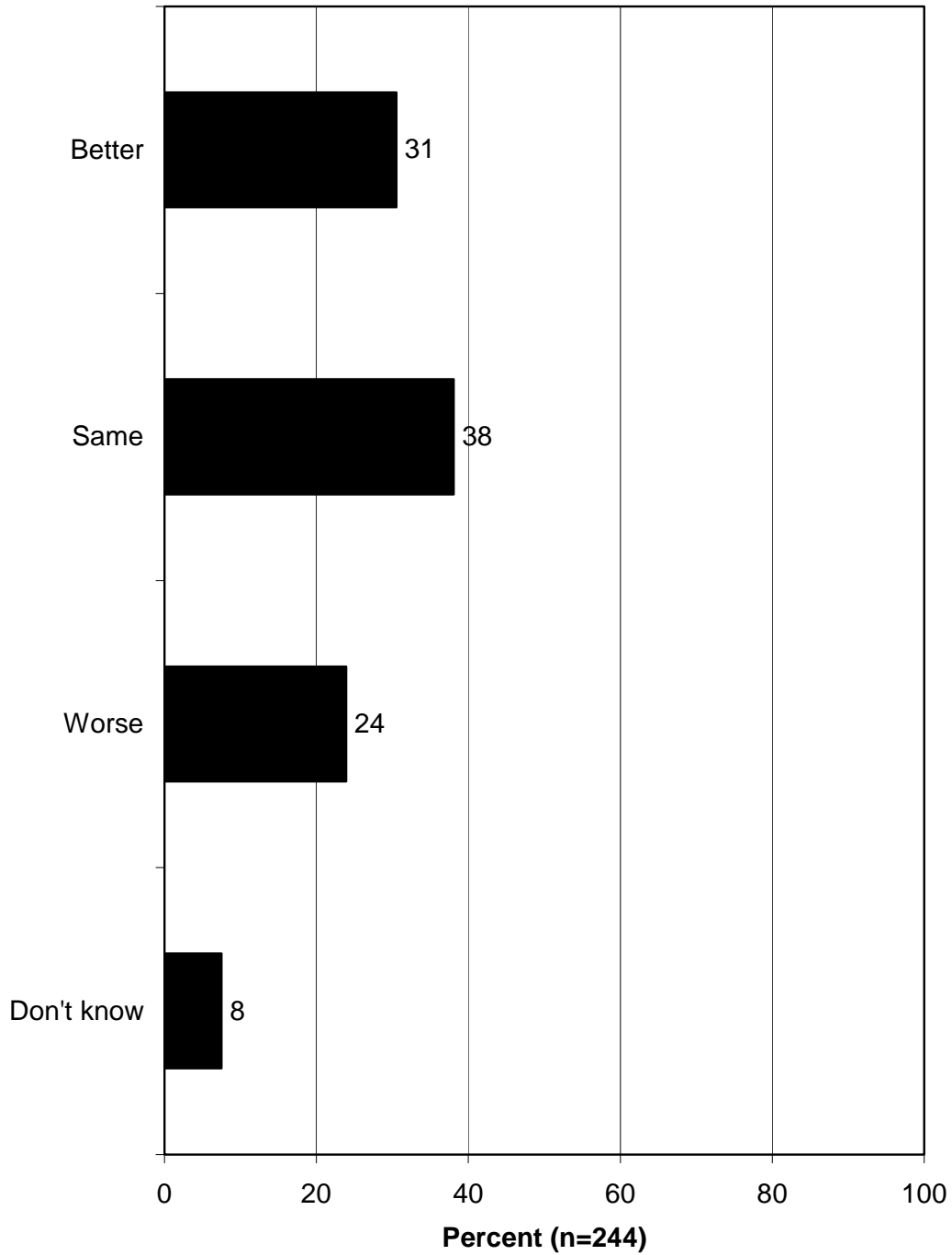
**Percent of each of the following groups who rated the current air quality in Northwest Indiana as fair or poor:**



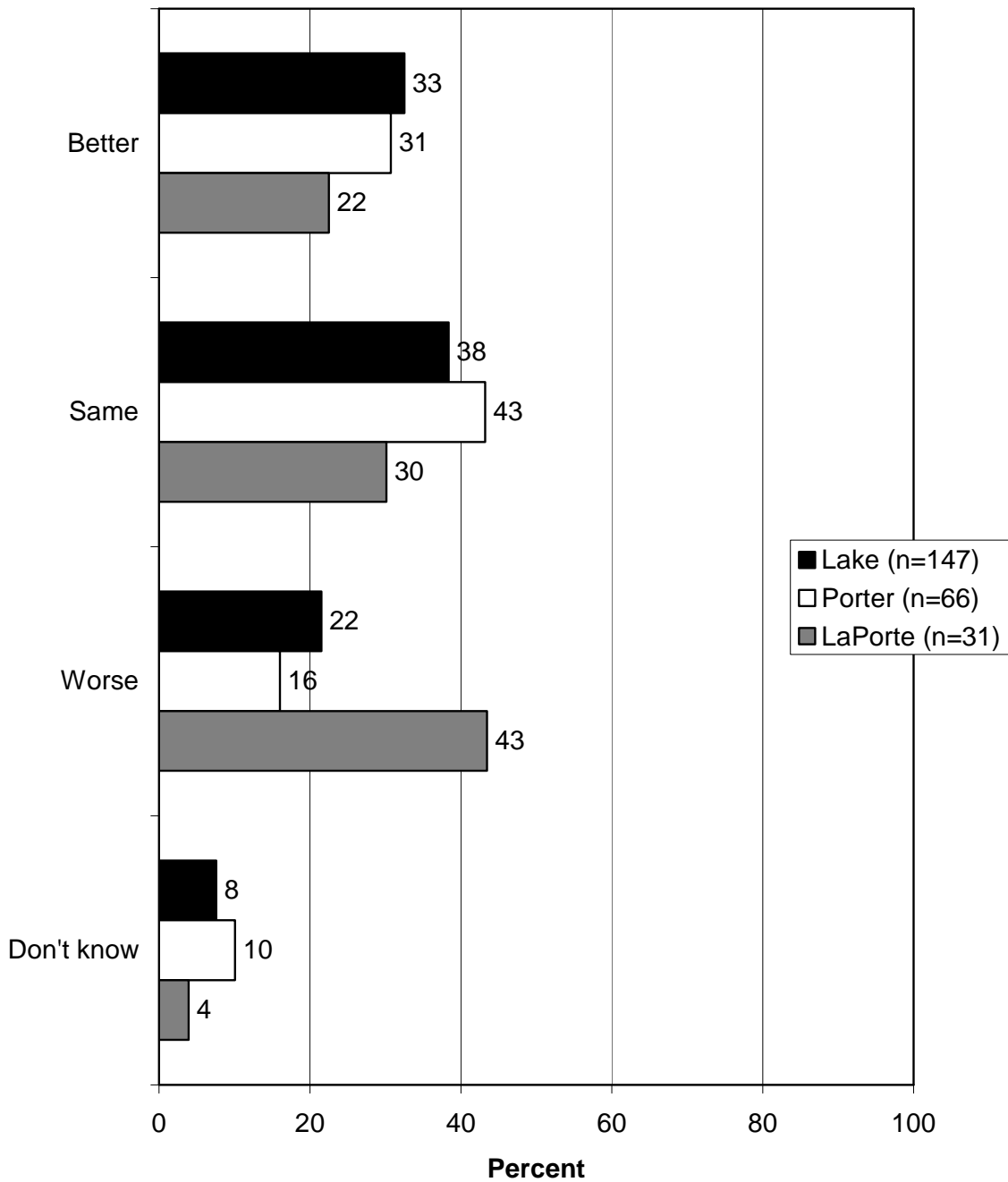
An explanation of how to interpret demographic correlation graphs is included on page 10.



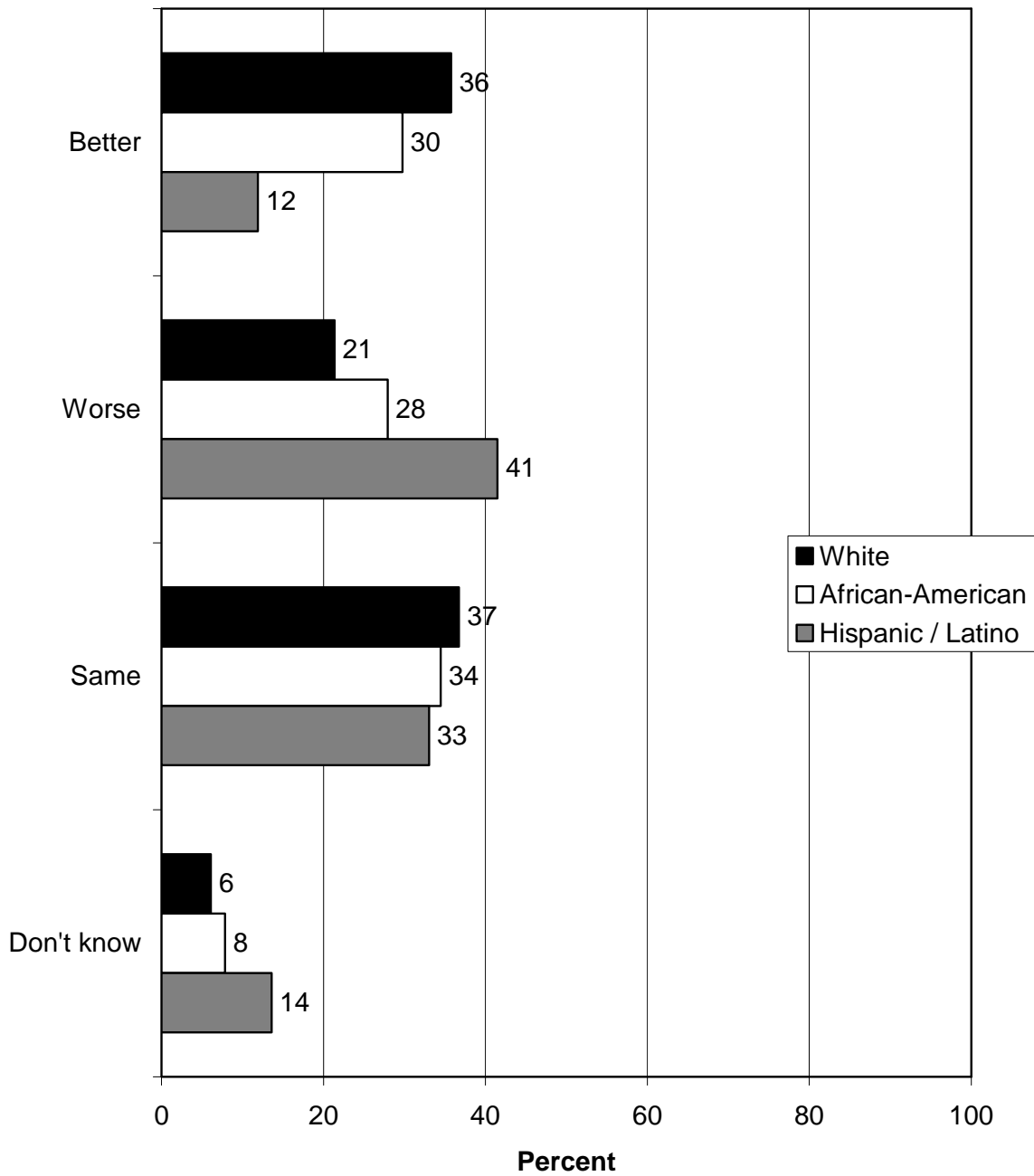
**Q58. How do you think the air quality in Northwest Indiana is now compared to 10 years ago?**



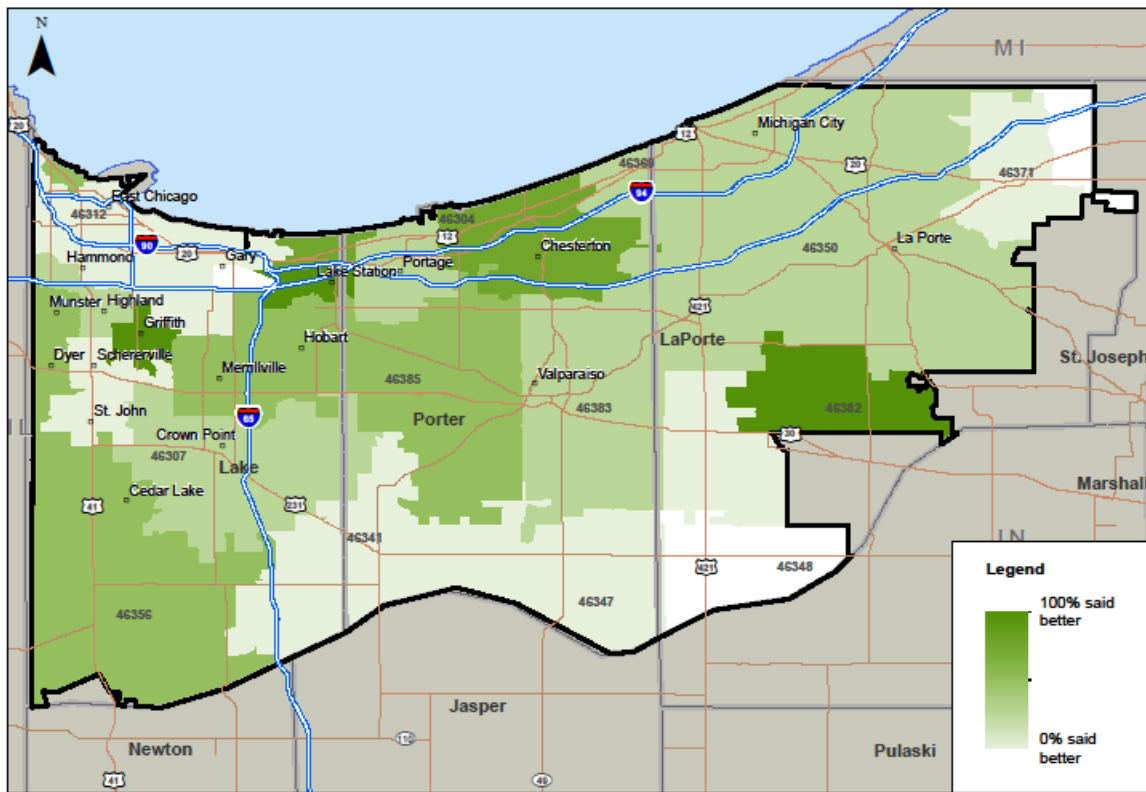
**Q58. How do you think the air quality in Northwest Indiana is now compared to 10 years ago?**



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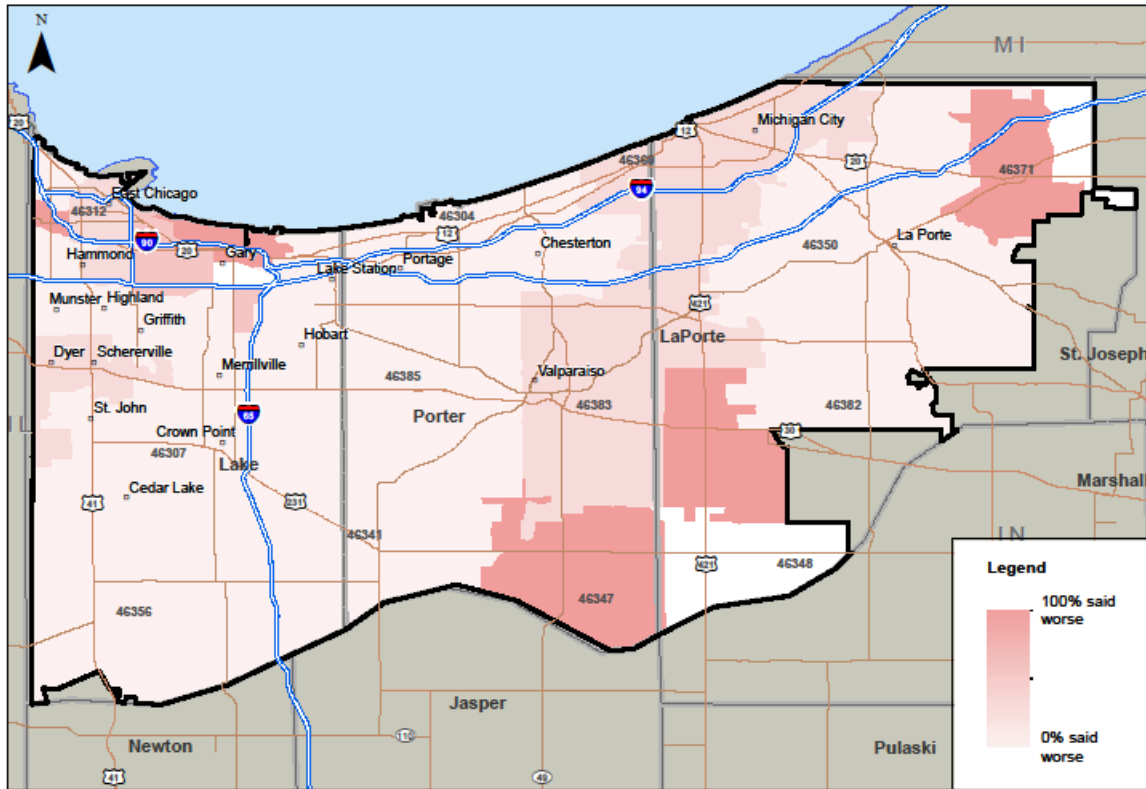
Percentage who said that air quality has gotten better over the past 10 years.



Data collected by  
Responsive  
Management

Q58. How do you think the air quality in Northwest Indiana is now compared to 10 years ago? Is it better, worse, or the same?

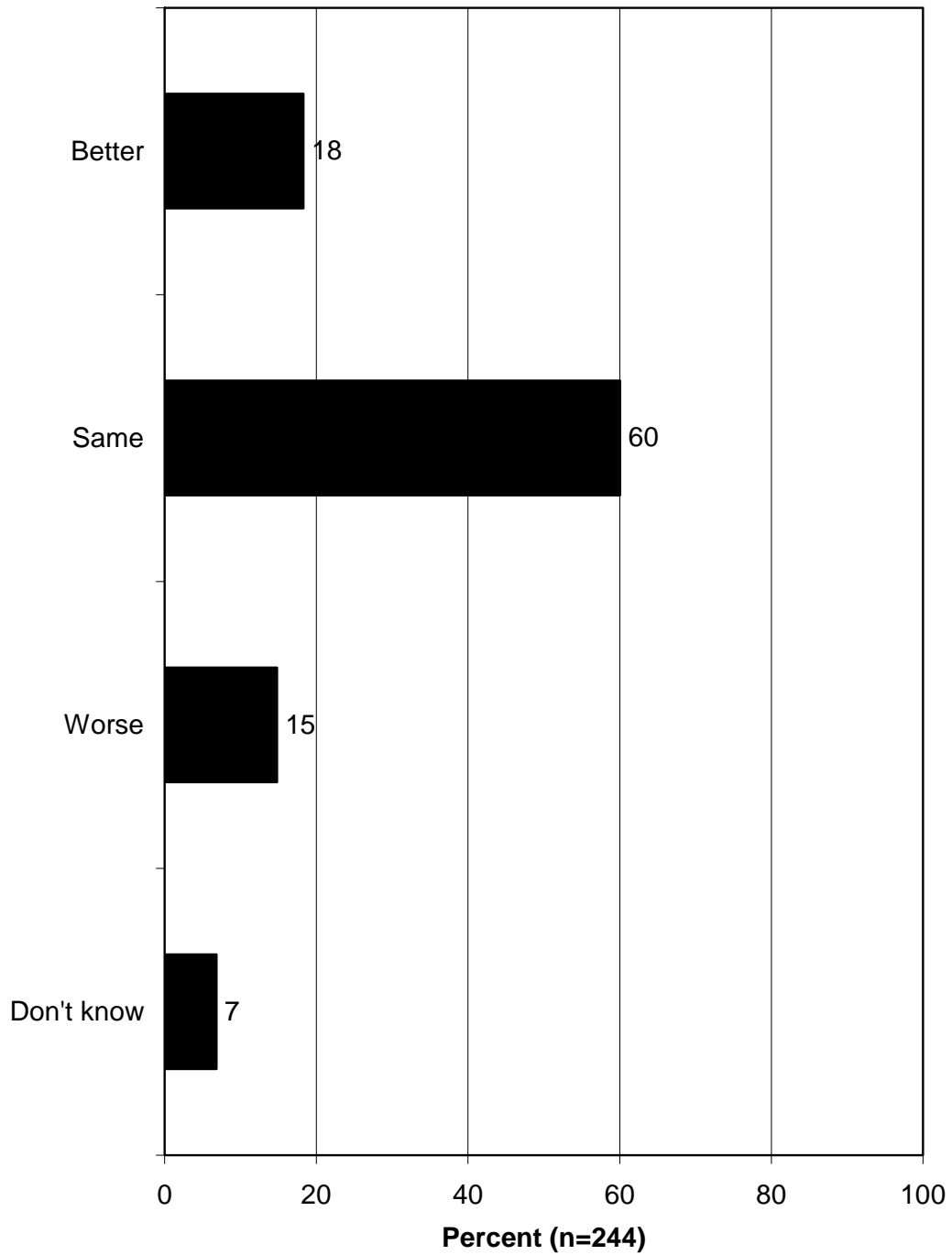
Percentage who said that air quality has gotten worse over the past 10 years.



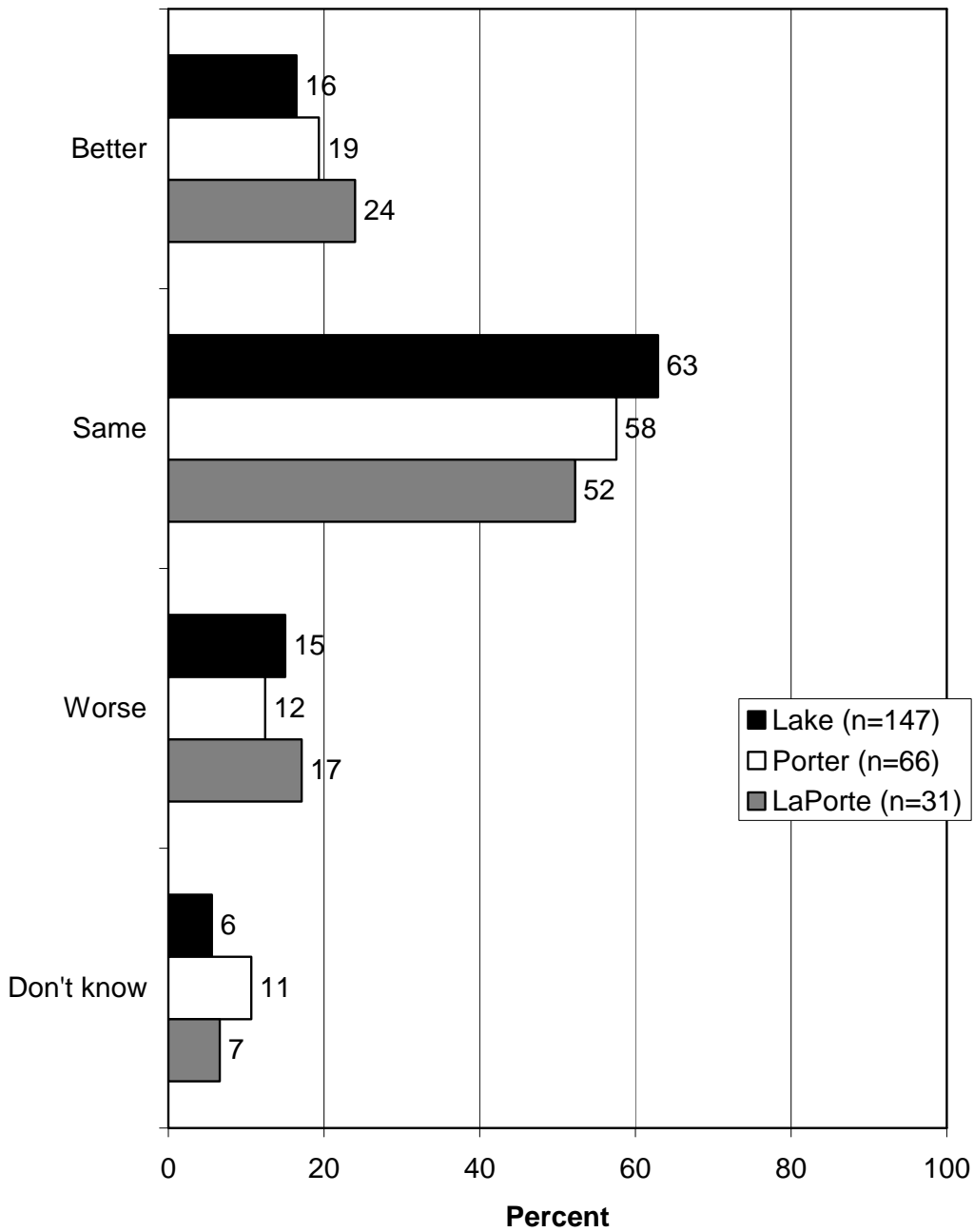
 **CARVATECH**  
Data collected by  
Responsive  
Management

Q58. How do you think the air quality in Northwest Indiana is now compared to 10 years ago? Is it better, worse, or the same?

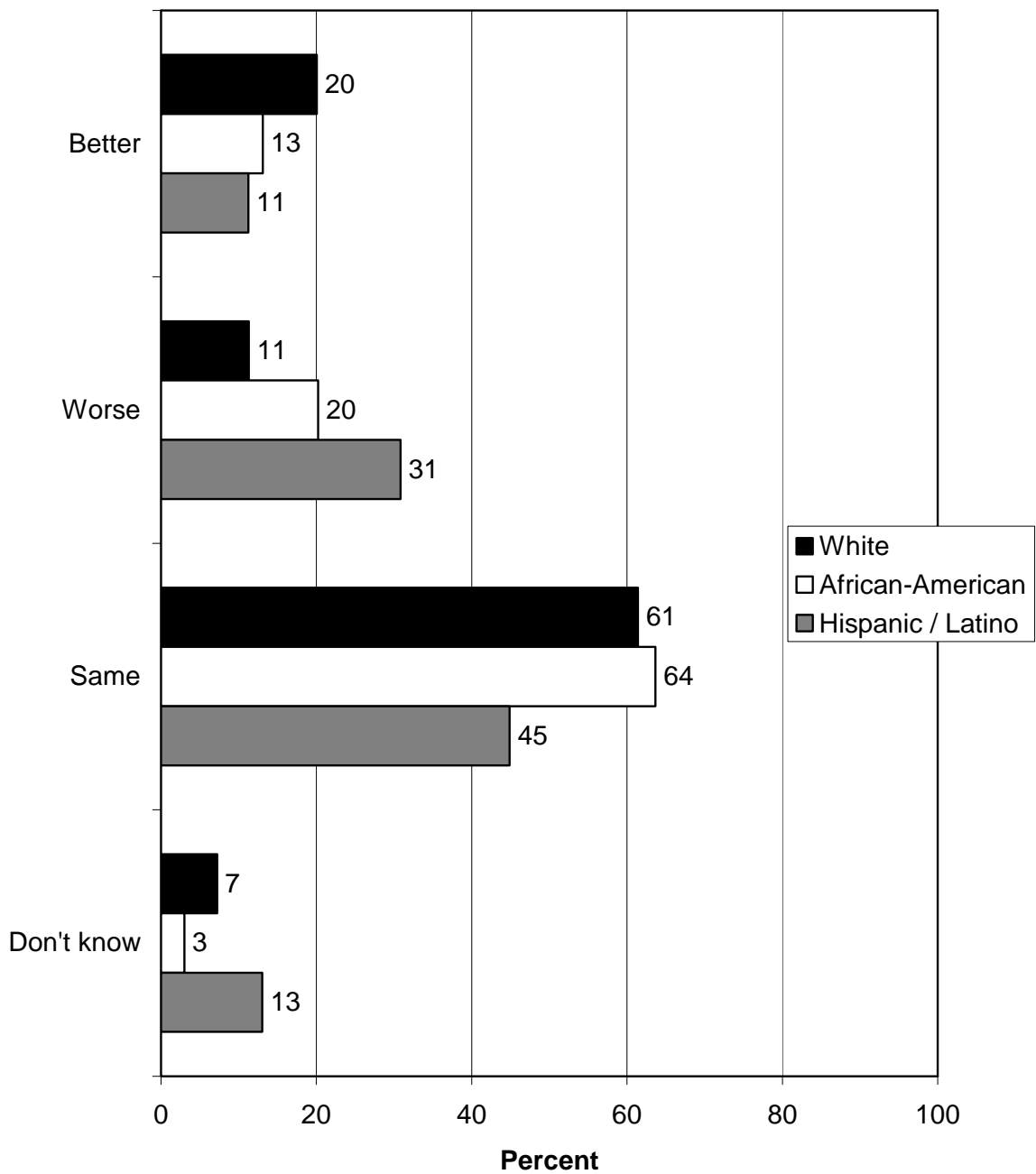
**Q59. How do you think the air quality in Northwest Indiana is now compared to 5 years ago?**



**Q59. How do you think the air quality in Northwest Indiana is now compared to 5 years ago?**

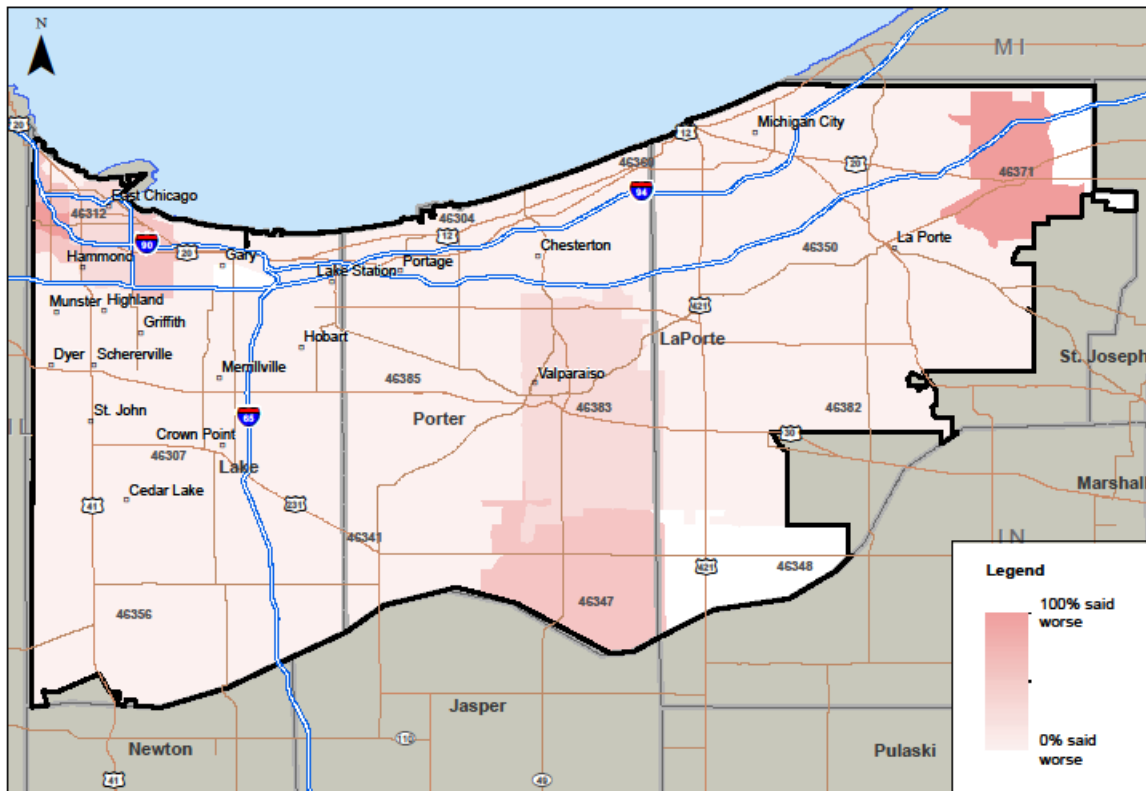


**Q59. How do you think the air quality in Northwest Indiana is now compared to 5 years ago?**





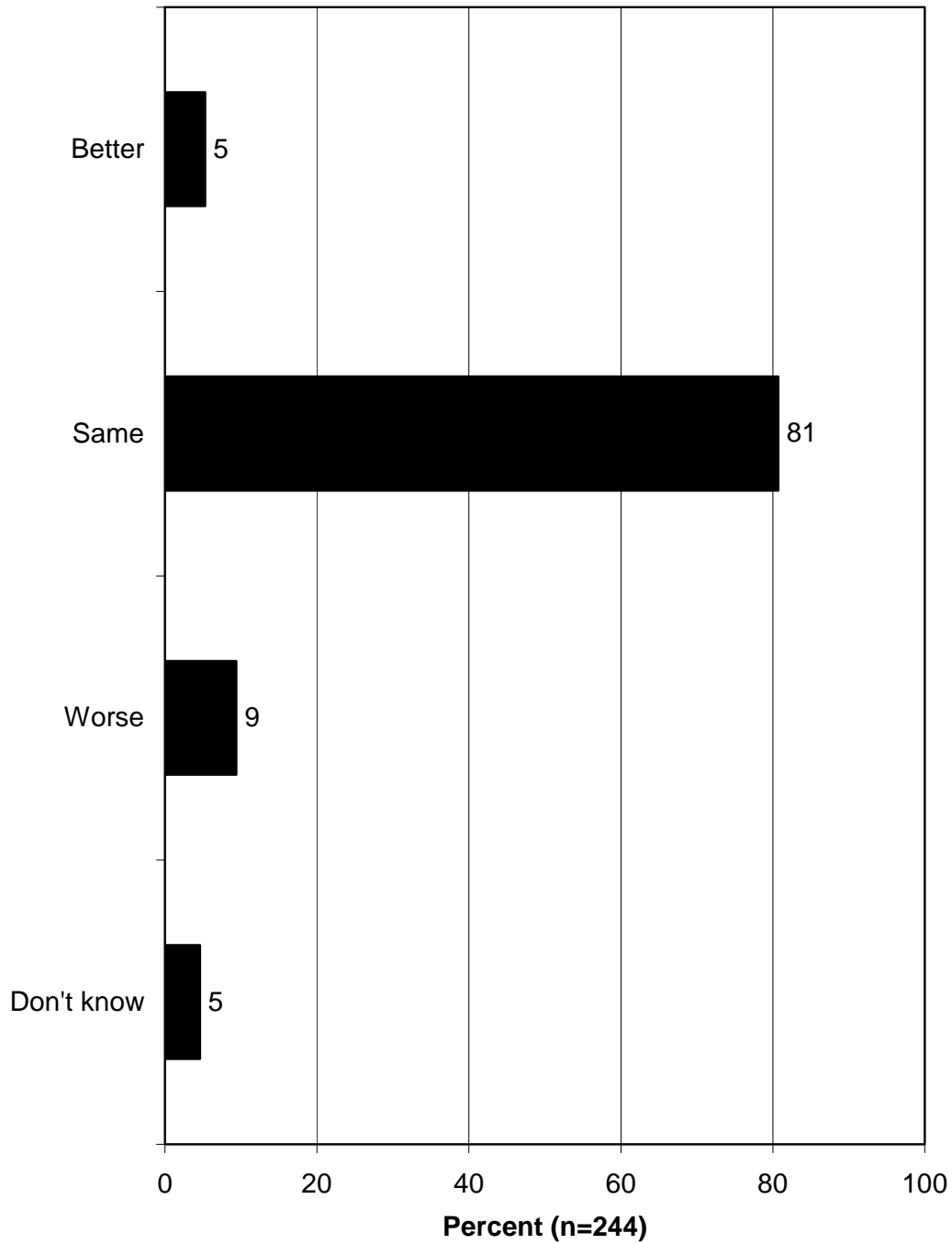
Percentage who said that air quality has gotten worse over the past 5 years.



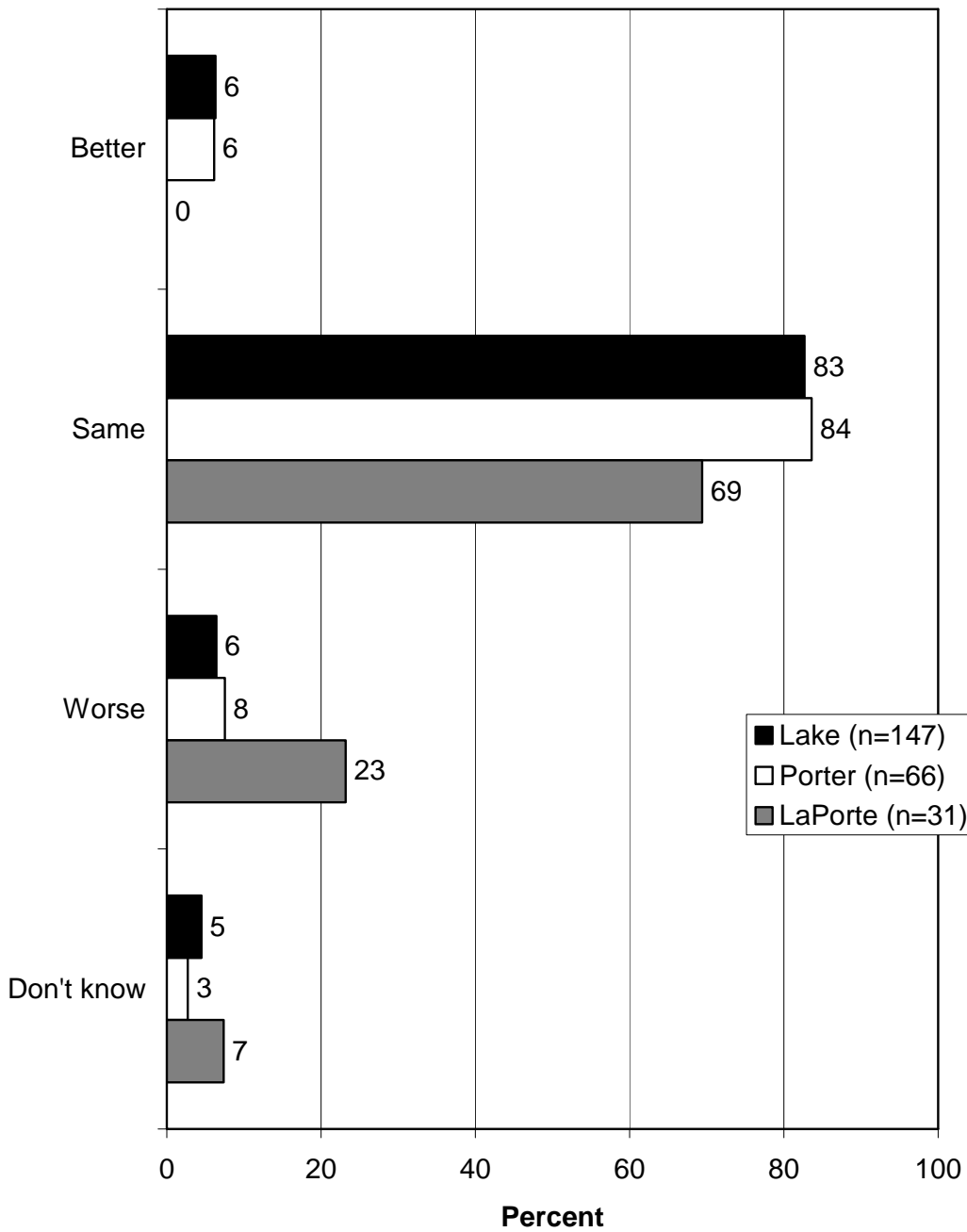
**CARVATECH**  
 Data collected by  
 Responsive  
 Management

Q59. What about when comparing the air quality now to 5 years ago? (Is it better, worse, or the same?)

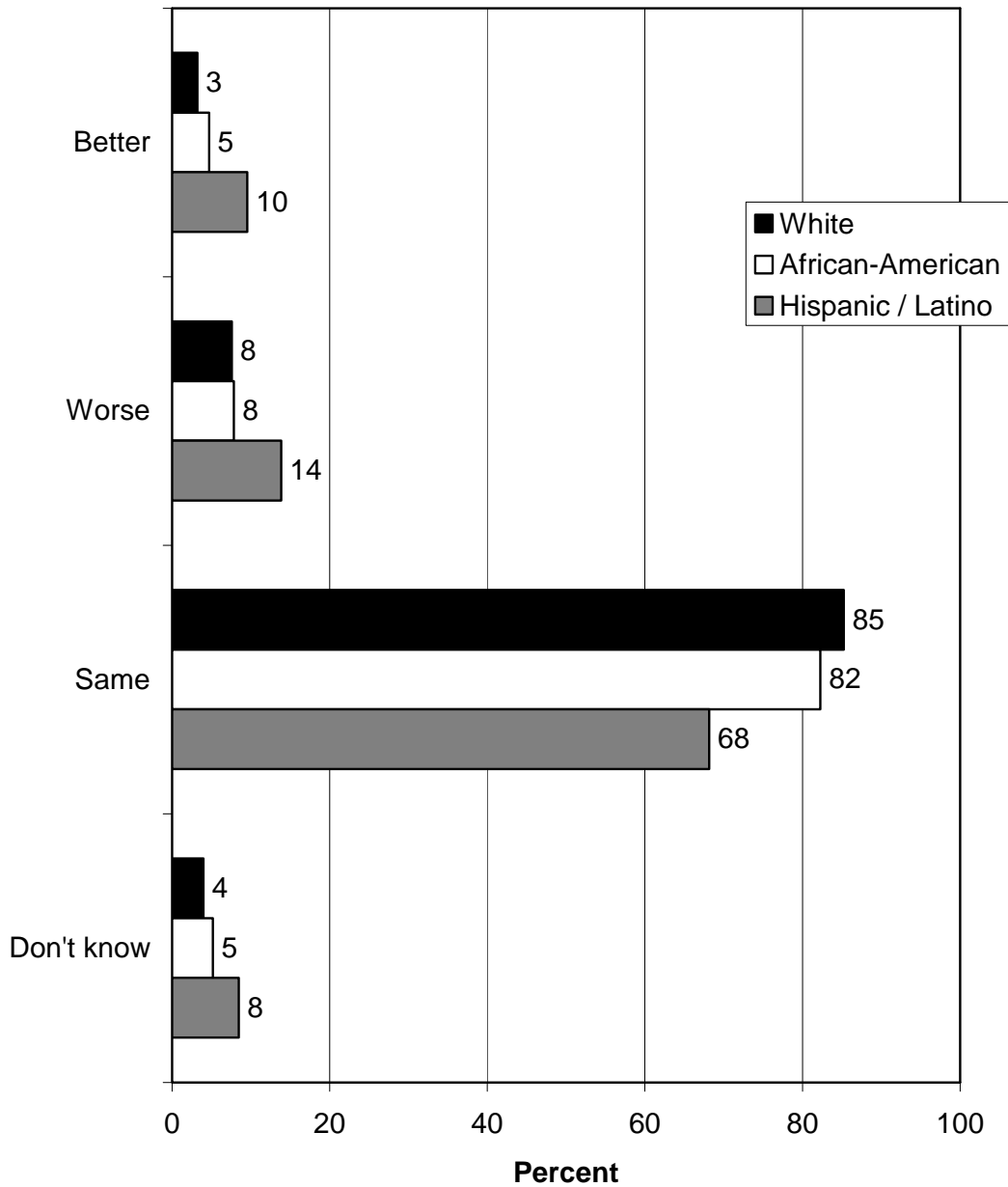
**Q60. How do you think the air quality in Northwest Indiana is now compared to a year ago?**

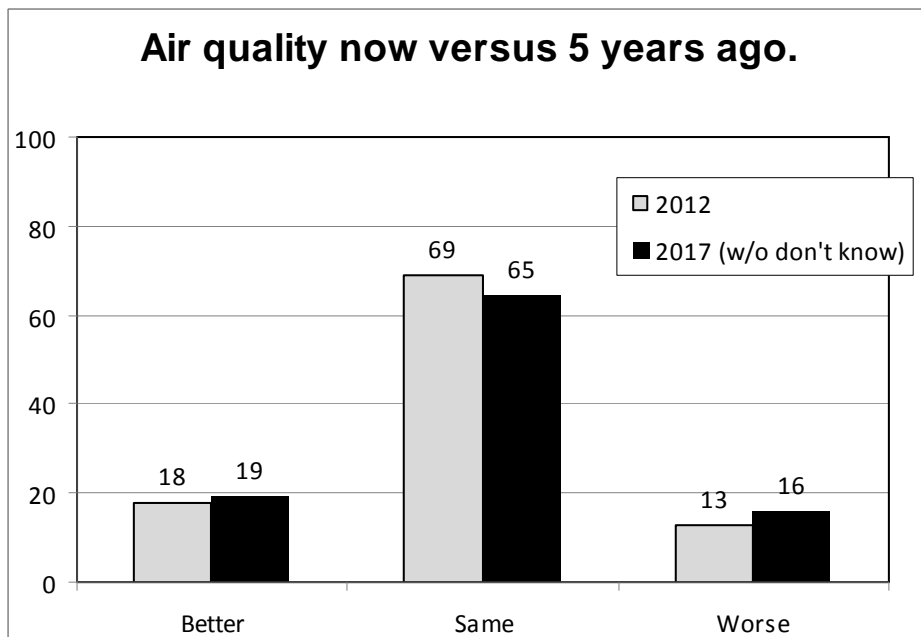
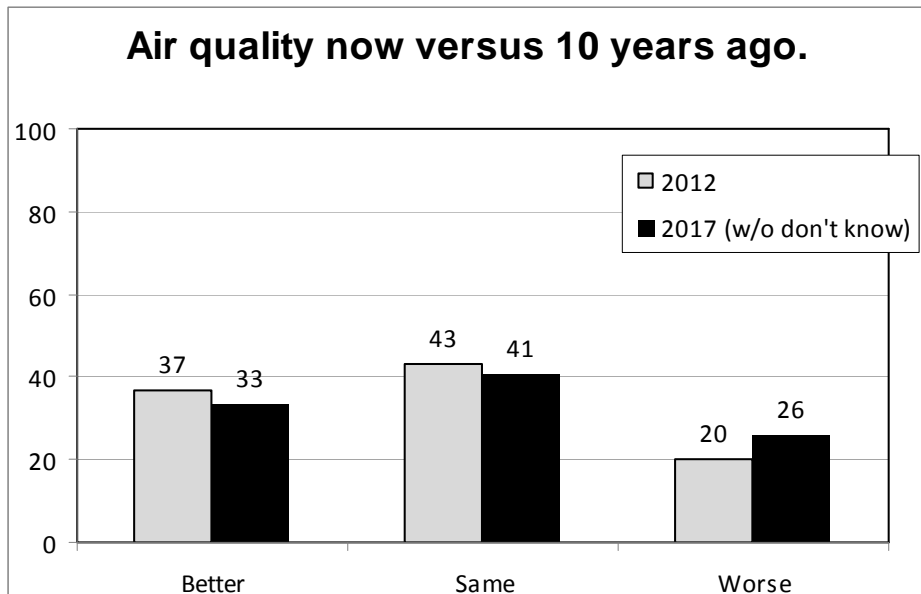


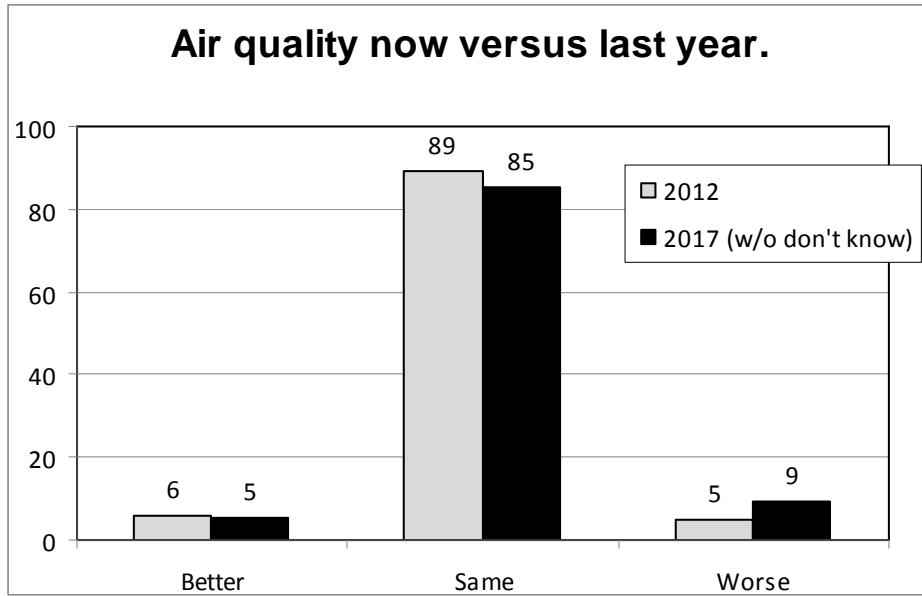
**Q60. How do you think the air quality in Northwest Indiana is now compared to a year ago?**



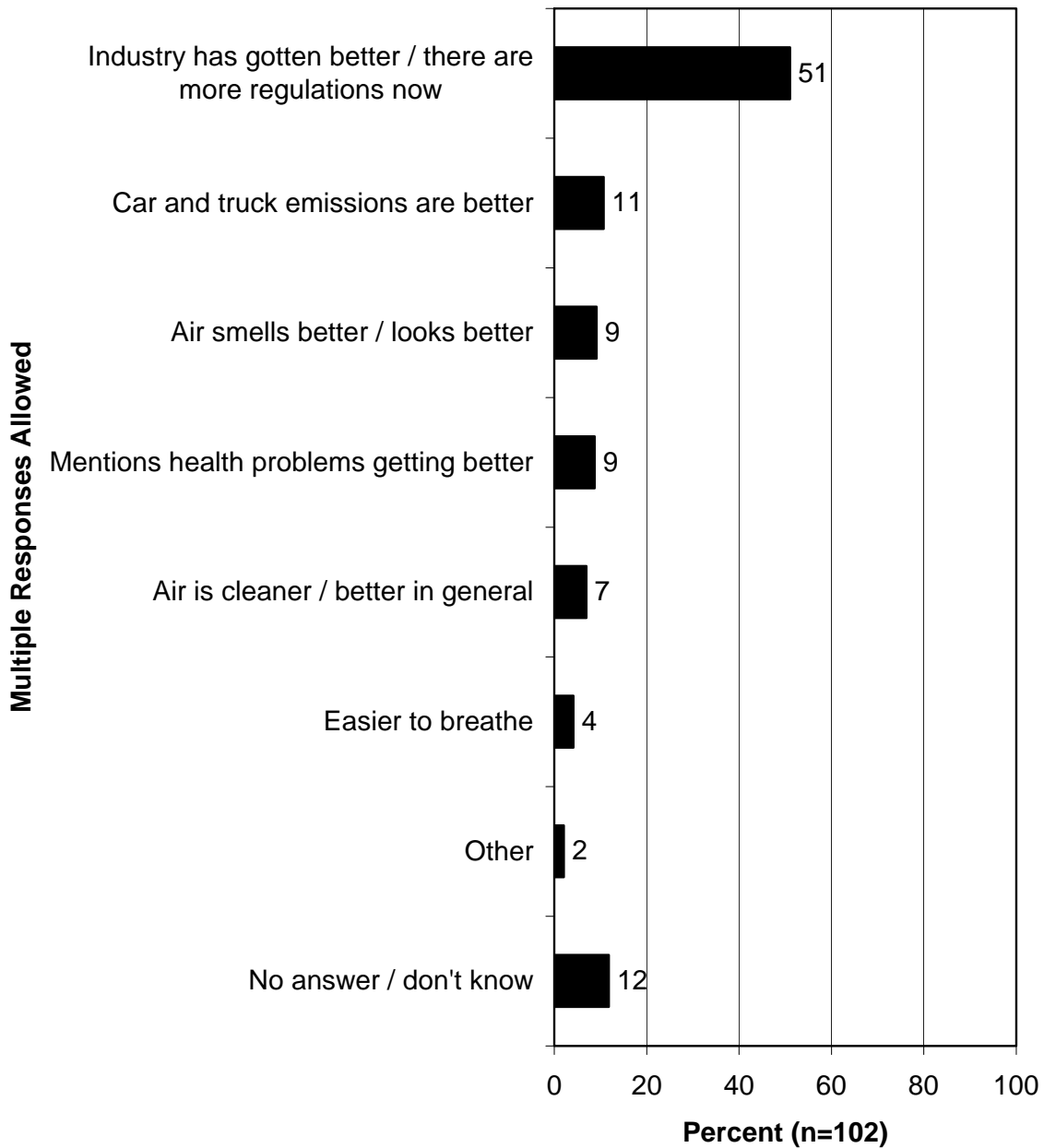
**Q60. How do you think the air quality in Northwest Indiana is now compared to a year ago?**



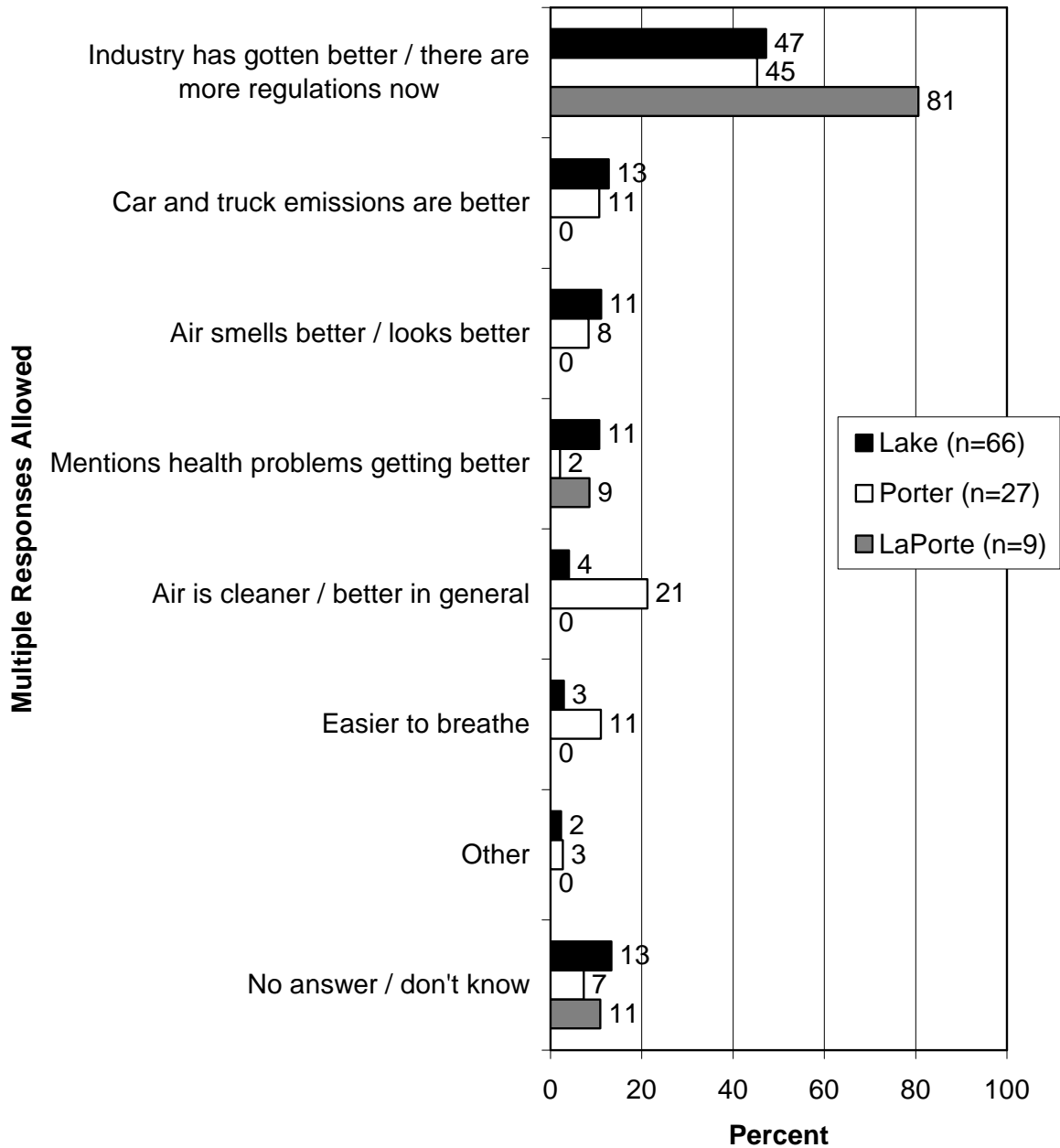




**Q62. In what ways do you feel the air quality has improved over the years? (Asked of those who rated air quality better now than compared to 10 years, 5 years, or a year ago.)**

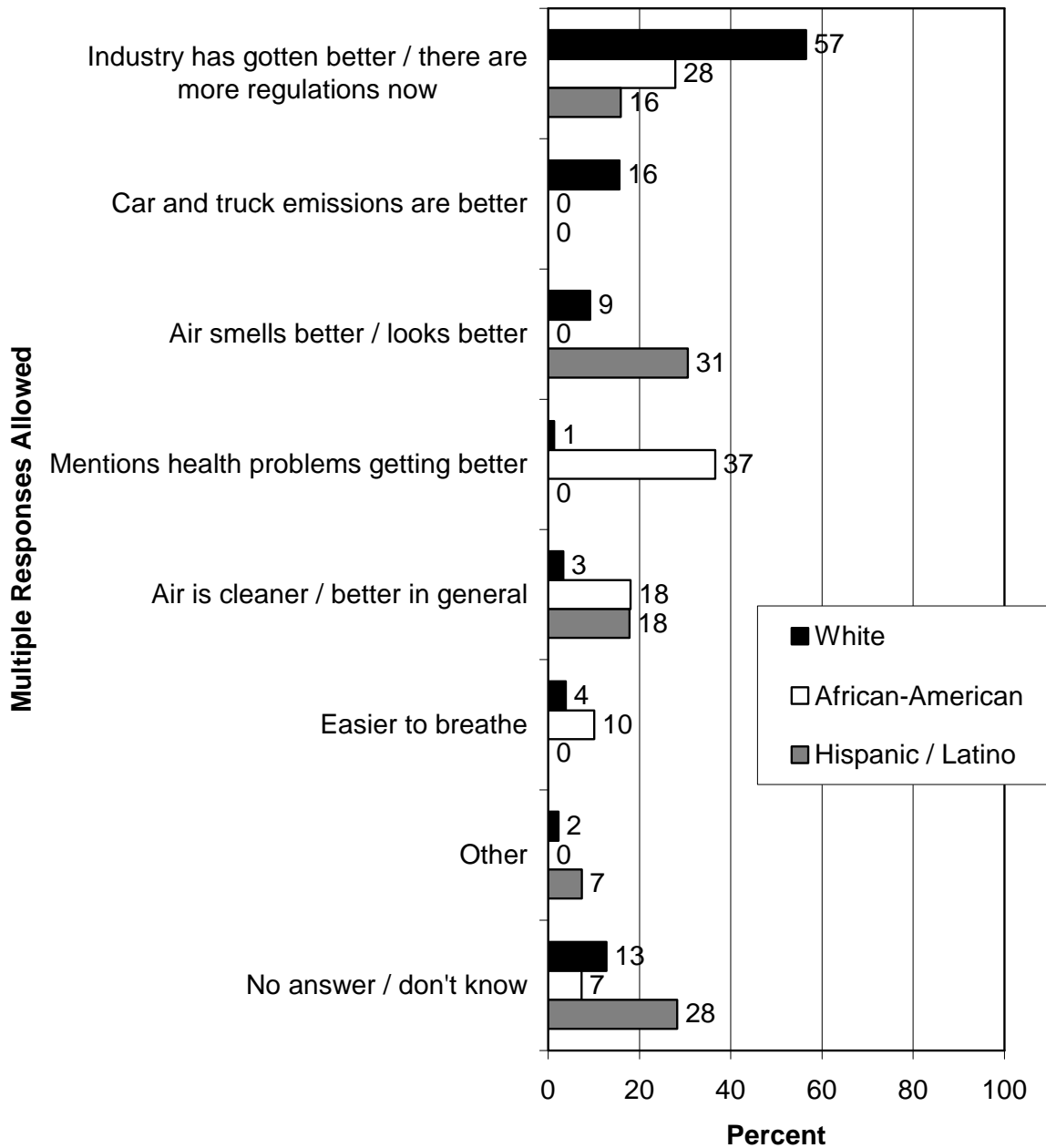


**Q62. In what ways do you feel the air quality has improved over the years? (Asked of those who rated air quality better now than compared to 10 years, 5 years, or a year ago.)**

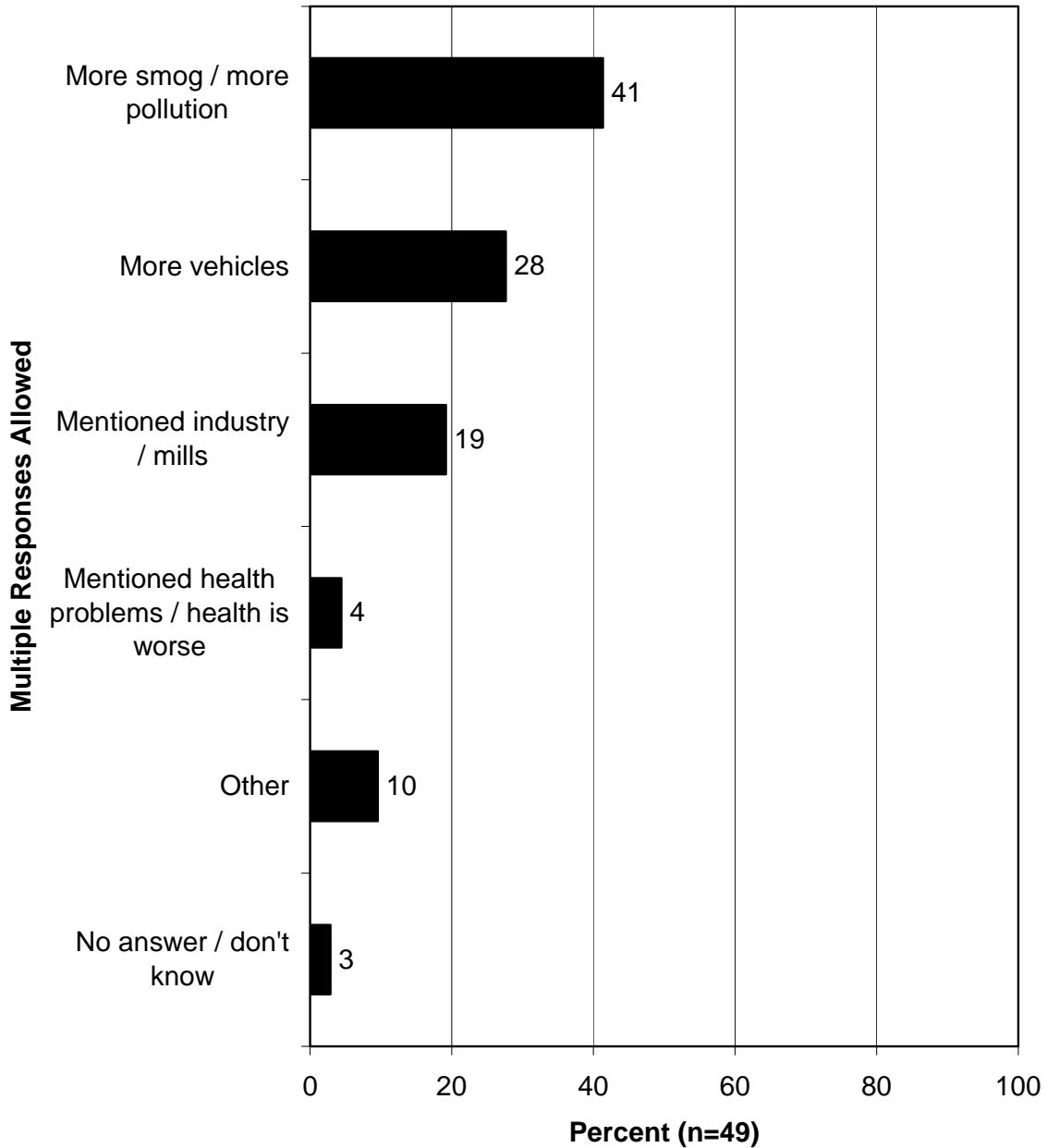




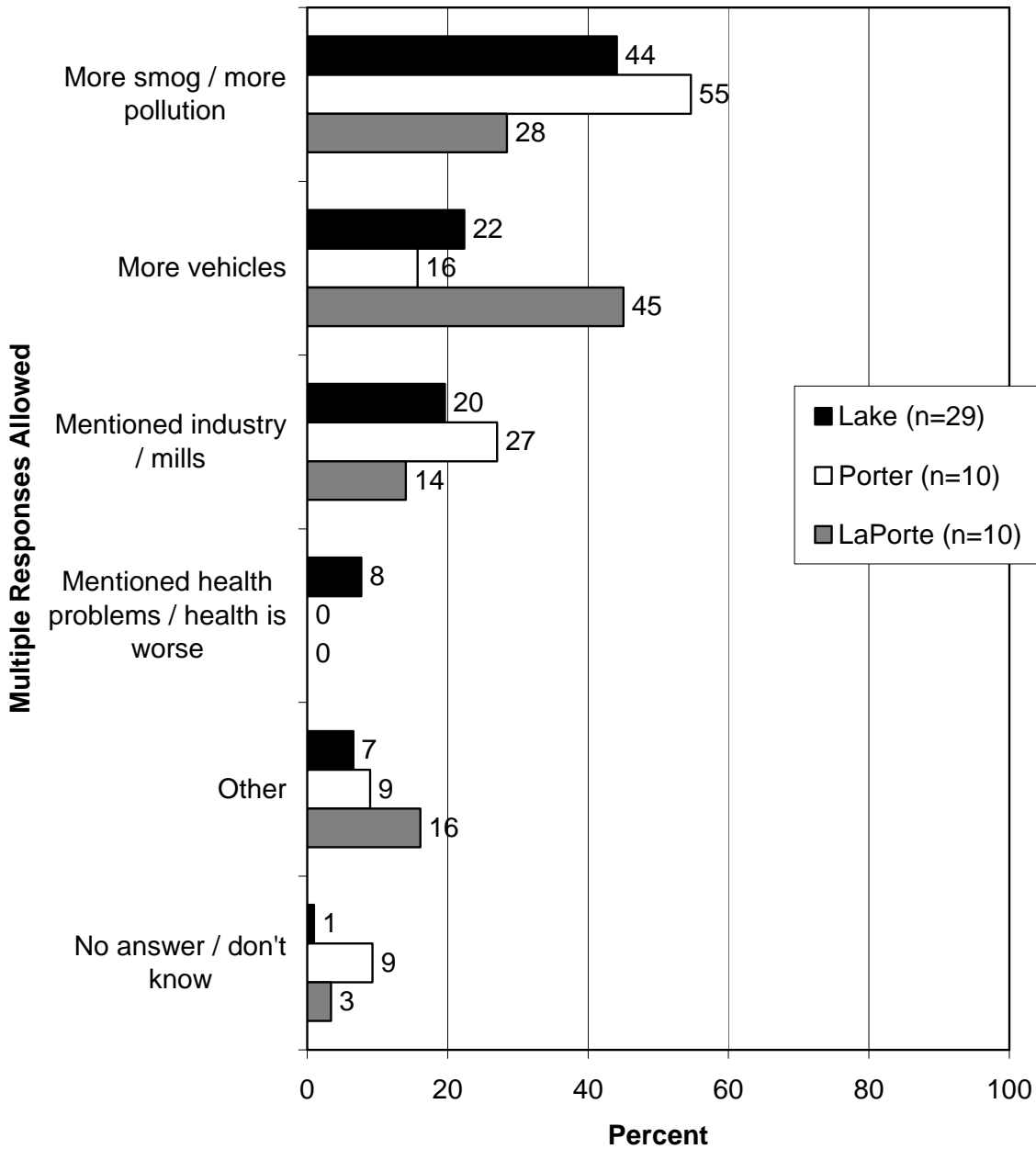
**Q62. In what ways do you feel the air quality has improved over the years? (Asked of those who rated air quality better now than compared to 10 years, 5 years, or a year ago.)**



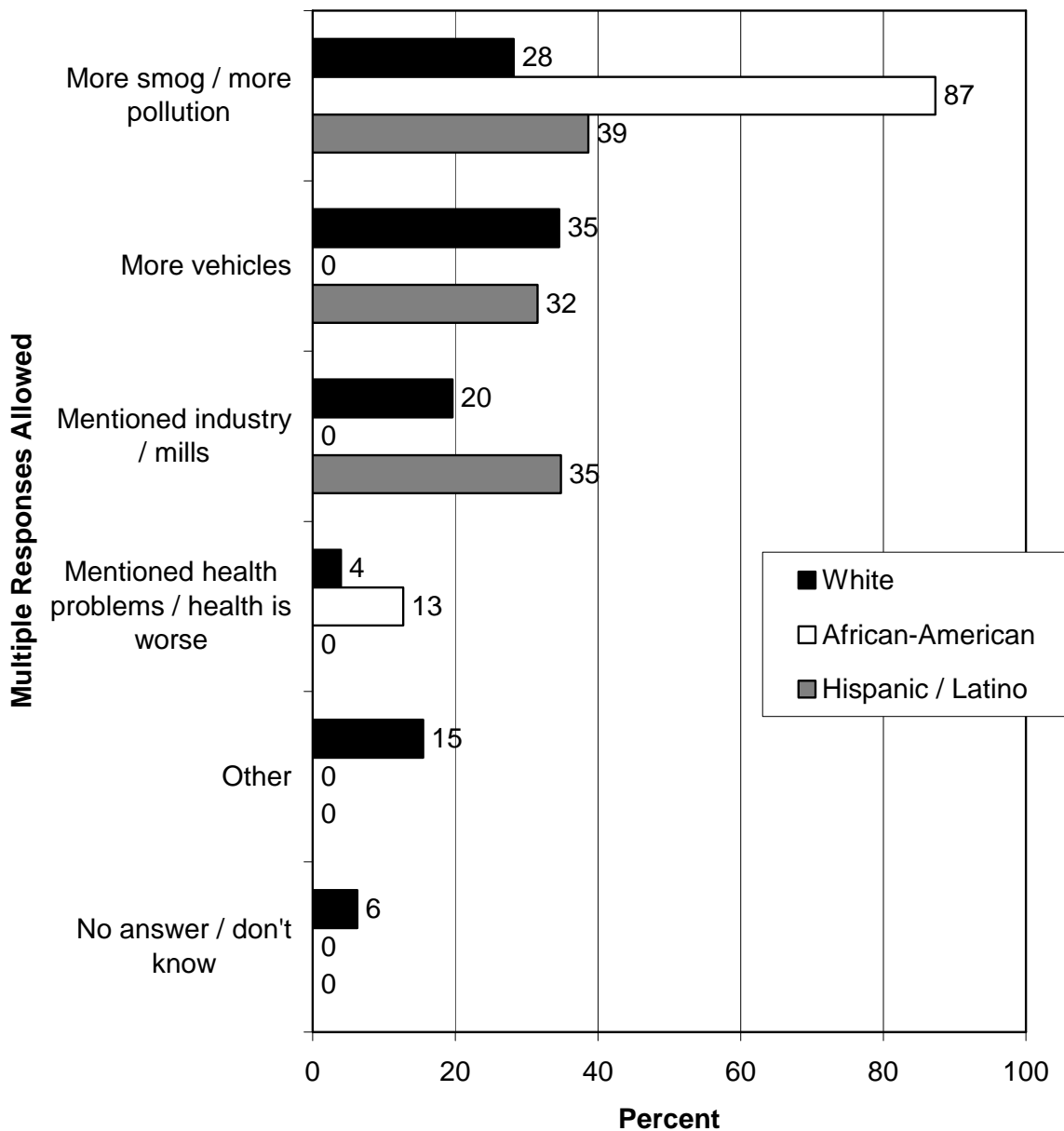
**Q64. In what ways do you feel the air quality has gotten worse over the years? (Asked of those who rated air quality worse now than compared to 10 years, 5 years, or a year ago.)**



**Q64. In what ways do you feel the air quality has gotten worse over the years? (Asked of those who rated air quality worse now than compared to 10 years, 5 years, or a year ago.)**



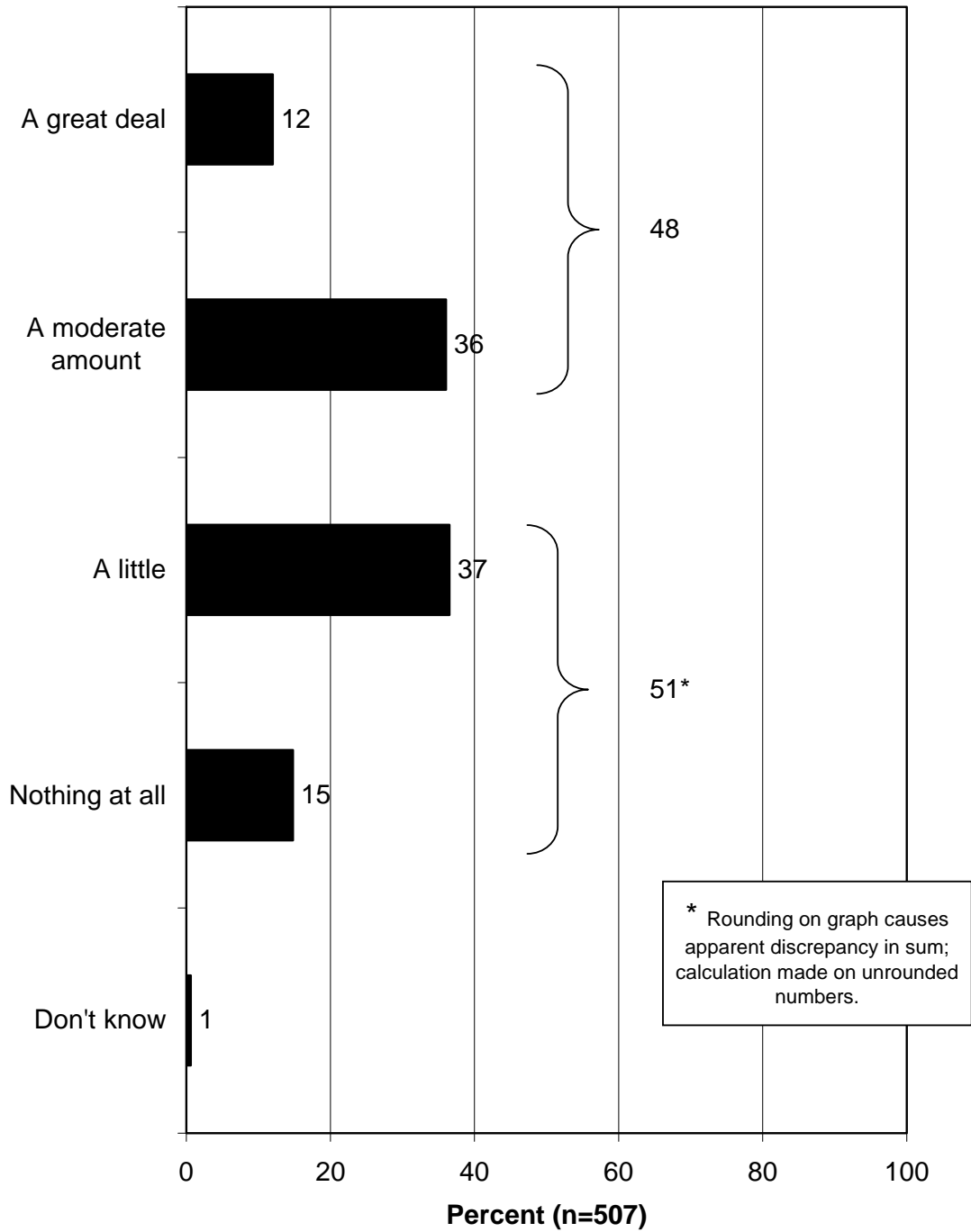
**Q64. In what ways do you feel the air quality has gotten worse over the years? (Asked of those who rated air quality worse now than compared to 10 years, 5 years, or a year ago.)**



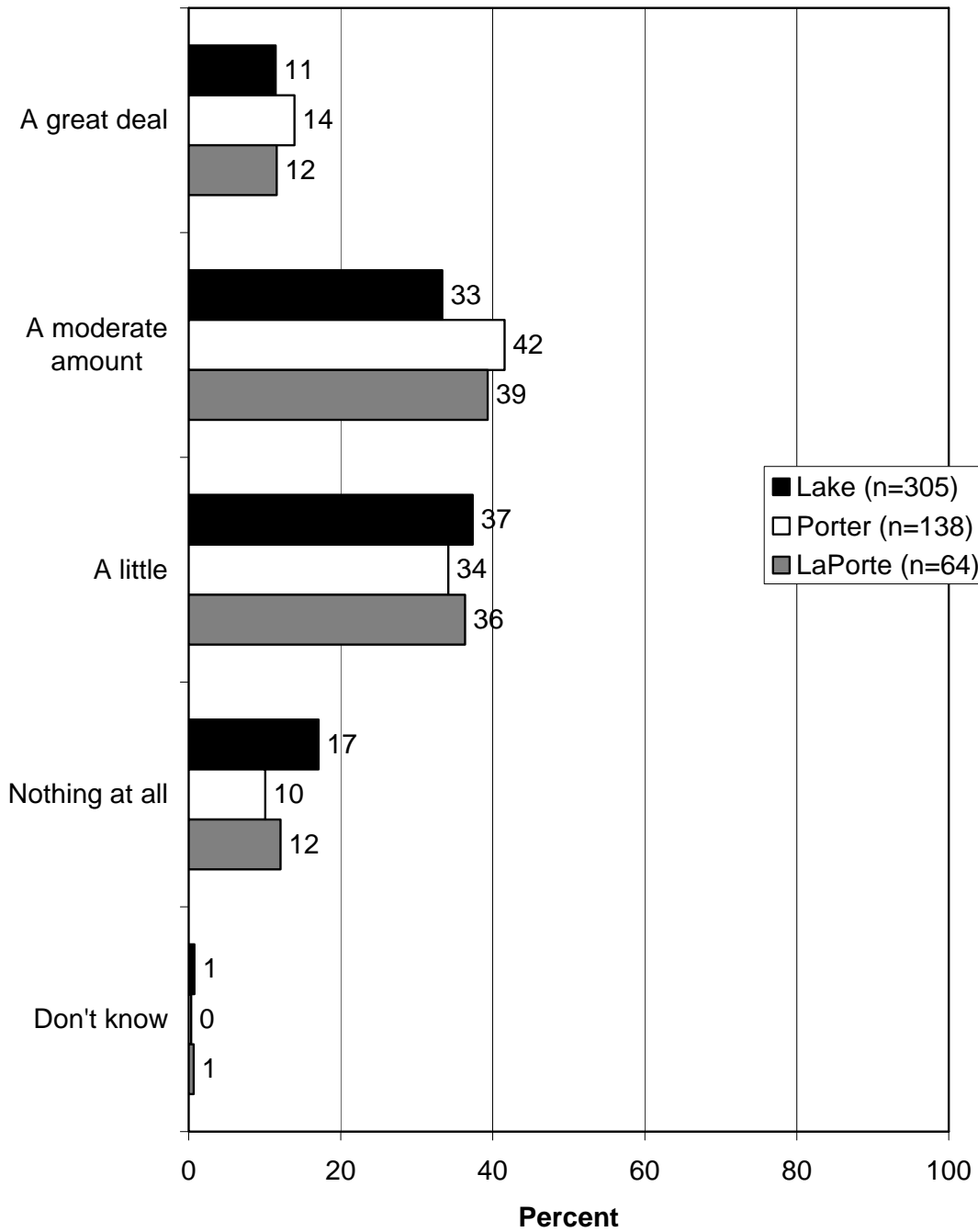
## **KNOWLEDGE OF AND INFORMATION ON AIR QUALITY IN NORTHWEST INDIANA**

- In a self-assessment, residents were about evenly divided between those who said they know *a great deal or moderate amount* about air quality in Northwest Indiana (48%) and those who said they know *a little or nothing at all* (51%).
  - Crosstabulations show that the groups most likely to indicate they know *a great deal or moderate amount* about air quality are those 55 or older (66% of this group gave this response), those who do not have a frequent or daily commute (61%), and Porter County residents (56%).
  - Conversely, the groups most likely to indicate they know *a little or nothing at all* about air quality are Hispanic residents (75%), African-American residents (70%), and residents 18-34 years old (70%).
  
- Residents were asked, in an open-ended question, where they get their information on local air quality issues. The top responses were newspapers (39% stated this), television (30%), and websites (24%).
  - Responses were similar when residents were asked to name the single best way to reach them with local air quality information: 21% stated newspapers, 18% stated television, and 17% stated email.
  
- Most residents (96%) have not observed billboards in the area with ads or information about air quality; only 4% said they have seen such billboards. Also, most of that small group who had seen the billboards said that they did not actively seek out more information after seeing the billboard.

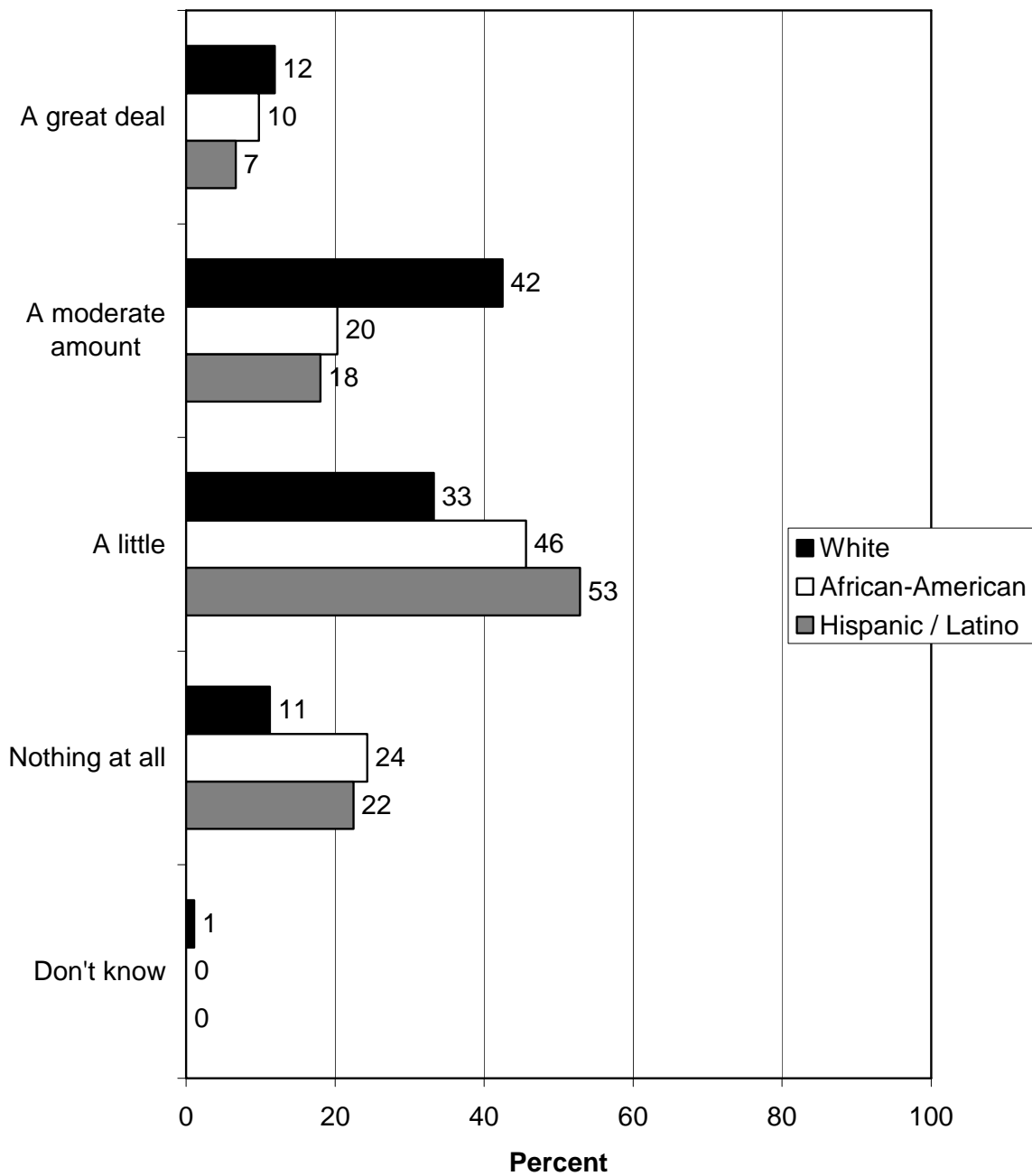
**Q55. How much would you say you know about air quality in Northwest Indiana?**



### Q55. How much would you say you know about air quality in Northwest Indiana?

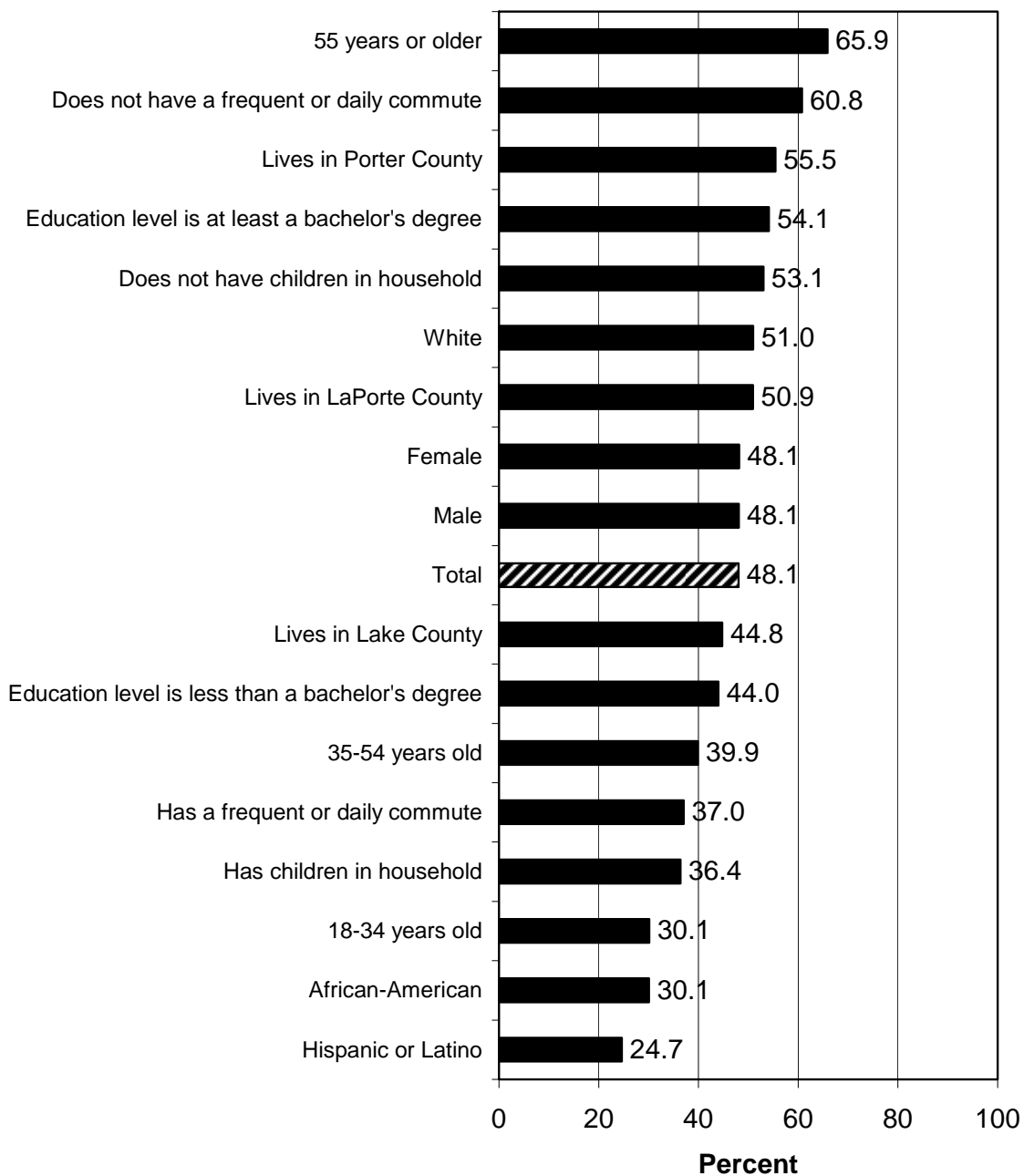


**Q55. How much would you say you know about air quality in Northwest Indiana?**

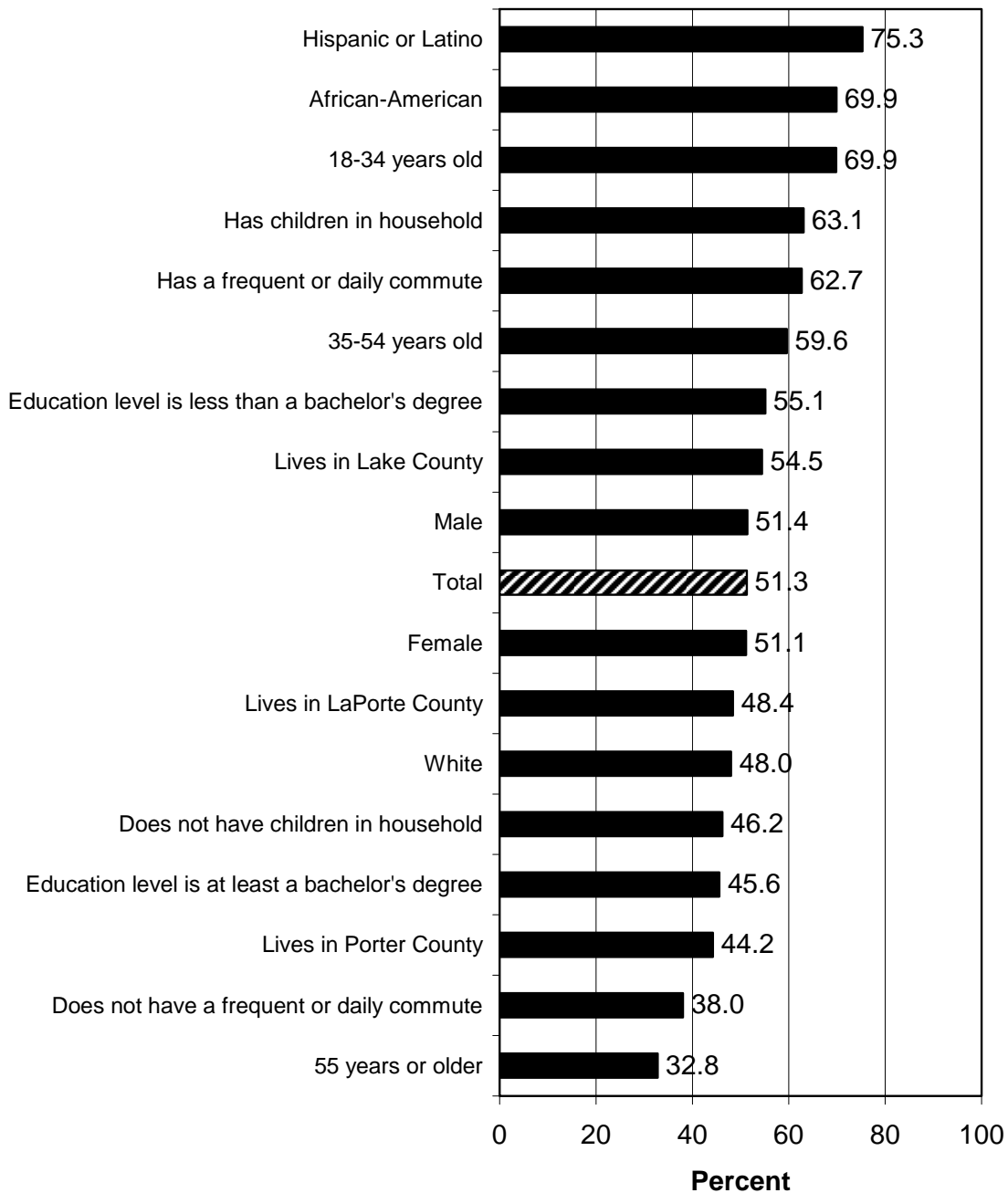




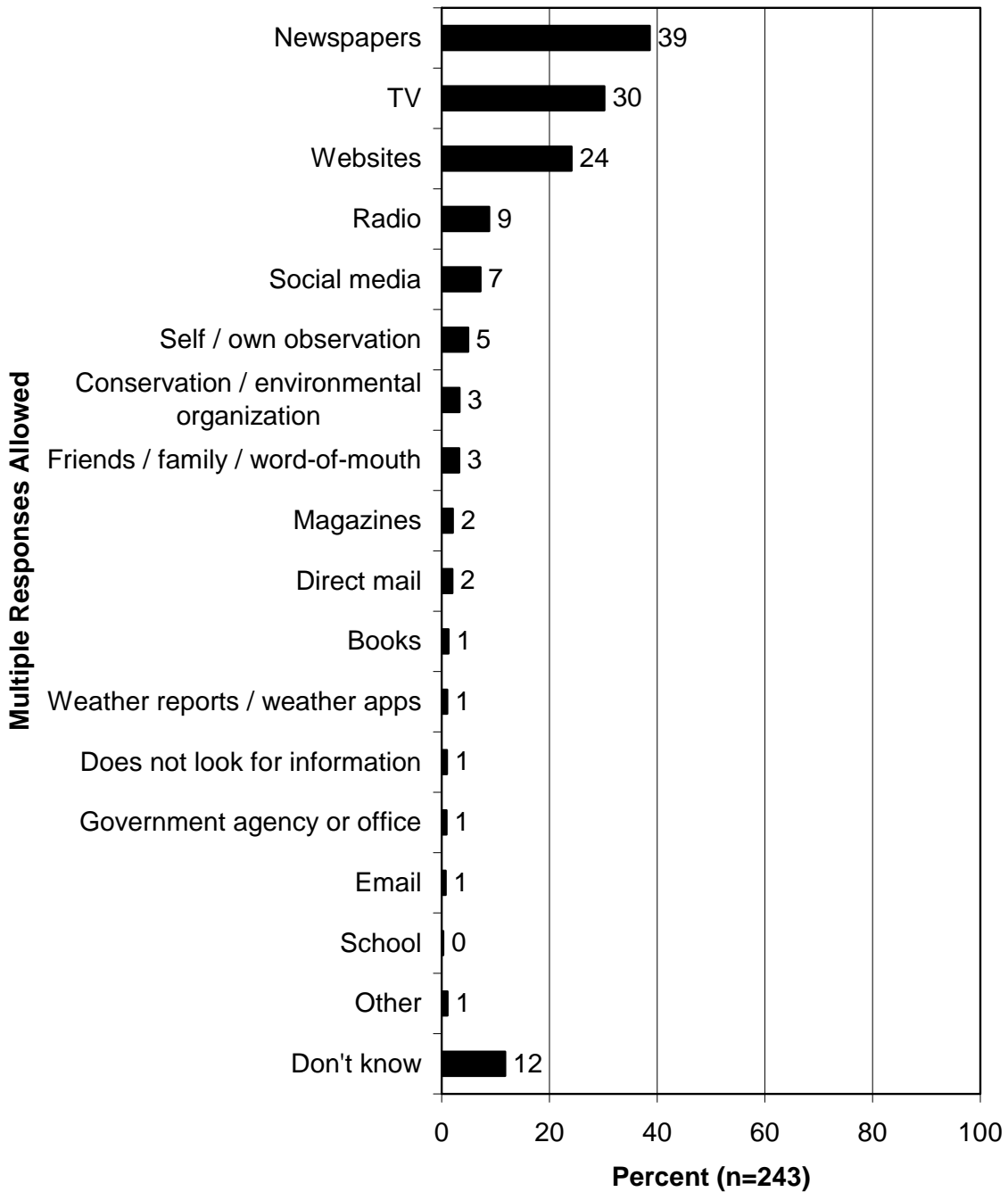
**Percent of each of the following groups who indicated knowing a great deal or a moderate amount about air quality in Northwest Indiana:**



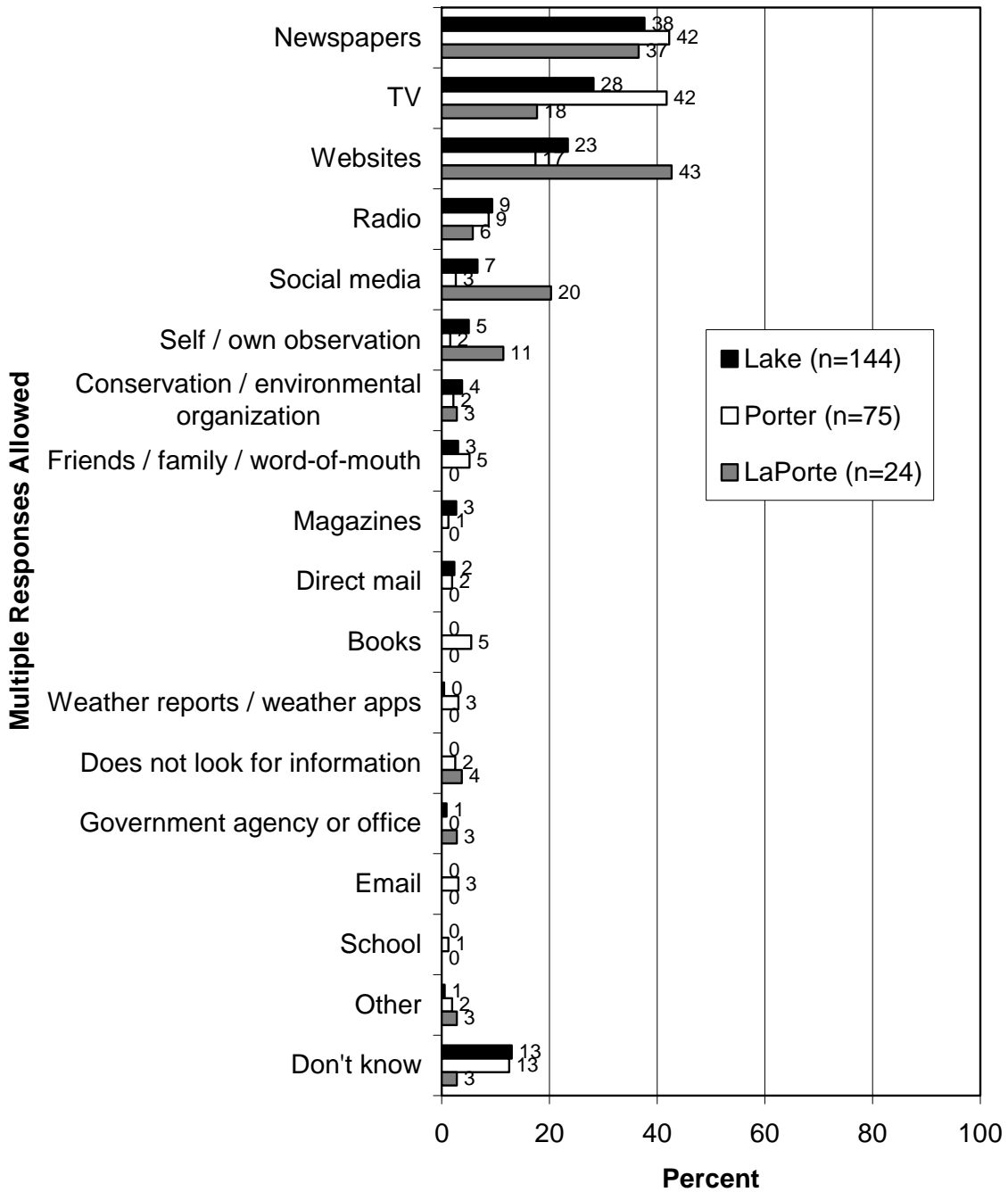
**Percent of each of the following groups who indicated knowing a little or nothing at all about air quality in Northwest Indiana:**



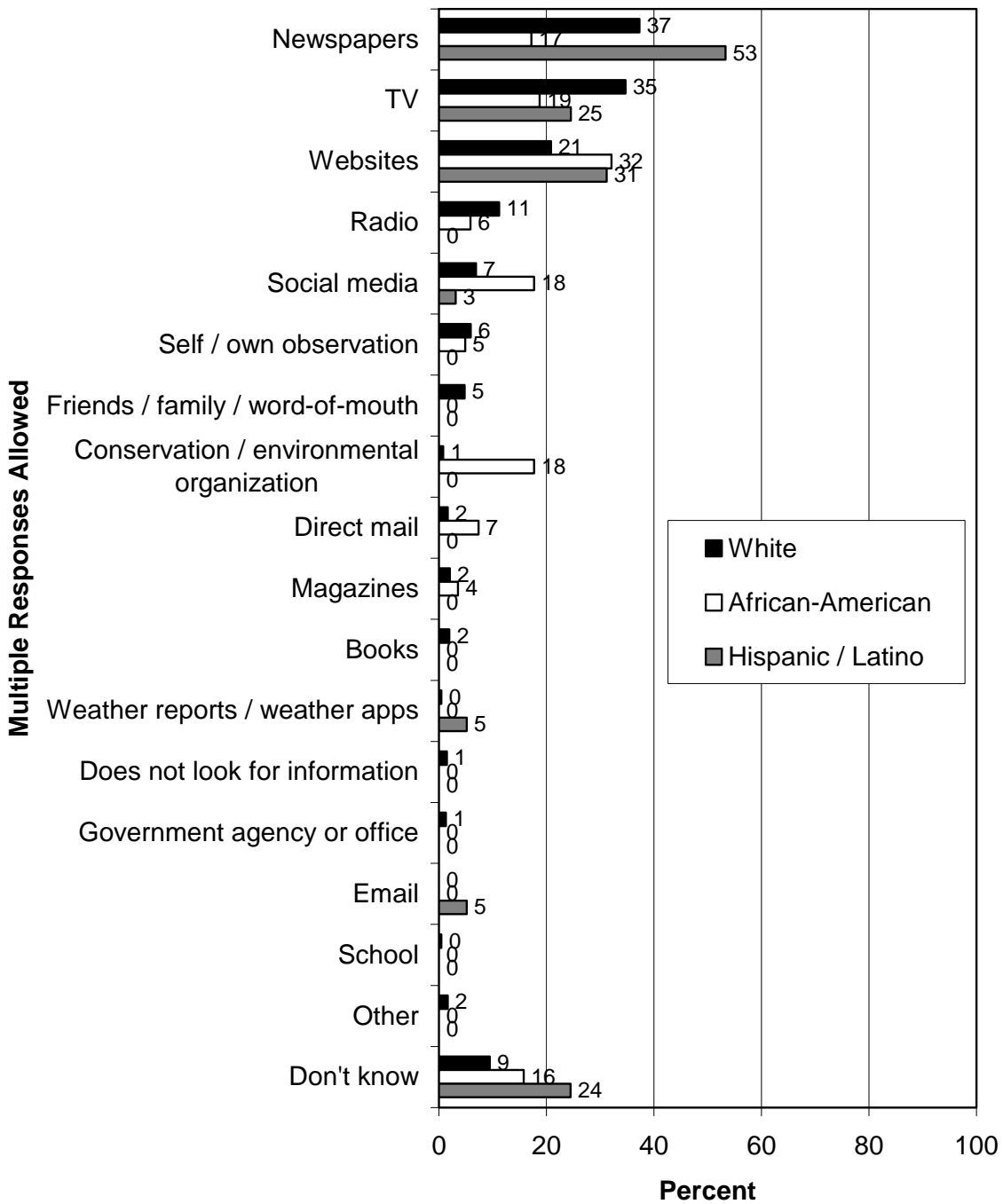
**Q81. In general, where do you get your information  
on local air quality issues?**



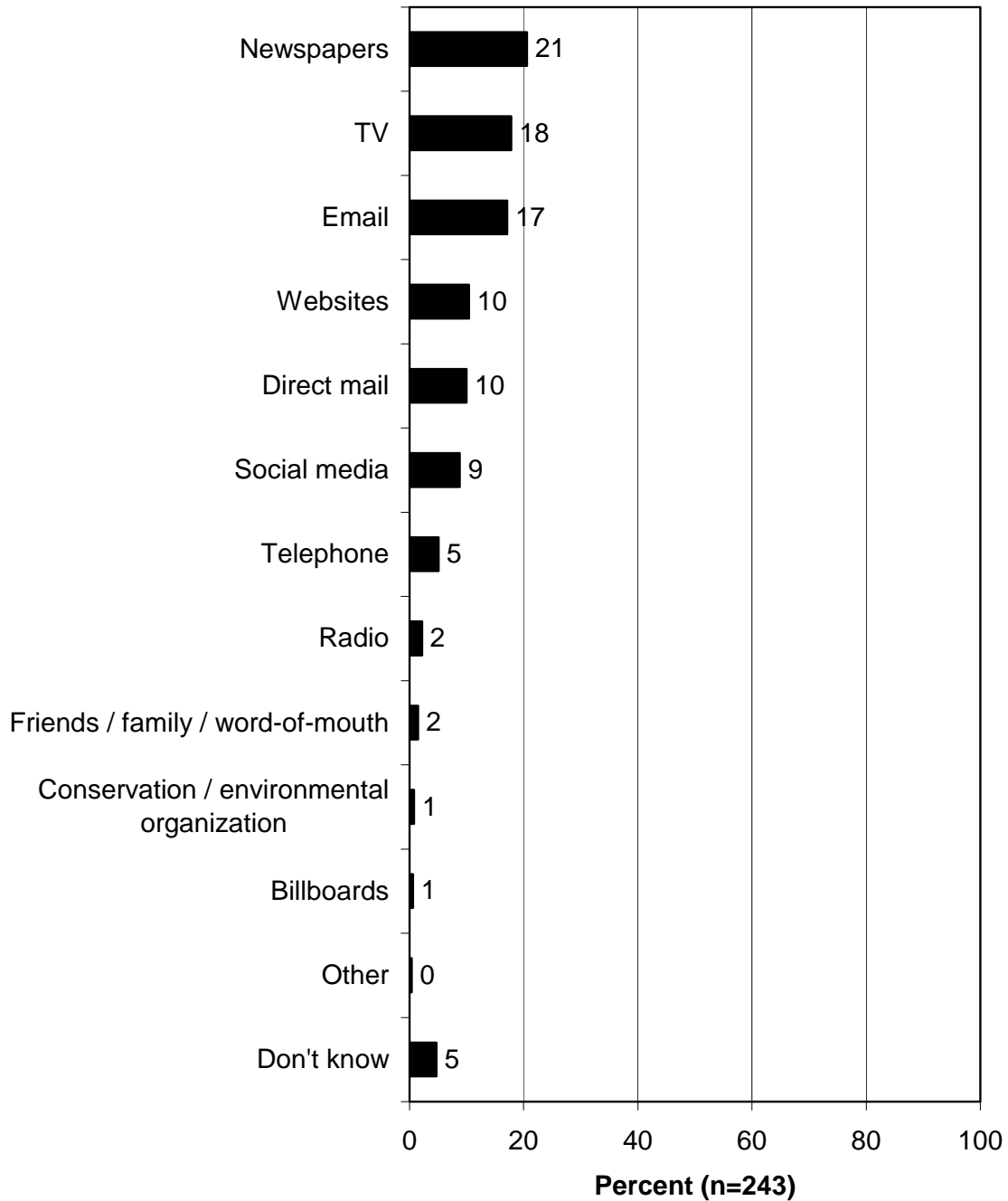
### Q81. In general, where do you get your information on local air quality issues?



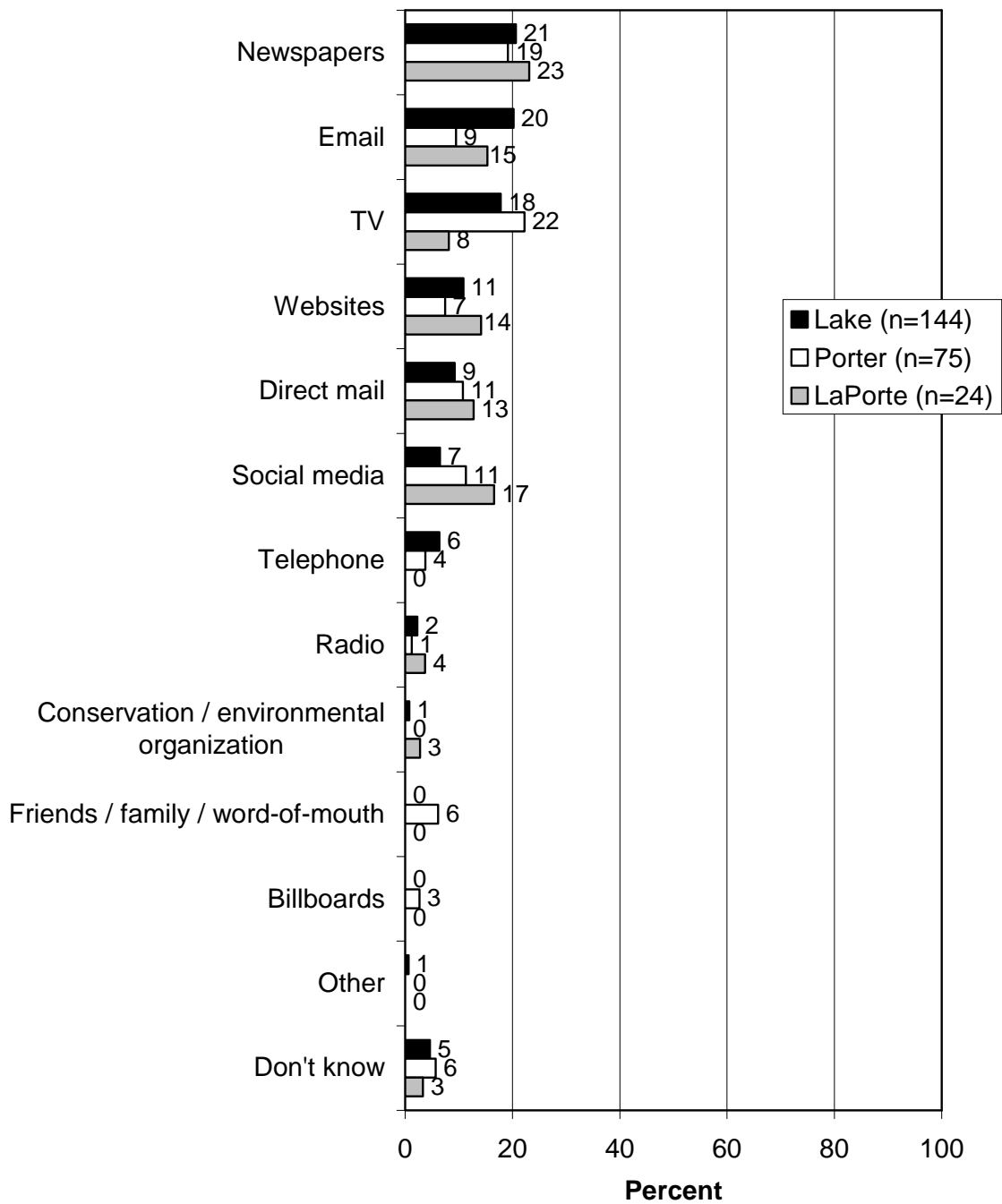
**Q81. In general, where do you get your information on local air quality issues?**



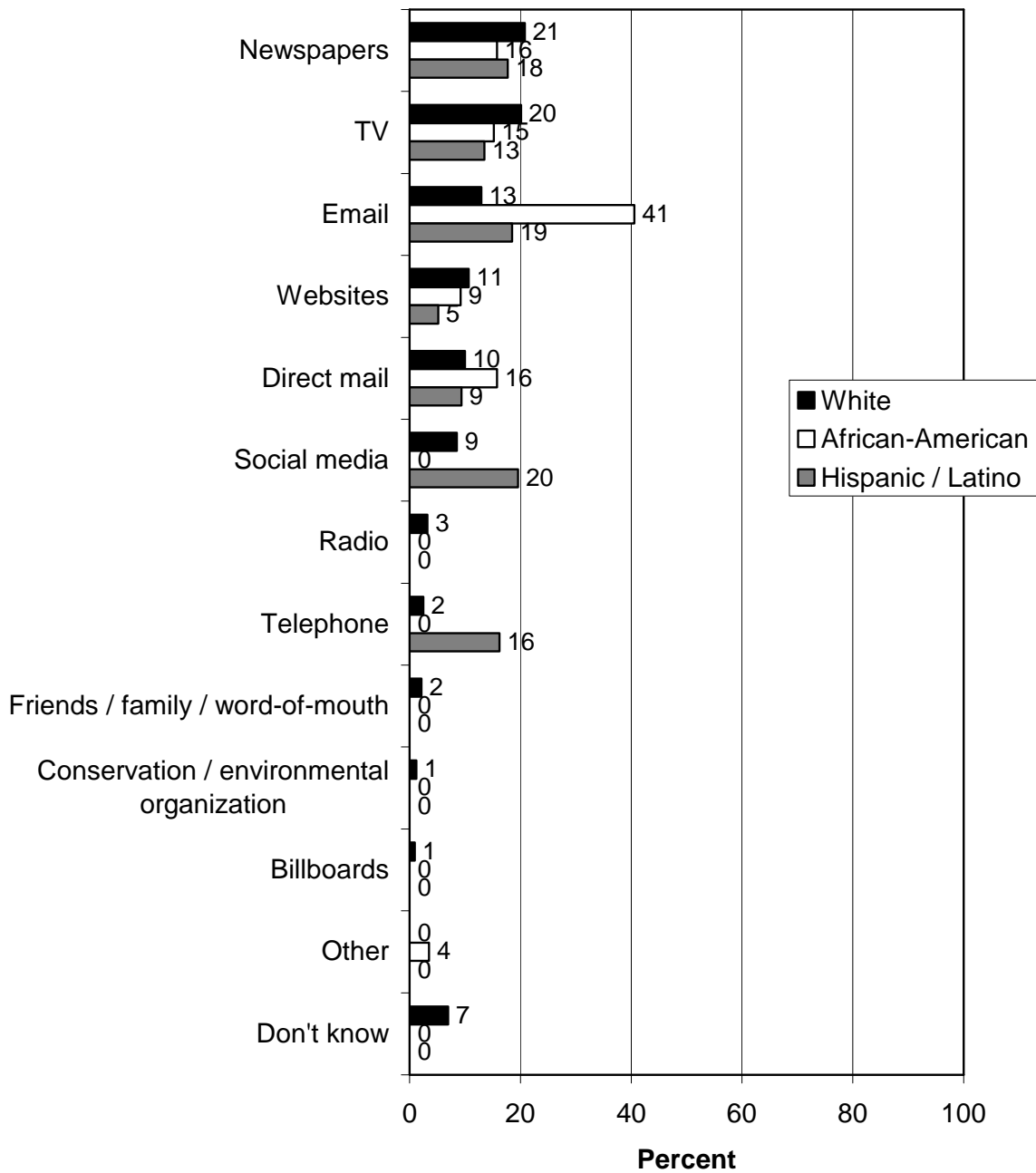
**Q83/Q84. What is the single best way to reach you with information about local air quality issues that you would be likely to read or look at?**



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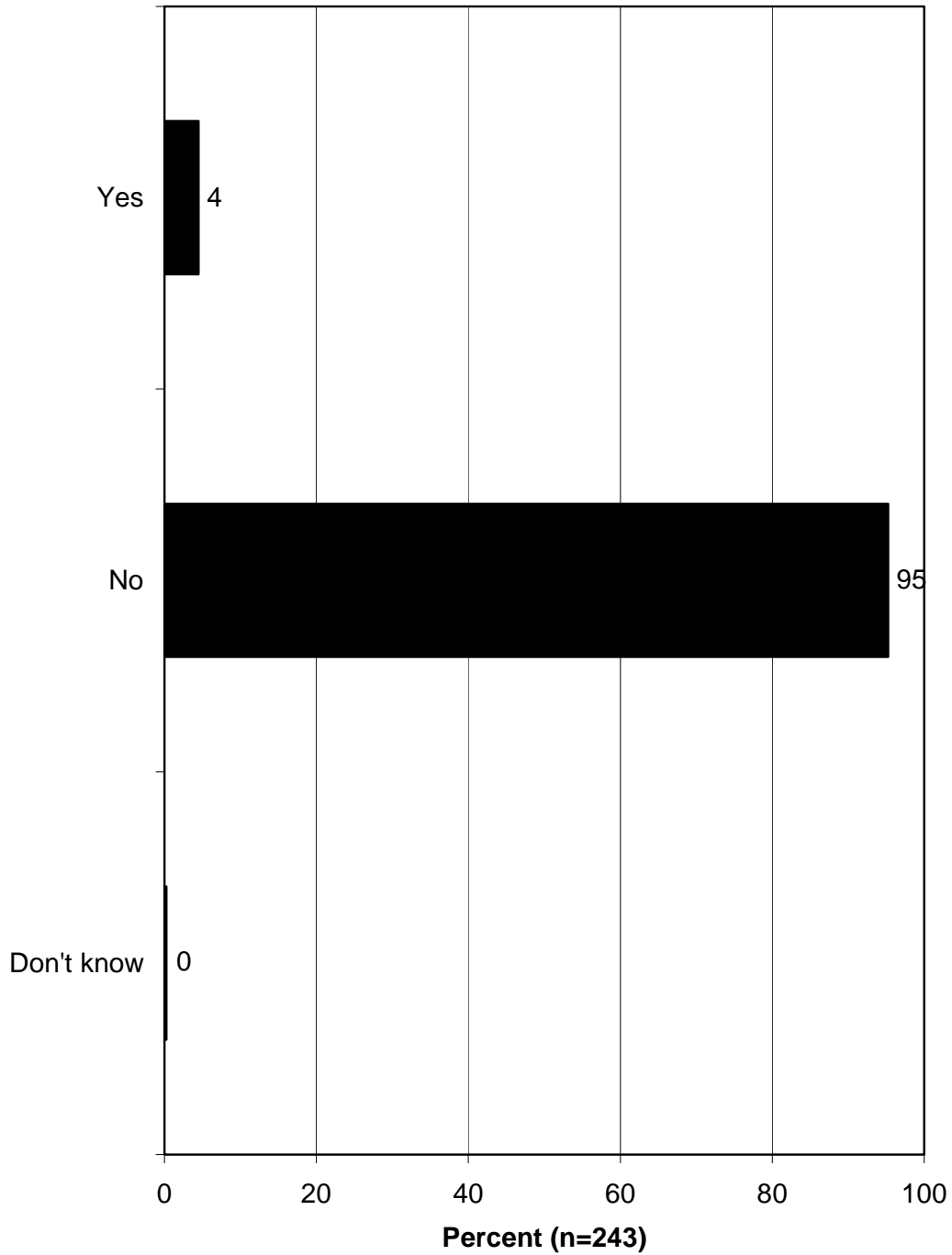


**Q83/Q84. What is the single best way to reach you with information about local air quality issues that you would be likely to read or look at?**

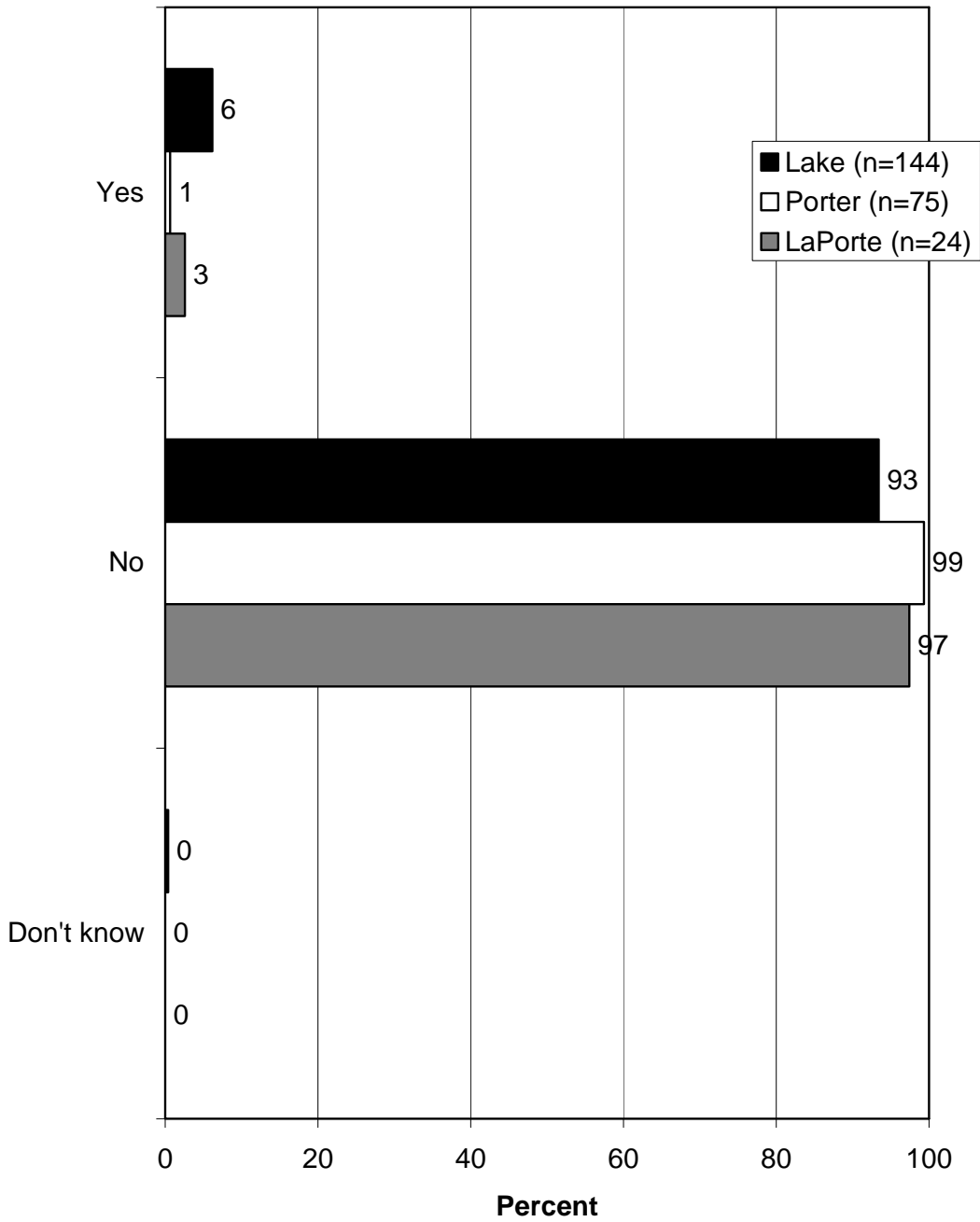




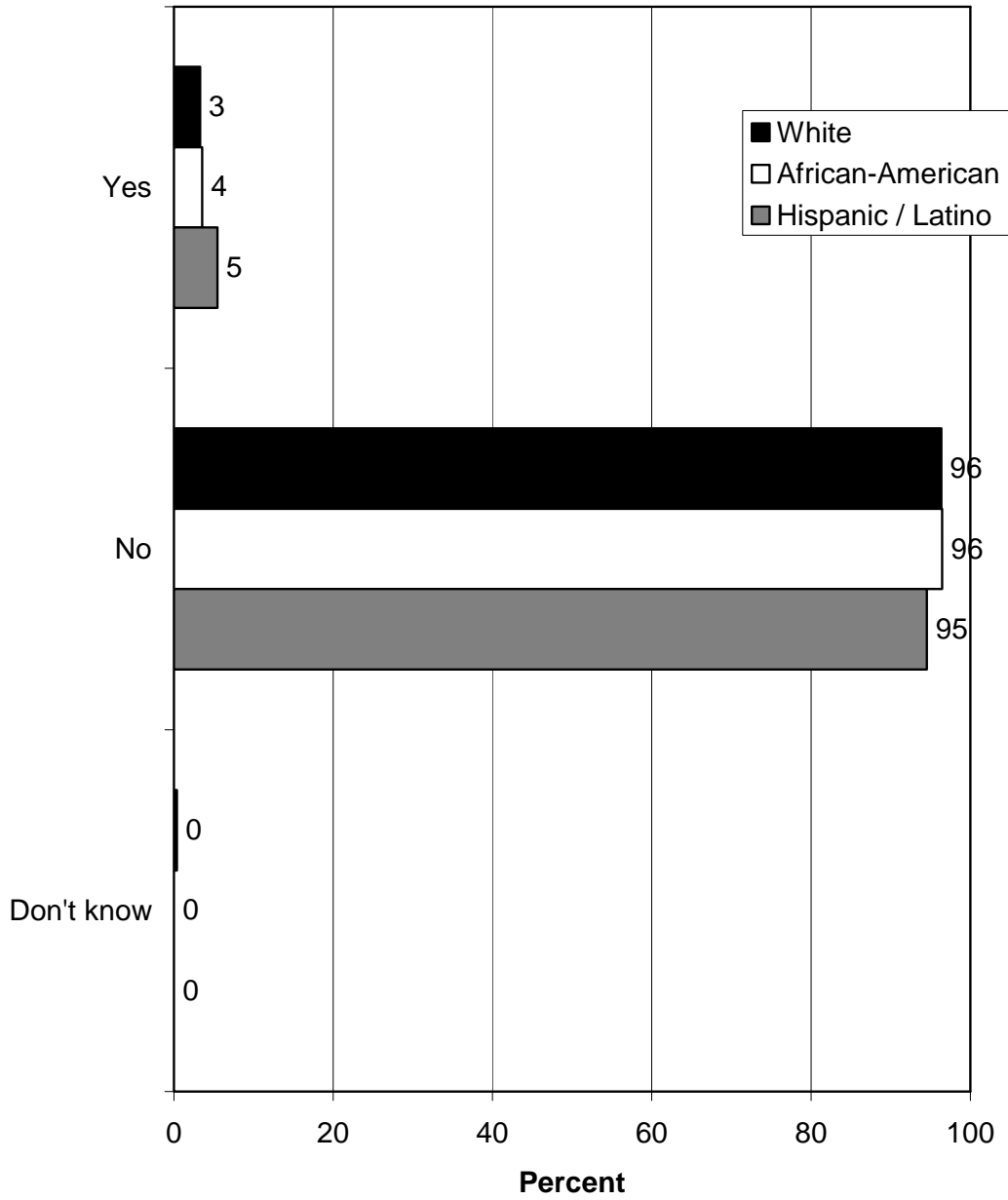
**Q86. Have you noticed any billboards in the area with ads or information about air quality?**



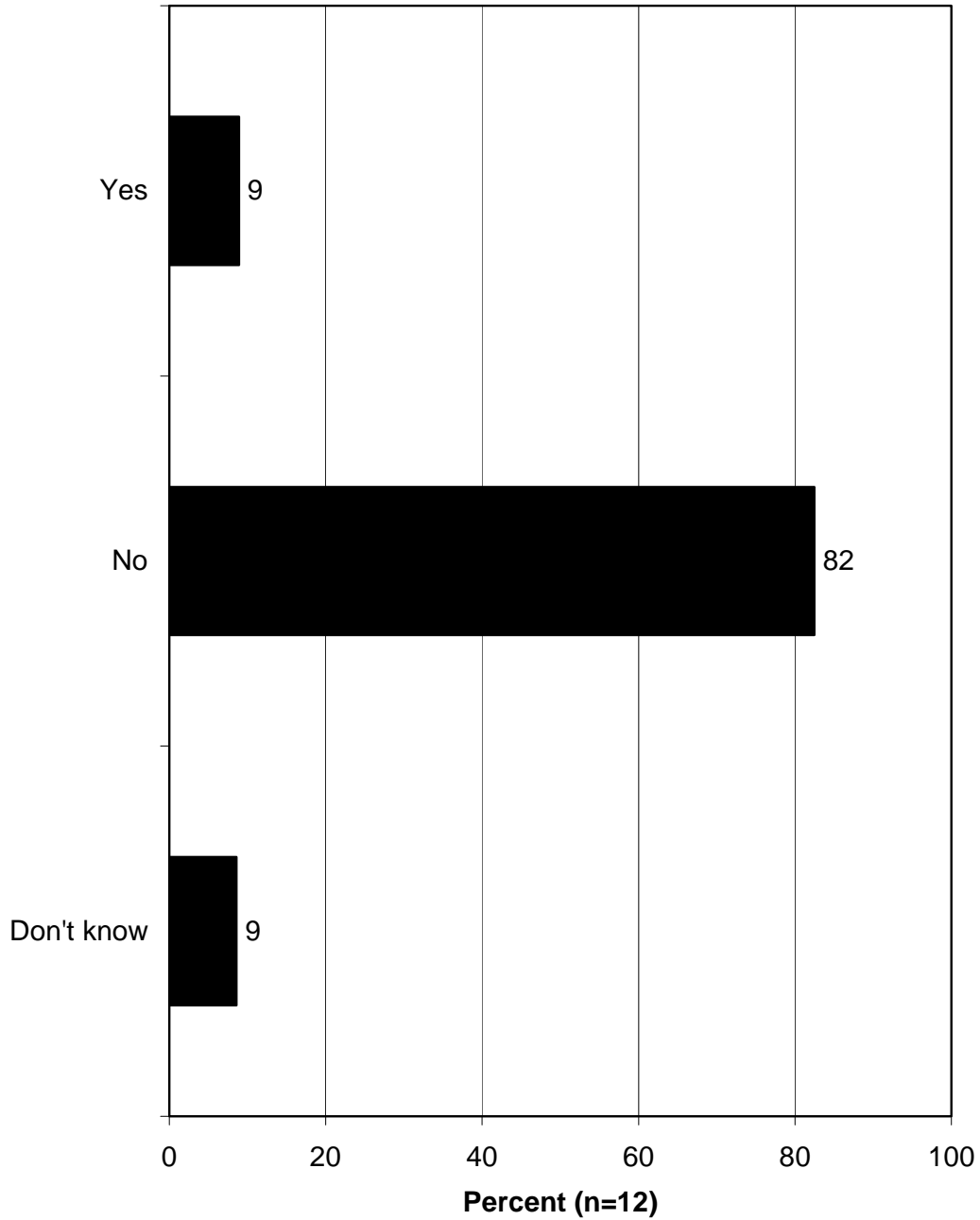
**Q86. Have you noticed any billboards in the area with ads or information about air quality?**



**Q86. Have you noticed any billboards in the area with ads or information about air quality?**



**Q87. Did you actively seek out more information on air quality after seeing the billboard? (Asked of those who noticed billboards with ads or information about air quality.)**



## **AIR QUALITY CAMPAIGNS**

### **Overall**

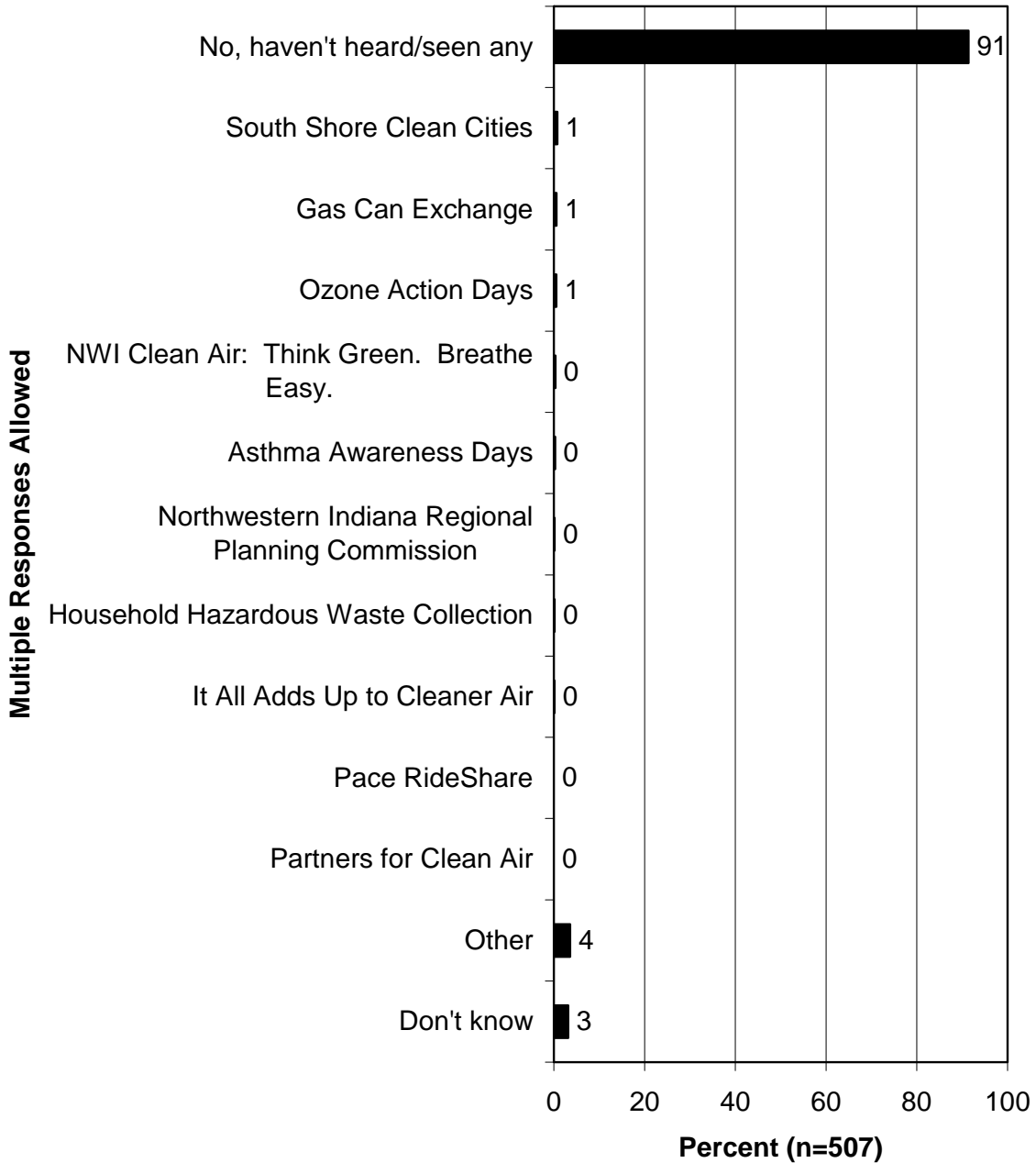
This portion of the survey focused on residents' awareness of and opinions on 10 specific campaigns or initiatives in Northwest Indiana, each with a major or inherent goal of improving local air quality. The campaigns under discussion are:

- Asthma Awareness Days
- Gas Can Exchange
- Household Hazardous Waste Collection
- It All Adds Up to Cleaner Air
- Northwestern Indiana Regional Planning Commission (NIRPC)
- NWI Clean Air: Think Green. Breathe Easy.
- Ozone Action Days
- Pace RideShare
- Partners for Clean Air
- South Shore Clean Cities

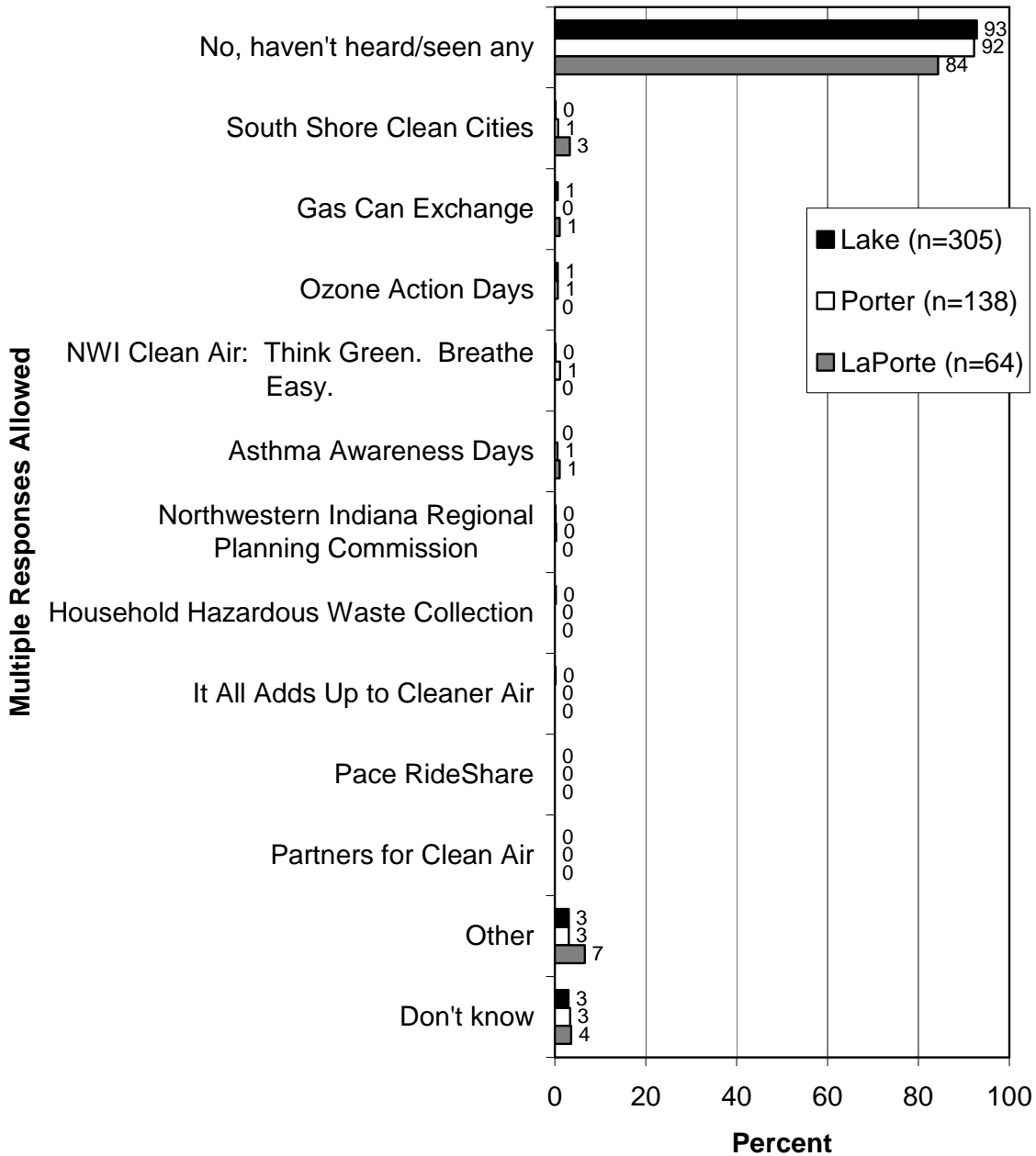
- Residents were first asked, in an open-ended question, if they had seen or could name any campaigns or initiatives in Northwest Indiana that promote actions or programs to improve air quality. Most (91%) could not; none of the subject campaigns were named by over 1% of residents.
  - Shown in this section is a GIS map of Northwest Indiana illustrating the distribution of knowledge within the region for this survey question.
- When residents were read the names of the campaigns, however, recognition was substantial.
  - Two campaigns had awareness or recognition by a majority of residents: Household Hazardous Waste Collection (55% of residents were aware of this) and Ozone Action Days (51%).
  - At the next tier of awareness were NIRPC (35%) and Pace RideShare (33%). (Note that NWI Clean Air falls into this tier, with 26% of residents being aware of it.)
  - The least known campaigns were It All Adds Up to Cleaner Air (14%) and South Shore Clean Cities (15%).
  - A trend graph is shown comparing awareness of the eight campaigns that could be matched with the 2012 study. In all cases awareness has decreased, with the largest decrease occurring for Ozone Action Days (63% aware in 2012; 51% aware in 2017).

- Interestingly, the campaigns with the lowest levels of awareness had the highest mean ratings of effectiveness. Residents were asked to rate the effectiveness of each campaign (if they indicated they had heard of the campaign) on air quality education in Northwest Indiana, on a scale of 0 to 10, with 0 being not at all effective and 10 being extremely effective.
  - It All Adds Up to Cleaner Air was the top campaign with a mean rating of 8.0, followed by South Shore Clean Cities (7.3).
  - The trend graph shows a comparison of high ratings of effectiveness (10, 9, or 8) between the 2012 and 2017 studies. There was a major increase in high ratings for It All Adds Up (37% in 2012; 66% in 2017) and a sizable increase for the NIRPC (31% to 43%). On the other hand, there were decreases for Pace RideShare (32% to 22%) and Asthma Awareness Days (45% to 38%).
  
- The remainder of this section presents results for each of the 10 campaigns. In each case, residents were first asked if they were aware of the campaign. If so, they received follow-up questions asking about the source of their information and asking them to rate the effectiveness of the campaign.
  
- The campaign “NWI Clean Air: Think Green. Breathe Easy.” is of special interest to this survey. Therefore, a few additional questions are asked about this campaign that are not asked about the others. Also, a randomized portion of residents received questions about the other campaigns (to shorten the overall survey length for each respondent), but everyone received the questions about NWI Clean Air.
  - The section on this campaign is presented next, starting on the following page. Afterward, the sections for each campaign are presented in alphabetical order.

**Q92. Have you recently heard about or seen any campaigns or initiatives in Northwest Indiana that promote actions or programs to improve air quality? Can you specifically name any?**

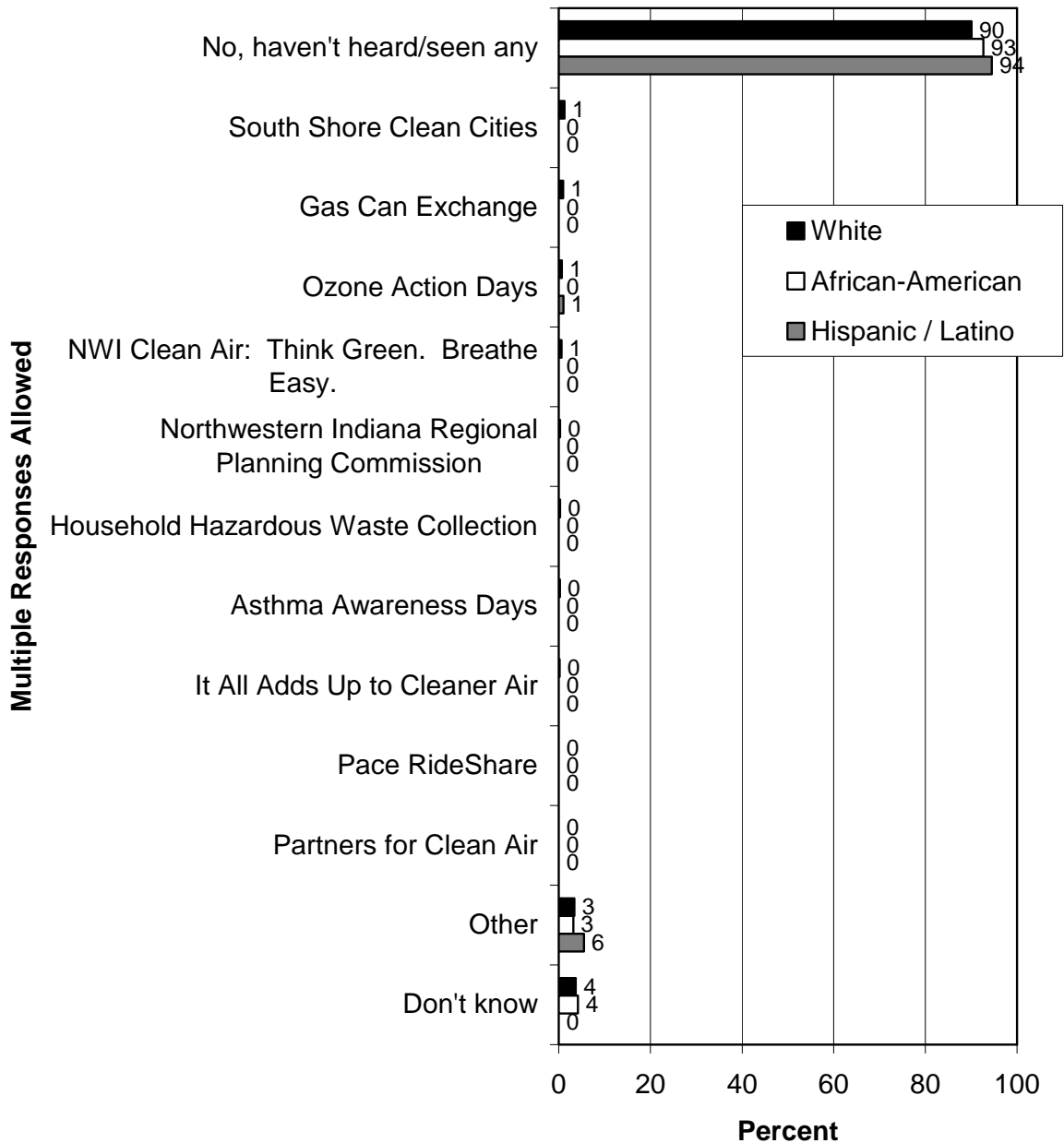


**Q92. Have you recently heard about or seen any campaigns or initiatives in Northwest Indiana that promote actions or programs to improve air quality? Can you specifically name any?**

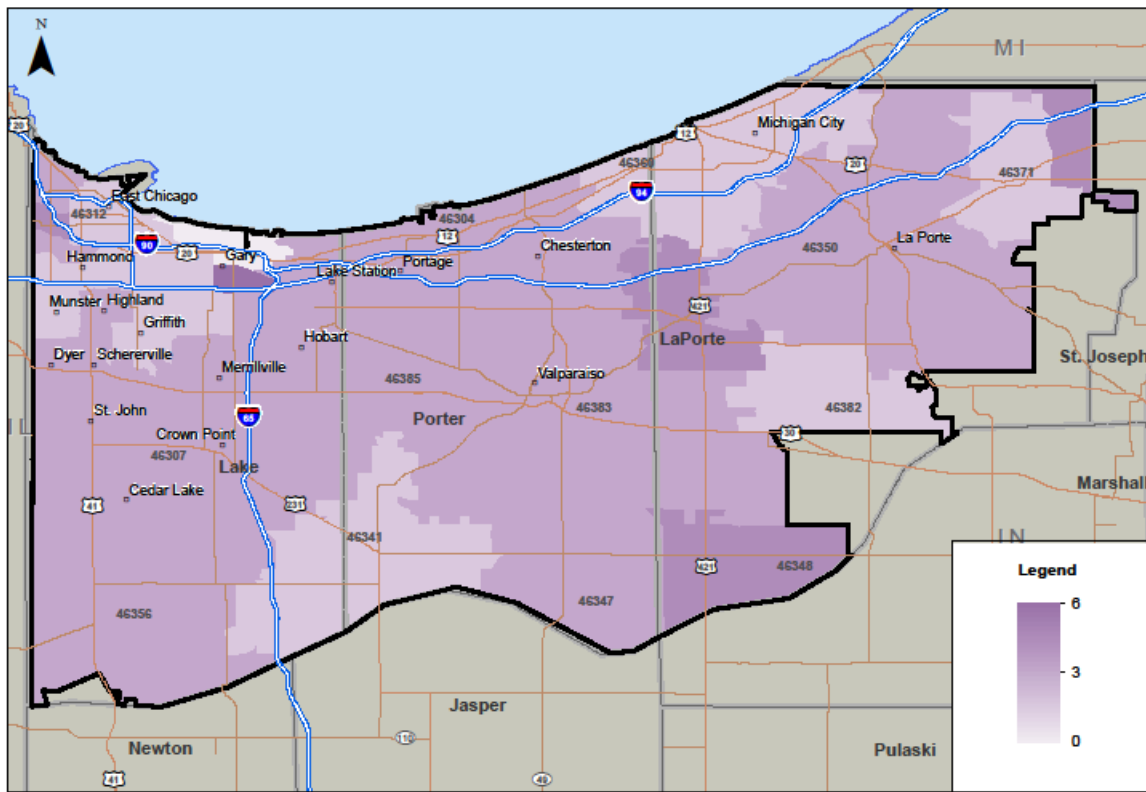




**Q92. Have you recently heard about or seen any campaigns or initiatives in Northwest Indiana that promote actions or programs to improve air quality? Can you specifically name any?**



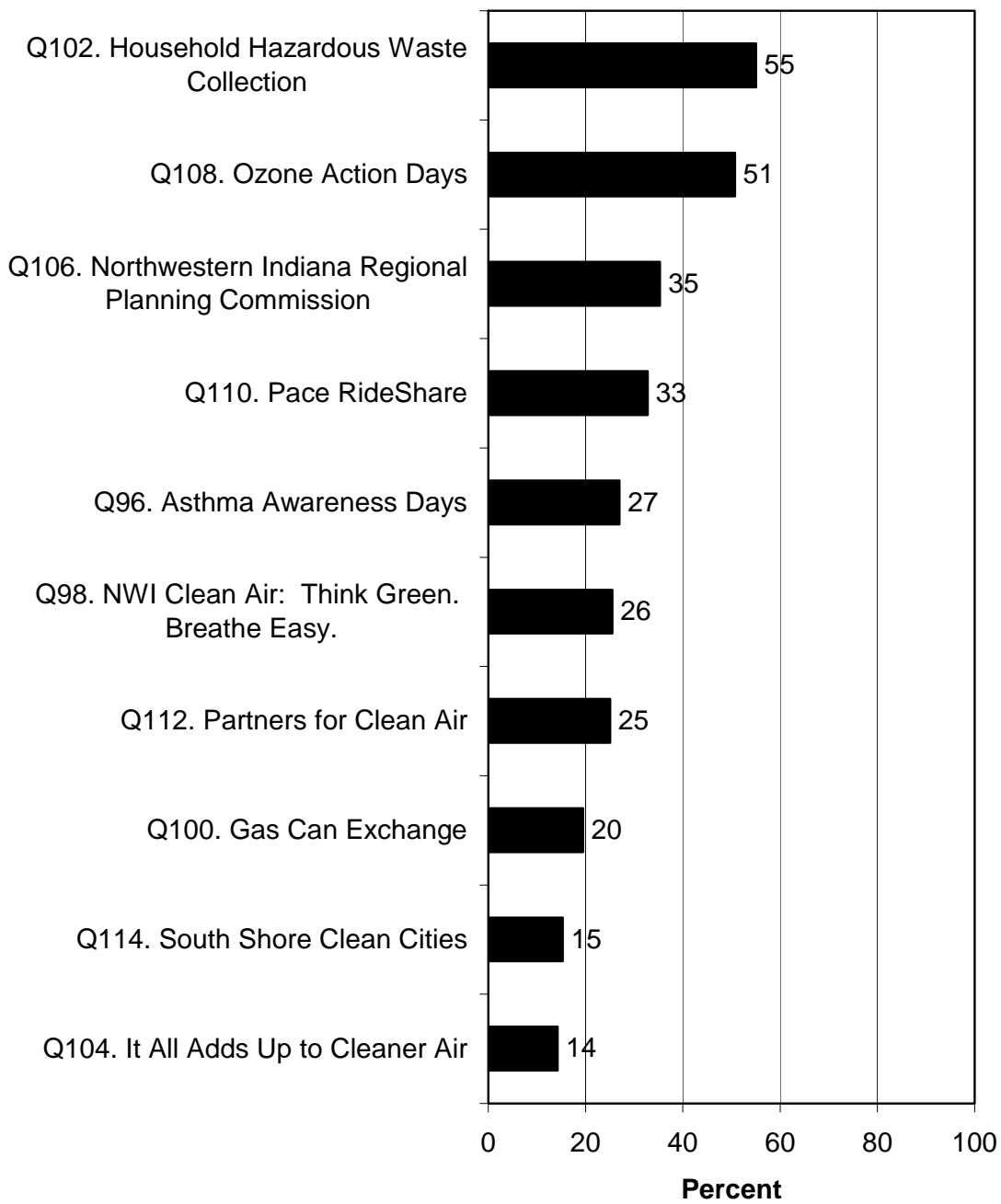
Average number of initiatives aware of (aided awareness).



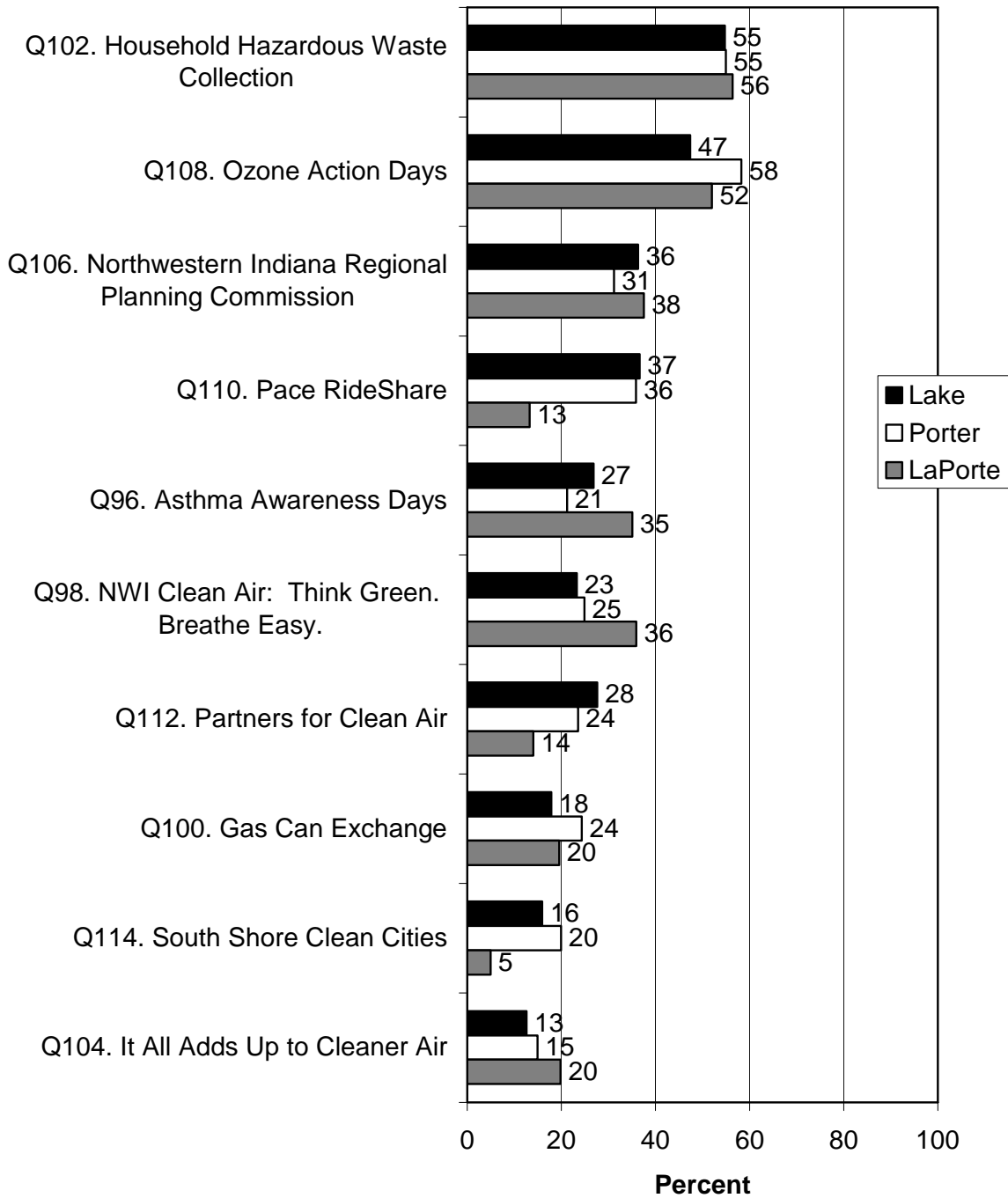
Data collected by  
Responsive  
Management

Q92. Have you recently heard about or seen any campaigns or initiatives in Northwest Indiana that promote actions or programs to improve air quality? Can you specifically name any?

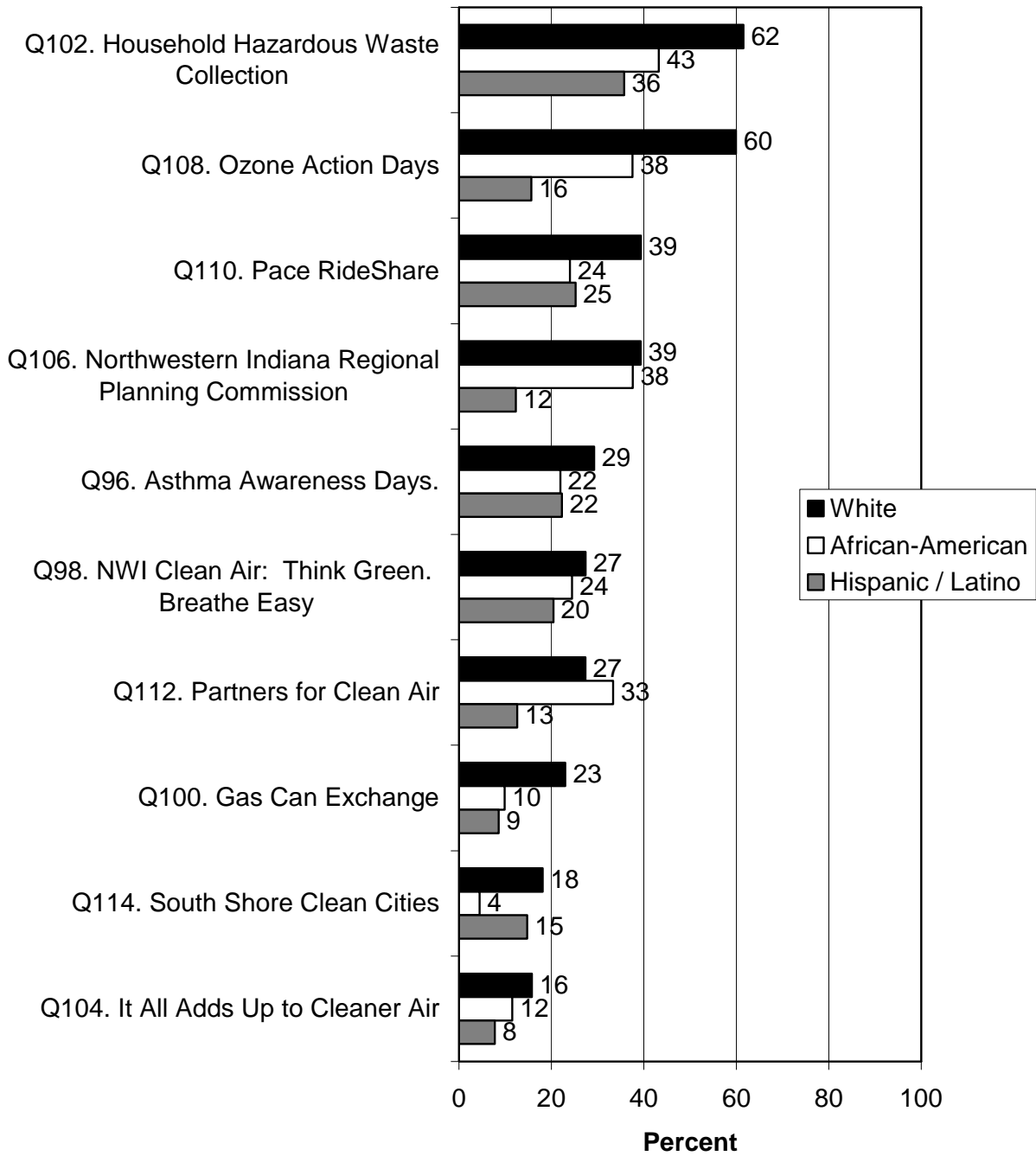
**Percent who were aware, prior to the survey, of the following campaigns after being prompted:**

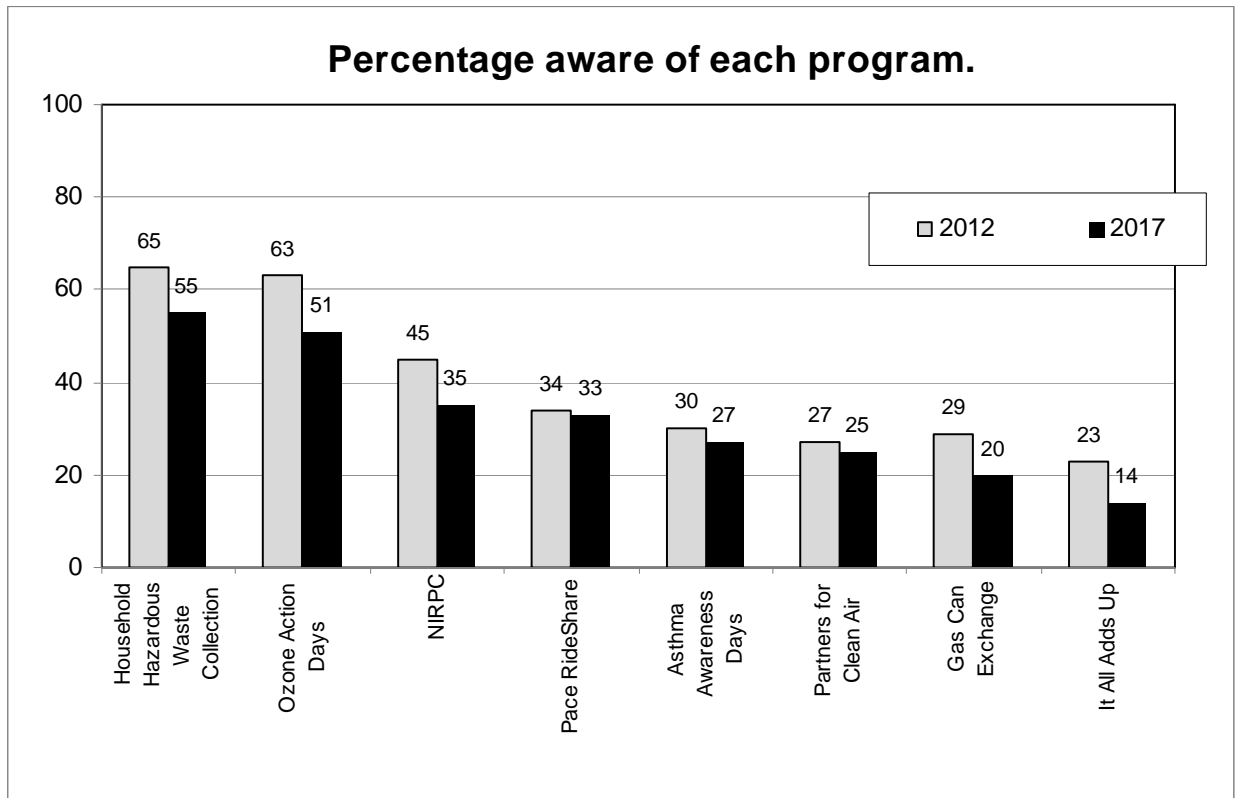


**Percent who were aware, prior to the survey, of the following campaigns after being prompted:**

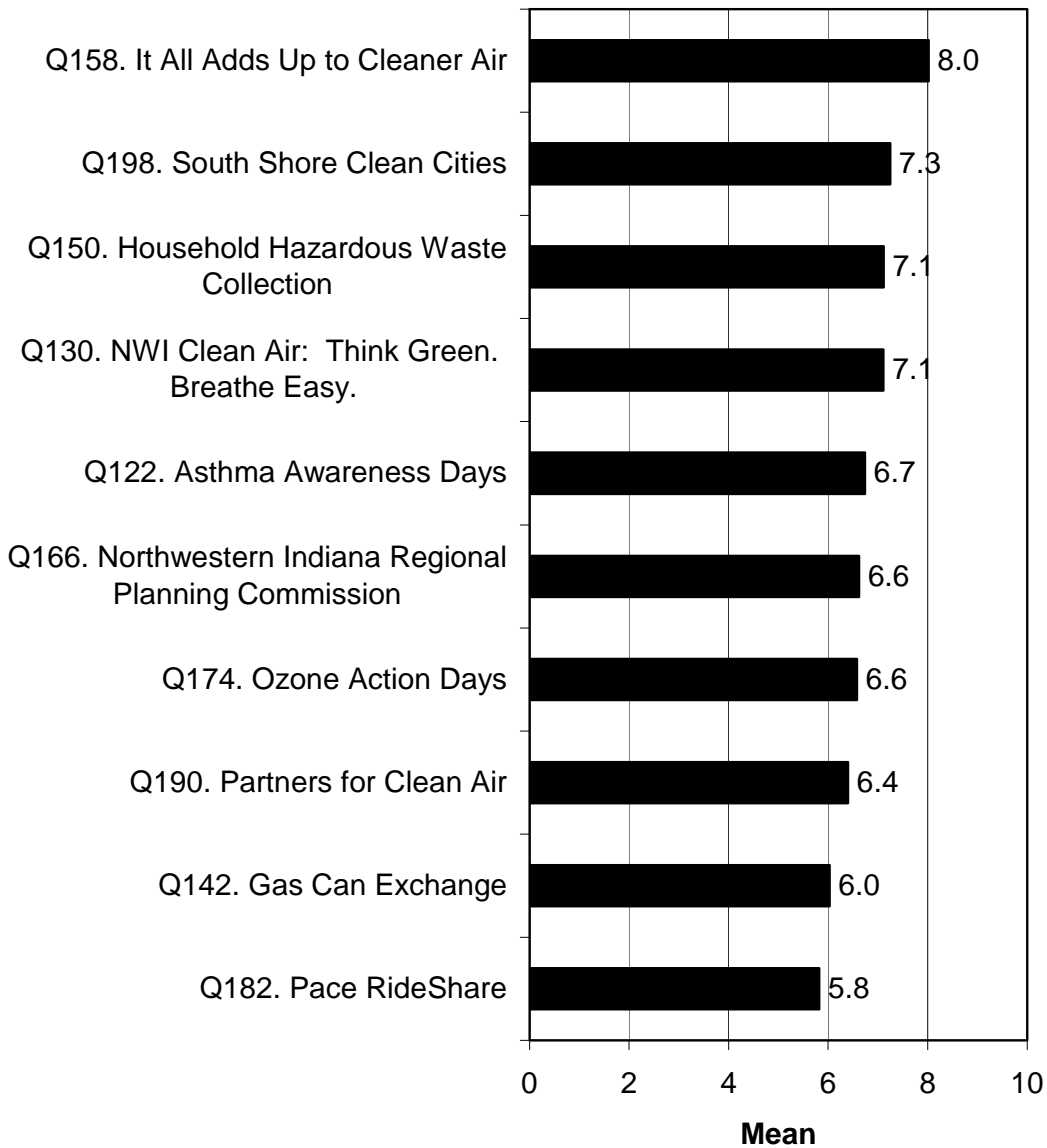


**Percent who were aware, prior to the survey, of the following campaigns after being prompted.**

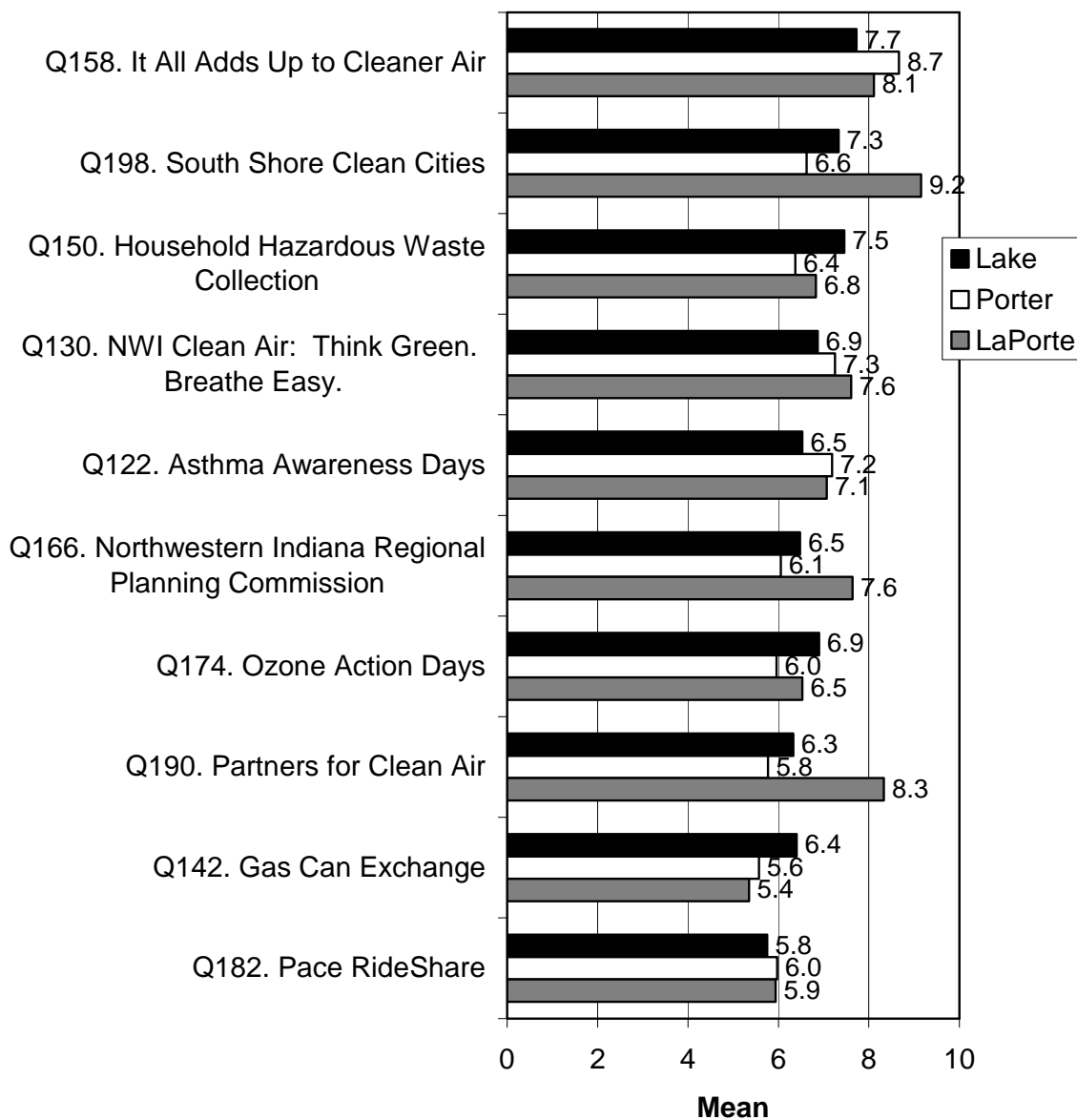




**Mean rating of the perceived effectiveness that the following could have on air quality education in Northwest Indiana, on a scale of 0 to 10, with 0 being not at all effective and 10 being extremely effective:  
(Asked of those aware of the program.)**



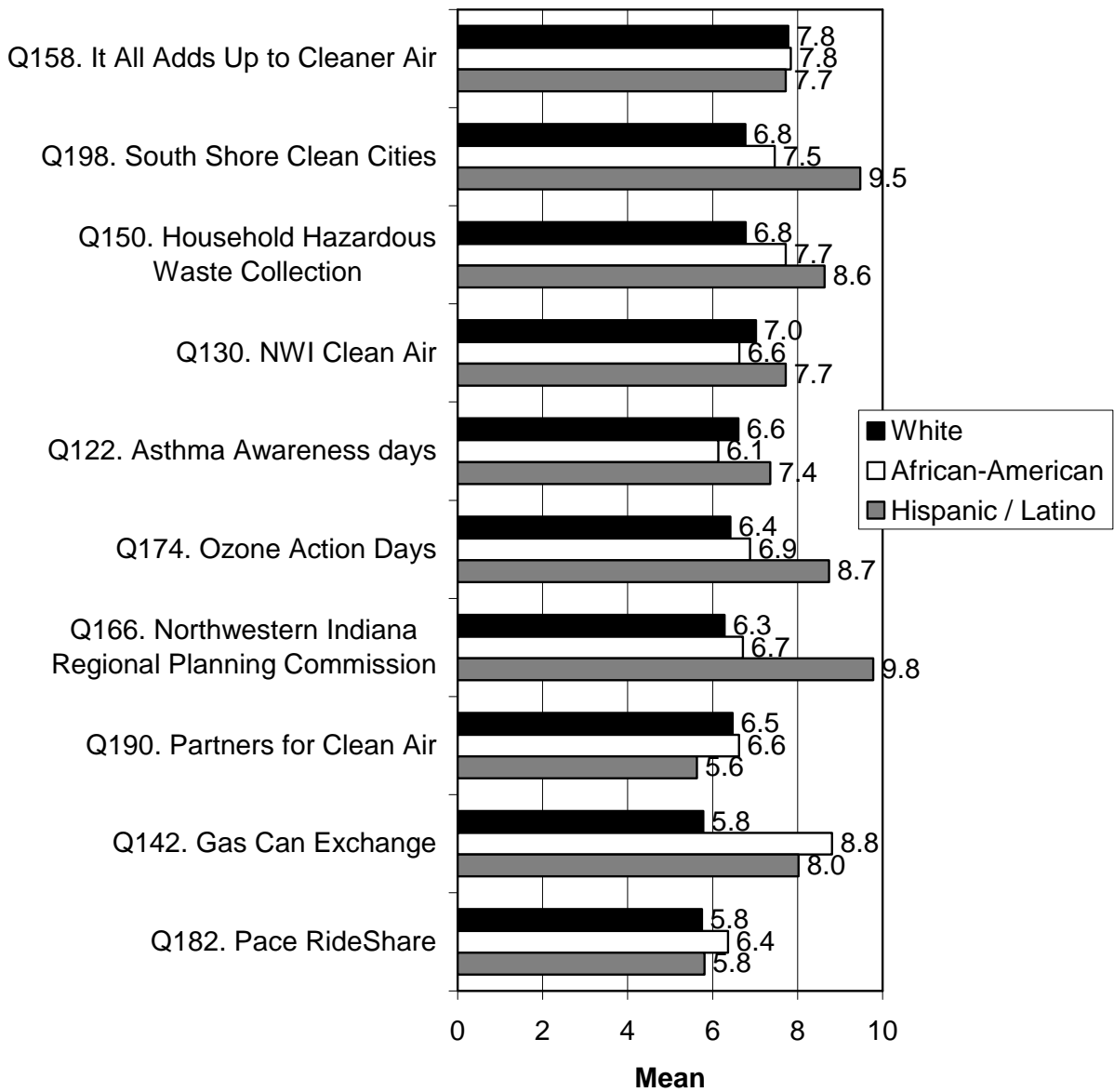
**Mean rating of the perceived effectiveness that the following could have on air quality education in Northwest Indiana, on a scale of 0 to 10, with 0 being not at all effective and 10 being extremely effective:  
(Asked of those aware of the program.)**

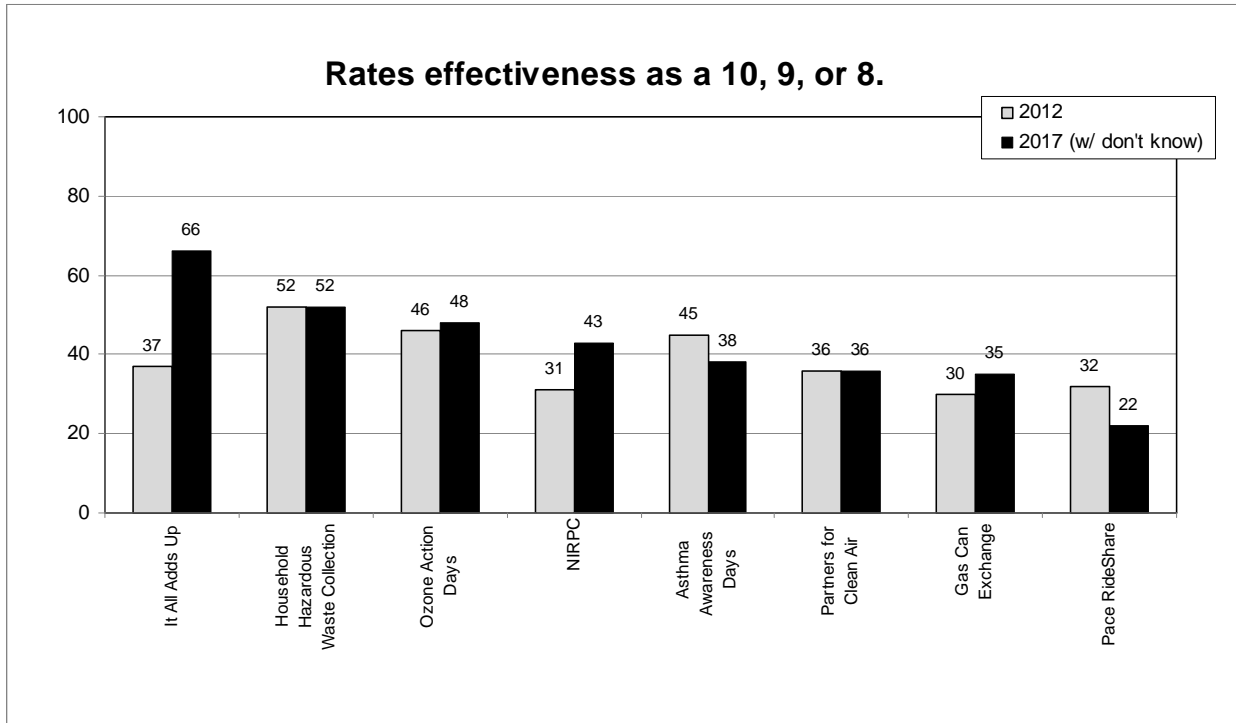




**Mean rating of the perceived effectiveness that the following could have on air quality education in Northwest Indiana, on a scale of 0 to 10, with 0 being not at all effective and 10 being extremely effective.**

**(Asked of those aware of the program.)**

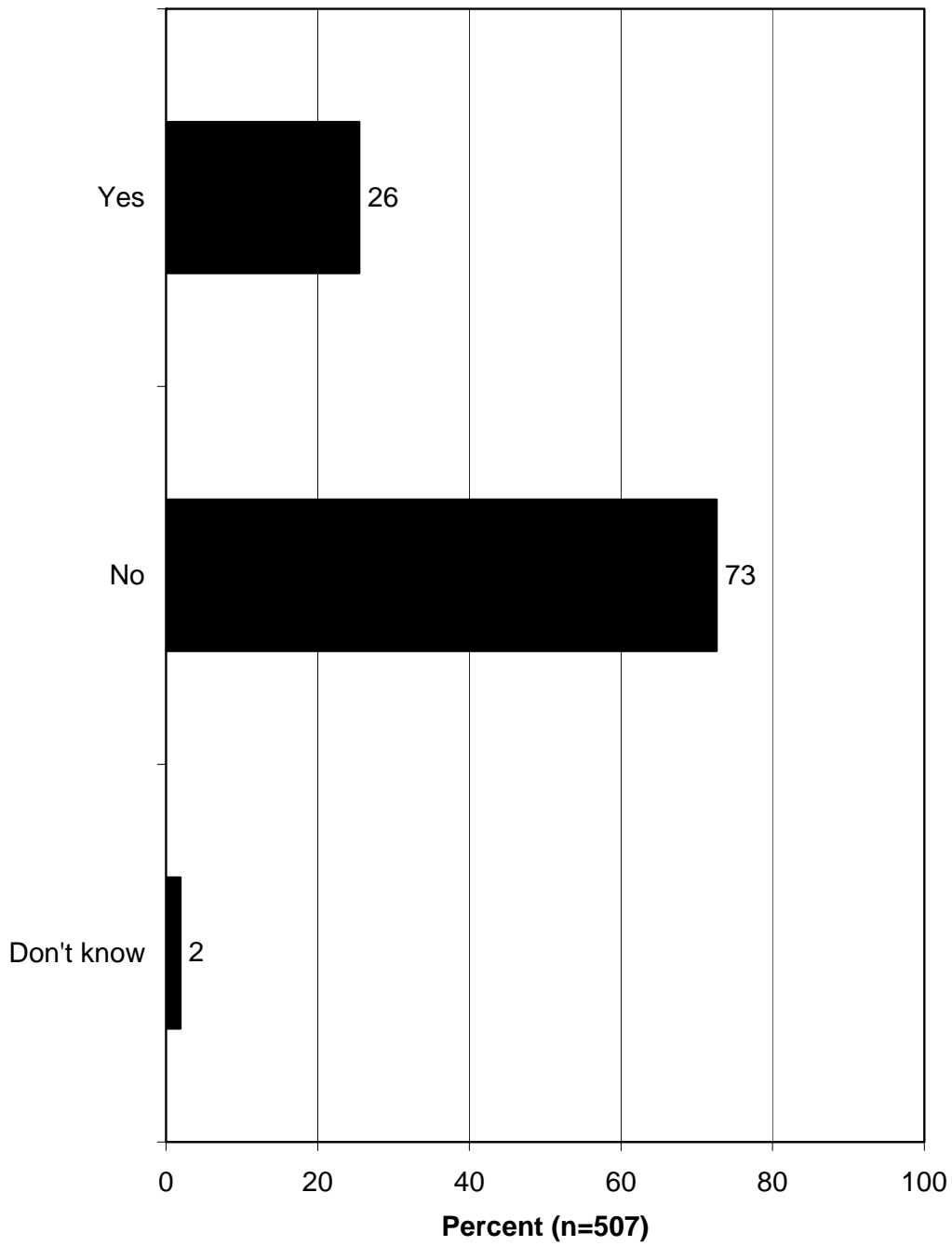




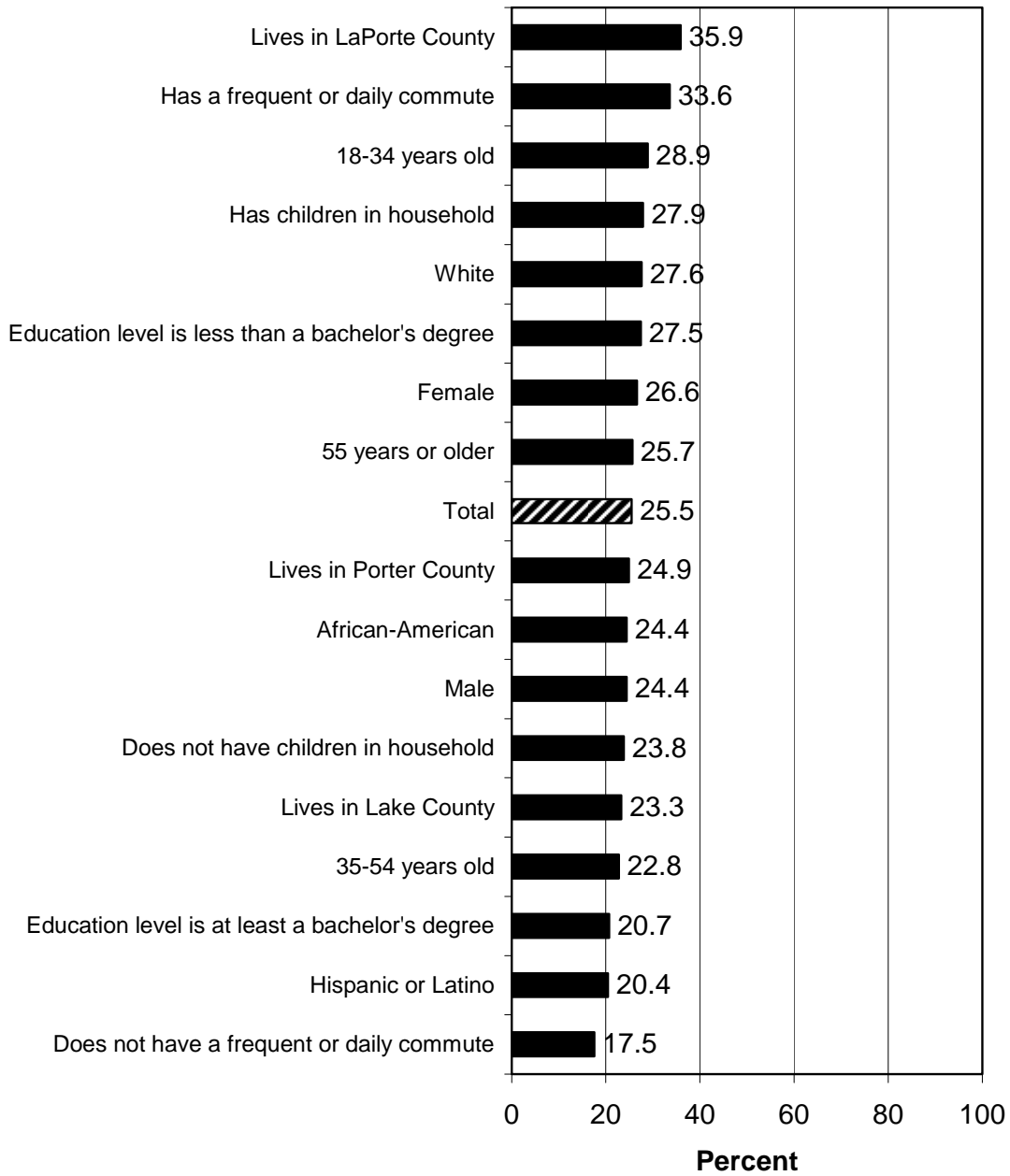
### **NWI Clean Air: Think Green. Breathe Easy.**

- Prior to this survey, 26% of residents were aware of this campaign.
  - Groups most likely to be aware of the campaign are LaPorte County residents (36% were aware of the campaign), those with a frequent or daily commute (34%), residents 18-34 years old (29%), and those with children in the household (28%).
  - Among those who heard about the campaign, the most common source of information was newspapers or magazines (28% stated this), distantly followed by online ads (12%).
  - Residents who were aware of the campaign were asked to rate the effectiveness that the campaign could have on air quality education in Northwest Indiana, on a scale of 0 to 10, where 0 is not at all effective and 10 is extremely effective. The campaign received a mean rating of 7.1; 20% rated it 9 or 10.
    - Shown in this section is a GIS map of Northwest Indiana illustrating the distribution of opinion within the region for this survey question.
  
- Those aware of NWI Clean Air were asked to give a general assessment of the campaign on a scale of excellent-good-fair-poor. The percentage who rated it *excellent* or *good* (51%) is double that of those who rated it *fair* or *poor* (25%).
  - Those who did not rate the campaign *excellent* most frequently said it was because they did not hear much about it or that it needs more advertising.
  - Those who did rate the campaign *excellent* most frequently said it was because the campaign informs and educates people. Crosstabulations by county and race are not included due to the small sample sizes.
  - Nearly all residents who have heard of NWI Clean Air (94%) do not remember any facts, tips, or details about the information; several said they only remember the slogan.

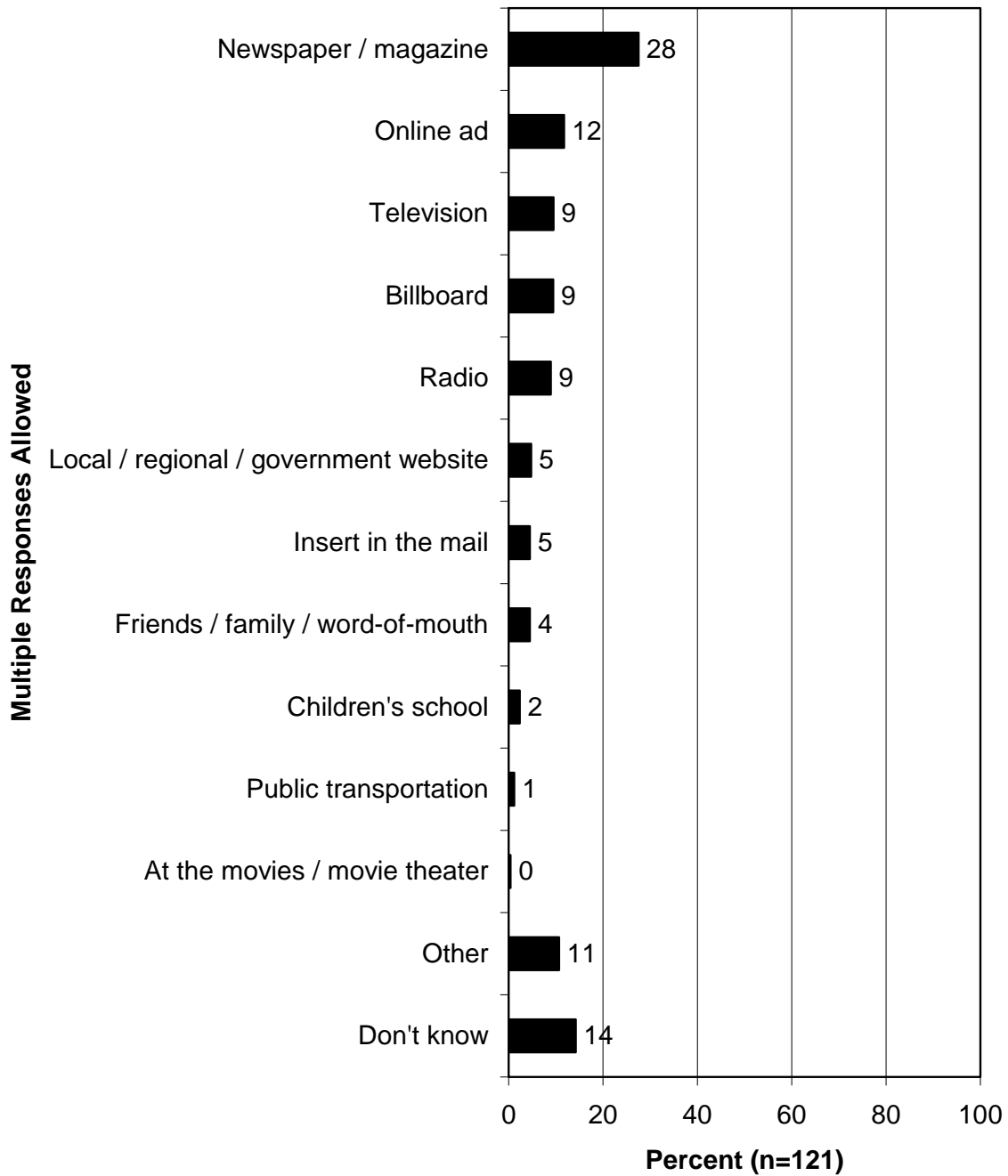
**Q98. NWI Clean Air: Think Green. Breathe Easy.  
(Were you aware of this campaign?)**



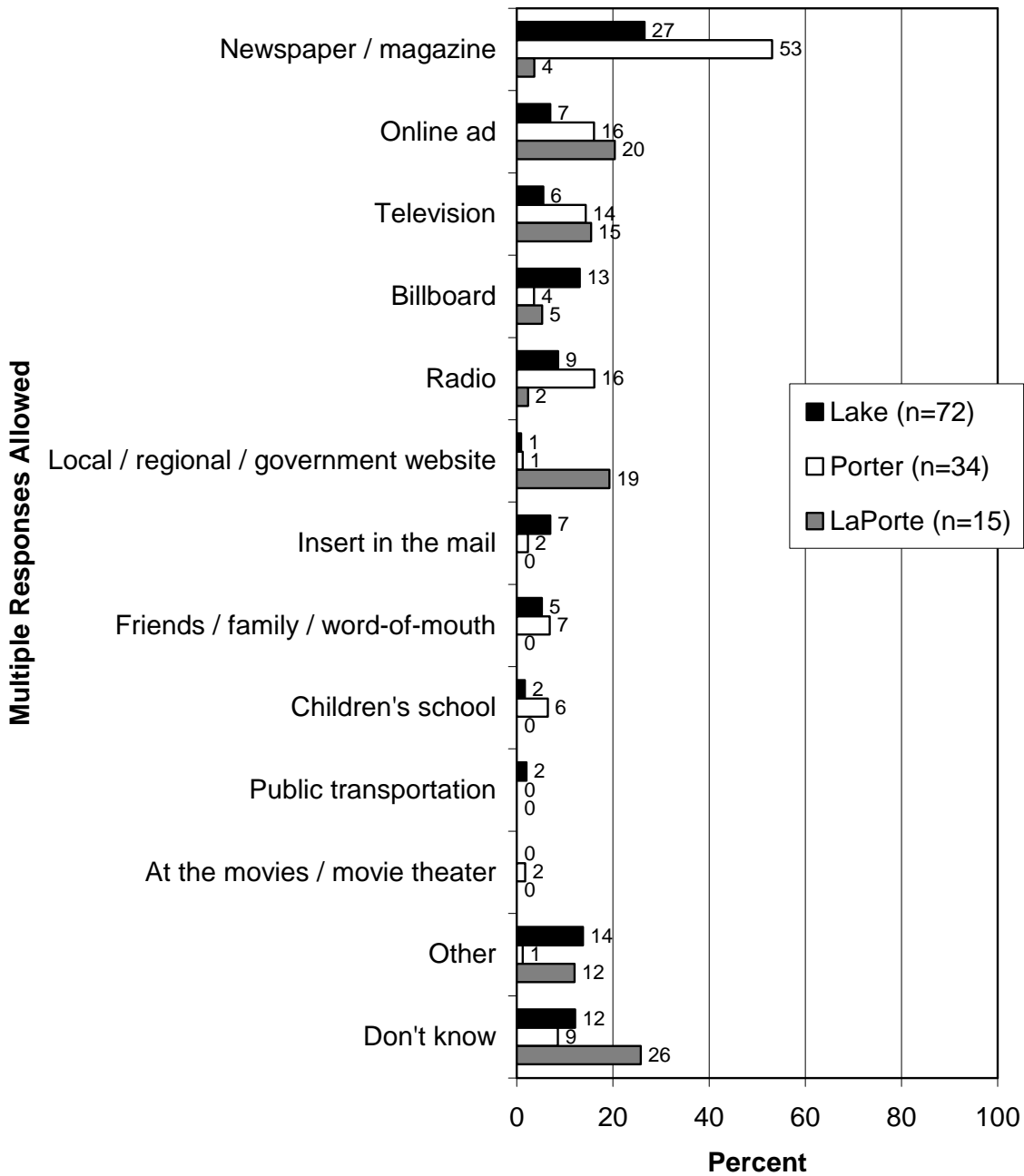
**Percent of each of the following groups who were aware of "NWI Clean Air: Think Green. Breathe Easy." prior to the survey:**



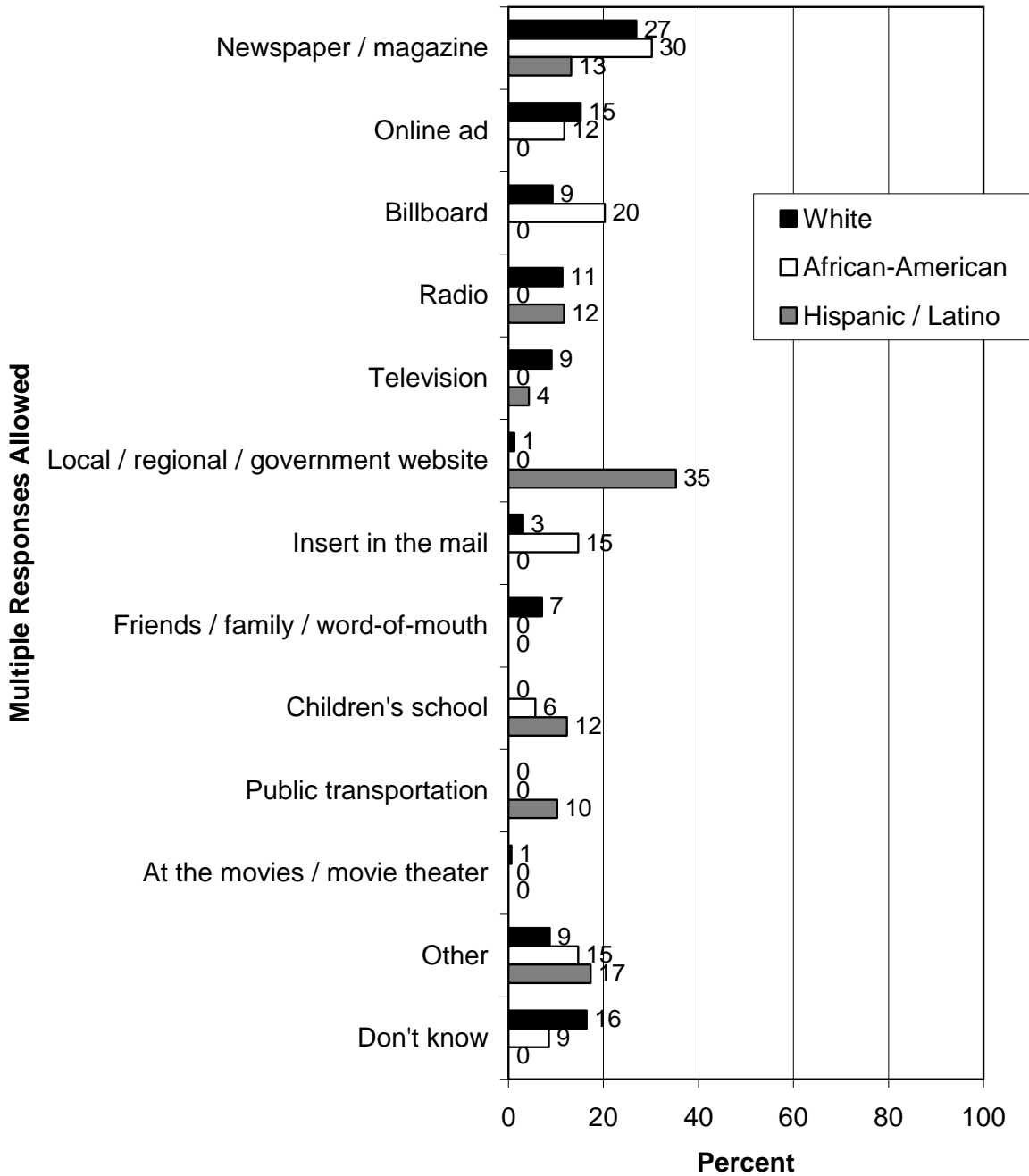
**Q128. How or by what source did you first learn about NWI Clean Air? (Asked of those who have heard of this campaign.)**



**Q128. How or by what source did you first learn about NWI Clean Air? (Asked of those who have heard of this campaign.)**

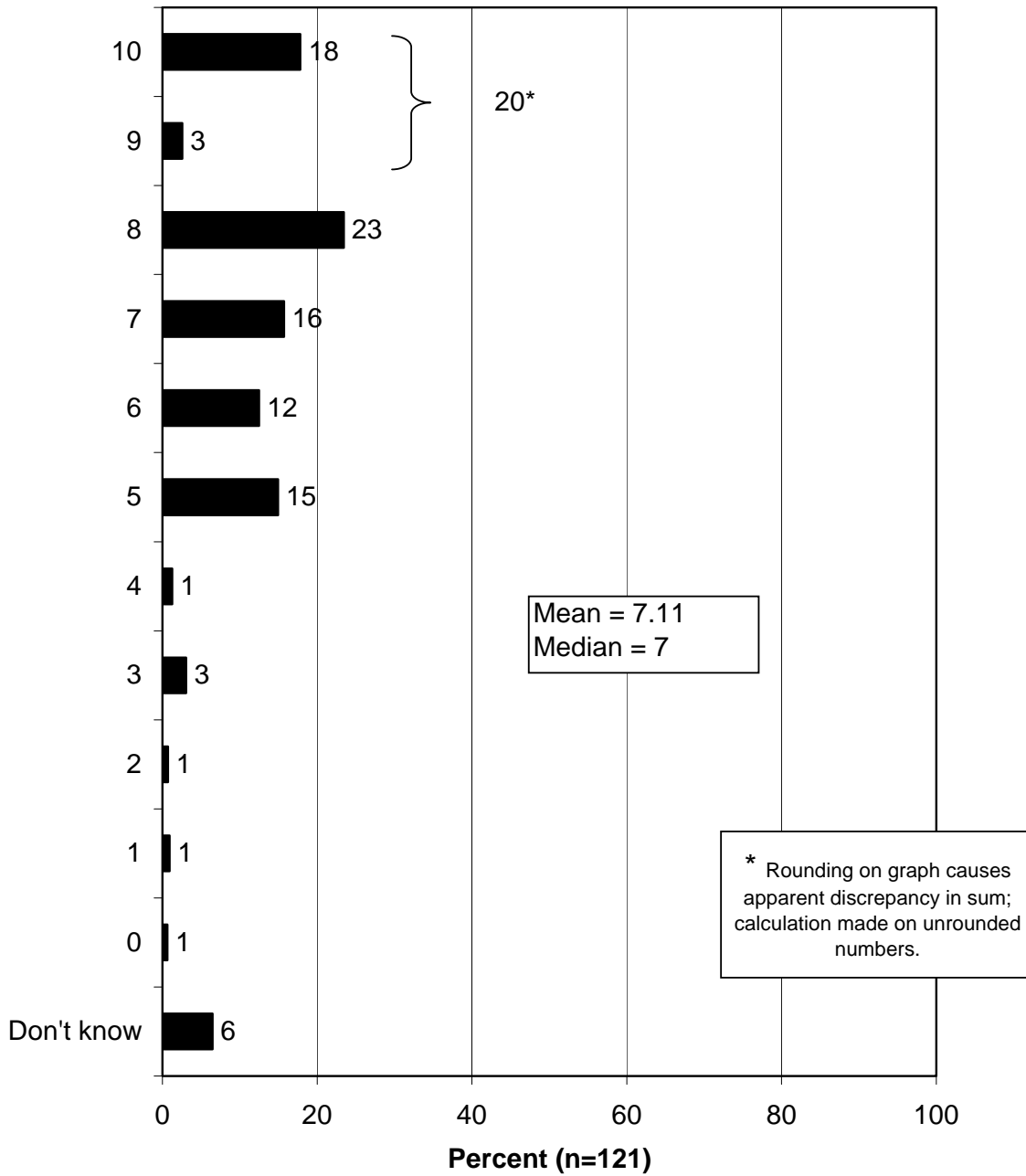


**Q128. How or by what source did you first learn about NWI Clean Air? (Asked of those who have heard of this campaign.)**

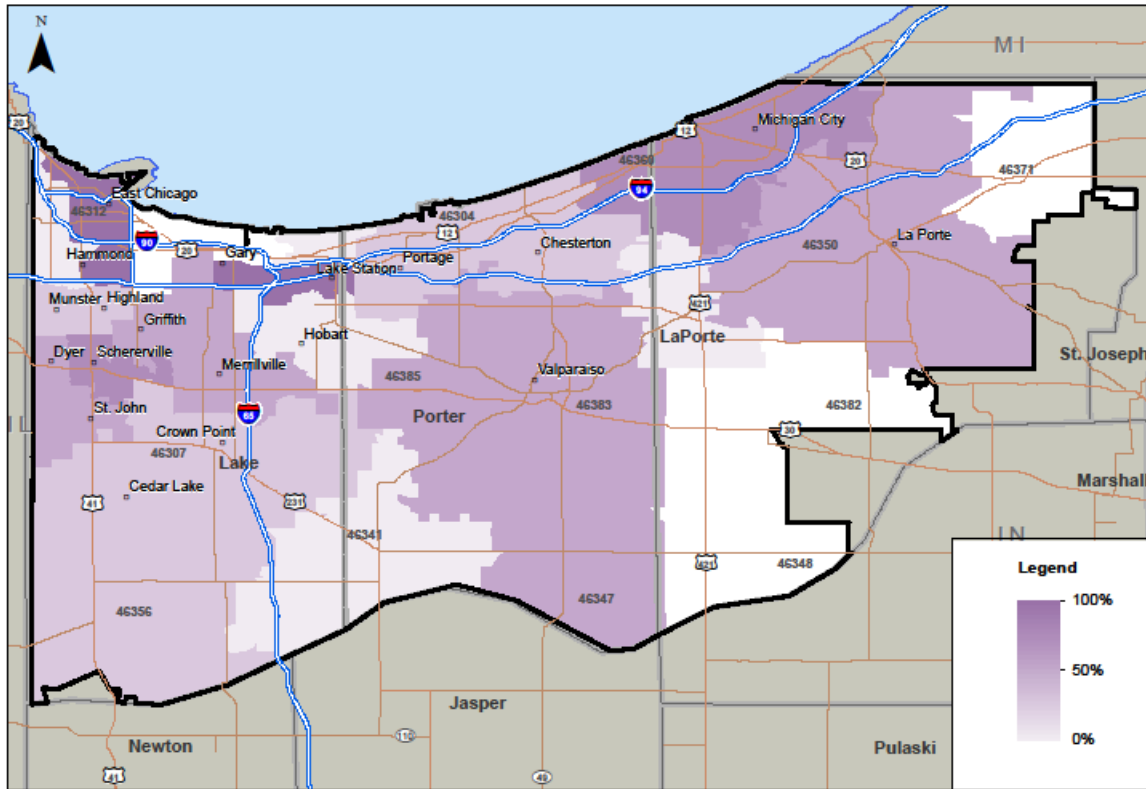




**Q130. How much of a positive effect do you think  
NWI Clean Air could have on air quality education  
in Northwest Indiana? (Asked of those who have  
heard of this campaign.)**



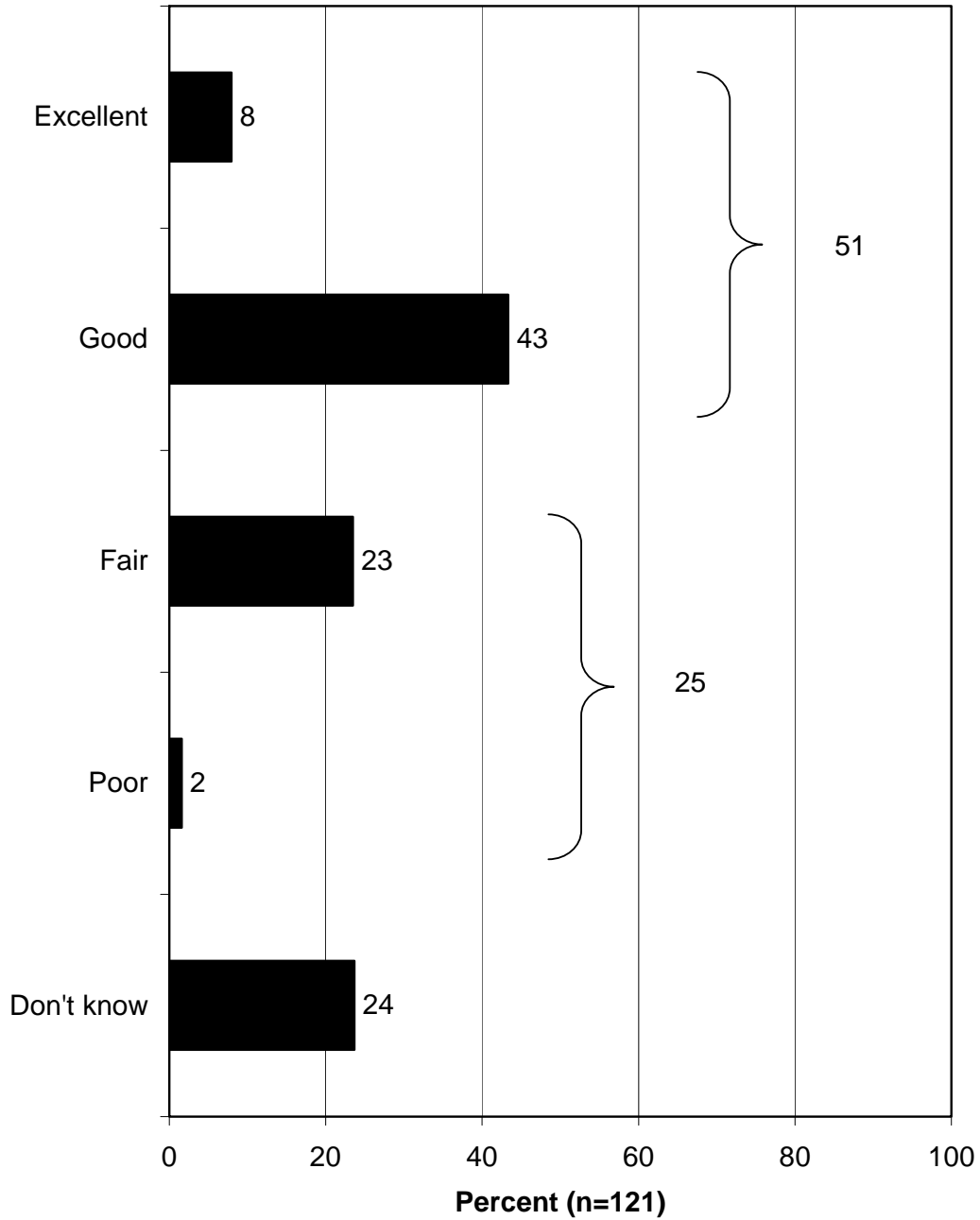
Percentage who think the NWI Clean Air: Think Green. Breathe Easy. initiative could positively affect (ratings of 8-10) air quality education.



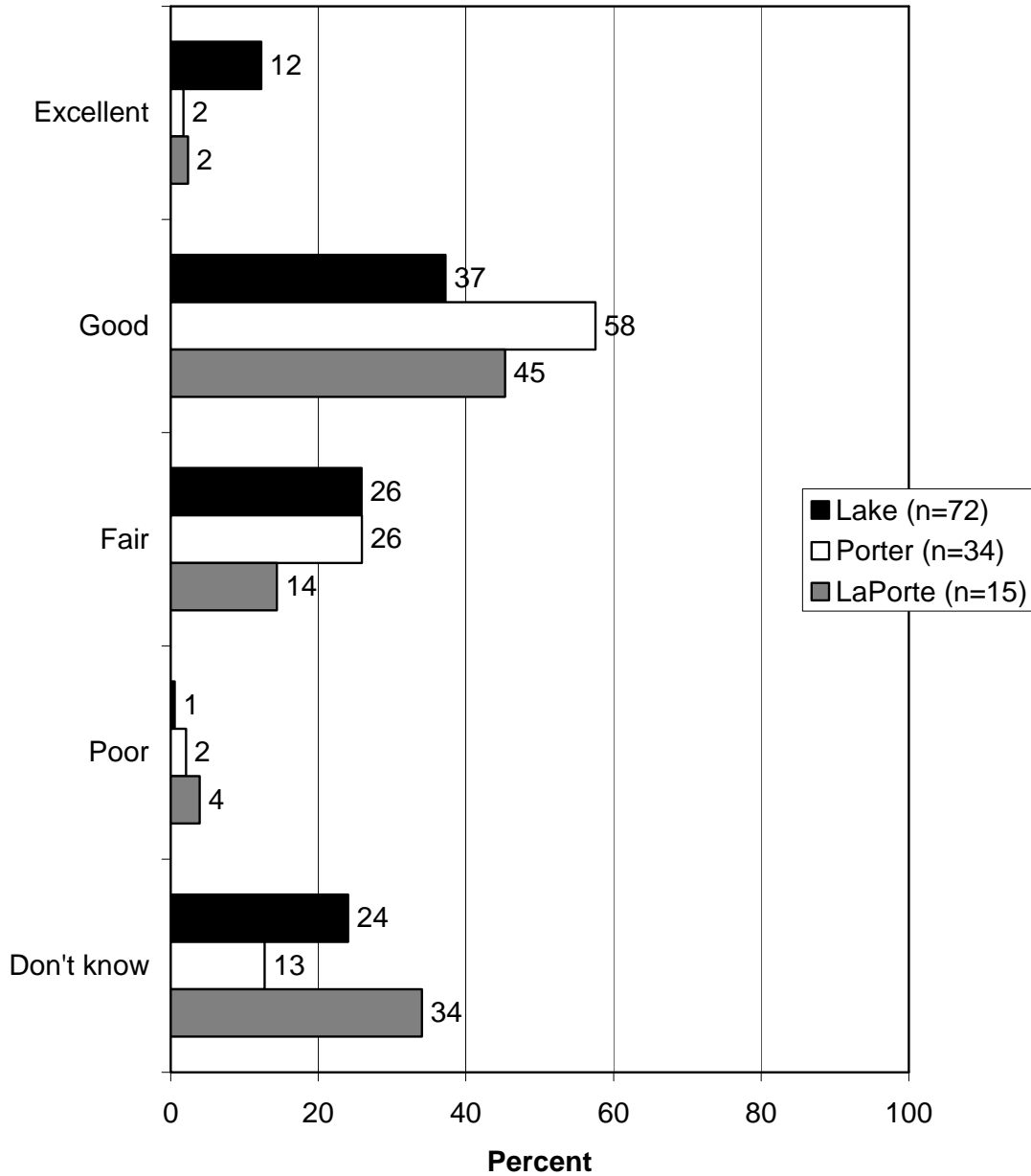
Data collected by  
Responsive  
Management

Q130. How much of a positive effect do you think "NWI Clean Air: Think Green. Breathe Easy." could have on air quality education in Northwest Indiana? Please use a 0 to 10 scale, where 0 is "not at all effective" and 10 is "extremely effective."

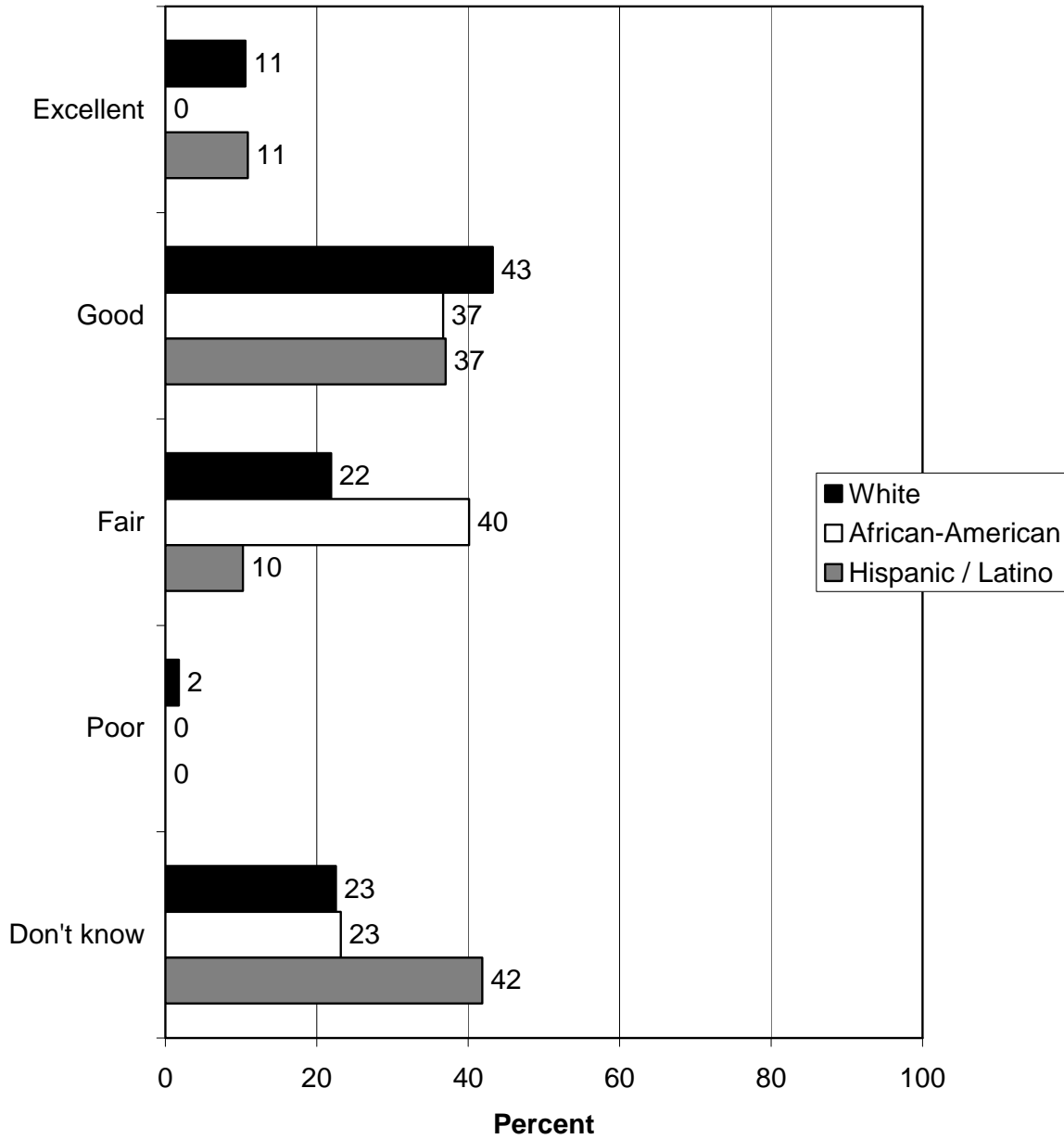
**Q133. Overall, how would you rate the  
"NWI Clean Air: Think Green. Breathe Easy."  
campaign? (Asked of those who have heard of this  
campaign.)**



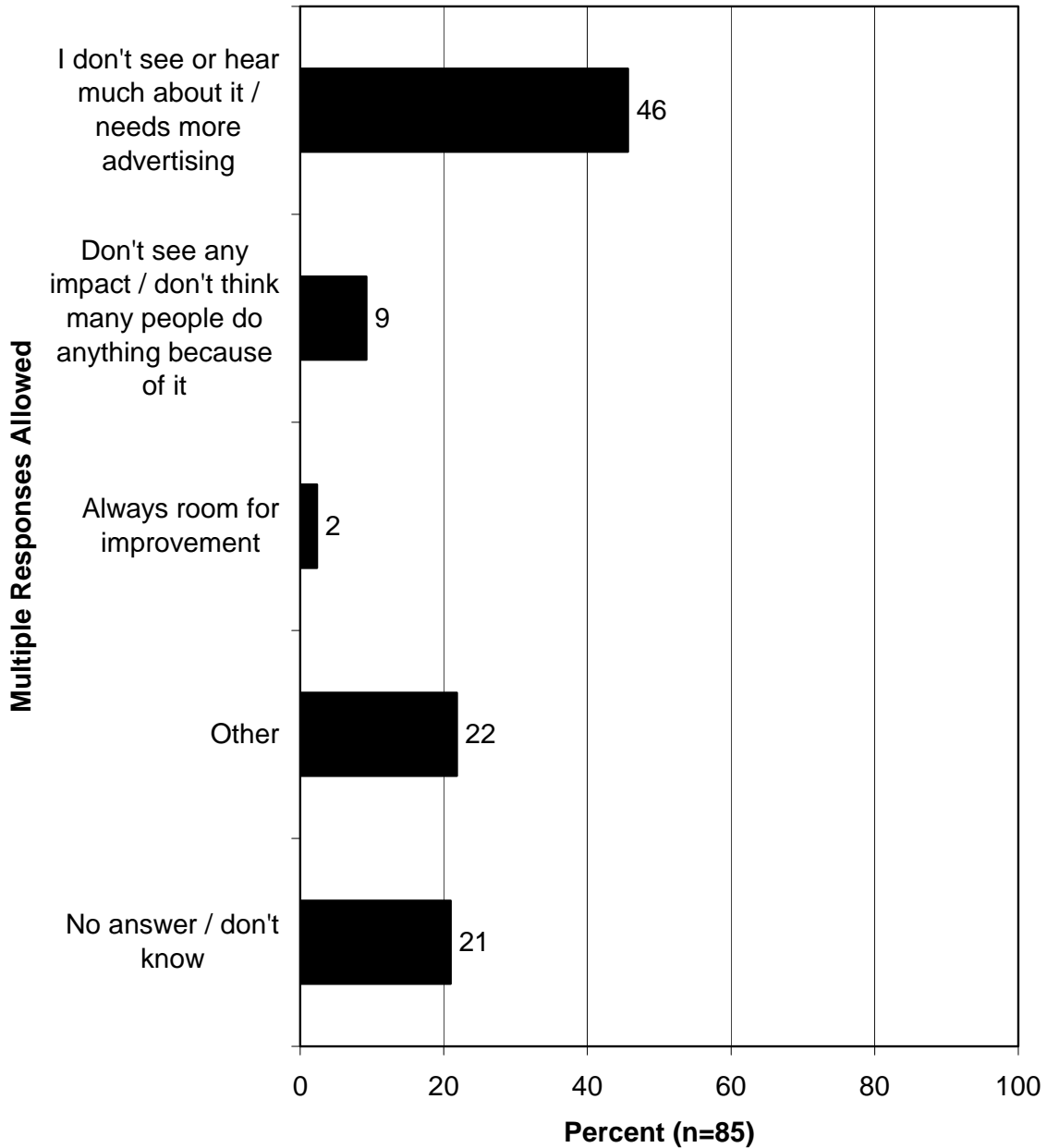
**Q133. Overall, how would you rate the "NWI Clean Air: Think Green. Breathe Easy." campaign? (Asked of those who have heard of this campaign.)**



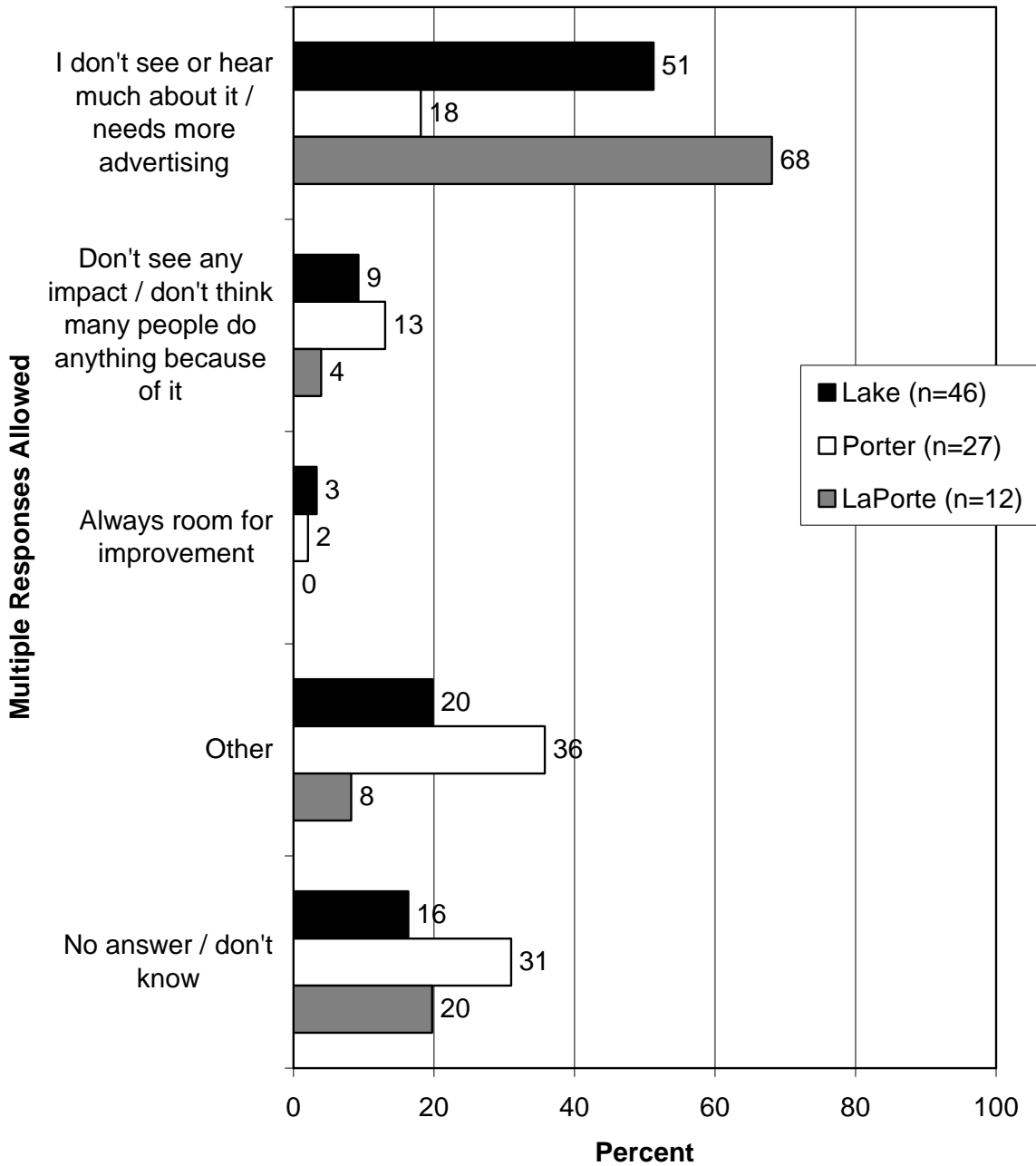
**Q133. Overall, how would you rate the  
"NWI Clean Air: Think Green. Breathe Easy."  
campaign? (Asked of those who have heard of this  
campaign.)**



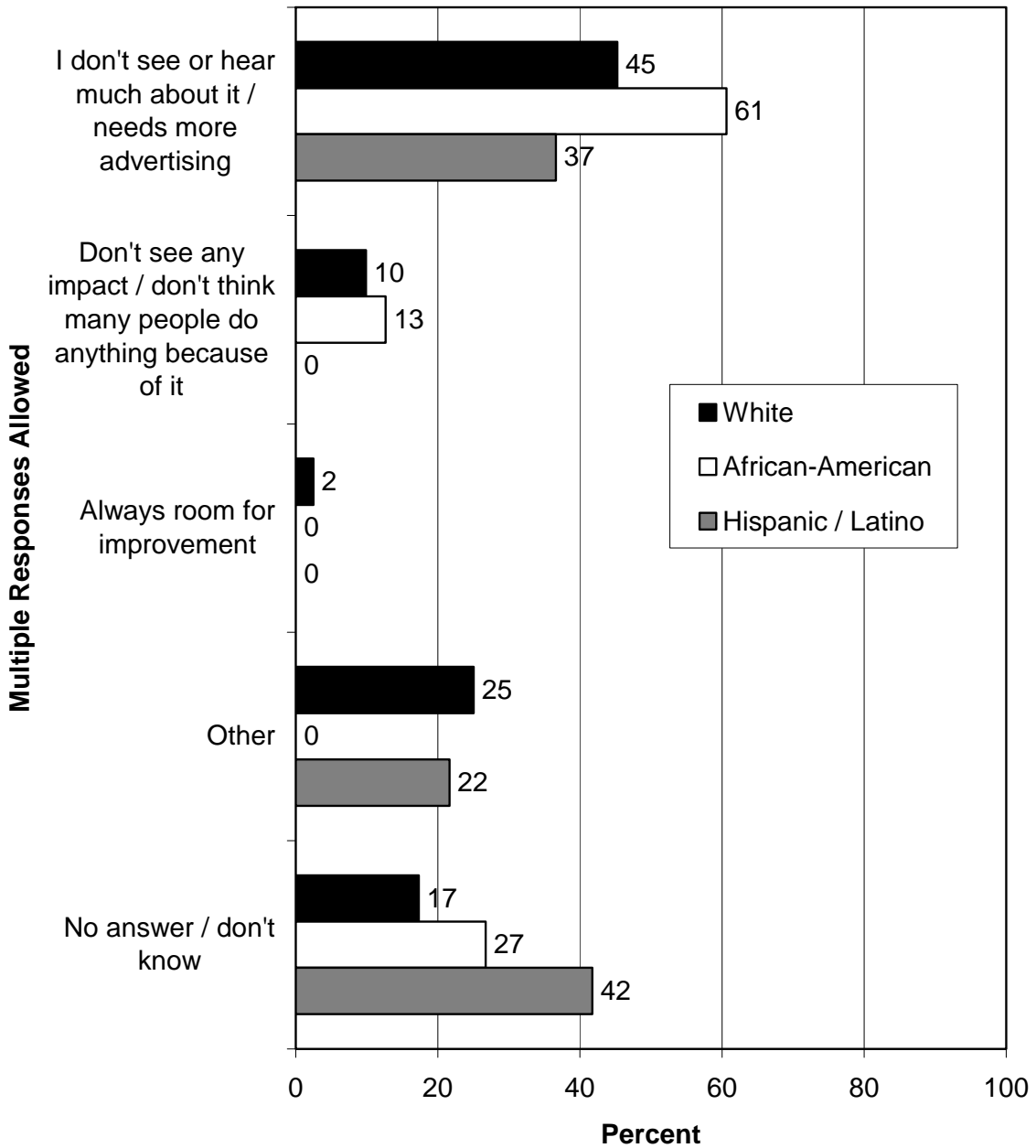
**Q134. What are the main reasons you did not rate the "NWI Clean Air: Think Green. Breathe Easy." campaign higher? (Asked of those who have heard of this campaign and did not rate it excellent.)**



**Q134. What are the main reasons you did not rate the "NWI Clean Air: Think Green. Breathe Easy." campaign higher? (Asked of those who have heard of this campaign and did not rate it excellent.)**

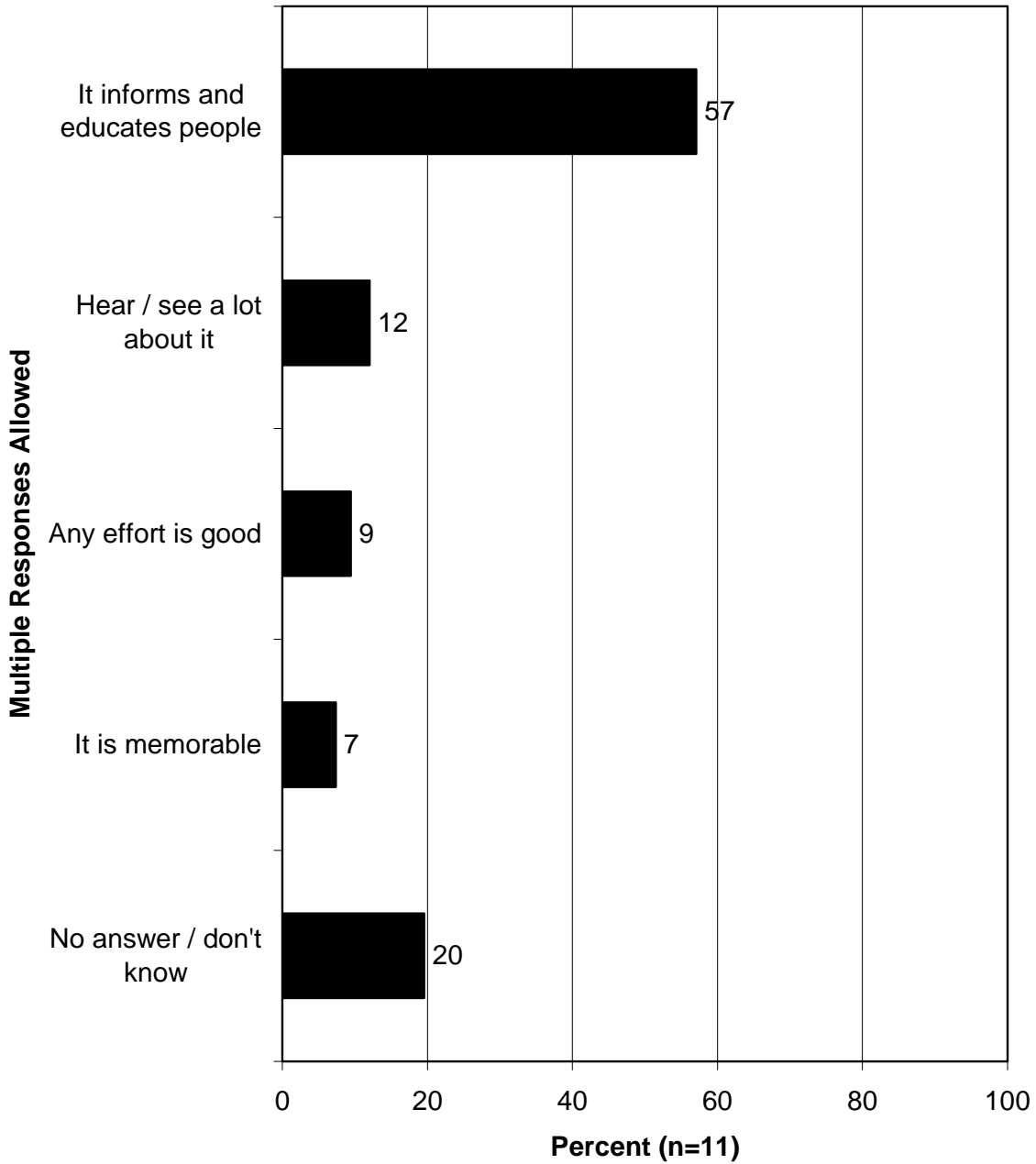


**Q134. What are the main reasons you did not rate the "NWI Clean Air: Think Green. Breathe Easy." campaign higher? (Asked of those who have heard of this campaign and did not rate it excellent.)**

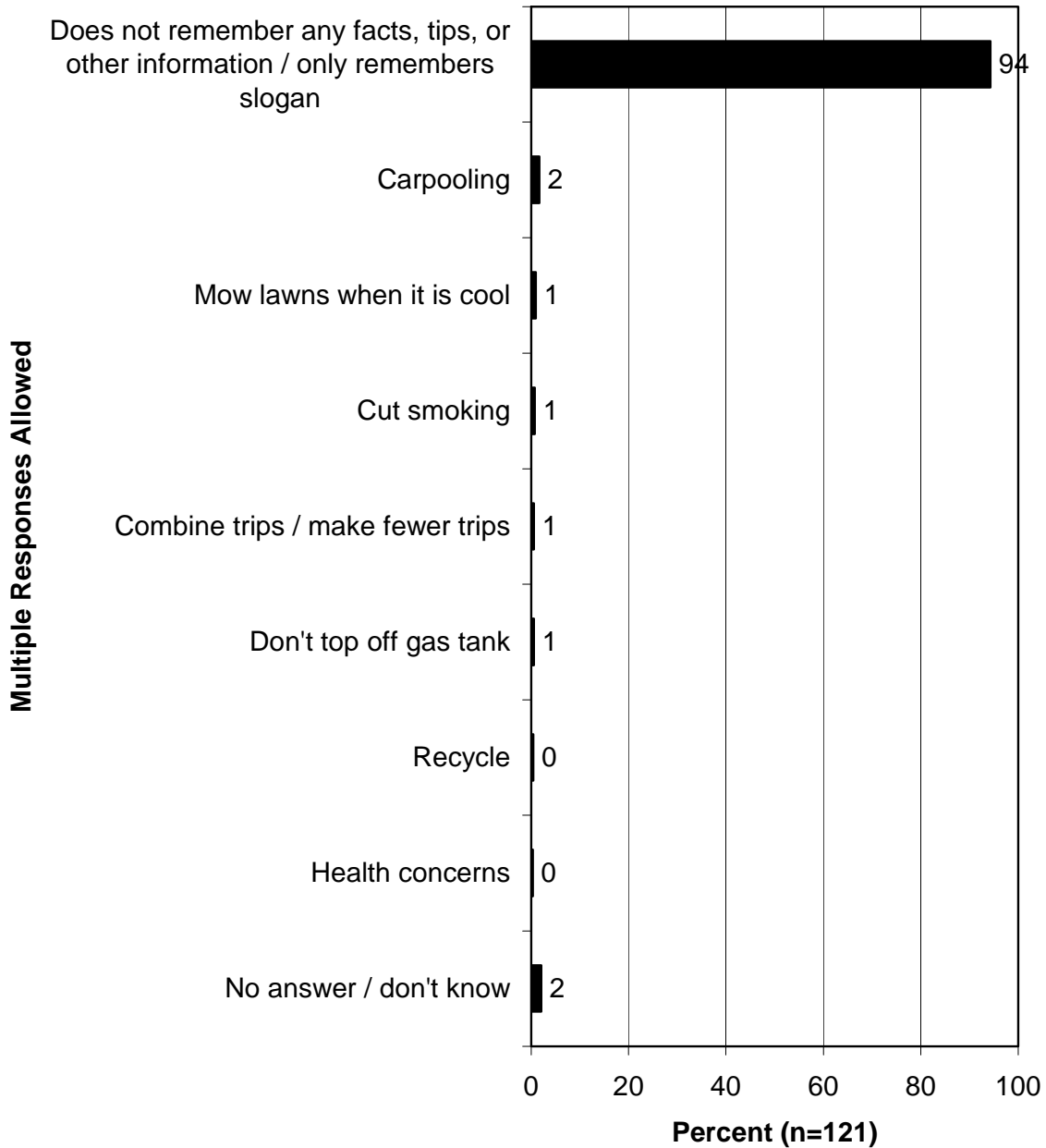




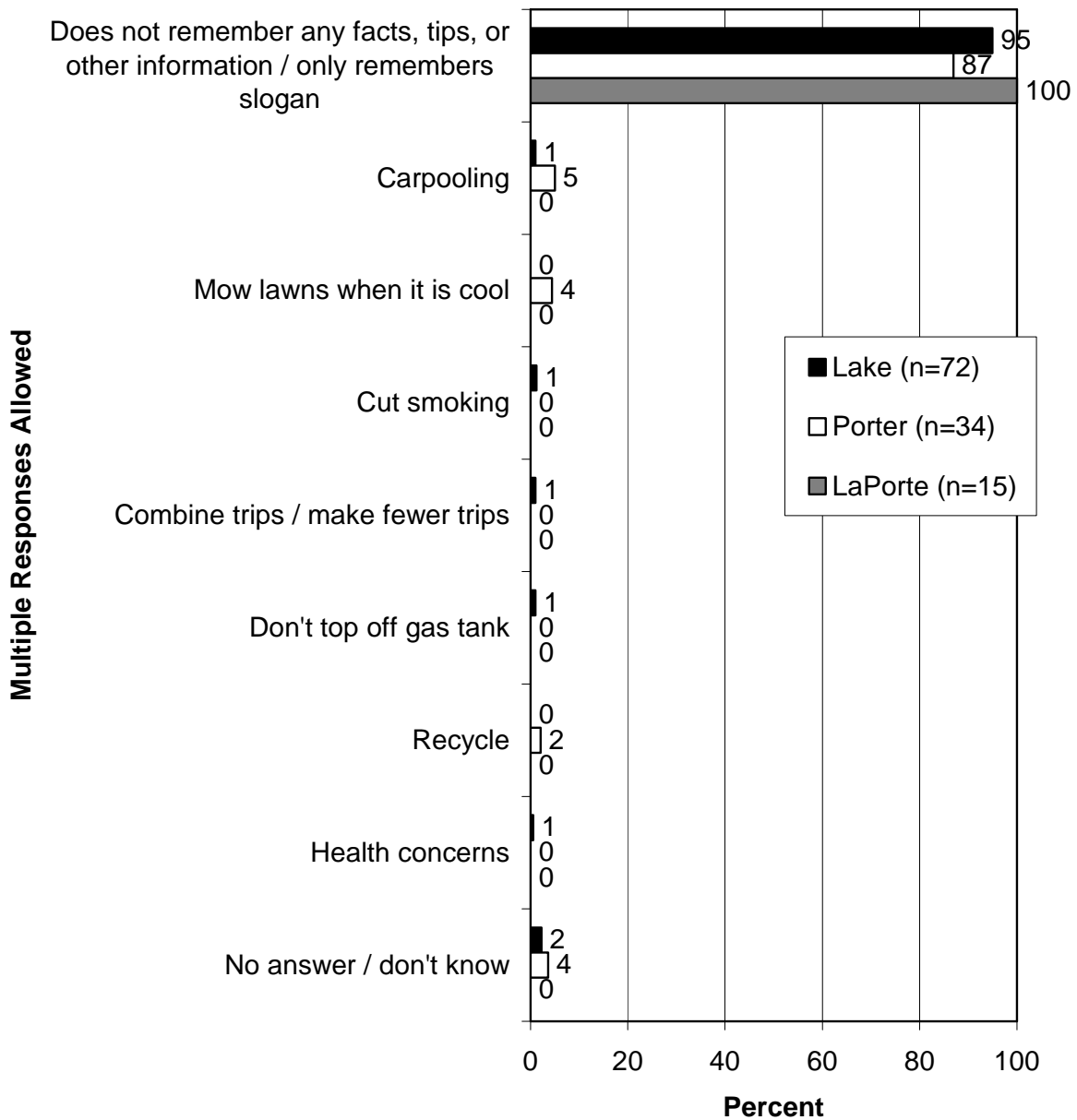
**Q135. What are the main reasons you rated the "NWI Clean Air: Think Green. Breathe Easy." campaign excellent? (Asked of those who have heard of this campaign and rated it excellent.)**



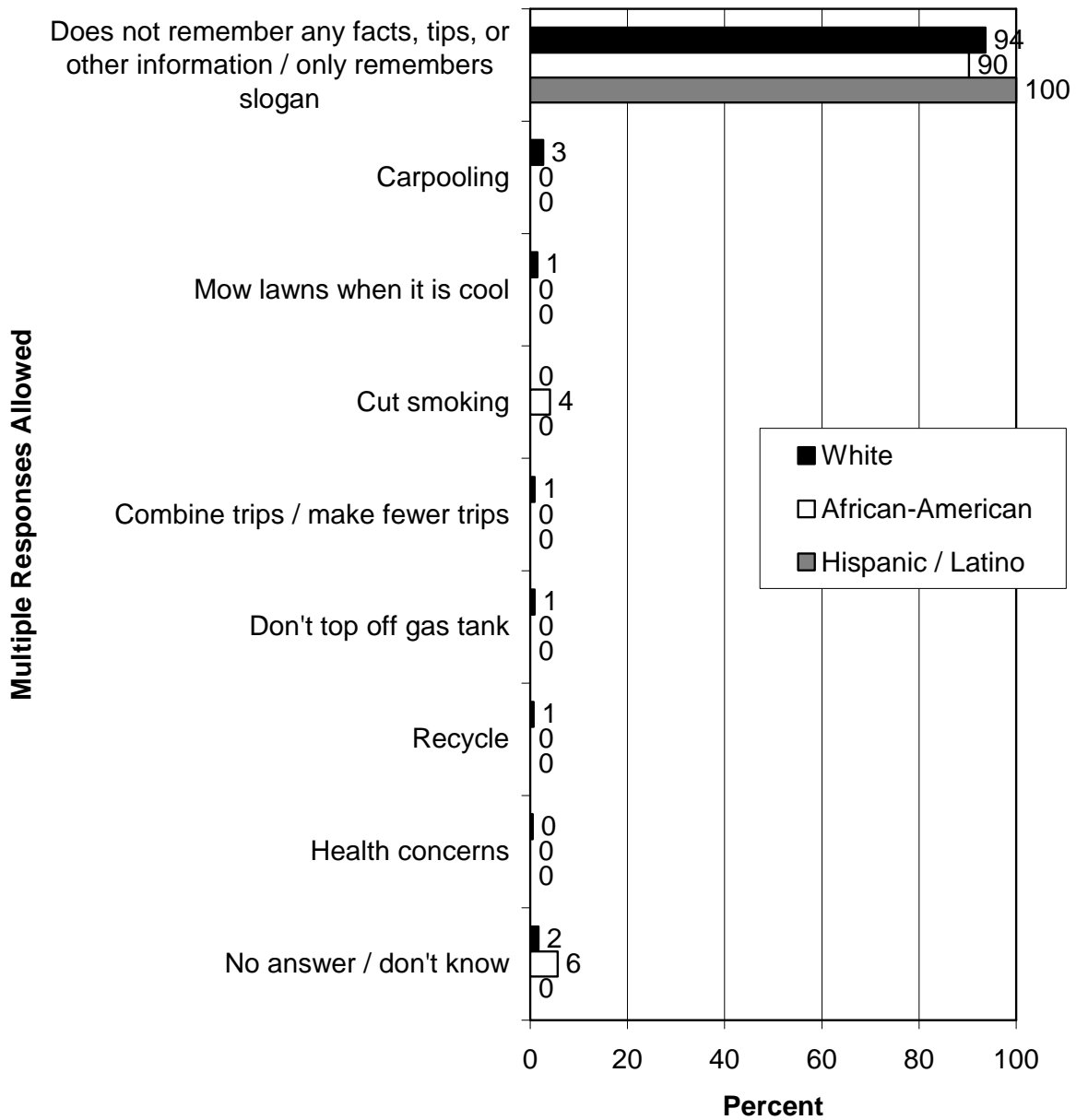
**Q136. Do you recall any facts, tips, or other information from the "NWI Clean Air: Think Green. Breathe Easy." campaign? IF YES: Specifically, what do you recall? (Asked of those who have heard of this campaign.)**



**Q136. Do you recall any facts, tips, or other information from the "NWI Clean Air: Think Green. Breathe Easy." campaign? IF YES: Specifically, what do you recall? (Asked of those who have heard of this campaign.)**



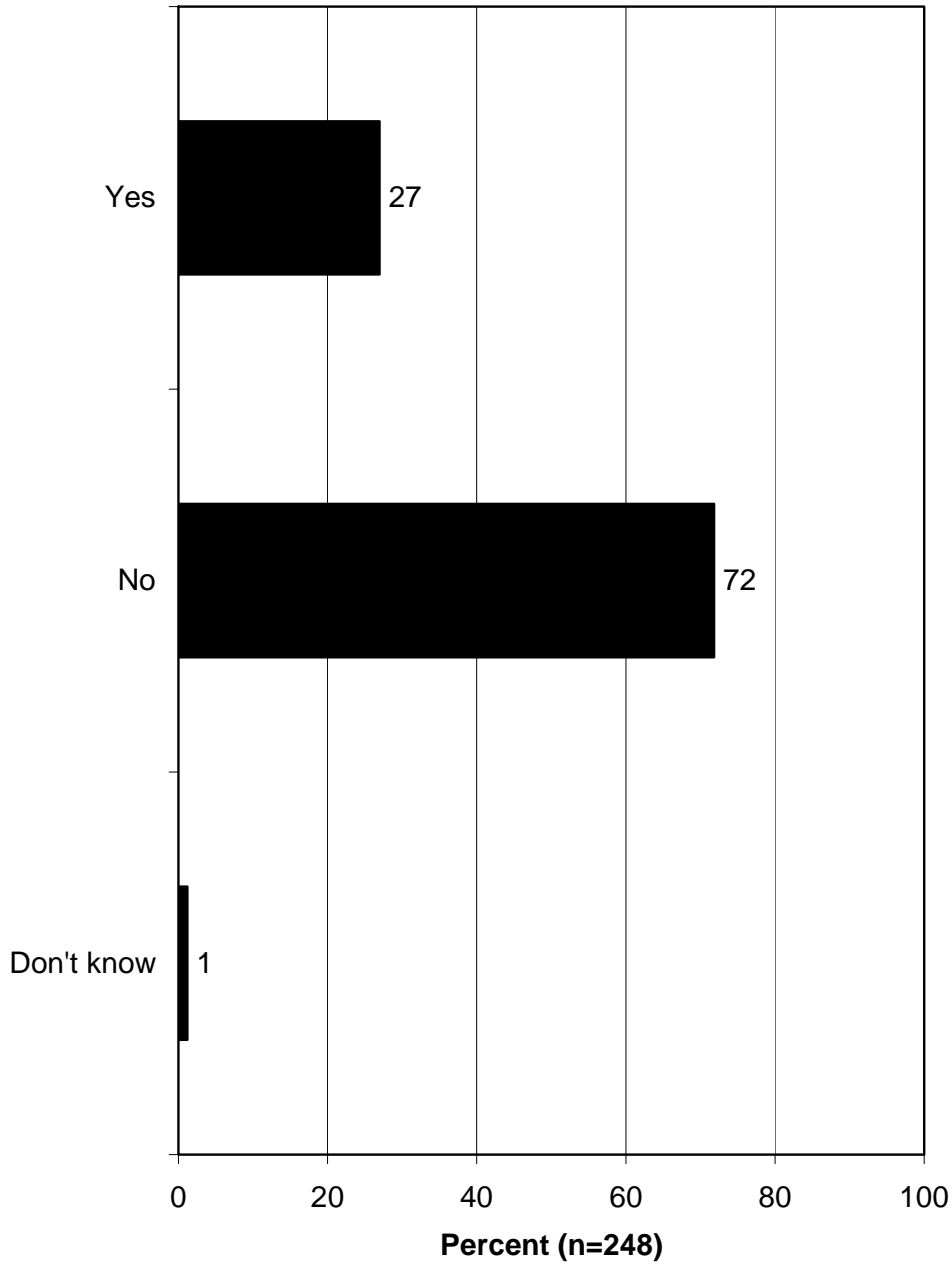
**Q136. Do you recall any facts, tips, or other information from the "NWI Clean Air: Think Green. Breathe Easy." campaign? IF YES: Specifically, what do you recall? (Asked of those who have heard of this campaign.)**



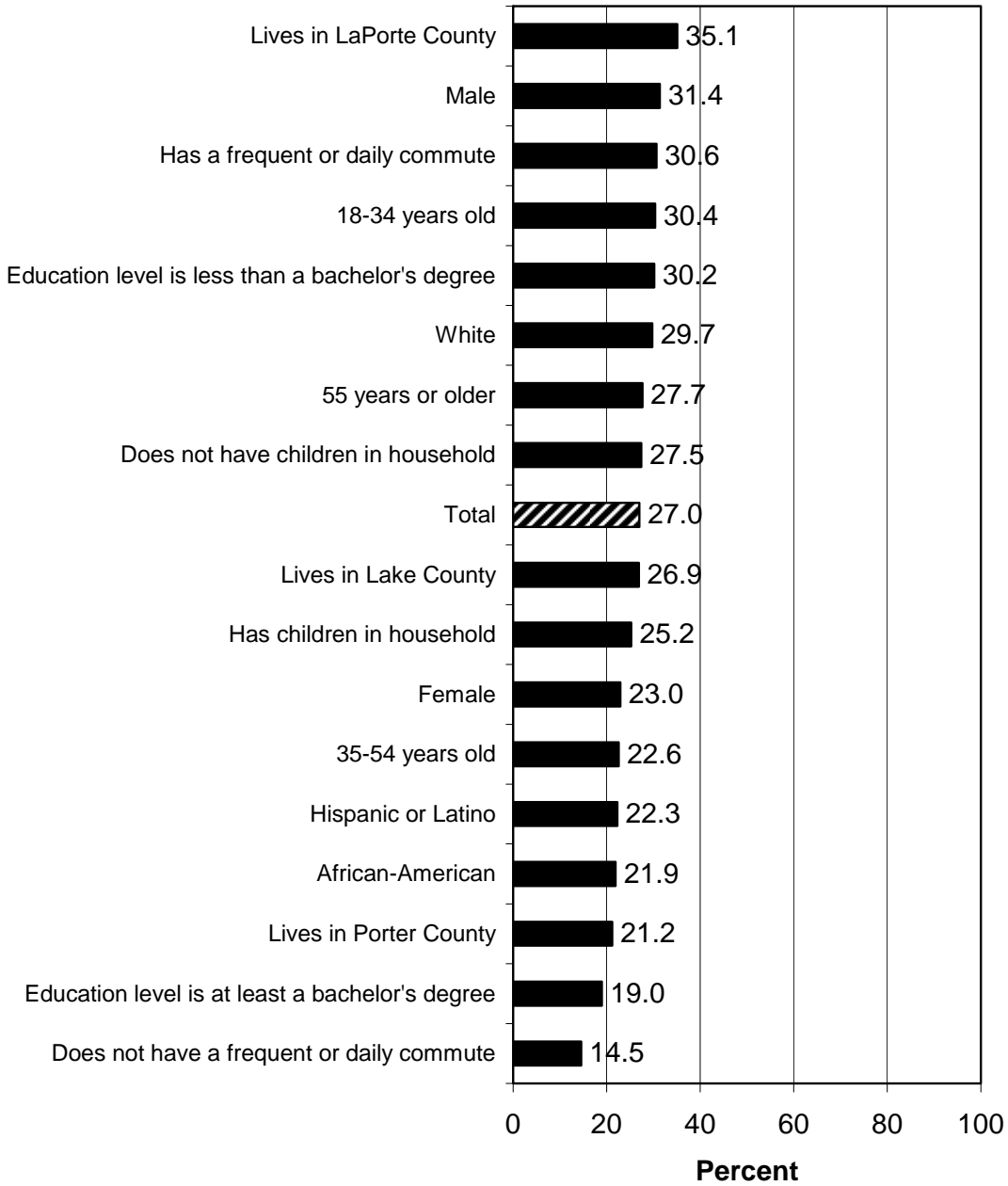
### **Asthma Awareness Days**

- Prior to this survey, 27% of residents were aware of this campaign.
  - Groups most likely to be aware of the campaign are LaPorte County residents (35% were aware of the campaign), male residents (31%), those with a frequent or daily commute (31%), and residents 18-34 years old (30%).
  - Among those who heard about the campaign, the most common sources of information were television (19% stated this); newspapers or magazines (13%); friends, family, or word-of-mouth (12%); and radio (12%).
    - Residents are much less likely to learn about Asthma Awareness Days through television or newspapers and magazines than they were in 2012.
  - Residents were asked to rate the effectiveness that the campaign could have on air quality education in Northwest Indiana, on a scale of 0 to 10, where 0 is not at all effective and 10 is extremely effective. The campaign received a mean rating of 6.7; 21% rated it 9 or 10.
    - Shown in this section is a GIS map of Northwest Indiana illustrating the distribution of opinion within the region for this survey question.

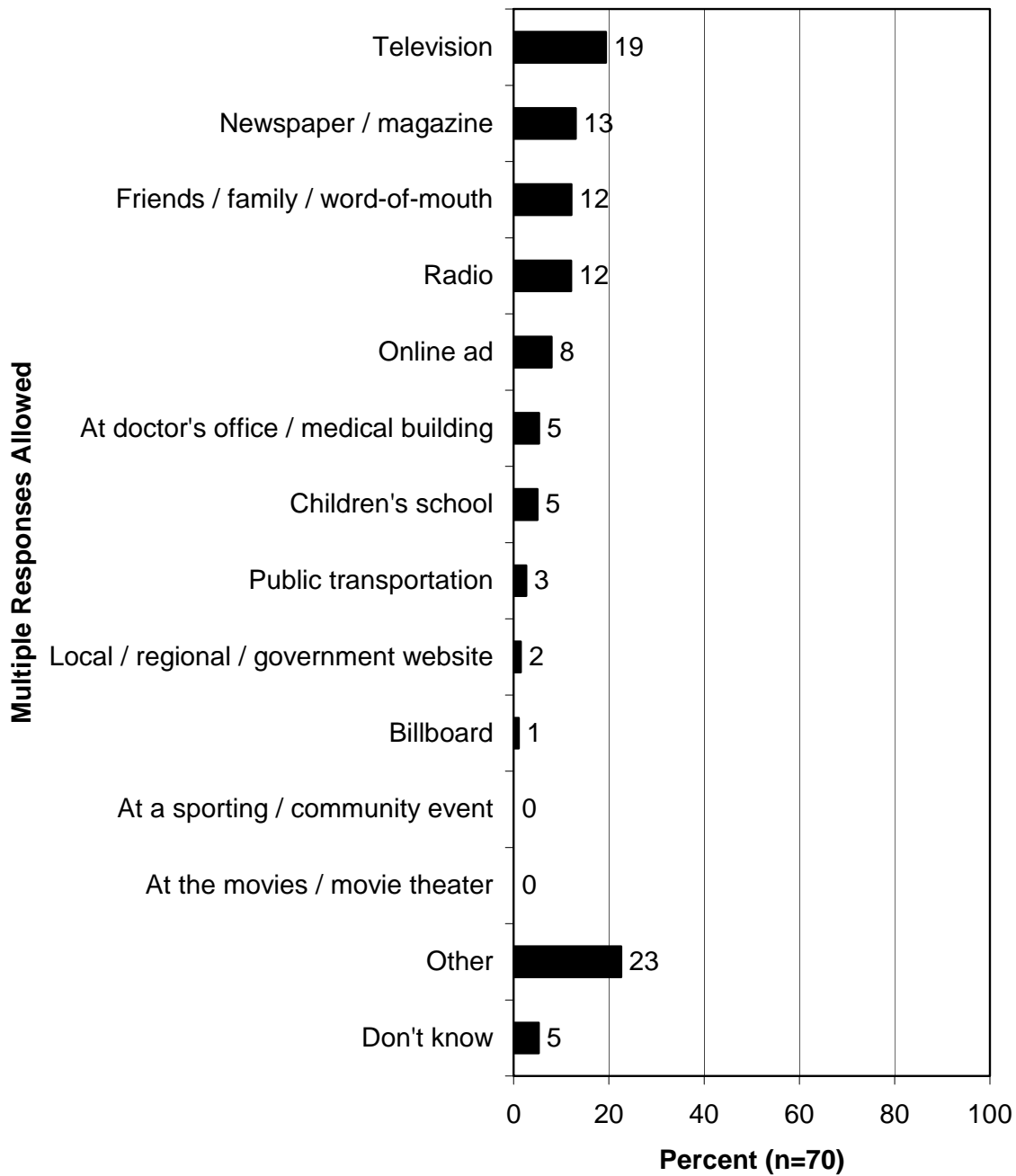
**Q96. Asthma Awareness Days.  
(Were you aware of this campaign?)**



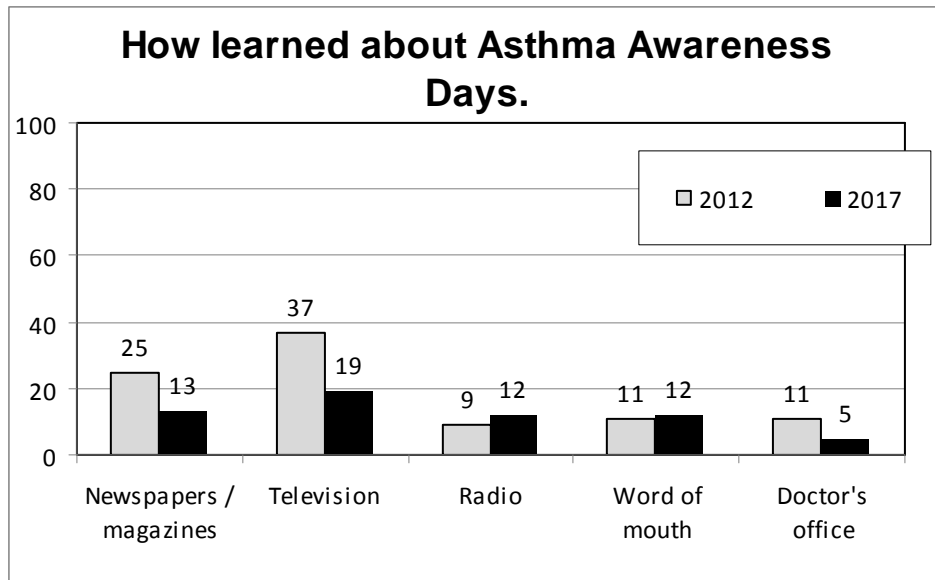
**Percent of each of the following groups who were aware of Asthma Awareness Days prior to the survey:**



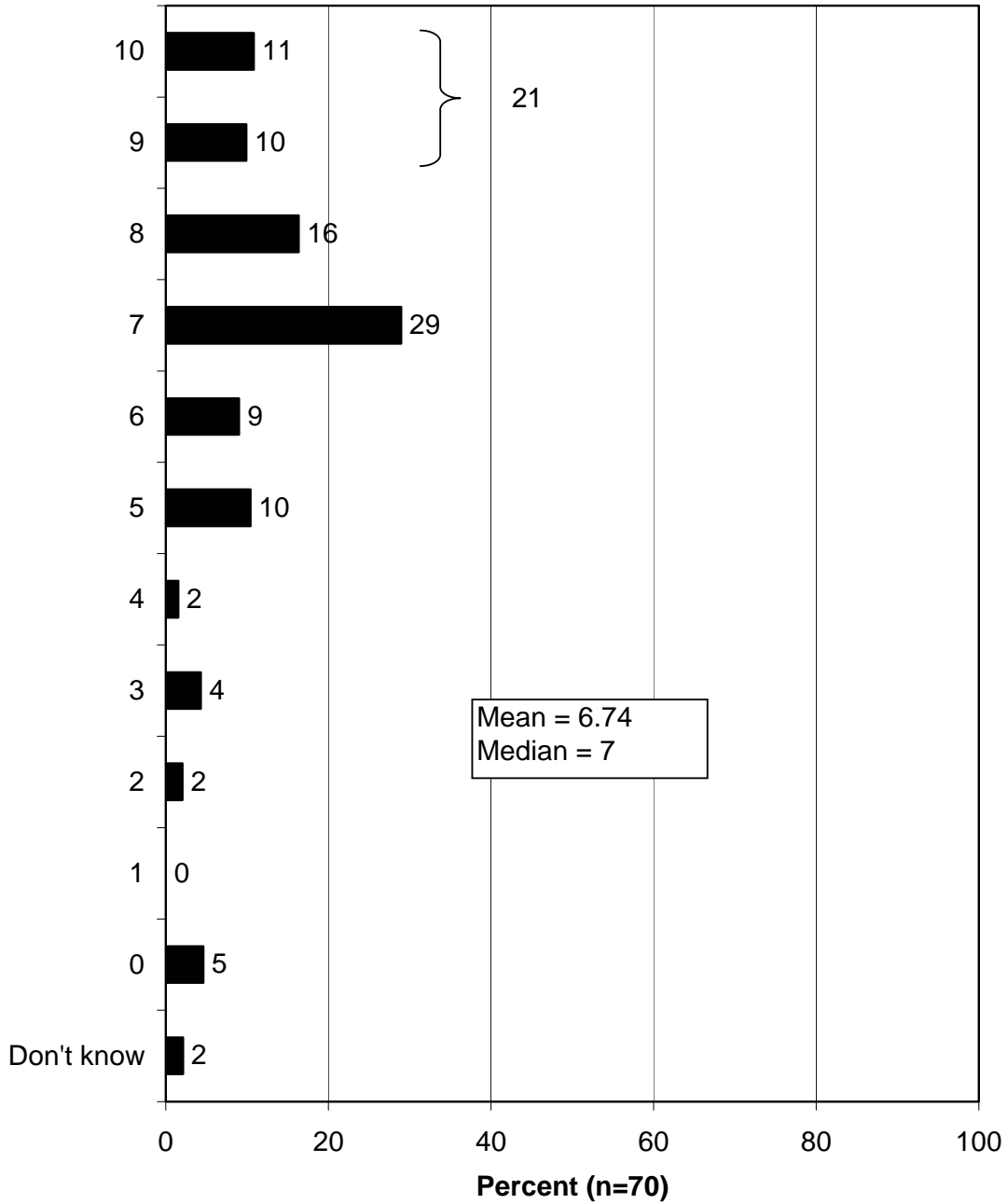
**Q120. How or by what source did you first learn about Asthma Awareness Days? (Asked of those who have heard of this campaign.)**



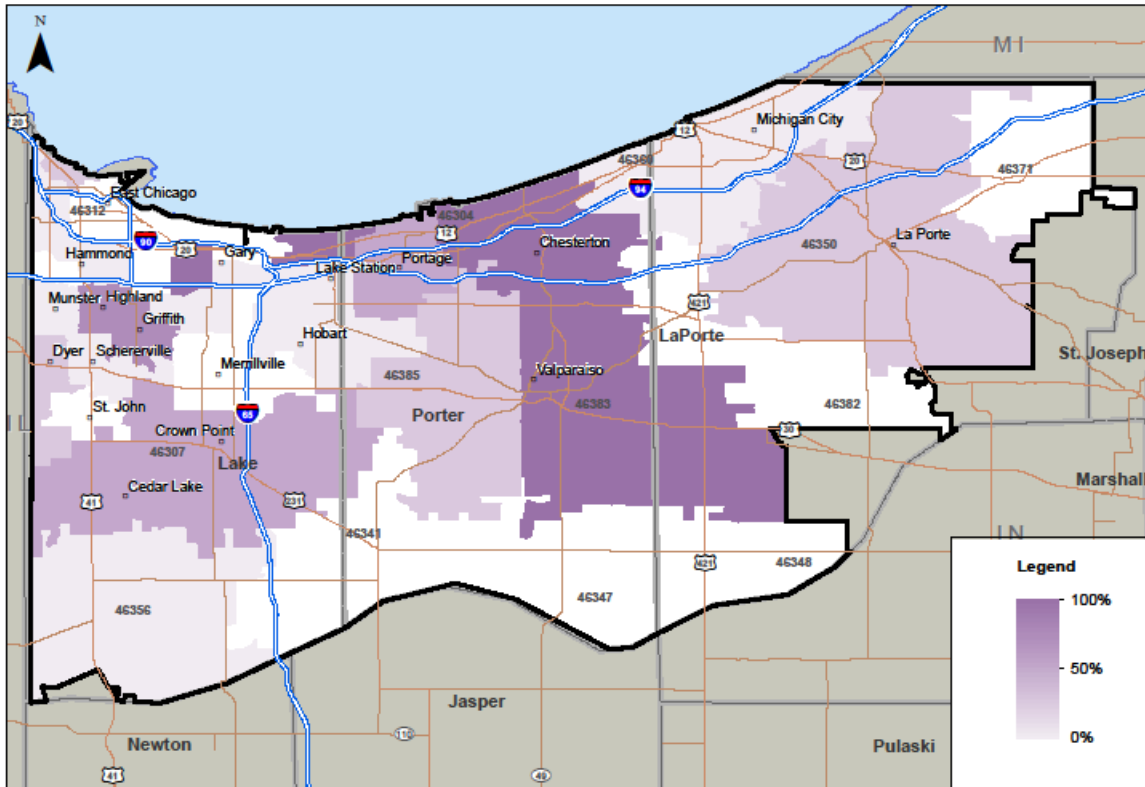




**Q122. How much of a positive effect do you think Asthma Awareness Days could have on air quality education in Northwest Indiana? (Asked of those who have heard of this campaign.)**



Percentage who think the Asthma Awareness Days initiative could positively affect (ratings of 8-10) air quality education.



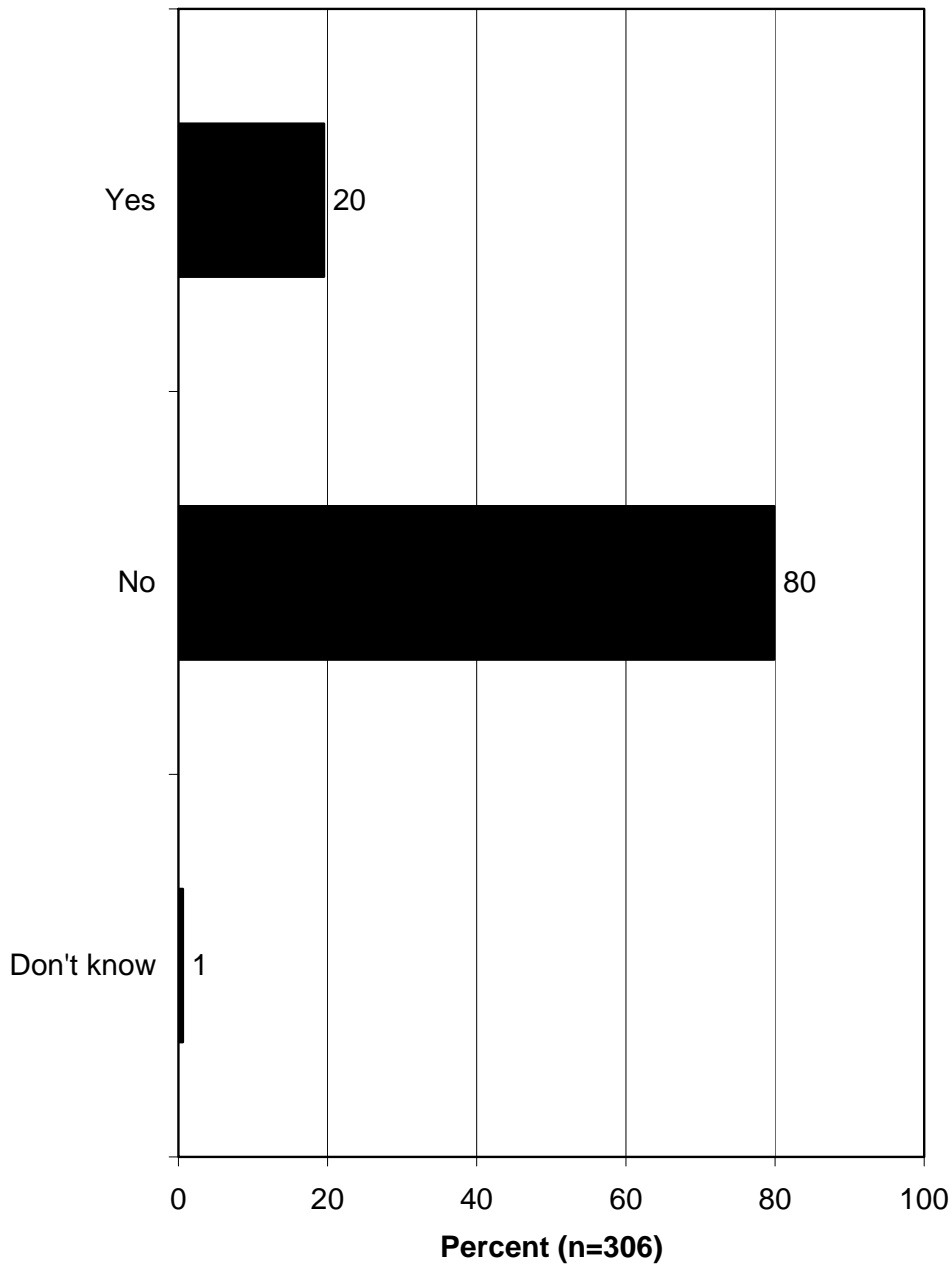
Data collected by  
Responsive  
Management

Q122. How much of a positive effect do you think Asthma Awareness Days could have on air quality education in Northwest Indiana?  
Please use a 0 to 10 scale, where 0 is "not at all effective" and 10 is "extremely effective."

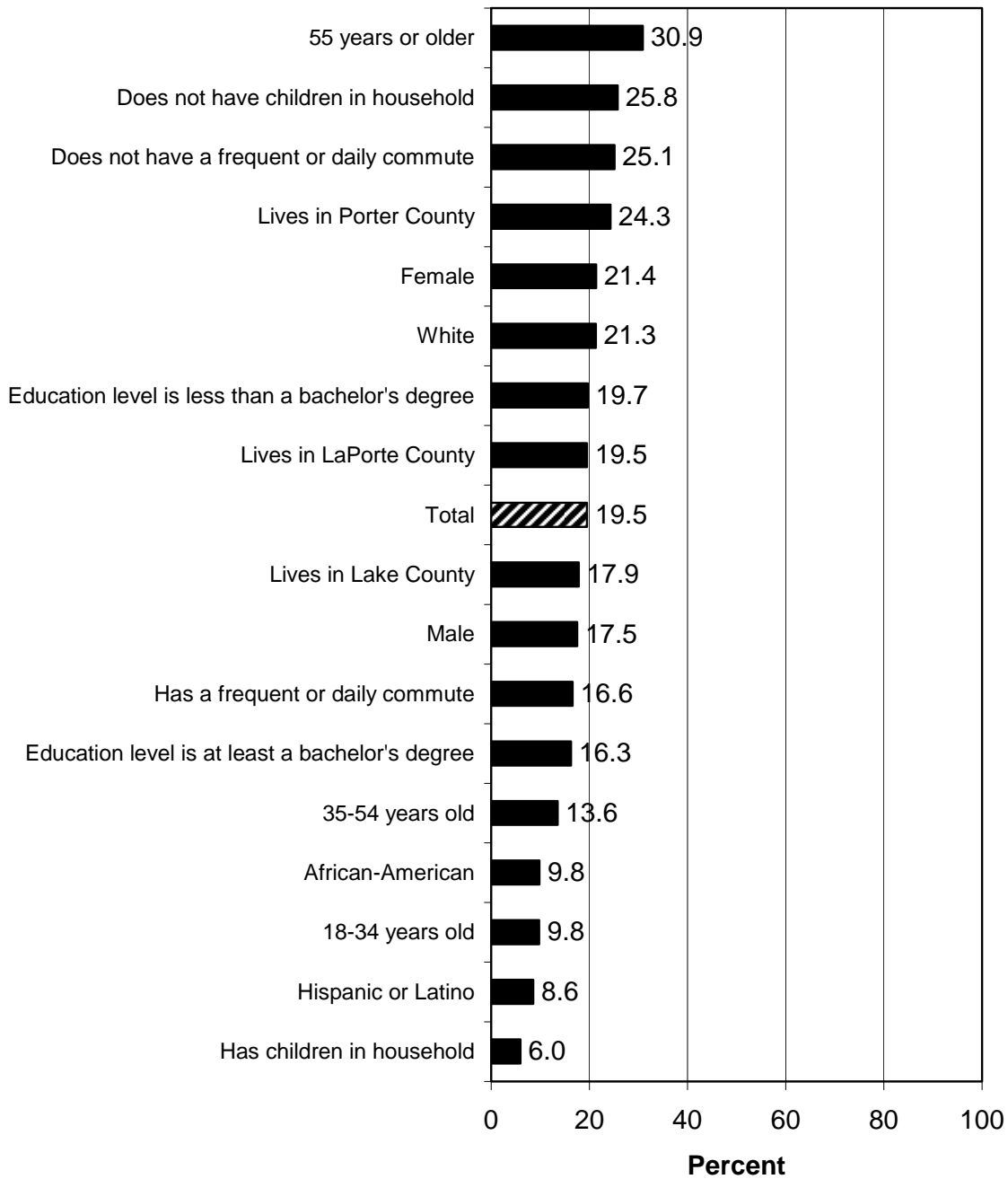
## Gas Can Exchange

- Prior to this survey, 20% of residents were aware of this campaign.
  - Groups most likely to be aware of the campaign are residents 55 or older (31% were aware of the campaign), those with no children in the household (26%), those without a frequent or daily commute (25%), and Porter County residents (24%).
  - Among those who heard about the campaign, the most common sources of information were newspapers or magazines (25%); radio (25%); and friends, family, or word-of-mouth (23%).
    - Compared to 2012, residents are less likely to learn about Gas Can Exchange through newspapers or magazines and are more likely to learn about it through word-of-mouth.
  - Residents were asked to rate the effectiveness that the campaign could have on air quality education in Northwest Indiana, on a scale of 0 to 10, where 0 is not at all effective and 10 is extremely effective. The campaign received a mean rating of 6.0; 20% rated it 9 or 10.
    - Shown in this section is a GIS map of Northwest Indiana illustrating the distribution of opinion within the region for this survey question.

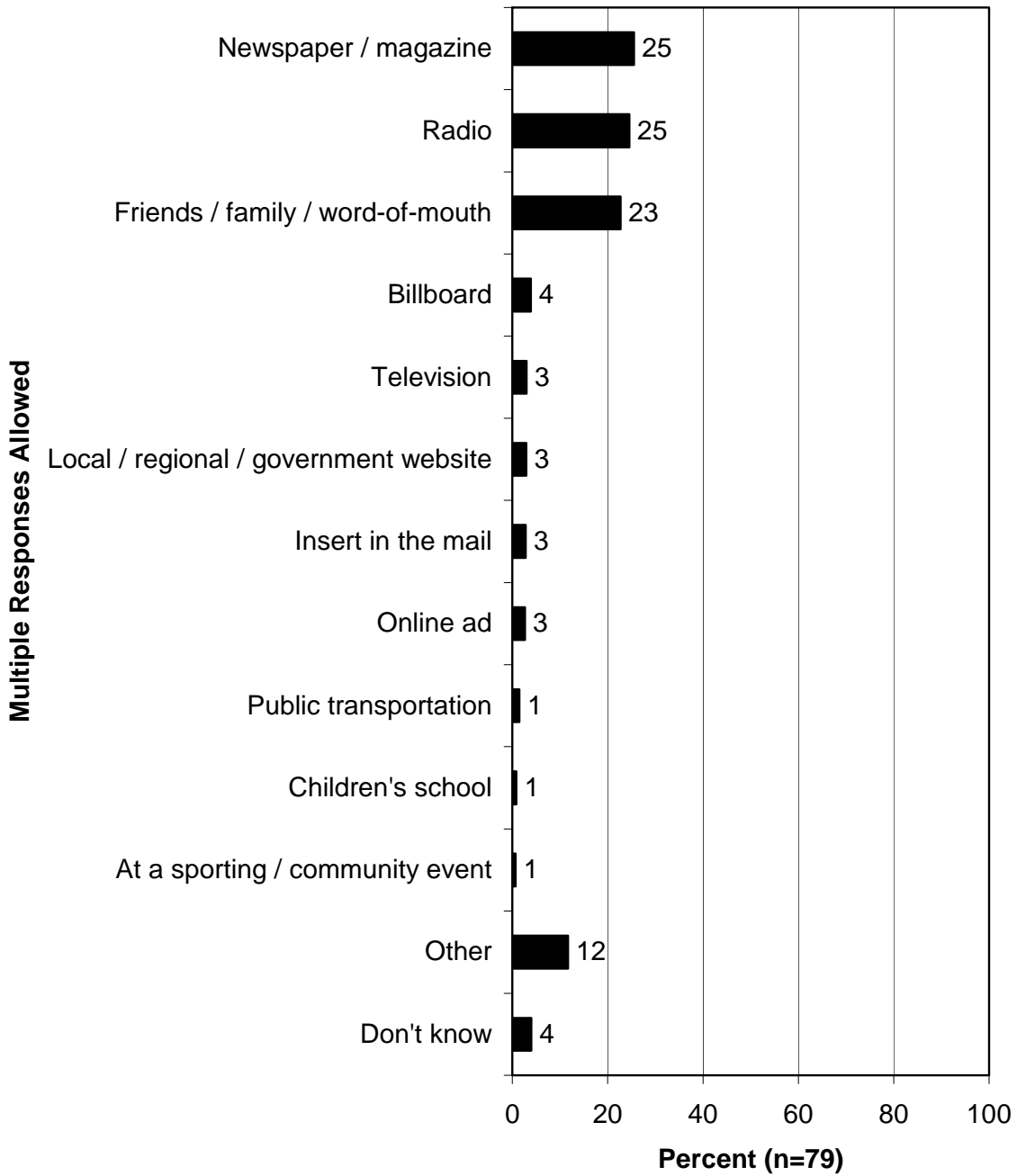
**Q100. Gas Can Exchange.  
(Were you aware of this campaign?)**

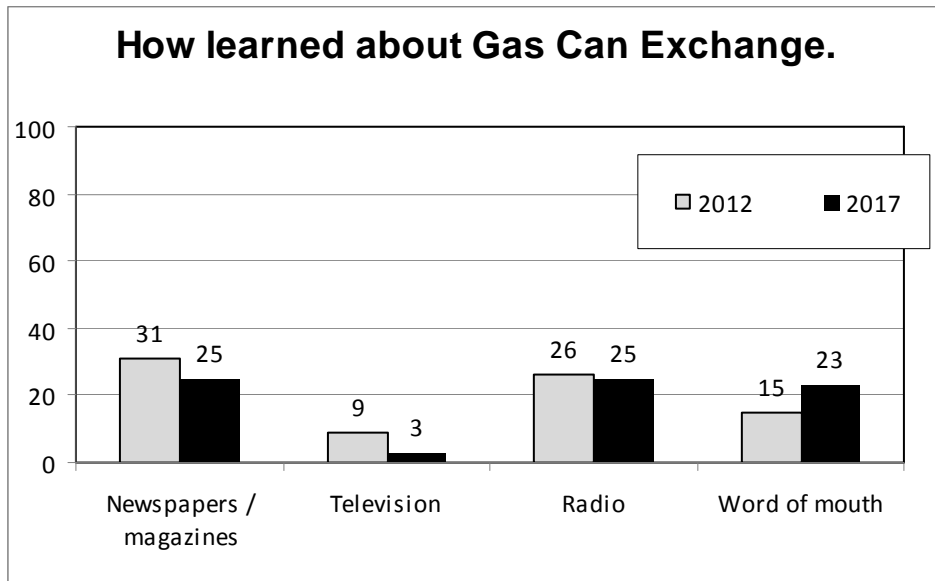


**Percent of each of the following groups who were aware of Gas Can Exchange prior to the survey:**



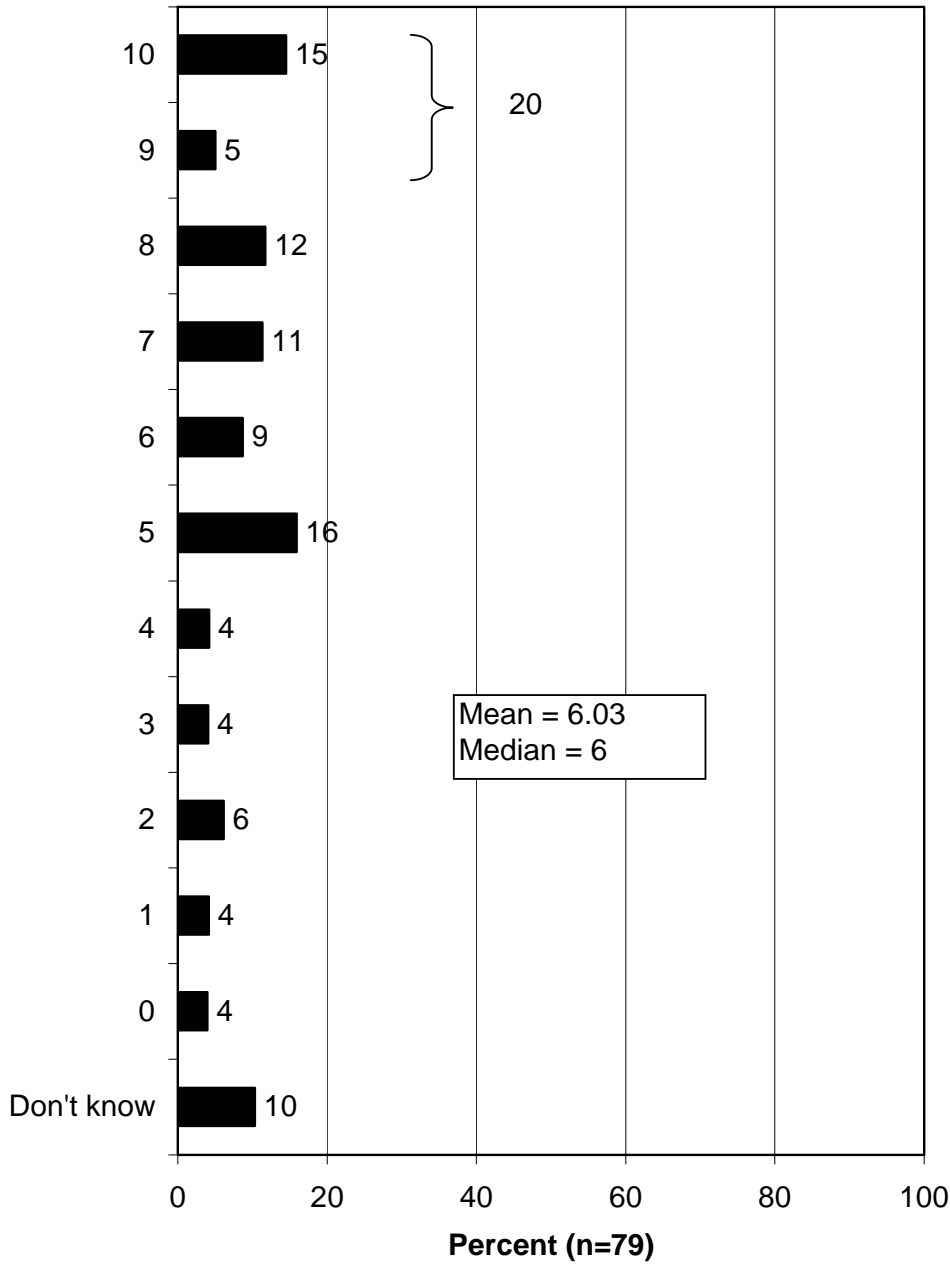
**Q140. How or by what source did you first learn about Gas Can Exchange? (Asked of those who have heard of this campaign.)**



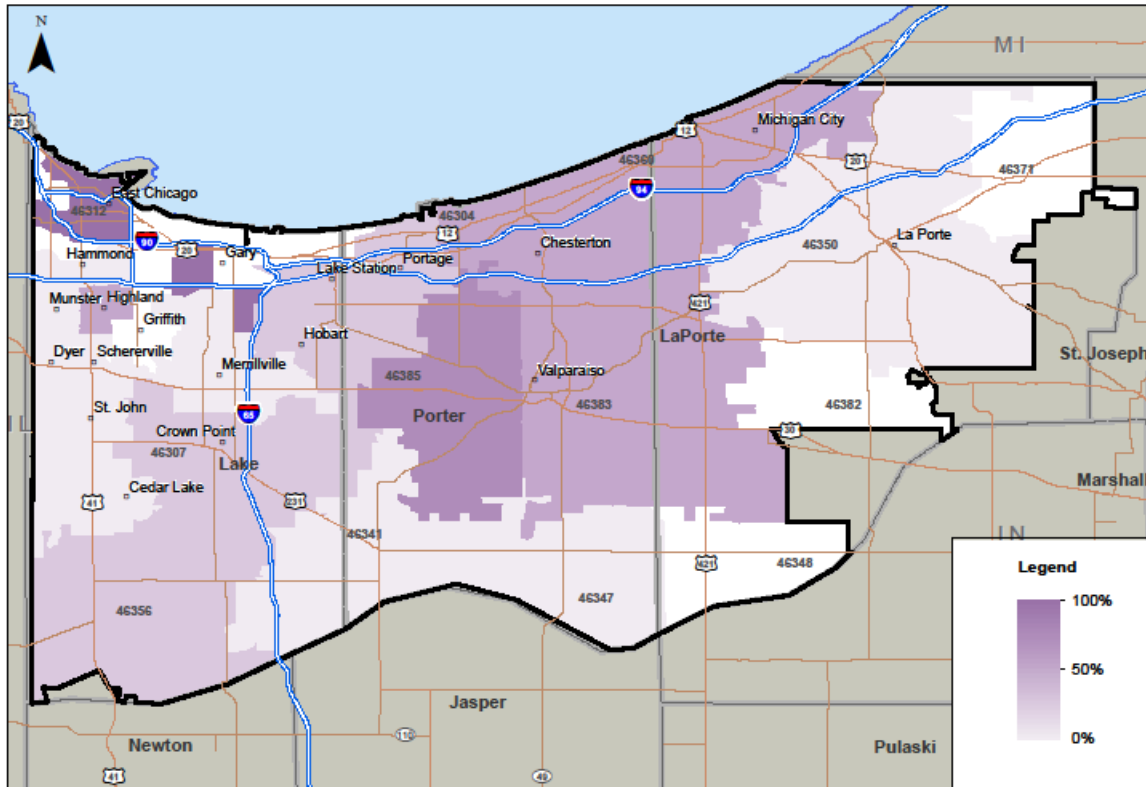




**Q142. How much of a positive effect do you think Gas Can Exchange could have on air quality education in Northwest Indiana? (Asked of those who have heard of this campaign.)**



Percentage who think the Gas Can Exchange initiative could positively affect (ratings of 8-10) air quality education.



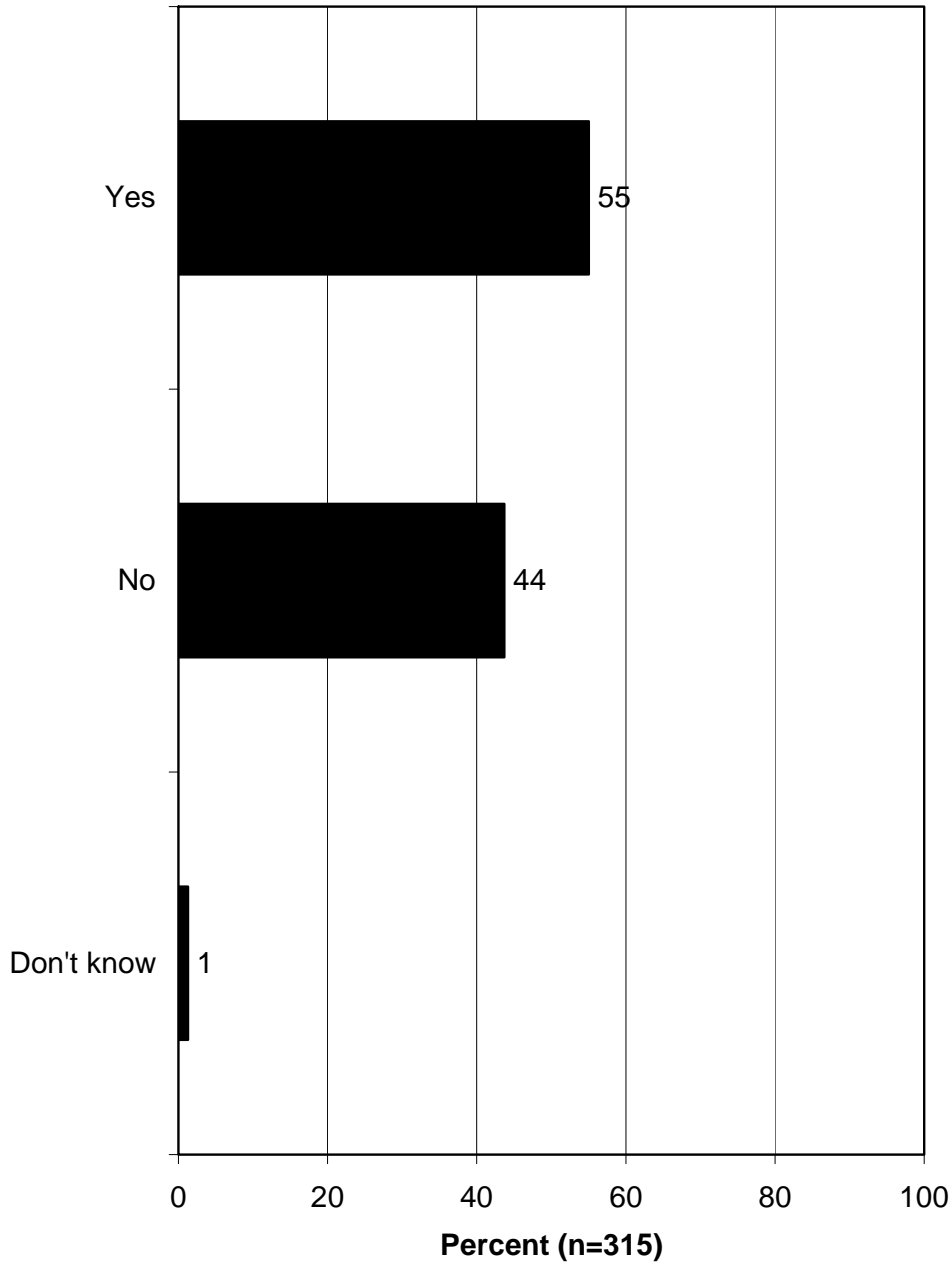
Data collected by  
Responsive  
Management

Q142. How much of a positive effect do you think Gas Can Exchange could have on air quality education in Northwest Indiana?  
Please use a 0 to 10 scale, where 0 is "not at all effective" and 10 is "extremely effective."

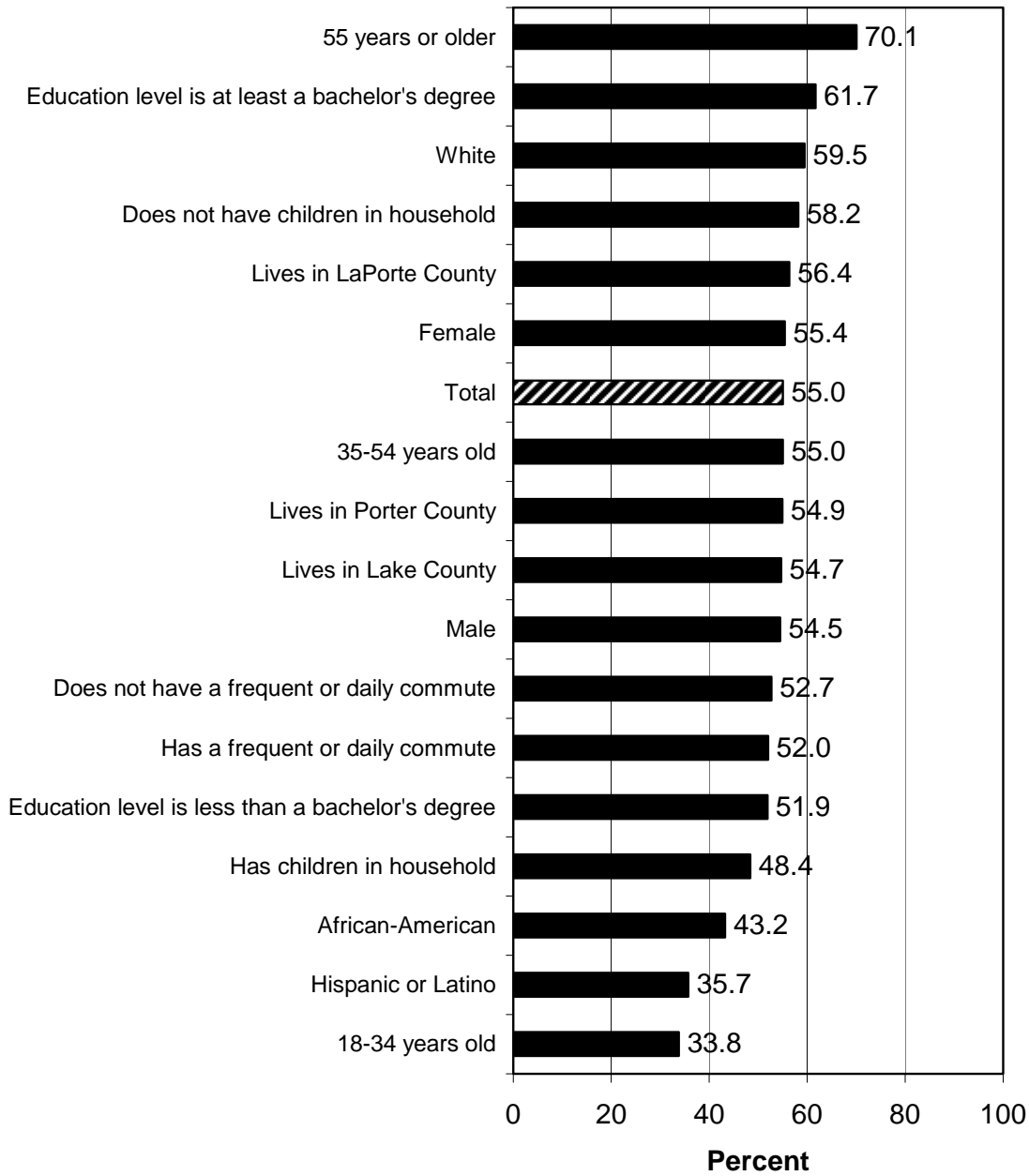
## **Household Hazardous Waste Collection**

- Prior to this survey, 55% of residents were aware of this campaign.
  - Groups most likely to be aware of the campaign are residents 55 or older (70% were aware of the campaign), those with an education level of at least a bachelor's degree (62%), white residents (60%), and those with no children in the household (58%).
  - Among those who heard about the campaign, the most common source of information was newspapers or magazines (38%), distantly followed by friends, family, or word-of-mouth (22%) and inserts in the mail (14%).
    - Residents are more likely to learn about Household Hazardous Waste Collection through word-of-mouth than they were in 2012.
  - Residents were asked to rate the effectiveness that the campaign could have on air quality education in Northwest Indiana, on a scale of 0 to 10, where 0 is not at all effective and 10 is extremely effective. The campaign received a mean rating of 7.1; 38% rated it 9 or 10.
    - Shown in this section is a GIS map of Northwest Indiana illustrating the distribution of opinion within the region for this survey question.

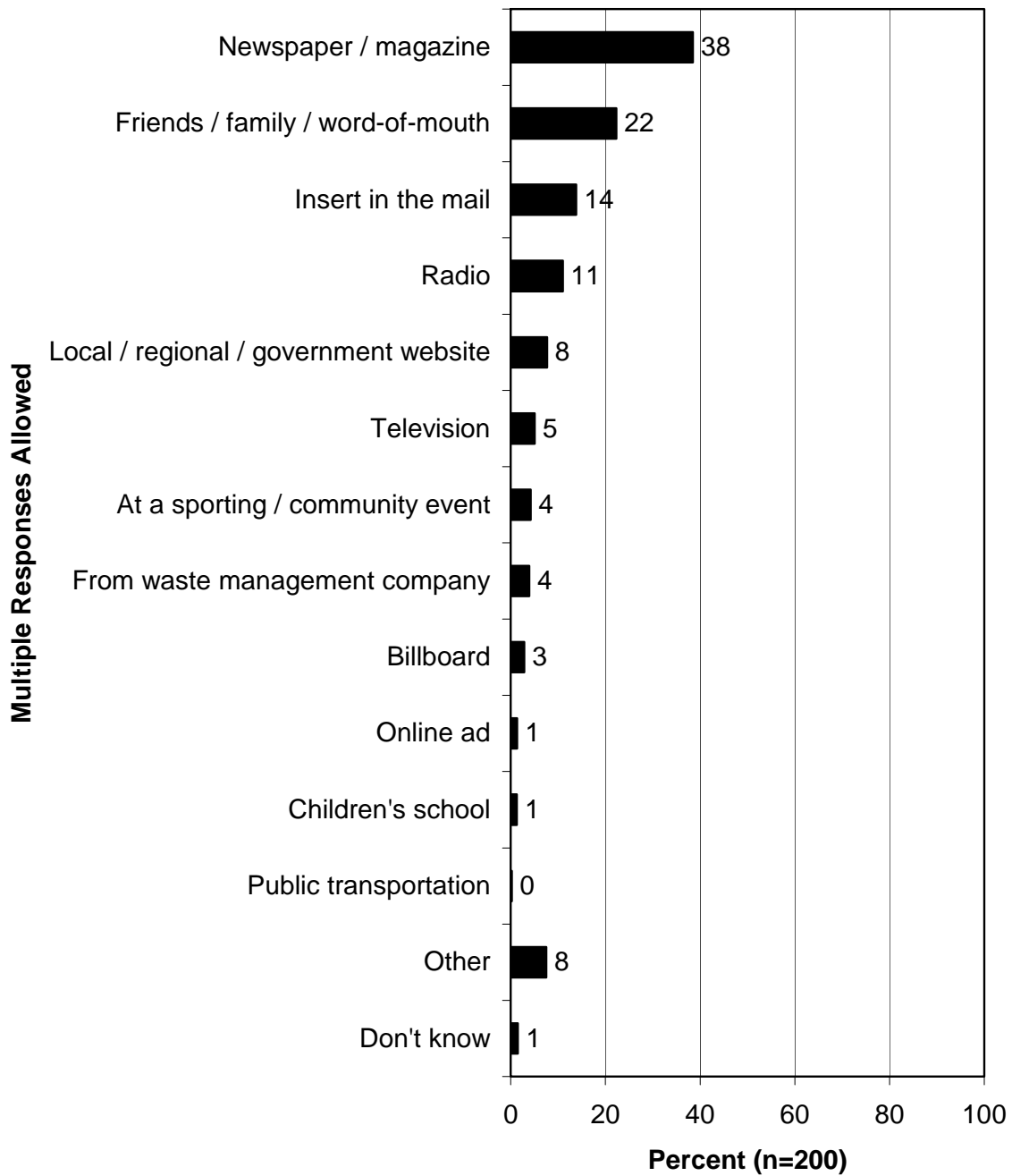
**Q102. Household Hazardous Waste Collection.  
(Were you aware of this campaign?)**

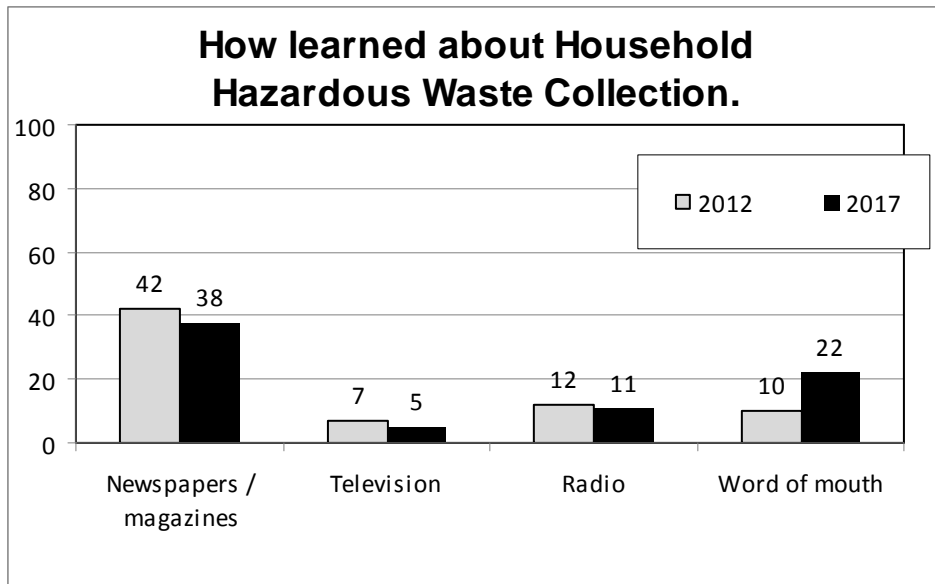


**Percent of each of the following groups who were aware of Household Hazardous Waste Collection prior to the survey:**

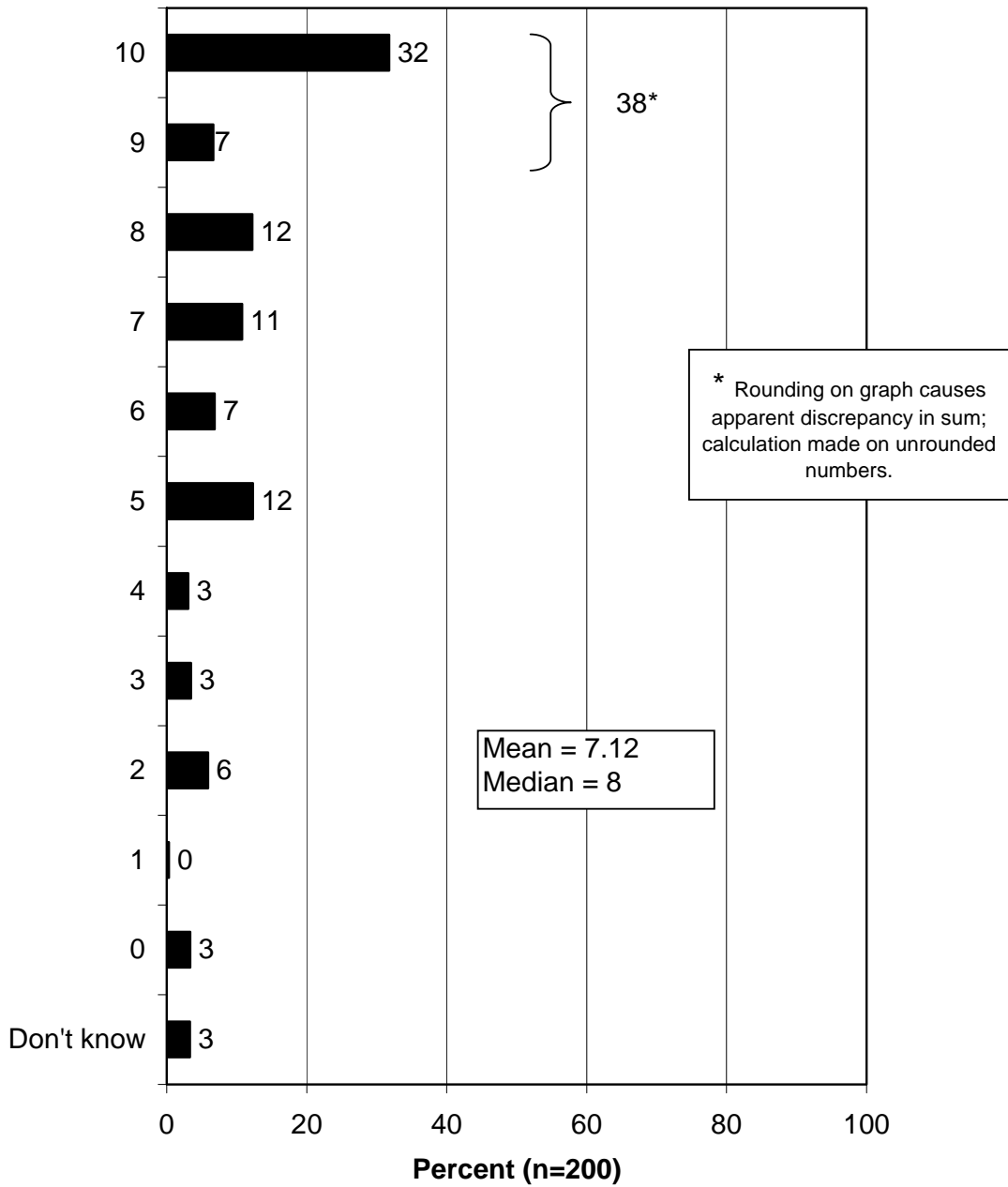


**Q148. How or by what source did you first learn about Household Hazardous Waste Collection?  
(Asked of those who have heard of this campaign.)**



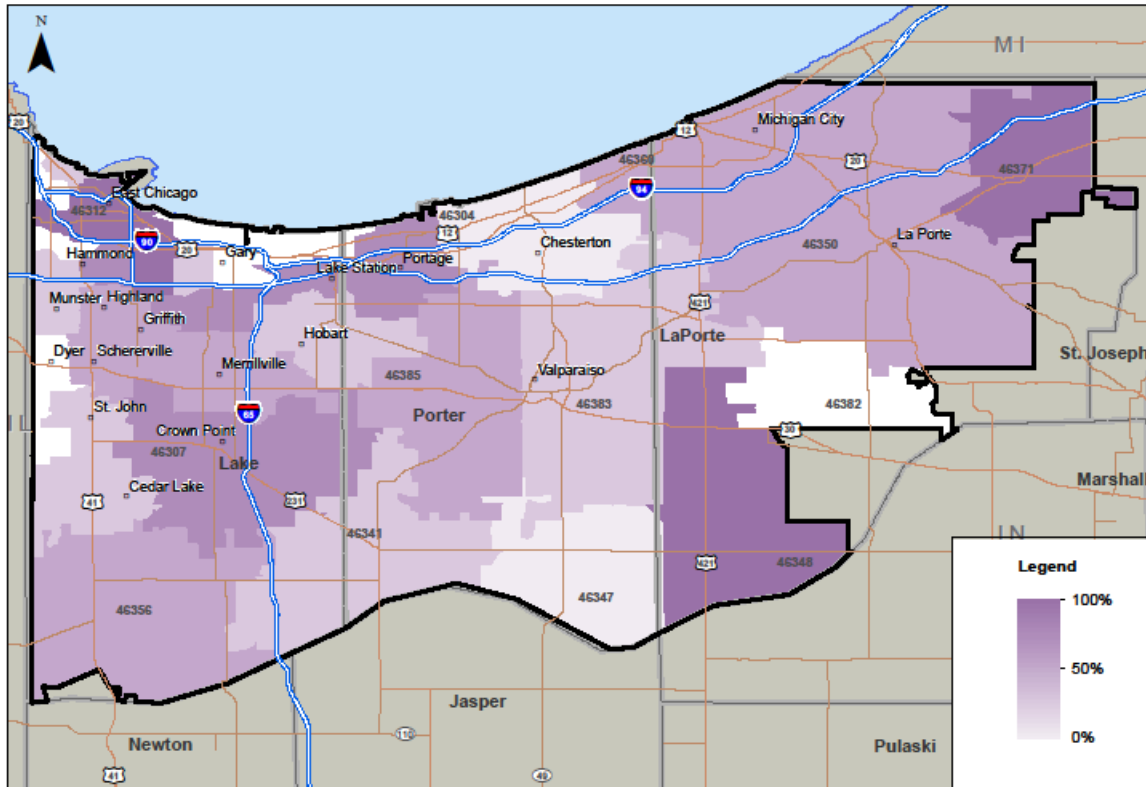


**Q150. How much of a positive effect do you think Household Hazardous Waste Collection could have on air quality education in Northwest Indiana? (Asked of those who have heard of this campaign.)**





Percentage who think the Household Hazardous Waste Collection initiative could positively affect (ratings of 8-10) air quality education.



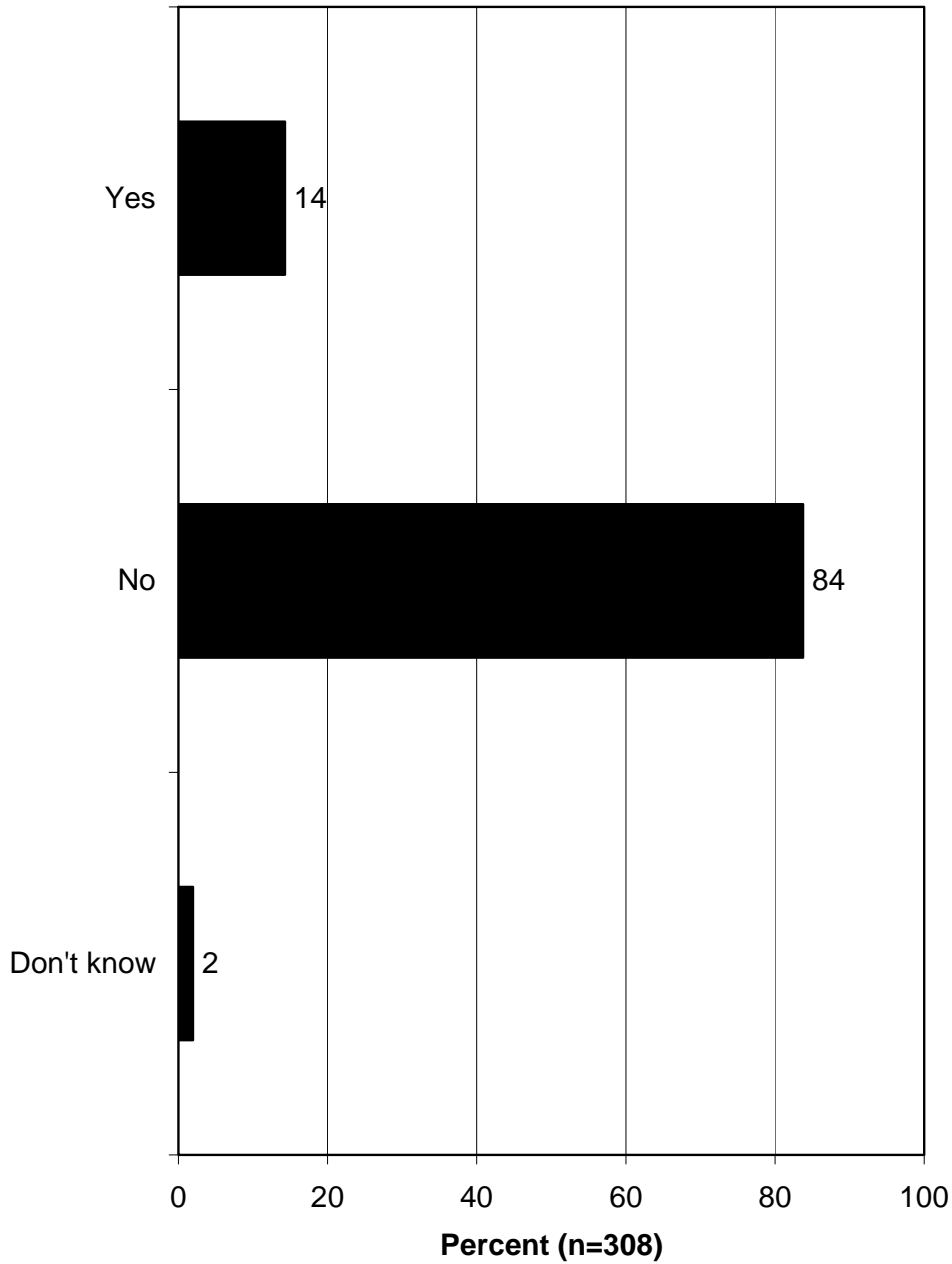
Data collected by  
Responsive  
Management

Q150. How much of a positive effect do you think Household Hazardous Waste Collection could have on air quality education in Northwest Indiana? Please use a 0 to 10 scale, where 0 is "not at all effective" and 10 is "extremely effective."

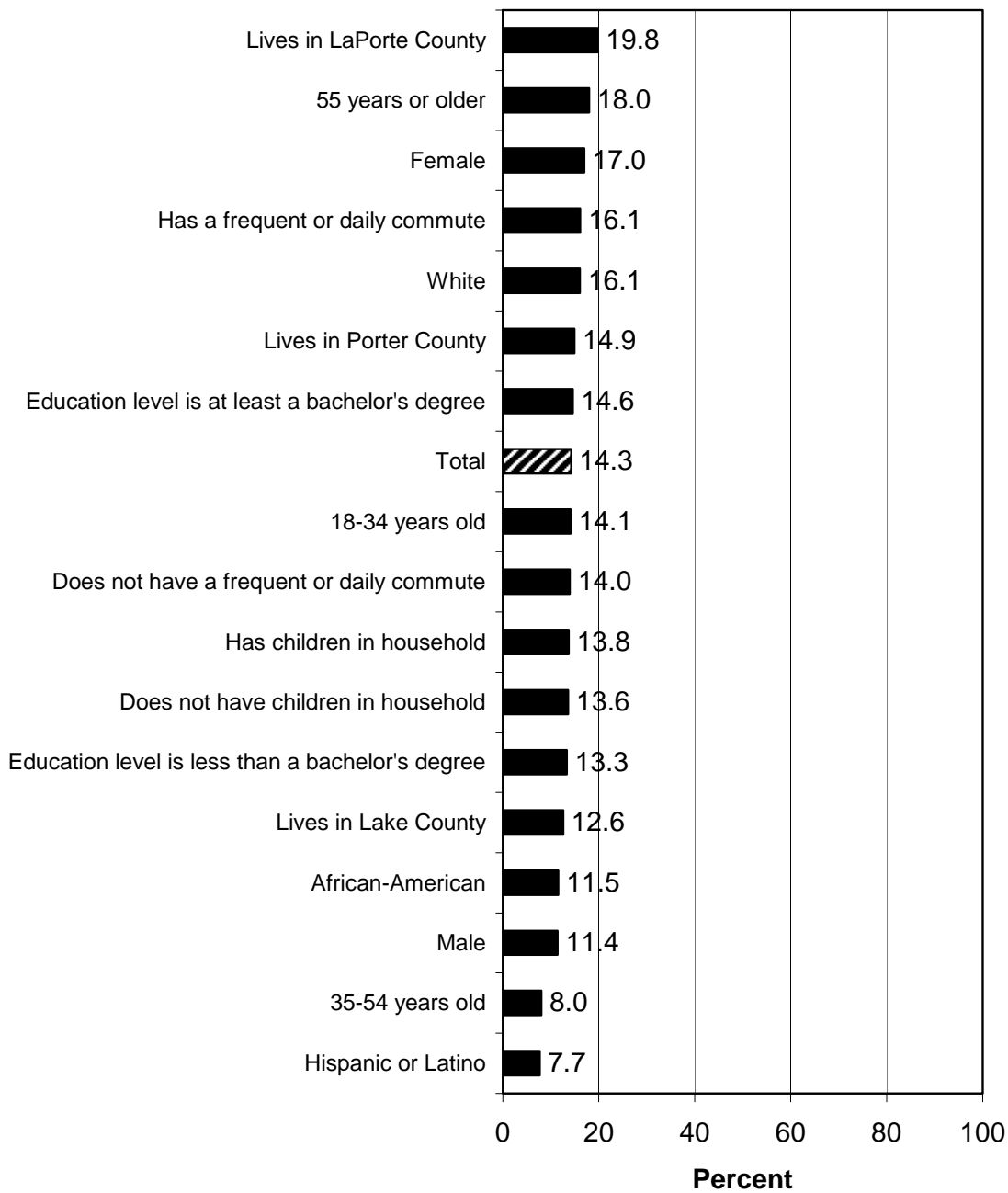
### **It All Adds Up To Cleaner Air**

- Prior to this survey, 14% of residents were aware of this campaign.
  - Groups most likely to be aware of the campaign are LaPorte County residents (20% were aware of the campaign), residents 55 and older (18%), and female residents (17%).
  - Among those who heard about the campaign, the most common sources of information were newspapers or magazines (28%) and radio (17%).
    - Compared to 2012, residents are more likely to learn about It All Adds Up to Cleaner Air through radio and are less likely to learn about it through television or newspapers and magazines.
  - Residents were asked to rate the effectiveness that the campaign could have on air quality education in Northwest Indiana, on a scale of 0 to 10, where 0 is not at all effective and 10 is extremely effective. The campaign received a mean rating of 8.0, the highest of all the campaigns; 41% rated it 9 or 10.
    - Shown in this section is a GIS map of Northwest Indiana illustrating the distribution of opinion within the region for this survey question.

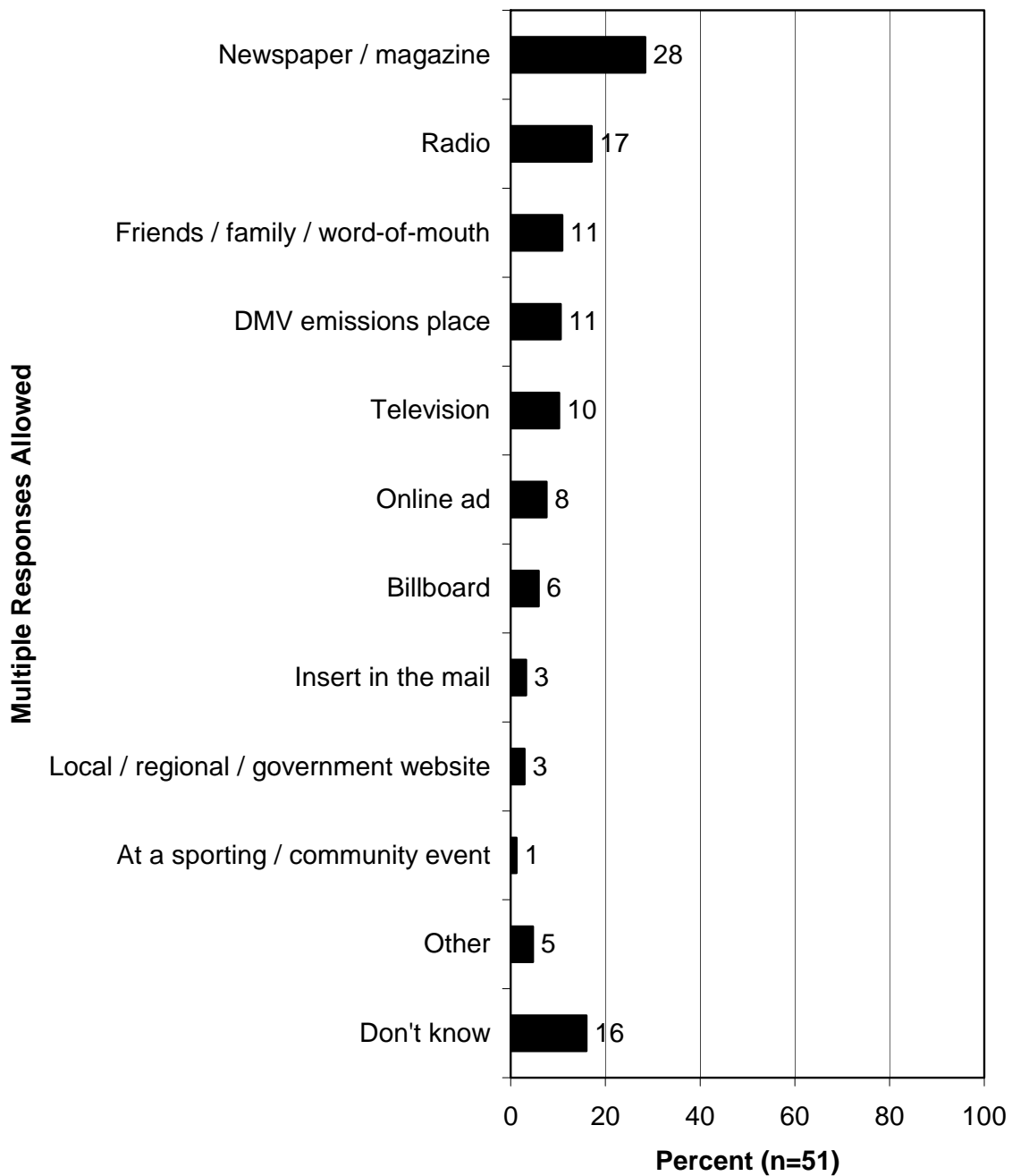
**Q104. It All Adds Up to Cleaner Air.  
(Were you aware of this campaign?)**

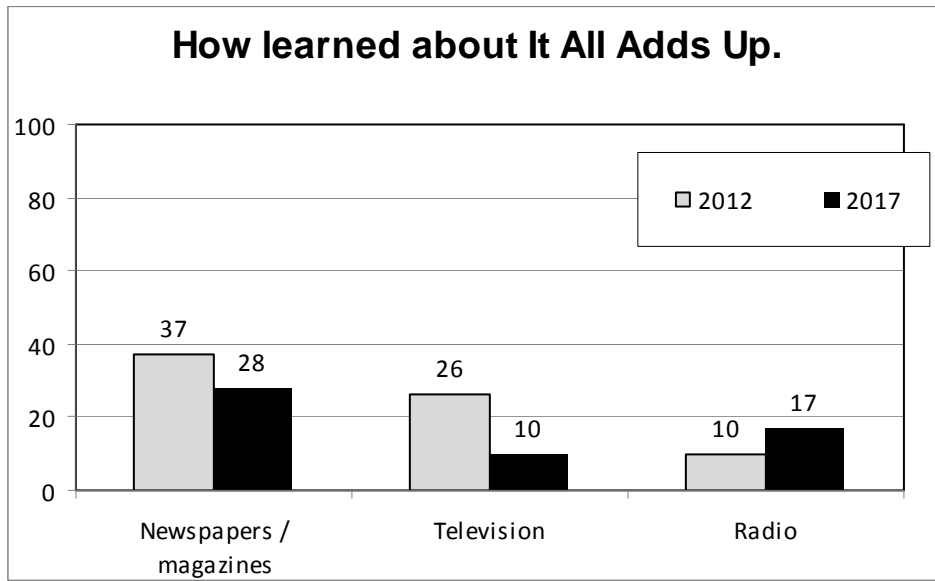


**Percent of each of the following groups who were aware of It All Adds Up to Cleaner Air prior to the survey:**

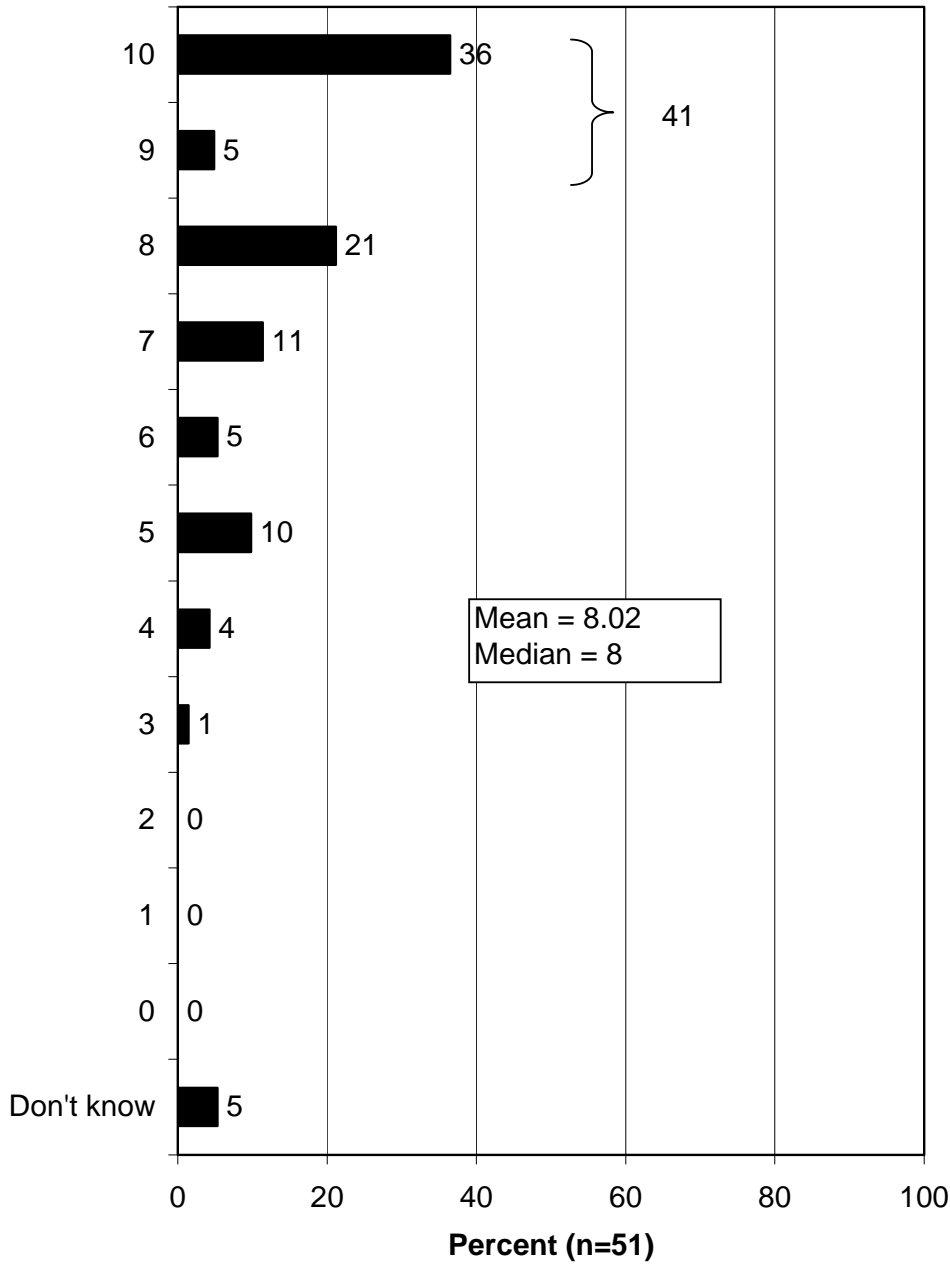


**Q156. How or by what source did you first learn about It All Adds Up To Cleaner Air? (Asked of those who have heard of this campaign.)**

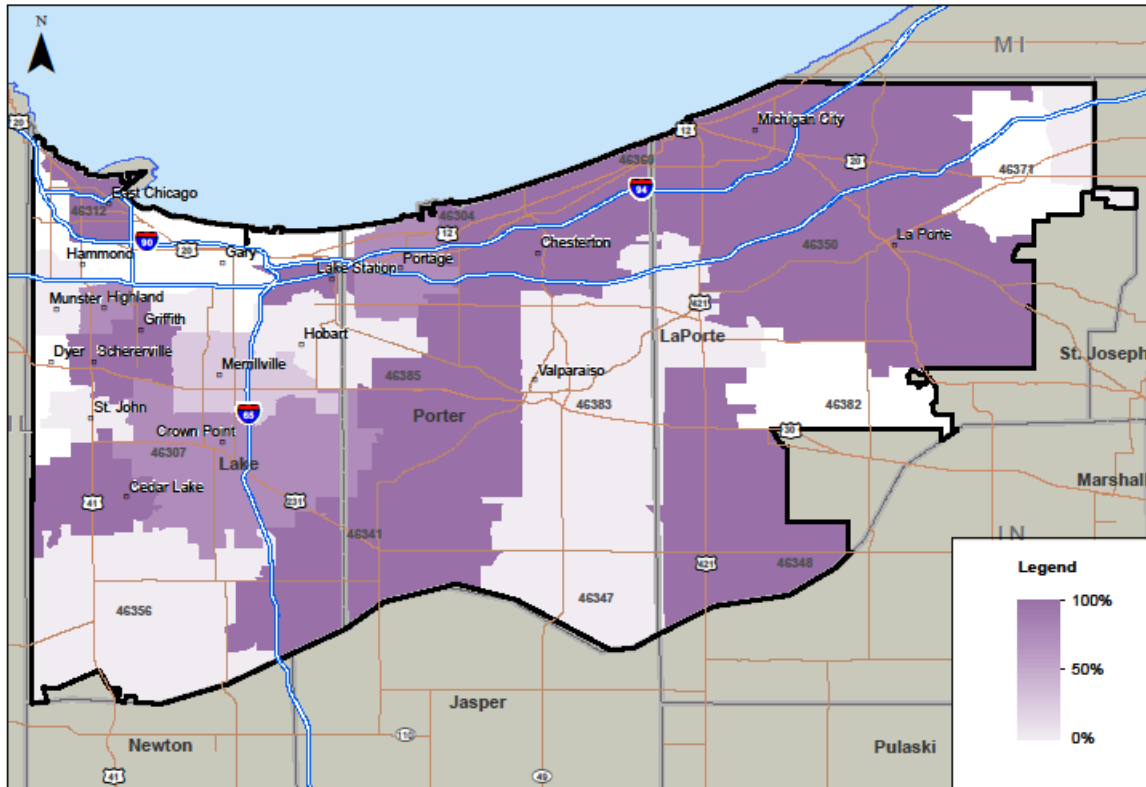




**Q158. How much of a positive effect do you think It All Adds Up to Cleaner Air could have on air quality education in Northwest Indiana? (Asked of those who have heard of this campaign.)**



Percentage who think the It All Adds Up to Cleaner Air initiative could positively affect (ratings of 8-10) air quality education.



Data collected by  
Responsive  
Management

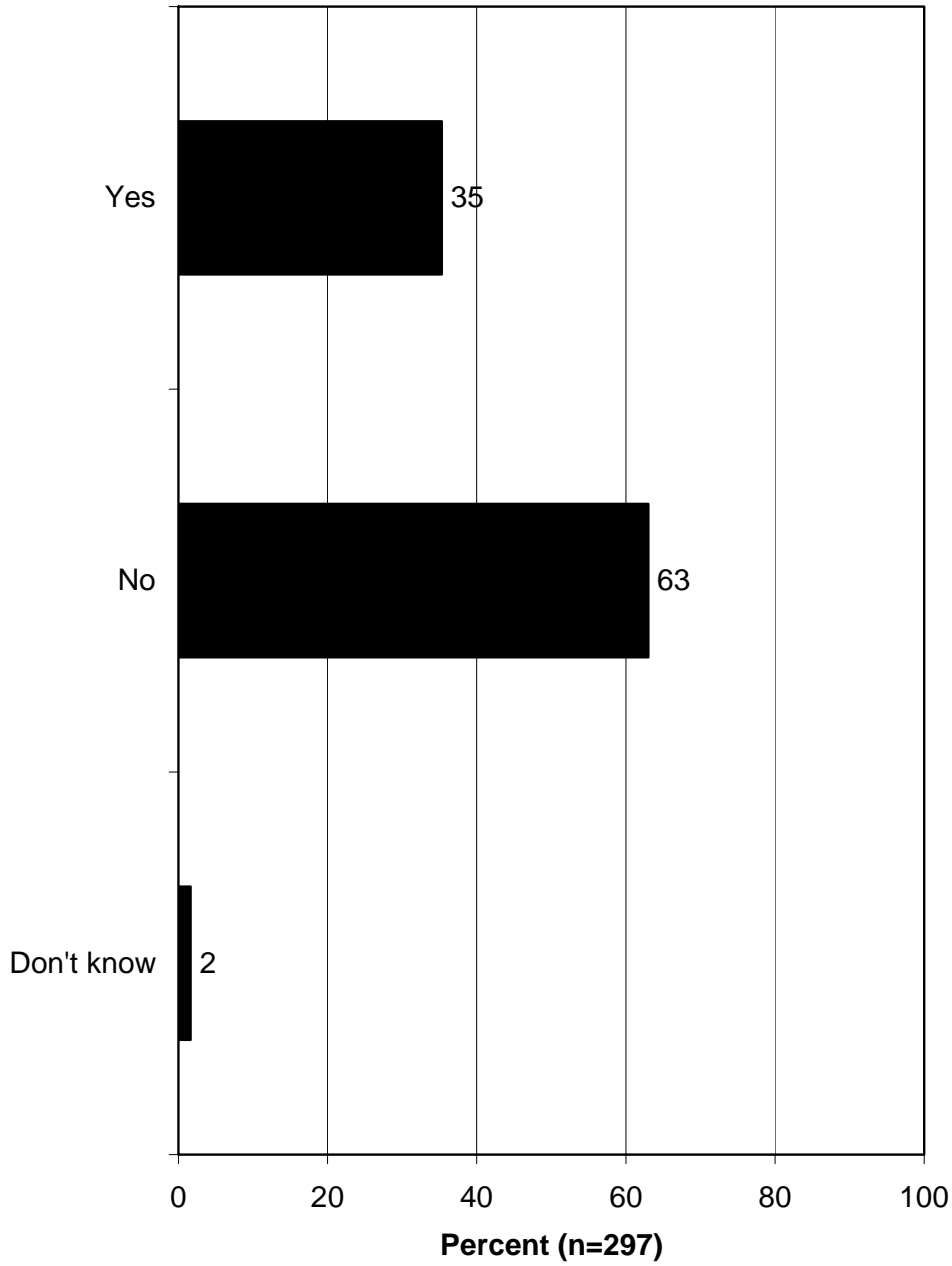
Q158. How much of a positive effect do you think It All Adds Up to Cleaner Air could have on air quality education in Northwest Indiana? Please use a 0 to 10 scale, where 0 is "not at all effective" and 10 is "extremely effective."



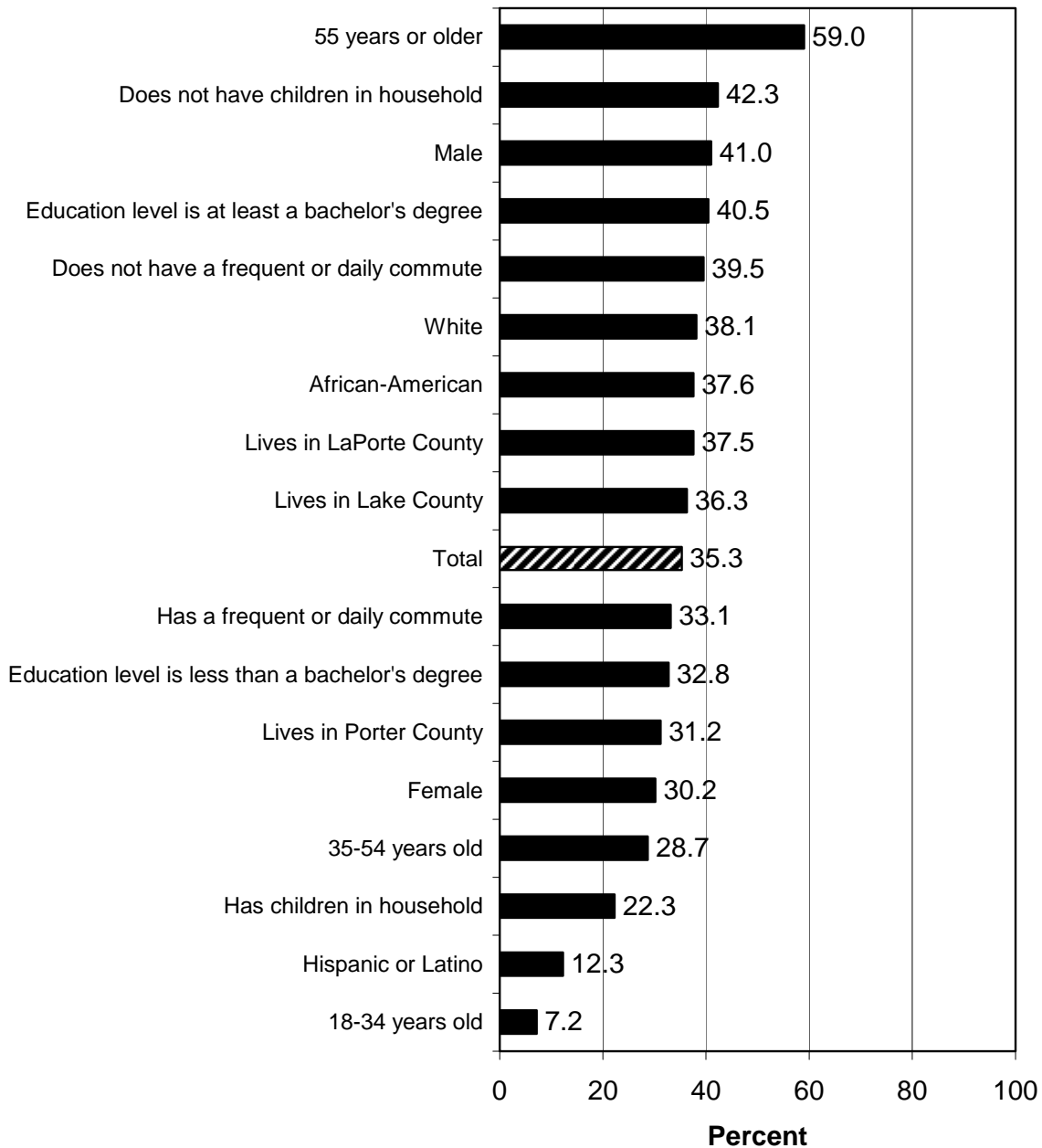
### **Northwestern Indiana Regional Planning Commission (NIRPC)**

- Prior to this survey, 35% of residents were aware of the organization.
  - Age is clearly a major factor regarding awareness of the NIRPC: the group *most* likely to be aware of the organization is residents 55 and older (59% heard of the campaign) and the group *least* likely to be aware is residents 18-34 years old (only 7%). Other groups with higher levels of awareness are those with no children in the household (42%) and male residents (41%).
  - Among those who heard about the organization, by far the most common source of information was newspapers or magazines (46%). All other sources were named by less than 10% of respondents.
    - Nonetheless, residents are less likely to learn about the NIRPC through newspapers or magazines than they were in 2012 (59% listed this source in that study).
  - Residents were asked to rate the effectiveness that the organization could have on air quality education in Northwest Indiana, on a scale of 0 to 10, where 0 is not at all effective and 10 is extremely effective. The NIRPC received a mean rating of 6.6; 21% rated it 9 or 10.
    - Shown in this section is a GIS map of Northwest Indiana illustrating the distribution of opinion within the region for this survey question.

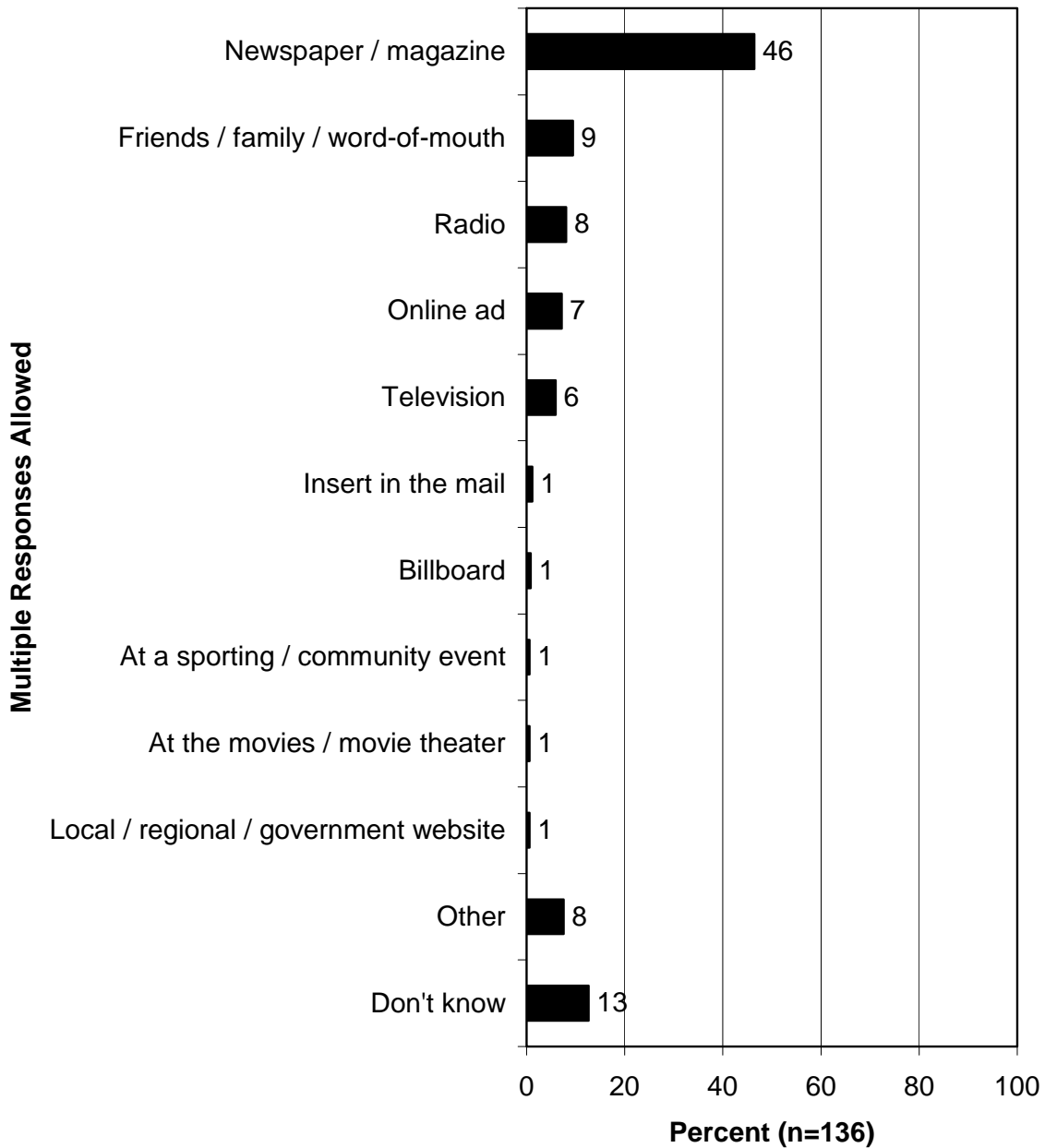
**Q106. Northwestern Indiana Regional Planning Commission. (Were you aware of this?)**

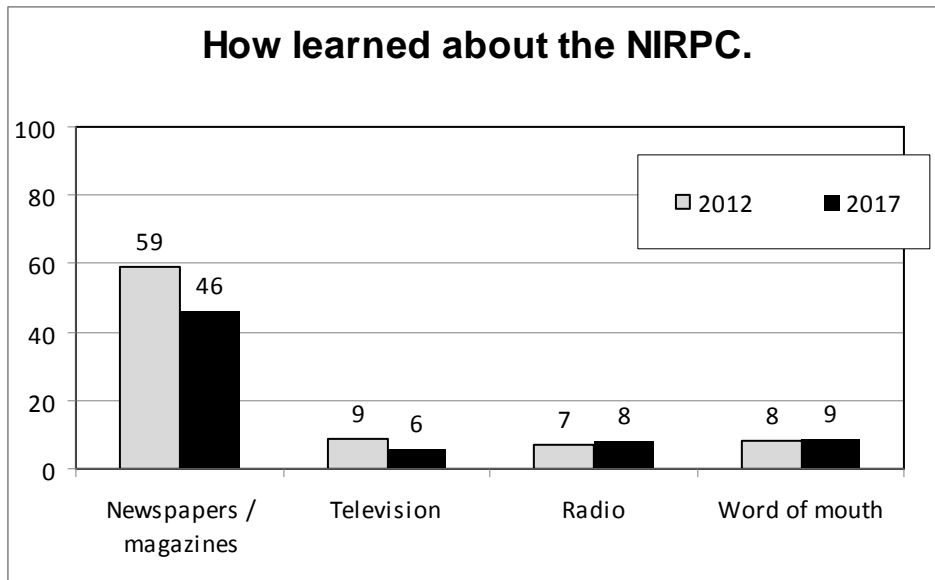


**Percent of each of the following groups who were aware of the Northwestern Indiana Regional Planning Commission (NIRPC) prior to the survey:**

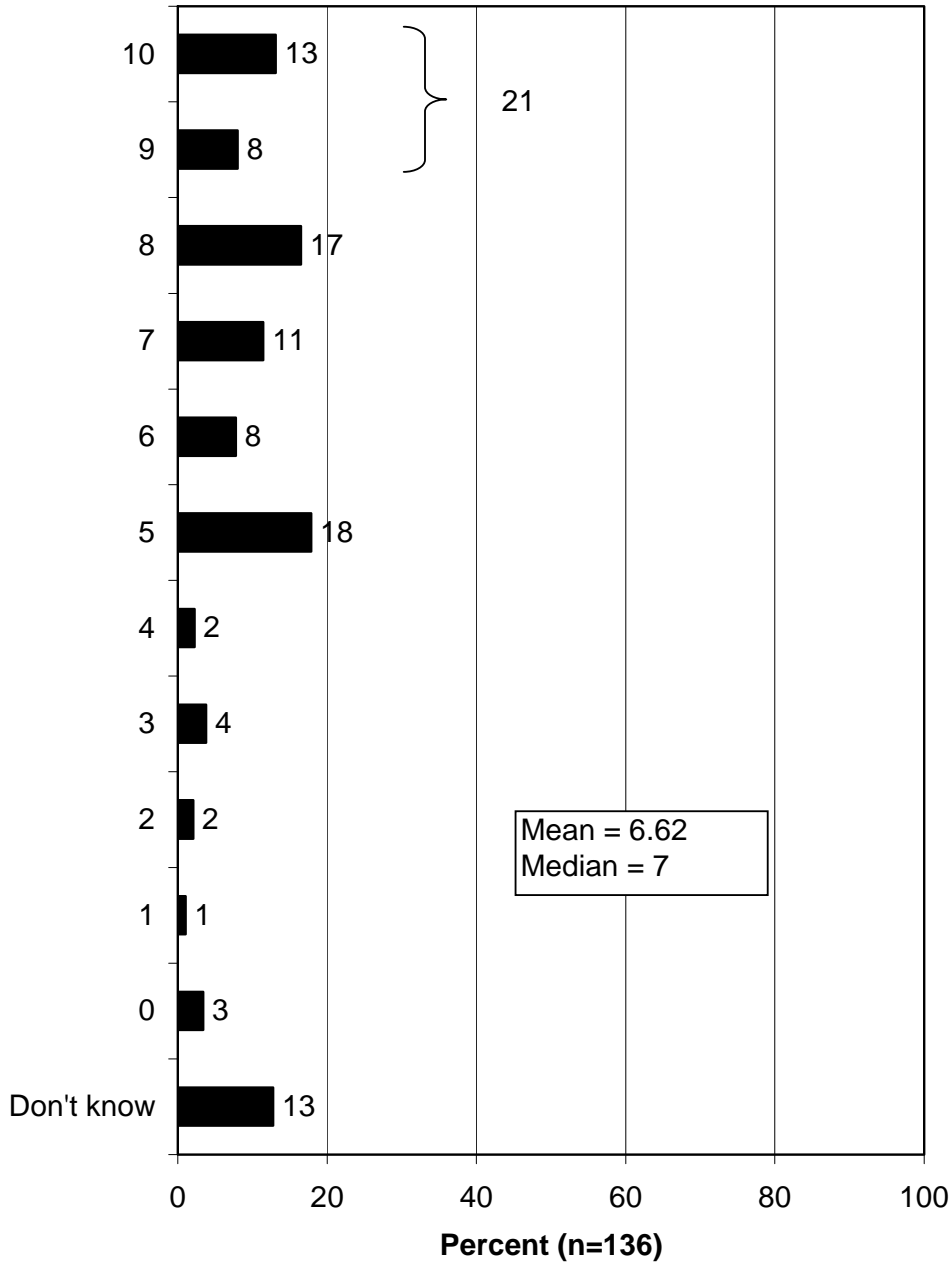


**Q164. How or by what source did you first learn about the Northwestern Indiana Regional Planning Commission, also known as the NIRPC? (Asked of those who have heard of this.)**

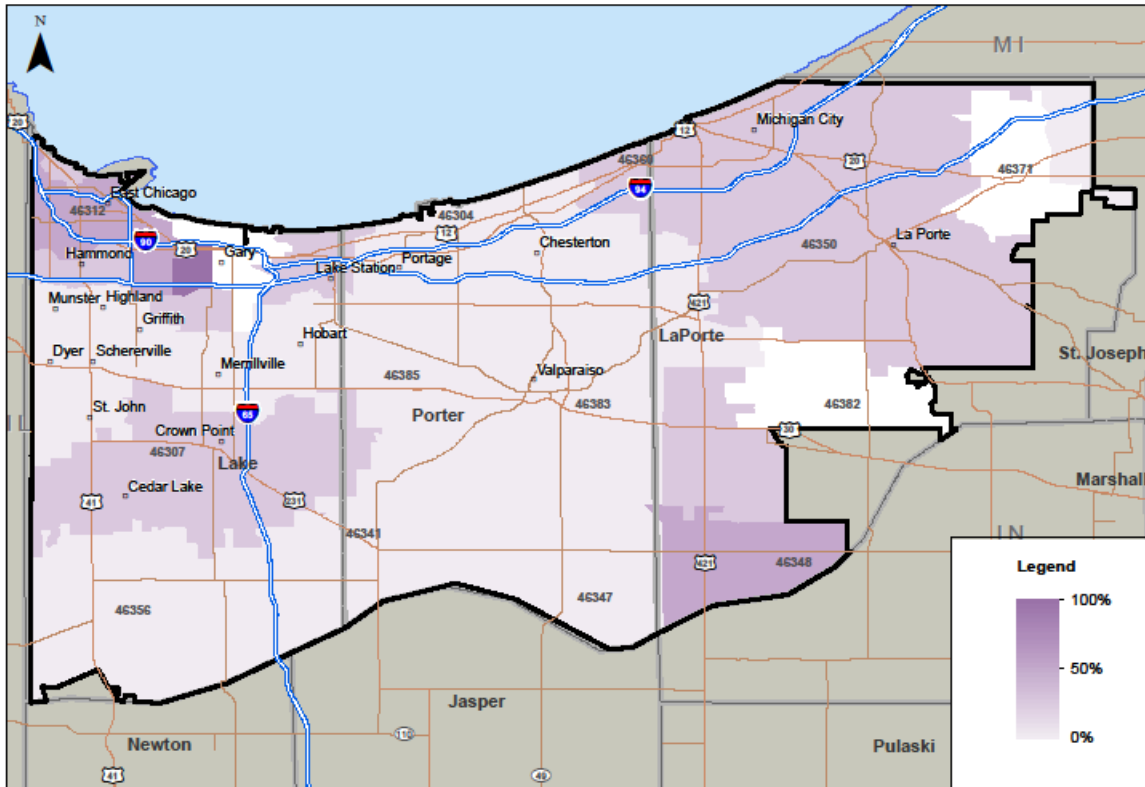




**Q166. How much of a positive effect do you think the Northwestern Indiana Regional Planning Commission could have on air quality education in Northwest Indiana? (Asked of those who have heard of this.)**



Percentage who think the Northwestern Indiana Regional Planning Commission could positively affect (ratings of 8-10) air quality education.



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Data collected by  
Responsive  
Management

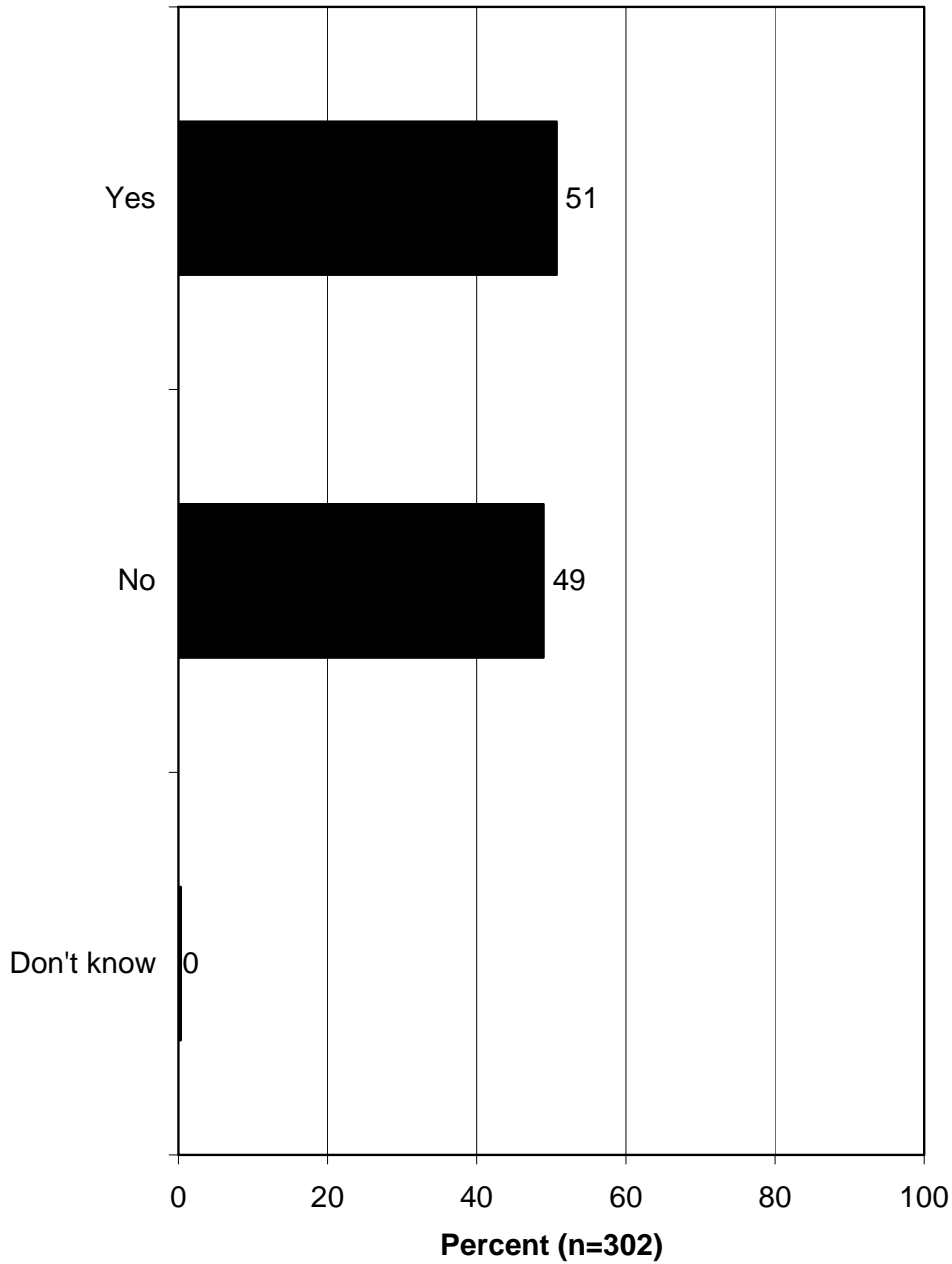
Q186. How much of a positive effect do you think the Northwestern Indiana Regional Planning Commission (NIRPC) could have on air quality education in Northwest Indiana? Please use a 0 to 10 scale, where 0 is "not at all effective" and 10 is "extremely effective."

## Ozone Action Days

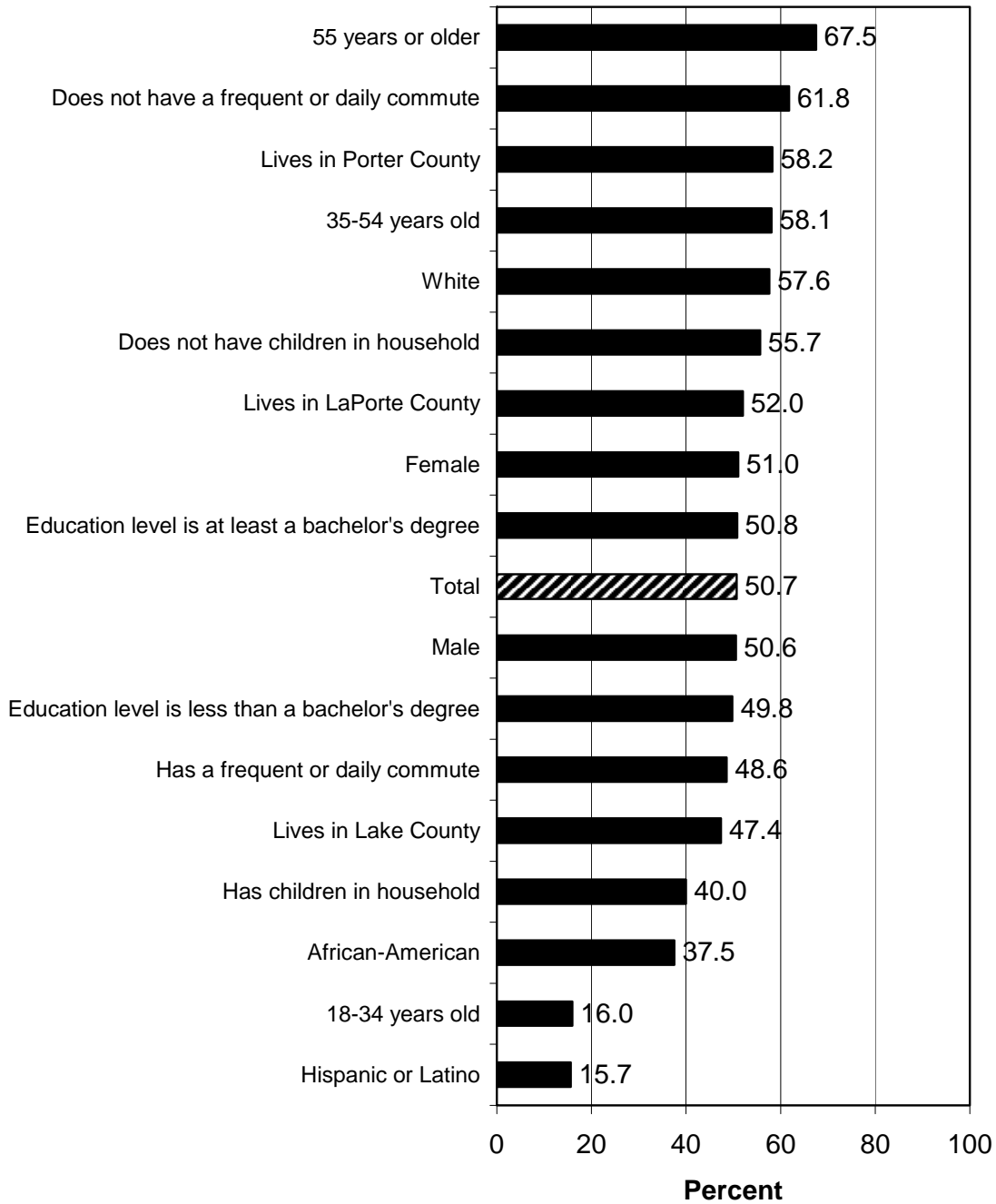
- Prior to this survey, 51% of residents were aware of this campaign.
  - Groups most likely to be aware of the campaign are residents 55 or older (68% are aware) and those without a frequent or daily commute (62%). The groups least likely to be aware are Hispanic residents (16%) and residents 18-34 years old (16%).
  - Among those who heard about the campaign, by far the most common source of information was television (55%), distantly followed by newspapers or magazines (22%) and radio (12%).
    - The trend graph shows that these sources have remained consistent since the 2012 study.
  - Residents were asked to rate the effectiveness that the campaign could have on air quality education in Northwest Indiana, on a scale of 0 to 10, where 0 is not at all effective and 10 is extremely effective. The campaign received a mean rating of 6.6; 24% rated it 9 or 10.
    - Shown in this section is a GIS map of Northwest Indiana illustrating the distribution of opinion within the region for this survey question.



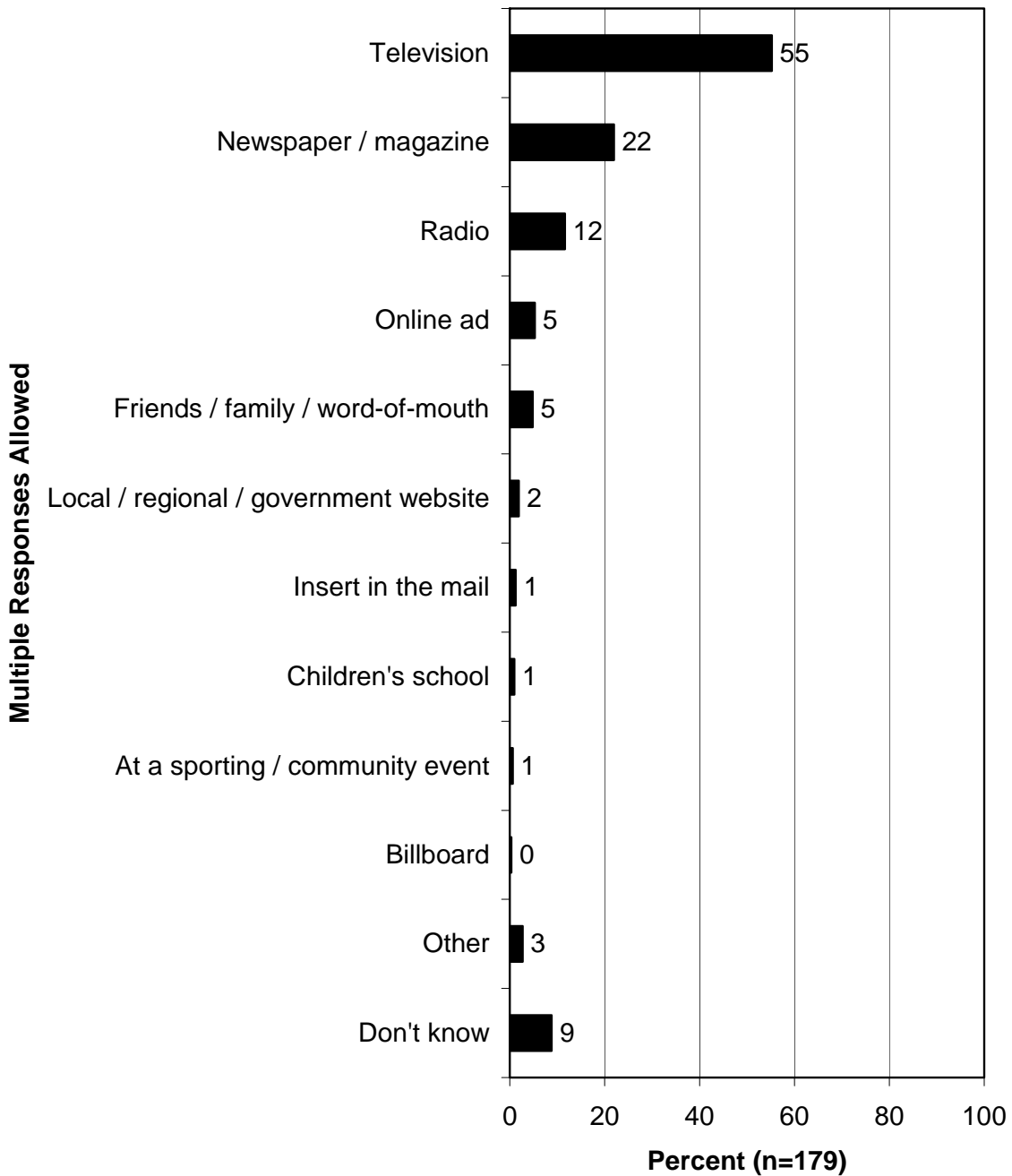
**Q108. Ozone Action Days.  
(Were you aware of this campaign?)**

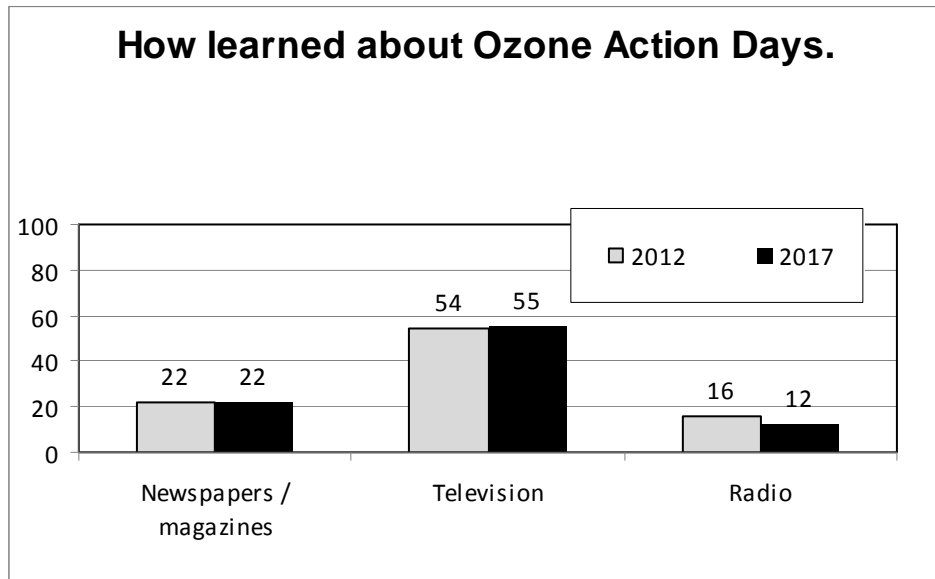


**Percent of each of the following groups who were aware of Ozone Action Days prior to the survey:**

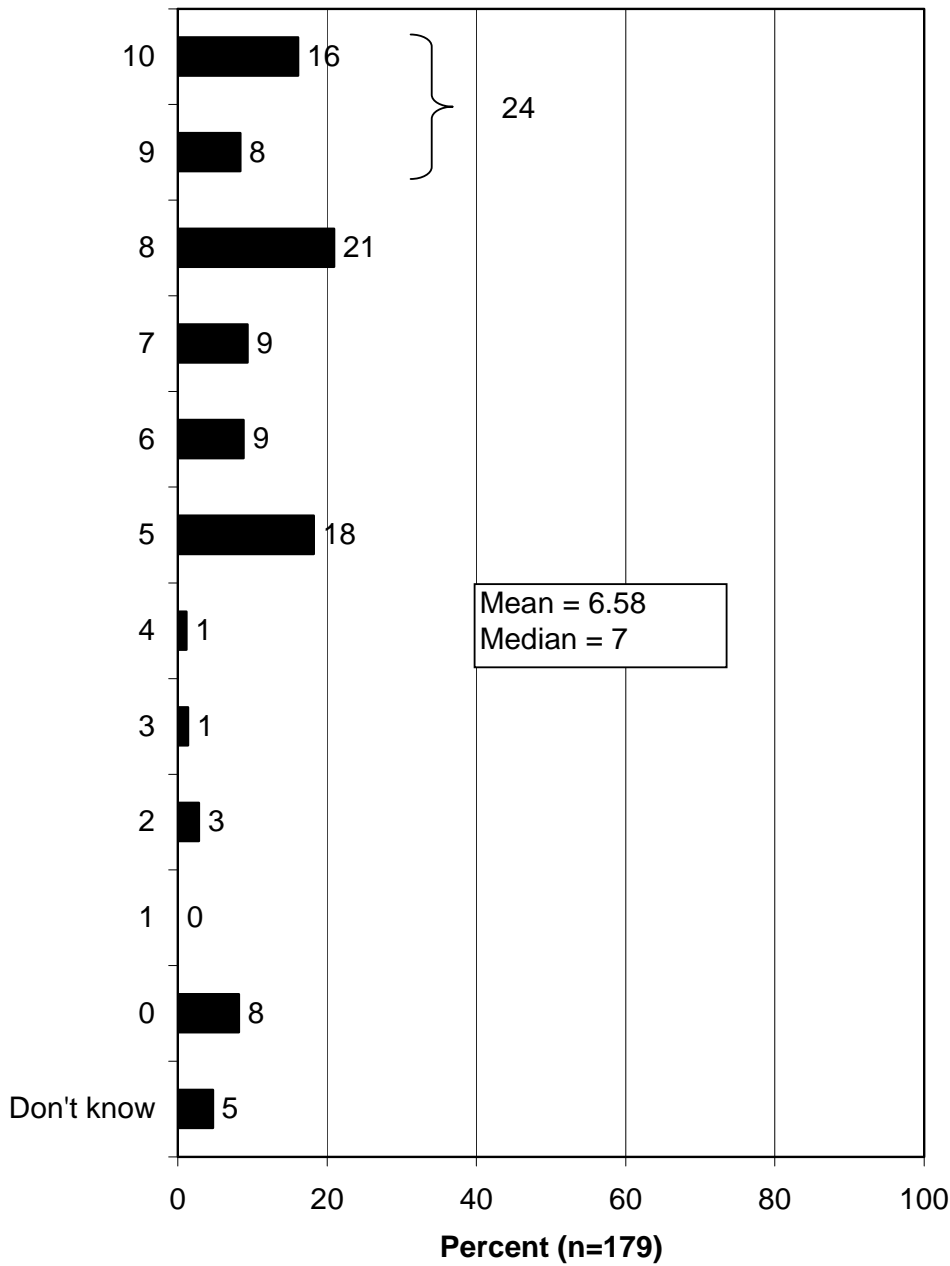


**Q172. How or by what source did you first learn about Ozone Action Days? (Asked of those who have heard of this campaign.)**

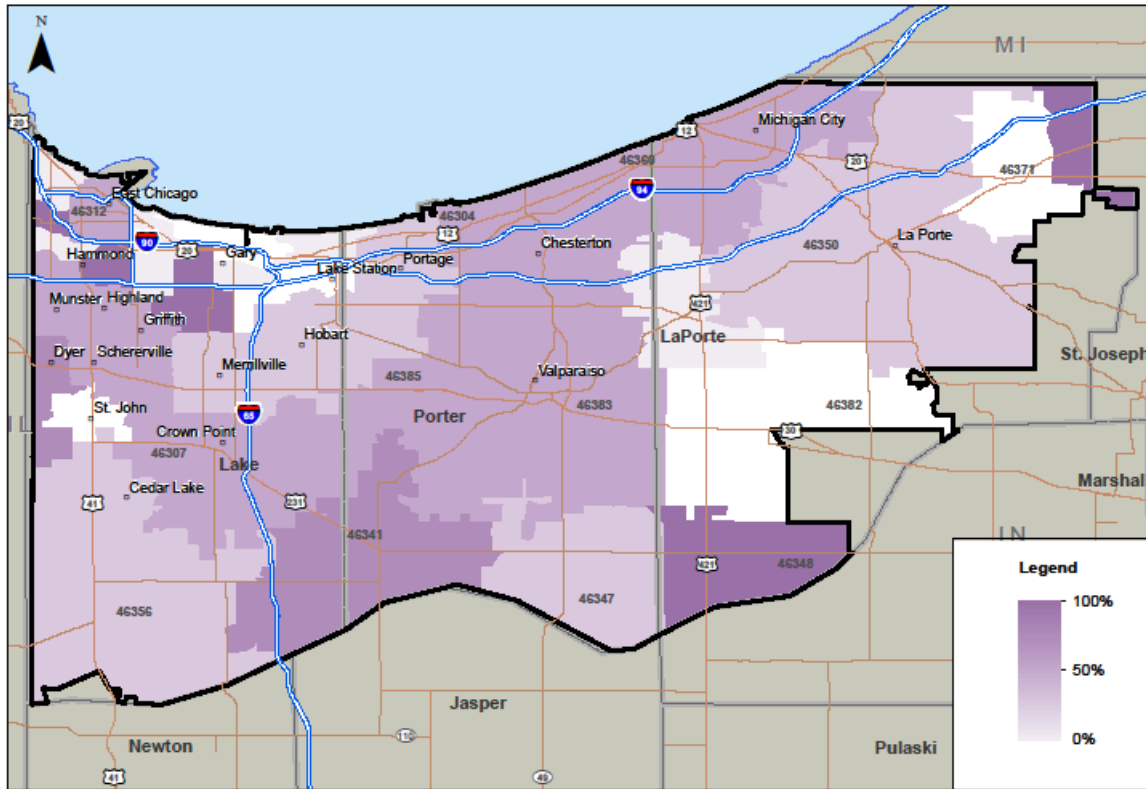




**Q174. How much of a positive effect do you think  
Ozone Action Days could have on air quality  
education in Northwest Indiana? (Asked of those  
who have heard of this campaign.)**



Percentage who think the Ozone Action Days initiative could positively affect (ratings of 8-10) air quality education.



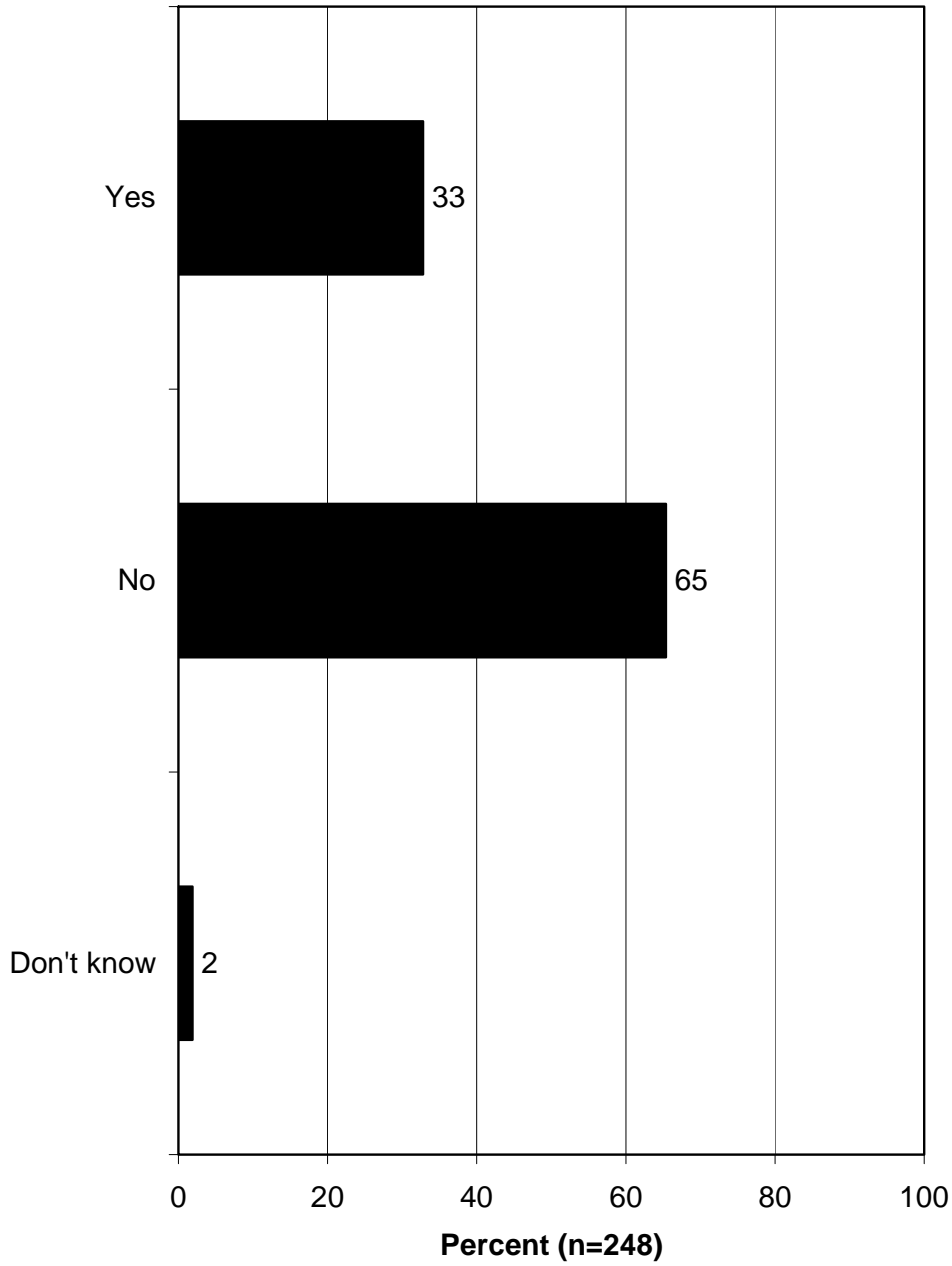
Data collected by  
Responsive  
Management

Q174. How much of a positive effect do you think Ozone Action Days could have on air quality education in Northwest Indiana? Please use a 0 to 10 scale, where 0 is "not at all effective" and 10 is "extremely effective."

## **Pace RideShare**

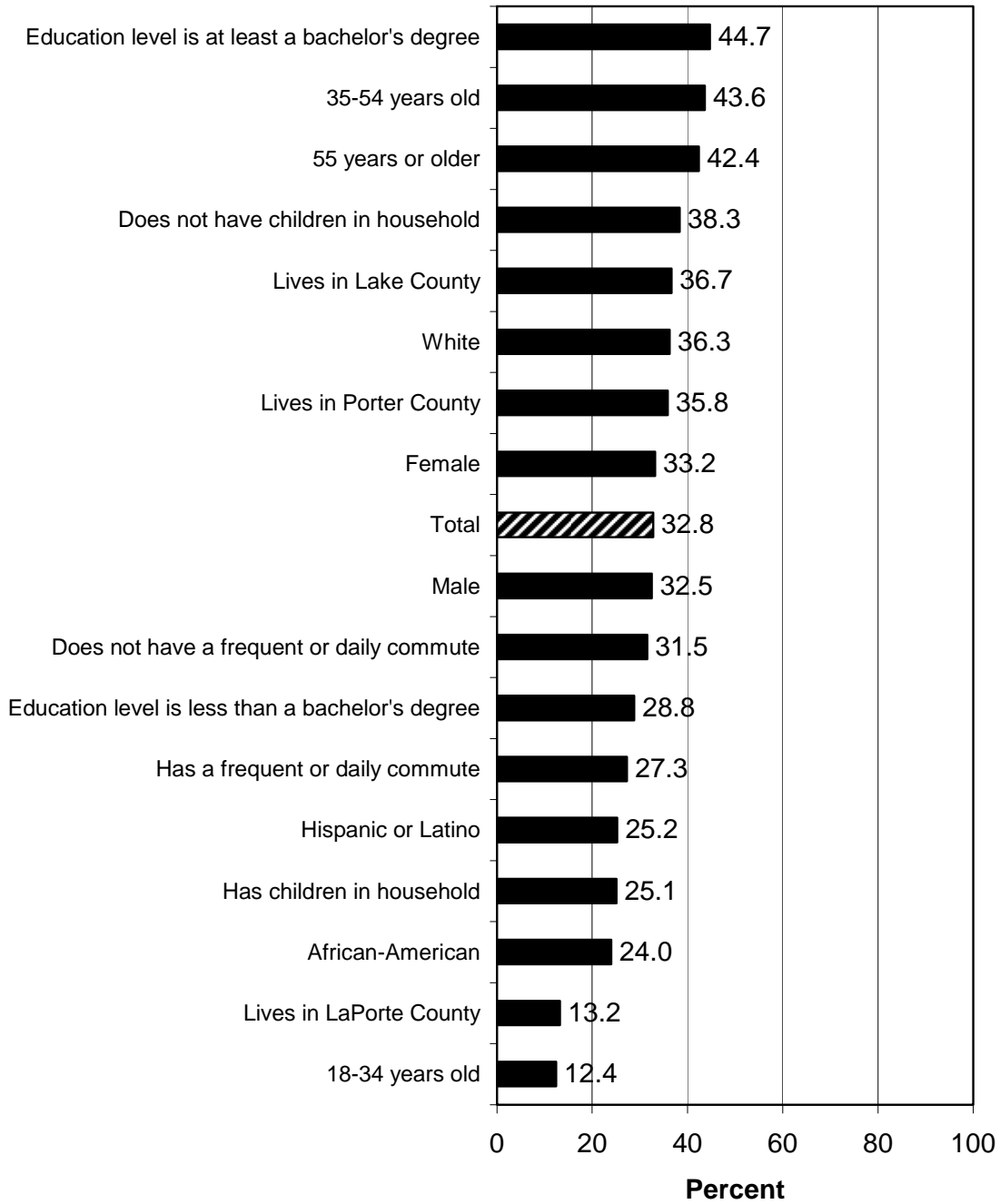
- Prior to this survey, 33% of residents were aware of this campaign.
  - Groups most likely to be aware of the campaign are those with an education level of at least a bachelor's degree (45% are aware), residents 35-54 years old (44%), and residents 55 or older (42%). The groups least likely to be aware are residents 18-34 years old (12%) and LaPorte County residents (13%).
  - Among those who heard about the campaign, the most common sources of information were television (21%); newspapers or magazines (18%); and friends, family, or word-of-mouth (15%).
    - Residents are less likely to learn about Pace RideShare through newspapers or magazines than they were in 2012. However, there were small increases in those getting information from television and word-of-mouth.
  - Residents were asked to rate the effectiveness that the campaign could have on air quality education in Northwest Indiana, on a scale of 0 to 10, where 0 is not at all effective and 10 is extremely effective. The campaign received a mean rating of 5.8, the lowest among all the campaigns; only 7% rated it 9 or 10.
    - Shown in this section is a GIS map of Northwest Indiana illustrating the distribution of opinion within the region for this survey question.

**Q110. Pace RideShare.  
(Were you aware of this campaign?)**

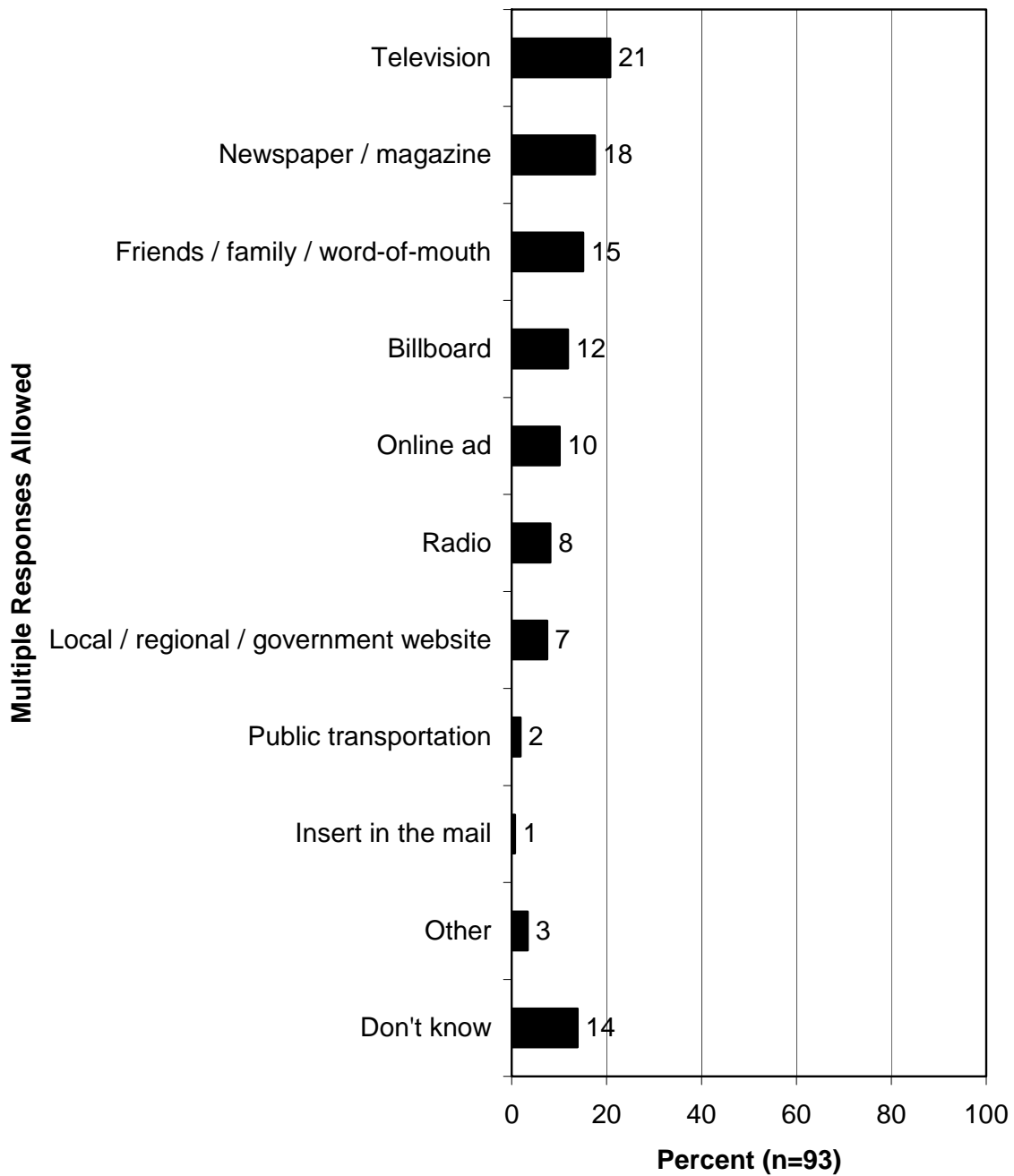


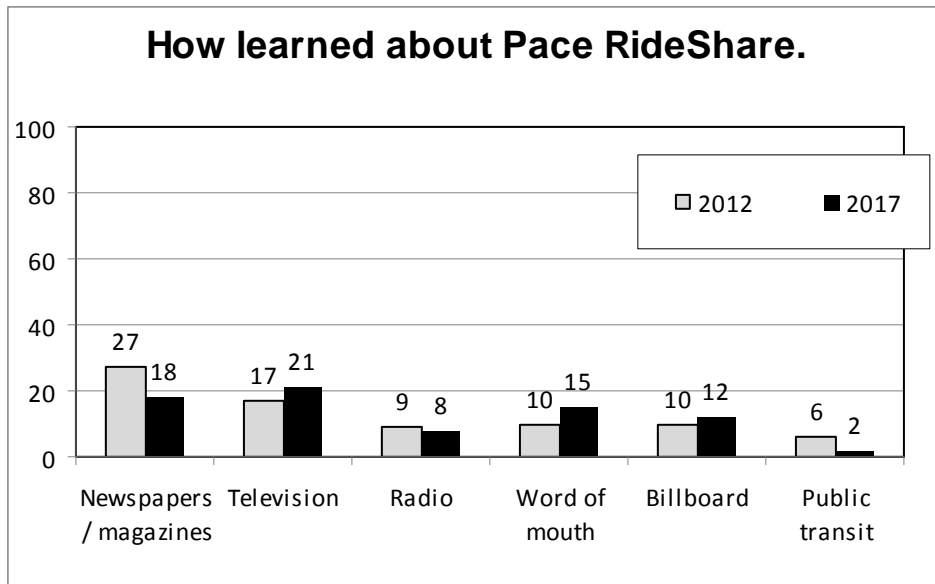


**Percent of each of the following groups who were aware of Pace RideShare prior to the survey:**

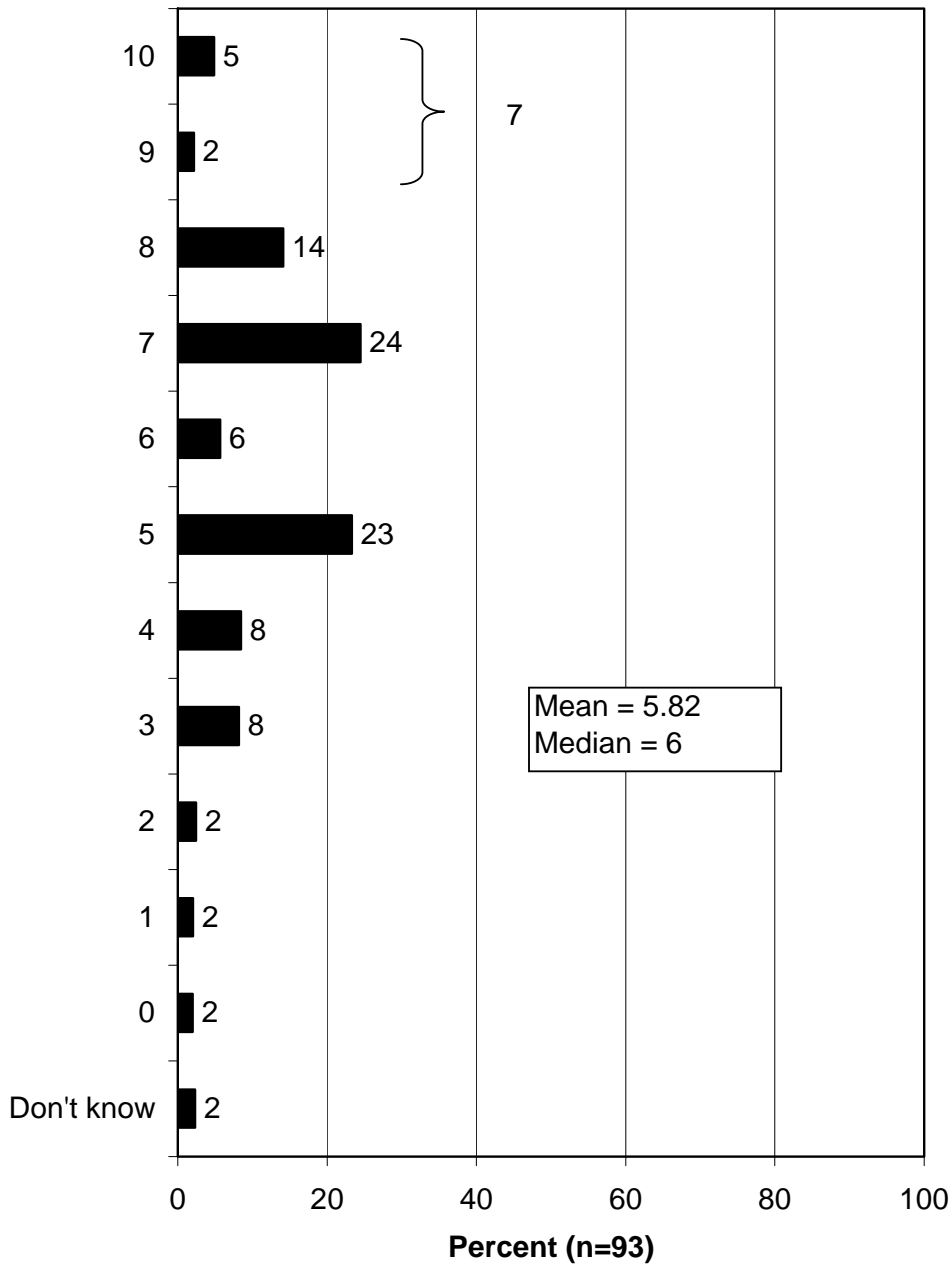


**Q180. How or by what source did you first learn about Pace RideShare? (Asked of those who have heard of this campaign.)**

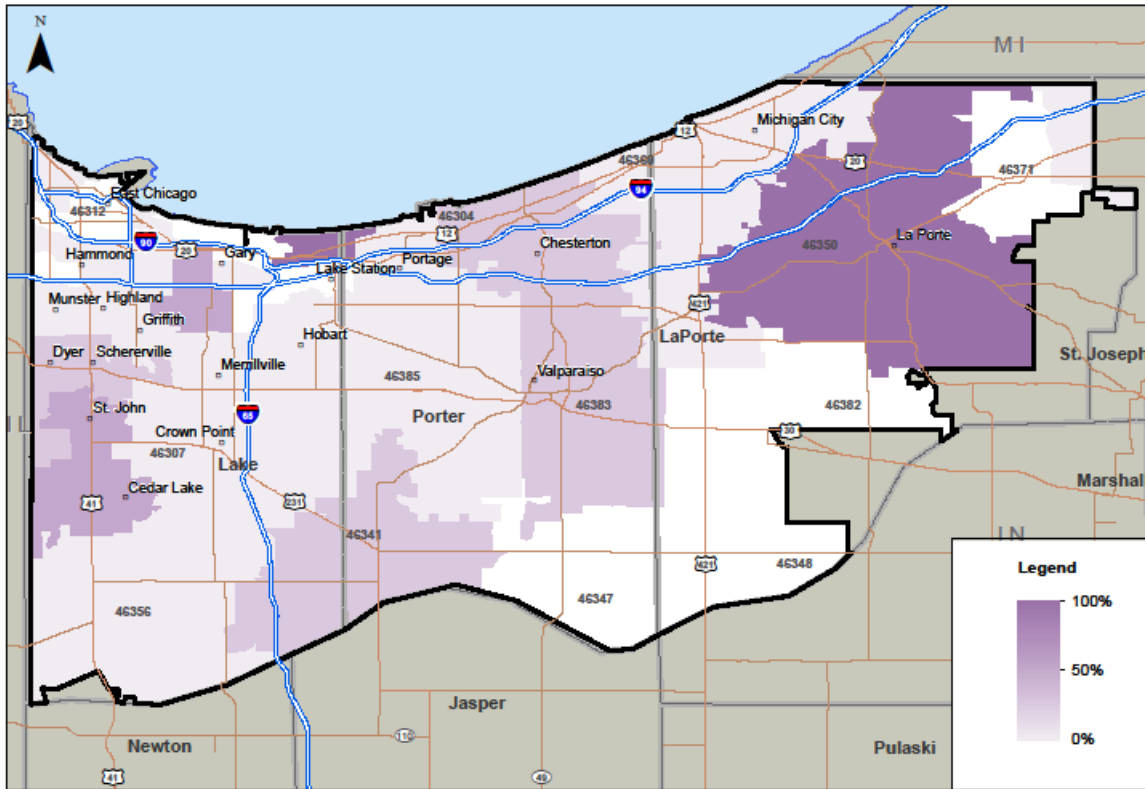




**Q182. How much of a positive effect do you think Pace RideShare could have on air quality education in Northwest Indiana? (Asked of those who have heard of this campaign.)**



Percentage who think the Pace RideShare initiative could positively affect (ratings of 8-10) air quality education.



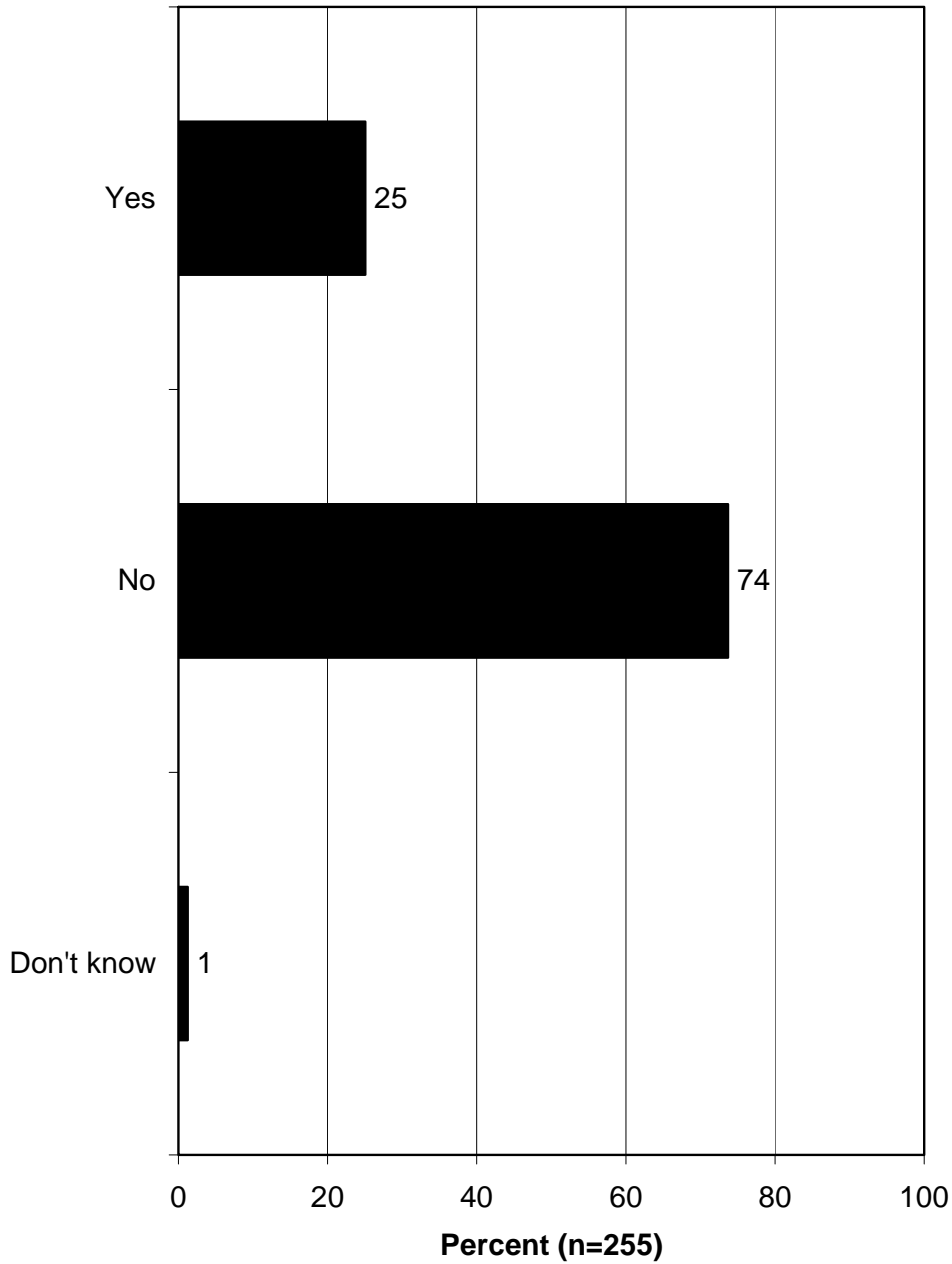
Data collected by  
Responsive  
Management

Q182. How much of a positive effect do you think Pace RideShare could have on air quality education in Northwest Indiana?  
Please use a 0 to 10 scale, where 0 is "not at all effective" and 10 is "extremely effective."

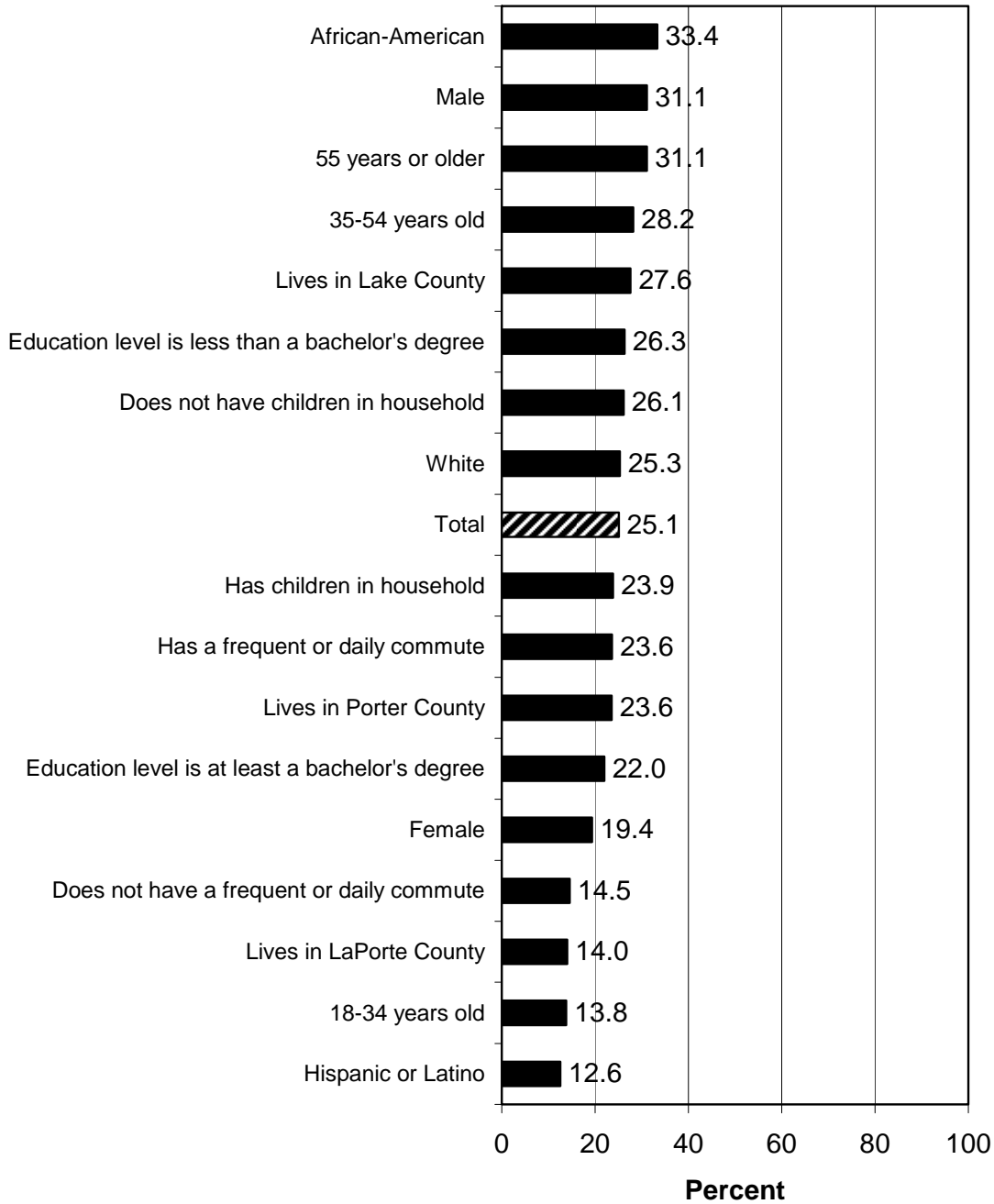
## Partners for Clean Air

- Prior to this survey, 25% of residents were aware of this campaign.
  - Groups most likely to be aware of the campaign are African-American residents (33% are aware), male residents (31%), and residents 55 or older (31%). The groups least likely to be aware are Hispanic residents (13%) and residents 18-34 years old (14%).
  - Among those who heard about the campaign, the most common source of information was newspapers or magazines (37%), distantly followed by radio (21%) and television (14%).
    - Residents are more likely to learn about Partners for Clean Air through radio and less likely to learn about it through television than they were in 2012.
  - Residents were asked to rate the effectiveness that the campaign could have on air quality education in Northwest Indiana, on a scale of 0 to 10, where 0 is not at all effective and 10 is extremely effective. The campaign received a mean rating of 6.4; 9% rated it 9 or 10.
    - Shown in this section is a GIS map of Northwest Indiana illustrating the distribution of opinion within the region for this survey question.

**Q112. Partners for Clean Air.  
(Were you aware of this campaign?)**

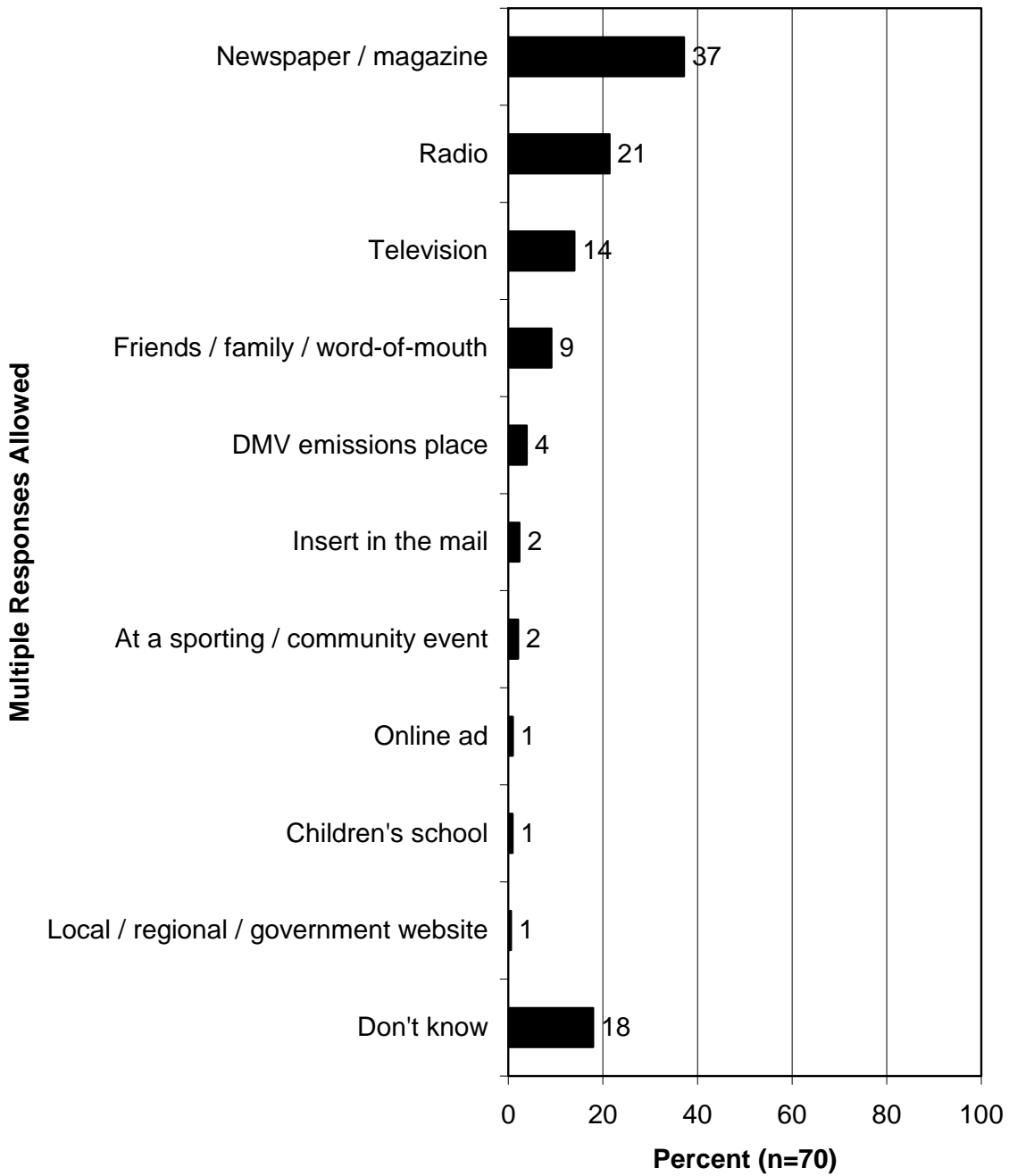


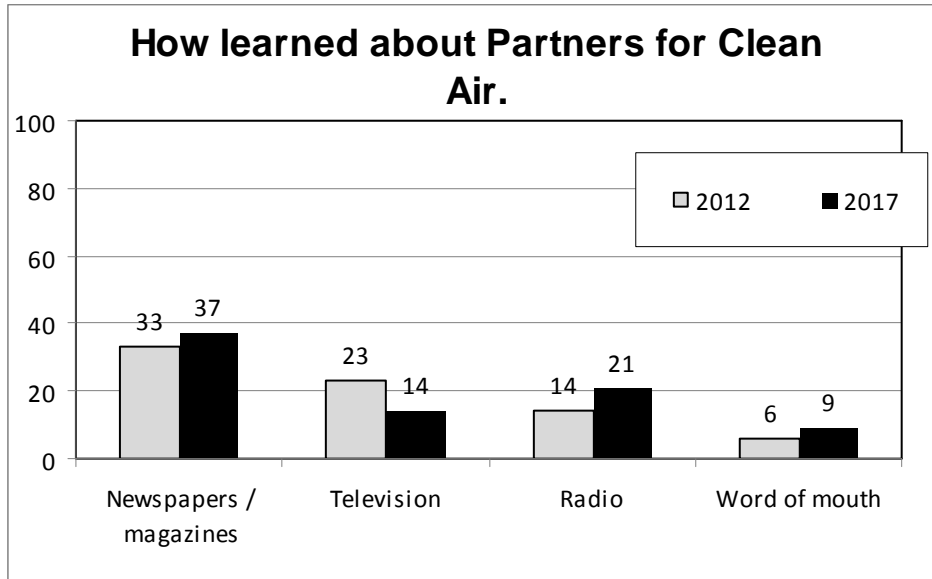
**Percent of each of the following groups who were aware of Partners for Clean Air prior to the survey:**



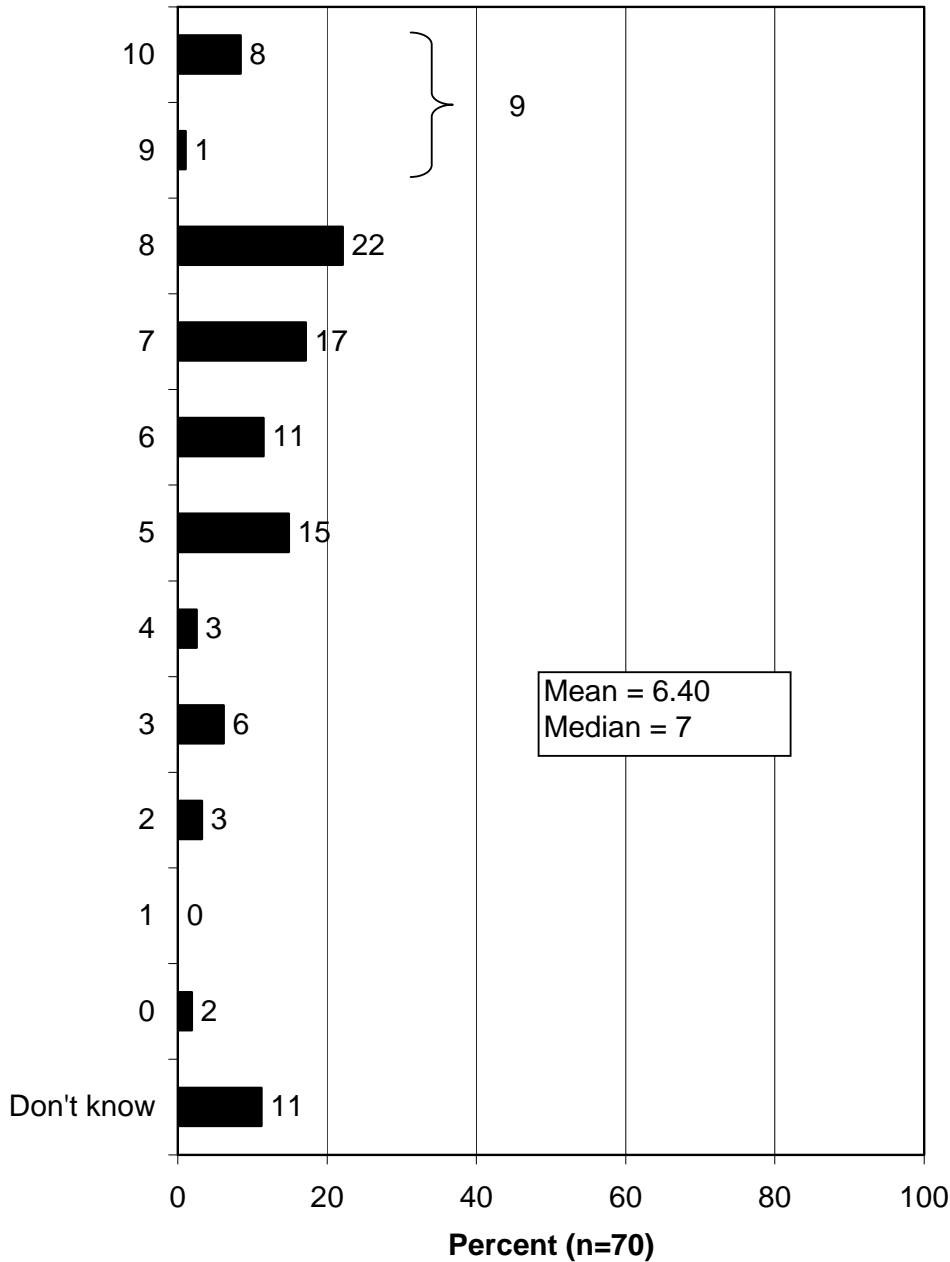


**Q188. How or by what source did you first learn about Partners for Clean Air? (Asked of those who have heard of this campaign.)**

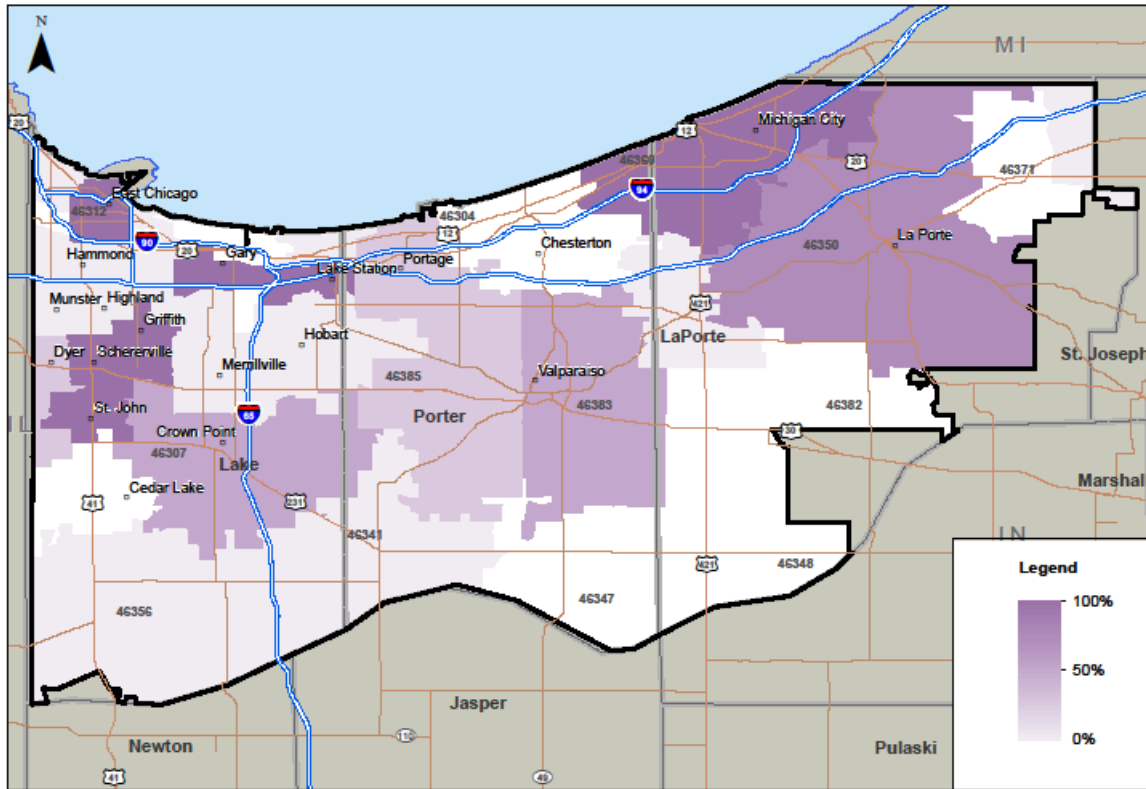




**Q190. How much of a positive effect do you think Partners for Clean Air could have on air quality education in Northwest Indiana? (Asked of those who have heard of this campaign.)**



Percentage who think the Partners for Clean Air initiative could positively affect (ratings of 8-10) air quality education.



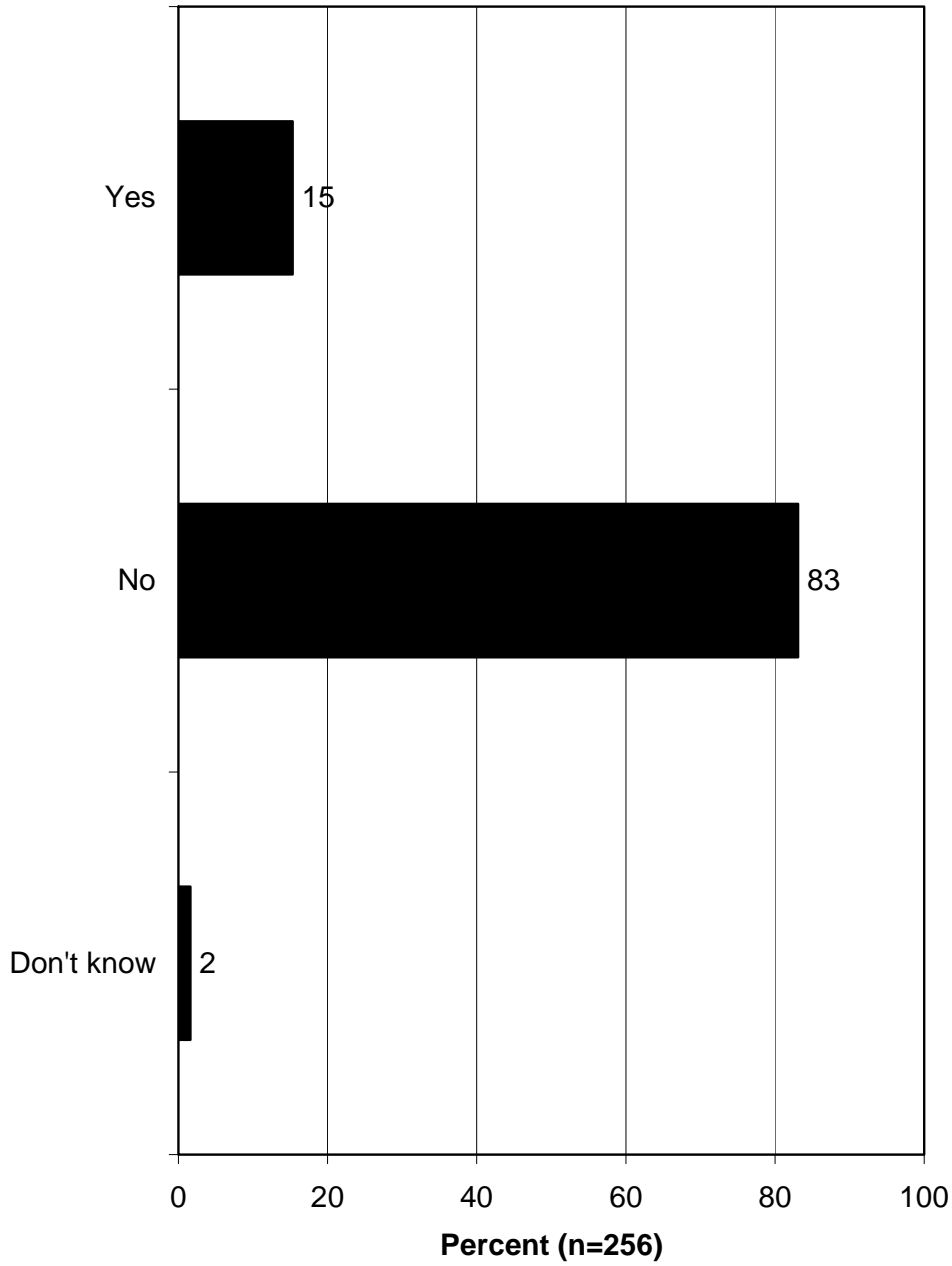
Data collected by  
Responsive  
Management

Q190. How much of a positive effect do you think Partners for Clean Air could have on air quality education in Northwest Indiana? Please use a 0 to 10 scale, where 0 is "not at all effective" and 10 is "extremely effective."

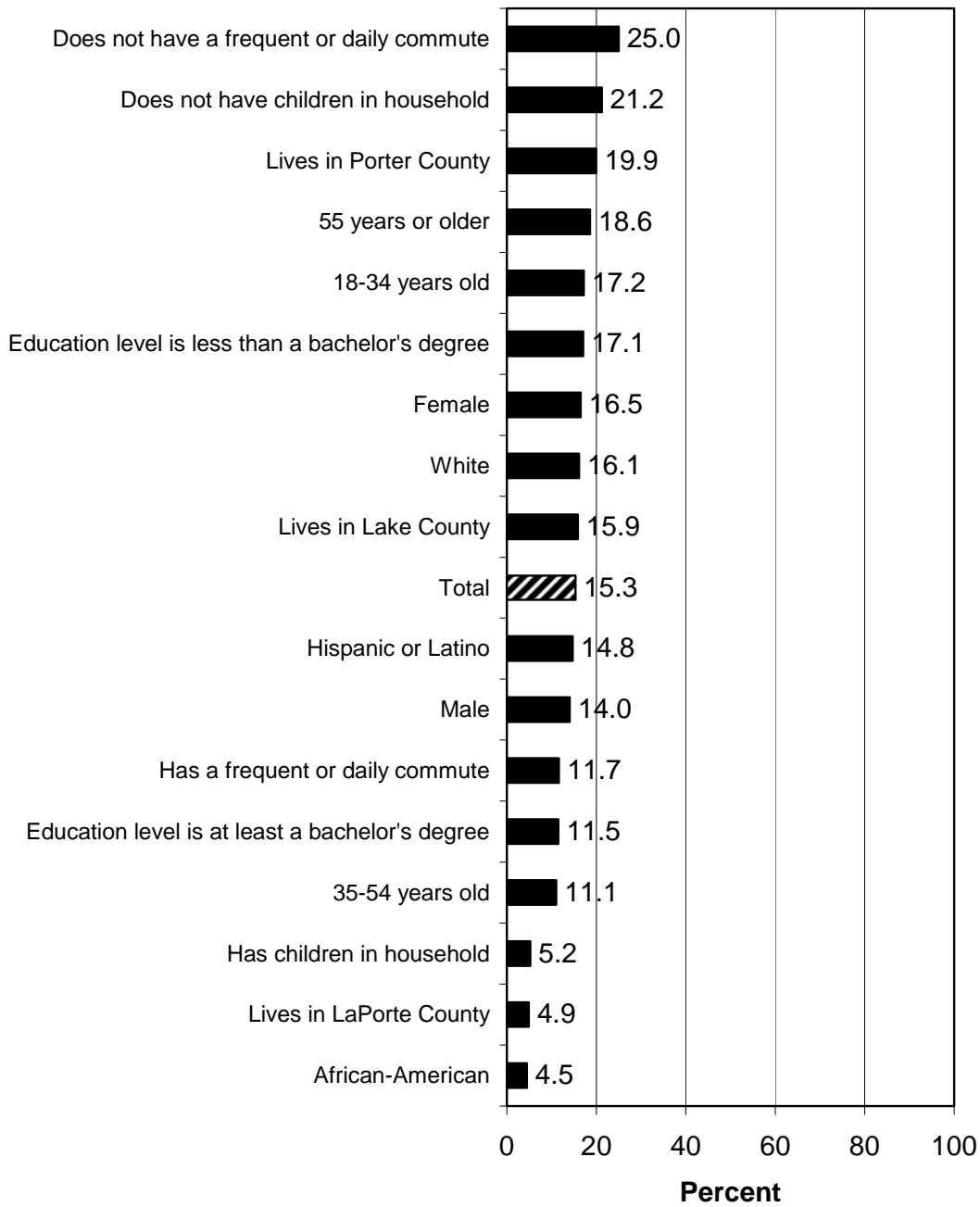
### **South Shore Clean Cities**

- Prior to this survey, 15% of residents were aware of this campaign.
  - Groups most likely to be aware of the campaign are those without a frequent or daily commute (25% are aware), those with no children in the household (21%) and Porter County residents (20%). The groups least likely to be aware are African-American residents (5%), LaPorte County residents (5%), and those with children in the household (5%).
  - Among those who heard about the campaign, the most common sources of information were newspapers or magazines (29%); friends, family, and word-of-mouth (25%), and radio (12%).
  - Residents were asked to rate the effectiveness that the campaign could have on air quality education in Northwest Indiana, on a scale of 0 to 10, where 0 is not at all effective and 10 is extremely effective. The campaign received a mean rating of 7.3; 24% rated it 9 or 10.
    - Shown in this section is a GIS map of Northwest Indiana illustrating the distribution of opinion within the region for this survey question.

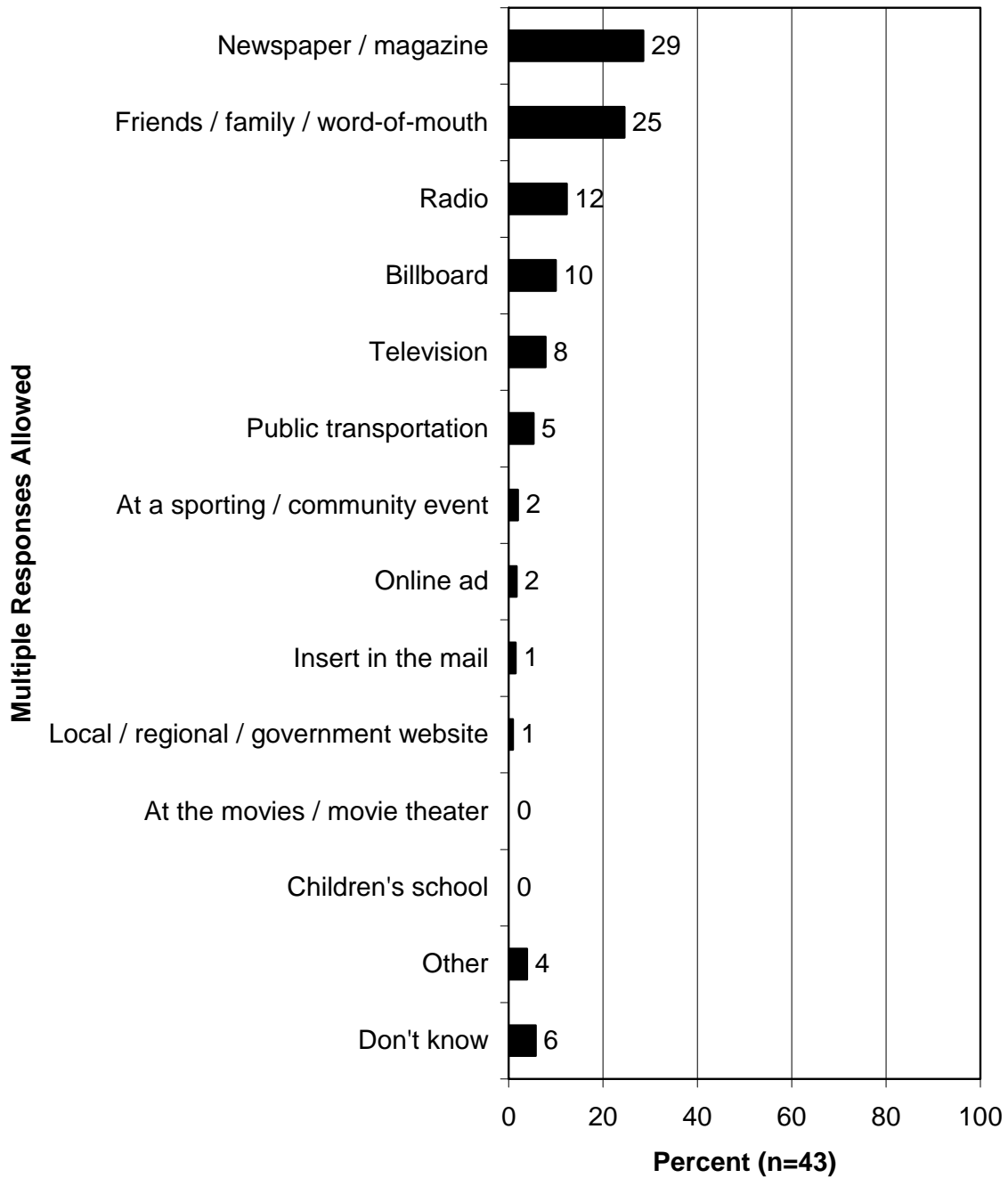
**Q114. South Shore Clean Cities.  
(Were you aware of this campaign?)**



**Percent of each of the following groups who were aware of South Shore Clean Cities prior to the survey:**

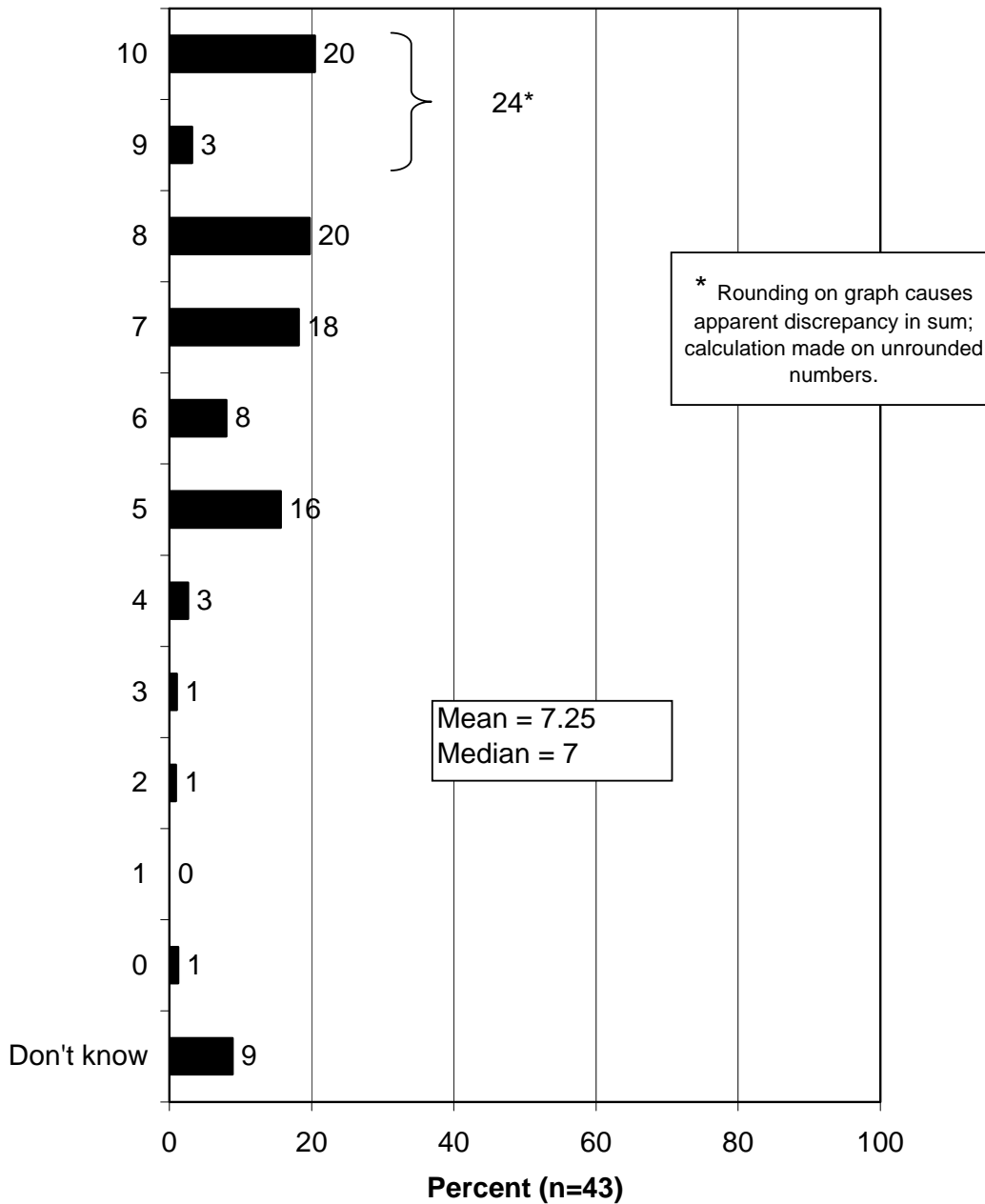


**Q196. How or by what source did you first learn about South Shore Clean Cities? (Asked of those who have heard of this campaign.)**

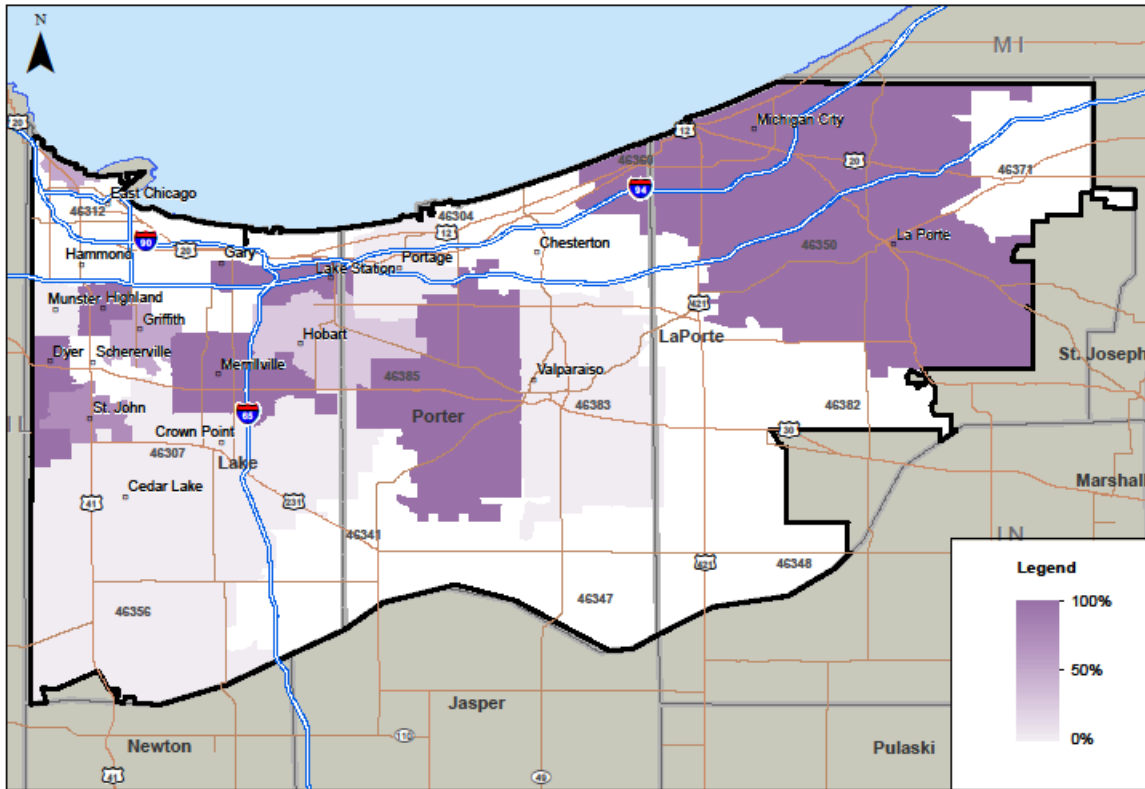




**Q198. How much of a positive effect do you think South Shore Clean Cities could have on air quality education in Northwest Indiana? (Asked of those who have heard of this campaign.)**



Percentage who think the South Shore Clean Cities initiative could positively affect (ratings of 8-10) air quality education.



Data collected by  
Responsive  
Management

Q198. How much of a positive effect do you think South Shore Clean Cities could have on air quality education in Northwest Indiana?  
Please use a 0 to 10 scale, where 0 is "not at all effective" and 10 is "extremely effective."

## **TAKING ACTION**

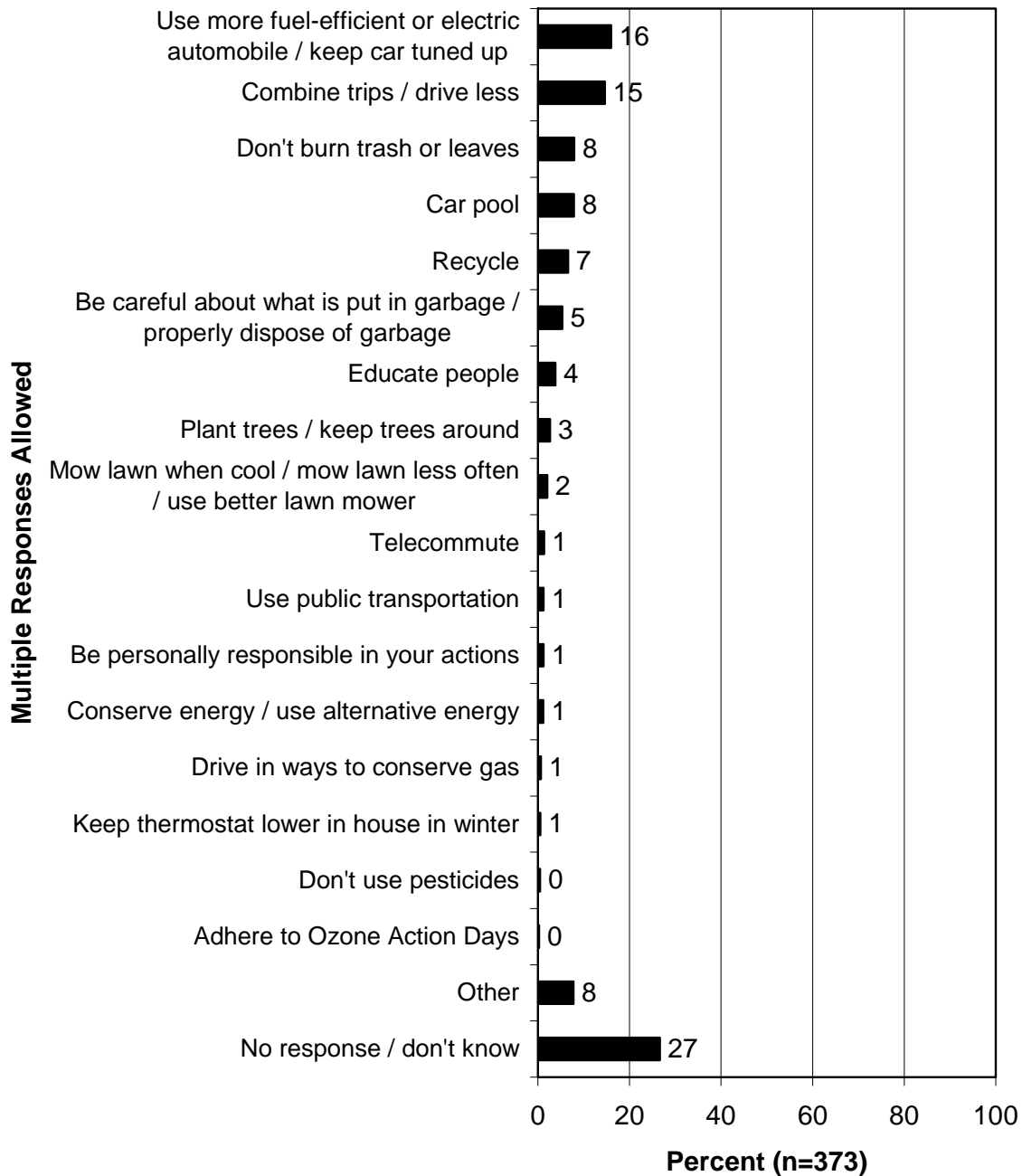
Of particular interest in this survey was the extent to which Northwest Indiana residents engage in behaviors (through conscious effort or habit) that are beneficial to air quality. It was also of interest to gauge residents' opinions on how much impact they personally can have on local air quality.

- In an open-ended question, residents were asked to name the most important action that they can personally take to improve air quality in their area. No response was dominant, but those most frequently mentioned were to use more fuel-efficient vehicles or keep their vehicle tuned up (16% gave a response to this effect), to combine trips or drive less (15%), to avoid burning trash or leaves (8%), and to carpool (8%).
- Residents were presented with a series of 14 actions that are beneficial to air quality, and they were asked to name the ones they currently undertake.
  - Four of the actions are common to most Northwest Indiana residents: conducting routine car maintenance (94% of residents do this), combining errands into one trip (91%), emissions testing or a clean air car check (85%), and recycling (84%).
  - At a lower tier of frequency, but still common, are reducing car idling (69%), getting gas when it is cool outside (46%), not topping off the gas tank (45%), and walking instead of driving (37%).
  - The least common of the listed activities are carpooling (26%), biking instead of driving (23%), mowing the lawn after 7 p.m. (20%), telecommuting (20%), taking public transportation (10%), and driving a hybrid car (9%).
  - A trend graph shows which actions have increased or decreased levels of participation since the 2012 study. Participation in routine car maintenance, combining errands, emissions testing, and reducing car idling shows a marked increase since 2012.
    - Those who engage in any of the activities most frequently stated they do so because it is the right thing to do or they are concerned about the environment.
    - Note that emissions testing is required in much of the study area.
  - Also shown in this section is a GIS map of Northwest Indiana illustrating the distribution of behavior within the region in terms of those taking six or more air quality actions.

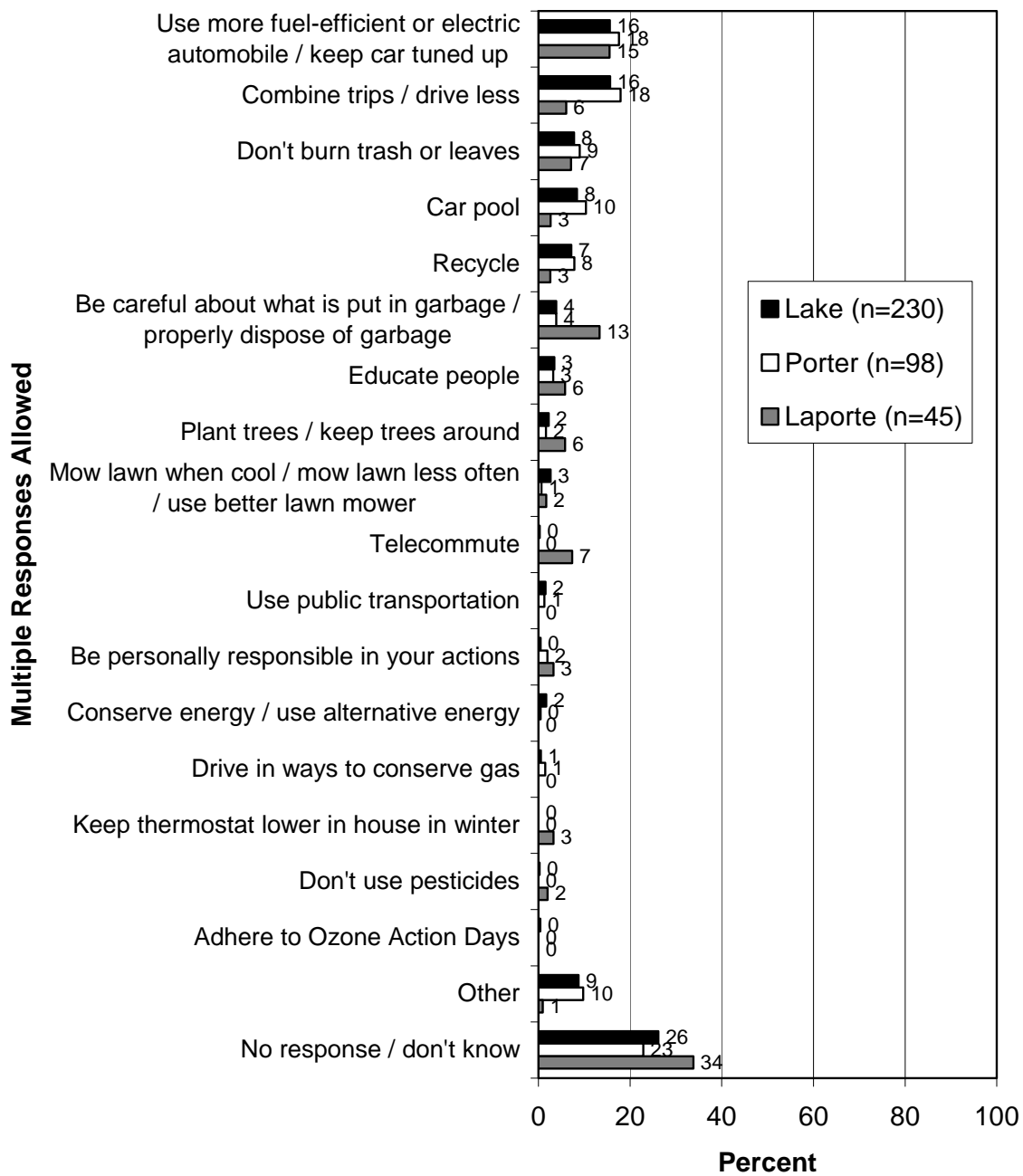
- Residents were next asked how much each of the 14 actions does to improve air quality in their areas: *a lot, a little, or nothing at all*.
  - The actions seen by residents as the most beneficial to air quality are recycling and the various responses related to vehicle use and maintenance, such as conducting routine car maintenance, reducing car idling, walking or biking instead of driving, emissions testing, carpooling, and combining errands into one trip.
  - At the opposite end, the actions seen as least beneficial are not topping off the gas tank, mowing the lawn after 7 p.m., and getting gas when it is cool outside.
  - Three graphs and their corresponding crosstabulations are shown for the following responses: *a lot, a lot and a little combined, and nothing at all*.
    - Trend graphs are included comparing the responses for *a lot* and *a lot and a little combined* between the 2012 and 2017 studies.
    - Also shown in this section are a series of GIS maps of Northwest Indiana illustrating the distribution of opinion within the region regarding the ability of five actions to improve air quality *a lot* (the actions include carpooling, combining errands into one trip, conducting routine car maintenance, reducing car idling, and taking public transportation).
  
- Again considering these 14 actions, residents were asked to rate their likelihood of adopting each to improve air quality problems in their area, on a scale of 0 to 10, where 0 is not at all likely and 10 is extremely likely.
  - The actions with the highest mean ratings largely mirror those that had the highest participation rates, which may indicate that residents intend to continue current beneficial behaviors but might not be adopting new ones. The highest mean ratings are for recycling (mean rating of 8.9), conducting routine car maintenance (8.6), combining errands into one trip (8.2), and emissions testing (8.0).
  - At the bottom are telecommuting (3.0), driving a hybrid car (2.2), and taking public transportation (1.9).
  - Another graph shows the percentages who rated each action a 9 or 10.

- Northwest Indiana residents were asked if anything prevents them from doing more of the actions to help improve local air quality.
  - A majority of residents (56%) had no response or did not know. Other responses were that there is no availability or mechanism in place (such as recycling programs or public transportation) (11% indicated this), age or health (10%), an inability to telecommute or carpool (7%), and financial reasons (5%).
  
- If a person believes that he or she cannot personally make a difference in protecting or improving his/her local air quality, it stands to reason that it would be difficult to motivate such a person into action. Therefore, it was important to assess residents' attitudes as to whether they can have an impact. Residents were asked how much of an impact they personally feel they can make to better the air quality in their area, on a scale of 0 to 10, where 0 is "individually, I cannot make an impact on air quality at all" and 10 is "I can make a huge difference."
  - The numerical responses were fairly evenly distributed, with the average ending up in the middle: the mean rating was 5.15 and the median was 5.
  - The groups most likely to give a 9 or 10 rating were African-American residents (23% gave a 9 or 10 rating), residents 18-34 years old (17%), and female residents (17%).
  - The groups most likely to give a 0 or 1 rating were those who do not have a frequent or daily commute (19%), white residents (19%), and residents 55 or older (19%).
  - The trend graph shows that these ratings were generally consist between the 2012 and 2017 studies. (Note that "don't know" responses were removed from 2017 values for a more direct comparison with 2012 values. Another caveat is that the 2012 study used a 1 to 10 scale, whereas the current study used a 0 to 10 scale.)
  - Also shown in this section is a GIS map of Northwest Indiana illustrating the distribution of opinion within the region for this survey question.

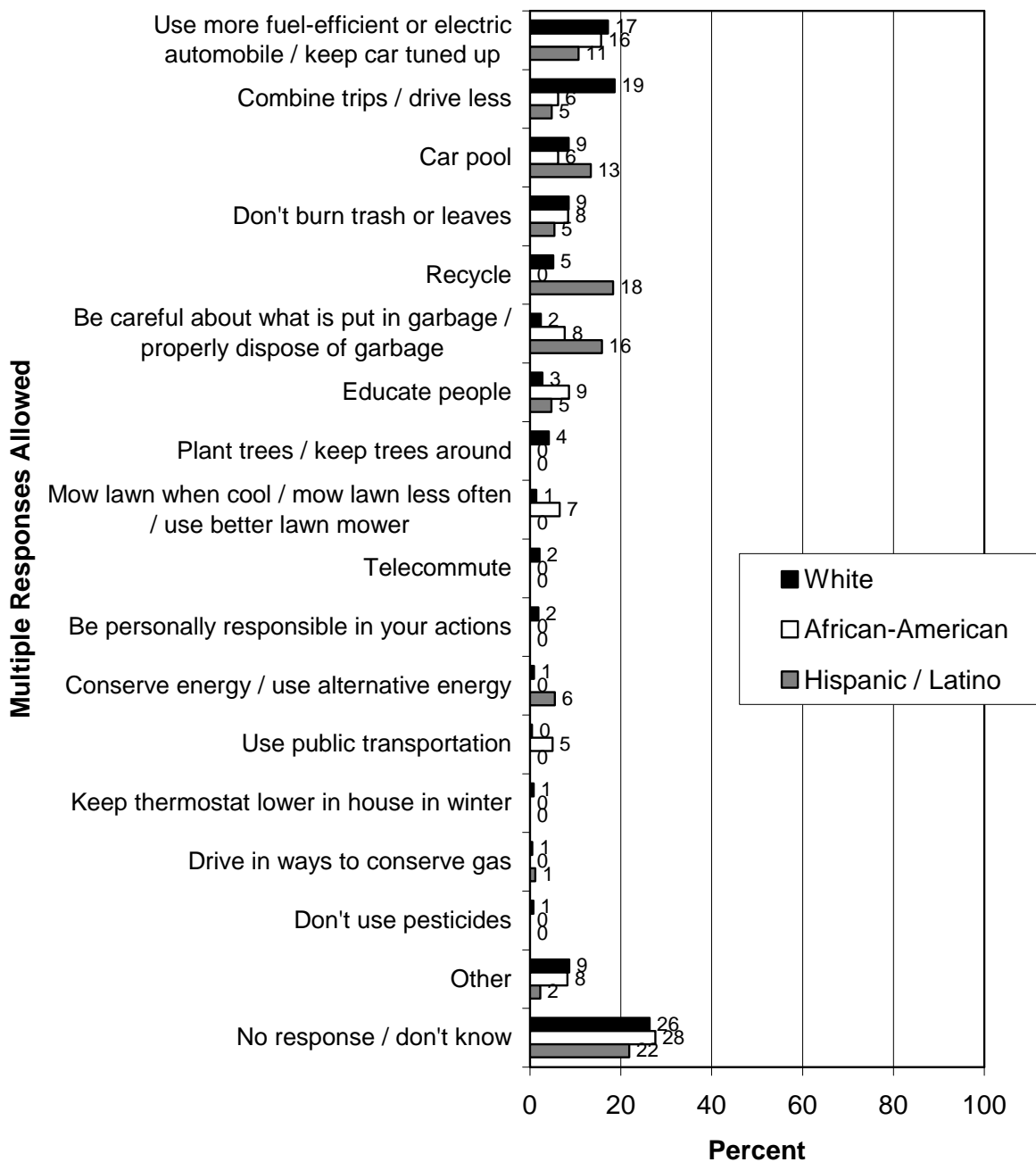
**Q202. In your opinion, what is the single most important action you, personally, can take to help protect or improve the air quality in your area?**



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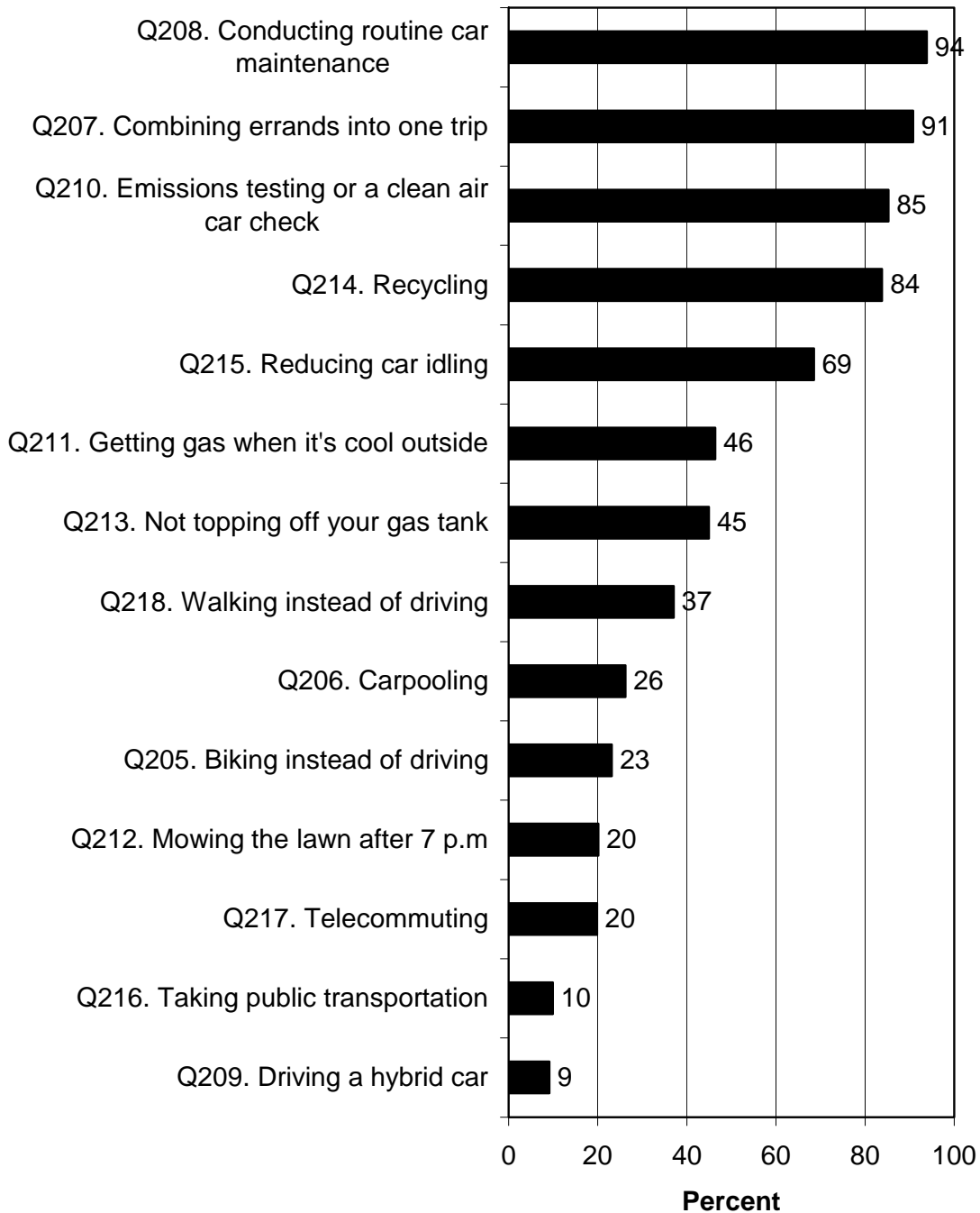


**Q202. In your opinion, what is the single most important action you, personally, can take to help protect or improve the air quality in your area?**

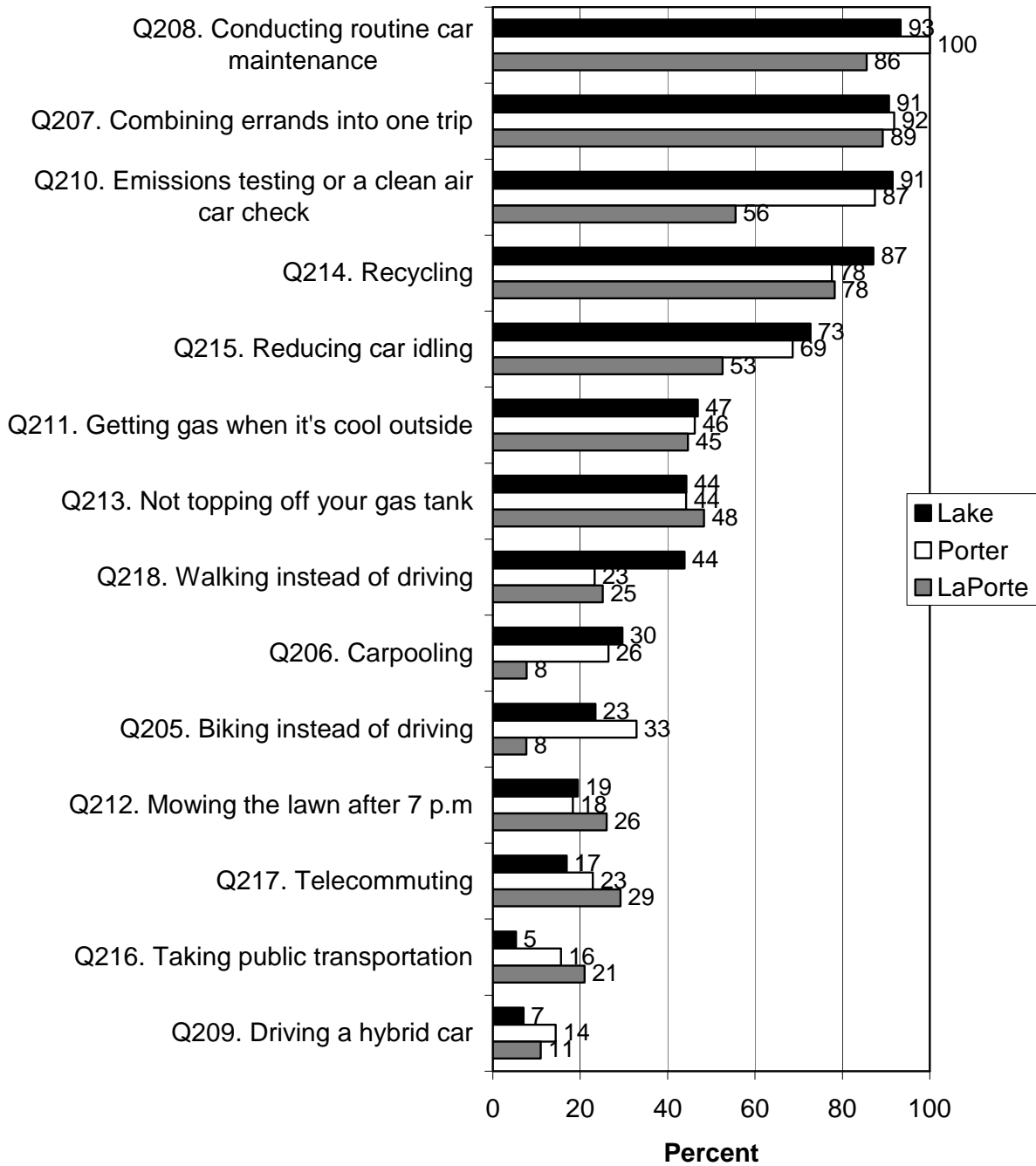




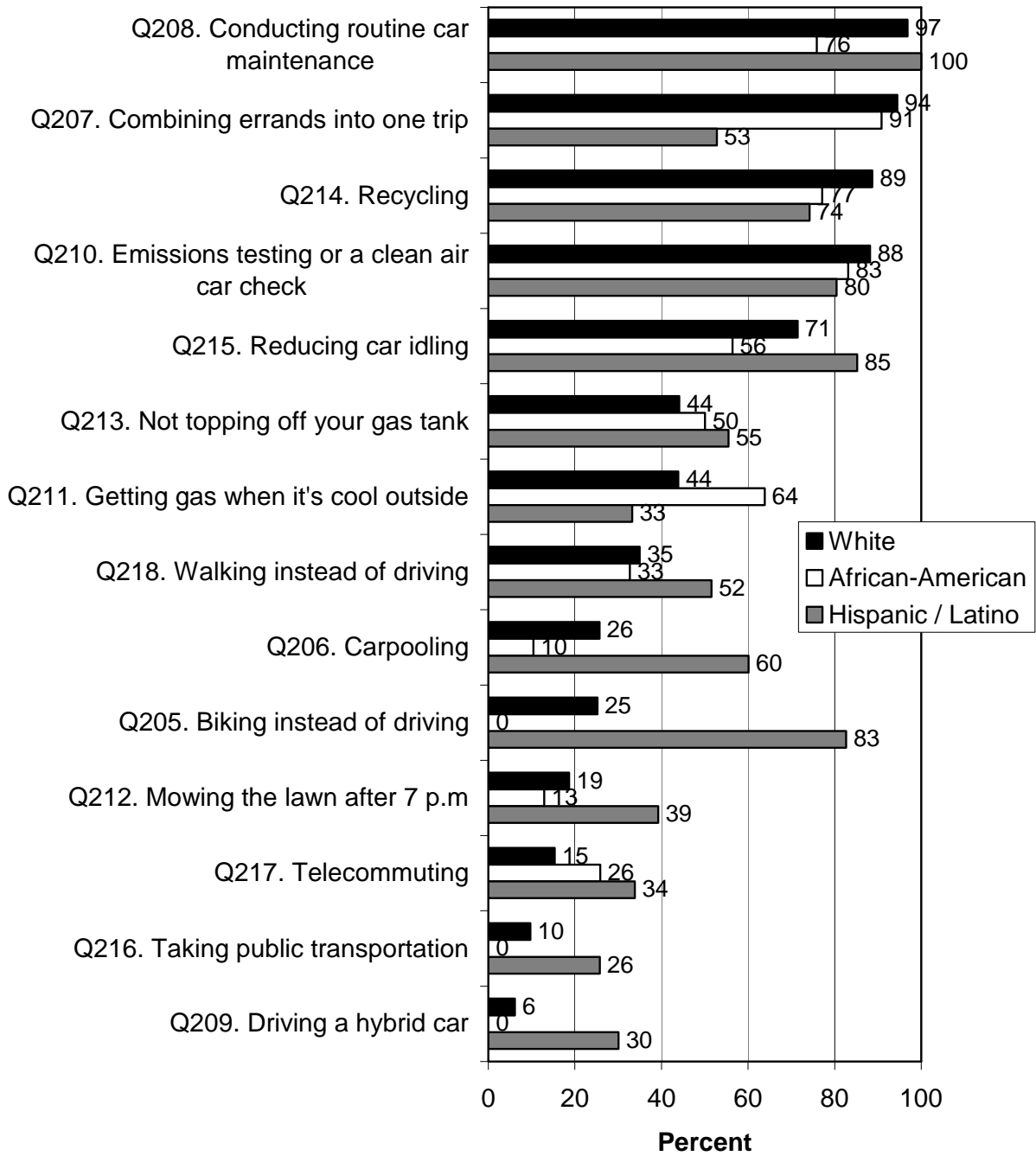
**Percent who are currently taking the following actions to improve air quality in their area:**



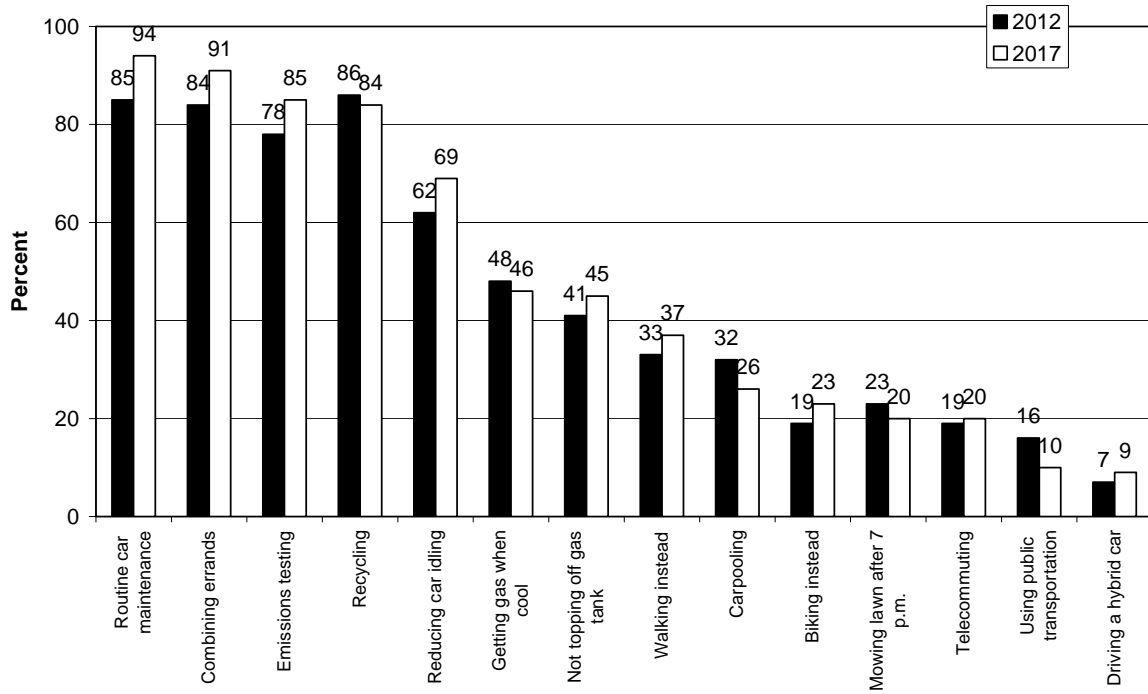
### Percent who are currently taking the following actions to improve air quality in their area:



**Percent who are currently taking the following actions to improve air quality in their area.**

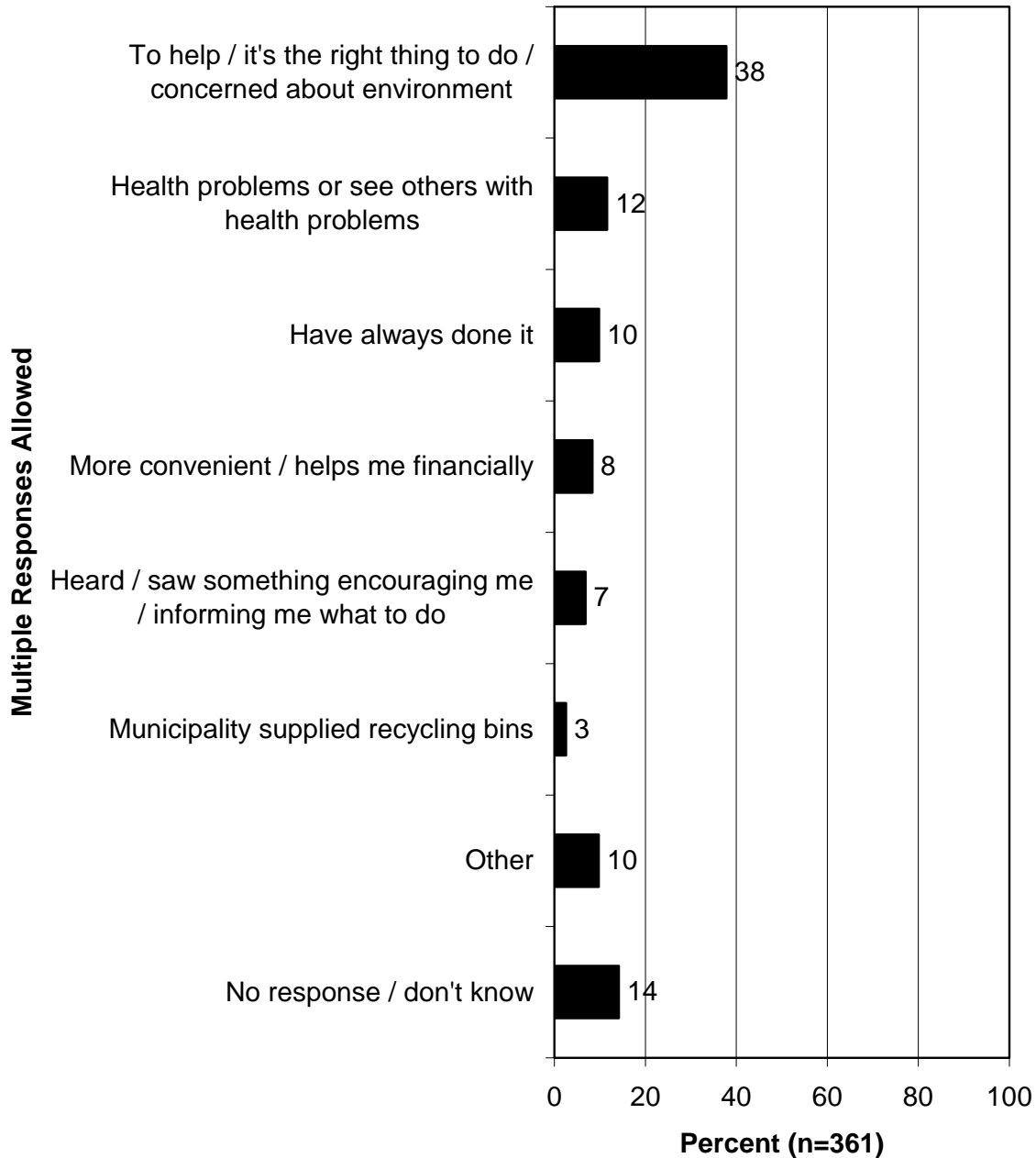


Currently takes the given action.

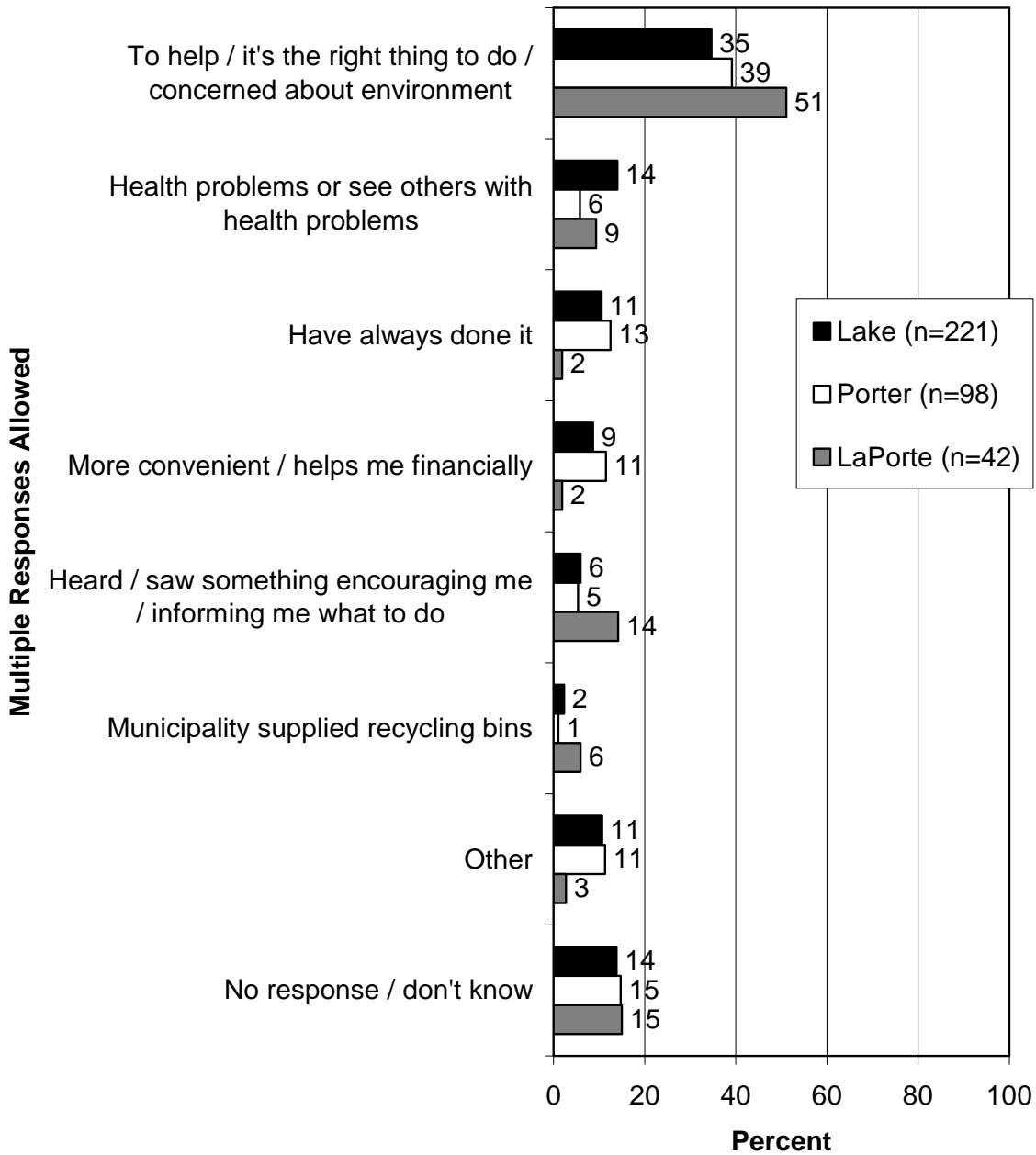




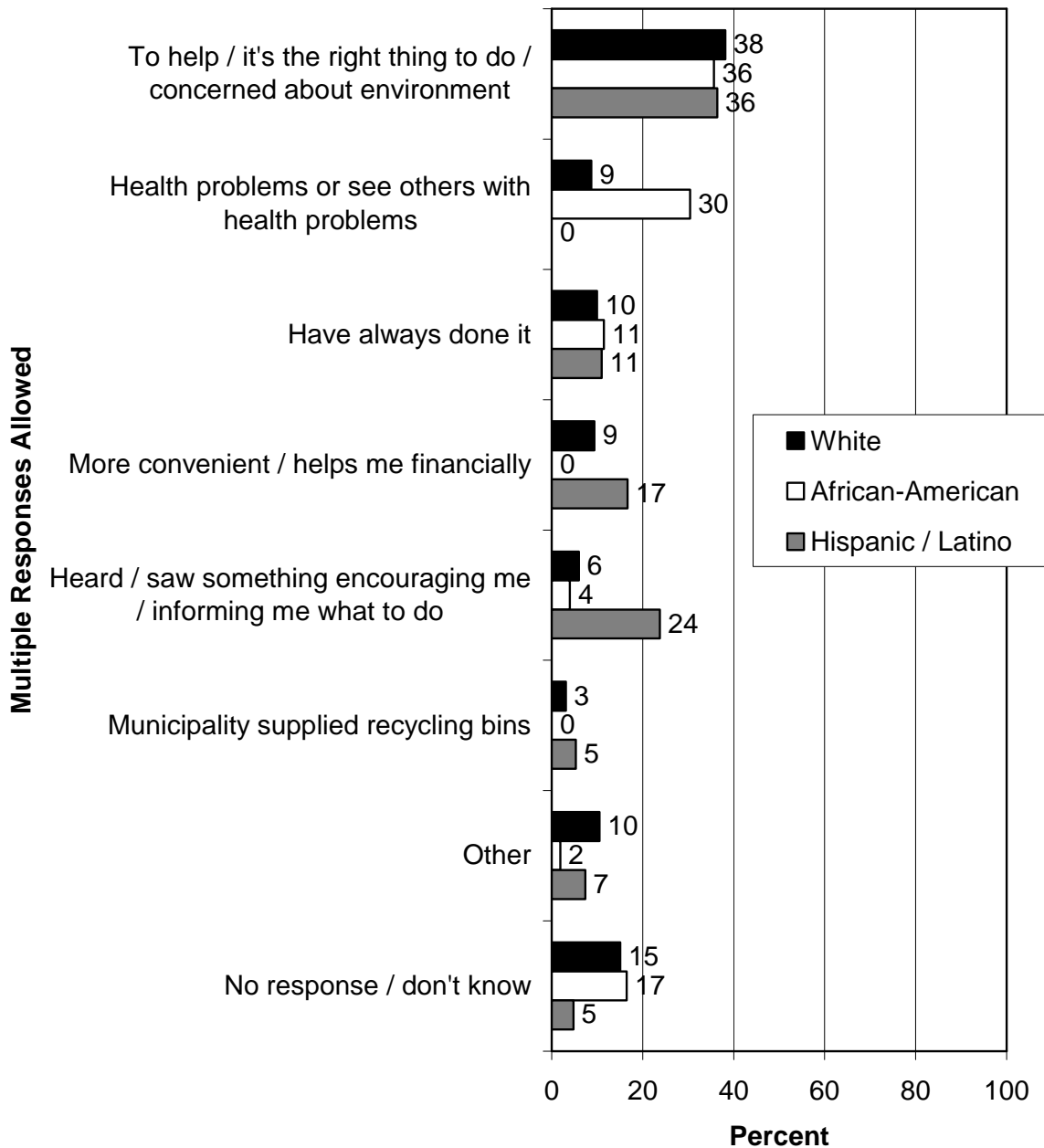
**Q223. What, specifically, caused you to start doing the things you currently are to help improve the air quality in your area? (Asked of those who currently do one of the actions listed in the survey.)**



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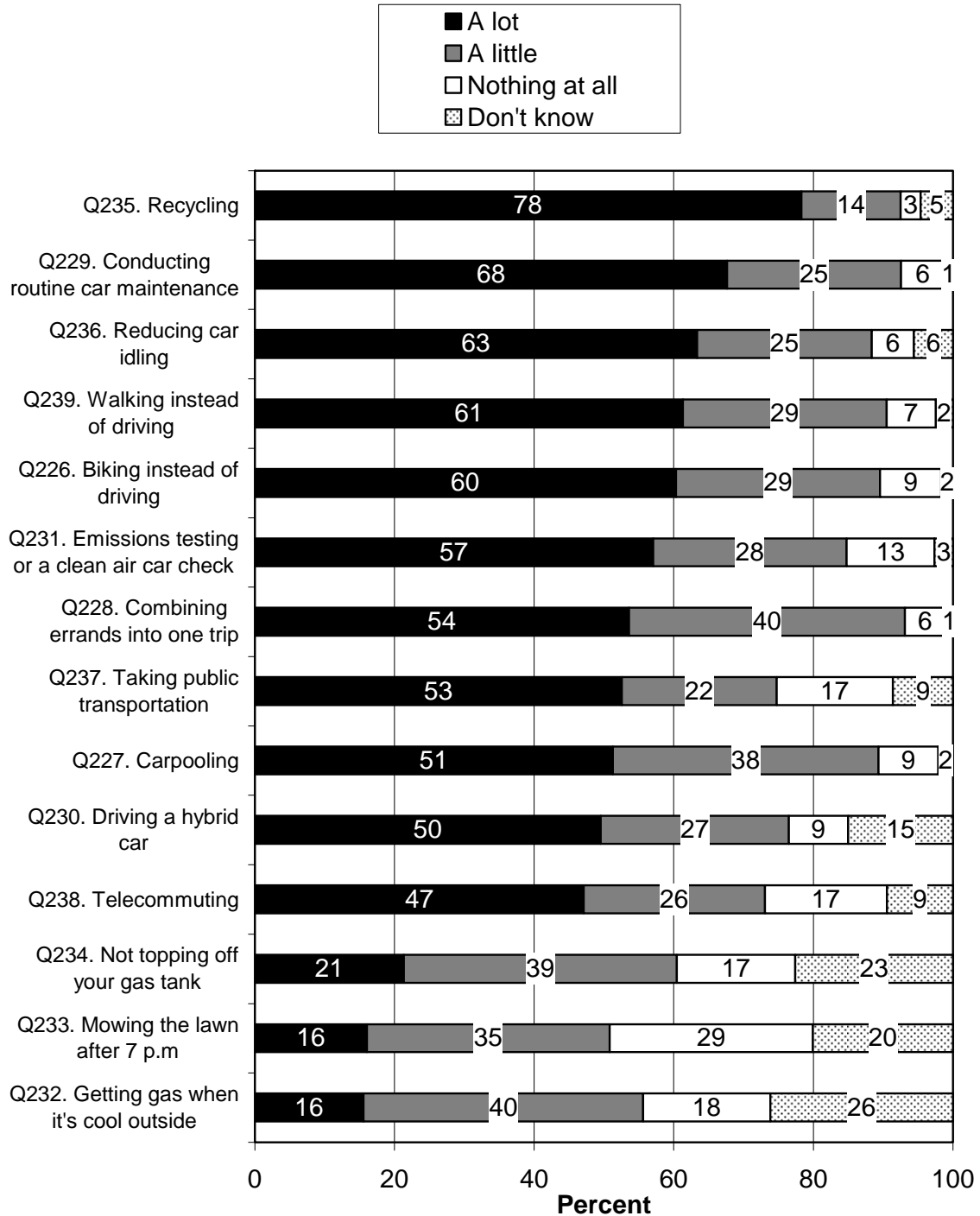


**Q223. What, specifically, caused you to start doing the things you currently are to help improve the air quality in your area? (Asked of those who currently do one of the actions listed in the survey.)**

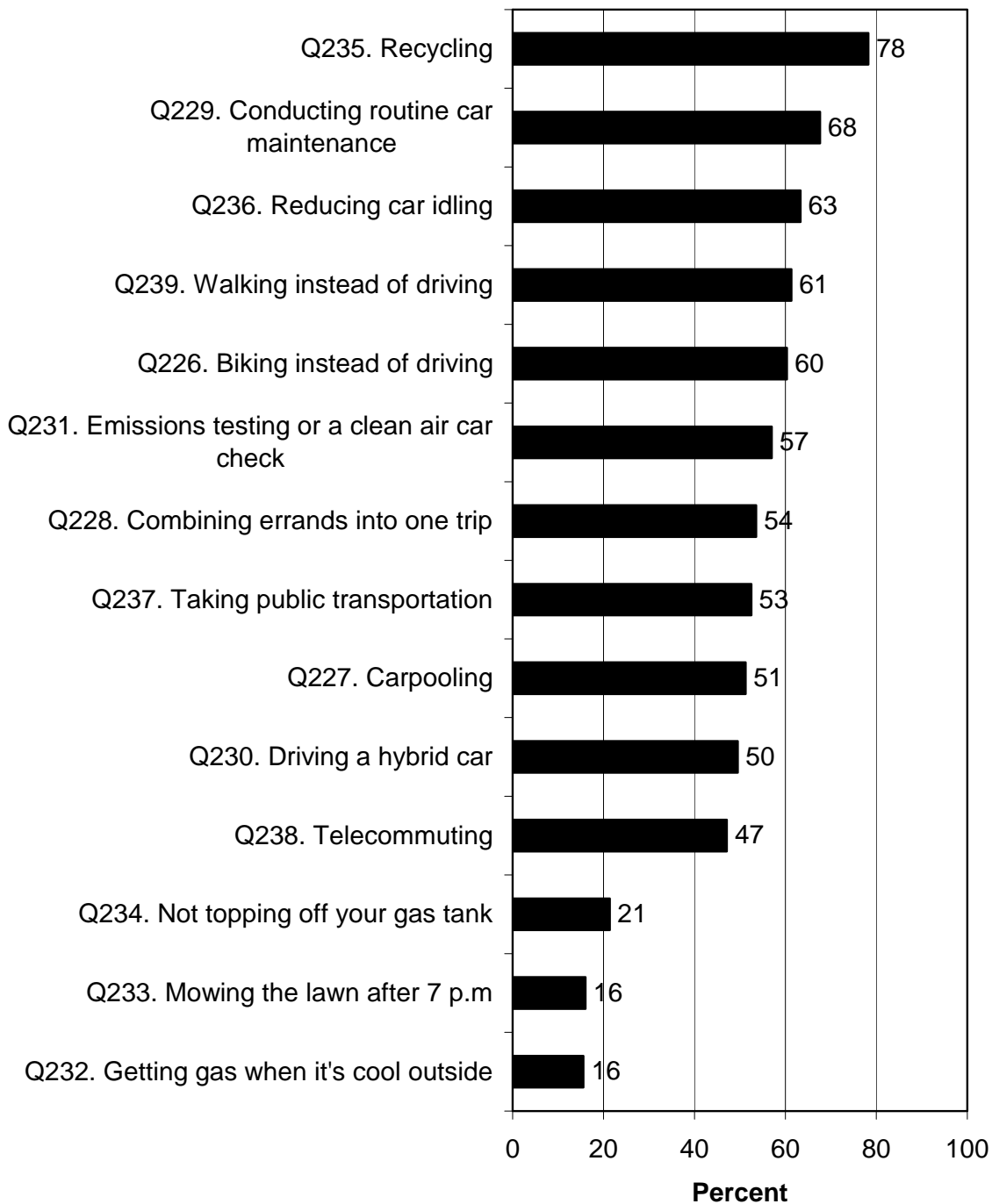




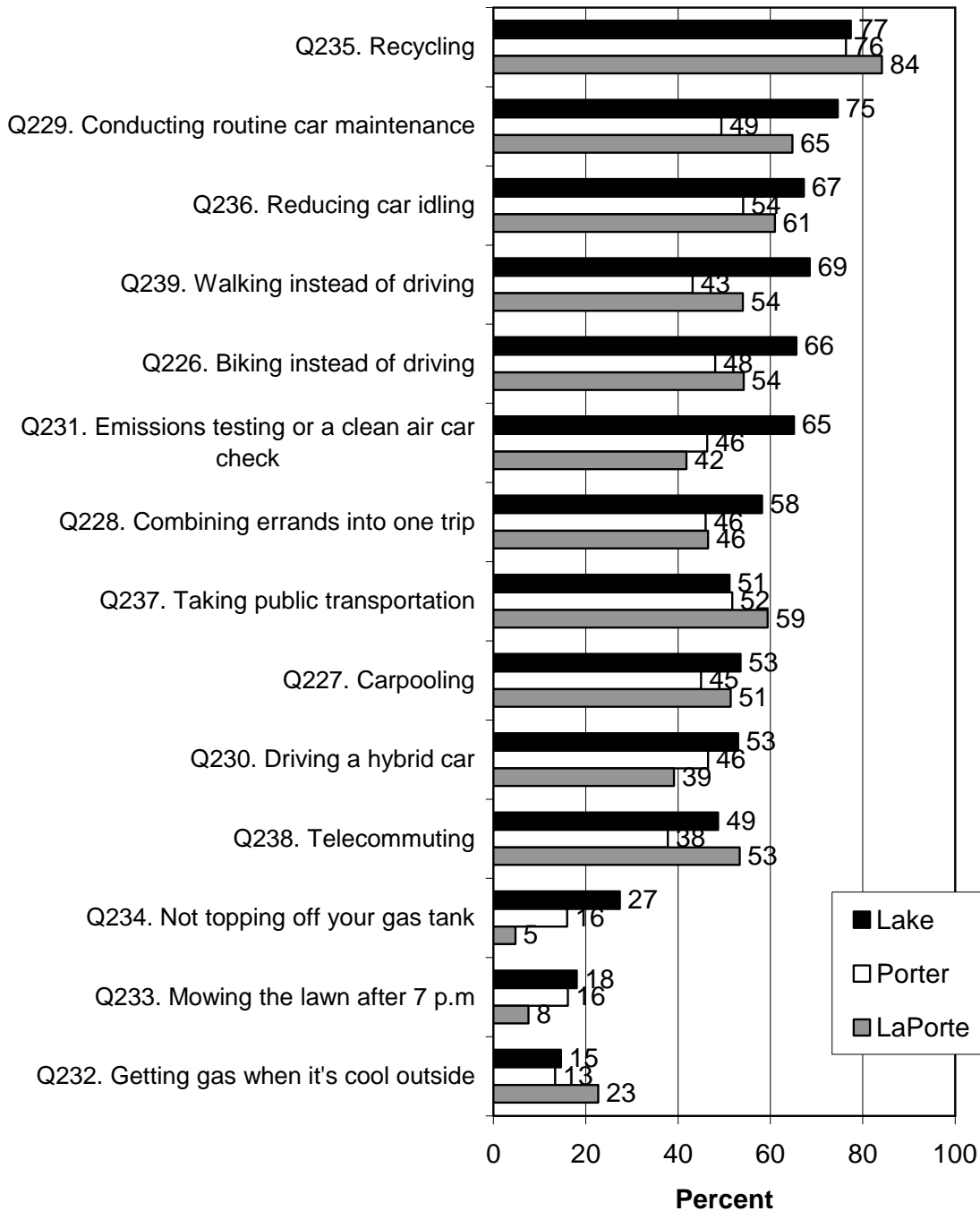
**Percent who say that the following do as shown to improve air quality in their area:**



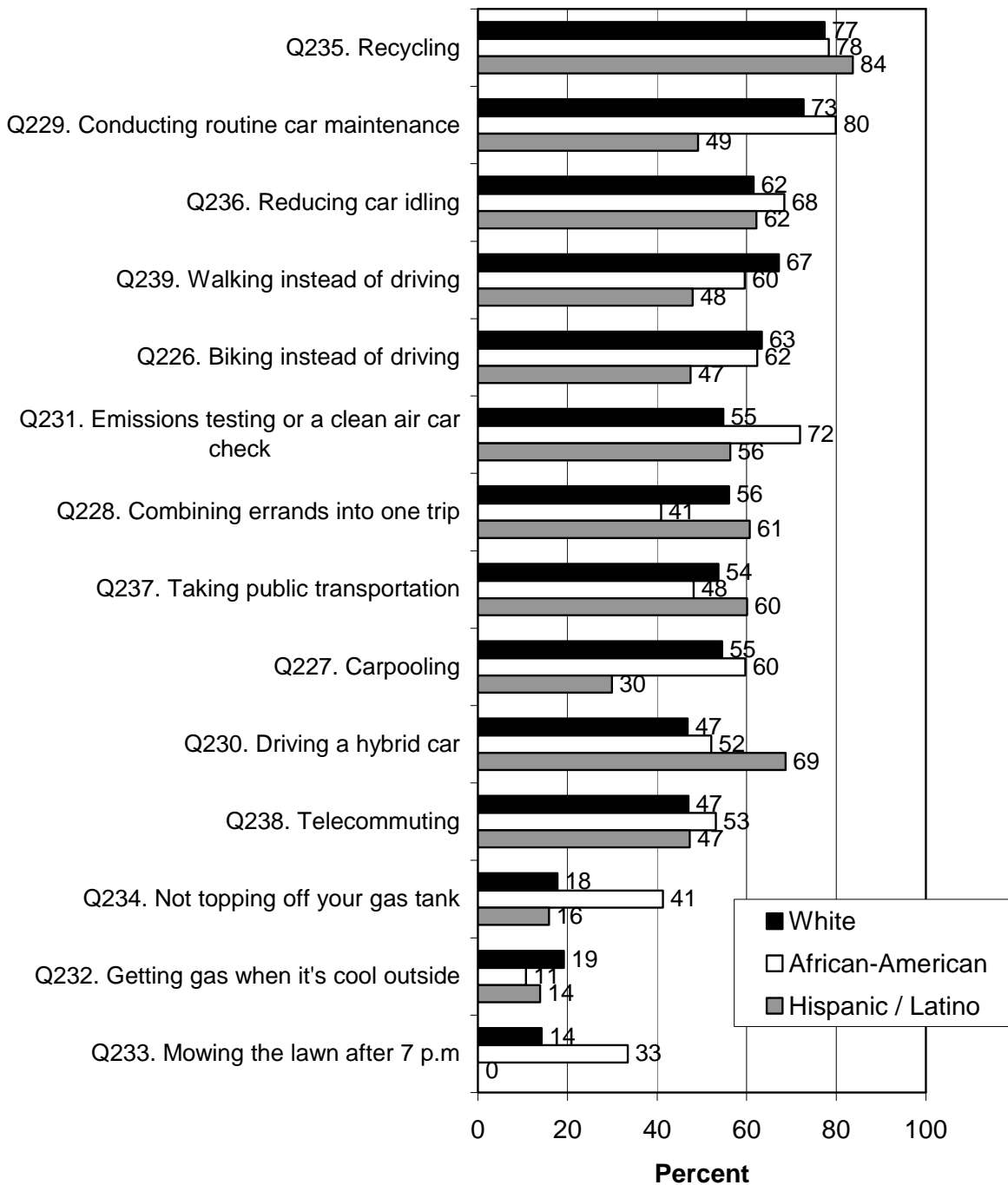
**Percent who say that the following do a lot to improve air quality in their area:**

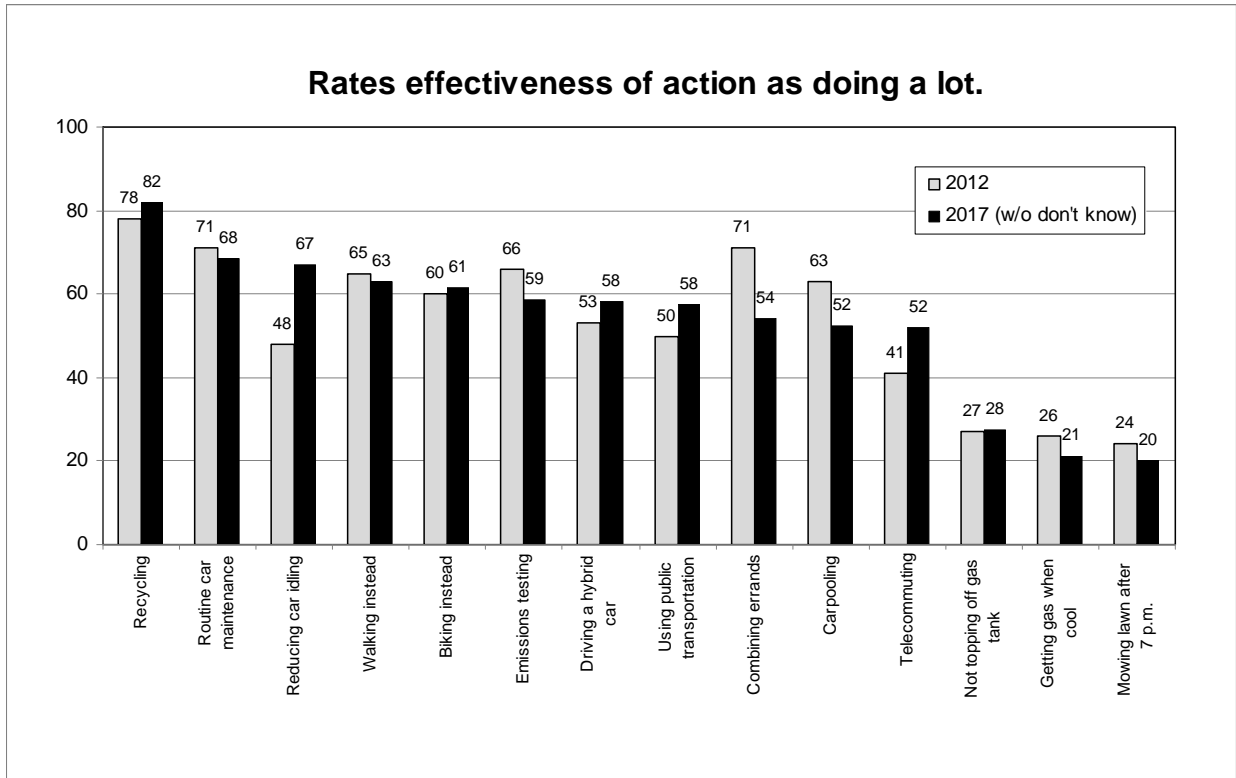


**Percent who say that the following do a lot to improve air quality in their area:**

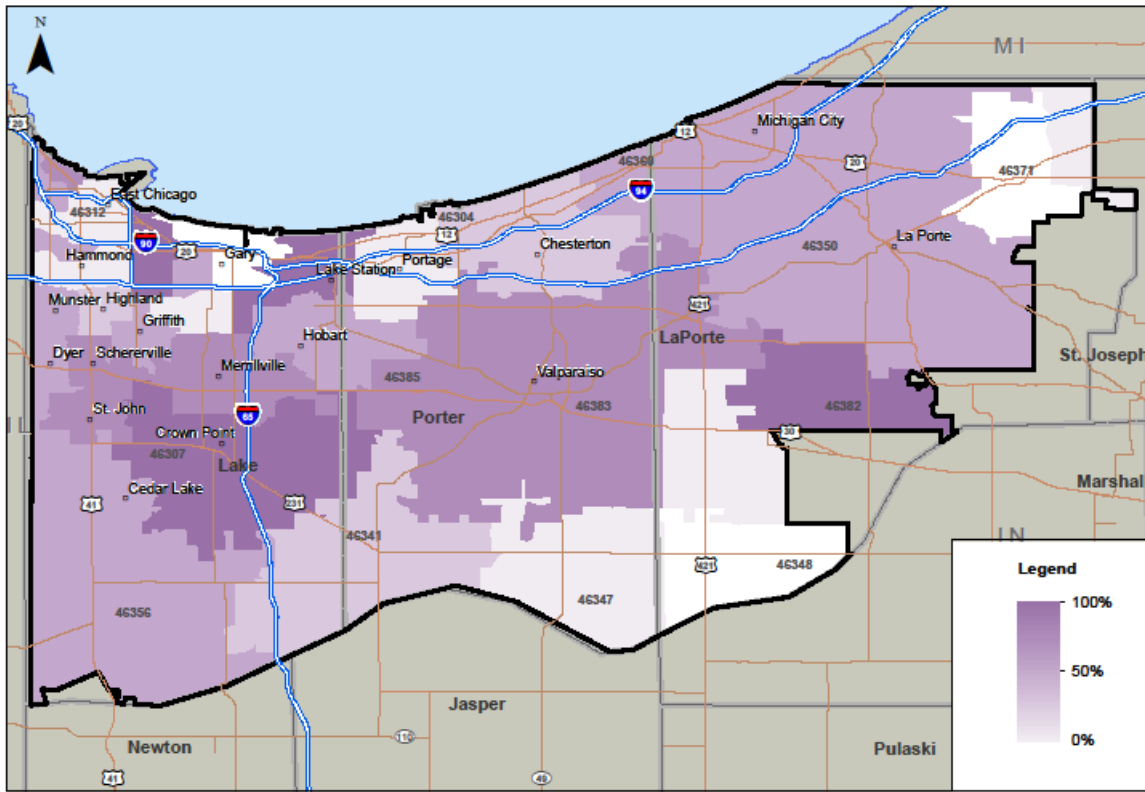


### Percent who say that the following do a lot to improve air quality in their area.





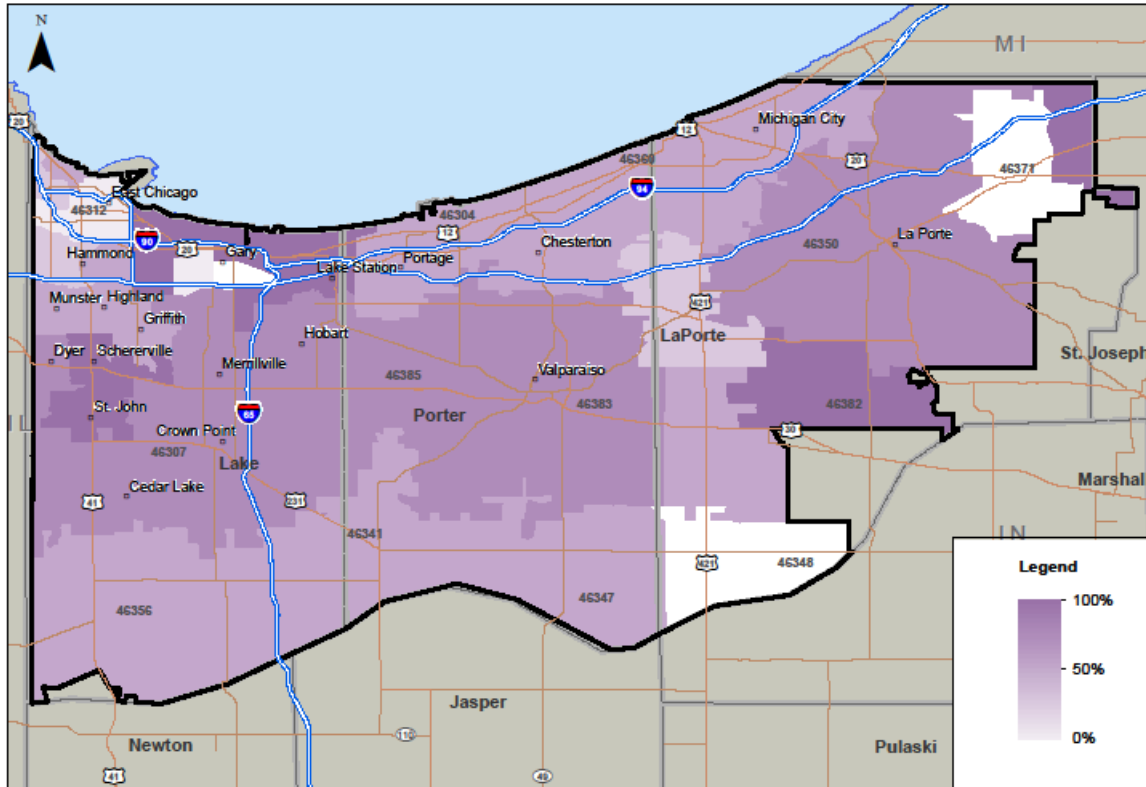
Percentage who feel that carpooling does a lot to improve air quality in their area.



Data collected by Responsive Management

Q227. Carpooling (Would you say that this action does a lot, a little, or nothing at all to improve air quality in your area?)

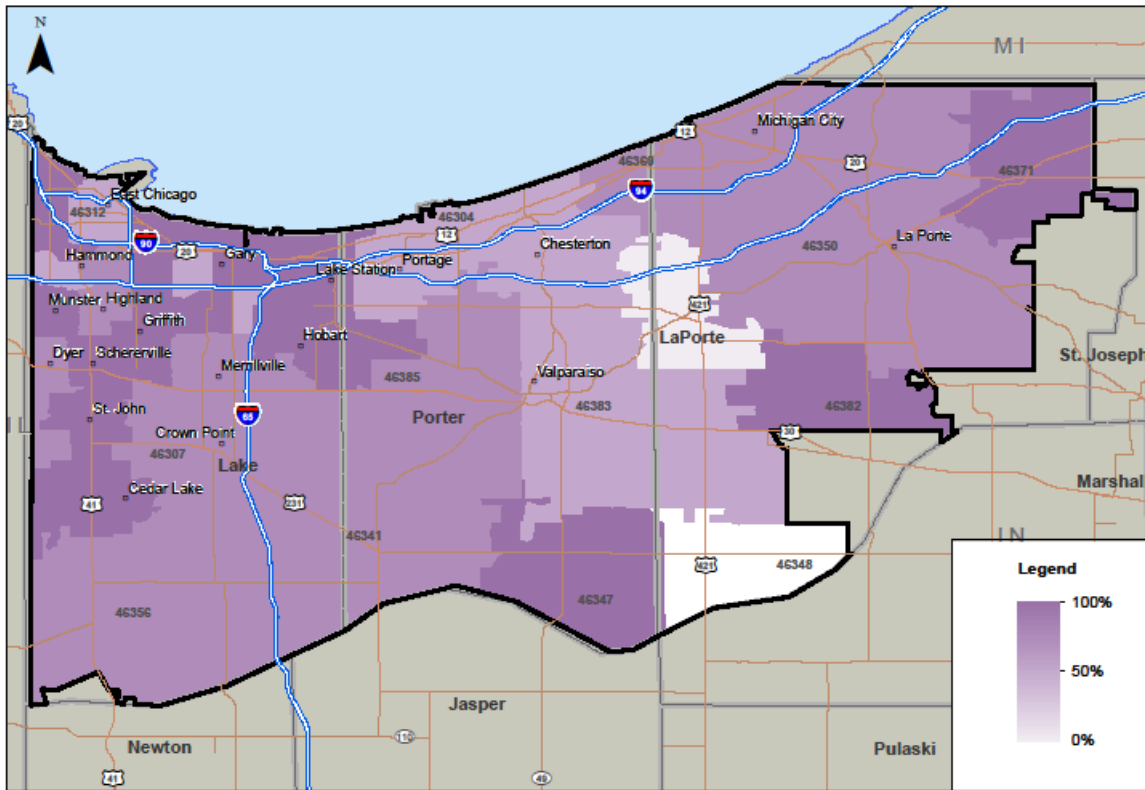
Percentage who feel that combining errands into one trip does a lot to improve air quality in their area.



Data collected by  
Responsive  
Management

Q228. Combining errands into one trip (Would you say that this action does a lot, a little, or nothing at all to improve air quality in your area?)

Percentage who feel that conducting routine car maintenance does a lot to improve air quality in their area.

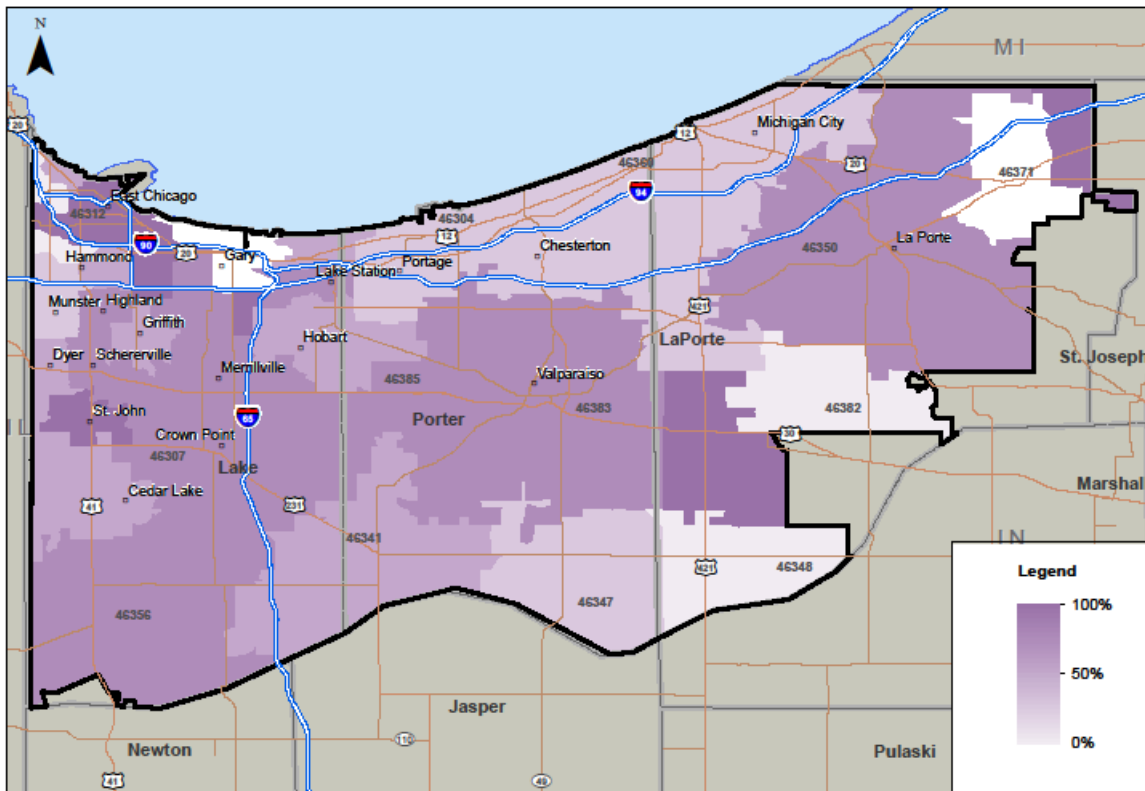


Data collected by Responsive Management

Q229. Conducting routine car maintenance (Would you say that this action does a lot, a little, or nothing at all to improve air quality in your area?)



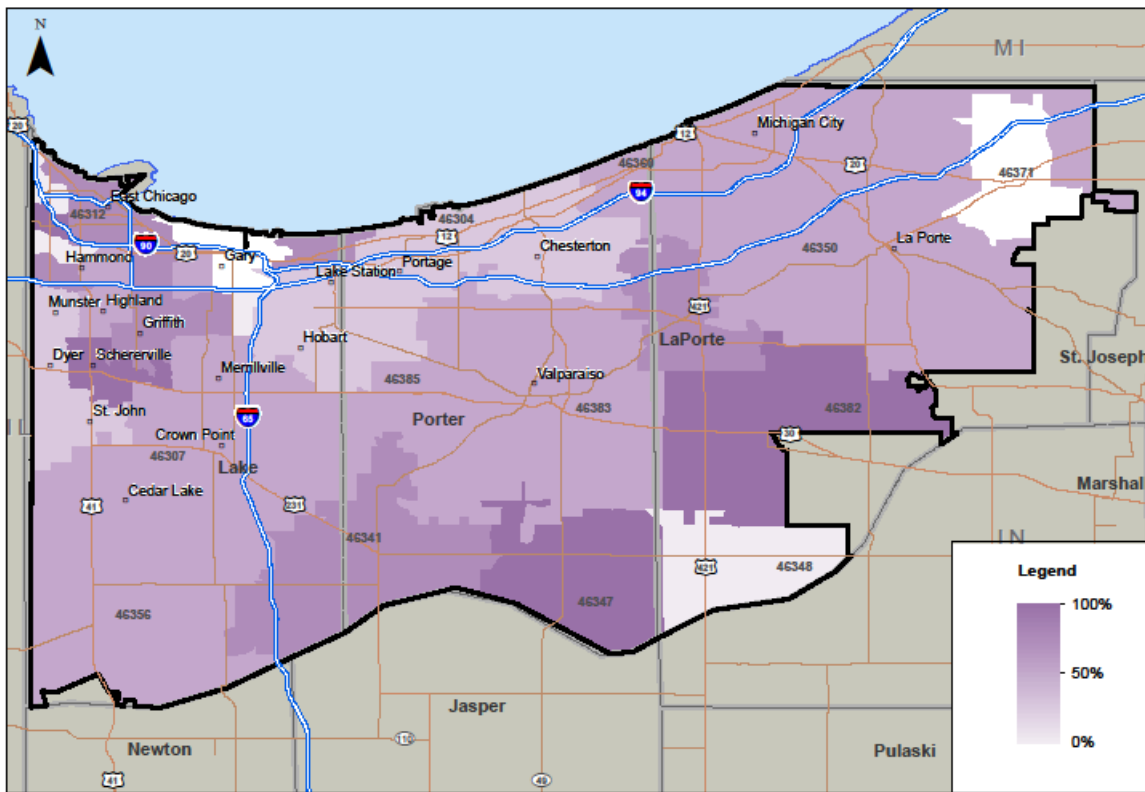
Percentage who feel that reducing car idling does a lot to improve air quality in their area.



Data collected by  
Responsive  
Management

Q236. Reducing car idling (Would you say that this action does a lot, a little, or nothing at all to improve air quality in your area?)

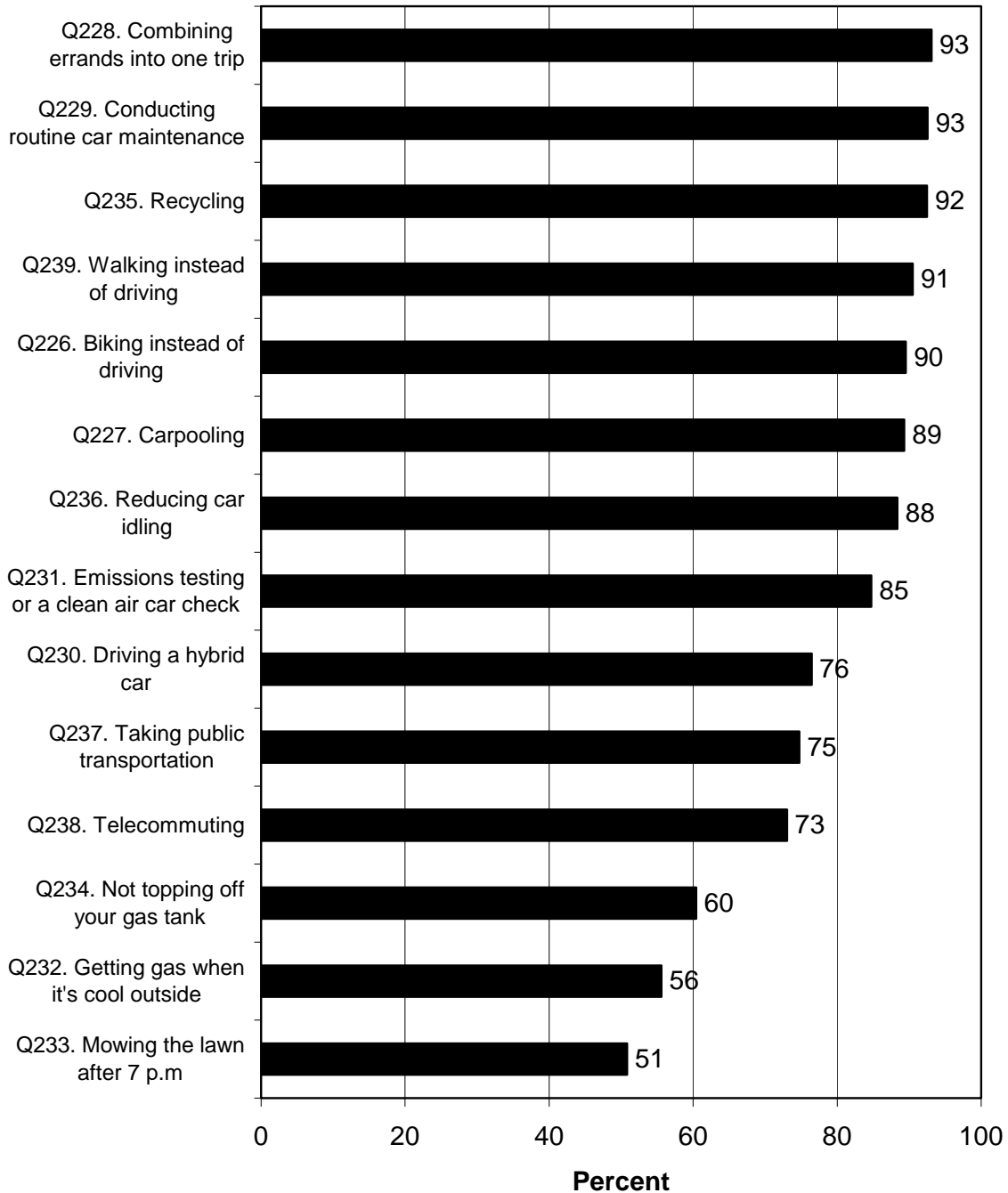
Percentage who feel that taking public transportation does a lot to improve air quality in their area.



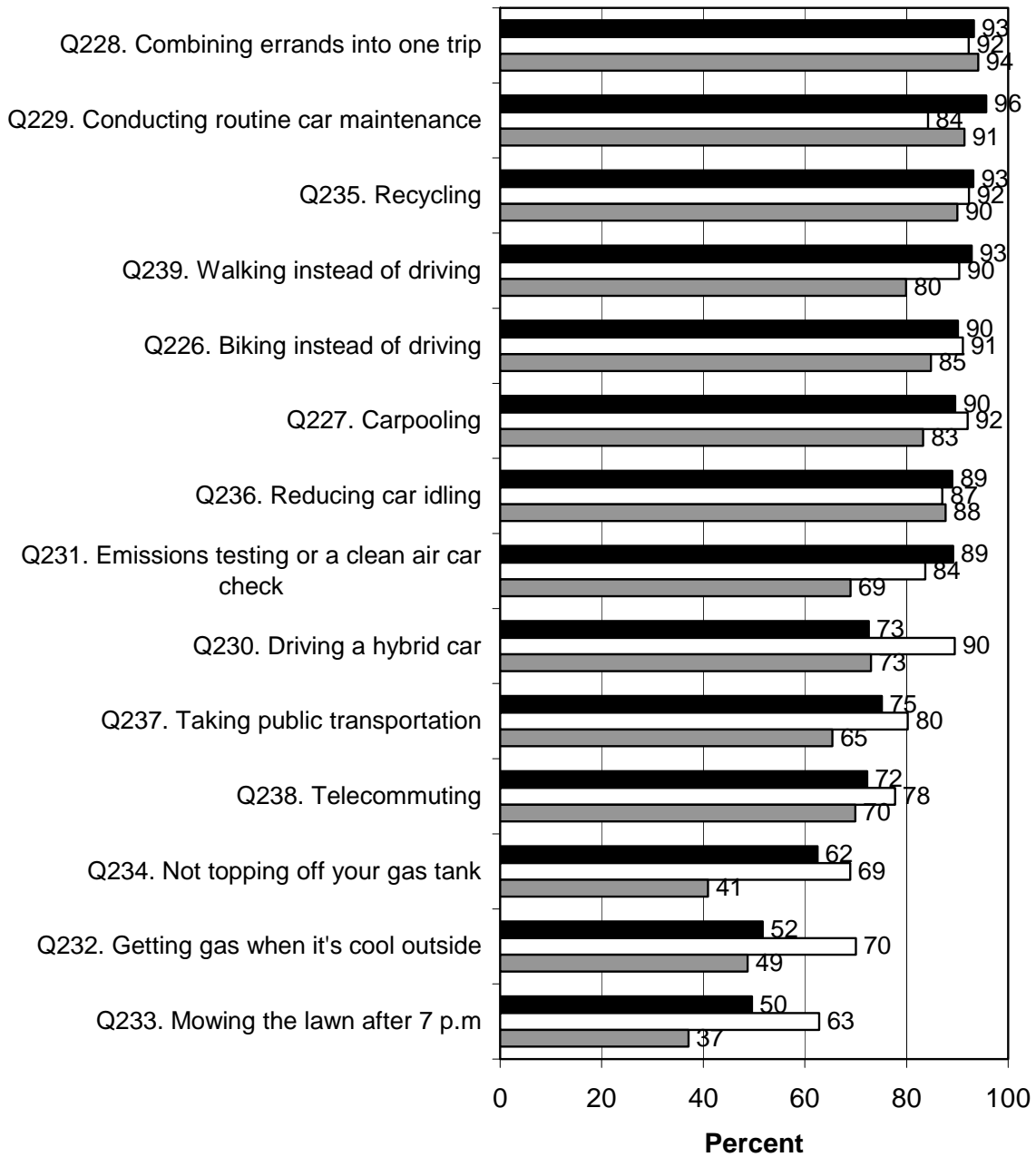
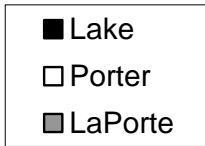
Data collected by Responsive Management

Q237. Taking public transportation (Would you say that this action does a lot, a little, or nothing at all to improve air quality in your area?)

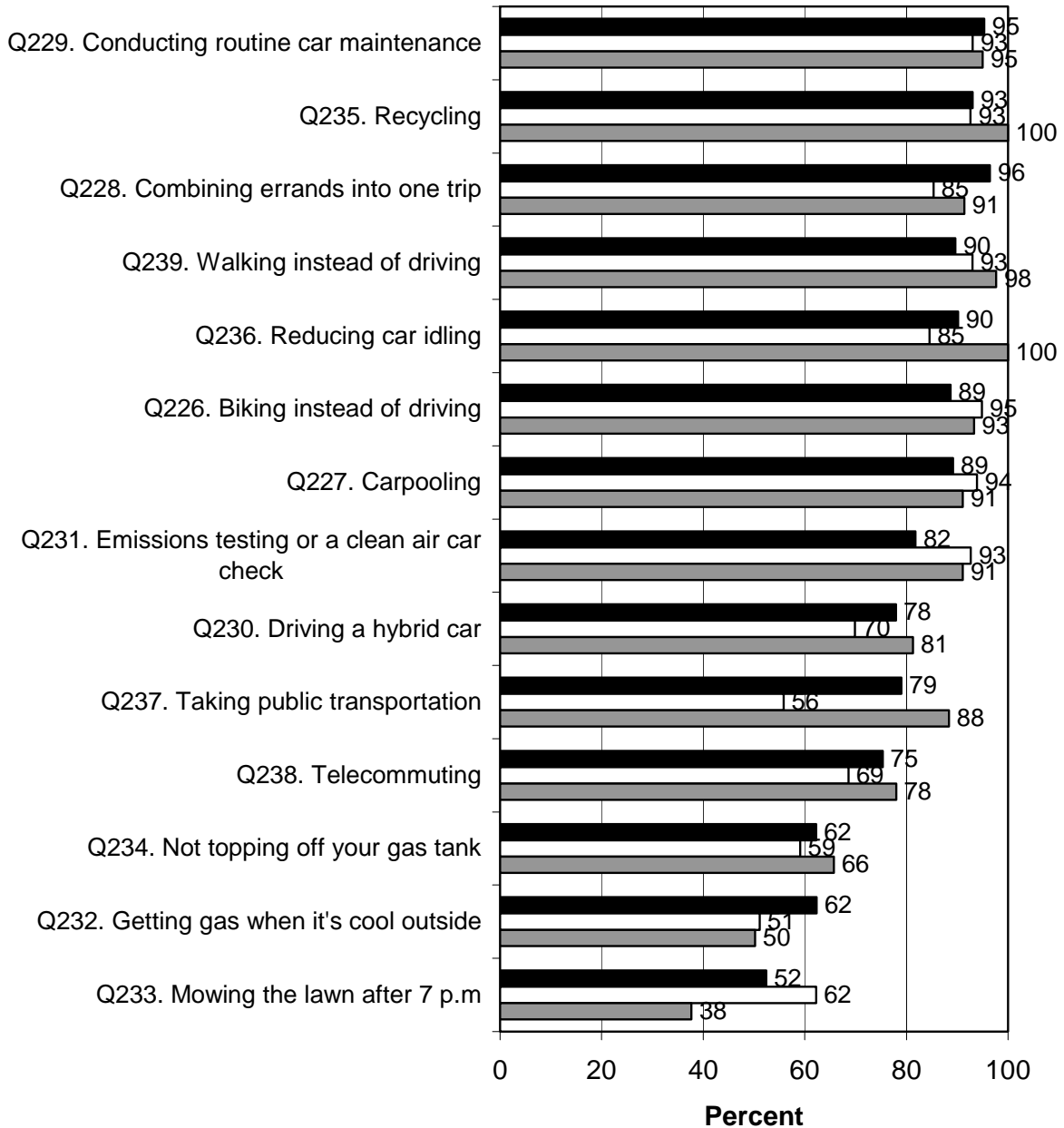
**Percent who say that the following do a lot or a little to improve air quality in their area:**

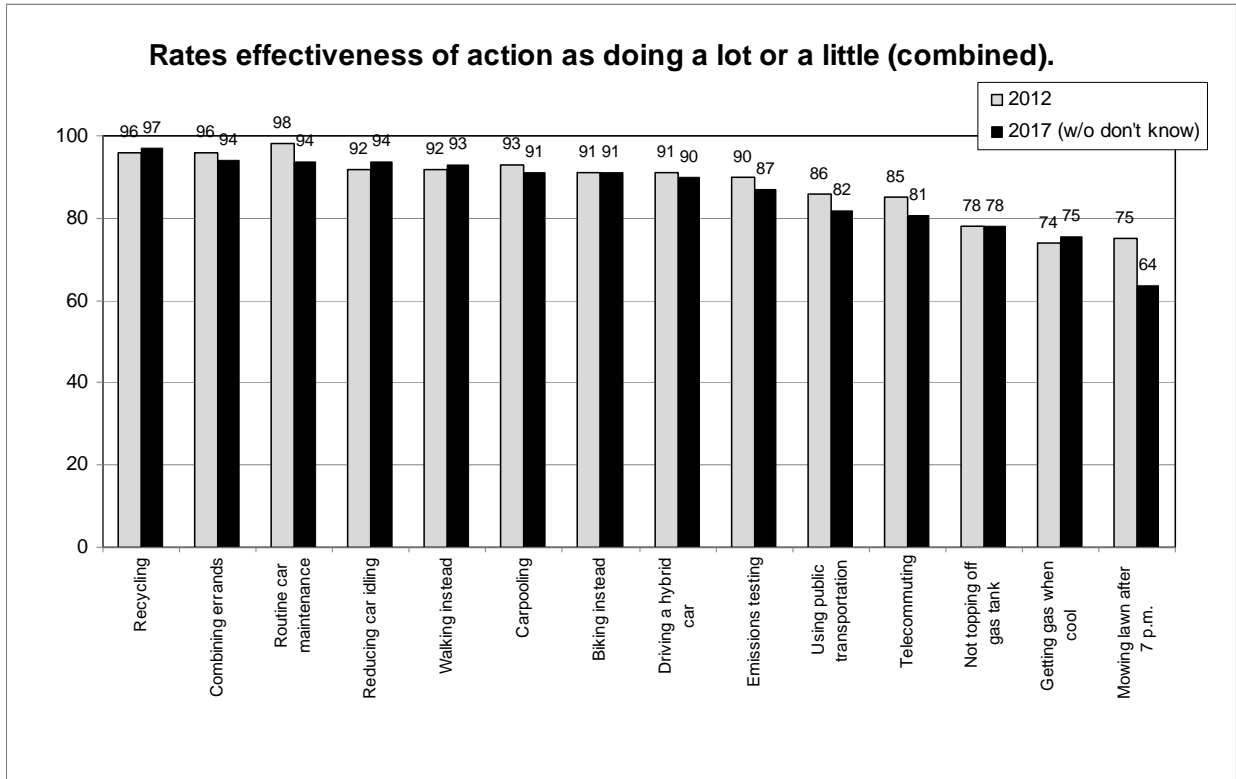


### Percent who say that the following do a lot or a little to improve air quality in their area:

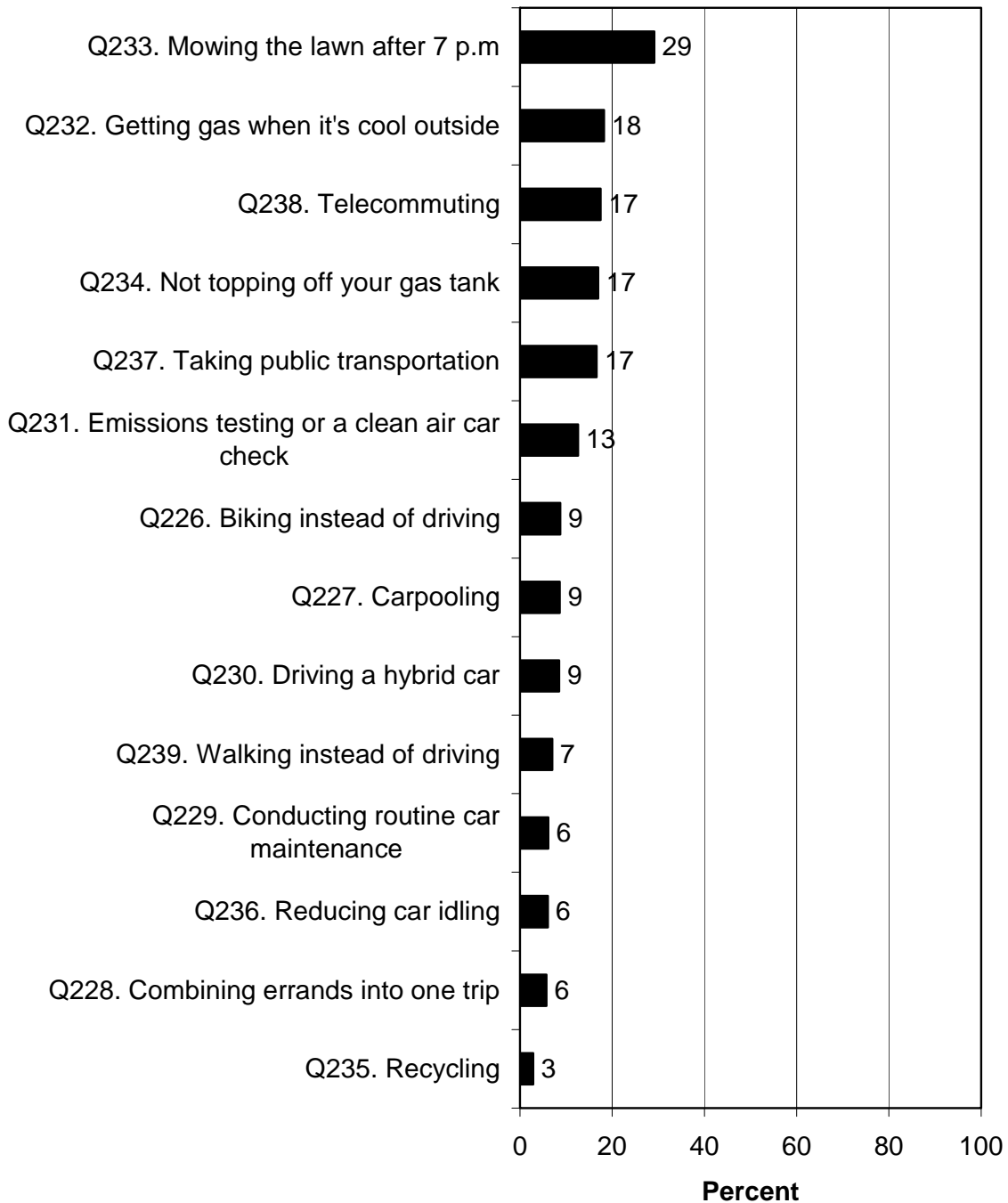


**Percent who say that the following do a lot or a little to improve air quality in their area.**

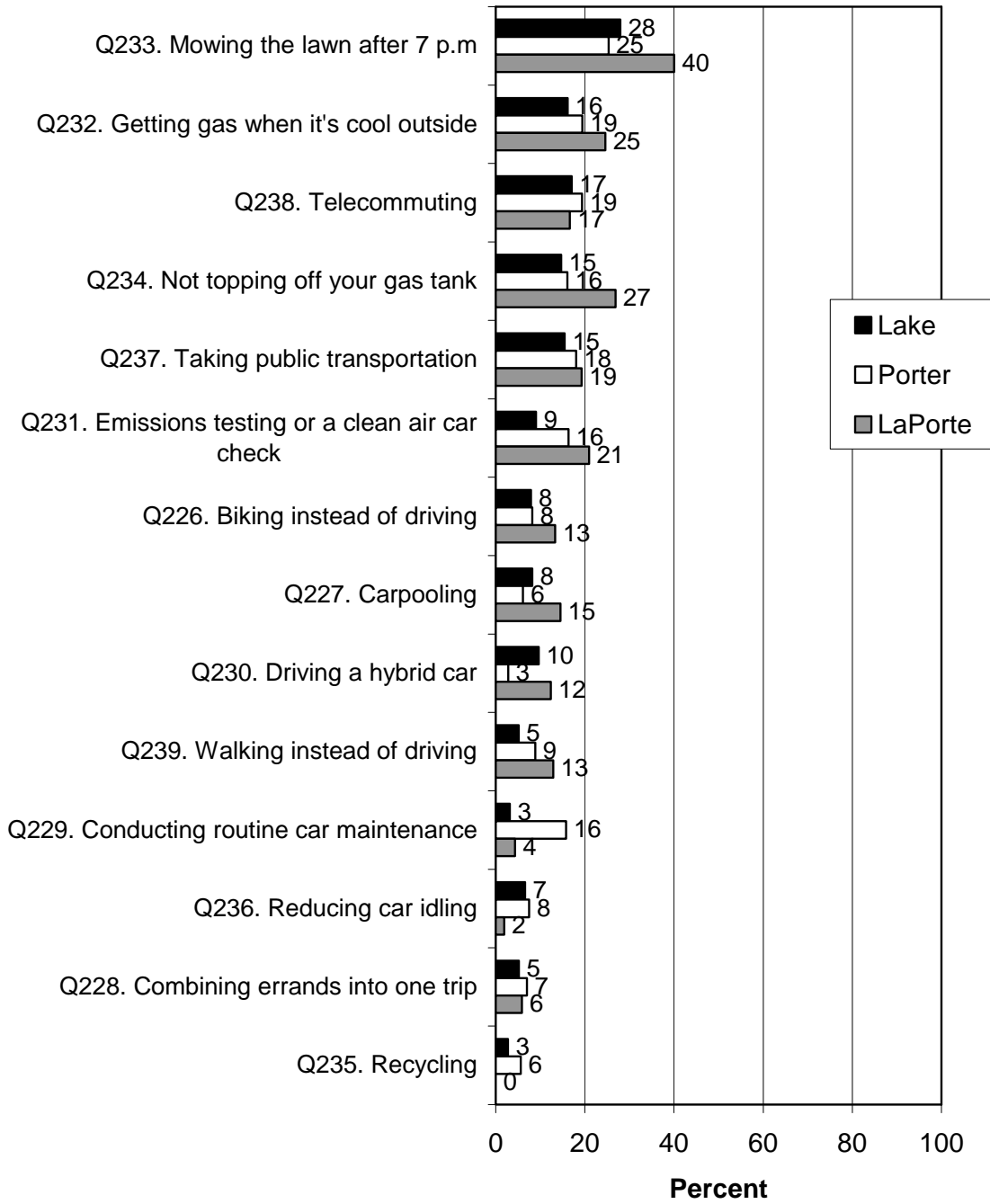




**Percent who say that the following do nothing at all  
to improve air quality in their area:**

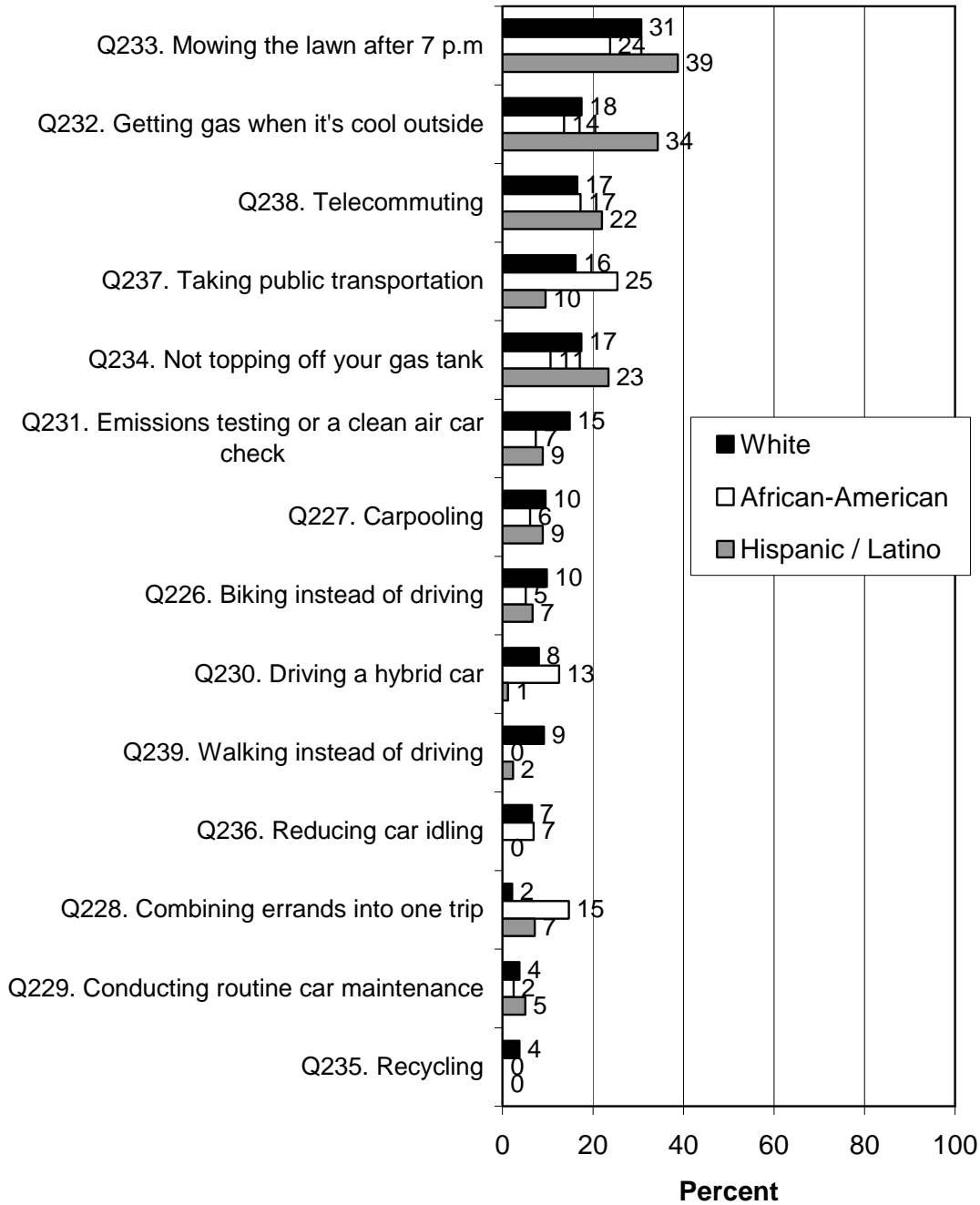


### Percent who say that the following do nothing at all to improve air quality in their area:

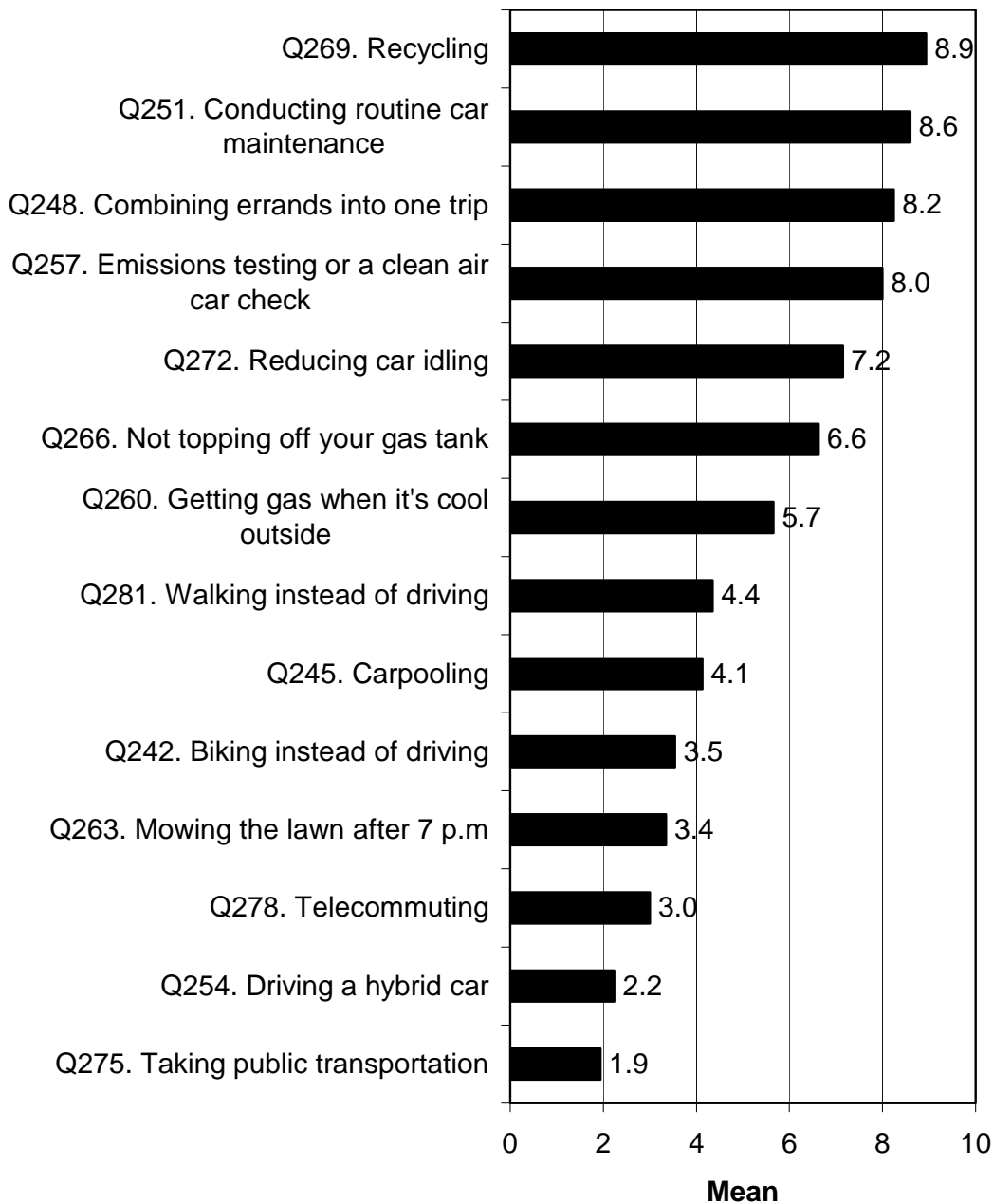




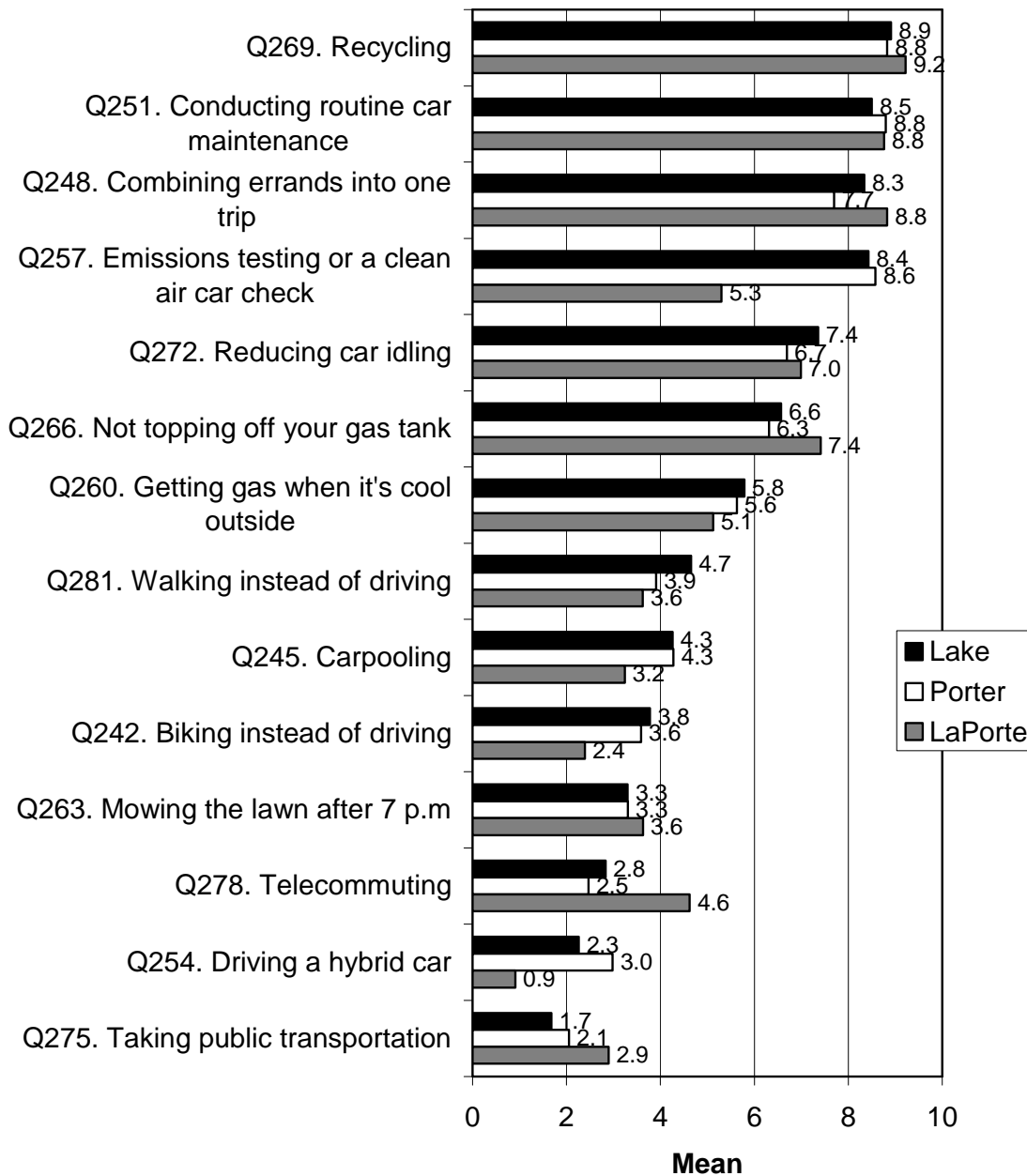
**Percent who say that the following do nothing at all to improve air quality in their area.**



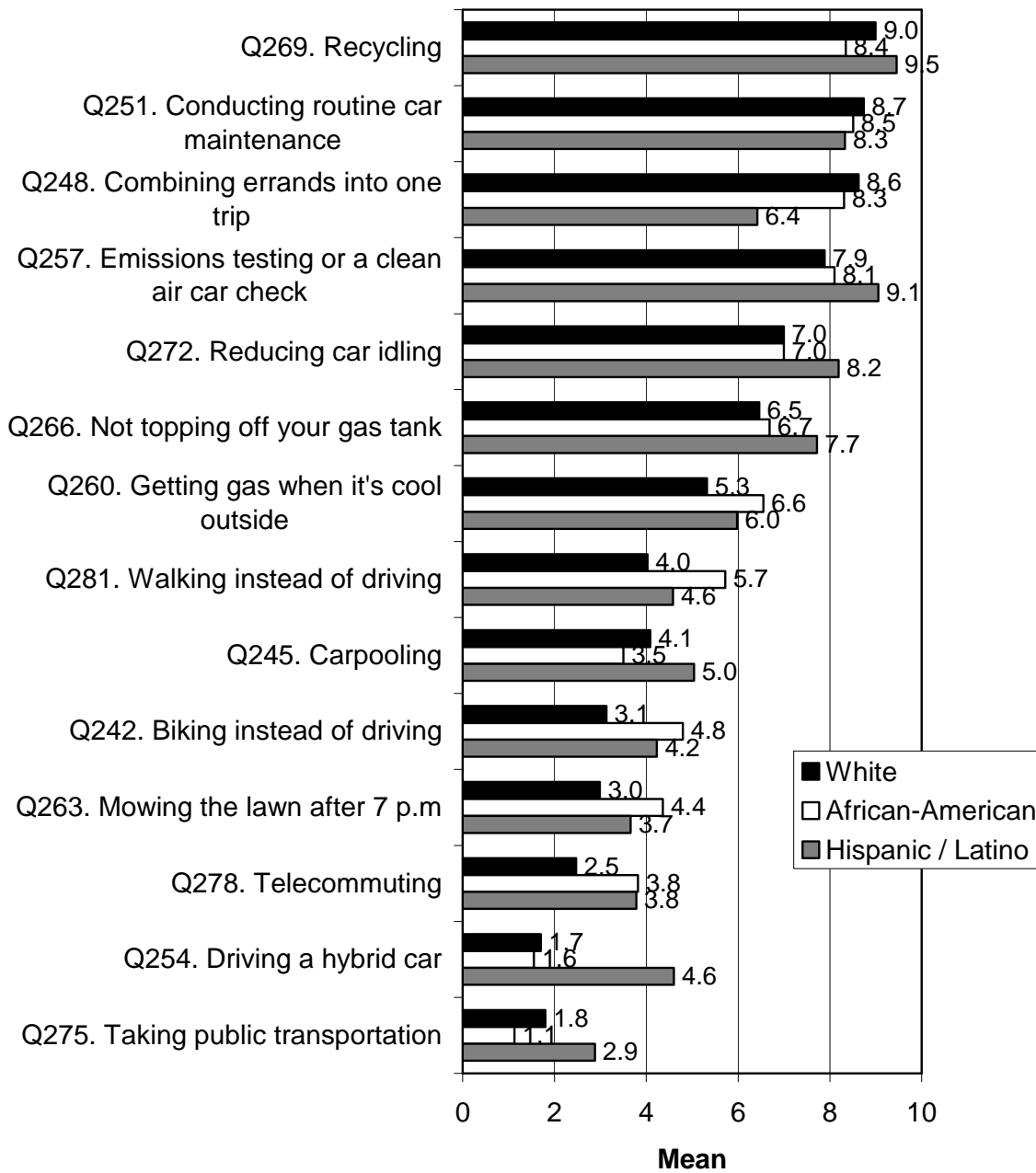
**Mean rating of likelihood to adopt the following actions to improve air quality problems in their area, on a scale of 0 to 10, where 0 is not at all likely and 10 is extremely likely:**



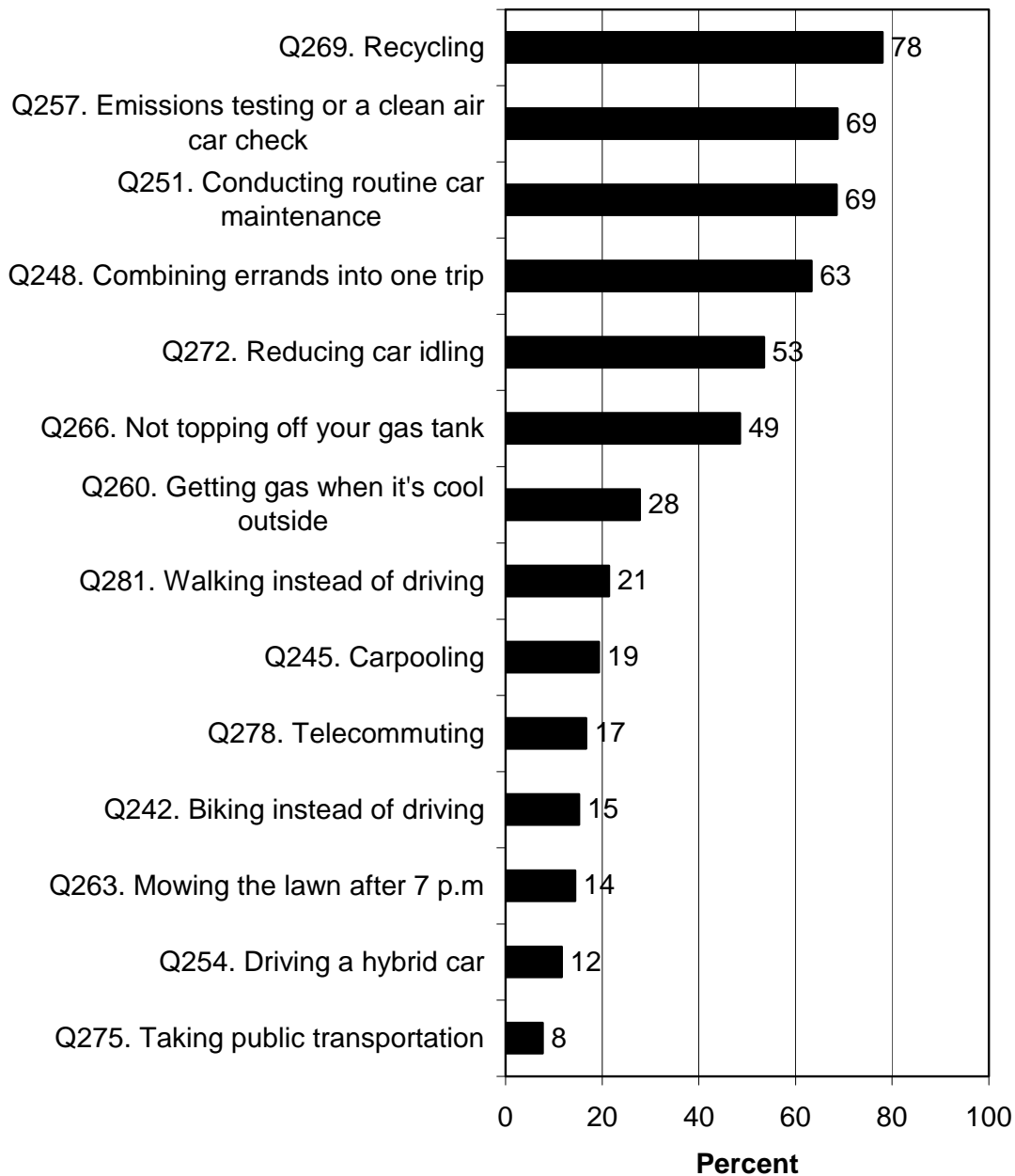
**Mean rating of likelihood to adopt the following actions to improve air quality problems in their area, on a scale of 0 to 10, where 0 is not at all likely and 10 is extremely likely:**



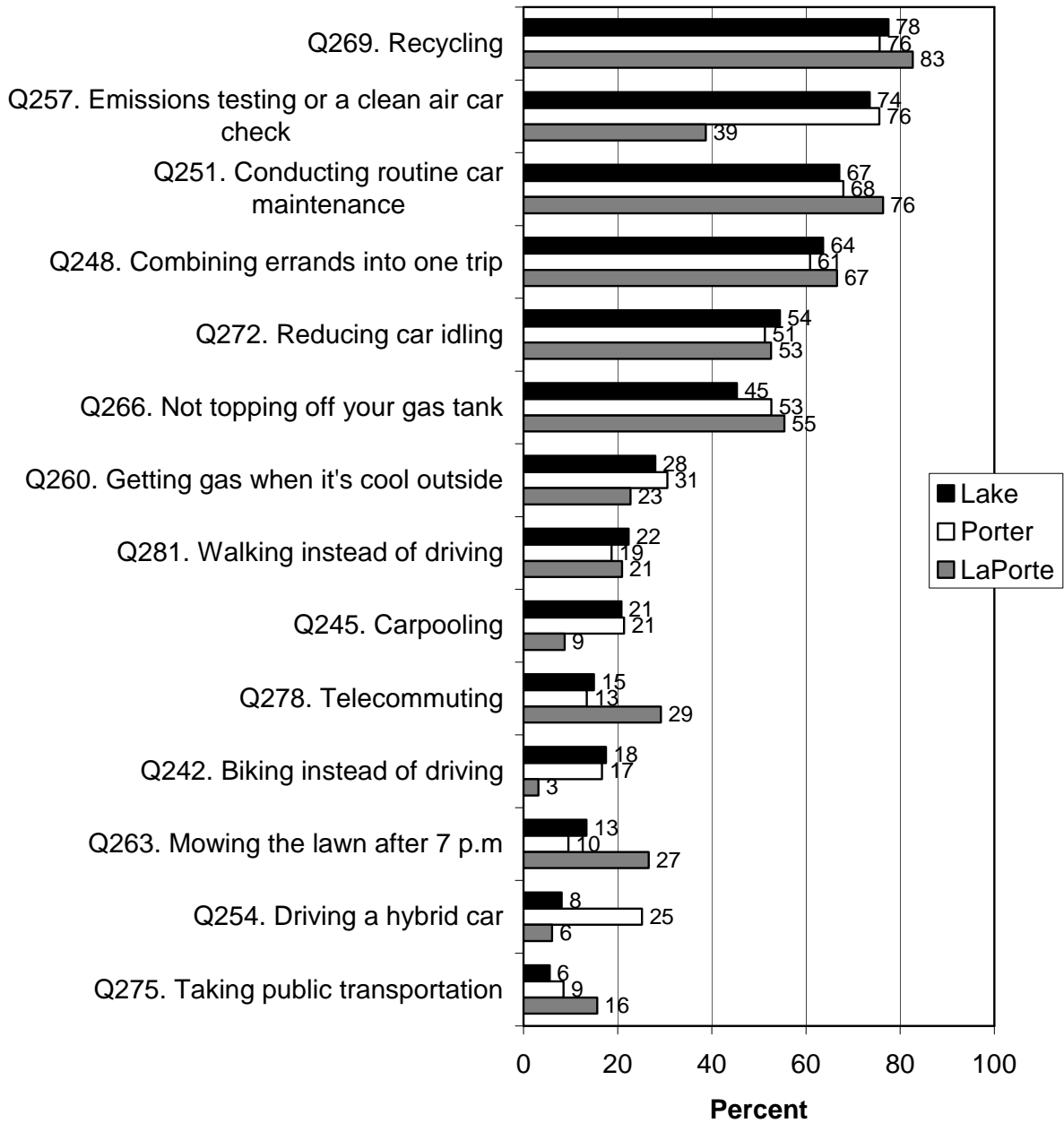
**Mean rating of likelihood to adopt the following actions to improve air quality problems in their area, on a scale of 0 to 10, where 0 is not at all likely and 10 is extremely likely.**



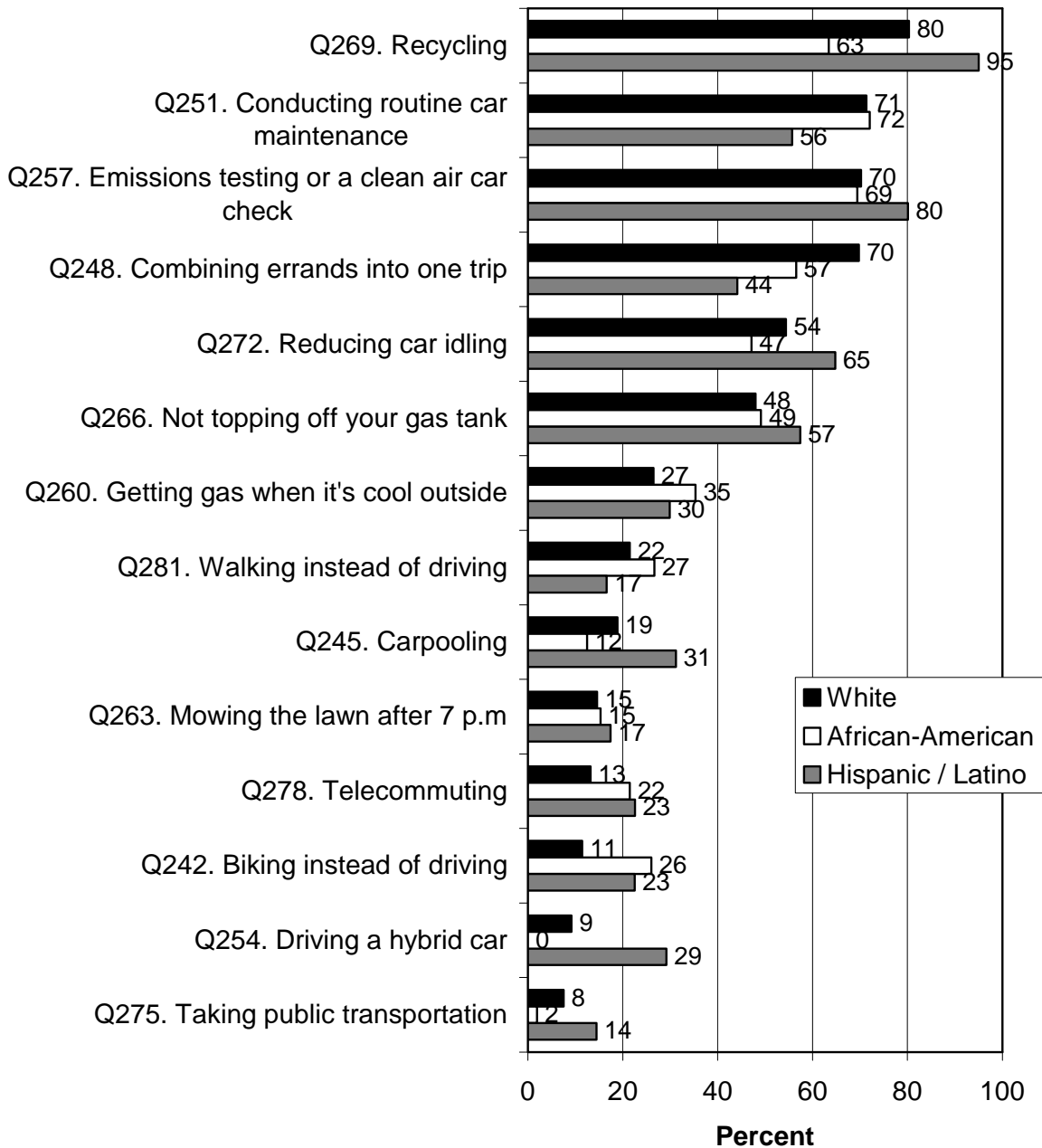
**Percent who rated their likelihood to adopt the following actions to improve air quality problems in their area a 9 or 10, on a scale of 0 to 10, where 0 is not at all likely and 10 is extremely likely:**



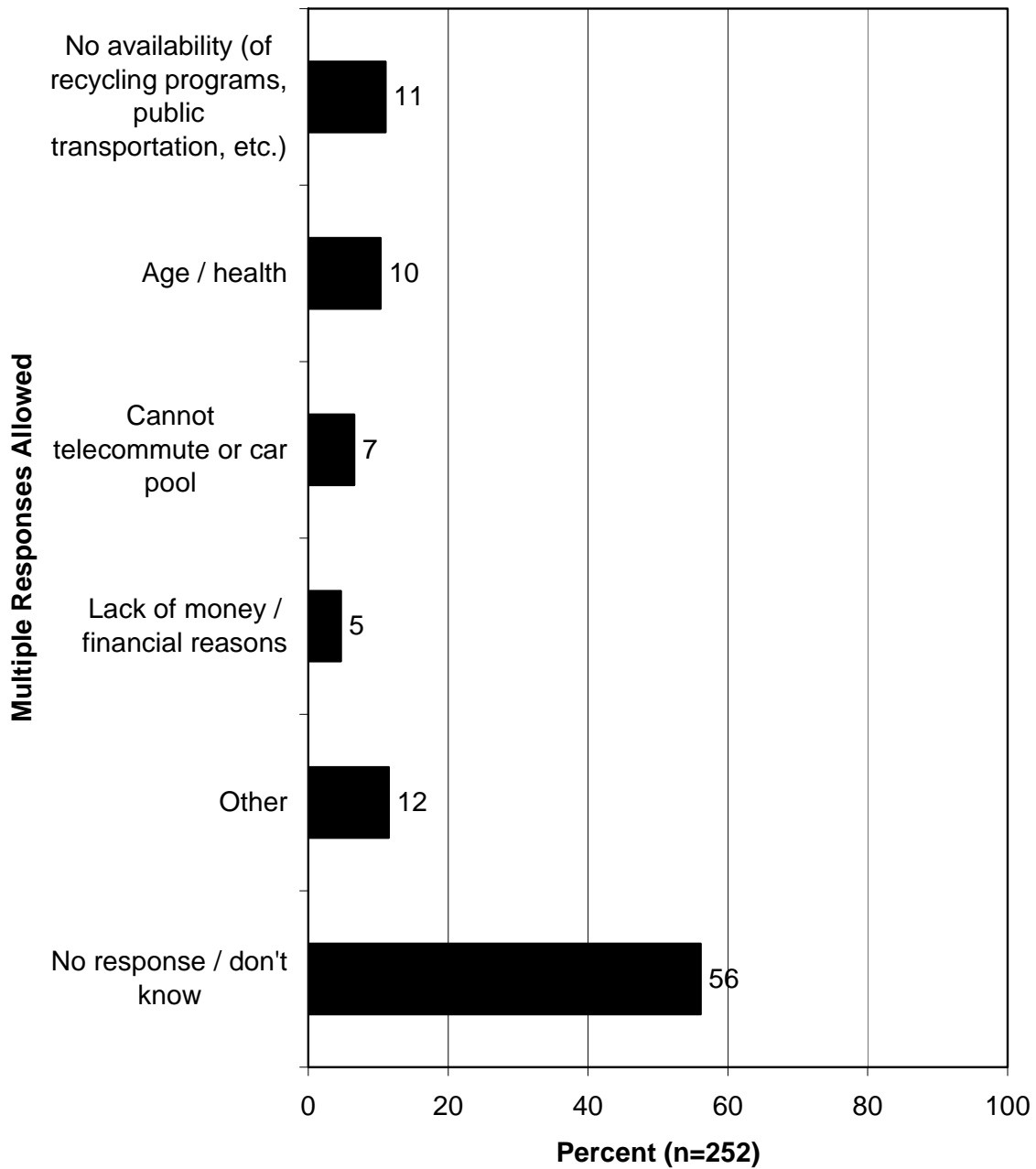
**Percent who rated their likelihood to adopt the following actions to improve air quality problems in their area a 9 or 10, on a scale of 0 to 10, where 0 is not at all likely and 10 is extremely likely:**



**Percent who rated their likelihood to adopt the following actions to improve air quality problems in their area a 9 or 10, on a scale of 0 to 10, where 0 is not at all likely and 10 is extremely likely.**

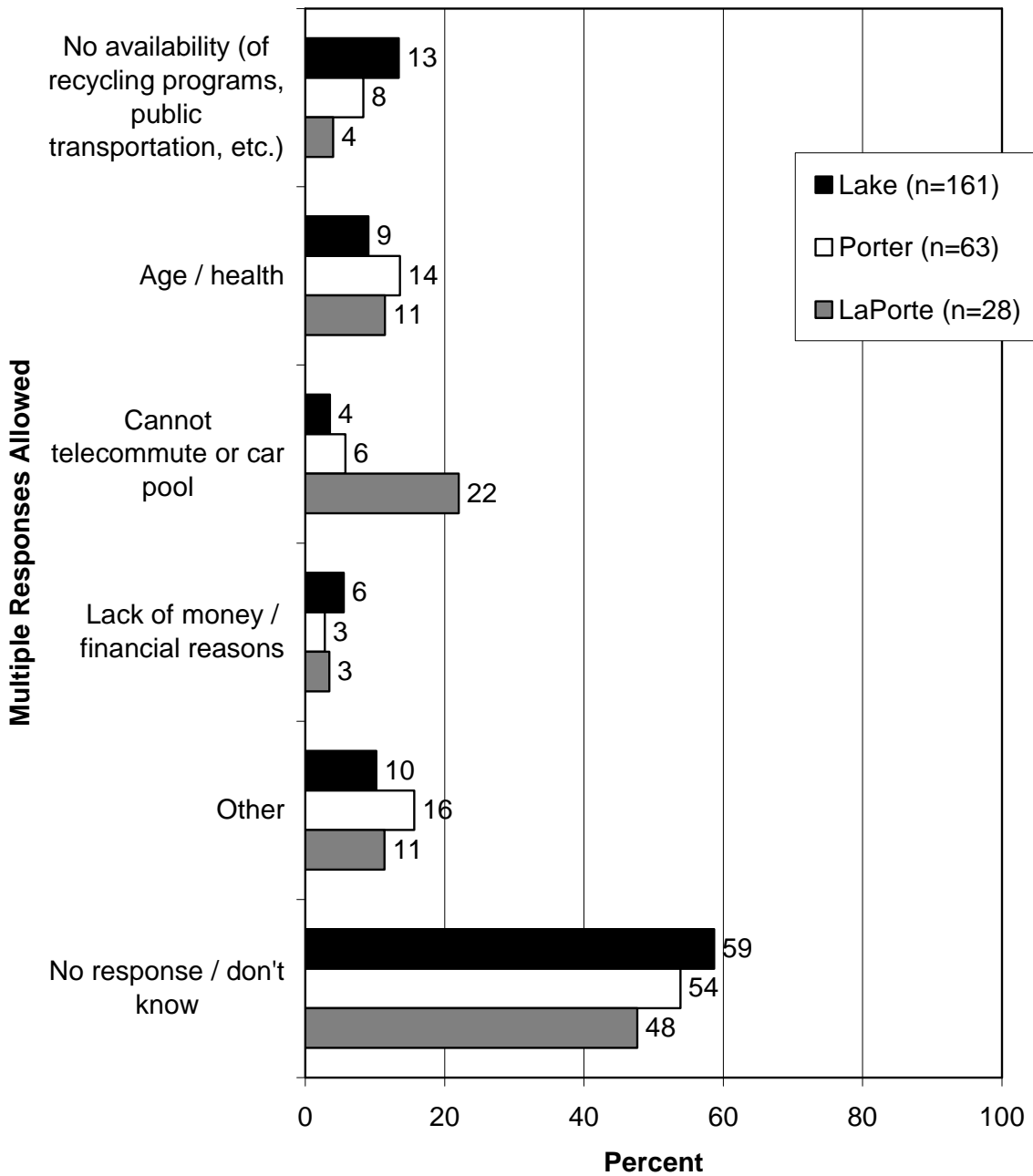


**Q284. Is there anything that prevents you from doing more of the actions we discussed to help improve the air quality in your area?**

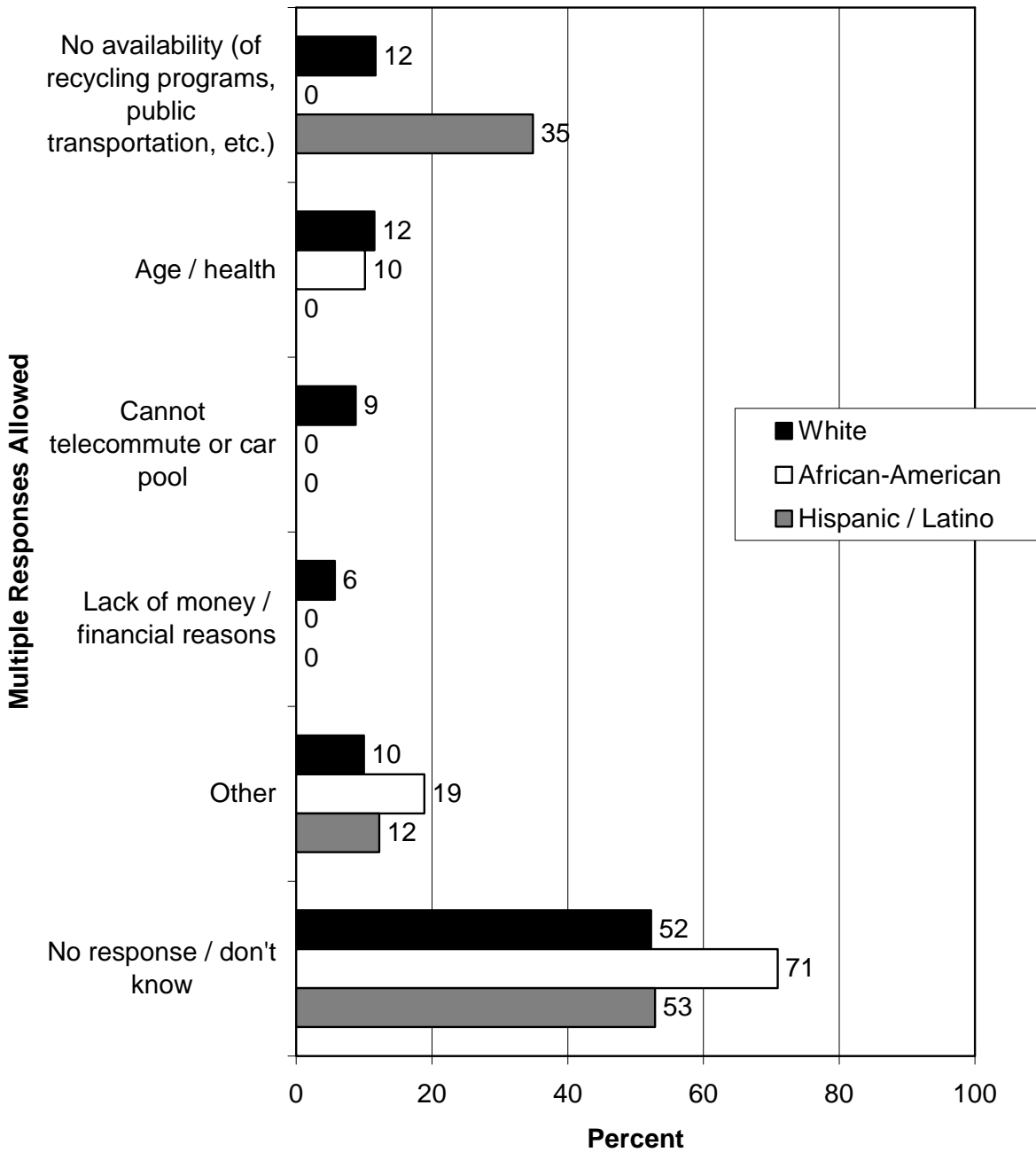




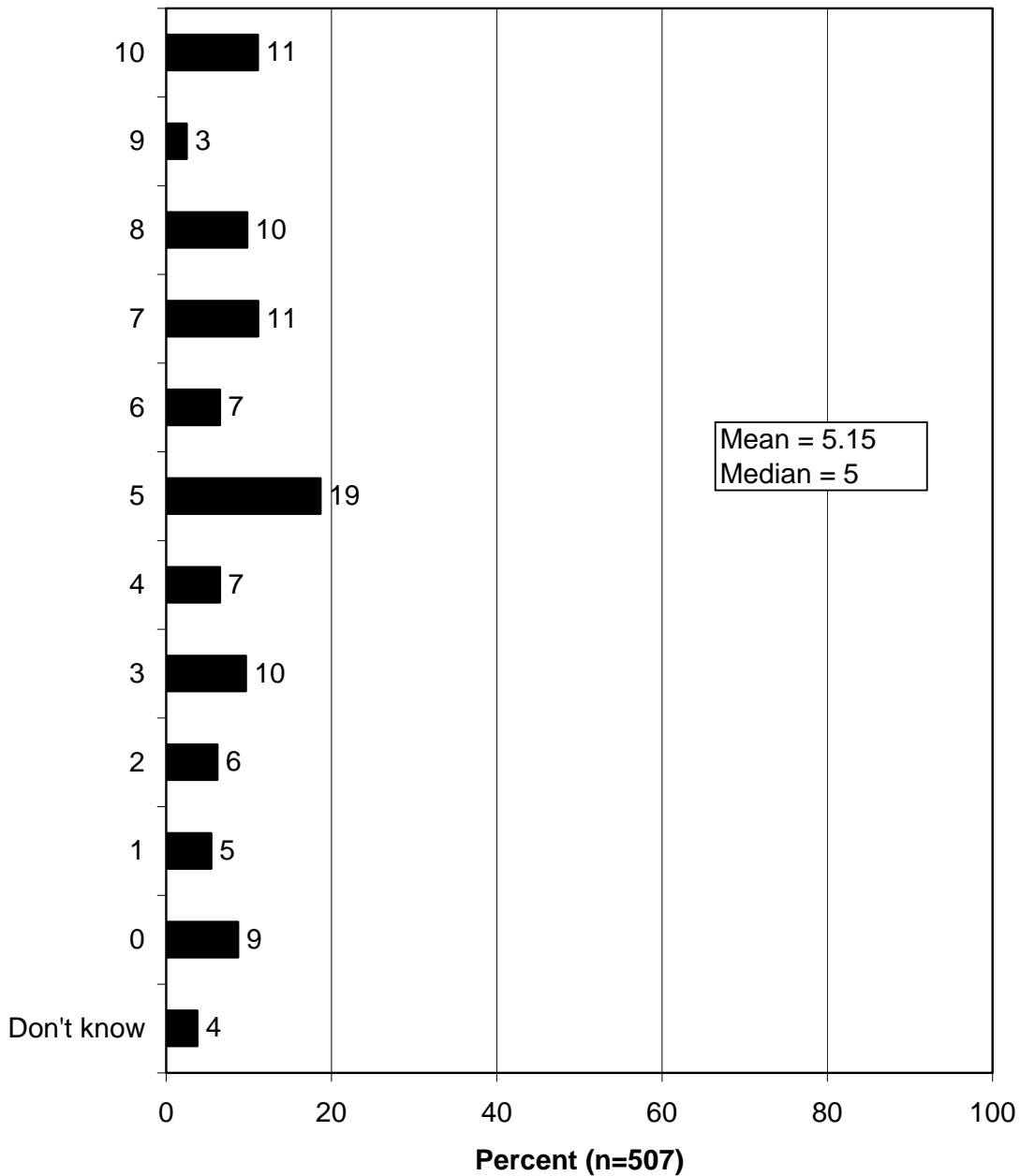
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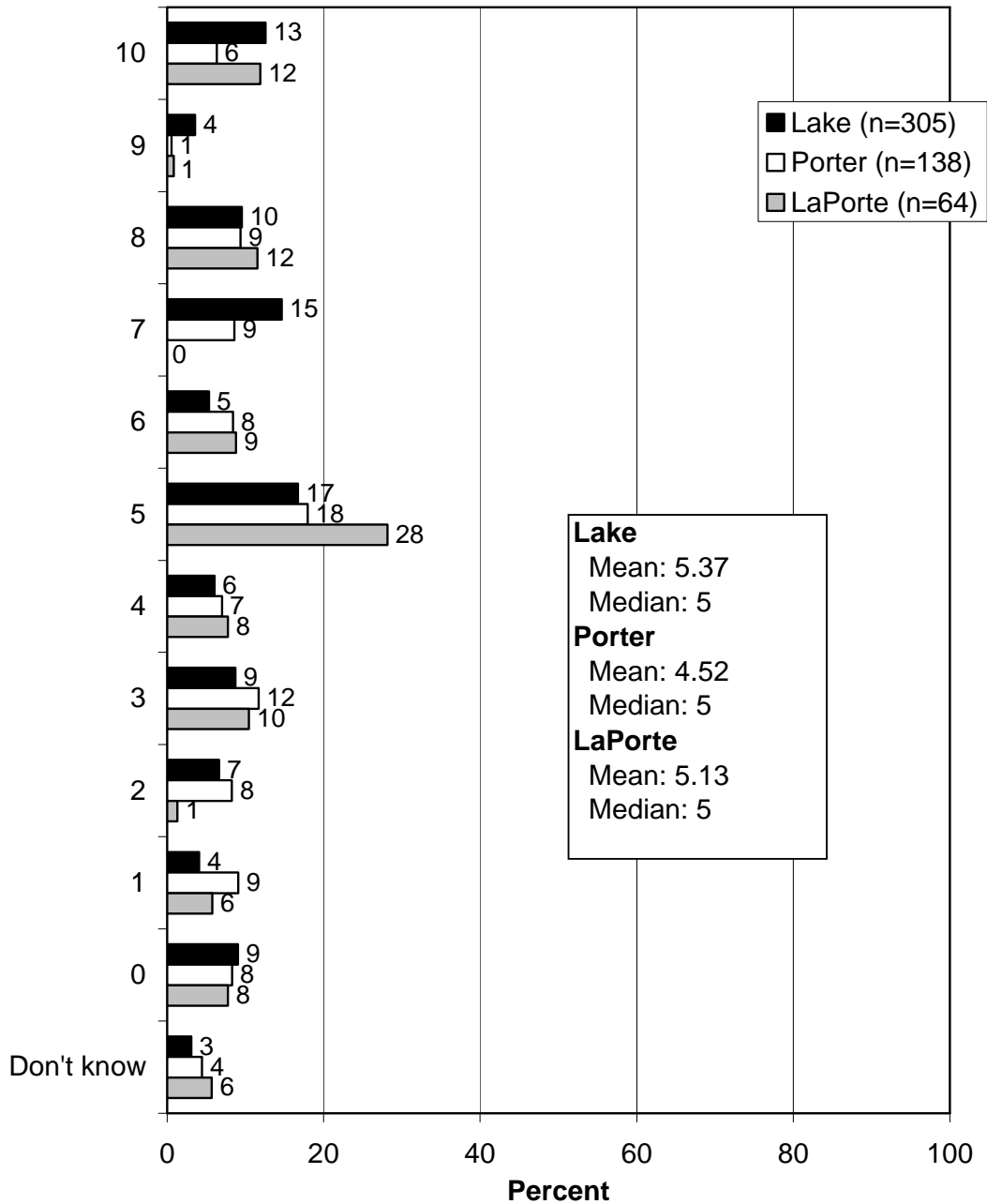
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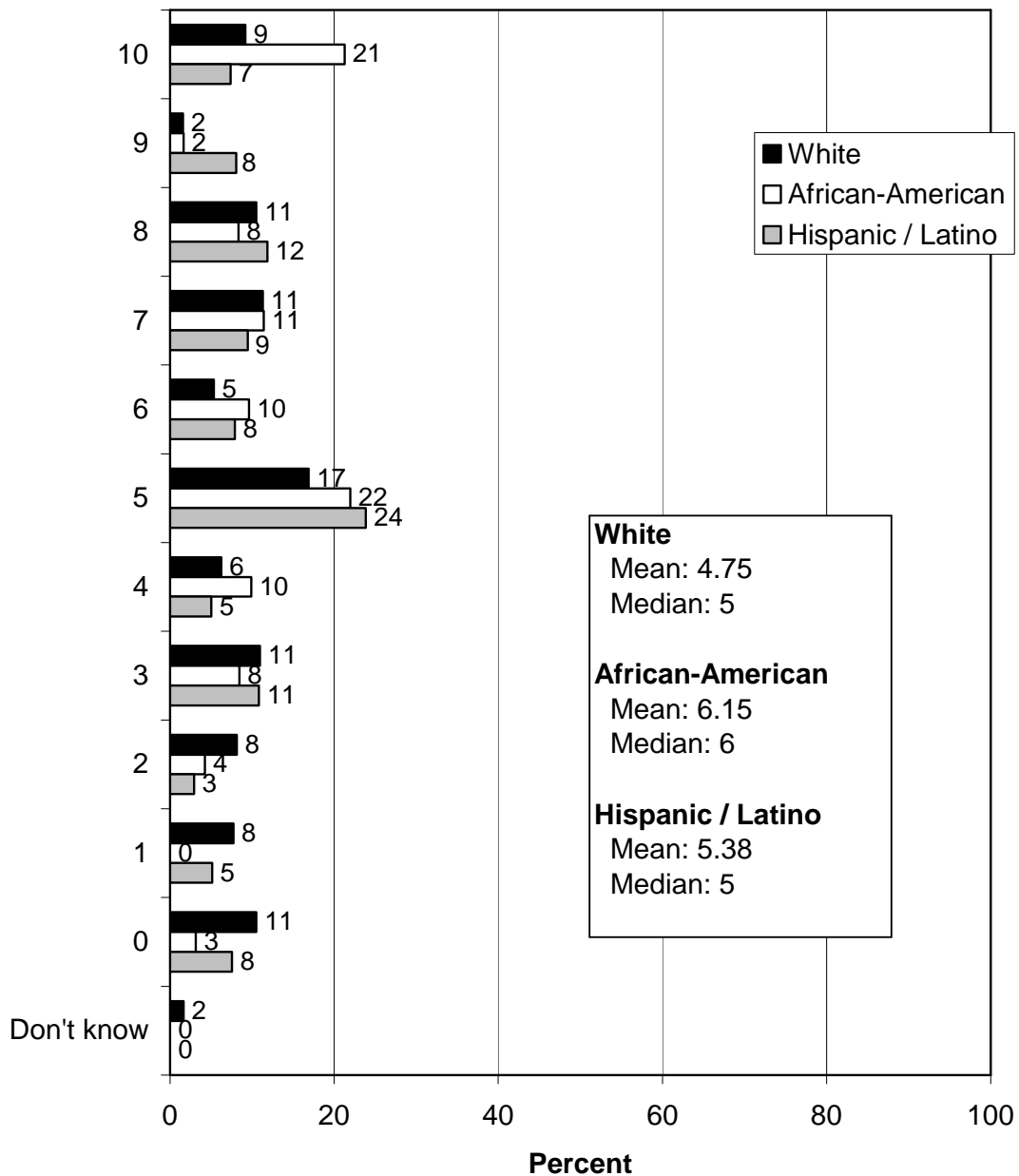
**Q285. As an individual, how much of an impact do you personally feel like you can make to better the air quality in your area? Please use a 0 to 10 scale, where 0 is "individually, I cannot make an impact on air quality at all" and 10 is "I can make a huge difference."**



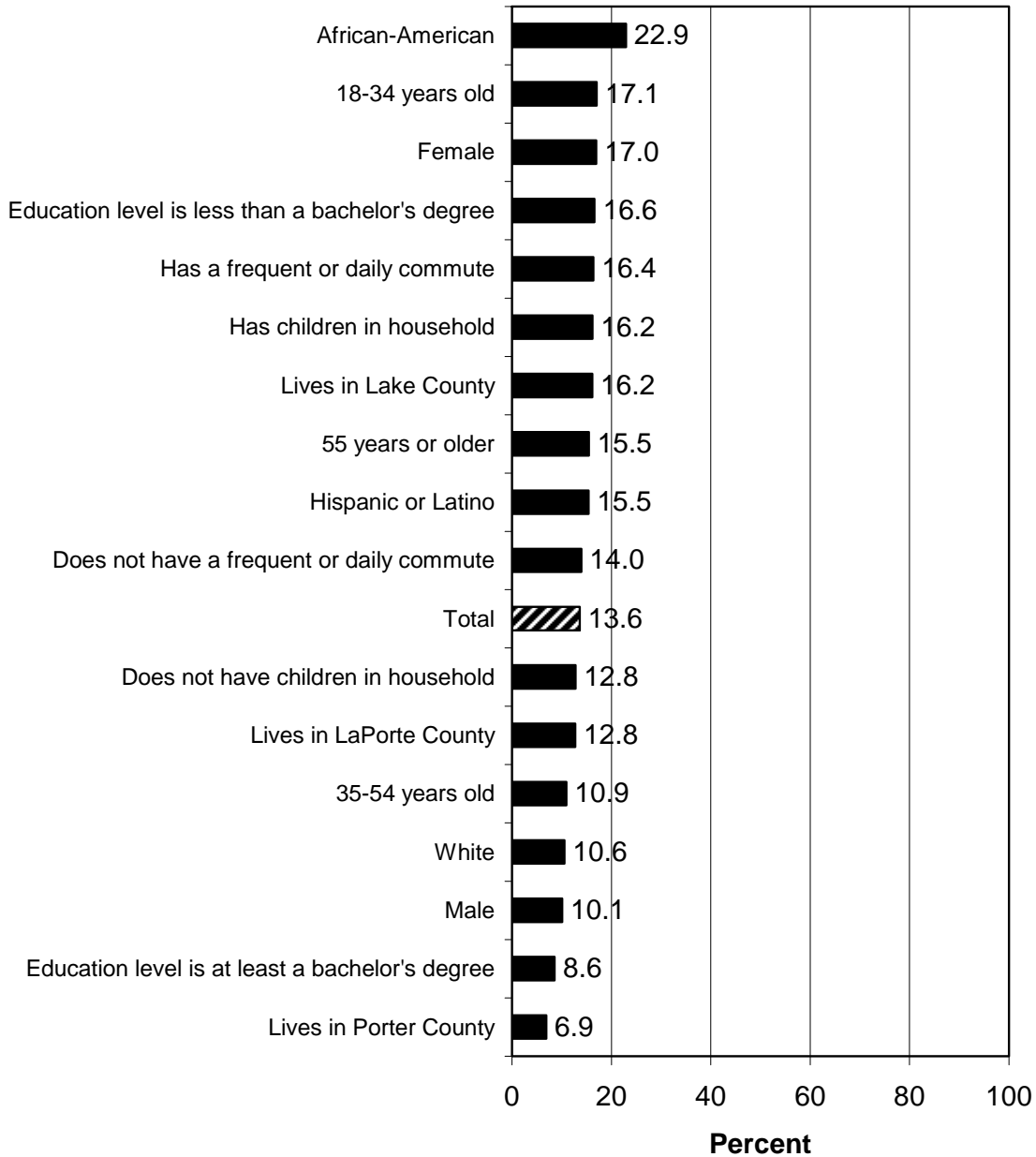
**Q285. As an individual, how much of an impact do you personally feel like you can make to better the air quality in your area? Please use a 0 to 10 scale, where 0 is "individually, I cannot make an impact on air quality at all" and 10 is "I can make a huge difference."**



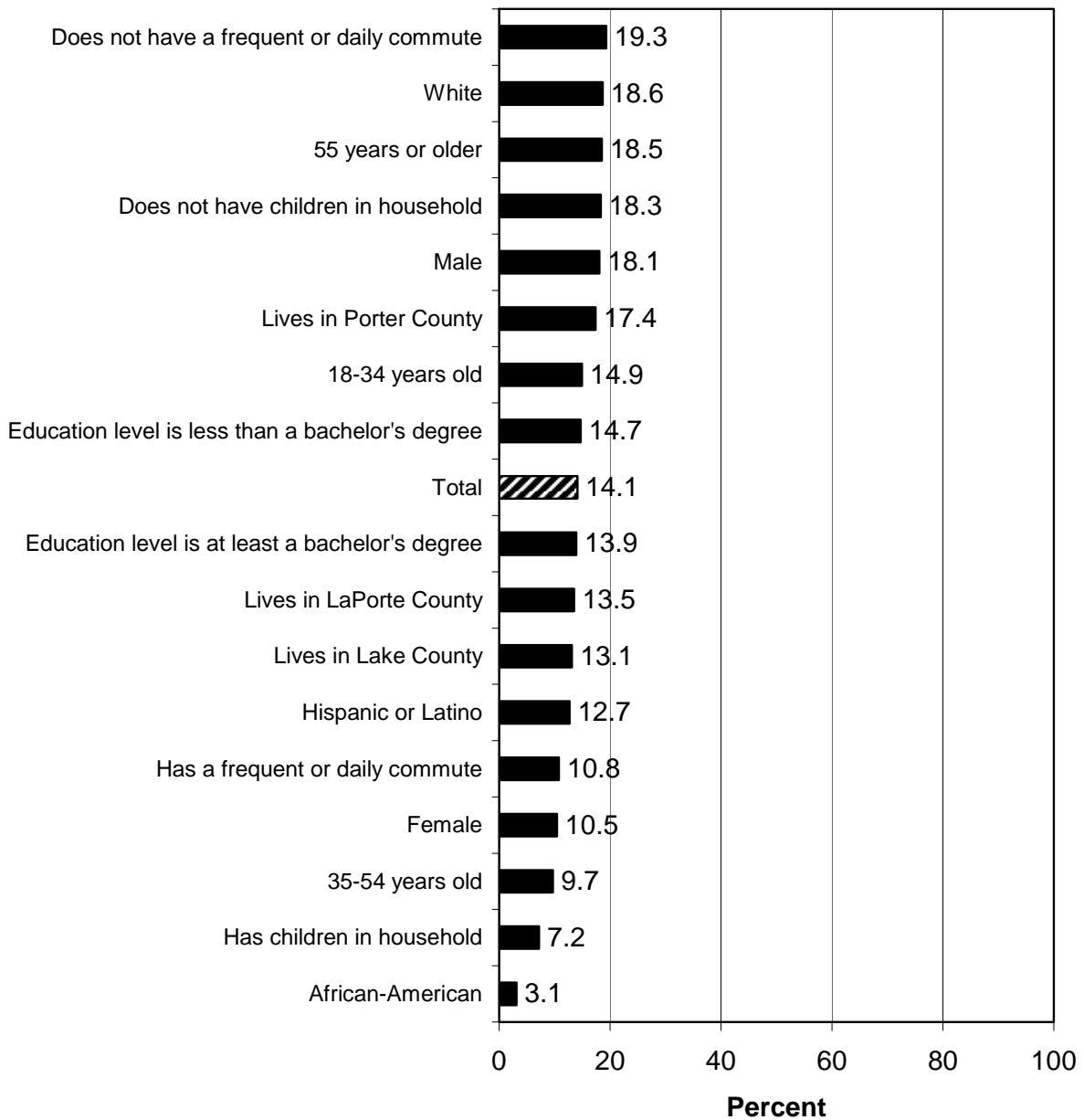
**Q285. As an individual, how much of an impact do you personally feel like you can make to better the air quality in your area? Please use a 0 to 10 scale, where 0 is "individually, I cannot make an impact on air quality at all" and 10 is "I can make a huge difference."**



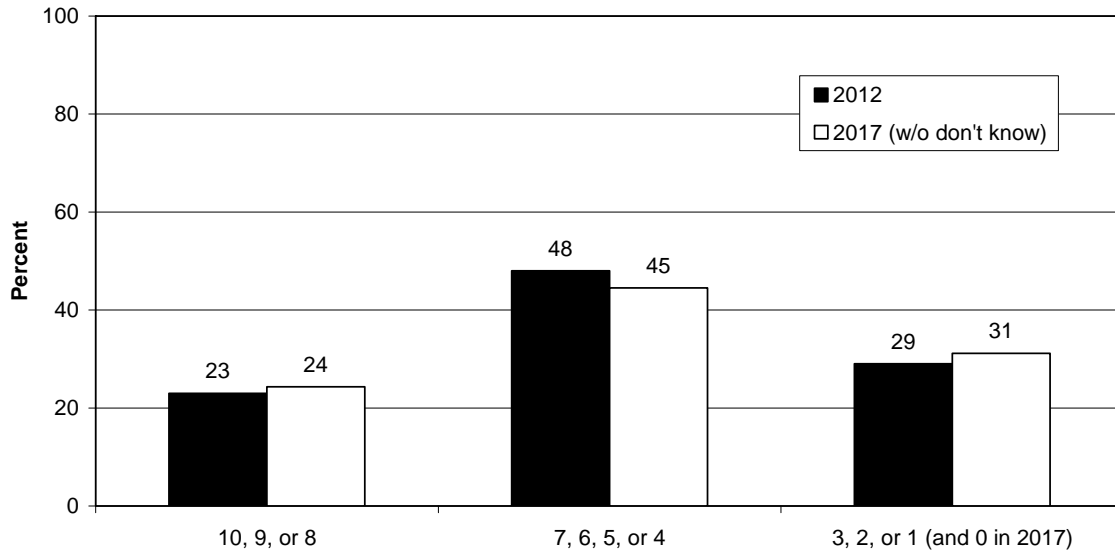
**Percent of each of the following groups who rated their ability to make an impact on air quality as a 9 or 10, on a scale of 0 to 10, where 0 is "individually, I cannot make an impact on air quality at all" and 10 is "I can make a huge impact on air quality":**



**Percent of each of the following groups who rated their ability to make an impact on air quality as a 0 or 1, on a scale of 0 to 10, where 0 is "individually, I cannot make an impact on air quality at all" and 10 is "I can make a huge impact on air quality":**

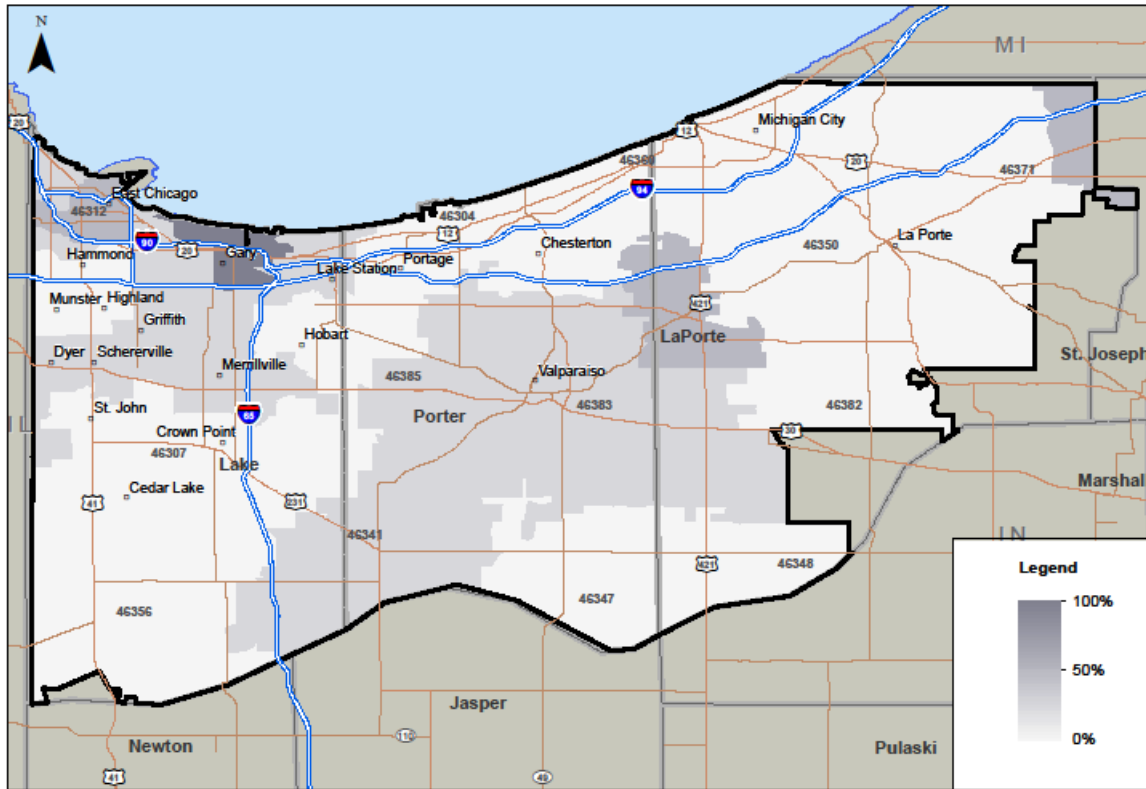


**As an individual, how much of an impact do you personally feel like you can make to better the air quality in your area?**





Percentage who feel they, personally, can make an impact (ratings of 8-10) in bettering air quality.



Data collected by  
Responsive  
Management

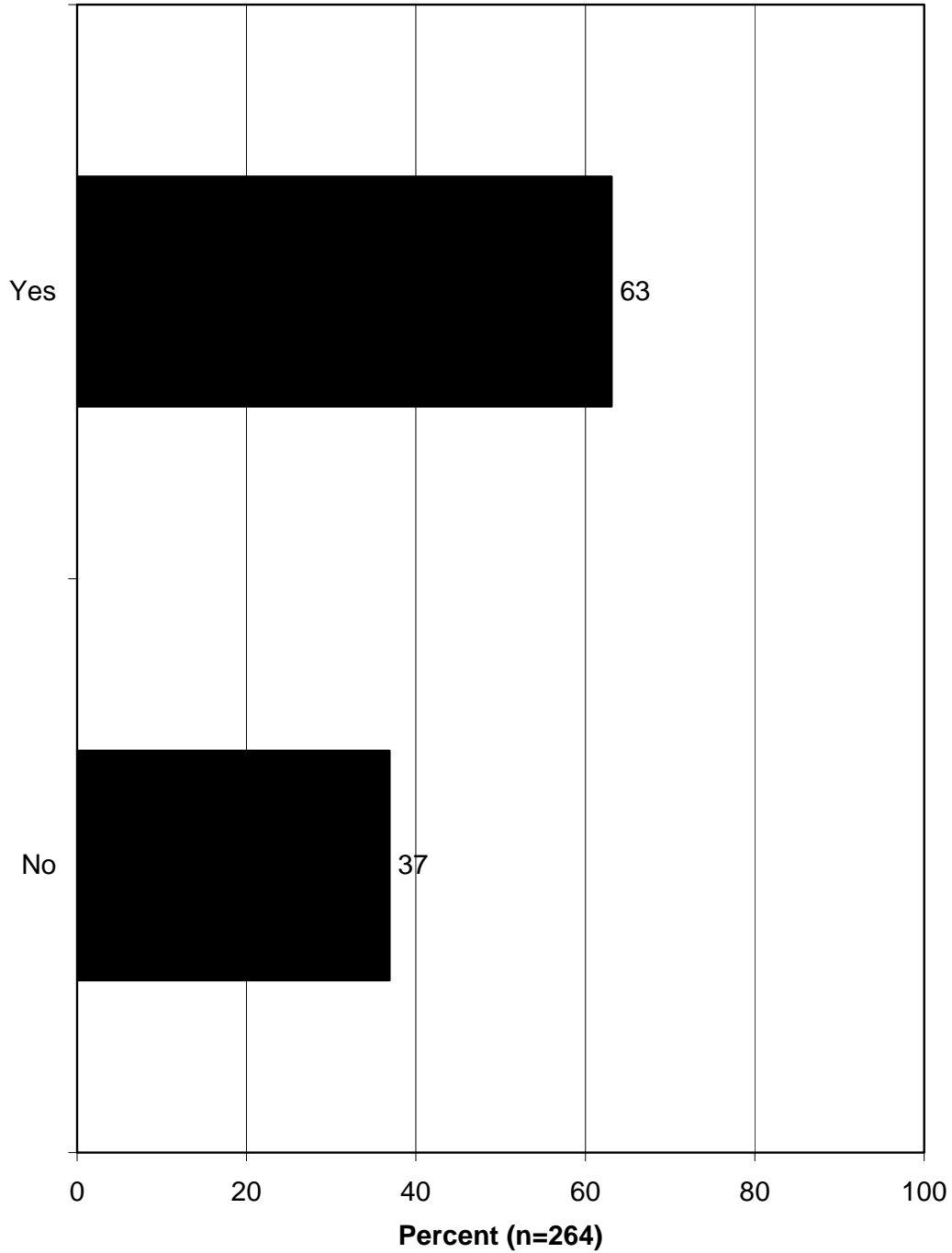
Q285. As an individual, how much of an impact do you personally feel like you can make to better the air quality in your area? Please use a 0 to 10 scale, where 0 is "individually, I cannot make an impact on air quality at all" and 10 is "I can make a huge difference."

## COMMUTING

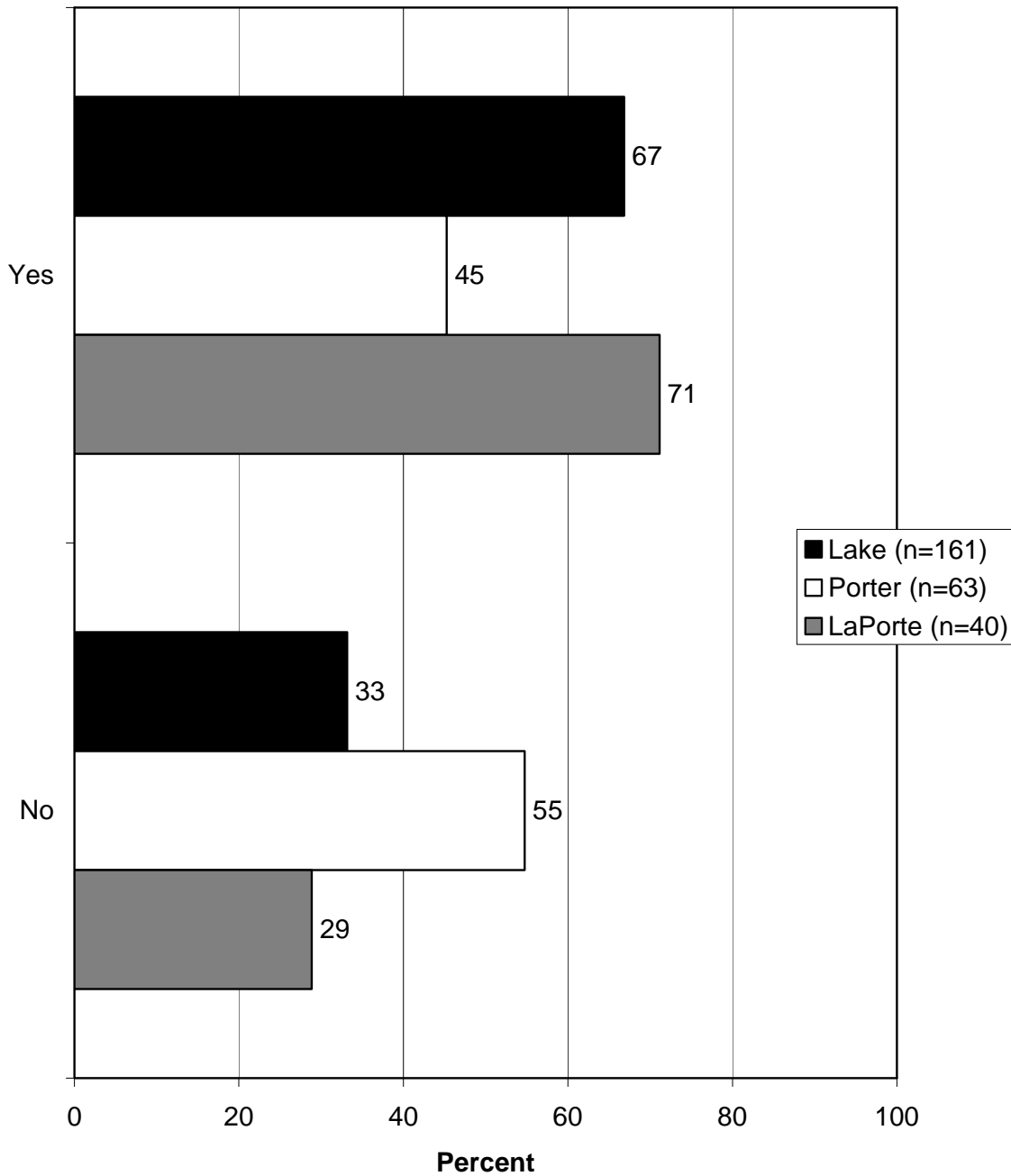
This final section of the report discusses commuting habits of Northwest Indiana residents.

- A majority of residents (63%) commute on a daily or frequent basis to and from work, school, or some other activity or responsibility. Still, a sizable number (37%) do not.
  - Those who commute on a daily or frequent basis travel a mean of 32.1 miles round-trip. However, the wide-ranging distribution shown on the graph suggests that there is no such thing as a “typical commute.”
  - Shown in this section is a GIS map of Northwest Indiana illustrating the distribution of commute distances within the region.
  - Two-thirds of commuters (67%) do so on a daily basis, with most of the remainder (30%) commuting several times a week.
  
- Most commuters (89%) drive a car to work or other destination.
  - Other commuters walk (5% stated this), carpool (3%), or take public transportation (3%).
    - Those who did *not* indicate above that they use public transportation were asked how often they use it: 2% said *frequently* and 4% said *sometimes*, whereas 20% said *rarely* and 74% said *never*.

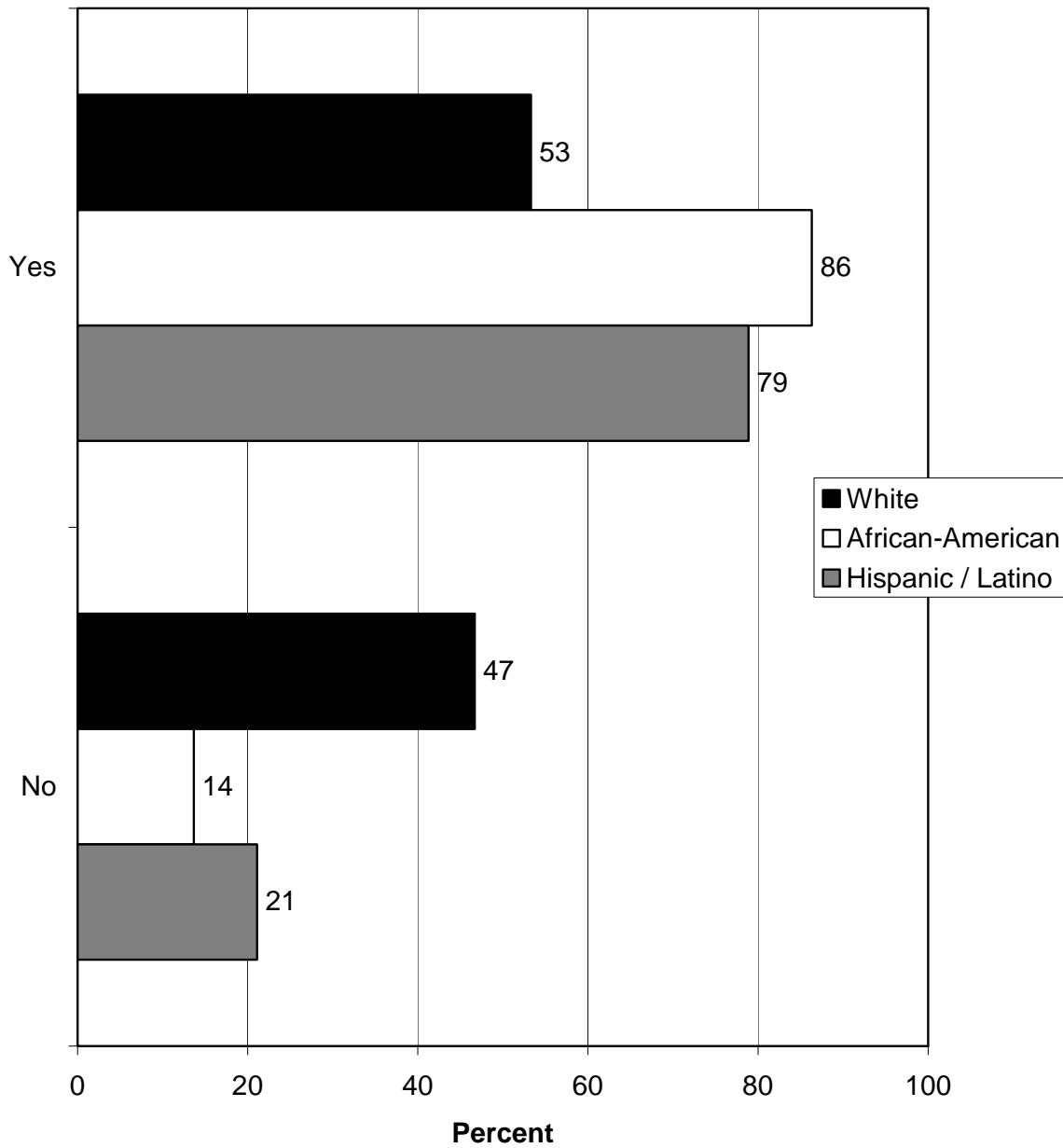
**Q71. Do you have a daily or frequent commute to and from work, school, or other activity?**



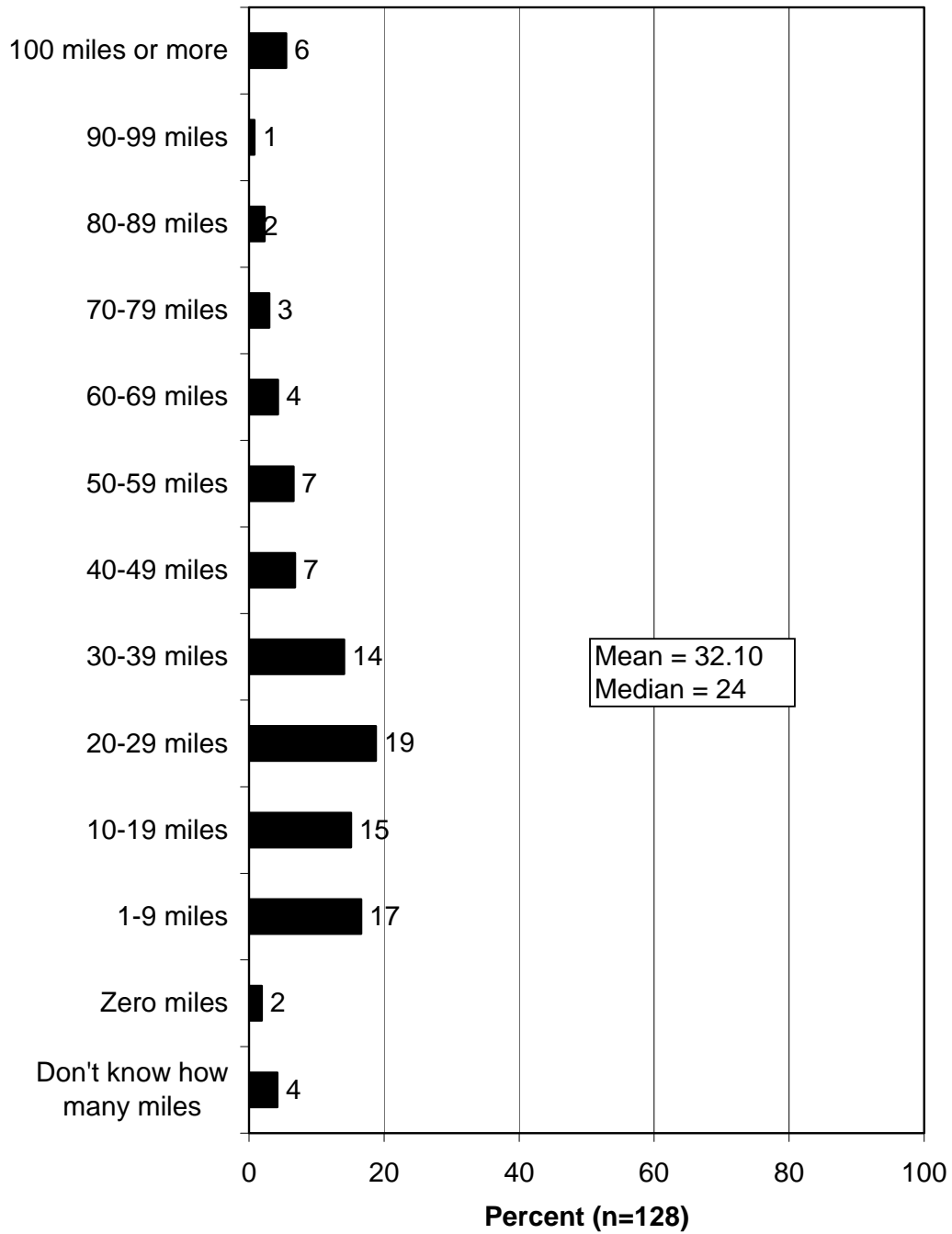
**Q71. Do you have a daily or frequent commute to and from work, school, or other activity?**



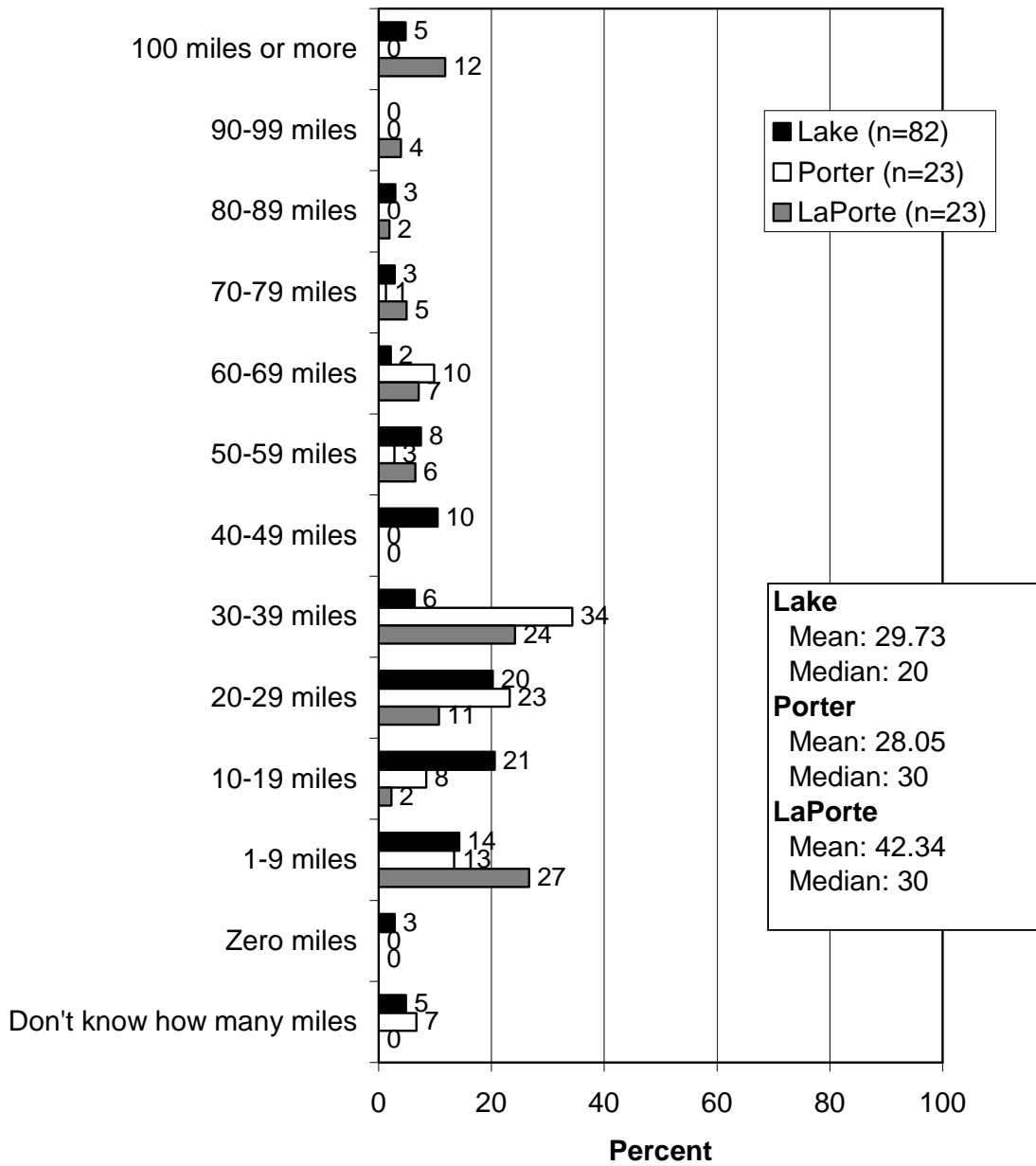
**Q71. Do you have a daily or frequent commute to and from work, school, or other activity?**



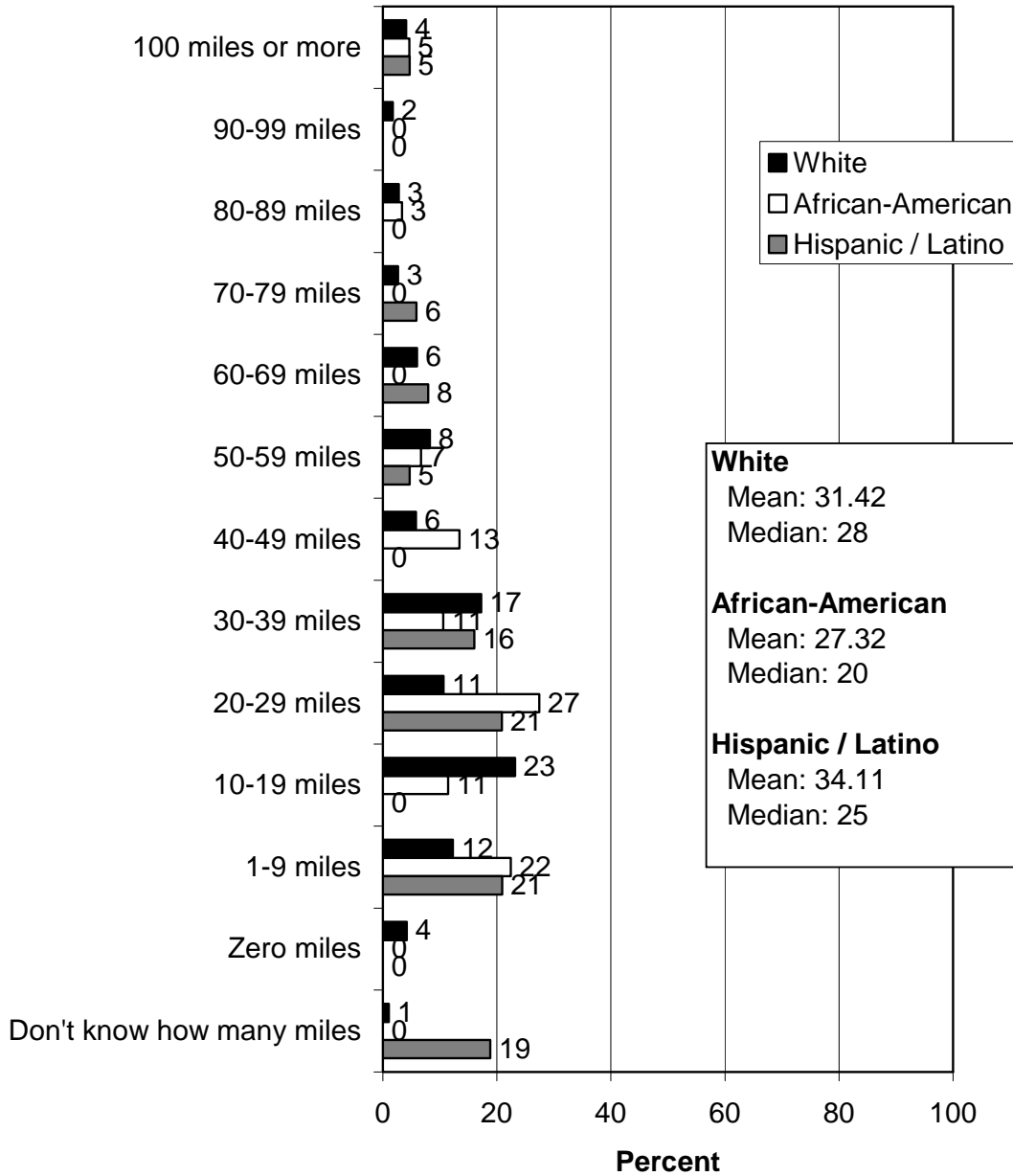
**Q72. On average, how many miles, round-trip, is your commute? (Asked of those who have a daily or frequent commute.)**



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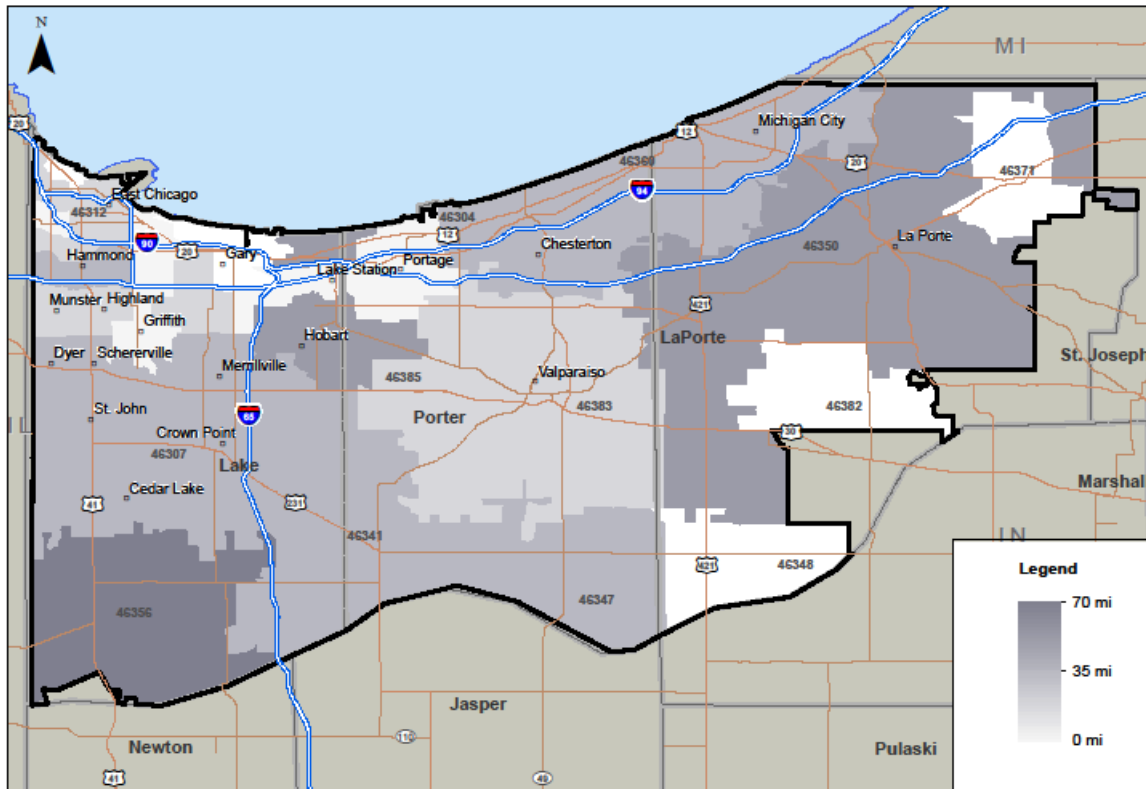


**Q72. On average, how many miles, round-trip, is your commute? (Asked of those who have a daily or frequent commute.)**





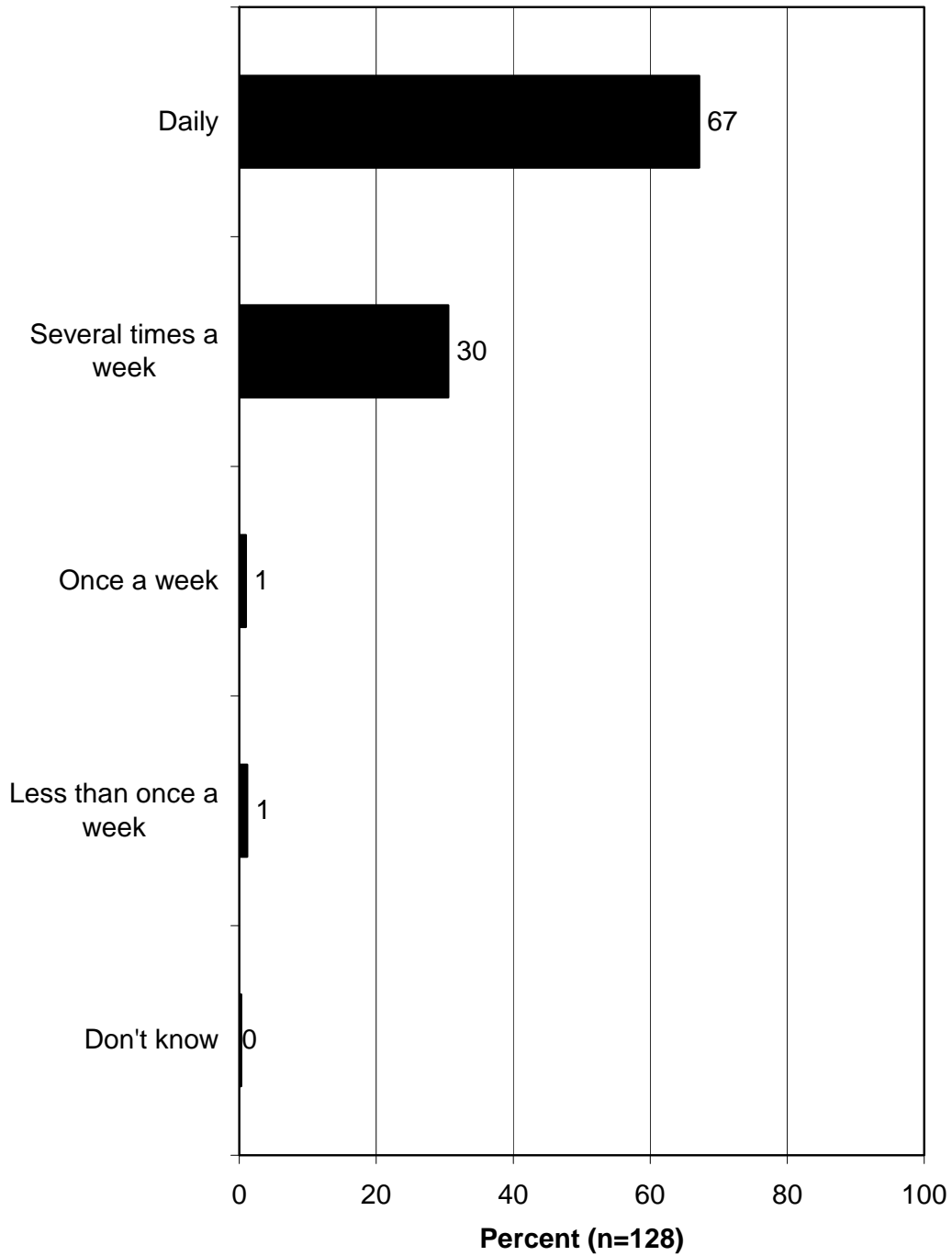
Average number of miles for daily commute.



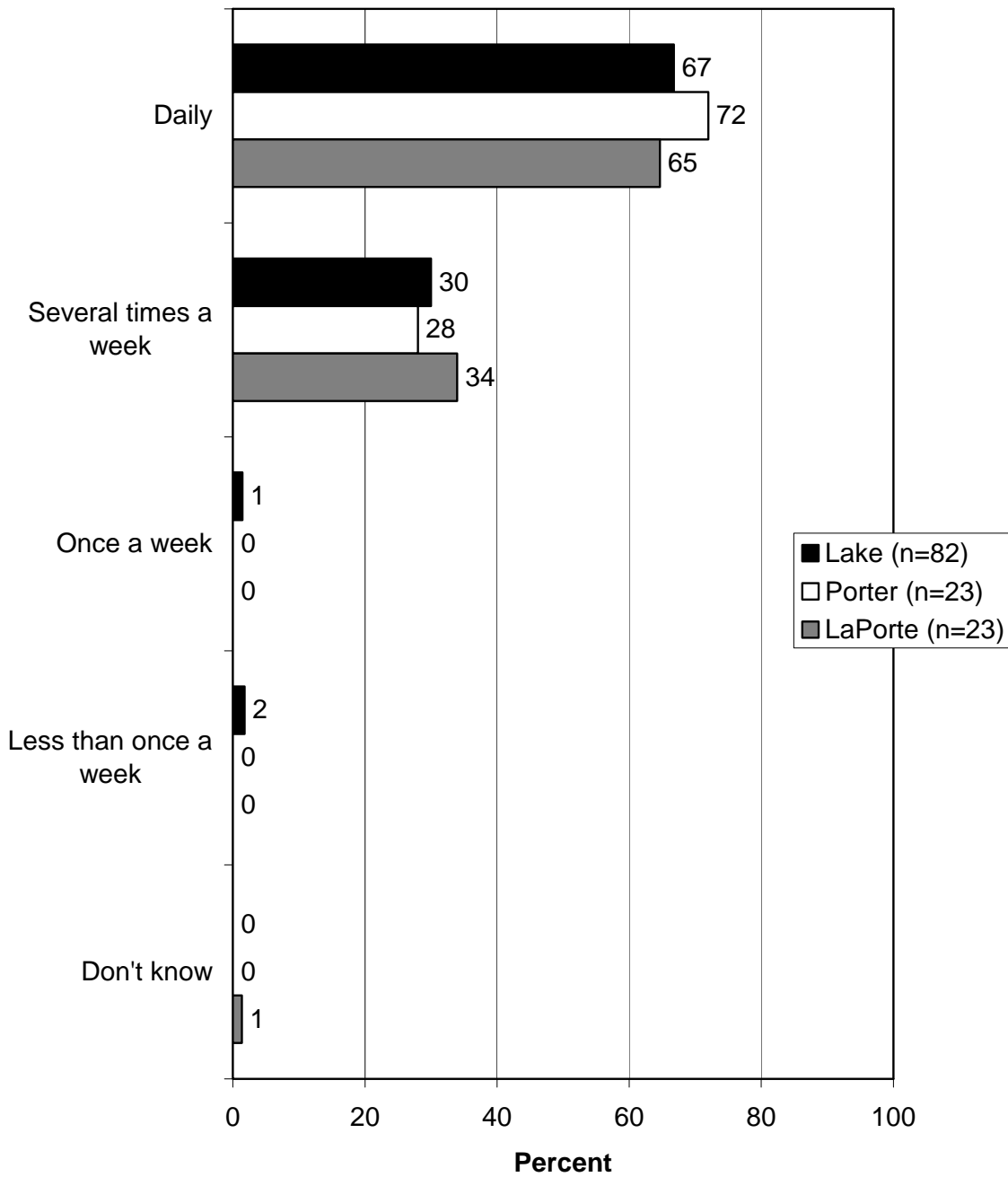
Data collected by  
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Management

Q72. On average, how many miles, round-trip, is your commute?

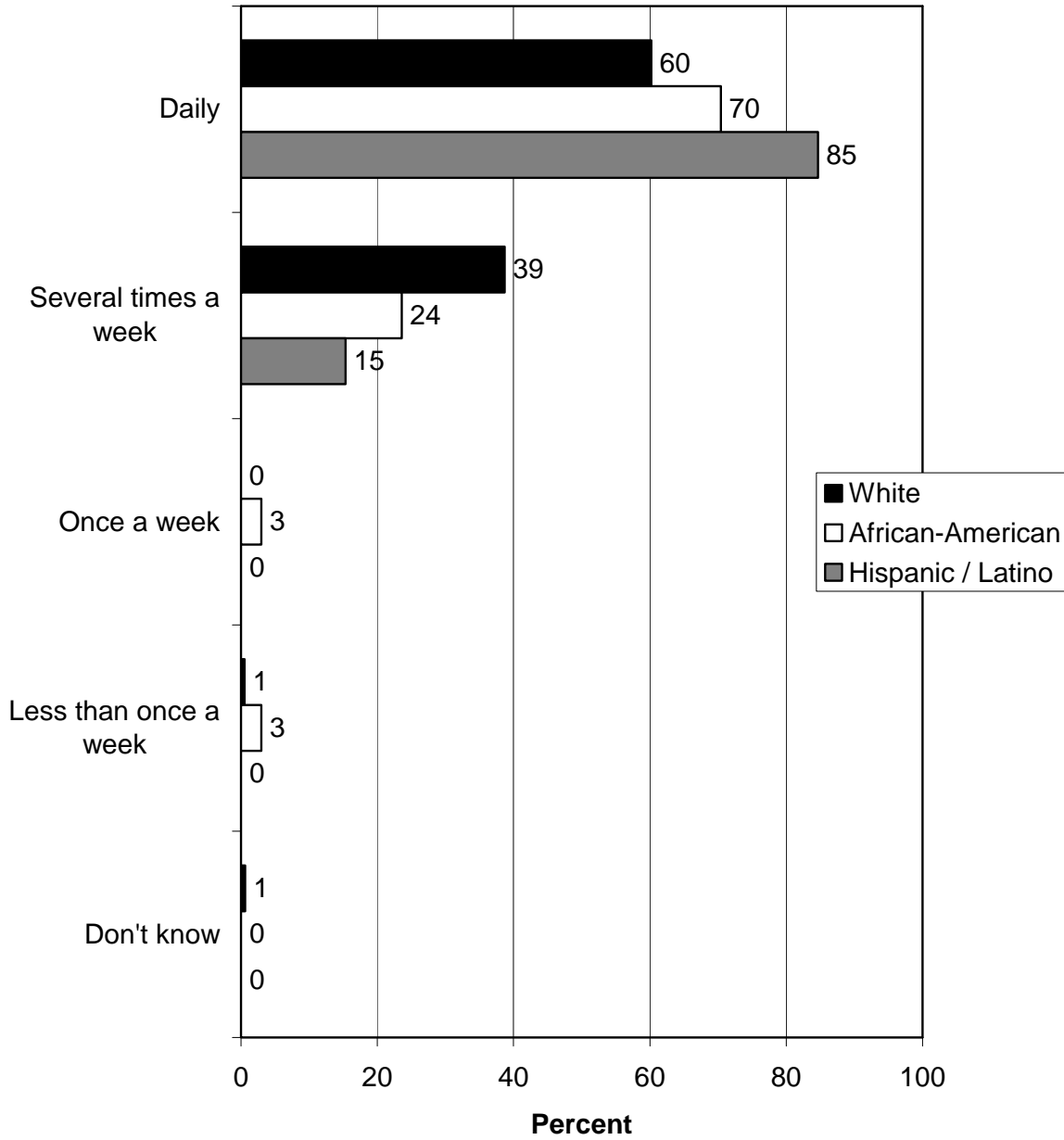
**Q75. How often is this commute? Is it...? (Asked of those who have a daily or frequent commute.)**



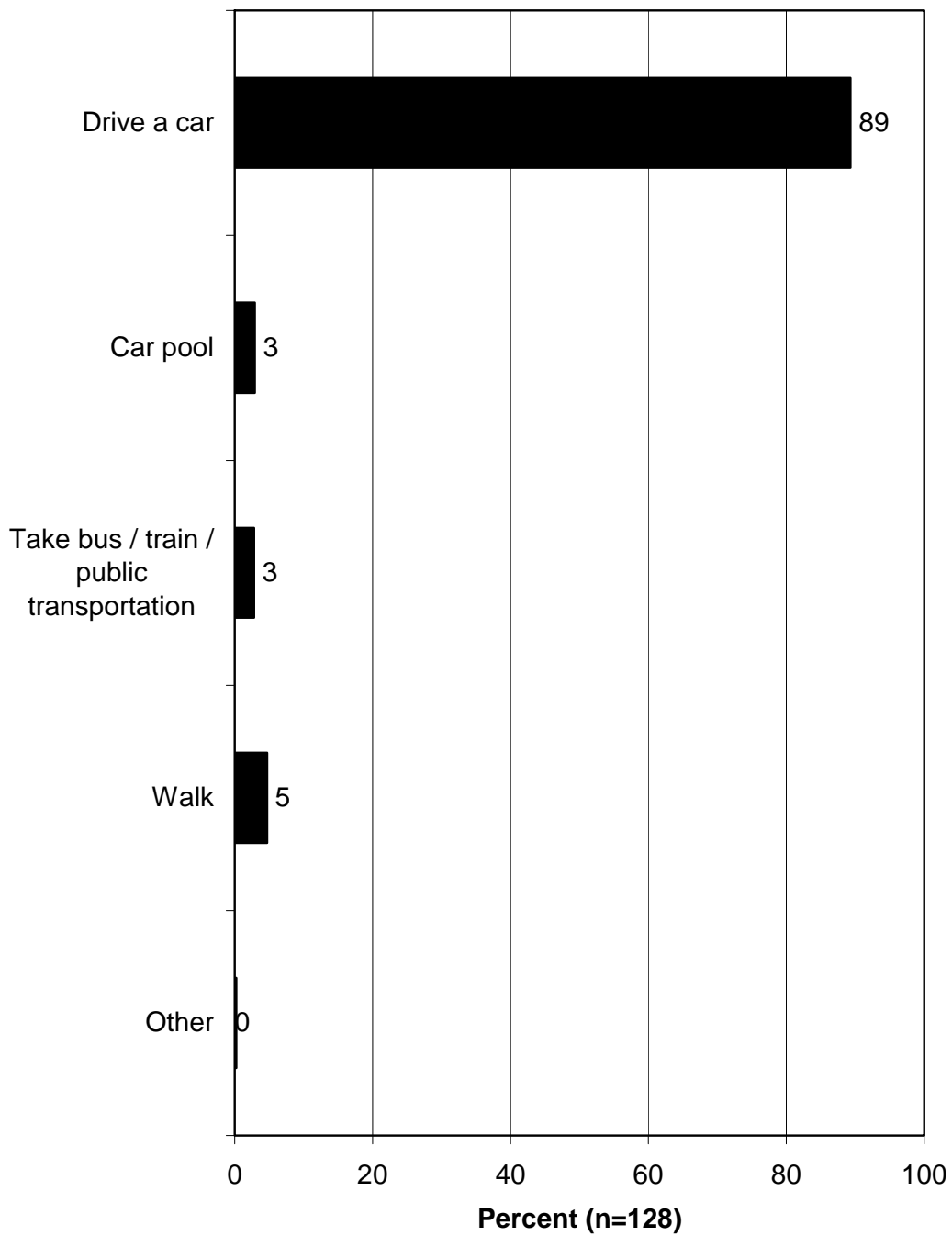
**Q75. How often is this commute? Is it...? (Asked of those who have a daily or frequent commute.)**



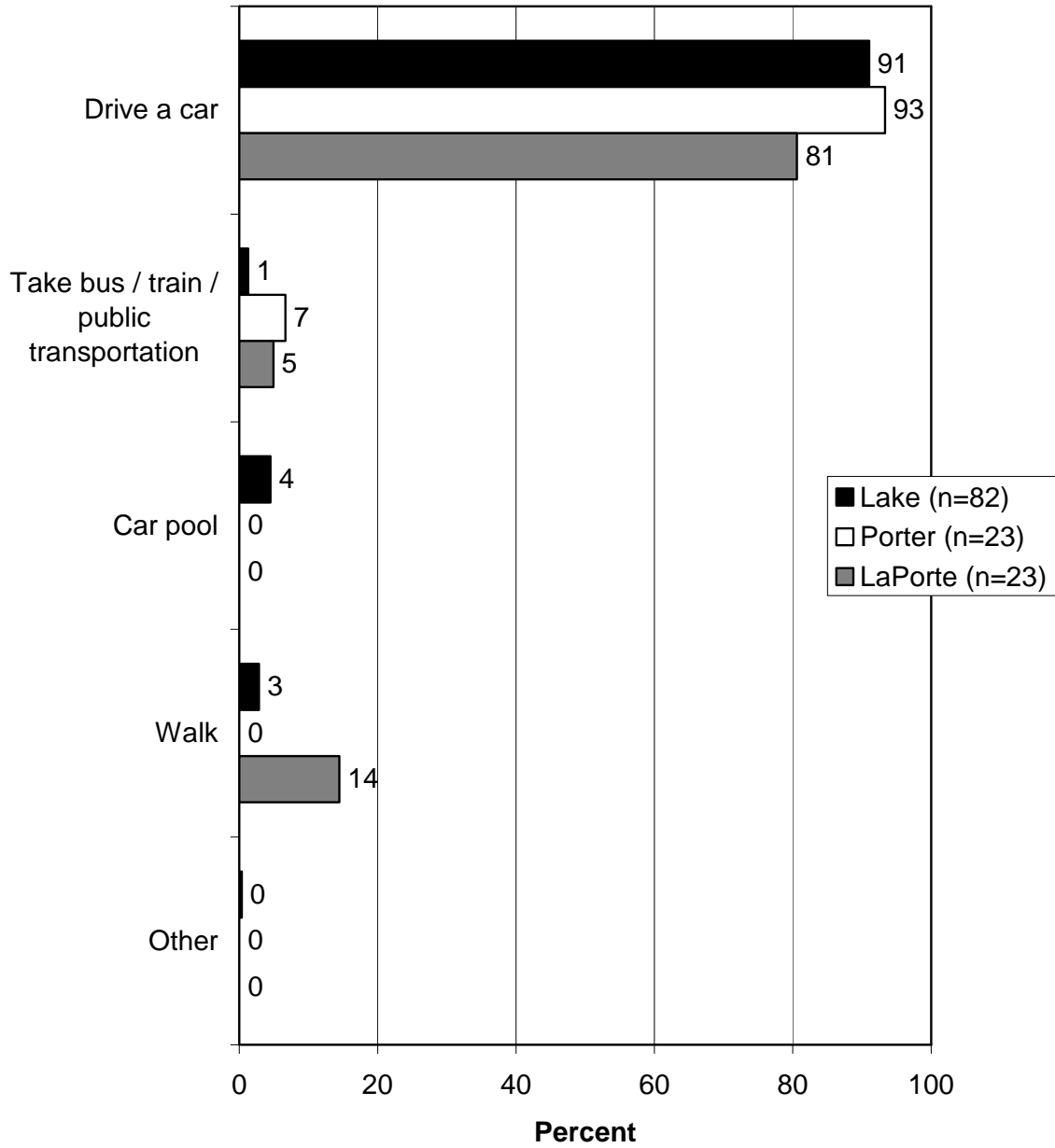
**Q75. How often is this commute? Is it...? (Asked of those who have a daily or frequent commute.)**



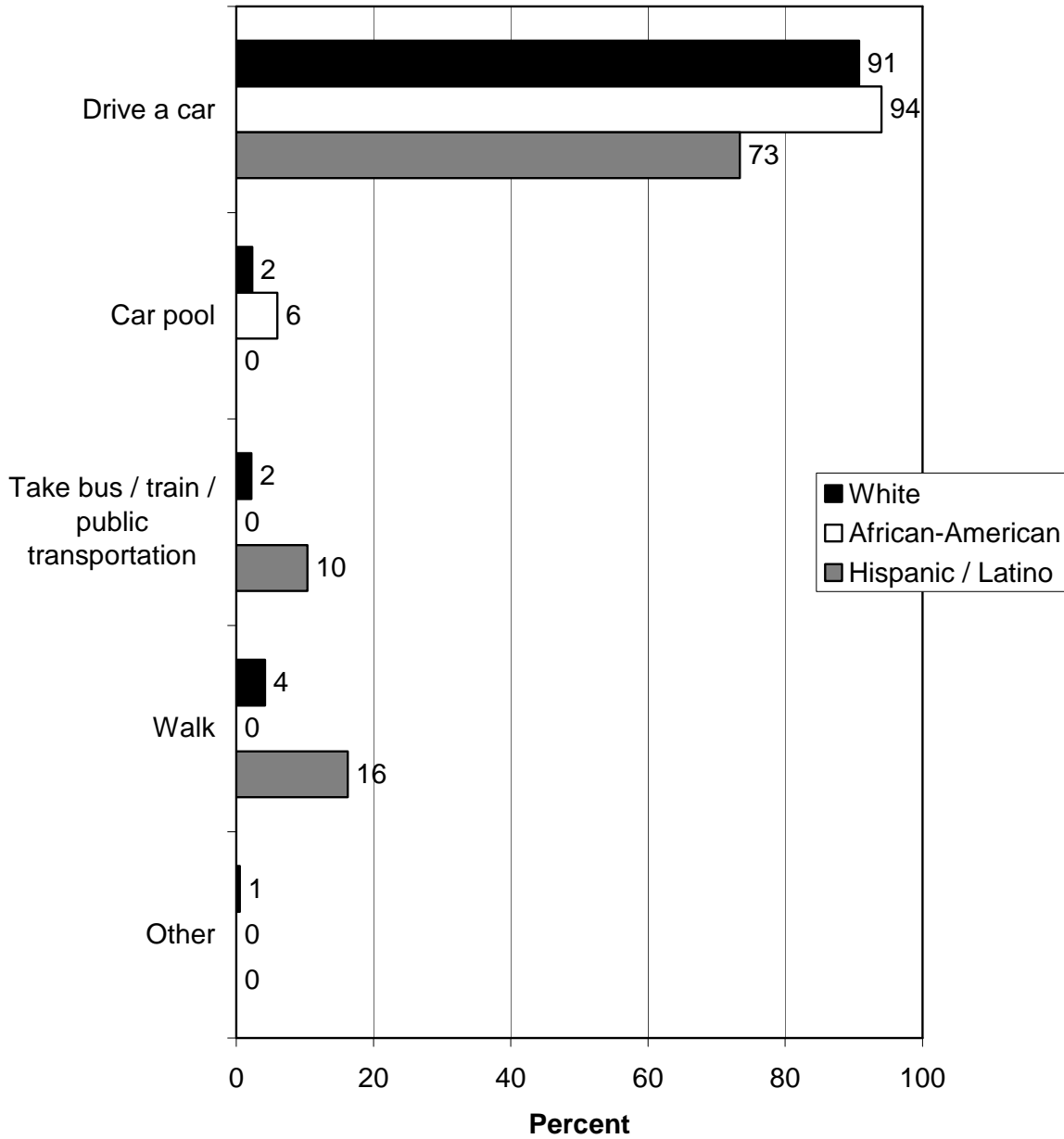
**Q76. How do you typically commute to work?  
(Asked of those who have a daily or frequent  
commute.)**



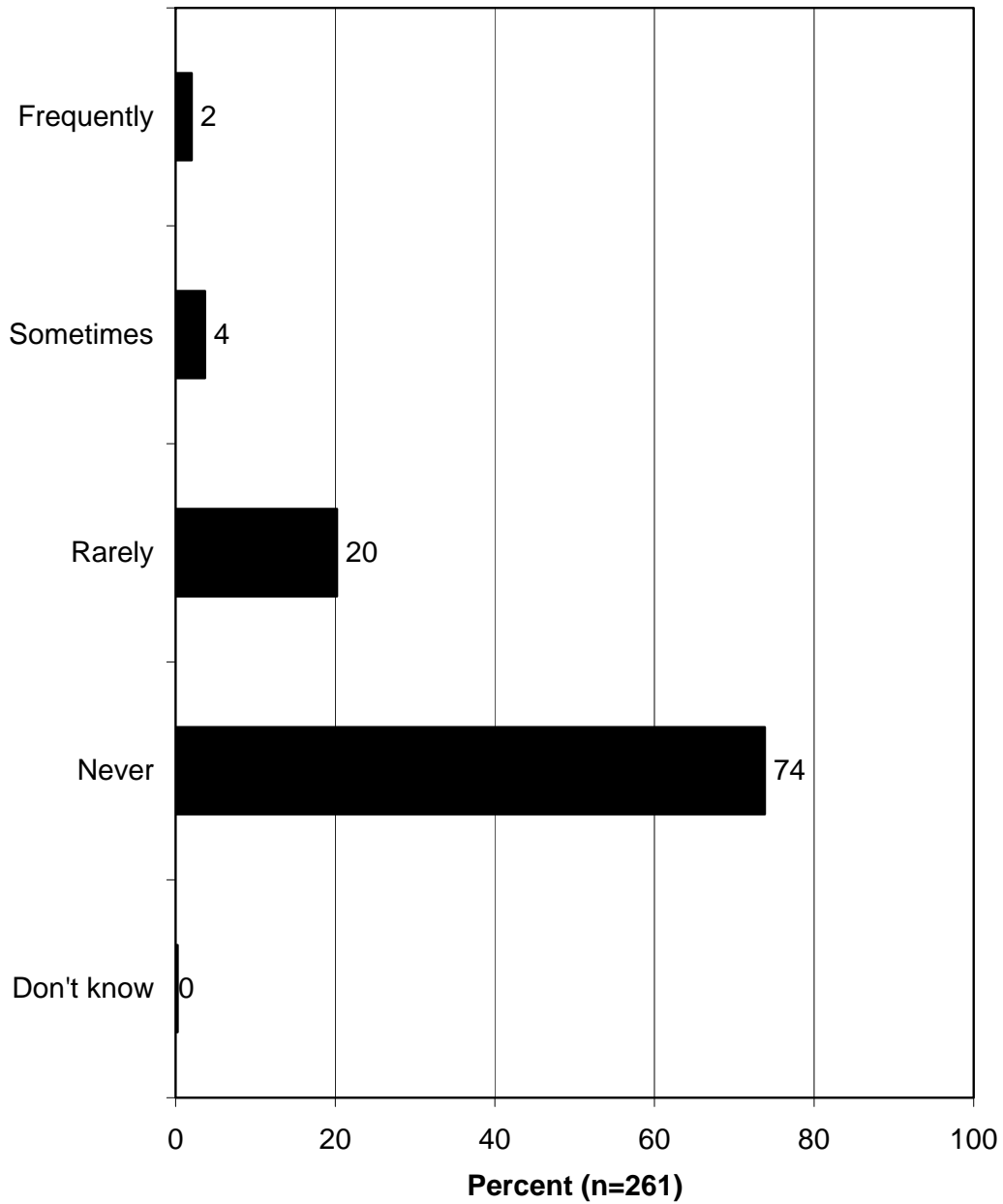
**Q76. How do you typically commute to work?  
(Asked of those who have a daily or frequent commute.)**



**Q76. How do you typically commute to work?  
(Asked of those who have a daily or frequent  
commute.)**

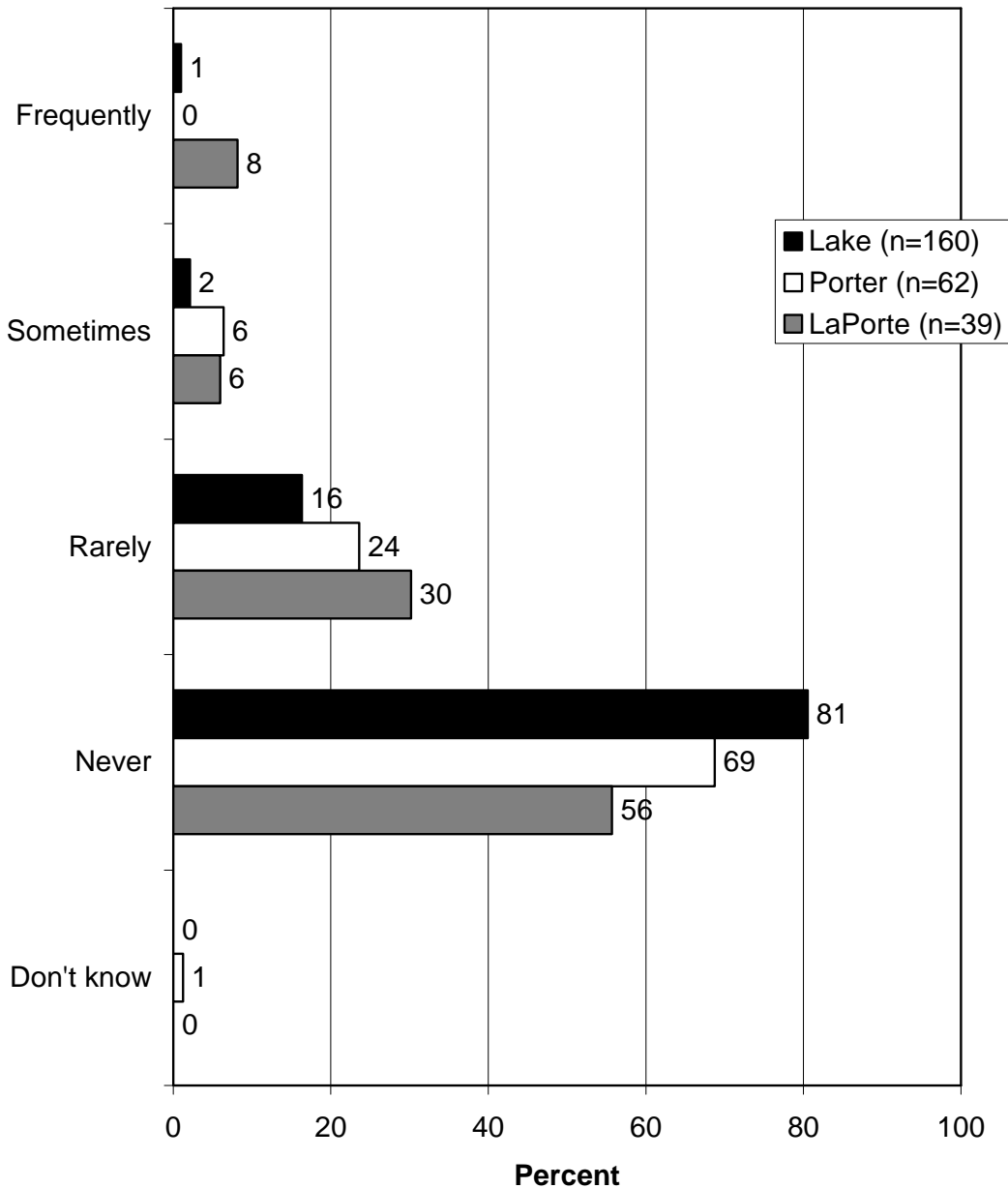


**Q78. How often do you use public transportation, if you use it at all, in Northwest Indiana? (Asked of those who have a daily or frequent commute and who did not indicate that they use public transportation.)**

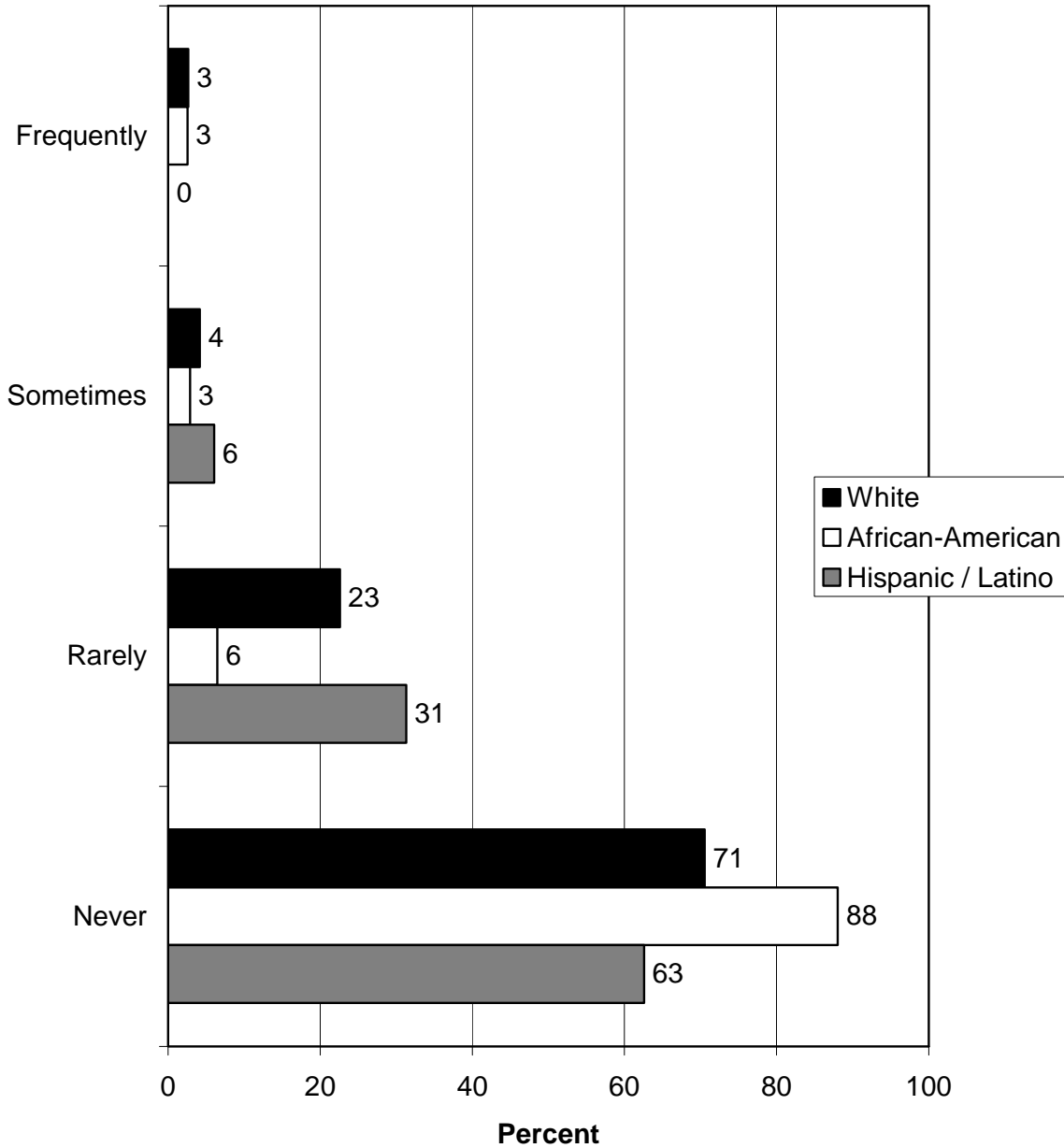




**Q78. How often do you use public transportation, if you use it at all, in Northwest Indiana? (Asked of those who have a daily or frequent commute and who did not indicate that they use public transportation.)**



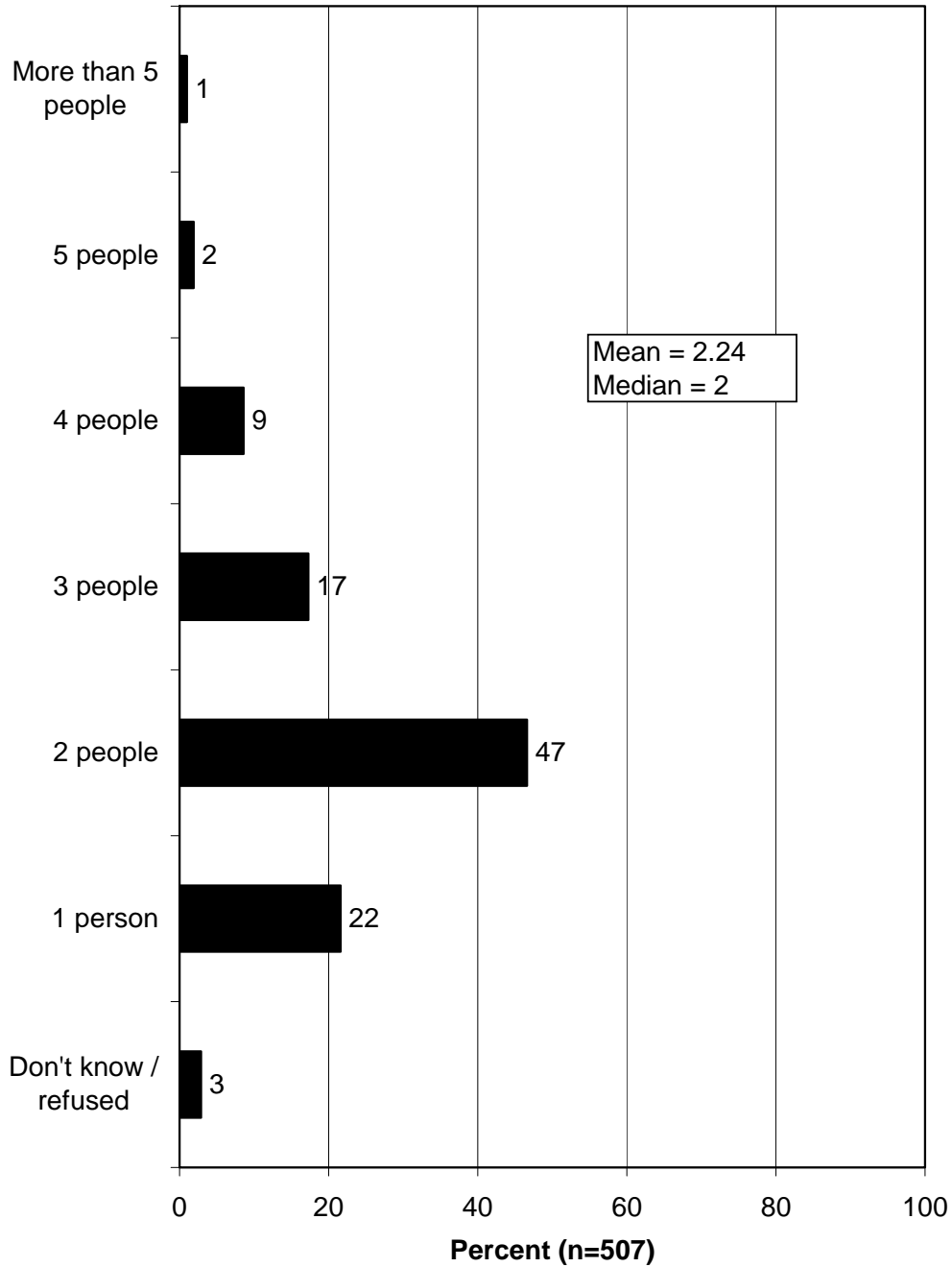
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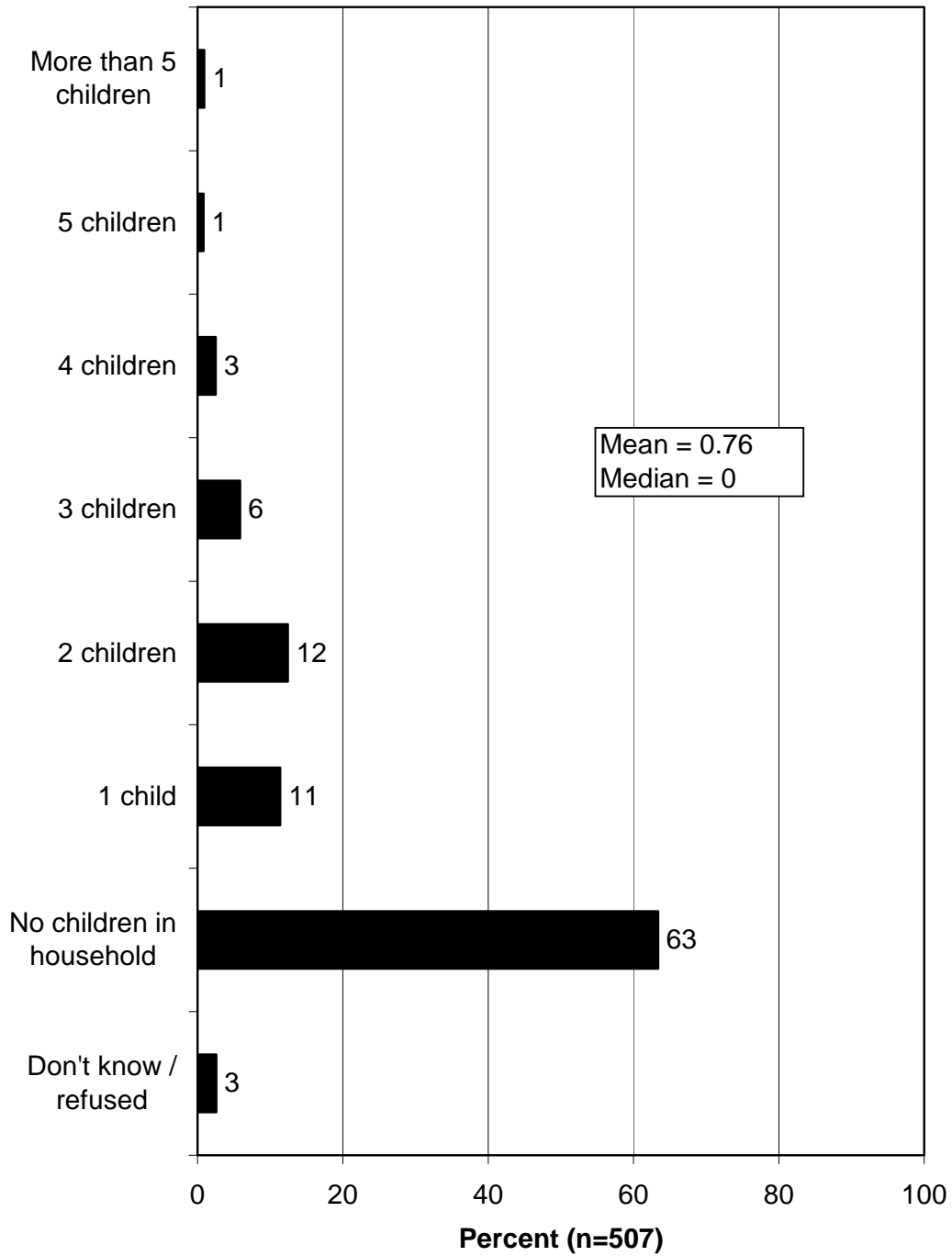
## DEMOGRAPHIC DATA

The following demographic data were used in the crosstabulations shown throughout this report.

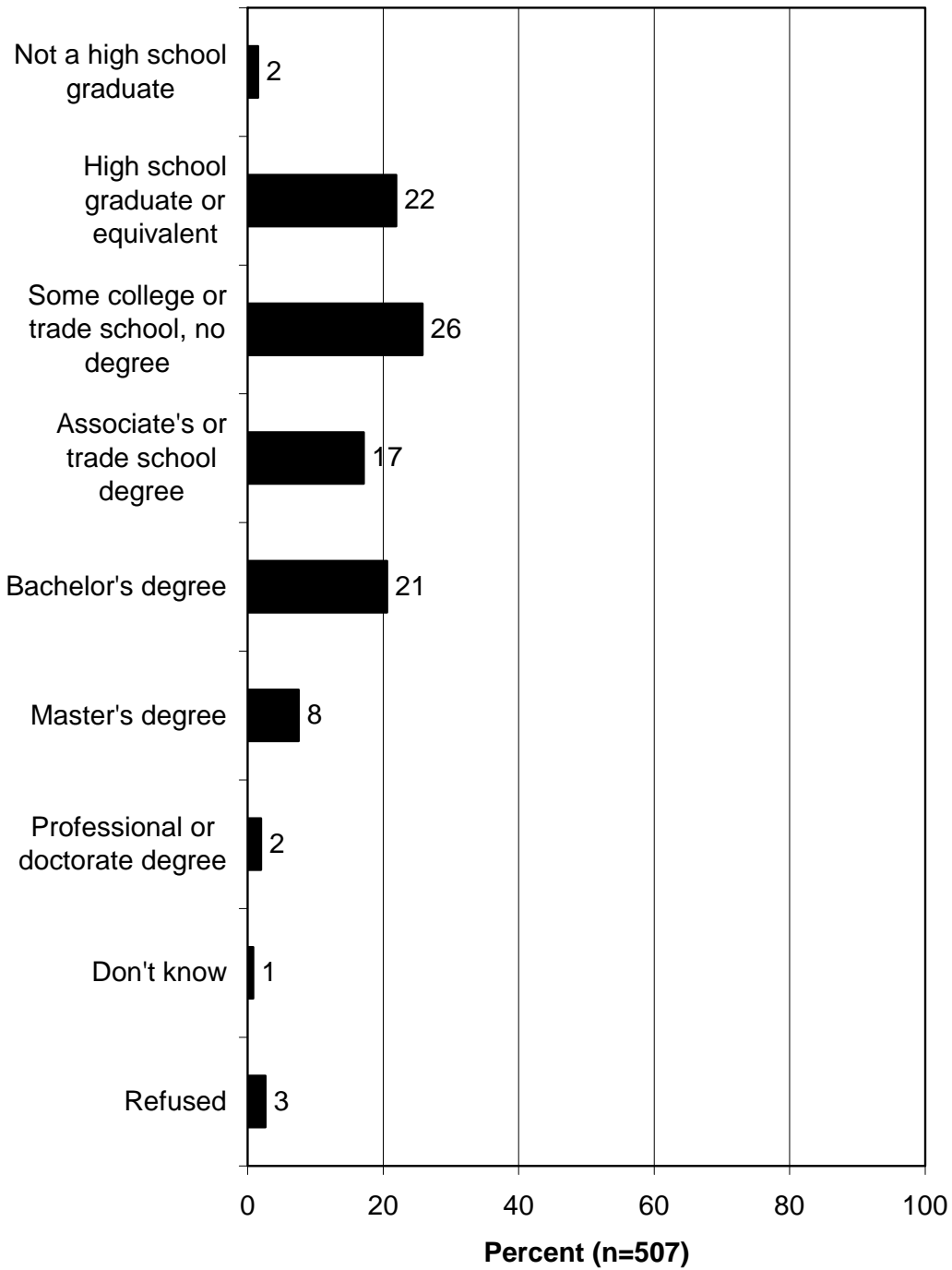
### Q289. How many people, age 18 or older, including yourself, are currently living in your household?



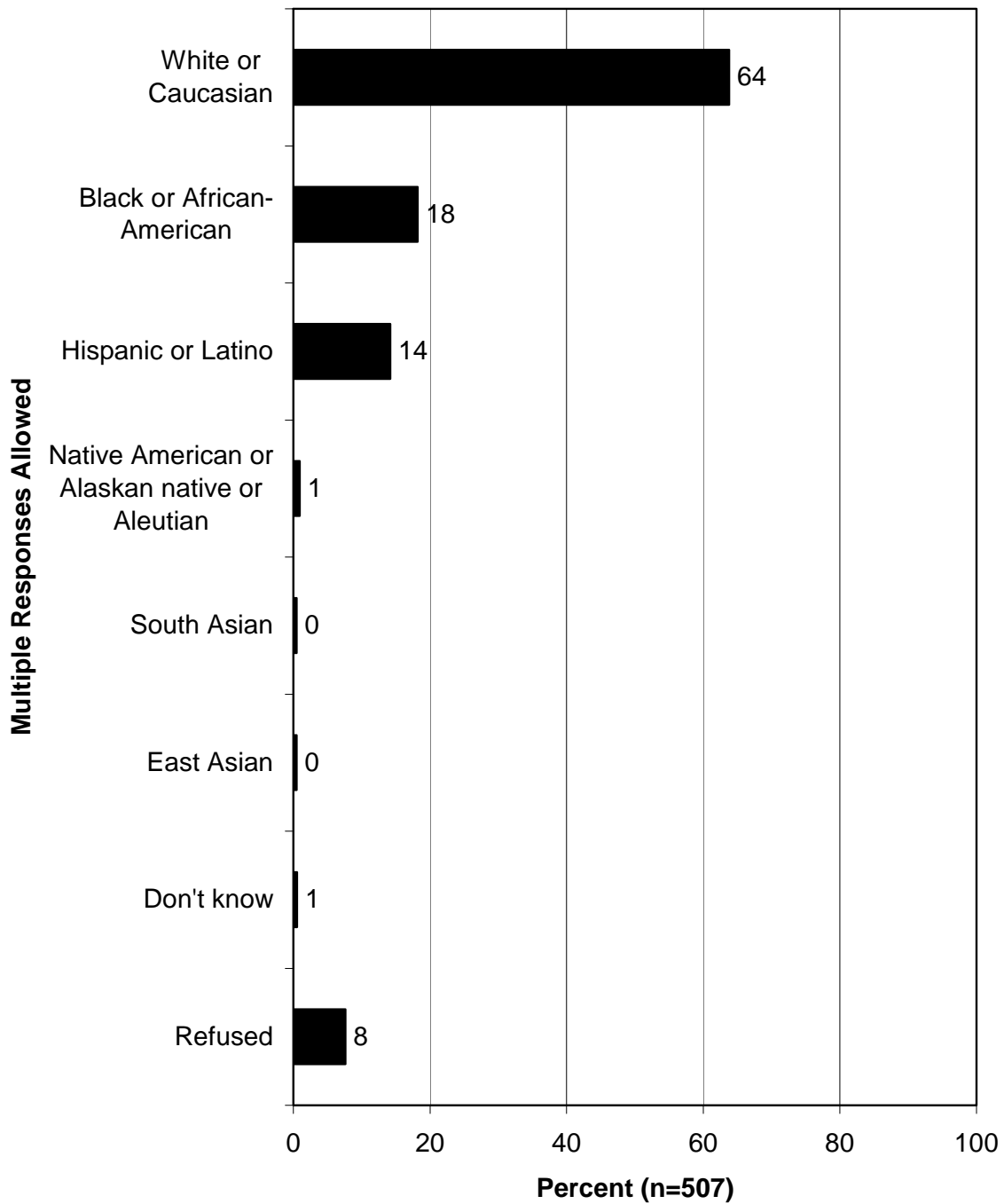
**Q291. How many children, age 17 or younger, do you have currently living in your household?**



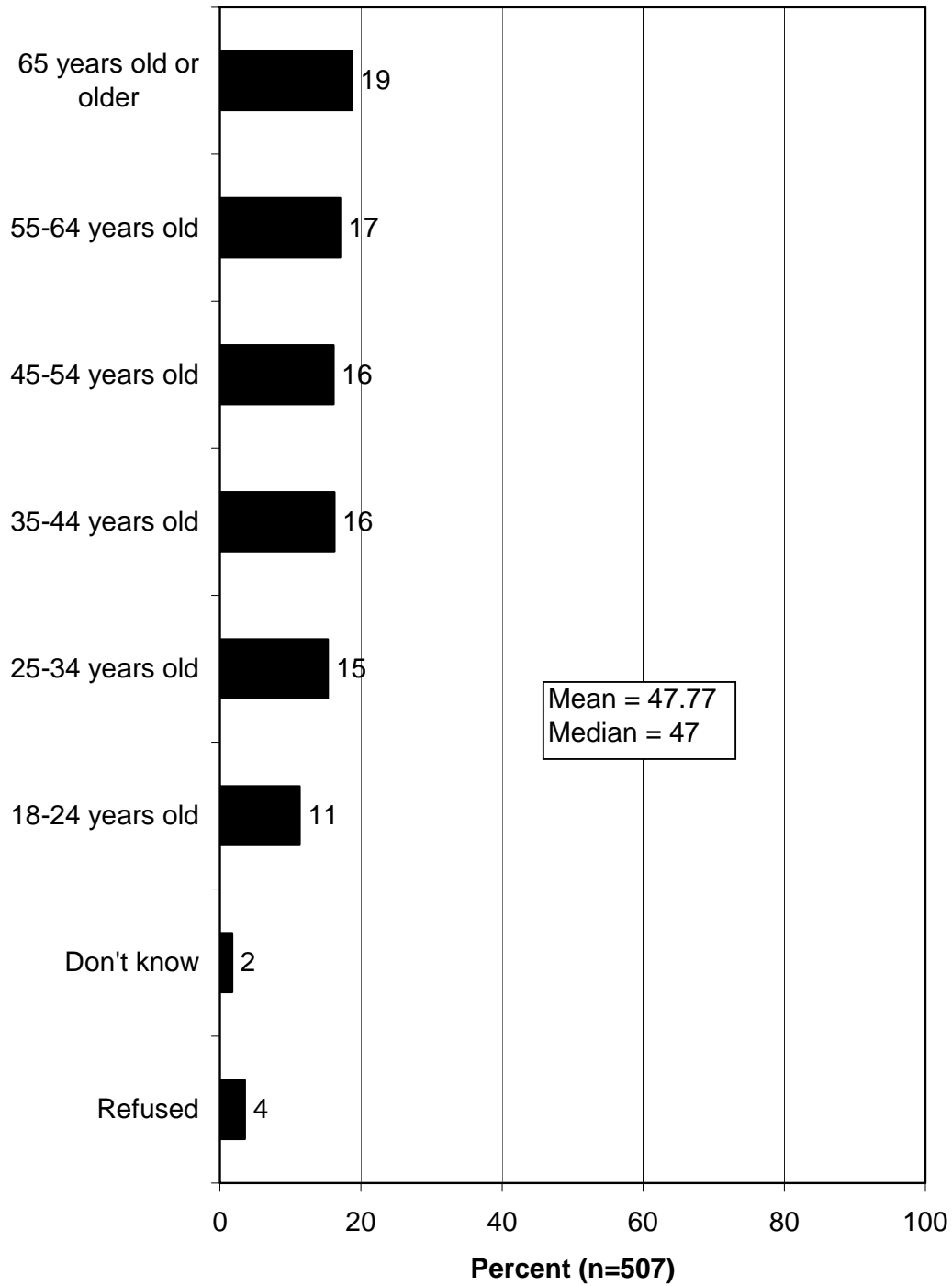
**Q294. What is the highest level of education you have completed?**



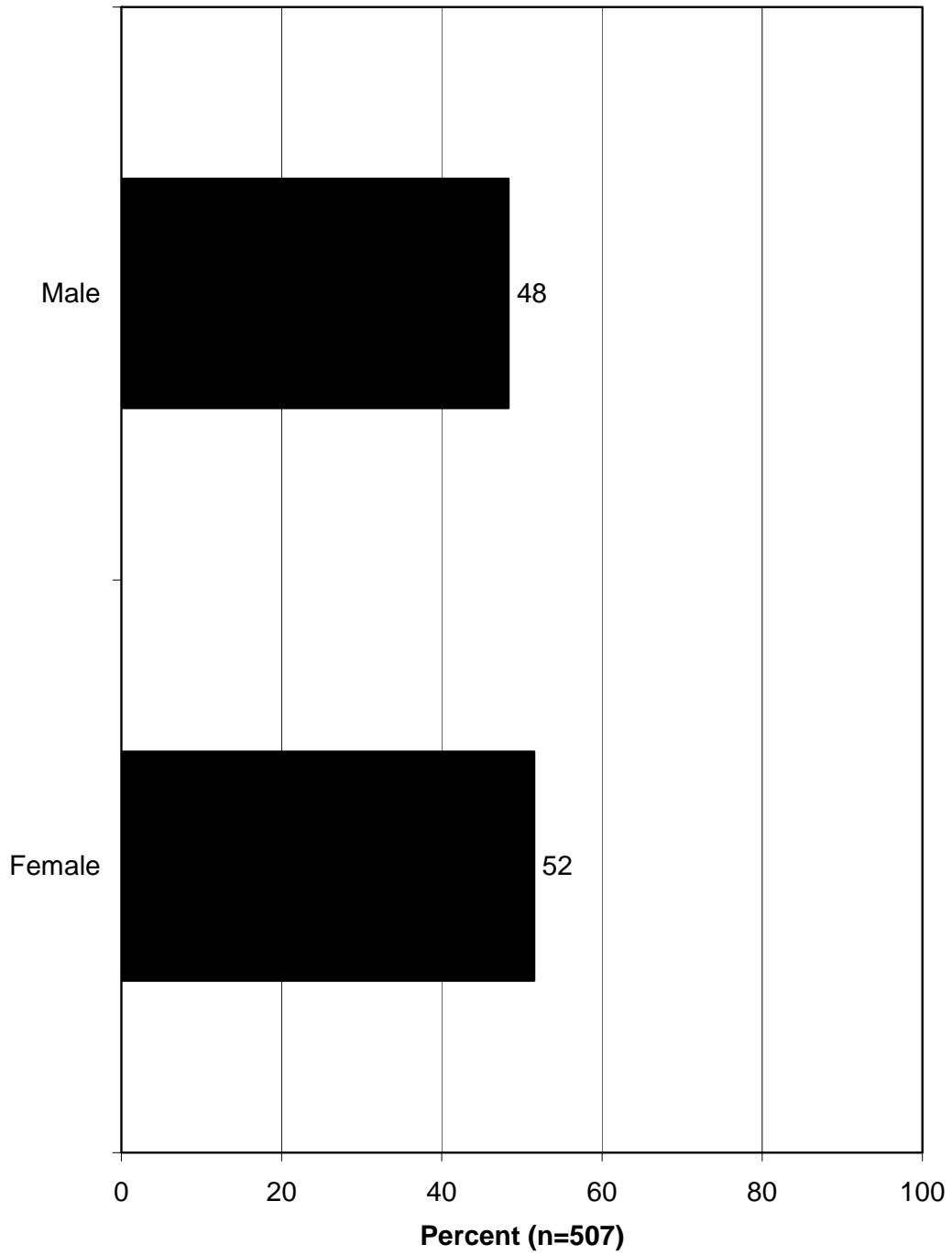
**Q297. What races or ethnic backgrounds do you consider yourself? Please mention all that apply.**



**Q299. Respondent's age.**



**Q305. Respondent's gender (observed, not asked, in telephone survey).**





## **FOCUS GROUP RESULTS**

This section presents major findings from the focus groups as bold statements, which are typically followed by additional analysis or explicatory detail. Representative verbatim quotations from focus group participants are included throughout the relevant subject headings.

### **GENERAL ISSUES OF IMPORTANCE FACING NORTHWEST INDIANA**

Each focus group began with a general, open-ended discussion about the most important issues currently facing Northwest Indiana. Following this introductory portion were more specific conversations about residents' opinions on air quality, their actions taken on behalf of air quality, sources of information on the topic, and awareness of and opinions on specific air quality campaigns.

#### **Air quality does not appear to be a top-of-mind concern among Northwest Indiana residents.**

The initial open-ended question about important issues facing Northwest Indiana at the beginning of each focus group found participants readily discussing crime, economic development and job opportunities, education, healthcare (with an emphasis on addiction treatment), and infrastructure. However, no one mentioned the issue of air quality unprompted.

*I just heard this morning two 9-year-old kids got shot in Gary in a drive-by.... It just seems to be getting worse in this area. —Merrillville participant*

*Good paying jobs. —Merrillville participant*

*Most of the people that I know who went to college and got degrees moved somewhere else. —Merrillville participant*

*When the lottery first started, all the money was supposed to go to schools and road development. Where is it? —Merrillville participant*

*Because of the state of the Michigan City schools, I'm looking into voucher programs for private schools. —Valparaiso participant*

*Heroin. [Working in] the ambulance, it's just all the time.... Now there are synthetic drugs; super crazy drugs.... In Porter County it's a big problem. —Valparaiso participant*

*Drug addiction. I've had 8 friends from high school who died. It's terrible. —Valparaiso participant*

*Jobs. Indiana became a right-to-work state. It seems like most of the jobs start you off at minimum wage, which is not a living wage.... The unions are under attack. There's a lot more people struggling than you realize. —Valparaiso participant*

*There's still a water crisis in Chicago...lead. —Valparaiso participant*

*Infrastructure is important too. Bridges, roads, rail. There's stuff that you know hasn't been worked on for a long time. —Valparaiso participant*

## **OPINIONS ON AIR QUALITY IN NORTHWEST INDIANA**

Following the open-ended questioning regarding general issues of importance, the moderator proceeded with direct questioning about air quality issues in Northwest Indiana.

**Residents seem to consider air quality to be important, although it is generally thought of as a long-term issue that is “invisible” on a day-to-day basis.**

*I didn't grow up near factories, so I never thought about air quality. —Merrillville participant*

*I'm not too affected by it. The air quality around Porter County has been okay with me. In the Chicago area the pollution and gas smells have been bad. —Valparaiso participant*

**It is generally thought that there is less concern about air quality among Northwest Indiana residents now than there was in the past due to the emergence of more pressing issues of importance (e.g., economic development, crime, and healthcare).**

This is consistent with the initial open-ended questioning, during which participants named several issues they considered to be important for Northwest Indiana; air quality was not named.

*There's stuff that's more pressing.* —Merrillville participant

*You're not going to worry about dying from air quality 30 years from now if you're worried about getting shot tomorrow.* —Merrillville participant

*In the past five years, people have a lot more things to be concerned about. If you're breathing, you're good.* —Valparaiso participant

*I feel like it's not such a big issue because it's more long-term in the effect it has on us. It's not immediately affecting me, so that's why I don't pay attention to it.* —Valparaiso participant

**While some residents acknowledge that the air quality in Northwest Indiana is poorer than in other regions of the state and/or country, most seem to think that the air quality in Northwest Indiana is better today than it was five or ten years ago, and about the same as it was last year.**

Reasons cited for the improved air quality include regulations and requirements prohibiting engine idling in certain areas, vehicle emissions testing, and vehicle maintenance in general. Because of such requirements, there appeared to be less immediate concern among participants about air quality in their area. However, some participants complained about the cost, time, and effort required to meet these regulatory or legal standards. Others discussed the balance between air quality and the local economic importance of industrial mills. One person in the Valparaiso group mentioned Ozone Days during this portion of the discussion, while another mentioned the likely positive impacts of a ban on smoking in public areas that had been instituted in recent years.

*Where it touches me most is the vehicle testing... I've had vehicles that I had to get rid of. [One] used to pass, but then the standards changed.... You've got to jump through all the hoops, all to make the air just a little bit better. It cost hundreds and hundreds of dollars.*  
—Merrillville participant

*Air quality in this region is shit. We have the mills and everything.* —Valparaiso participant

*A lot of times, after it rains, my car is dirtier than before it rained.* —Valparaiso participant

*I would say probably better [today compared to years past], because they shut down the coal plant. The mills are working less.* —Valparaiso participant

*With harder restrictions on [mills], they might have to lay people off.* —Valparaiso participant

*They have Ozone Days, when the temperature and humidity are above 95.* —Valparaiso participant

*[After] 2012, a smoking ban was put in place in public places...so there's an improvement in personal air quality.* —Valparaiso participant

**Older residents believe that air quality has improved based on their personal observations.**

Older participants in the two groups, having substantial historical perspective in the region, often mentioned how they had directly witnessed an improvement in sights (cloudy air or the appearance of particulates and/or pollution) and smells related to air quality over the years.

*The air quality now is so much better than when I was a kid.... There were days when I couldn't even breathe.* —Merrillville participant

*[Growing up] I constantly had allergies that came from the air. So it's not as bad as it was.*  
—Merrillville participant

**Industry is seen as the major contributor to poor air quality; the collective impact from individual residents is not viewed as comparable to the effect from industry.**

Industrial mills were cited most often as the major detriment to air quality. Other named sources were hog and pig farms (particularly relating to smell), abandoned buildings (with concerns about lead and asbestos), and freight traffic that runs through Northwest Indiana. One important theme that surfaced during this discussion (and which a few people addressed in later comments) is frustration over out-of-state truckers impacting air quality in Northwest Indiana, despite the trucks being registered elsewhere (and thus not subject to the same emissions standards).

*I've watched [the mills] break rules all the time... It's a huge problem up here. ...Moving away from the mills, you have less and less learning disabilities and physical disabilities.*

—Merrillville participant

*In Gary it's a lot of the abandoned buildings. That will lower the quality of air if you have a lot of rotten buildings and mold.* —Merrillville participant

*What aggravates me is, they put so much pressure on the automobiles. But we live by major expressways; we have semis that dump huge amounts of toxic crap and they don't even live in-state. We're paying for it.* —Merrillville participant

*Further south in Porter, I would say the hog farms.* —Valparaiso participant

*Industry is the major issue. I don't think it's the vehicles.* —Valparaiso participant

*[Emissions testing] is putting a financial burden on the citizens, while the outsiders [freight trucks] are affecting the outcome.* —Valparaiso participant

*There's a lot of freight traffic; a lot of semis. We have a lot of commuters, [but] semis contribute a lot to air quality and road quality. ...A lot of these trucks are from out of state. Do they have to have emissions testing?* —Valparaiso participant

## **ACTIONS TAKEN ON BEHALF OF AIR QUALITY**

This portion of the discussion focused on personal behaviors by residents that may contribute to the betterment of air quality in Northwest Indiana. The moderator mentioned to focus group participants the same actions about which the survey asked, including walking or biking instead of driving, taking public transportation, carpooling, combining errands into one trip, conducting routine car maintenance, emissions testing/clean air checks, getting gas or mowing the lawn when it's cool outside, avoiding topping off a gas tank, reducing car idling, driving a hybrid car, recycling, and telecommuting.

**Many Northwest Indiana residents appear to be somewhat resistant to idea of making a special personal effort to improve air quality, believing that the vast majority of air pollution comes from industrial mills and not individual residents.**

This attitude was consistent across both focus groups for the most part. Presented in the context of personal actions on behalf of air quality, efforts such as carpooling, combining errands, recycling, getting gas or mowing the lawn after 7 p.m., or driving a hybrid car are often viewed as disproportionate burdens on residents. At the same time, the group discussions (along with the survey data) suggest that many residents do in fact take part in a number of these actions. However, it appears that efforts like combining errands and carpooling are more often done out of convenience or common sense than out of specific concern about air quality. Additionally, a number of comments in the Valparaiso group suggest that many area communities lack adequate public transportation or, similarly, do not facilitate a culture conducive to carpooling and walking or biking instead of driving.

*There's no comparison [between pollution from cars and from the mills]. —Merrillville participant*

*If they cared about clean air, they'd be on the mills, not the people. —Merrillville participant*

*The whole word has become more eco-conscious. It's shoved down our throats. —Merrillville participant*

*Most people [combine errands] for convenience; it's not air quality. —Merrillville participant*

*These [most of the items on the list] are things that we're already doing, so [air quality] is not a big thing for us. It's already done.... We might do things for selfish reasons, but these selfish reasons benefit everybody. —Merrillville participant*

*In the city [walking or biking instead of driving] that would be fine. Out here, no one's going to bike more than 10 miles. —Valparaiso participant*

*It's not just the time. Around here, you've got to have a death wish to get on a bike. —Valparaiso participant*

*Public transportation around this area is very minimal. —Valparaiso participant*

*I'm for the idea [of carpooling], but I don't have a lot of trust in people. —Valparaiso participant*

*There is not a general culture in this area to encourage carpooling. —Valparaiso participant*

*In Chicago there's a suburban bus company called Pace. They take people from the suburbs into the city...they had a carpool lane option for that. —Valparaiso participant*

*I always do that [combine errands into one trip]. —Valparaiso participant*

*I'll usually get gas when it's cheap [and not necessarily when it's cool outside]. —Valparaiso participant*

*I do that [avoiding topping off the gas tank], [but] it's just a money issue. —Valparaiso participant*

*The school requires that [not idling the car engine] when you're picking up kids.*

—Valparaiso participant

*I would love to [drive a hybrid car], but the cost of all that... Same with solar paneling, wind turbines—I would love to have those things at a house of mine, but just the cost of it...*

—Valparaiso participant

*I do it [mow the lawn] at night, because in the morning it's all dewy, then in the day it's really hot.* —Valparaiso participant

*If it [telecommuting] was an option I would take it.* —Valparaiso participant

### **Many residents resent emissions testing requirements.**

Similar to the previous finding, some participants appear to perceive emissions testing as an unfair burden to Northwest Indiana residents—there is particular frustration in light of freight trucks and semis that may not have to meet such emissions standards regularly passing through the region. In the Merrillville group, there were complaints about the high costs of retrofitting cars and the fines or fees associated with failing to meet these requirements.

*Emissions testing on the cars is a bunch of crap.* —Merrillville participant

*What aggravates me is, they put so much pressure on the automobiles. But we live by major expressways; we have semis that dump huge amounts of toxic crap and they don't even live in state. We're paying for it.* —Merrillville participant



## **SOURCES OF INFORMATION AND CREDIBILITY OF SOURCES**

Participants were asked whether they actively seek out information on air quality and, if so, where they typically look for such information. They were also asked about the relative credibility of various potential sources of information.

### **Few if any Northwest Indiana residents actively seek out information on air quality.**

Again, consistent with the initial discussions on important issues, air quality tends not to be a top-of-mind issue and therefore does not compel people to look for specific information on it.

*I'm not going to lie, I really don't care. It's just not my concern.* —Merrillville participant

### **Regarding the distribution of information on air quality, residents would trust nonprofit organizations and colleges or universities most.**

The focus groups suggest that nonprofit organizations and colleges or universities are trusted the most in terms of reliable, unbiased information on air quality. Conversely, there was not much trust in the credibility of the state or federal government, although the Northwest Indiana Regional Planning Commission appeared to have reasonably good credibility among most participants (note, however, that many people were unfamiliar with the specific work of the Planning Commission). In general, residents are more likely to approve of information from local agencies and organizations over information from more distant entities.

*I could trust an institution of higher education.* —Merrillville participant

*Or a nonprofit green organization.* —Merrillville participant

*I would not trust the EPA, because the EPA has a vested interest in making sure they have money and control.* —Merrillville participant

*I trust [the NIRPC]. They have an economic meeting that I go to every year. They bring in people from both sides of the spectrum – business people and people from universities, professors, things like that.* —Merrillville participant

*Like I said earlier, [I trust] nonprofits.* —Merrillville participant

*Independent sources. Like a nonprofit. Not somebody like BP or a company with a vested interest in the air quality.* —Valparaiso participant

*There are watchdog groups where they do great work.* —Valparaiso participant

*I think the most objective [source] would be colleges.* —Valparaiso participant

*Who is that [NIRPC]? Are they backed by a company, by the government?* —Valparaiso participant

*I'm a little jaded by these commissions. They make grandiose plans and get grant money, and then the money is not used for that [the original plan]. And then you never hear about these grandiose plans again.* —Valparaiso participant

**The American Lung Association appears to have reasonably good credibility among residents.**

Though not asked about directly in the initial discussions, this nonprofit organization was met with generally approving reactions when mentioned later as a potential information source.

## **MOTIVATIONS TO TAKE ACTION AND OPINIONS ON MESSAGES ABOUT AIR QUALITY**

The final portion of the focus group discussions centered on specific air quality campaigns and their relative effectiveness, as well as opinions on a handful of outreach and marketing materials used by the NIRPC. A further point of interest during these discussions concerned how Northwest Indiana residents may be motivated to take action on behalf of air quality.

Group participants were asked about the following campaigns, initiatives, and organizations: Asthma Awareness Days; NWI Clean Air: Think Green, Breathe Easy; Gas Can Exchange; Household Hazardous Waste Collection; It All Adds Up to Cleaner Air; Northwestern Indiana Regional Planning Commission; Pace Rideshare; Partners for Clean Air; South Shore Clean Cities; and Air Quality Action Days, also known as Ozone Action Days.

There was generally little awareness of the It All Adds Up to Cleaner Air campaign, Partners for Clean Air, and South Shore Clean Cities. Additionally, several people appeared to confuse the Pace Rideshare initiative with an actual commuter bus line (rather than the online carpool facilitation service). Asthma Awareness Days had moderate awareness, and a few people had seen pamphlets for the Think Green, Breathe Easy campaign when getting emissions tests. As mentioned, no more than a handful of people in each group were at all familiar with the Northwestern Indiana Regional Planning Commission.

**Residents are favorable toward Air Quality Action Days / Ozone Action Days, although they tend to view them as primarily informational in nature—most people do not appear to think of them as efforts to encourage specific actions intended to mitigate the effects of extreme hot weather. Meanwhile, the Household Hazardous Waste Collection and Gas Can Exchange initiatives were popular with residents, with several people mentioning that they have used these services.**

Some participants compared the information they receive on Air Quality Action Days / Ozone Action Days to a weather report: it is good information to have but unlikely to alter their behavior in a major way.

*Of all the ones you mentioned, that one [Air Quality Action Days] to me seems the most effective.* —Merrillville participant

*Ozone Alerts [say things like] don't send your kids out today; check on your elders.*  
—Merrillville participant

*I've had them take my paint [at Hazardous Waste Collection events].* —Merrillville participant

*It [Air Quality Action Day information] tells me it's going to be hot and muggy.*  
—Valparaiso participant

*They usually say to stay indoors or check on the elderly.* —Valparaiso participant

*It's on the news, when they give you the weather. It's something that's there, any time you want to look at it. The other ones, I don't know what they're doing. I've never heard of them.* —Valparaiso participant

*Yes, I use it [Hazardous Waste Collection]; I wish the lines were shorter.* —Valparaiso participant

*It [Hazardous Waste Collection] is excellent. You can't put your paint in the trash, so it's got to go somewhere.* —Valparaiso participant

**Many residents are confident that the issue of air quality has been resolved (or at least addressed) through regulations and requirements such as emissions testing.**

This is another obstacle in persuading residents to change their behavior in ways to benefit air quality in Northwest Indiana. The Commission will need to demonstrate with specificity why it is important for individuals to take action. One person suggested incentivizing responsible behavior as opposed to punishing those who do not take certain actions; another person recommended emphasizing air quality information in schools, reasoning that children are likely to influence their parents' behavior on this topic. One comment met with agreement from others was to avoid the use of hard copy direct mailings to promote air quality messages—this approach was described as wasteful (especially as it goes against “acting green”), with many likely to throw away such mailings without reading them.

*If you want people to do their part and make things better, you have to work off the thesis of volunteerism. [To do that] you need incentives... You should do that [incentivize] rather than punish people. —Valparaiso participant*

*A lot of this is common sense. If you've chosen not to do [these things], then a commercial or piece of paper that comes to your house is not going to change that... How much is a campaign going to cost us in reality? —Valparaiso participant*

*People will buy the cars that they like. It's just what we do. If it's a piece of paper that comes in the mail, [it's] going to go in the garbage. Not many people read those things. —Valparaiso participant*

*It can be hard to get us to change our habits, [but] kids are more impressionable. If you're going to direct that information, direct it there [to children, particularly through the schools]. —Valparaiso participant*


*I think a brochure is just going to end up in the trash. —Valparaiso participant*

Group participants were shown various marketing and outreach items that the NIRPC has used in the past to promote air quality awareness. The items were distributed to participants sequentially so that participants could consider each type of material.

First, the following series of NWI Clean Air: Think Green, Breathe Easy print ads featuring health statistics were shown to participants:




Next, the following series of NWI Clean Air: Think Green, Breathe Easy print ads with facts and tips were shown to participants:




NORTHWEST INDIANA  
**CLEAN AIR**  
Think Green. Breathe Easy.

A lawn mower that mulches will cut and recut grass trimmings into small pieces. Since grass trimmings are 85% water, they quickly decompose, releasing nitrogen and additional nutrients that nourish the lawn.




NORTHWEST INDIANA  
**CLEAN AIR**  
Think Green. Breathe Easy.

Avoid refueling on Air Quality Action Days. If you have to, refuel when it's cool.



NORTHWEST INDIANA  
**CLEAN AIR**  
Think Green. Breathe Easy.


Trees clean the air, they absorb odors and pollutant gases nitrogen oxides, ammonia, sulfur dioxide and ozone and filter particulates out of the air by trapping them on their leaves and bark.



NORTHWEST INDIANA  
**CLEAN AIR**  
Think Green. Breathe Easy.

Share a ride, walk or bike instead of Driving

Finally, the following “Top Ten Tips” brochure was shown to participants:



**Your Family Comes First**

There's nothing more important than spending time outdoors with your family. That's why it's so important to do whatever you can to keep our air clean. It's good for the environment and good for the health of your friends and family.

Take a closer look at how poor air quality is affecting our community:

- Across the three counties of Northwest Indiana, recent studies from the American Lung Association show that:
  - 9% of adults suffer from asthma
  - 4% live with chronic bronchitis
  - 38% have a form of cardio-vascular disease
  - 10% of the children in Lake and LaPorte counties struggle with pediatric asthma
- The number of adults with asthma is nearly that of adults with diabetes. Consider how diabetics make adjustments to their diet in order to be as healthy as possible.
- Everyone can make adjustments to improve air quality and the quality of life for those who live with asthma and other lung diseases.

*It's Easy to Make a Difference.  
FIND OUT HOW AT*  
**NWICleanAir.com**

**NORTHWEST INDIANA  
CLEAN AIR**  
Think Green. Breathe Easy.


**The Top Ten Tips for Improving Air Quality**

It's the small things that can make a big difference in the quality of the air we breathe.

1. Limit engine idling time. If you're stopped for more than 30 seconds...turn it off.
2. Combine errands or "trip chaining" – plan your route so that all your errands can be done in one trip with the least amount of stops and miles.
3. Fill your gas tank during the cool evening hours to reduce evaporation and don't top off the tank.
4. Park and go inside at restaurants; avoid drive-thru windows and congested areas to save fuel and time.
5. Get regular engine tune-ups and keep the right amount of air in the tires. Well-maintained vehicles create less pollution.
6. Mow your lawn after 7 p.m.
7. Conserve energy in your home; turn off appliances and lights when not in use.
8. Change the way you get to work – join or, better yet, start a carpool.
9. Walk or bike to work, to church, to local meetings.
10. Join Northwest Indiana Clean Air to get more information about ways you can think green so we all breathe easy.

**NORTHWEST INDIANA  
CLEAN AIR**  
Think Green. Breathe Easy.

Northwest Indiana – where it all adds up to cleaner air.  
Brought to you by the Northwestern Indiana Regional Planning Commission, a Clean Air leader.



**The Top Ten Tips brochure was considered the most comprehensive and potentially effective marketing material.**

Note that this was presented last, after the first two groups of materials, so the pros and cons of the other materials had already been evaluated.

*We all seem to love lists these days.* —Merrillville participant



*This one [the Top Ten Tips] is probably the best.* —Merrillville participant

*When you're advertising, you want to spark up a conversation. [The statements] on the brochure do that more than the ones on the flyer.* —Merrillville participant

**Participants were critical of some of the images used in the print ads featuring health statistics.**

According to several in the groups, the sunny, positive images (such as the hands forming a heart, the woman in the red coat smiling with open arms, and children jumping in unison) seemed at odds with the content of the messages regarding health problems from poor air quality.

*This is hokey [the ad featuring the hands forming a heart]. I'm not watching Ellen.*  
—Merrillville participant

*The woman in the coat looks like she's enjoying herself. She doesn't look like she has cardio-vascular disease.* —Valparaiso participant

*What am I supposed to do with this piece of information? The ad is sugarcoating: "I'm giving you this horrible information, but look how pretty it is."* —Valparaiso participant

**Messages that employ graphic imagery may be effective because they are memorable—such images are more likely to go viral and stick in the popular consciousness.**

As a corollary to the previous finding, a number of participants suggested negative (but still appropriate) images to better convey the health problems associated with substandard air quality. One example cited was the image of a smoker's lung used in anti-smoking messages.

*Cigarette commercials are gross but eye-catching.* —Merrillville participant

*It's worked in other places. [For example] a diseased lung on a cigarette pack. In our culture, we don't see cute—we see bloody and violent. Does anyone stop and watch kids*

*playing in a field? No. But we slow down [to look at] an accident. —Merrillville participant*

*Something that catches my attention is not going to be children smiling. It's going to be something morbid and scary. [Morbid] messages create a sense of urgency. Nothing here creates urgency. —Valparaiso participant*

*You could have ten kids in the picture, with one kid laying down [as a result of dying]. —Valparaiso participant*

**Some residents do not connect asthma and cardiovascular disease to air quality.**

An education campaign by the NIRPC will need to draw a direct link between air quality and these health issues.

*Cardio-vascular is more a dietary issue than [a consequence of a lack of] clean air. —Valparaiso participant*

**The discussions suggest that, in terms of messaging about air quality, residents dislike being told to do things without reason or context.**

Many comments during the groups suggest that individual pieces of information alone will not be enough to convince Northwest Indiana residents to take action on behalf of air quality—many people will need to be persuaded that changing their behaviors will indeed result in better air quality in the region. Further, some people are frustrated by messages encouraging a specific action that does not apply to them or their area (e.g., a messaging encouraging walking or bike riding in an area without sidewalks or bike lanes).

*We are so ecologically friendly now. Each new rule is basically saying, “Let’s find a new way to extract money from the people.” —Merrillville participant*

*It’s just not practical to tell us to ride a bike or walk. There are no sidewalks; you just can’t do it. —Valparaiso participant*

**Residents appreciate specific information on air quality (current status, historical trends, etc.), but not generalized slogans or exhortations to take action without context.**

There is support for specific information such as warnings to limit outdoor exposure or data on how the air quality in Northwest Indiana compares to other parts of the state or country. Also, some people like the idea of specific energy efficiency comparisons (see the comment below).

*[Do something like] what they do on the buses—it will say, “This bus saves X [number] of cars.” CSX will do something about how much freight they move compared to how many semis. —Merrillville participant*

**Many residents do not see the point in changing their behavior, due to the perception that individual people do not impact air quality anywhere near to the extent that industrial interests in the region do.**

This mindset suggests that it will be a challenge to convince participants that their actions do indeed influence air quality—most people appear to view the effects from industrial mills, freight traffic, or other large-scale polluters as a more immediate and pressing problem. There is also frustration over the perception that industrial mills can pollute as much as they want, seemingly without any meaningful consequences, while regular citizens are encouraged to take special actions to mitigate harmful effects.

*I would direct it [messages on actions to take to improve air quality] at industry. It’s a much bigger impact. —Valparaiso participant*

*You want me to shut off my car at a drive-through while you [industry] are dumping crap in Lake Michigan? Let’s take accountability for the biggest culprits, and leave the small guy alone. —Valparaiso participant*

*This is a lot of energy spent on the little guy again. What is the percentage of our footprint versus the industry? —Valparaiso participant*

*I would feel positive about it if I knew the other side of the coin [industry] was being addressed. —Valparaiso participant*

*It's easier to tell us what to do than it is to tell a lobbyist that you're not going to take their money. —Valparaiso participant*

**Messages and public service announcements that are primarily image-based should be placed on billboards, while text-heavy messages, including brochures, should be prominently featured in waiting areas (bus stops, auto mechanic waiting rooms, doctors' offices, etc.).**

The “captive audiences” in such waiting areas are more likely to have the time and inclination to notice and read the text.

*Most people, if they can't glance and get the message, it's not [going to register].  
—Merrillville participant*

*If you were sitting at a bus station you would read it. —Merrillville participant*

*With the heavy text I could read this on a train wall. I couldn't do this on a billboard.  
—Valparaiso participant*

*This stuff should be put up at the tire place or the oil change place. We're stuck there so we'll look at it. —Valparaiso participant*

*This is something I might read when I'm getting my oil changed or at the doctor's office. But if it shows up at my house, [no]. —Valparaiso participant*

## **APPENDIX: FOCUS GROUP DISCUSSION GUIDE**

### **I. Introduction**

#### A. Purpose of focus group

1. To better understand your opinions on important issues facing Northwest Indiana—we'll talk general issues at first and then move into some specific things
2. For the purposes of the discussion tonight, we're going to concentrate just on Northwest Indiana, meaning Lake, Porter, and LaPorte Counties
3. The study is being conducted for the Northwestern Indiana Regional Planning Commission; we also did a survey of Northwest Indiana residents as part of the research, and I'll mention some of the survey findings during our discussion
4. I work for Responsive Management, not the Planning Commission; Responsive Management is an independent research firm based in Virginia

#### B. Rules

1. Please speak one at a time
2. Be respectful of others' opinions, even if you disagree
3. Please do not interrupt; everyone will have a chance to speak
4. Please also do not tap on the table, as it can actually drown out the discussion on the recording device
5. *[If the snacks provided include chips in bags]:* Please open your chip bags now and pour them onto a napkin; otherwise the noise actually drowns out the discussion on the recording

#### C. Self-introductions

1. First name
2. How long you've lived in the area
3. What you do for a living

### **II. Opinions on General Issues of Importance Facing Northwest Indiana**

#### A. What would you say are the most important issues facing Northwest Indiana right now? *[Probe as necessary mentioning issues below]:*

1. Crime?
2. Economic development?

3. Education?
4. Healthcare?
5. Air quality?
6. Jobs or unemployment?
7. Streets and roads?
8. Water quality?

### III. Opinions on Air Quality in Northwest Indiana

- A. [*If not already mentioned*]: What about air quality? How important is air quality as an issue in Northwest Indiana? Why?
- B. Do you think much about the quality of the air in Northwest Indiana? Why or why not?
  1. [*If thinks air quality isn't important*]: Why aren't you more concerned about air quality?
- C. What do you think about the quality of the air in Northwest Indiana?
  1. How do you think it compares to other areas of the country?
- D. How do you think the air quality in Northwest Indiana is now compared to ten years ago?
  1. How about compared to five years ago?
  2. How about compared to last year?
  3. Why? What kinds of things have you noticed that make you feel this way?
- E. The survey of Northwest Indiana residents that we did this year found that the percentages of people who think the air quality now is worse compared to ten years ago, five years ago, and last year, all went up compared to the percentages who said the same in 2012. Why do you think that is?
- F. Another interesting thing from the survey is that concern about air quality has gone down a bit since 2012, which is the last time a similar survey question was asked of residents. (Respondents were asked to rate their concern about air quality on a scale of 0 to 10: in 2012, 58% gave a concern rating of 8, 9 or 10, compared to 52% in 2017.) Why do you think that is?

#### **IV. Actions Taken on Behalf of Air Quality**

- A. What kinds of things do you think negatively affect air quality in Northwest Indiana?
1. [*If not already named*]: What about transportation? What kind of an impact do you think it has on air quality? [*Probe*]: How do you think the impact on air quality from transportation compares to the impact from industry?
- B. What do you think are the most important things people can do to help protect or improve the air quality in Northwest Indiana? What actions can people take?
- C. I'm going to name some different actions related to air quality and I'd like to hear your thoughts on each one. [*Probe on each*]:
1. Is this something you already do? Why or why not?
  2. What kind of impact do you think this has on air quality in your area?
  3. Are you likely to do this/keep doing this in the future? Why or why not?
    - i. Walking or biking instead of driving
    - ii. Taking public transportation
    - iii. Carpooling
    - iv. Combining errands into one trip
    - v. Conducting routine car maintenance
    - vi. Emissions testing or a clean air car check
    - vii. Getting gas when it's cool outside
    - viii. Not topping off your gas tank
    - ix. Reducing car idling
    - x. Driving a hybrid car
    - xi. Mowing the lawn after 7 PM
    - xii. Recycling
    - xiii. Telecommuting
  4. In the survey, we found that Northwest Indiana residents today, compared to five years ago, are more likely to do most of the items on that list, especially routine car maintenance, emissions testing, reducing car idling, and combining errands. What do you think accounts for this change?
  5. Two exceptions are carpooling and taking public transportation, which residents today are a little bit *less likely* to do. Any thoughts on why this is?

6. We also asked survey respondents whether they thought each of those actions did a lot, a little, or nothing at all to improve air quality in their area. Compared to five years ago, residents today are more likely to say that reducing car idling, telecommuting, and using public transportation do a lot to improve air quality. Why do you think this is?
7. On the other hand, residents today are less likely to say that combining errands, carpooling, and emissions testing do a lot to improve air quality. Thoughts?

## **V. Sources of Information and Credibility of Sources**

- A. Who would you trust most for reliable information on local air quality in Northwest Indiana? Why? [*Probe as necessary mentioning entities below*]:
  1. Nonprofit organizations?
    - i. Which ones?
    - ii. The American Lung Association?
  2. Community groups or citizens groups?
  3. Local or regional government in Northwest Indiana?
    - i. Which agencies or organizations specifically?
  4. Indiana state government?
  5. The federal government?
    - i. Which state/federal agencies?
- B. Do you ever look for information on local air quality issues? Why or why not?
- C. Where do you get information about local air quality issues?
- D. What would be the most effective ways for residents to get information about local air quality issues? [*Probe about methods other than television*]

## **VI. Motivations to Take Action and Messages About Air Quality**

- A. What do you think would motivate people to take action on behalf of air quality in Northwest Indiana?
- B. What kinds of messages would work best to motivate people to take action on behalf of air quality in Northwest Indiana?



- C. If you were going to create a message to raise awareness about air quality issues, or to encourage people to take certain actions, what would it sound like?
1. How about a message specifically about transportation choices, like some of the actions we were discussing earlier (walking or biking, taking public transportation, carpooling, combining errands)?
- D. How should these messages be distributed to the public? What would be the most effective ways to get the messages out?
- E. I'd like to get your reactions to some different campaigns addressing air quality issues. I'll describe each one and I'd like to know if you've ever heard of it and also what you think about it. (Is it an effective approach? Why or why not?)
1. **ASTHMA AWARENESS DAYS:** special days to raise awareness about air quality and the effects it has on asthma.
  2. **NWI CLEAN AIR: THINK GREEN. BREATHE EASY:** a regional campaign to raise awareness of the importance of air quality in general and for personal health and to promote easy actions for citizens to improve air quality.
  3. **GAS CAN EXCHANGE:** an annual public gas can exchange program held at Household Hazardous Waste Collection events throughout the region. Residents are encouraged to turn in old gasoline storage containers for new, environmentally-friendly ones.
  4. **HOUSEHOLD HAZARDOUS WASTE COLLECTION:** public events in the region that collect and properly dispose of hazardous materials, such as anti-freeze, oils, paint, pesticides, etc.
  5. **IT ALL ADDS UP TO CLEANER AIR:** a messaging initiative that encourages small changes in daily behavior that will collectively help to improve air quality in Northwest Indiana by reducing emissions that contribute to the creation of ground-level ozone.
  6. **NORTHWESTERN INDIANA REGIONAL PLANNING COMMISSION (NIRPC):** a regional council of governments serving Lake, Porter, and LaPorte Counties in Northwest Indiana. This forum enables citizens in the region to address regional issues related to transportation, the environment, and economic development.

7. PACE RIDESHARE: an online service that connects commuters who are interested in forming a carpool, giving them the ability to identify potential carpool partners quickly and securely.
8. PARTNERS FOR CLEAN AIR: a non-profit coalition dedicated to bringing cleaner air to the Chicago metropolitan area. It unites businesses, organizations, and individuals all committed to reducing harmful emissions and improving air quality.
9. SOUTH SHORE CLEAN CITIES: a nonprofit organization whose mission is to preserve and revitalize Northern Indiana by promoting the use of clean fuels and clean vehicle technologies.
10. AIR QUALITY ACTION DAYS, also known as OZONE ACTION DAYS: alerts residents to weather conditions (such as heat and humidity) that may cause ground-level air to be unhealthy to breathe. Also promotes actions that can lessen effects when weather is less than ideal. People can receive email or text alerts by signing up through the Department of Environmental Management; there are also Facebook posts and mentions on radio stations.
  - i. We talked earlier about the quality of the air in general in Northwest Indiana. From the reading I was doing to prepare for our discussion tonight, it seems that the air quality in the region is mostly good, although certain weather conditions make it worse. Residents' efforts on OZONE ACTION DAYS (or Air Quality Action Days) can be particularly helpful in limiting air pollutants. Was this something you realized? What do you think about this?
  - ii. To go back to another survey result, we found that awareness of these campaigns went down between 2012 and 2017—there were particularly big drops in awareness for the IT ALL ADDS UP CAMPAIGN and the OZONE ACTION DAYS. Why do you think this is?
  - iii. Another interesting thing from the survey is that, among those who had heard of the campaigns, people are *more likely* to consider the IT ALL ADDS UP TO CLEANER AIR campaign and the NORTHWESTERN INDIANA REGIONAL PLANNING COMMISSION to be effective.

(This is comparing Northwest Indiana residents in 2017 to residents five years ago in 2012.) Any idea why that might be?

- iv. At the same time, people today, compared to five years ago, are *less likely* to find the PACE RIDESHARE program to be effective. Again, any thoughts on why that might be?

F. I'd also like to get your feedback on some specific messaging materials about air quality.

I'll pass them around now. I'd like to know if you've ever seen these anywhere and also whether you find them to be effective at educating residents about air quality issues. [*Items will be passed around individually to consider one by one.*]

1. Top Ten Tips brochure
2. Clean Air monthly print ads (March, April, July, October)
3. American Lung Association print ads with asthma / cardio stats
  - i. What changes would you make to these messages, if any? Why?

## **VII. Closing**

- A. Thank you for coming tonight and talking about these issues.
- B. Does anyone have any additional comments or questions?

## **ABOUT RESPONSIVE MANAGEMENT**

Responsive Management is an internationally recognized public opinion and attitude survey research firm specializing in natural resource and outdoor recreation issues. Our mission is to help natural resource and outdoor recreation agencies and organizations better understand and work with their constituents, customers, and the public.

Utilizing our in-house, full-service telephone, mail, and web-based survey facilities with 50 professional interviewers, we have conducted more than 1,000 telephone surveys, mail surveys, personal interviews, and focus groups, as well as numerous marketing and communication plans, needs assessments, and program evaluations.

Clients include the federal natural resource and land management agencies, most state fish and wildlife agencies, state departments of natural resources, environmental protection agencies, state park agencies, tourism boards, most of the major conservation and sportsmen's organizations, and numerous private businesses. Responsive Management also collects attitude and opinion data for many of the nation's top universities.

Specializing in research on public attitudes toward natural resource and outdoor recreation issues, Responsive Management has completed a wide range of projects during the past 25 years, including dozens of studies of hunters, anglers, wildlife viewers, boaters, park visitors, historic site visitors, hikers, birdwatchers, campers, and rock climbers. Responsive Management has conducted studies on endangered species; waterfowl and wetlands; and the reintroduction of large predators such as wolves, grizzly bears, and the Florida panther.

Responsive Management has assisted with research on numerous natural resource ballot initiatives and referenda and has helped agencies and organizations find alternative funding and increase their membership and donations. Additionally, Responsive Management has conducted major organizational and programmatic needs assessments to assist natural resource agencies and organizations in developing more effective programs based on a solid foundation of fact.

Responsive Management has conducted research on public attitudes toward natural resources and outdoor recreation in almost every state in the United States, as well as in Canada, Australia, the United Kingdom, France, Germany, and Japan. Responsive Management has also conducted focus groups and personal interviews with residents of the African countries of Algeria, Cameroon, Mauritius, Namibia, South Africa, Tanzania, Zambia, and Zimbabwe.

Responsive Management routinely conducts surveys in Spanish and has conducted surveys in Chinese, Korean, Japanese and Vietnamese and has completed numerous studies with specific target audiences, including Hispanics; African-Americans; Asians; women; children; senior citizens; urban, suburban, and rural residents; large landowners; and farmers.

Responsive Management's research has been upheld in U.S. District Courts; used in peer-reviewed journals; and presented at major natural resource, fish and wildlife, and outdoor recreation conferences across the world. Company research has been featured in most of the nation's major media, including CNN, *The New York Times*, *The Wall Street Journal*, and on the front pages of *USA Today* and *The Washington Post*. Responsive Management's research has also been highlighted in *Newsweek* magazine.

Visit the Responsive Management website at:

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