

# **Responsive Management**



## **OPINIONS OF THE SURROUNDING COMMUNITY REGARDING FORT A.P. HILL AND ITS ACTIVITIES**

**Conducted for Fort A.P. Hill**

**by Responsive Management**

**2018**

# **OPINIONS OF THE SURROUNDING COMMUNITY REGARDING FORT A.P. HILL AND ITS ACTIVITIES**

**2018**

## **Responsive Management National Office**

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## **Acknowledgments**

Responsive Management would like to thank Dianne Smith, Acting Chief for Fort A.P. Hill's Plans, Analysis and Integration Office, for her input, support, and guidance on this project.



## **EXECUTIVE SUMMARY**

### **INTRODUCTION AND METHODOLOGY**

This study is the latest in a continuing series conducted for Fort A.P. Hill to determine the opinions of the surrounding communities regarding Fort A.P. Hill and its activities. The study entailed a telephone survey of residents of the surrounding Virginia communities of Caroline, Essex, King George, and Spotsylvania Counties, and the City of Fredericksburg. These surveys were administered on an approximately biennial basis beginning in 2003; the survey was last conducted in 2016.

For the survey, telephones were selected as the preferred sampling medium because of the almost universal ownership of telephones among residents of the surrounding communities (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 do surveys that are read by the respondent (i.e., mail and Internet surveys) because the latter 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 survey that they have to read to themselves. 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.

The telephone survey questionnaire was developed cooperatively by Responsive Management and Fort A.P. Hill. Telephone surveying times are Monday through Friday from noon 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 October 2018. Responsive Management obtained a total of 405 completed interviews.

The software used for data collection was Questionnaire Programming Language. The analysis of data was performed using IBM SPSS Statistics as well as proprietary software developed by Responsive Management. For the entire sample of area residents, the sampling error is at most plus or minus 4.85 percentage points.

### **AWARENESS, PERCEPTIONS, AND KNOWLEDGE OF AND OPINIONS ON FORT A.P. HILL AND ITS MILITARY ACTIVITIES**

- Nearly all residents (96%) were aware before the survey of the presence of Fort A.P. Hill, with 81% being *very* aware.
- When asked in an open-ended question to name the first things that come to mind when they think about Fort A.P. Hill, residents most often give a response related to the U.S. Army (33%) or military exercises (30%).
- Just under three quarters of residents (72%) say that they are knowledgeable about the military activities at Fort A.P. Hill; note that they more commonly say that they are *somewhat* knowledgeable (53%) rather than *very* knowledgeable (19%). Meanwhile, 28% are *not at all* knowledgeable.
- An overwhelming majority of residents (89%) think that the combat and combat support training conducted at Fort A.P. Hill is important to national defense, with 77% saying *very* important.

### **OPINIONS ON THE EFFECT THAT FORT A.P. HILL HAS ON THE COMMUNITY AND EFFORTS TO REDUCE CONFLICTS WITH THE COMMUNITY**

- The overwhelming majority of residents (88%) agree that Fort A.P. Hill is a good neighbor to the surrounding communities, with 69% *strongly* agreeing.
- About three quarters of residents (76%) say that military or civilian personnel associated with Fort A.P. Hill have a positive impact on the surrounding communities, while only 1% say that they have a negative impact.

- More than two thirds of residents (68%) were *not* aware before the survey that incompatible development on the borders of Fort A.P. Hill is a potential issue, and slightly less (57%) were *not* aware before the survey that incompatible development near military installations is an issue nationwide.
- A majority of residents (57%) would support efforts to reduce incompatible development near the borders of Fort A.P. Hill, with 29% *strongly* supporting such efforts. Only 8% would oppose. The remaining residents responded neutrally or did not know.
- Residents were asked about their support for or opposition to five measures that could be taken to reduce incompatible development near Fort A.P. Hill. The five measures that were asked about are as follows:
  - Zoning regulations to preserve the rural character of the land surrounding Fort A.P. Hill.
  - A comprehensive plan that designates land adjacent to Fort A.P. Hill for rural/agricultural use.
  - A comprehensive plan that limits high-density residential development adjacent to Fort A.P. Hill.
  - Money and tax advantages to willing landowners for establishing conservation easements.
  - The local government purchasing development rights from willing landowners to preserve the rural character of the area.
- Of the five measures discussed above, the most support overall is for zoning regulations in the area surrounding Fort A.P. Hill (56% *strongly* support, and 77% of residents support this measure overall) and a comprehensive plan that designates land adjacent to Fort A.P. Hill for rural/agricultural use (53% *strongly* support, 80% support overall).
  - Note that each measure has a majority in support of it.
- The survey asked about awareness of the Fort A.P. Hill Joint Land Use study: just over a quarter of residents (27%) had heard of it prior to the survey.

**NOISE AT FORT A.P. HILL**

- While three quarters of residents (74%) say that noise from Fort A.P. Hill is *not* a problem, about a quarter (24%) indicate that noise is a problem. However, note that mostly it is considered a *minor* problem rather than a *major* problem.
- The frequency of noise disturbances was also asked about. Just under three quarters of residents (73%) *rarely* or *never* experience noise disturbances from Fort A.P. Hill. On the other hand, 26% *always* or *sometimes* experience noise disturbances.
- Those who indicate that noise from Fort A.P. Hill is a major or minor problem most commonly name artillery exercises or explosions (62%), aircraft including helicopters (30%), and small weapons firing (25%) as the causes of the noise.
- Among those who say that noise from Fort A.P. Hill is a *major* problem, shaking of the house is by far the most common response (75%), when residents are asked to name the specific effects, distantly followed by disturbance of sleep (41%).
- Regardless of whether they had experienced noise problems, all residents were asked about efforts to minimize noise. A large majority of residents (80%) think that Fort A.P. Hill does an *excellent* or *good* job of minimizing the effects of training noise on the surrounding communities. At the other end of the scale, 8% think it does a *fair* or *poor* job.

**CONTACT WITH MILITARY OR CIVILIAN PERSONNEL FROM FORT A.P. HILL**

- A little more than a third of residents (38%) had contact with military or civilian personnel associated with Fort A.P. Hill in the past 2 years.
- Those who had contact with military or civilian personnel from Fort A.P. Hill most commonly described the contact as a regular contact with a friend (24% of those who had contact); in a public setting, such as a restaurant or while shopping (also 24%); or contact as part of business (23%). Other contacts were described as a regular contact with a family member (15%) or a visit to a Fort A.P. Hill office or facility (11%).



- Those who had contact with military or civilian personnel from Fort A.P. Hill most commonly said the contact was with Army personnel (37%), civilian employees (32%), or civilian contractors (20%).
- Those who had contact with military or civilian personnel associated with Fort A.P. Hill overwhelmingly described the contact as positive: 84% said the contact was positive, 15% said the contact was neutral, and 1% described the contact as negative.
- Those who had contact with military or civilian personnel associated with Fort A.P. Hill overwhelmingly said, in response to direct questions, that such personnel were professional and courteous: 98% said they were professional, and 98% said the personnel were courteous.

#### **RECREATIONAL ACTIVITIES AT FORT A.P. HILL**

- Approximately half of residents (48%) were aware that Fort A.P. Hill offers recreational activities to the public.
  - Those who were aware that Fort A.P. Hill offers recreational activities to the public were most commonly aware of hunting (48%), fishing (38%), special events (31%), and camps, picnics, and outings (21%).
- Residents were asked whether they had participated in four outdoor activities on Fort A.P. Hill in the past 2 years: hunting, fishing, wildlife viewing, and bicycling/walking/running. The overwhelming majority of residents (86%) had not done any of those activities; otherwise, 6% had bicycled/walked/run, 5% had hunted, 4% had fished, and 2% had viewed wildlife.
- All residents who had hunted on Fort A.P. Hill (100%) were satisfied with their overall hunting experiences, with 58% being *very* satisfied and 42% being *somewhat* satisfied.
- Satisfaction with fishing was even higher: all residents who had participated in fishing on Fort A.P. Hill (100%) were satisfied with their overall fishing experiences, with 87% being *very* satisfied and 13% being *somewhat* satisfied.

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## **INTRODUCTION AND METHODOLOGY**

This study is the latest in a continuing series conducted for Fort A.P. Hill to determine the opinions of the surrounding community regarding Fort A.P. Hill and its activities. The study entailed a telephone survey of residents of the surrounding Virginia communities of Caroline, Essex, King George, and Spotsylvania Counties, and the City of Fredericksburg. These surveys were administered on an approximately biennial basis beginning in 2003; the survey was last conducted in 2016. This 2018 survey report includes trend graphs comparing the current results with data from 2009, 2011, 2013, and 2016. Specific aspects of the research methodology are discussed below.

The following Caroline County zip codes were distributed proportionally according to population and were weighted to account for 57.5% of the sample: 22427, 22546, 22580, 22538, 22552, 22514, 22501, 22446, and 22535. The remaining sample included the following zip codes from the other counties and city distributed proportionally based on the population in the area: 22436, 22485, 22476, 22408, and 22509. Respondents residing in zip codes from King George County had to live south of State Route 3 in order to be included in the survey. Hereinafter, the term, “residents,” refers to these residents of the communities surrounding Ft. A.P. Hill.

### **USE OF TELEPHONES FOR THE SURVEY**

For the survey, telephones were selected as the preferred sampling medium because of the almost universal ownership of telephones among residents of the surrounding communities (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 do surveys that are read by the respondent (i.e., mail and Internet surveys) because the latter 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 survey that they have to read to themselves. 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 staff from Fort A.P. Hill and was based on previous years' surveys. Responsive Management conducted pre-tests of the questionnaire to ensure proper wording, flow, and logic in the survey.

## **SURVEY SAMPLE**

The sample of area 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 and was weighted to the specifications assigned by Fort A.P. Hill staff.

## **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 community concerns, as well as natural resources and outdoor recreation in general.

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 noon 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 October 2018.

## **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 405 completed interviews.

## **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 area residents around Fort A.P. Hill as a whole.

## SAMPLING ERROR

Throughout this report, findings of the telephone survey are reported at a 95% confidence interval. For the entire sample of area residents, the sampling error is at most plus or minus 4.85 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 4.85 percentage points of each other. Sampling error was calculated using the formula described below, with a sample size of 405 respondents and a population size of 59,795 area residents.

### Sampling Error Equation

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

Where: B = maximum sampling error (as decimal)  
 $N_p$  = population size (i.e., total number who could be surveyed)  
 $N_s$  = 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).

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

In examining the results, it is important to be aware that the 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 “strongly support” and “moderately support” are summed to determine the total percentage in support).

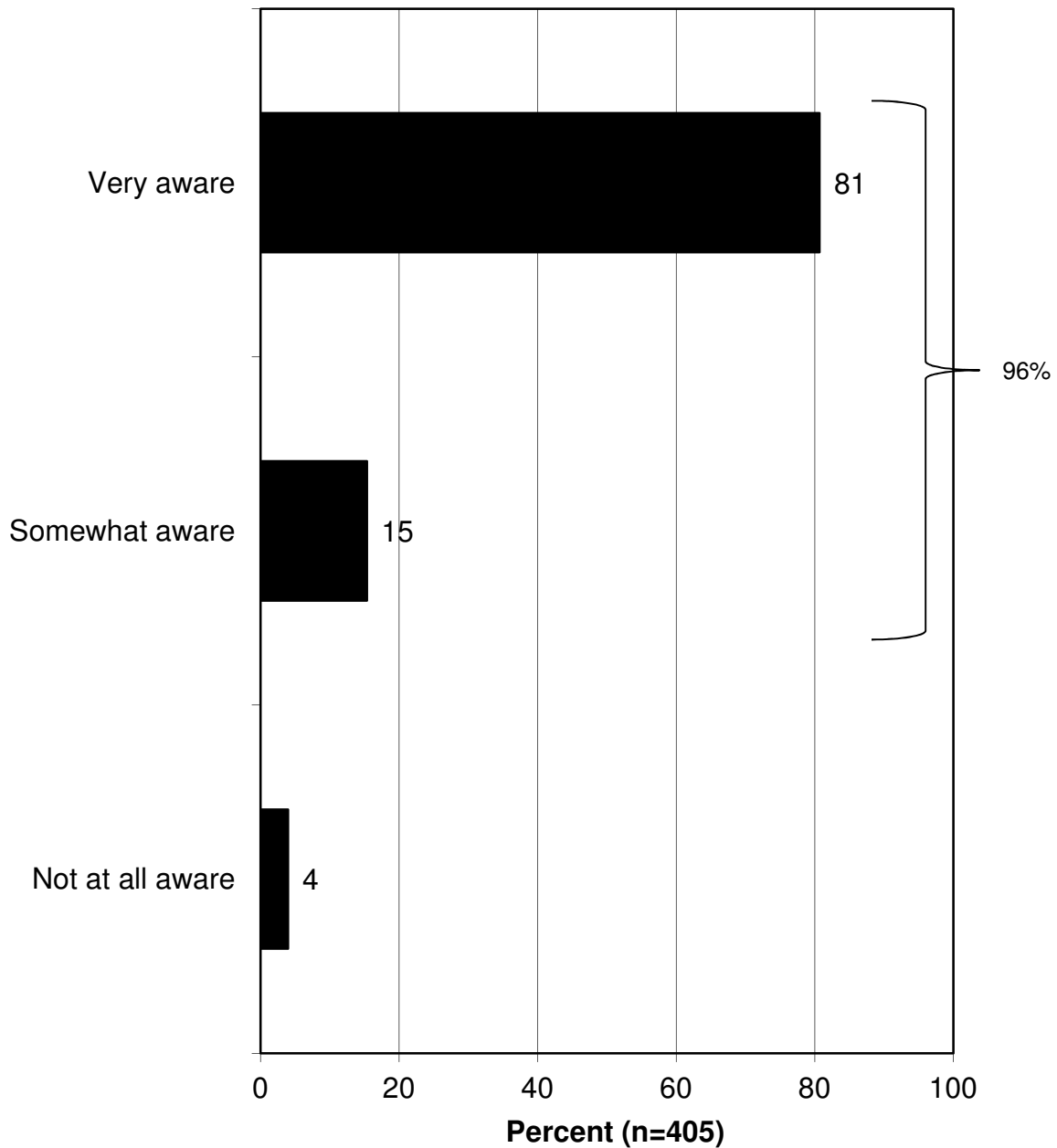
In the report, each graph of the overall results is followed by the trends graph of that same question.

## **AWARENESS, PERCEPTIONS, AND KNOWLEDGE OF AND OPINIONS ON FORT A.P. HILL AND ITS MILITARY ACTIVITIES**

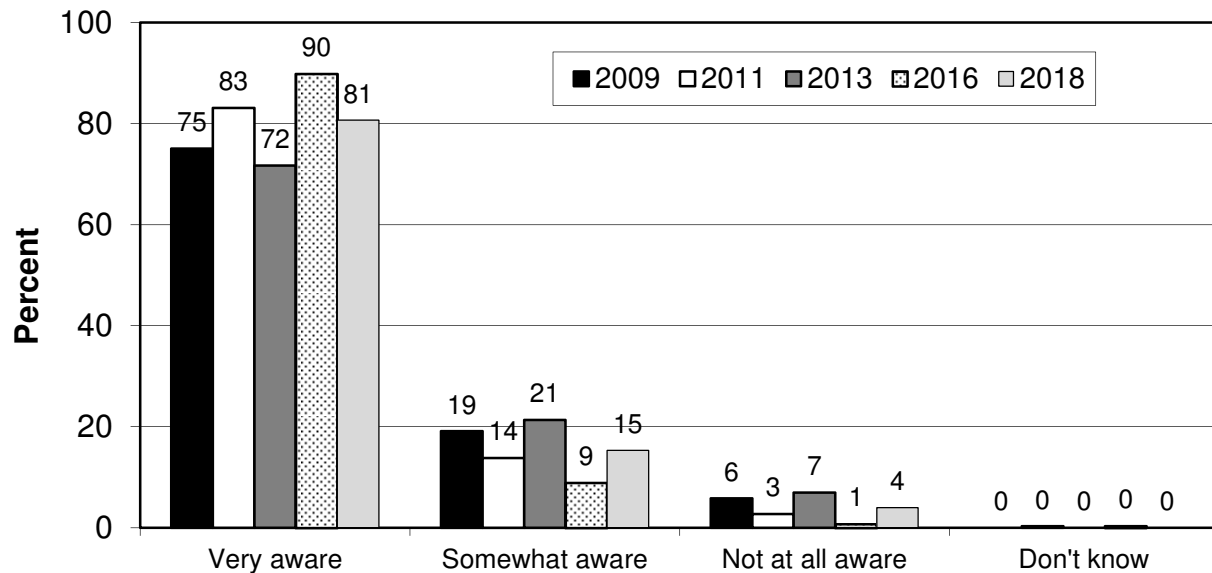
- Nearly all residents (96%) were aware before the survey of the presence of Fort A.P. Hill, with 81% being *very* aware.
  - Over the five surveys in the trends analysis, overall awareness (*very* or *somewhat* aware) has gone up and down between 93% and 99%.
  
- When asked in an open-ended question to name the first things that come to mind when they think about Fort A.P. Hill, residents most often give a response related to the U.S. Army (33%) or military exercises (30%). These are distantly followed by responses related to our nation's defense (7%) and noise (6%); all other response categories have only 3% or less.
  - Trends are shown; note that open-ended questions tend to have much variation from year to year.
  
- Just under three quarters of residents (72%) say that they are knowledgeable about the military activities at Fort A.P. Hill; note that they more commonly say that they are *somewhat* knowledgeable (53%) rather than *very* knowledgeable (19%). Meanwhile, 28% are *not at all* knowledgeable.
  - The last two survey years (2016 and 2018) have seen a rise in those saying *somewhat* knowledgeable at the expense of *not at all* knowledgeable, which has gone down (*very* knowledgeable has remained fairly constant at just under 20%).
  
- An overwhelming majority of residents (89%) think that the combat and combat support training conducted at Fort A.P. Hill is important to national defense, with 77% saying *very* important. At the other end, 2% think the training is unimportant.
  - In looking at trends, this past survey year (2018) saw the lowest percentage saying *very* important, switching for the most part to either *somewhat* important or *don't know*.



**Q20. How aware were you of Fort A.P. Hill's presence in your area before this survey? Would you say you were very aware, somewhat aware, or not at all aware of Fort A.P. Hill?**



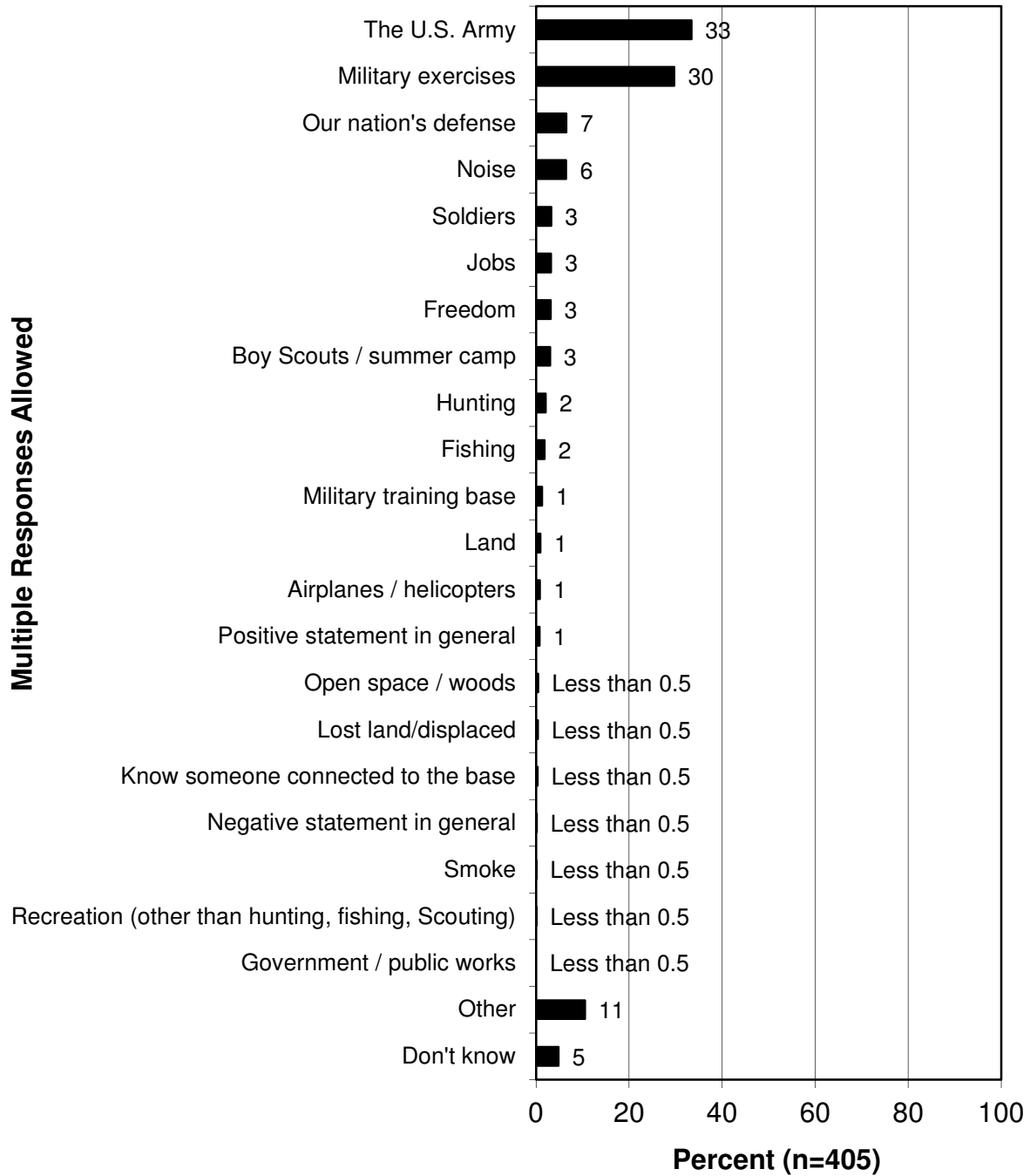
**Q20. How aware were you of Fort A.P. Hill's presence in your area before this survey? Would you say you were very aware, somewhat aware, or not at all aware of Fort A.P. Hill?**



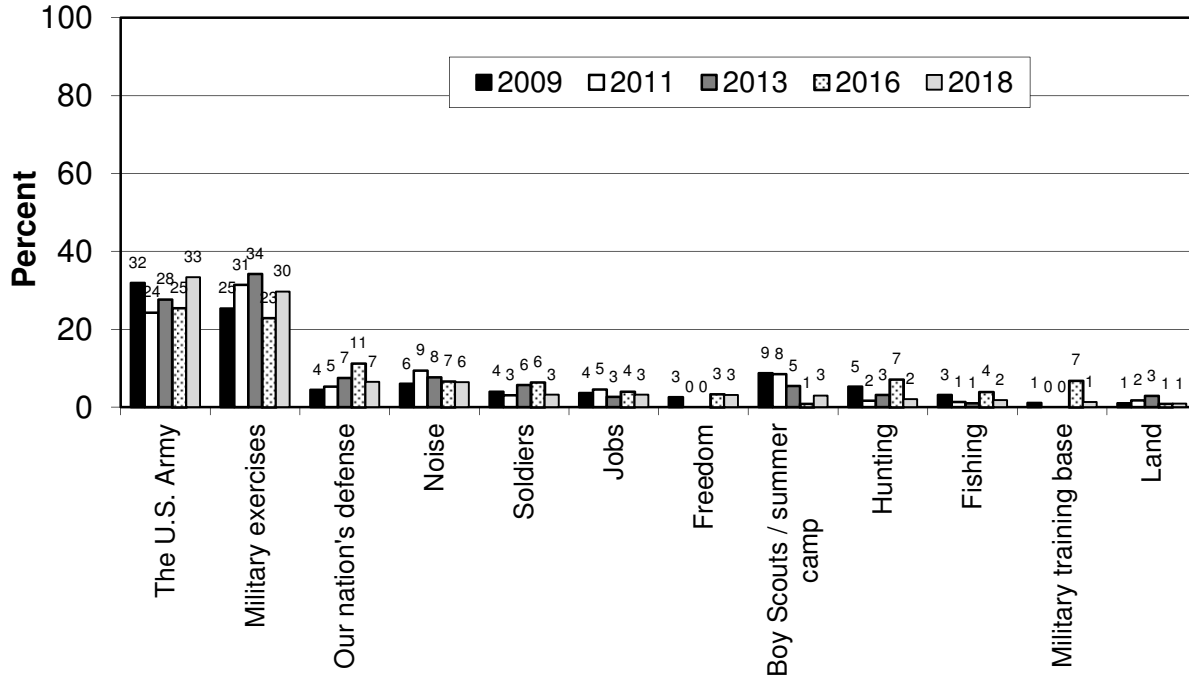
	2009	2011	2013	2016	2018
Overall awareness (very or somewhat)	94	97	93	99	96

Rounding may cause apparent discrepancies in sums; calculations made on unrounded numbers.

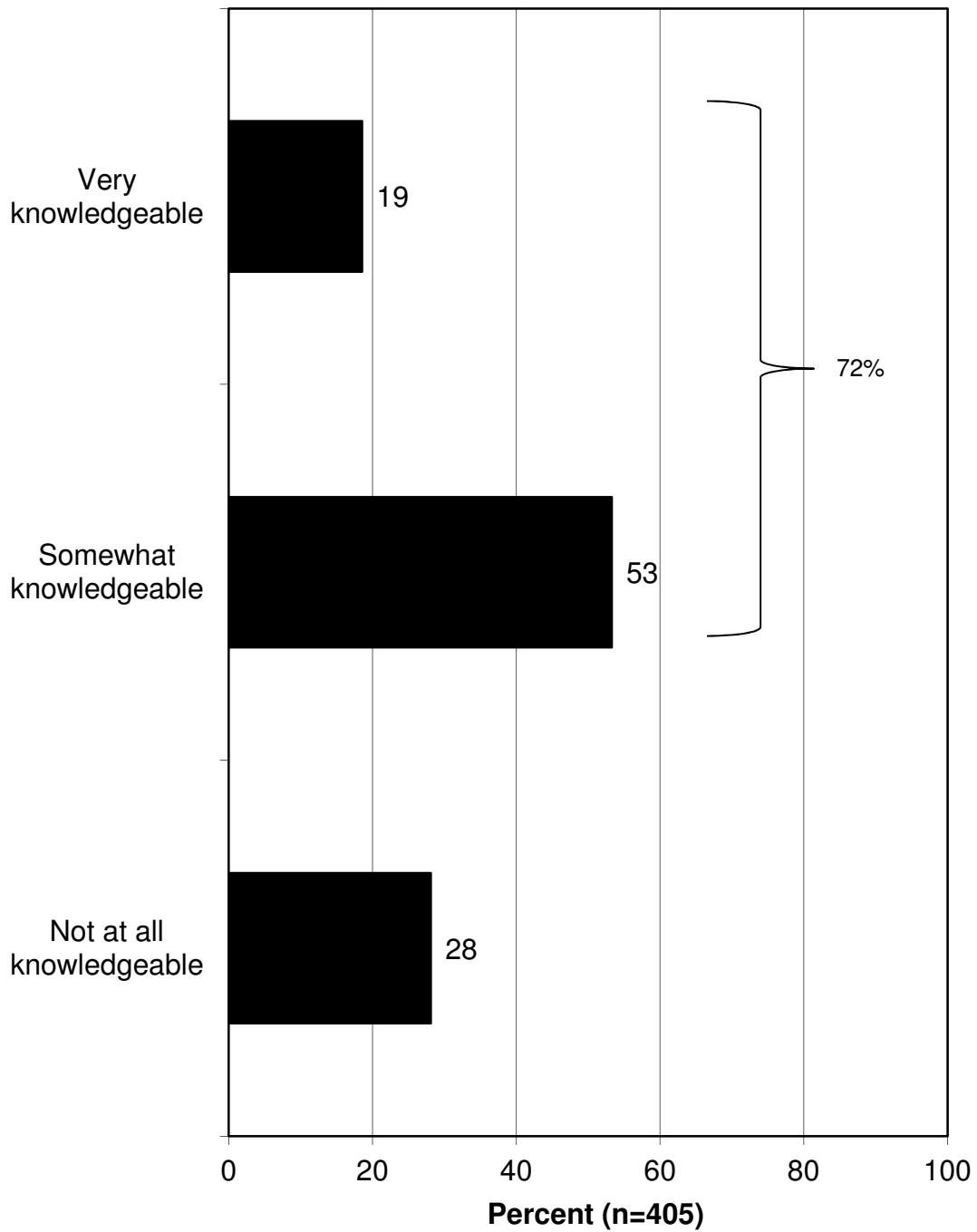
### Q24. What is the first thing that comes to your mind when you think about Fort A.P. Hill?



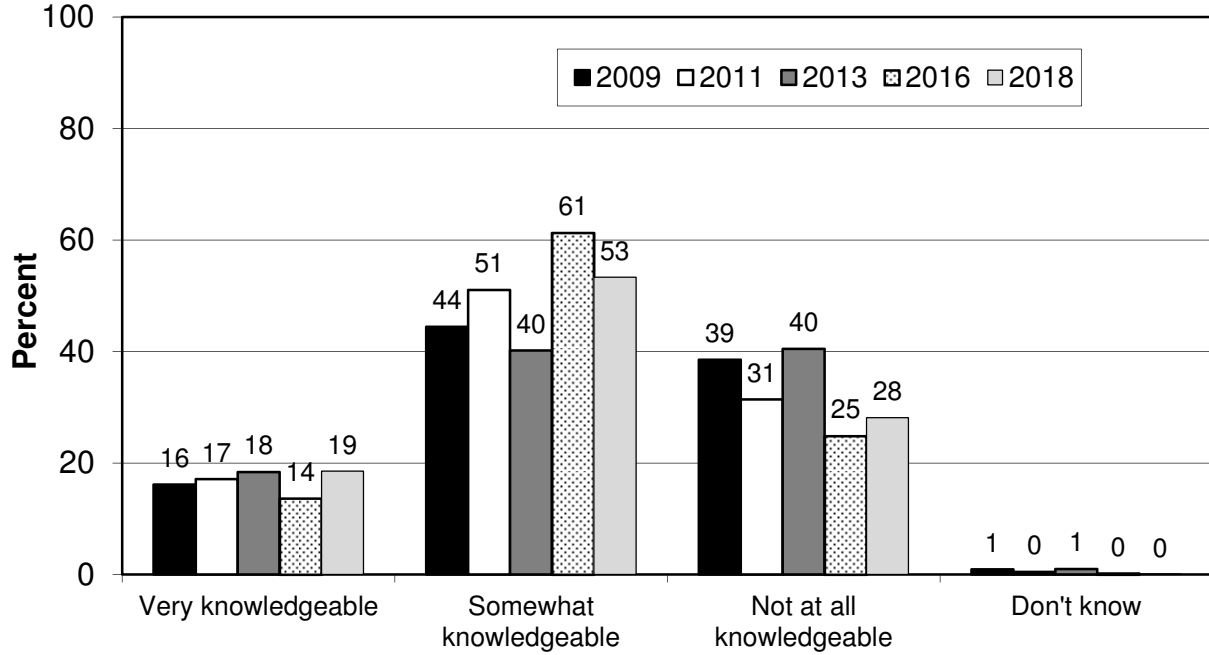
**Q24. What is the first thing that comes to your mind when you think about Fort A.P. Hill? (Shows only those with at least 3% in any given year.)**



**Q26. How knowledgeable would you say you are about the military activities at Fort A.P. Hill?**



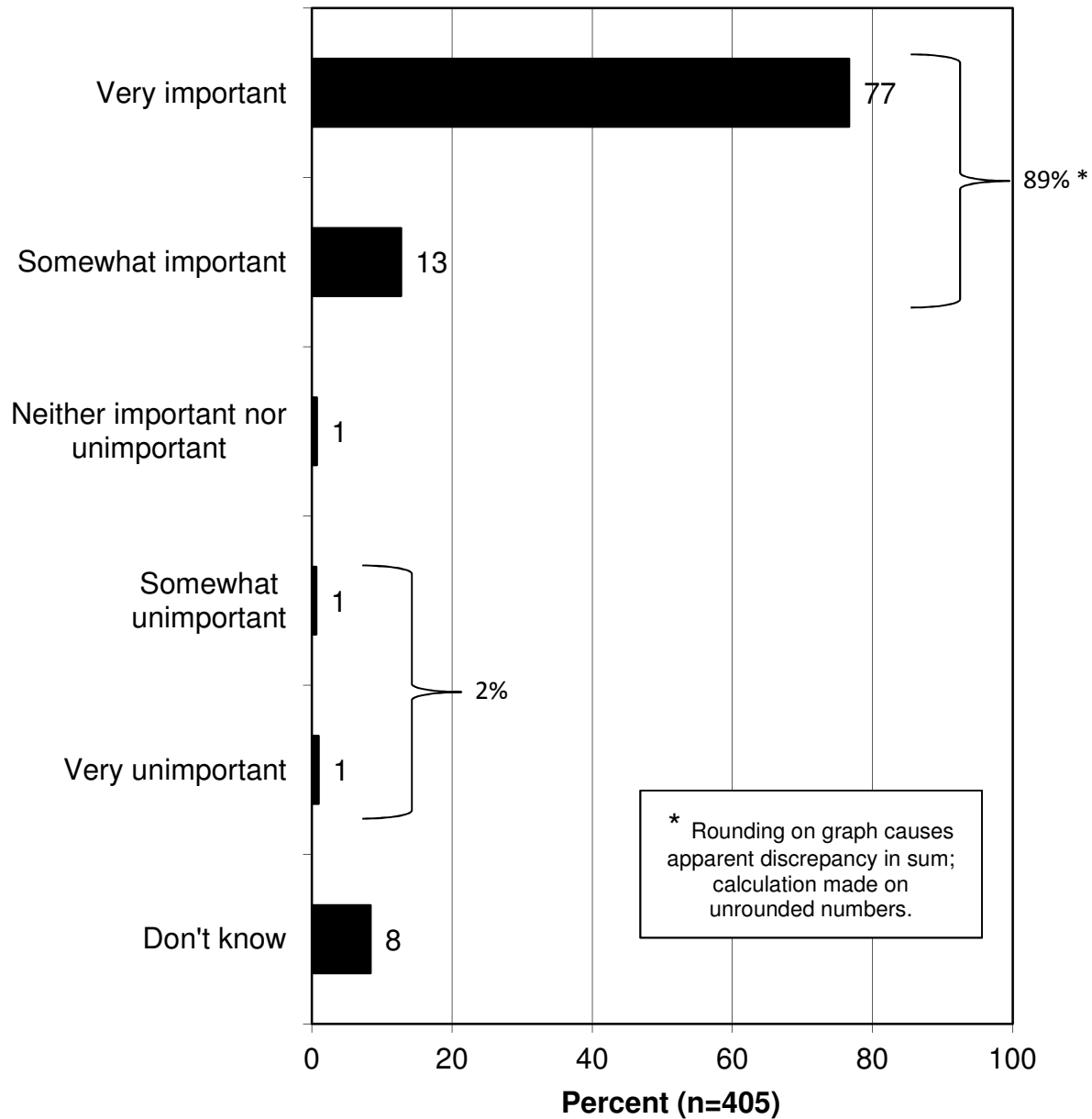
**Q26. How knowledgeable would you say you are about the military activities at Fort A.P. Hill?**



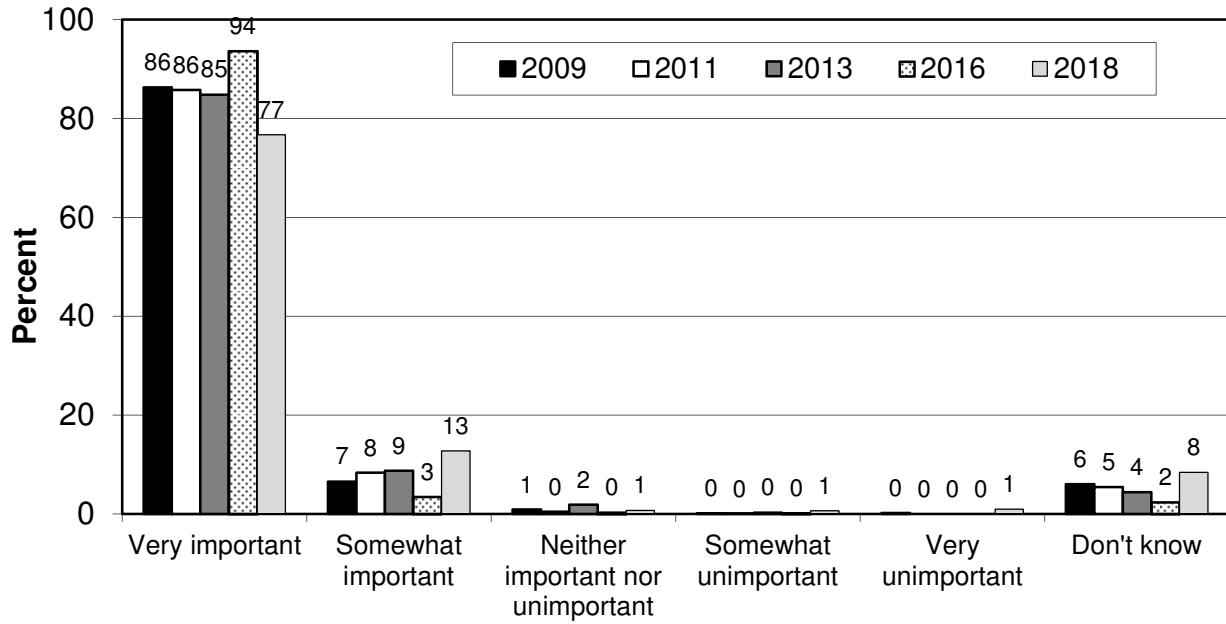
	2009	2011	2013	2016	2018
Overall knowledgeable (very or somewhat)	61	68	59	75	72

Rounding may cause apparent discrepancies in sums; calculations made on unrounded numbers.

**Q27. In general, do you think the combat and combat support training conducted at Fort A.P. Hill is important or unimportant to national defense?**



**Q27. In general, do you think the combat and combat support training conducted at Fort A.P. Hill is important or unimportant to national defense?**



	2009	2011	2013	2016	2018
Important	93	94	94	97	89
Unimportant	0	0	0	0	2

Rounding may cause apparent discrepancies in sums; calculations made on unrounded numbers.

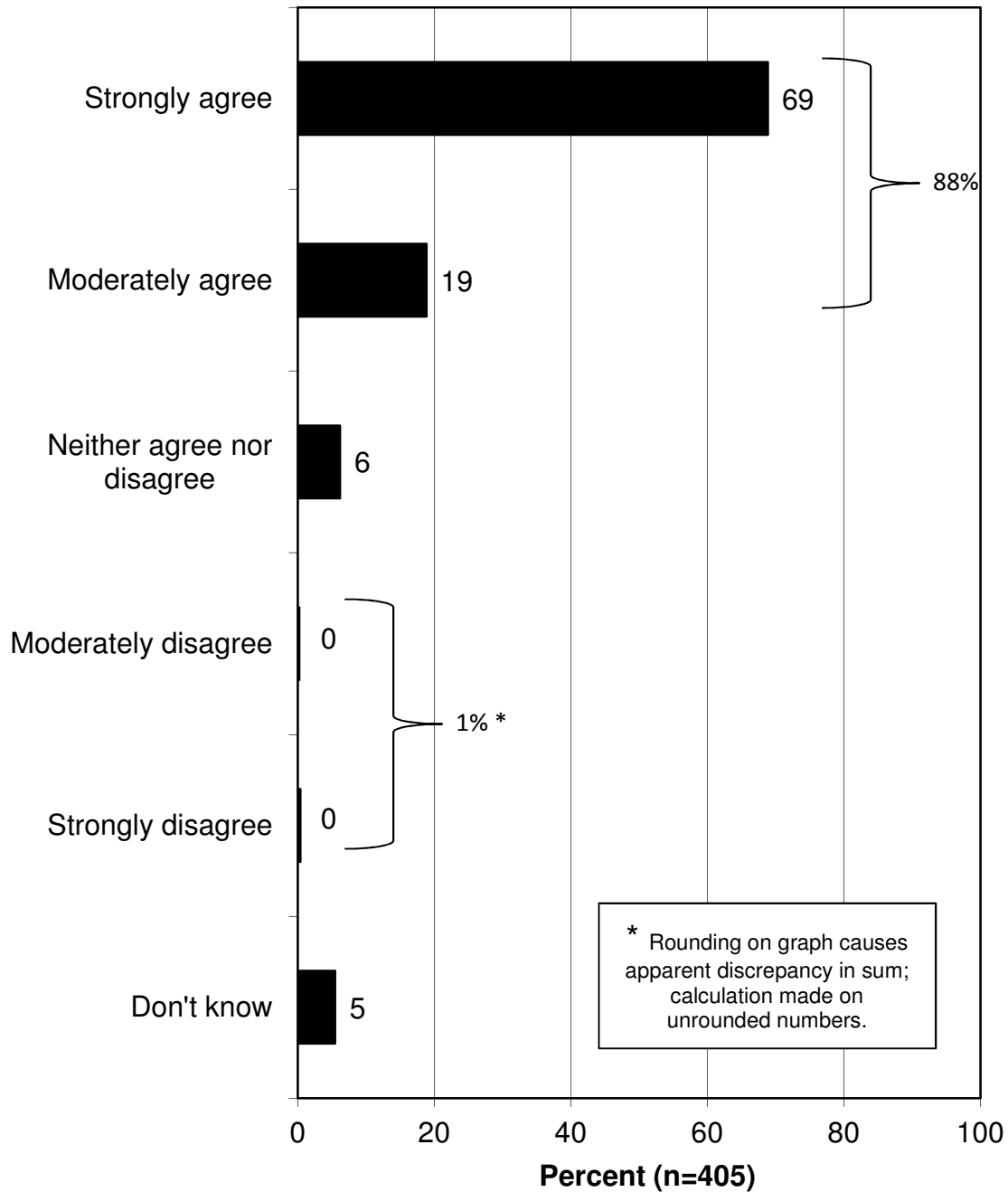


## **OPINIONS ON THE EFFECT THAT FORT A.P. HILL HAS ON THE COMMUNITY AND EFFORTS TO REDUCE CONFLICTS WITH THE COMMUNITY**

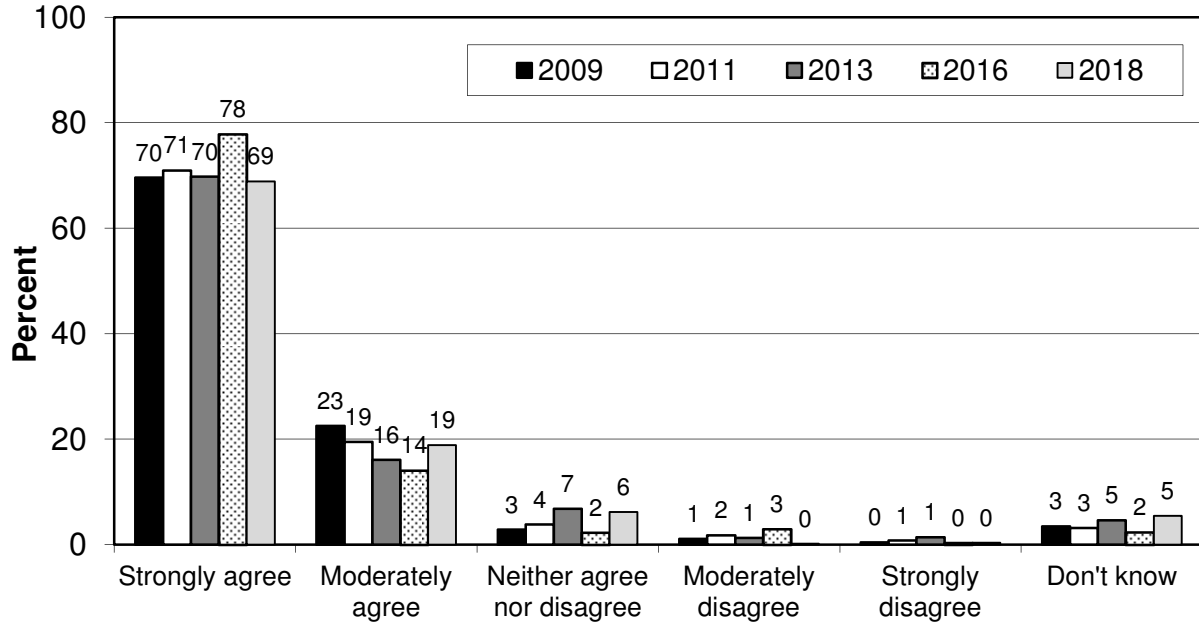
- The overwhelming majority of residents (88%) agree that Fort A.P. Hill is a good neighbor to the surrounding communities, with 69% *strongly* agreeing.
  - Overall agreement has been fairly constant over the survey years.
  
- About three quarters of residents (76%) say that military or civilian personnel associated with Fort A.P. Hill have a positive impact on the surrounding communities, while only 1% say that they have a negative impact.
  - The percentage saying *positive* in 2018 (76%) is right in the middle of the range of the previous surveys, which went from 72% in 2009 to 80% in 2016.
  
- More than two thirds of residents (68%) were *not* aware before the survey that incompatible development on the borders of Fort A.P. Hill is a potential issue, and slightly less (57%) were *not* aware before the survey that incompatible development near military installations is an issue nationwide.
  - The percentage saying *yes* in 2018 regarding the borders of Fort A.P. Hill establishes the low end of the range at 30%; the high end of the range was in 2016 (37%), with the rest of the years ranging from 32% to 34%.
  - When considering installations nationwide, the percentage saying *yes* in 2018 (36%) is consistent with all other survey years, which range from 33% to 37%.
  
- A majority of residents (57%) would support efforts to reduce incompatible development near the borders of Fort A.P. Hill, with 29% *strongly* supporting such efforts. Only 8% would oppose. The remaining residents responded neutrally or did not know.
  - The percentage of residents in 2018 who said that they supported efforts to reduce incompatible development near the borders of Fort A.P. Hill matched the previous low (57%); however, the percentage in opposition in 2018 (8%) is the lowest it has been of all five surveys in the trends analysis. So less support this year does not equal more opposition, just more *neither* and *don't know* responses.

- Residents were asked about their support for or opposition to five measures (presented in random order to eliminate order bias in the survey) that could be taken to reduce incompatible development near Fort A.P. Hill. This is in addition to their support for or opposition to efforts to reduce incompatible development overall, which was reported above but is shown on the graph of this series of questions for comparison. The five measures that were asked about are as follows:
  - Zoning regulations to preserve the rural character of the land surrounding Fort A.P. Hill.
  - A comprehensive plan that designates land adjacent to Fort A.P. Hill for rural/agricultural use.
  - A comprehensive plan that limits high-density residential development adjacent to Fort A.P. Hill.
  - Money and tax advantages to willing landowners for establishing conservation easements.
  - The local government purchasing development rights from willing landowners to preserve the rural character of the area.
  
- Of the five measures discussed above, the most support overall is for zoning regulations in the area surrounding Fort A.P. Hill (56% *strongly* support, and 77% of residents support this measure overall) and a comprehensive plan that designates land adjacent to Fort A.P. Hill for rural/agricultural use (53% *strongly* support, 80% support overall).
  - All other measures also have a majority in support of them. It is notable that all the specific measures, compared to the overall but non-specific wording, “efforts to reduce incompatible development,” garnered more support. In other words, residents were more willing to support a specific action than an open-ended but non-specific action.
    - Compared to the percentage of residents who supported these measures in other years, the percentages of residents in support in 2018 are similar for all items but one: limiting high-density development had its lowest support in 2018.
  
- The survey asked about awareness of the Fort A.P. Hill Joint Land Use study: just over a quarter of residents (27%) had heard of it prior to the survey.
  - This question was newly asked in 2016; the percentages are nearly the same in 2018 as in 2016.

**Q28. Overall, do you agree or disagree that Fort A.P. Hill is a good neighbor to the surrounding communities?**



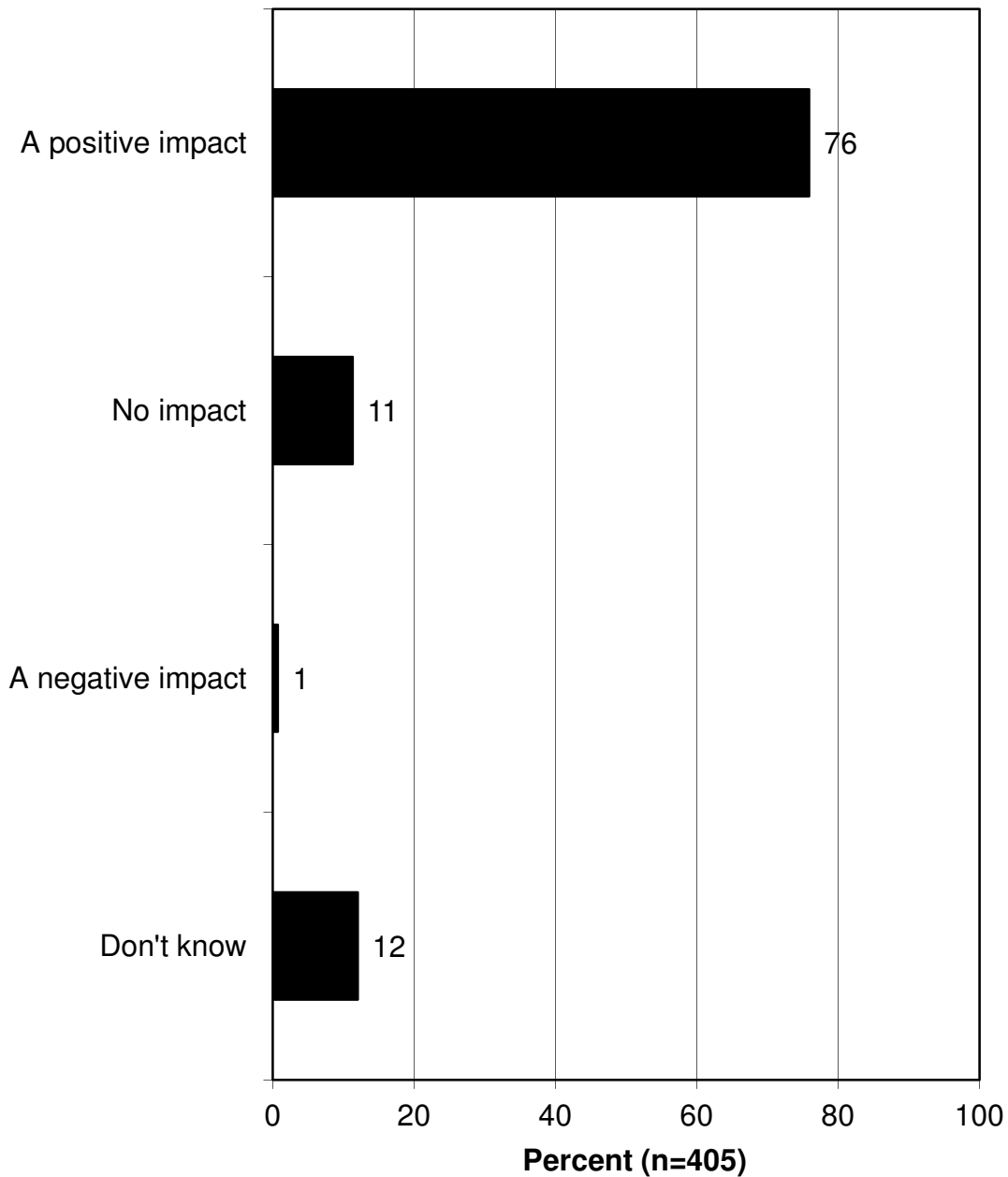
**Q28. Overall, do you agree or disagree that Fort A.P. Hill is a good neighbor to the surrounding communities?**



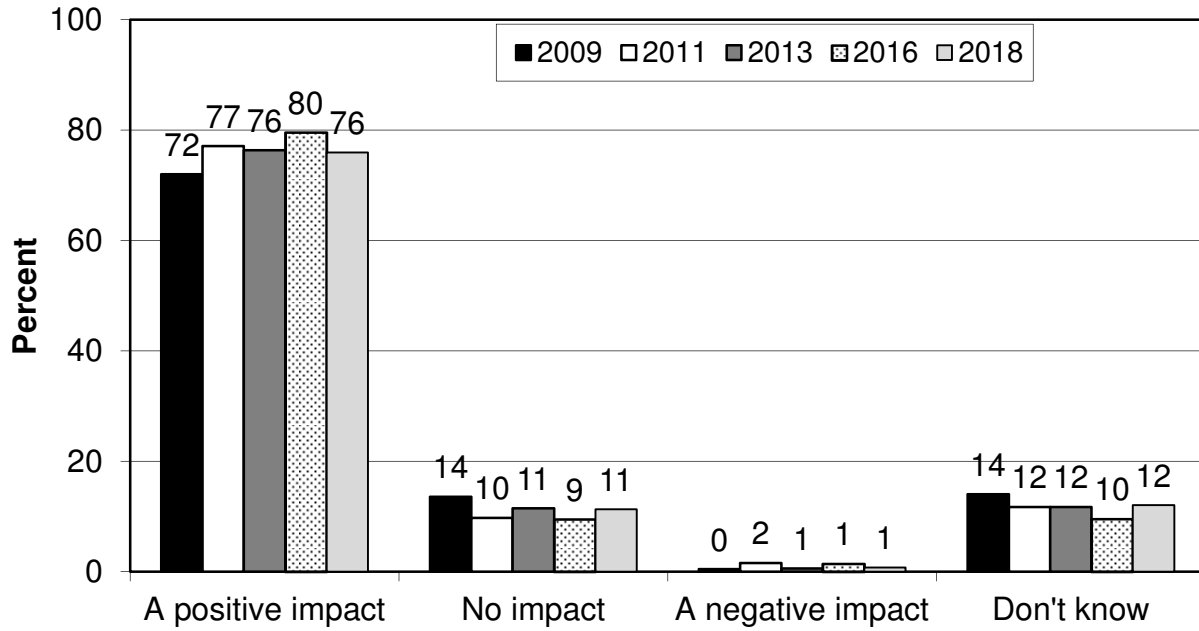
	2009	2011	2013	2016	2018
Agree	92	90	86	92	88
Disagree	2	3	3	3	1

Rounding may cause apparent discrepancies in sums; calculations made on unrounded numbers.

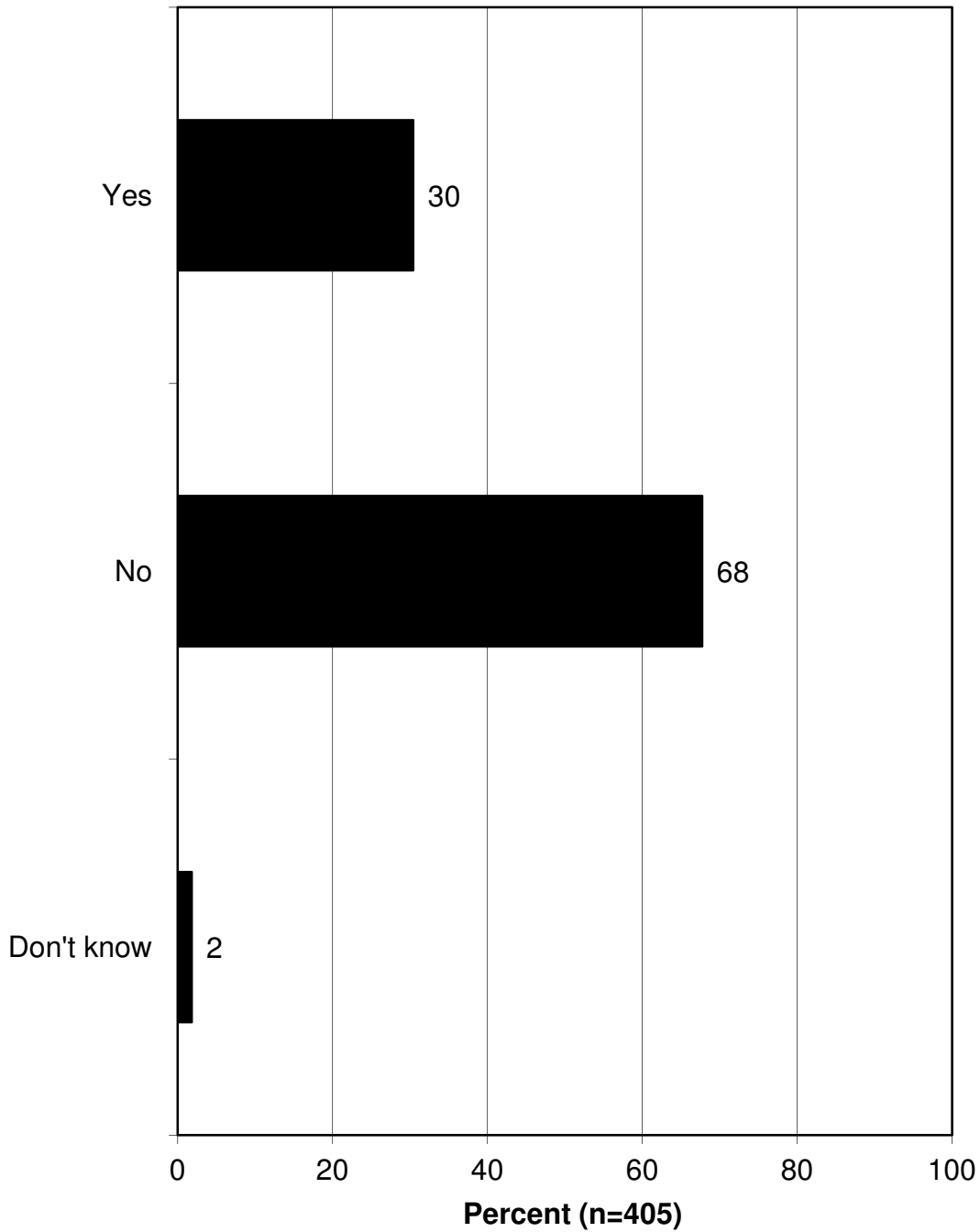
**Q54. Would you say that the military or civilian personnel from Fort A.P. Hill have a positive impact, a negative impact, or no impact on the surrounding communities?**



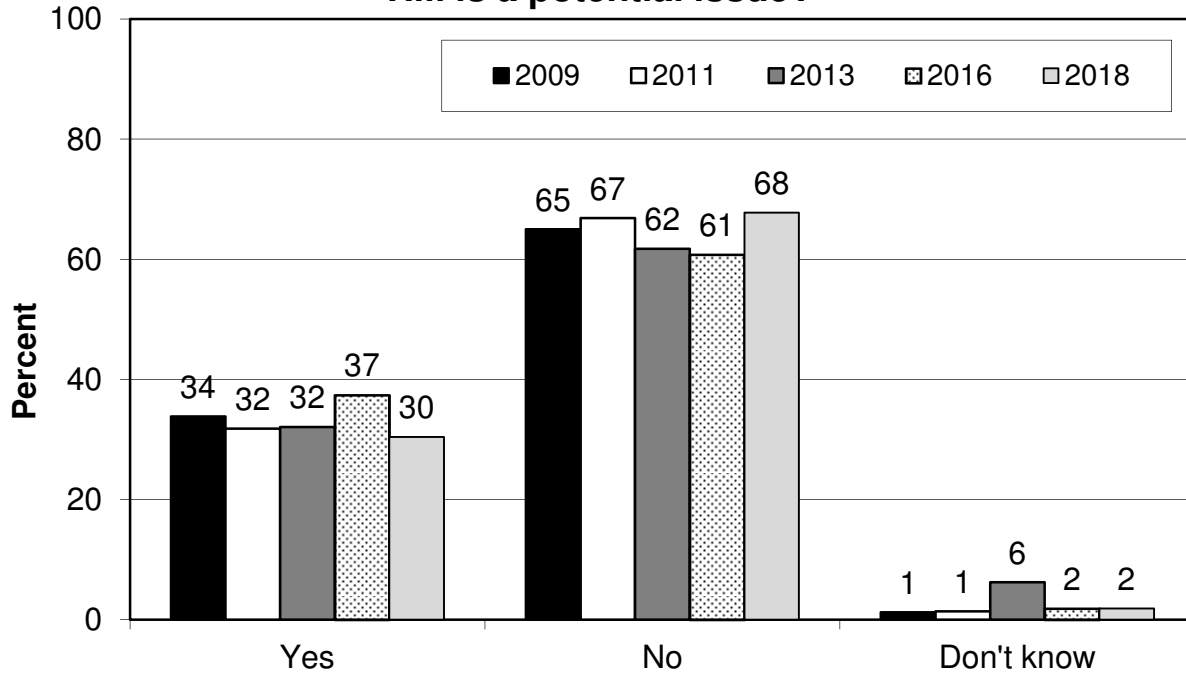
**Q54. Would you say that the military or civilian personnel from Fort A.P. Hill have a positive impact, a negative impact, or no impact on the surrounding communities?**



**Q55. Before this survey, were you aware that incompatible development on the borders of Fort A.P. Hill is a potential issue?**

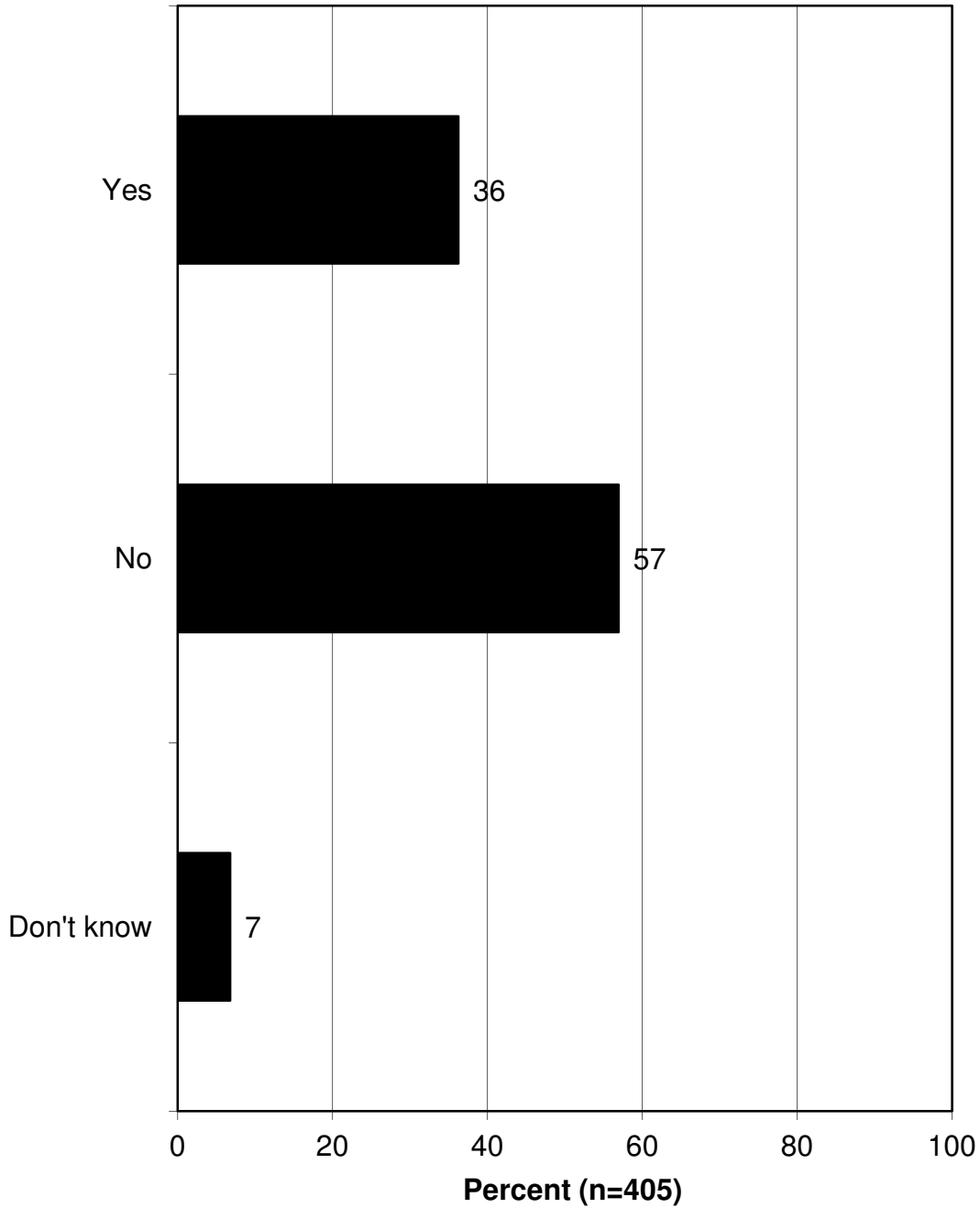


**Q55. Before this survey, were you aware that incompatible development on the borders of Fort A.P. Hill is a potential issue?**

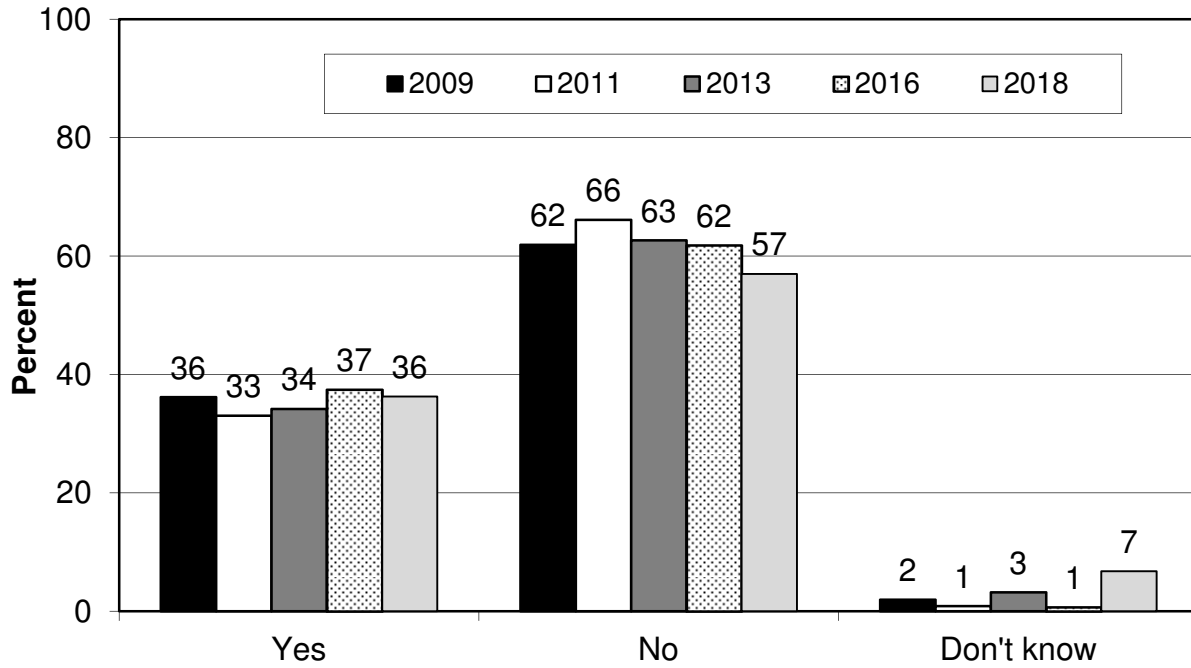




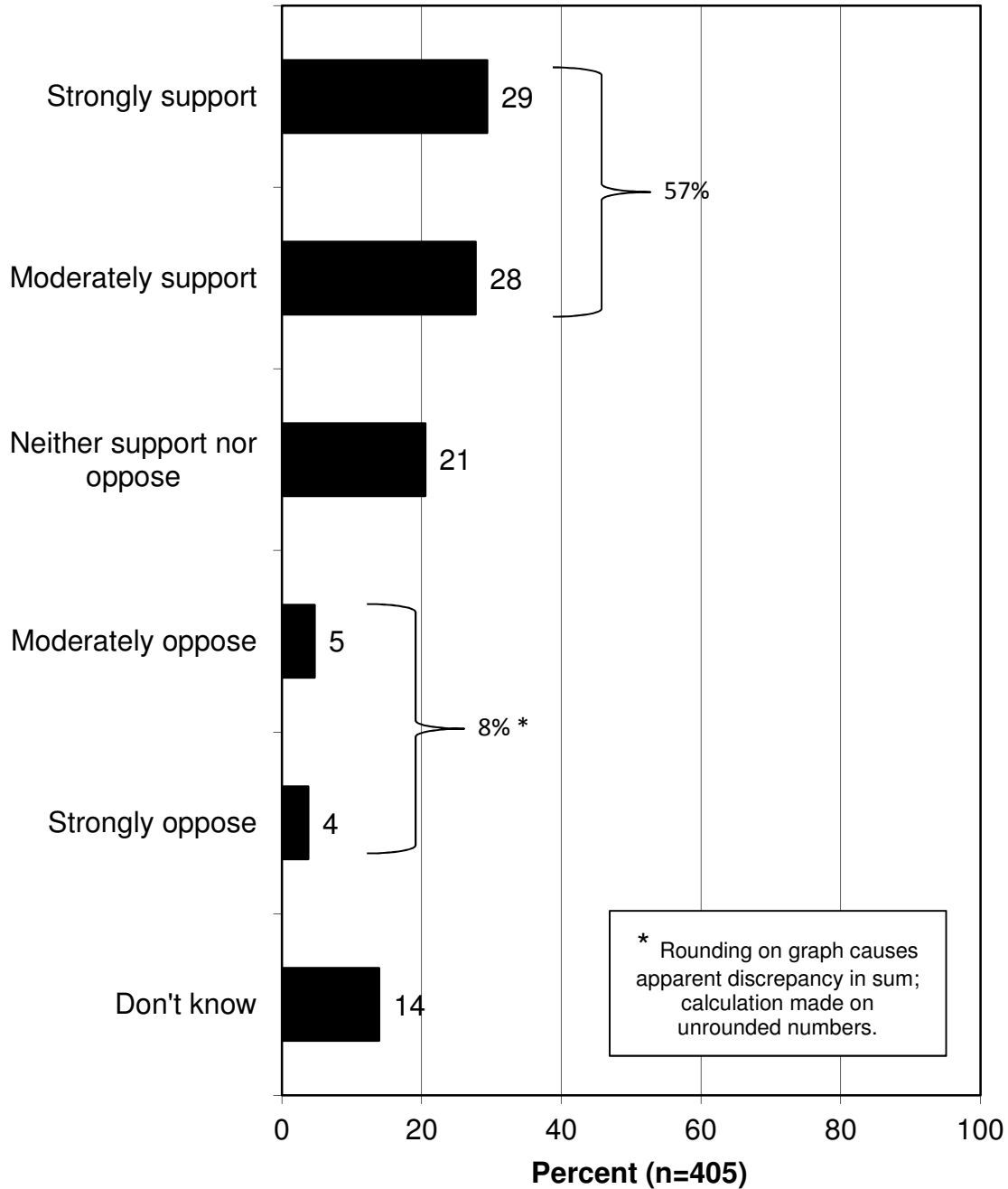
**Q56. Before this survey, were you aware that incompatible development near military installations is an issue nationwide?**



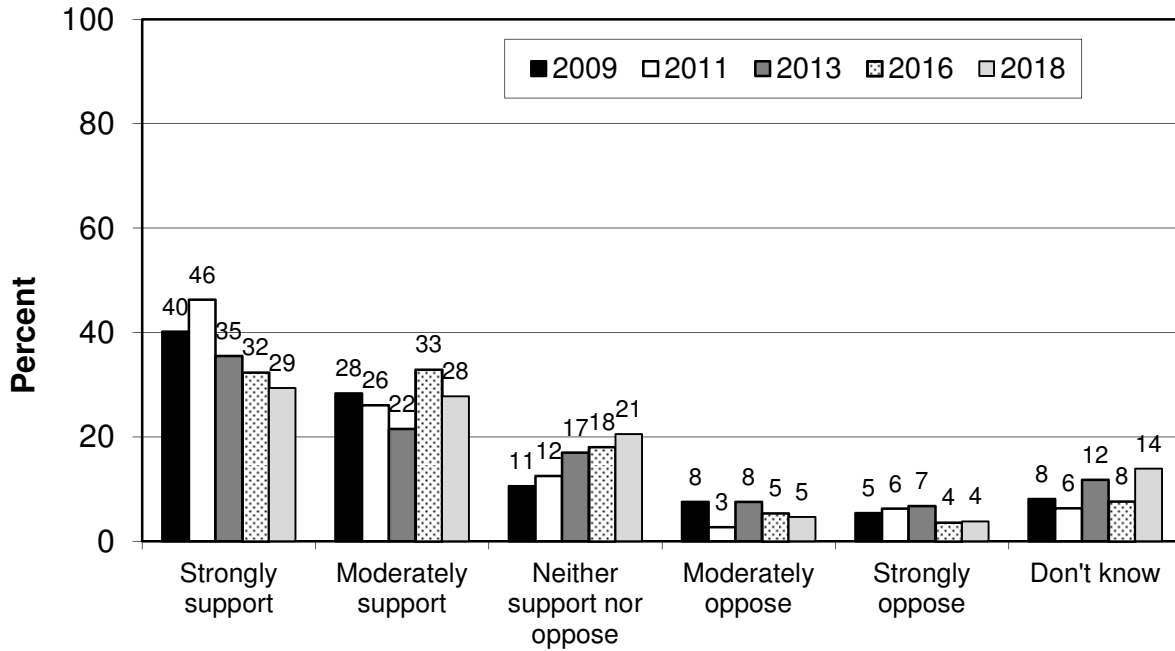
**Q56. Before this survey, were you aware that incompatible development near military installations is an issue nationwide?**



**Q58. Would you support or oppose efforts to reduce incompatible development near the borders of Fort A.P. Hill?**



**Q58. Would you support or oppose efforts to reduce incompatible development near the borders of Fort A.P. Hill?**

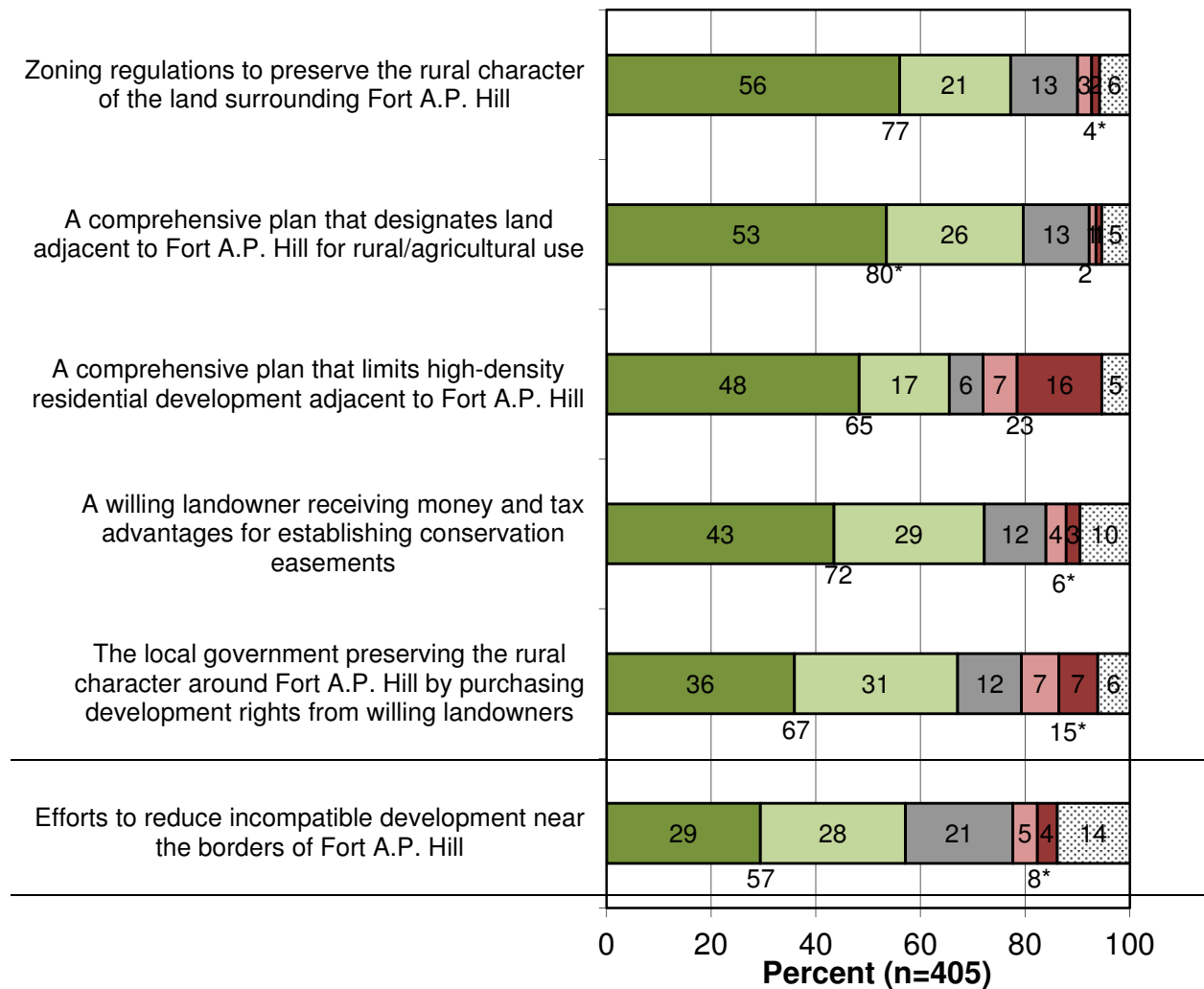
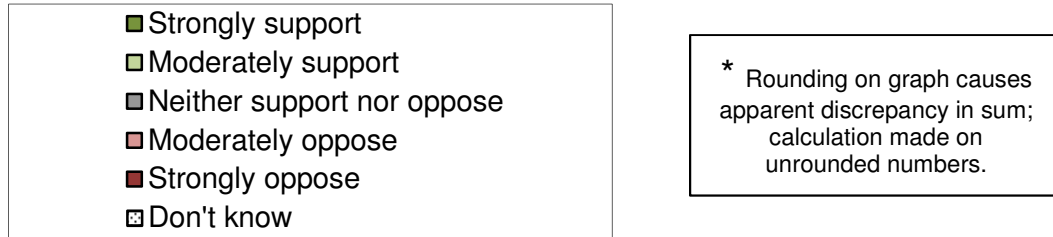


	2009	2011	2013	2016	2018
Support	68	72	57	65	57
Opposition	13	9	14	9	8

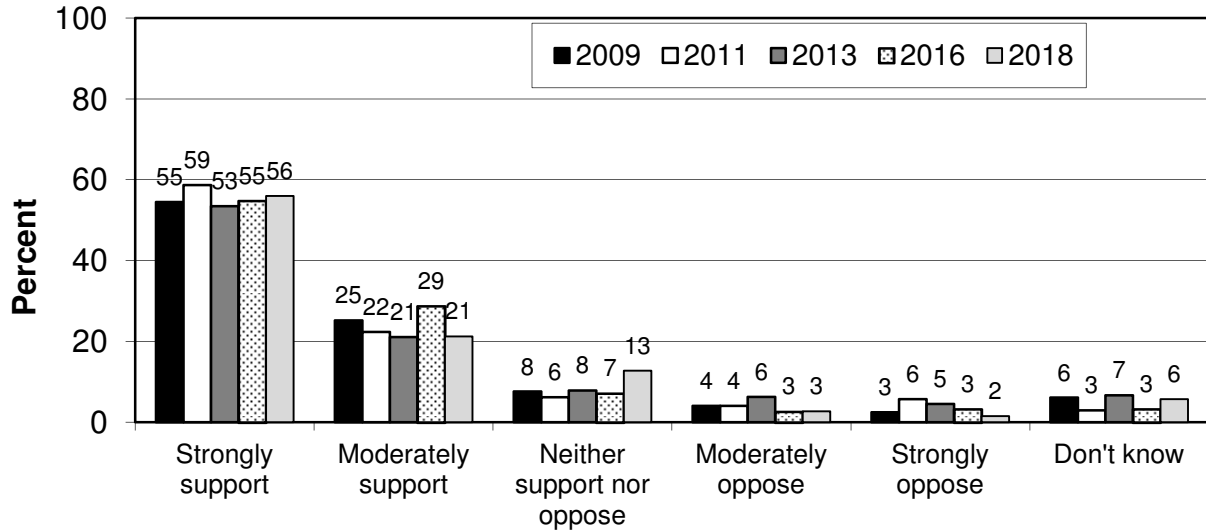
Rounding may cause apparent discrepancies in sums; calculations made on unrounded numbers.

Sums are shown for support and opposition below each bar. Results regarding support/opposition to efforts overall that were reported on their own are also shown on this graph for comparison.

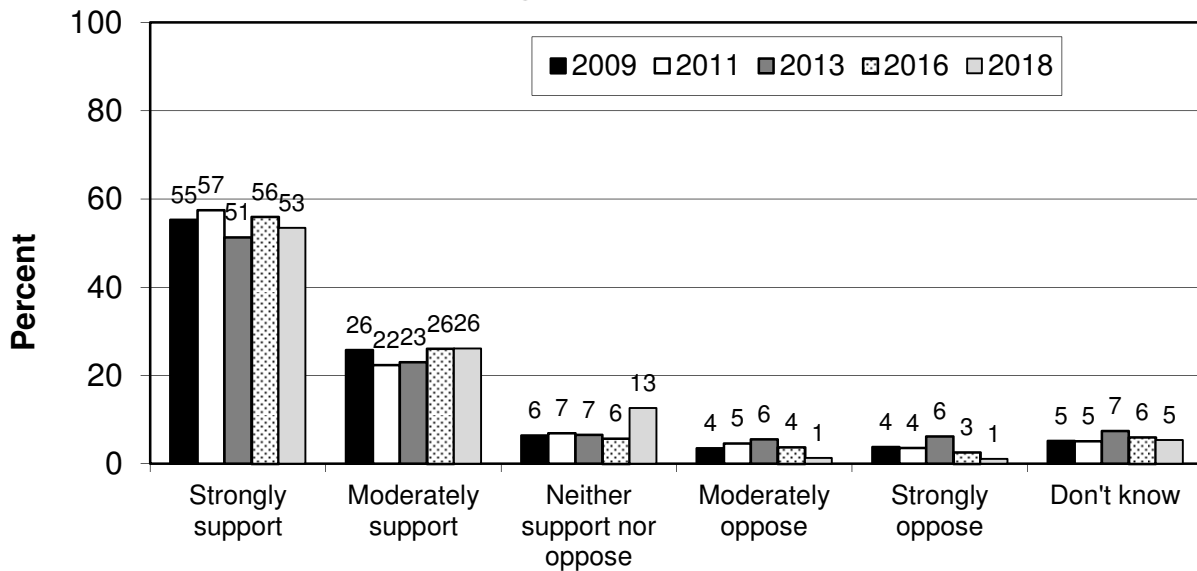
### Q58-63. Percent of residents who support or oppose the following measures that may be considered to reduce incompatible development near the borders of Fort A.P. Hill.



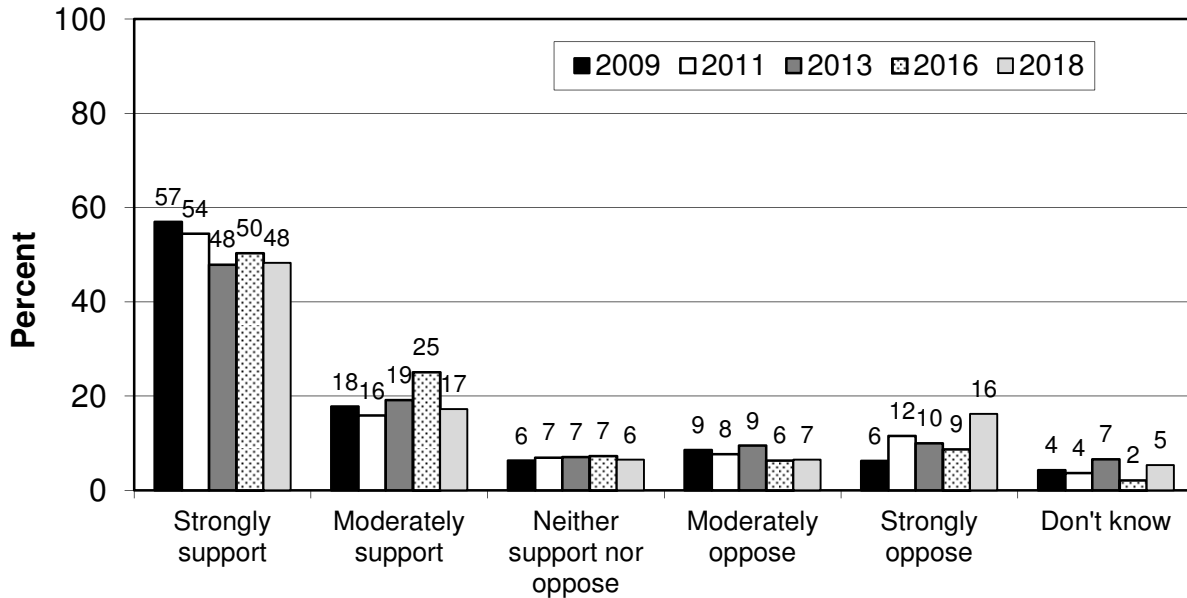
**Q59. Would you support or oppose zoning regulations to preserve the rural character of the land surrounding Fort A.P. Hill as a measure to reduce incompatible development?**



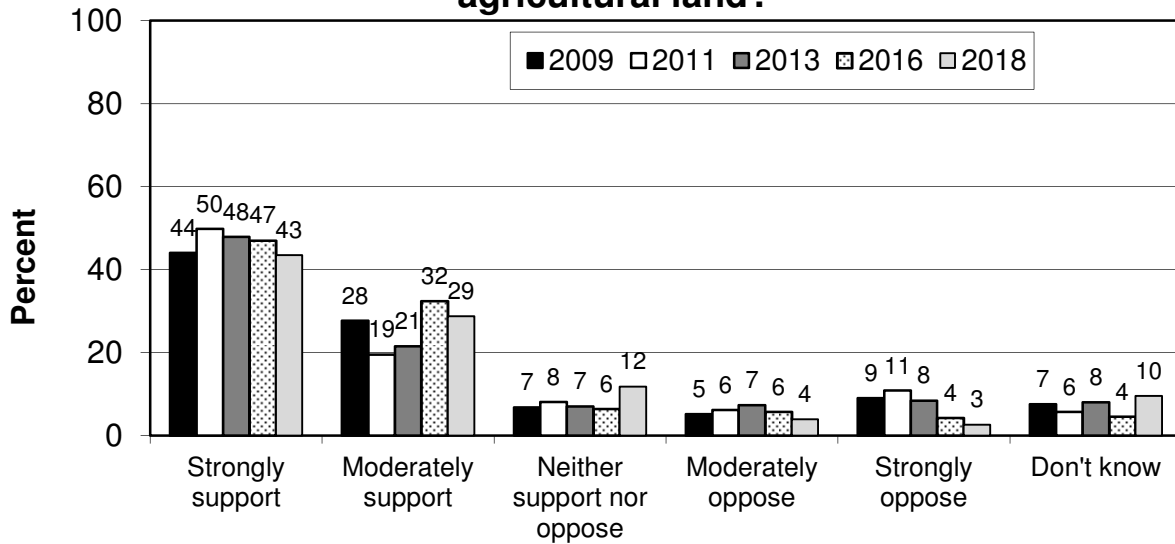
**Q60. Would you support or oppose a comprehensive plan that designates land adjacent to Fort A.P. Hill for rural/agricultural use?**



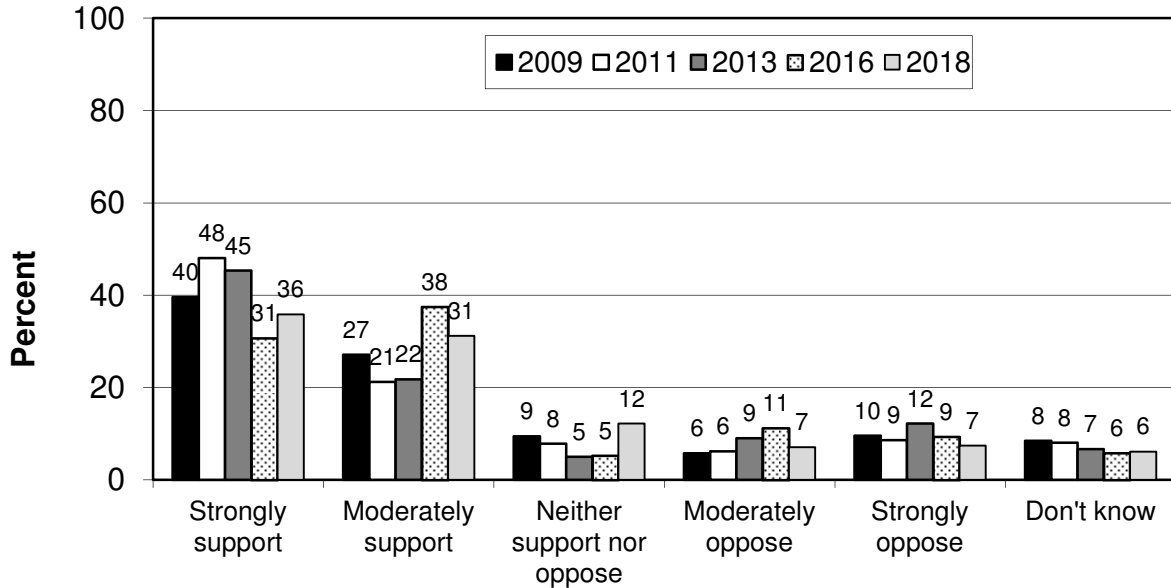
**Q61. Would you support or oppose a comprehensive plan that limits high-density residential development adjacent to Fort A.P. Hill?**



**Q62. Would you support or oppose a willing landowner receiving money and tax advantages for establishing conservation easements, as a measure to reduce incompatible development and preserve rural, agricultural land?**



**Q63. As a measure to reduce incompatible development, would you support or oppose the local government preserving the rural character around Fort A.P. Hill by purchasing development rights from willing landowners?**

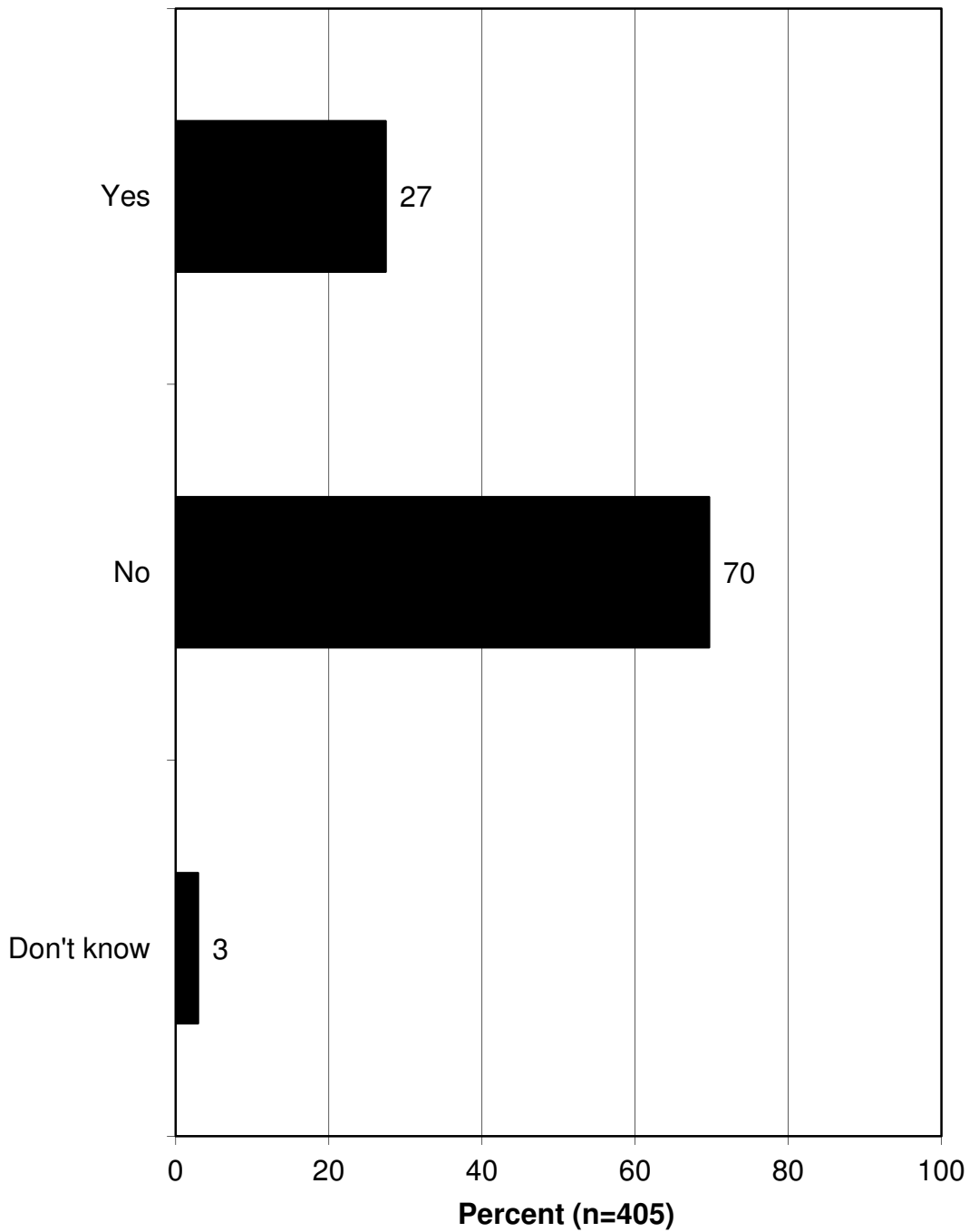


		2009	2011	2013	2016	2018
Q59. Zoning regs. re: rural	Support	80	81	75	84	77
	Opposition	7	10	11	6	4
Q60. Comp. plan re: rural and ag. use	Support	81	80	74	82	80
	Opposition	7	8	12	6	2
Q61. Comp. plan re: high-density dev.	Support	75	70	67	75	65
	Opposition	15	19	19	15	23
Q62. Tax advantages for cons. easements	Support	72	69	69	79	72
	Opposition	14	17	16	10	6
Q63. Govt. purchase dev. rights	Support	67	69	67	68	67
	Opposition	15	15	21	21	15

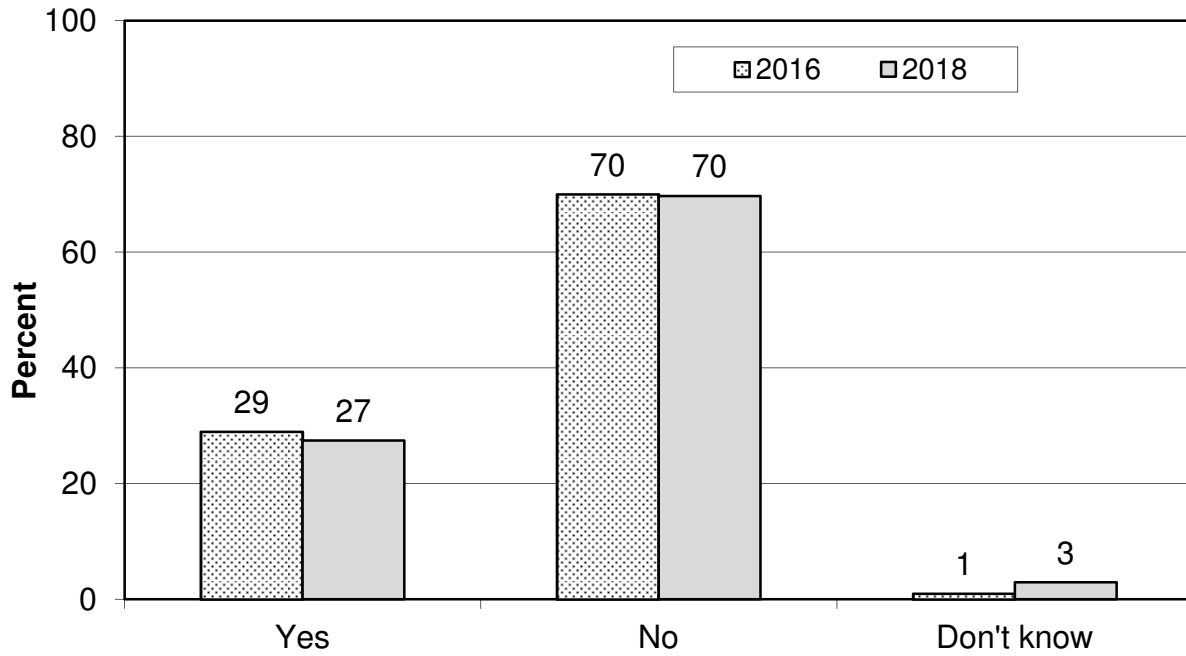
Rounding may cause apparent discrepancies in sums; calculations made on unrounded numbers.



**Q57. Before this survey, had you ever heard of the Fort A.P. Hill Joint Land Use study?**



**Q57. Before this survey, had you ever heard of the Fort A.P. Hill Joint Land Use study?**

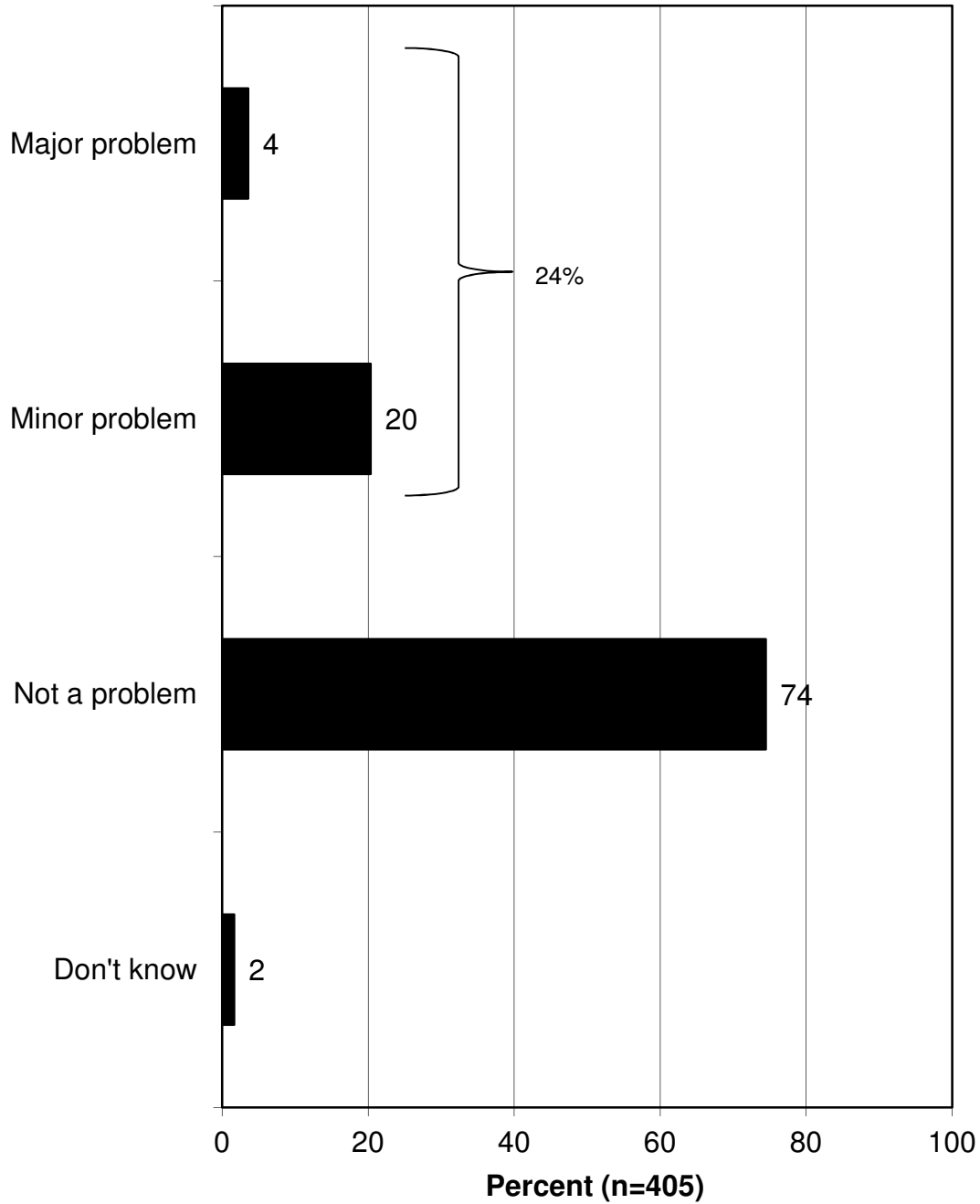


Previous survey years are not shown because this question was first asked in 2016.

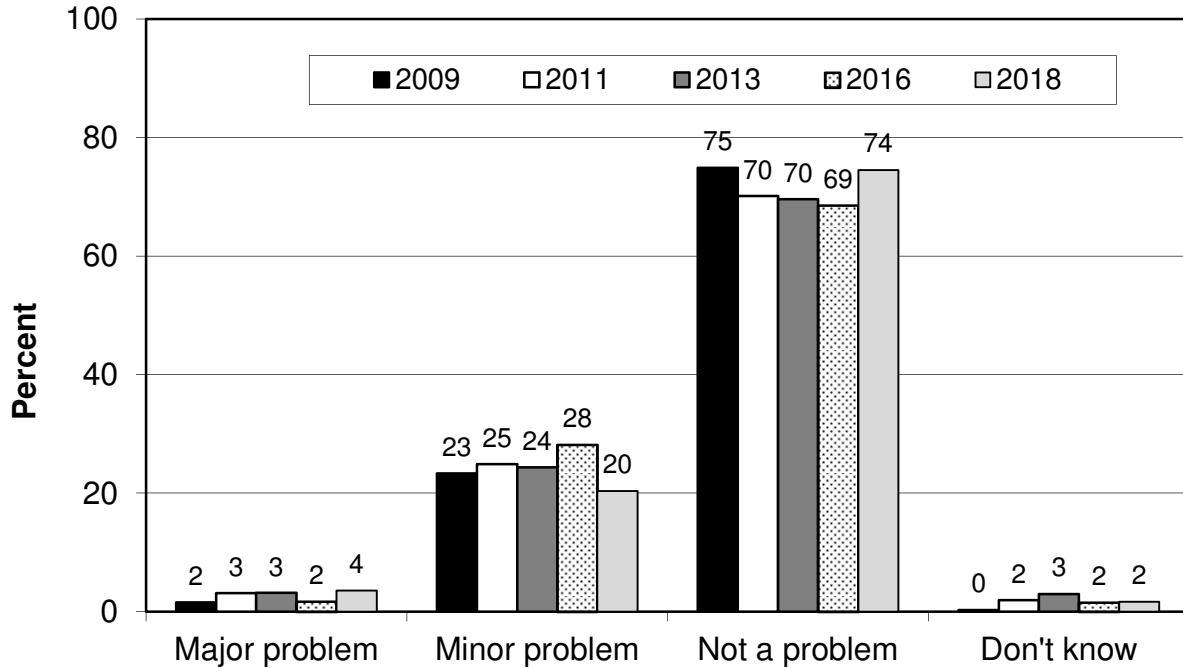
## **NOISE AT FORT A.P. HILL**

- While three quarters of residents (74%) say that noise from Fort A.P. Hill is *not* a problem, about a quarter (24%) indicate that noise is a problem. However, note that mostly it is considered a *minor* problem rather than a *major* problem.
  - The trends analysis found that 2018 had the lowest percentage of residents (24%) who said that noise is a problem; the high was in 2016, at 30%.
  
- The frequency of noise disturbances was also asked about. Just under three quarters of residents (73%) *rarely* or *never* experience noise disturbances from Fort A.P. Hill. On the other hand, 26% *always* or *sometimes* experience noise disturbances.
  - The trends analysis shows no directional trend, with always/sometimes varying from 24% to 36% (and 2018 being at the low end of that range) and rarely/never varying from 63% to 73% (and 2018—at 73%—being at the high end of that range, which was matched three times).
  
- Those who indicate that noise from Fort A.P. Hill is a major or minor problem most commonly name artillery exercises or explosions (62%), aircraft including helicopters (30%), and small weapons firing (25%) as the causes of the noise.
  - Trends show quite a lot of variation from year to year, with little overall consistency, in this open-ended question.
  
- Among those who say that noise from Fort A.P. Hill is a *major* problem, shaking of the house is by far the most common response (75%), when residents are asked to name the specific effects, distantly followed by disturbance of sleep (41%).
  - Like the open-ended question above, the trends for this show quite a lot of variation.
  
- Regardless of whether they had experienced noise problems, all residents were asked about efforts to minimize noise. A large majority of residents (80%) think that Fort A.P. Hill does an *excellent* or *good* job of minimizing the effects of training noise on the surrounding communities. At the other end of the scale, 8% think it does a *fair* or *poor* job.
  - The trends found that 2018 was in the middle of the range of previous surveys.

**Q29. Would you say that noise from Fort A.P. Hill is a major problem, a minor problem, or not a problem?**



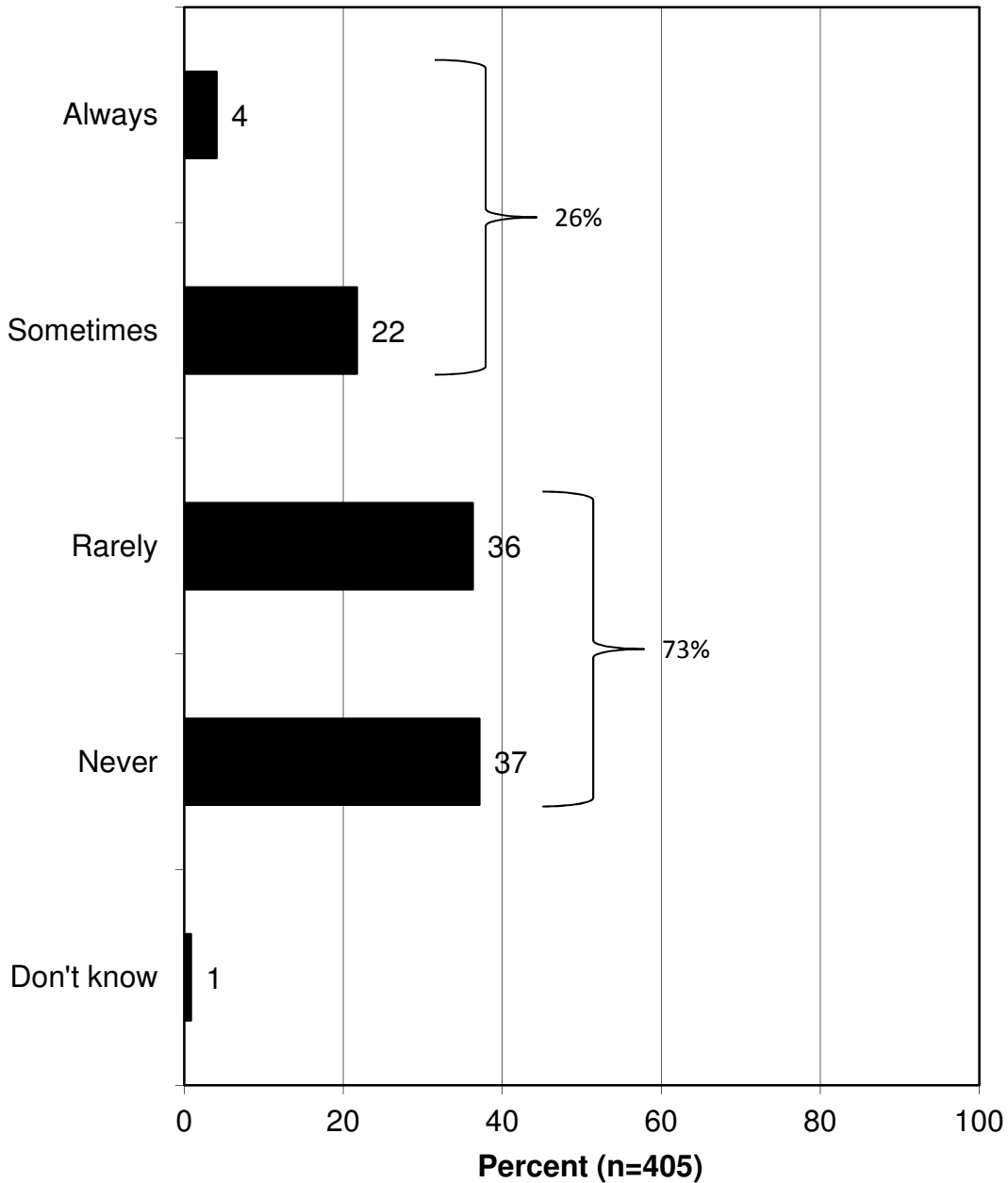
**Q29. Would you say that noise from Fort A.P. Hill is a major problem, a minor problem, or not a problem?**



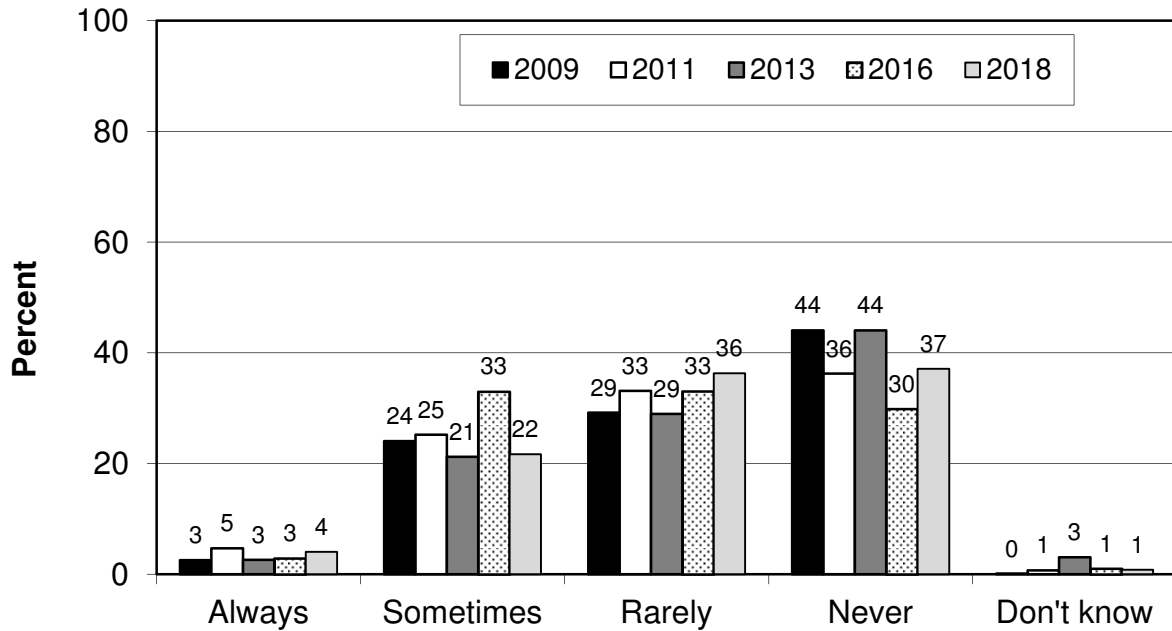
	2009	2011	2013	2016	2018
Overall problem (major or minor)	25	28	27	30	24

Rounding may cause apparent discrepancies in sums; calculations made on unrounded numbers.

**Q38. How frequently have you experienced noise disturbances from Fort A.P. Hill? Would you say that you are disturbed always, sometimes, rarely, or never?**



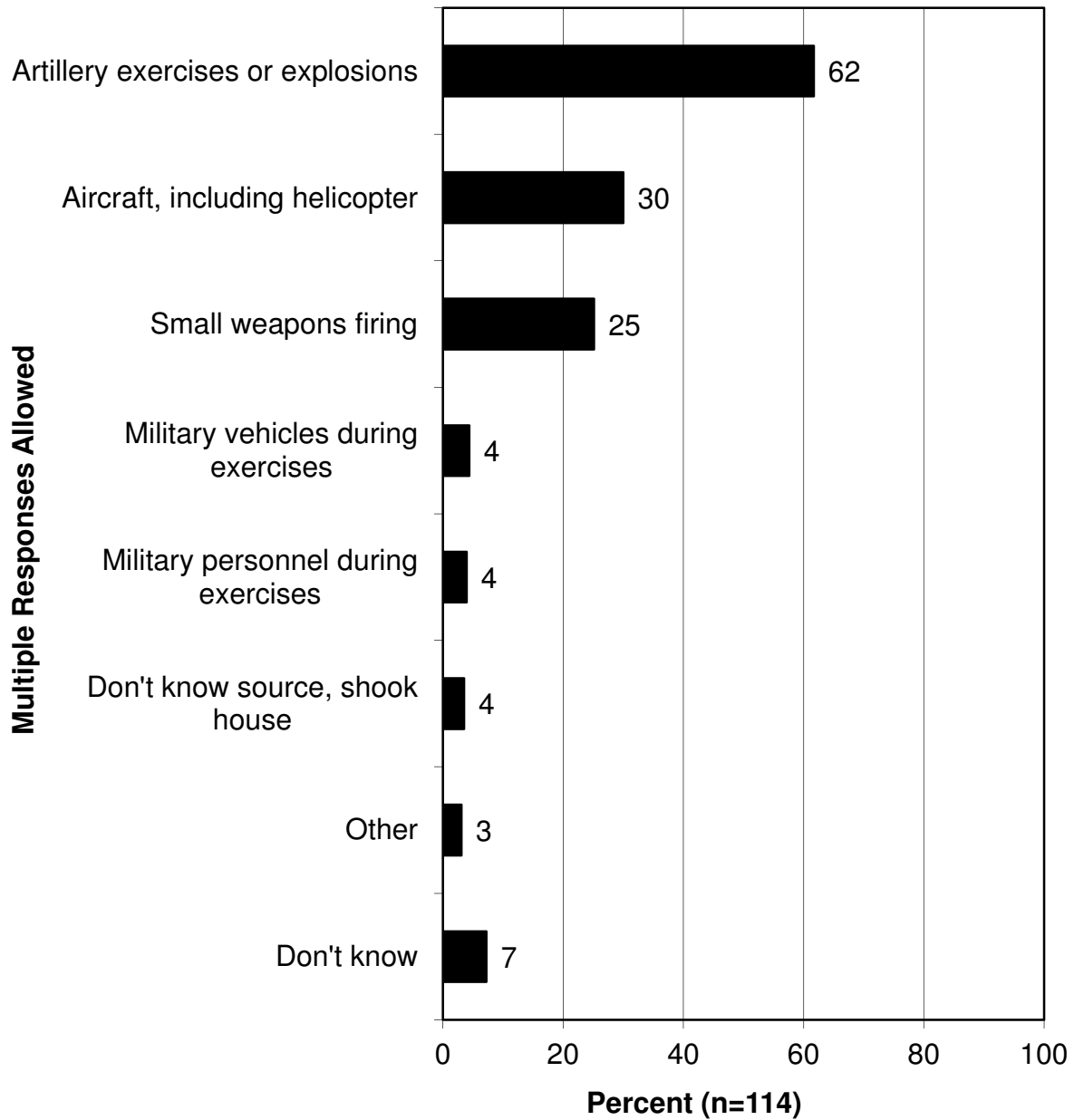
**Q38. How frequently have you experienced noise disturbances from Fort A.P. Hill? Would you say that you are disturbed always, sometimes, rarely, or never?**



	2009	2011	2013	2016	2018
Always/sometimes	27	30	24	36	26
Rarely/never	73	69	73	63	73

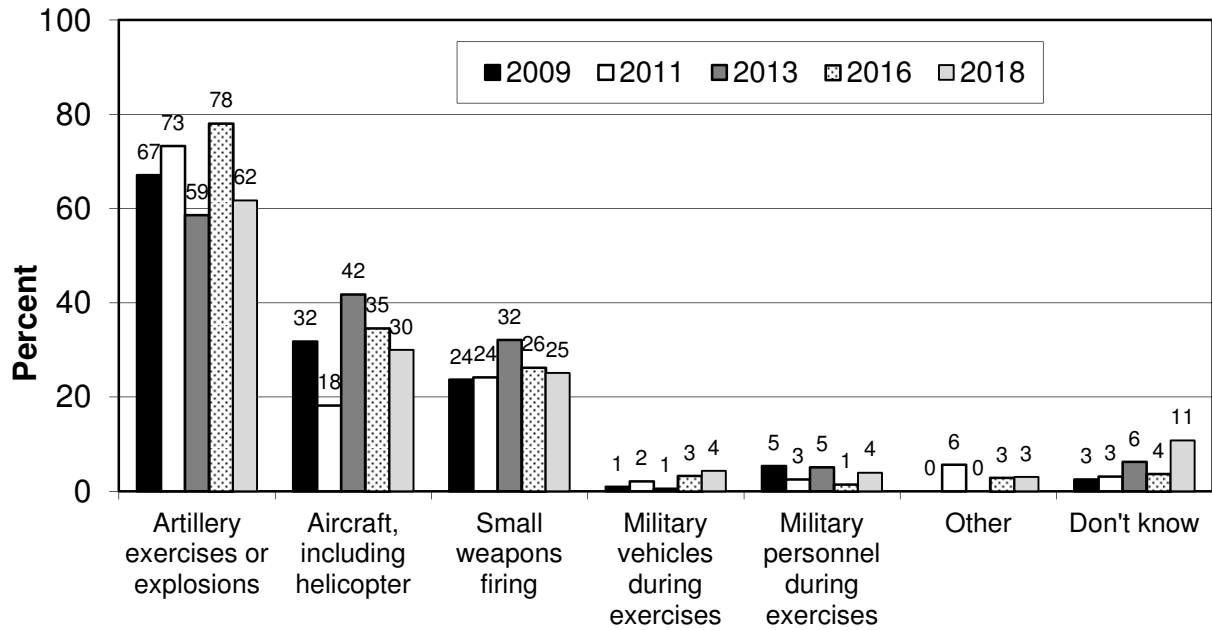
Rounding may cause apparent discrepancies in sums; calculations made on unrounded numbers.

**Q32. What was the nature of the noise disturbances you have experienced? (Asked of those who said the noise from Fort A.P. Hill is a problem.)**

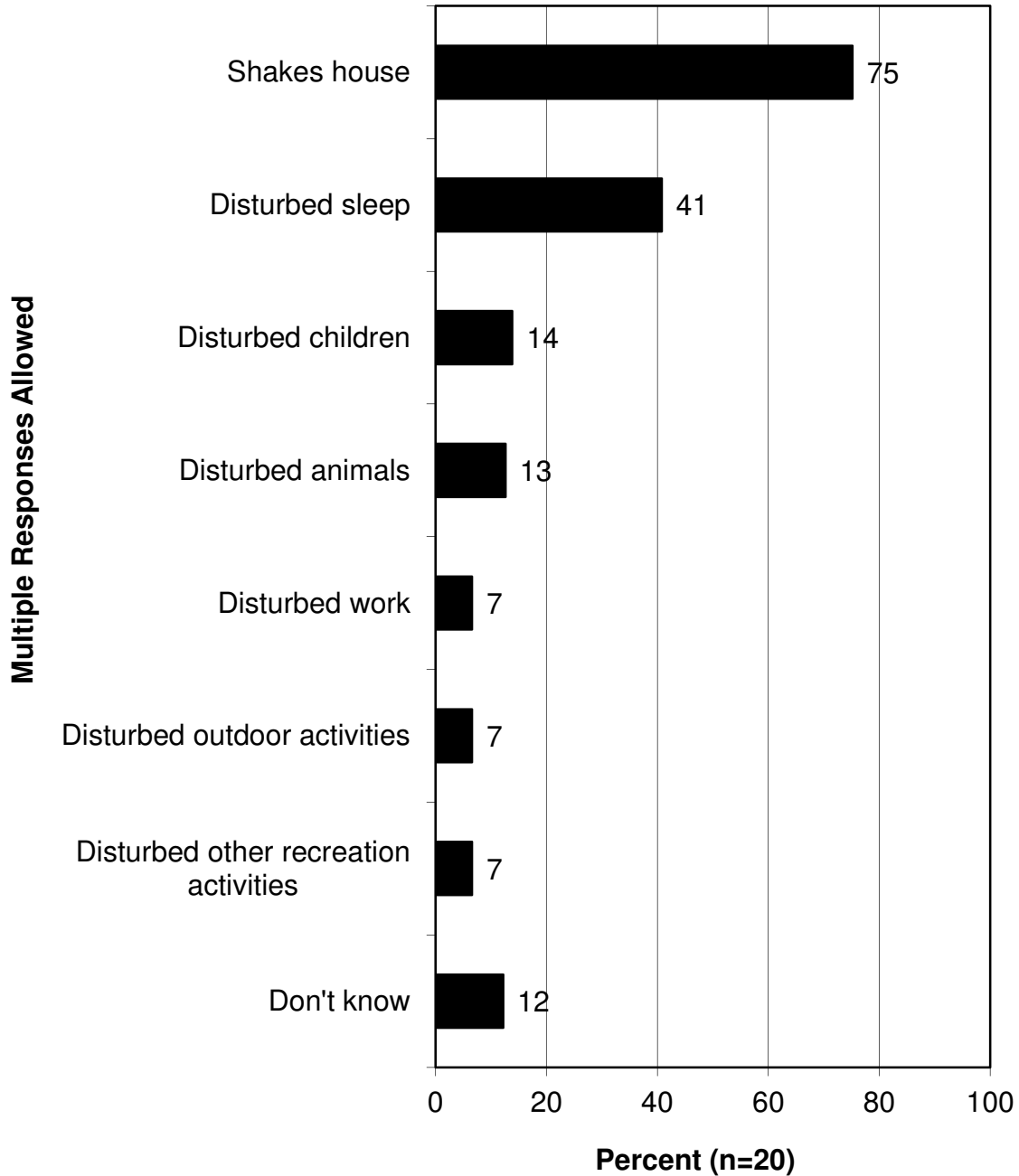




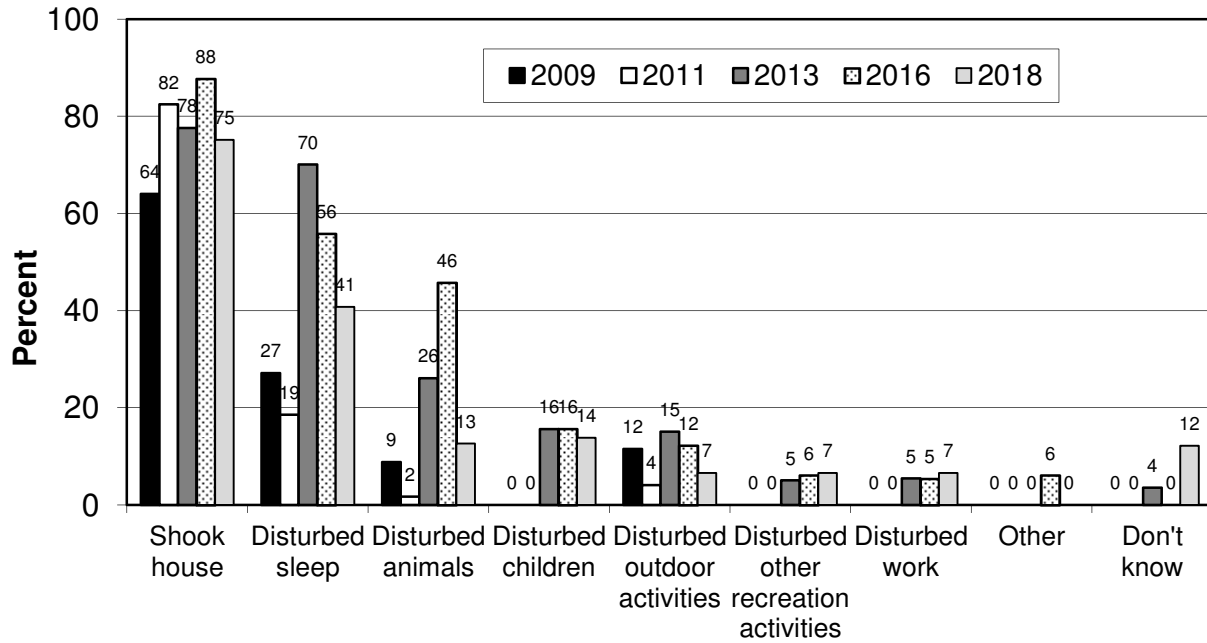
**Q32. What was the nature of the noise disturbances you have experienced? (Asked of those who said the noise from Fort A.P. Hill is a problem.)**



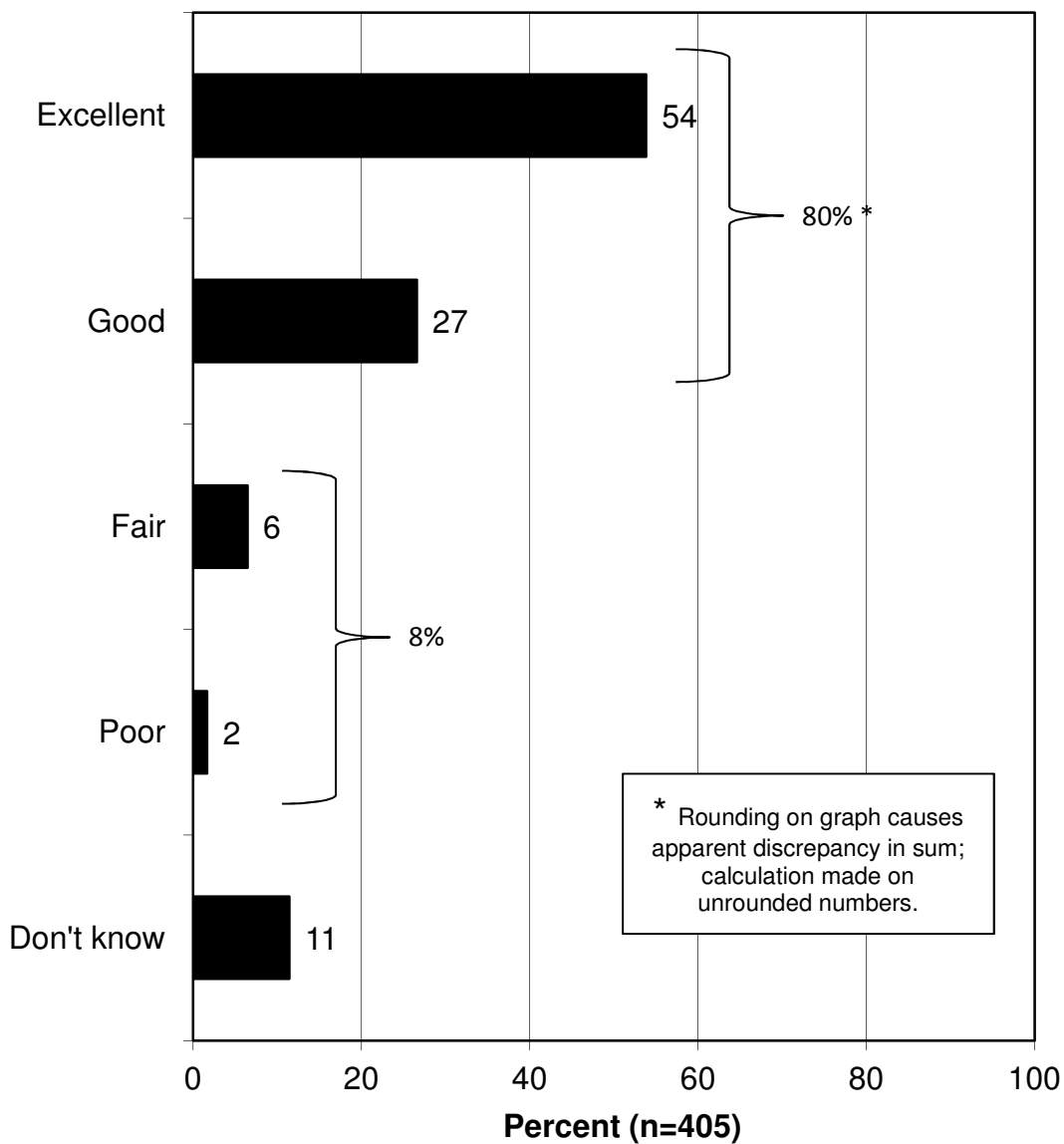
**Q36. How have these noise disturbances affected you? (Asked of those who said the noise from Fort A.P. Hill is a major problem.)**



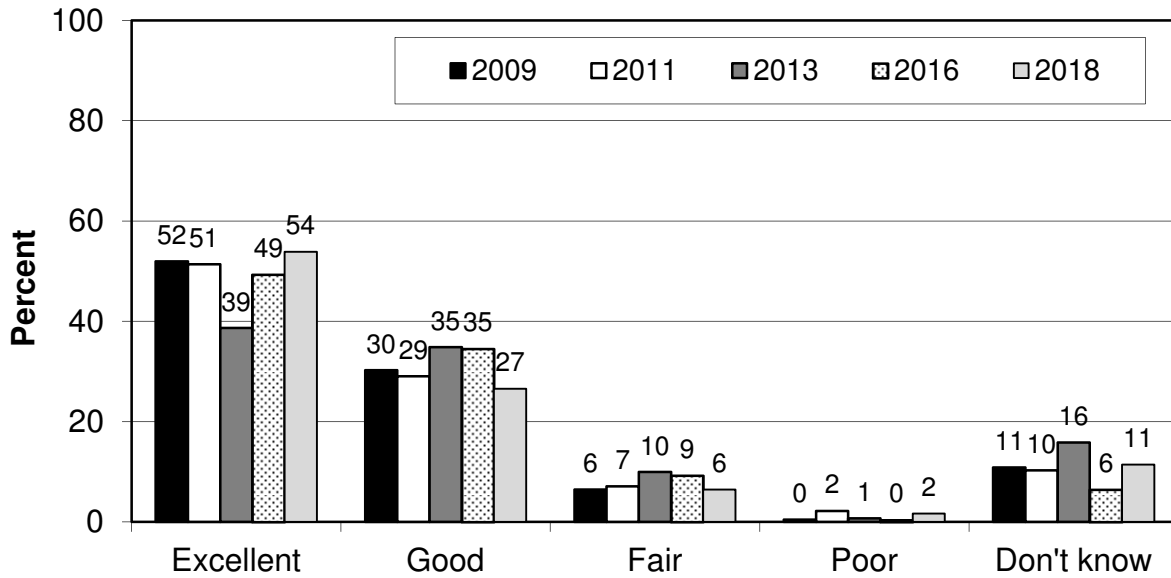
**Q36. How have these noise disturbances affected you? (Asked of those who said the noise from Fort A.P. Hill is a major problem.)**



**Q39. Understanding that noise is a normal component of certain types of military training, do you think that Fort A.P. Hill does an excellent, good, fair, or poor job of minimizing the effects of training noise on the surrounding communities?**



**Q39. Understanding that noise is a normal component of certain types of military training, do you think that Fort A.P. Hill does an excellent, good, fair, or poor job of minimizing the effects of training noise on the surrounding communities?**



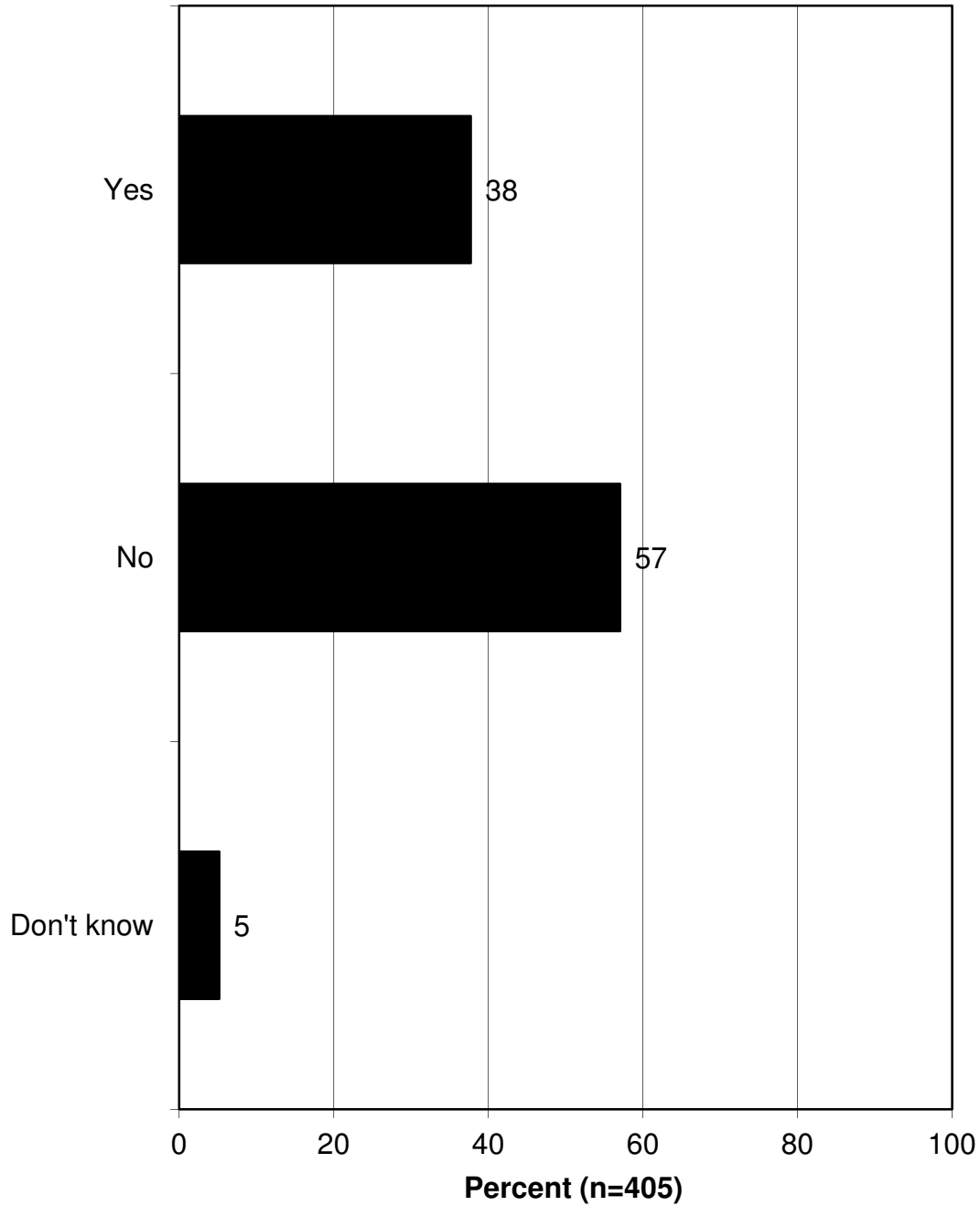
	2009	2011	2013	2016	2018
Excellent/good	82	80	73	84	80
Fair/poor	7	9	11	10	8

Rounding may cause apparent discrepancies in sums; calculations made on unrounded numbers.

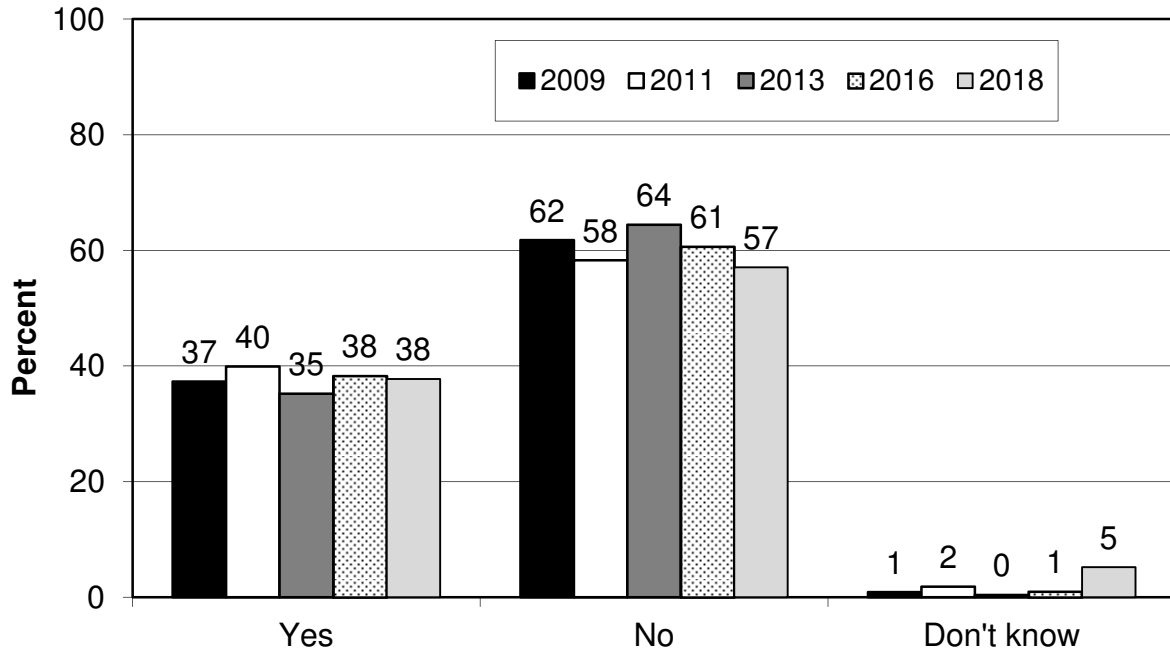
## CONTACT WITH MILITARY OR CIVILIAN PERSONNEL FROM FORT A.P. HILL

- A little more than a third of residents (38%) had contact with military or civilian personnel associated with Fort A.P. Hill in the past 2 years.
  - The trends analysis found 2018 (at 38%) to be consistent with other years, which ranged from 35% to 40% who had contact.
  
- Those who had contact with military or civilian personnel from Fort A.P. Hill most commonly described the contact as a regular contact with a friend (24% of those who had contact); in a public setting, such as a restaurant or while shopping (also 24%); or contact as part of business (23%). Other contacts were described as a regular contact with a family member (15%) or a visit to a Fort A.P. Hill office or facility (11%).
  - The trends graph is included.
  
- Those who had contact with military or civilian personnel from Fort A.P. Hill most commonly said the contact was with Army personnel (37%), civilian employees (32%), or civilian contractors (20%).
  - The trends graph is included.
  
- Those who had contact with military or civilian personnel associated with Fort A.P. Hill overwhelmingly described the contact as positive: 84% said the contact was positive, 15% said the contact was neutral, and 1% described the contact as negative.
  - While 2018 matched the previous low percentage saying *positive* (at 84%), the percentage saying *negative* did not rise, also matching the lowest percentage (1%); the *neutral* response percentage in 2018 is the highest of all survey years.
  
- Those who had contact with military or civilian personnel associated with Fort A.P. Hill overwhelmingly said, in response to direct questions, that such personnel were professional and courteous: 98% said they were professional, and 98% said the personnel were courteous.
  - The trends analysis finds consistently high percentages in all survey years.

**Q40. Over the past 2 years, have you had any contact with military or civilian personnel associated with Fort A.P. Hill?**

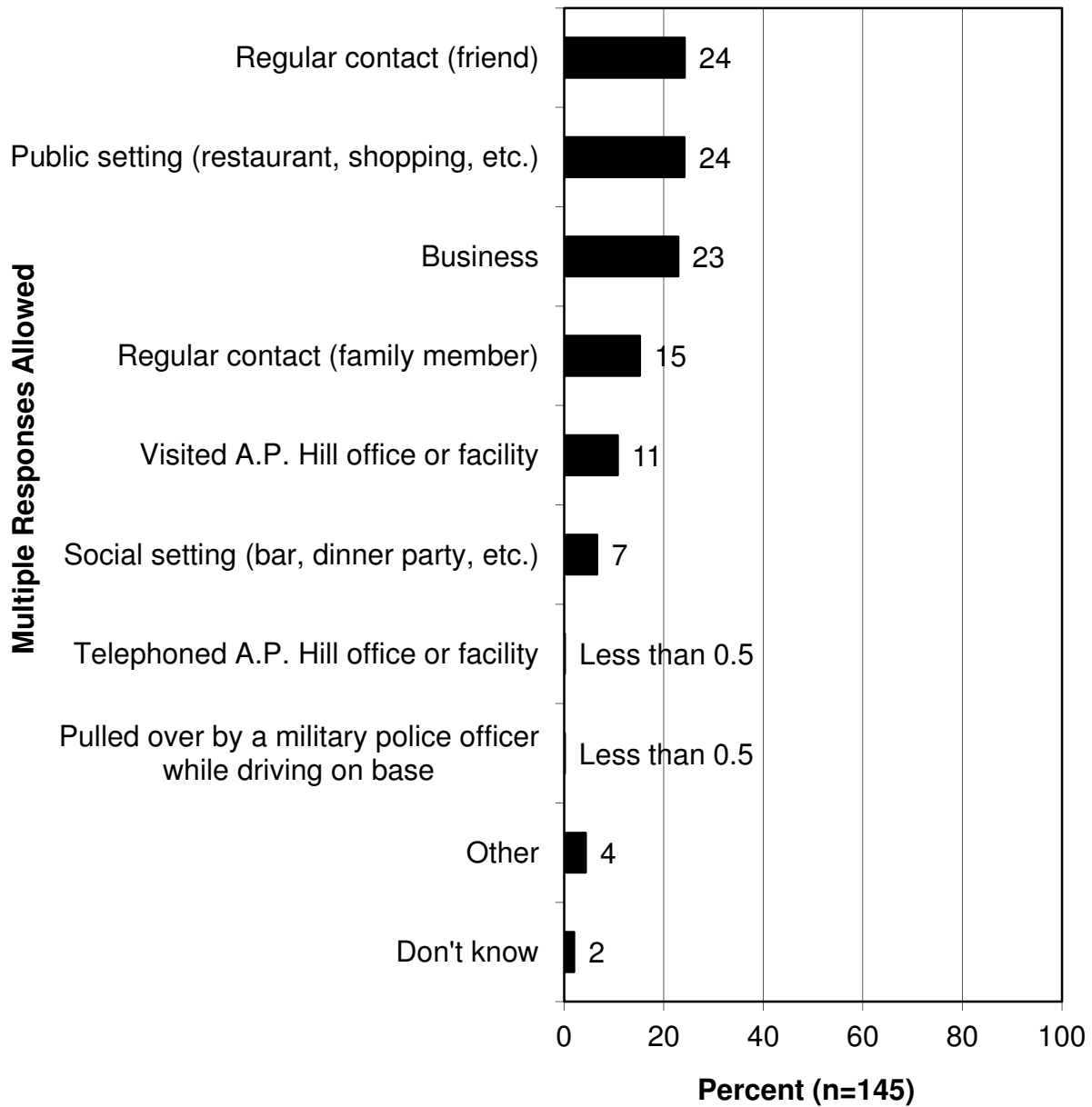


**Q40. Over the past 2 years, have you had any contact with military or civilian personnel associated with Fort A.P. Hill?**

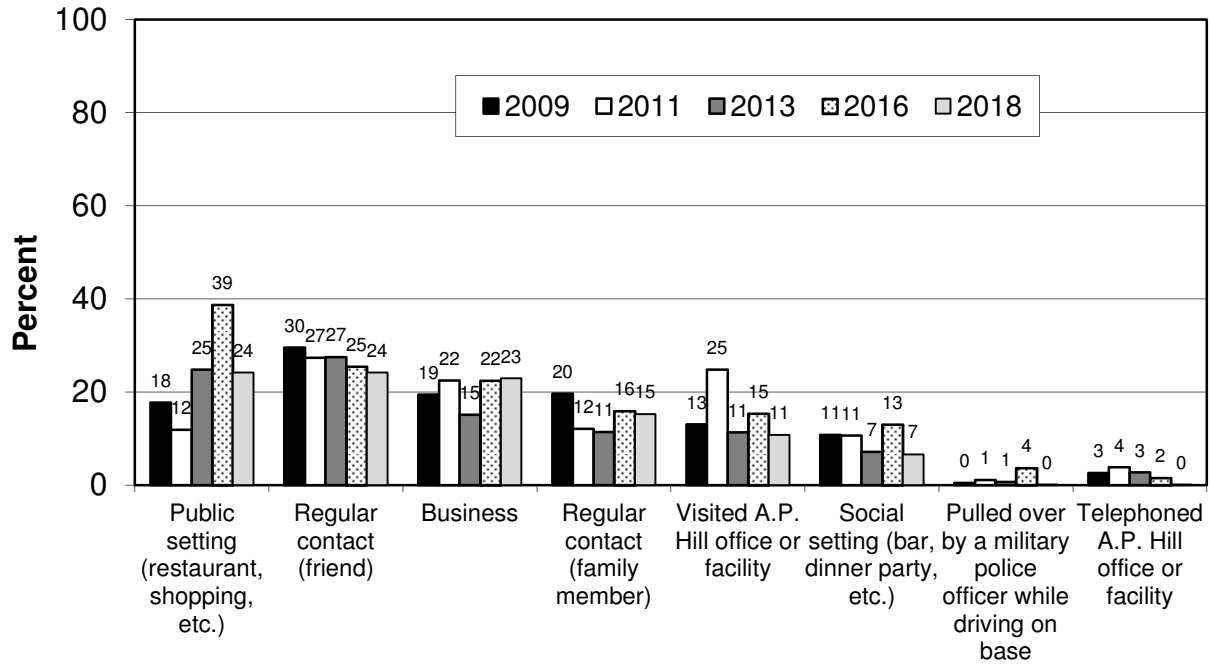




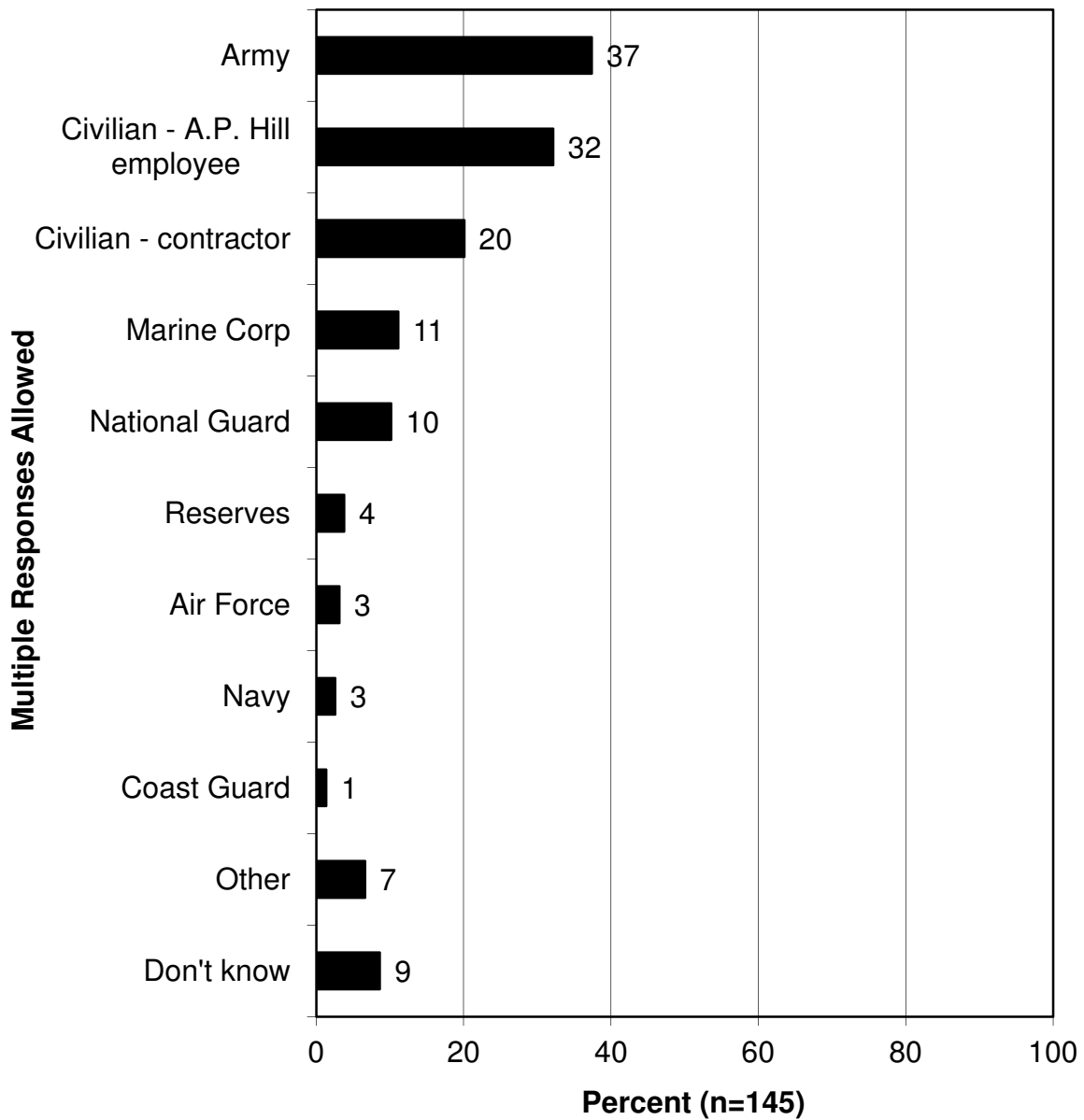
**Q43. What was the nature of the contact?  
(Asked of those who have had contact with  
military or civilian personnel associated with  
Fort A.P. Hill over the past 2 years.)**



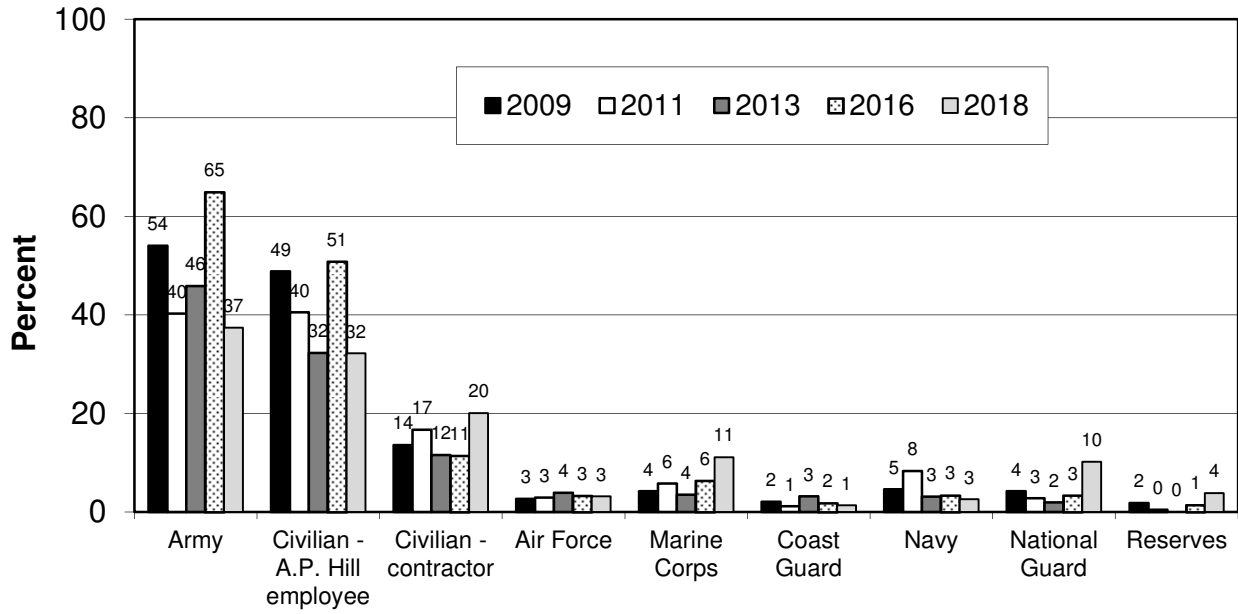
**Q43. What was the nature of the contact? (Asked of those who have had contact with military or civilian personnel associated with Fort A.P. Hill over the past 2 years.)**



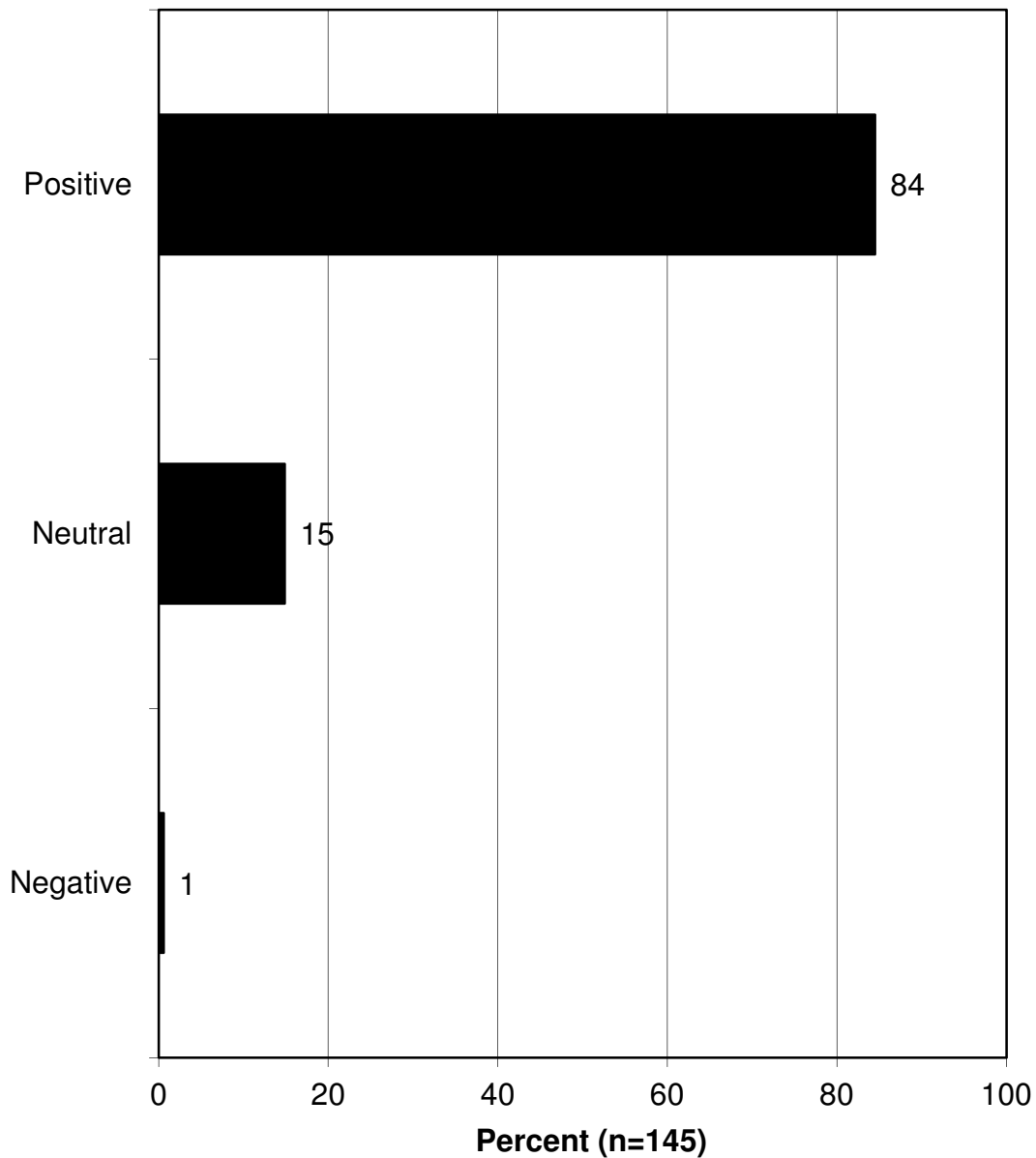
**Q47. Regarding the personnel you had contact with, were they civilian or military? (Asked of those who have had contact with military or civilian personnel associated with Fort A.P. Hill over the past 2 years.)**



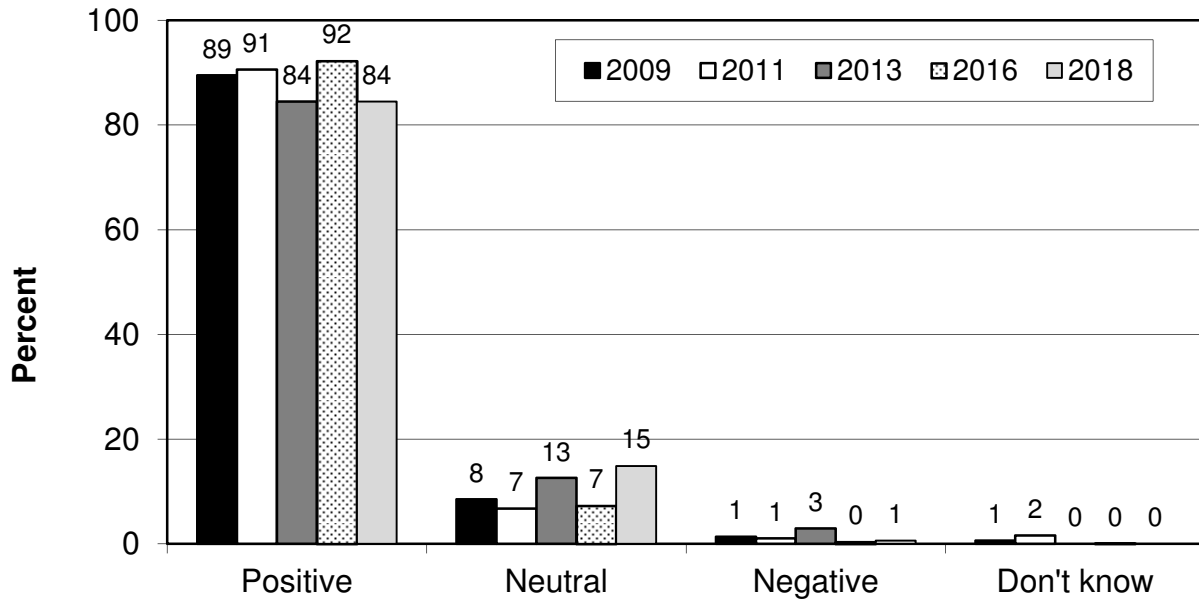
**Q47. Regarding the personnel you had contact with, were they civilian or military? (Asked of those who have had contact with military or civilian personnel associated with Fort A.P. Hill over the past 2 years.)**



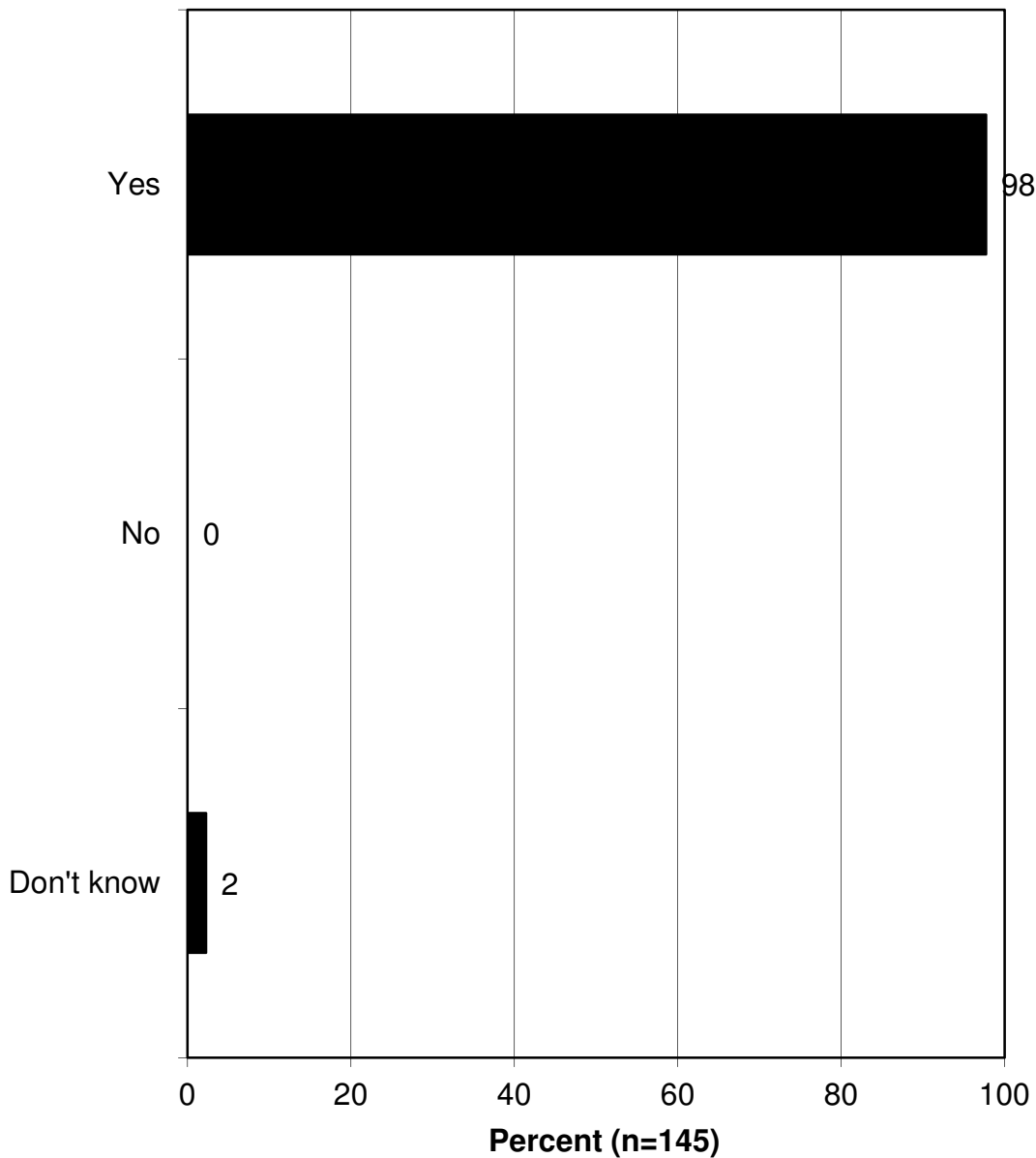
**Q50. Overall, would you describe the contact as positive, negative, or neutral? (Asked of those who have had contact with military or civilian personnel associated with Fort A.P. Hill over the past 2 years.)**



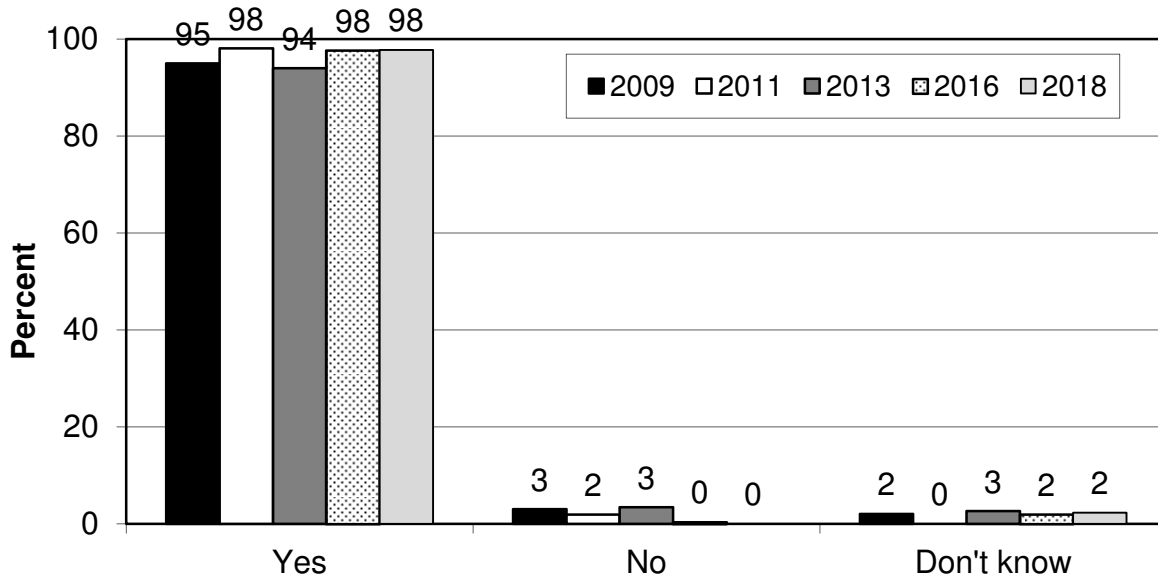
**Q50. Overall, would you describe the contact as positive, negative, or neutral? (Asked of those who have had contact with military or civilian personnel associated with Fort A.P. Hill over the past 2 years.)**



**Q52. Would you consider the military or civilian personnel you had contact with professional?  
(Asked of those who have had contact with military or civilian personnel associated with Fort A.P. Hill over the past 2 years.)**

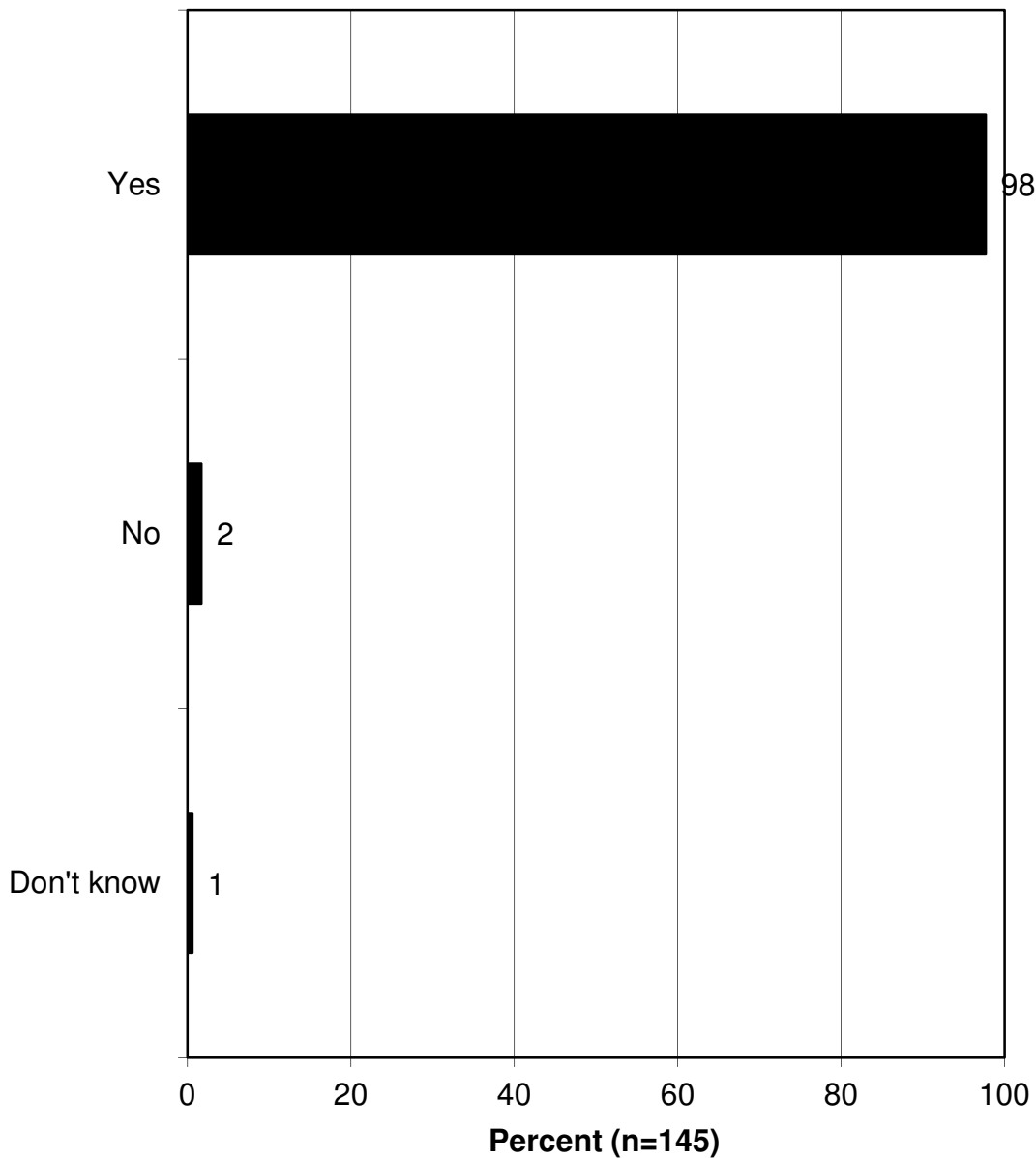


**Q52. Would you consider the military or civilian personnel you had contact with professional? (Asked of those who have had contact with military or civilian personnel associated with Fort A.P. Hill over the past 2 years.)**

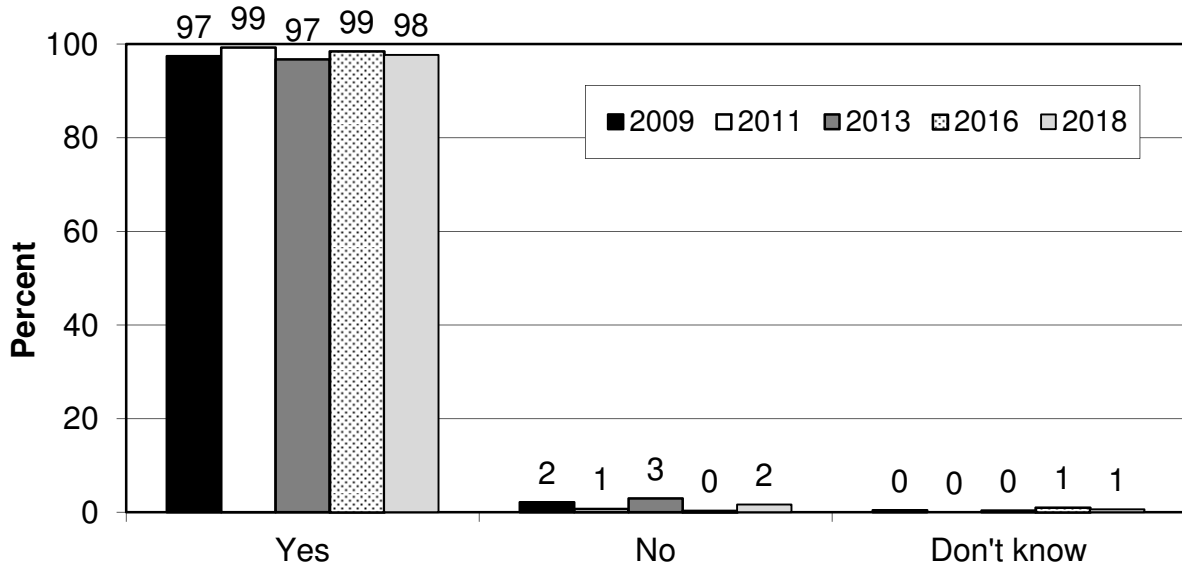




**Q53. Would you consider the military or civilian personnel you had contact with courteous?  
(Asked of those who have had contact with military or civilian personnel associated with  
Fort A.P. Hill over the past 2 years.)**



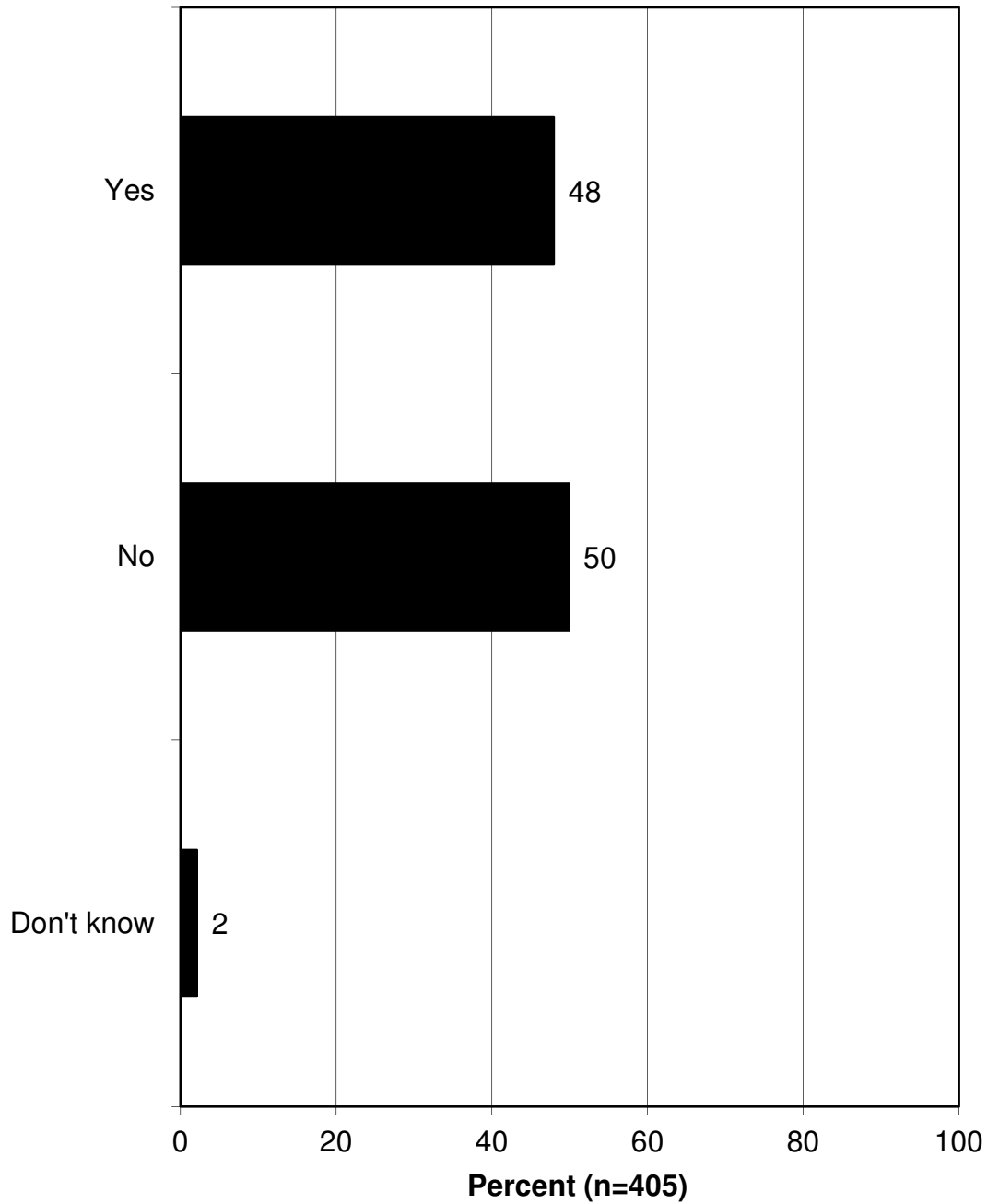
**Q53. Would you consider the military or civilian personnel you had contact with courteous? (Asked of those who have had contact with military or civilian personnel associated with Fort A.P. Hill over the past 2 years.)**



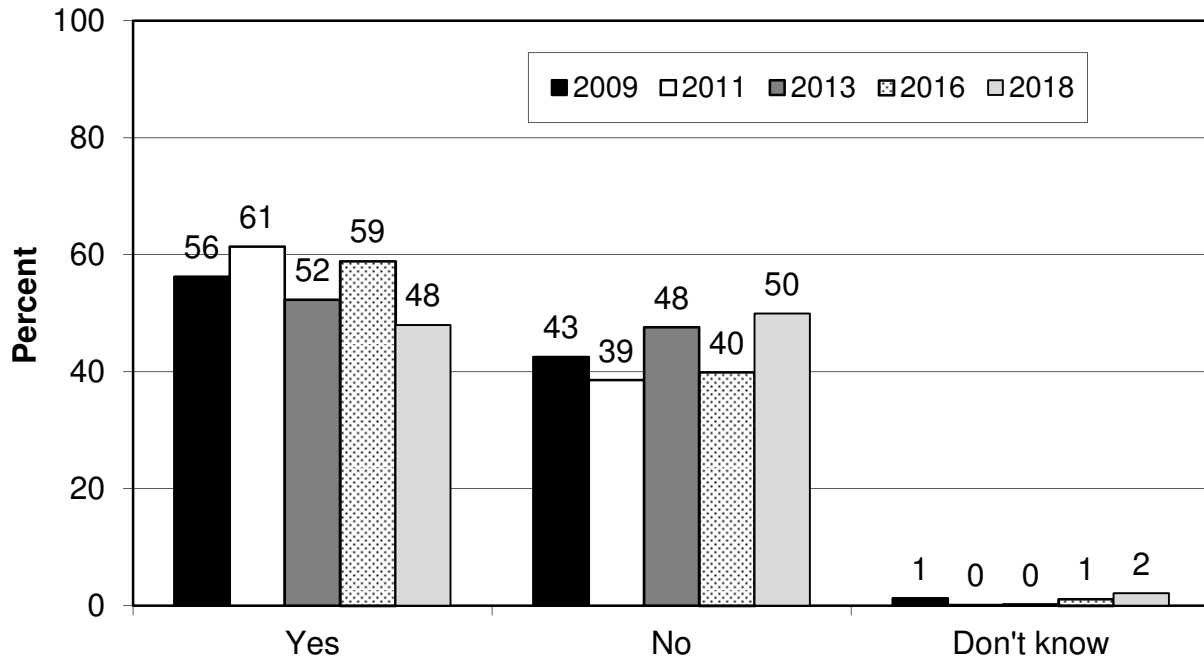
## **RECREATIONAL ACTIVITIES AT FORT A.P. HILL**

- Approximately half of residents (48%) were aware that Fort A.P. Hill offers recreational activities to the public.
  - Awareness in 2018—at 48%—was the lowest of all survey years; the previous range went from 52% to 61%.
  
- Those who were aware that Fort A.P. Hill offers recreational activities to the public were most commonly aware of hunting (48%), fishing (38%), special events (31%), and camps, picnics, and outings (21%).
  - Awareness of the activities varies quite widely from year to year.
  
- Residents were asked whether they had participated in four outdoor activities on Fort A.P. Hill in the past 2 years: hunting, fishing, wildlife viewing, and bicycling/walking/running. The overwhelming majority of residents (86%) had not done any of those activities; otherwise, 6% had bicycled/walked/run, 5% had hunted, 4% had fished, and 2% had viewed wildlife.
  - Participation in 2018 is similar to other years in the trends analysis.
  
- All residents who had hunted on Fort A.P. Hill (100%) were satisfied with their overall hunting experiences, with 58% being *very* satisfied and 42% being *somewhat* satisfied.
  - Satisfaction in 2018 is the same as the two previous surveys, which were both at 100%; the low in satisfaction was the first survey year of 2009 when 94% were satisfied with the hunting.
  
- Satisfaction with fishing was even higher: all residents who had participated in fishing on Fort A.P. Hill (100%) were satisfied with their overall fishing experiences, with 87% being *very* satisfied and 13% being *somewhat* satisfied.
  - Satisfaction started in 2009 at 93%; the survey year 2018 matched previous highs (at 100%) in 2011 and 2013.

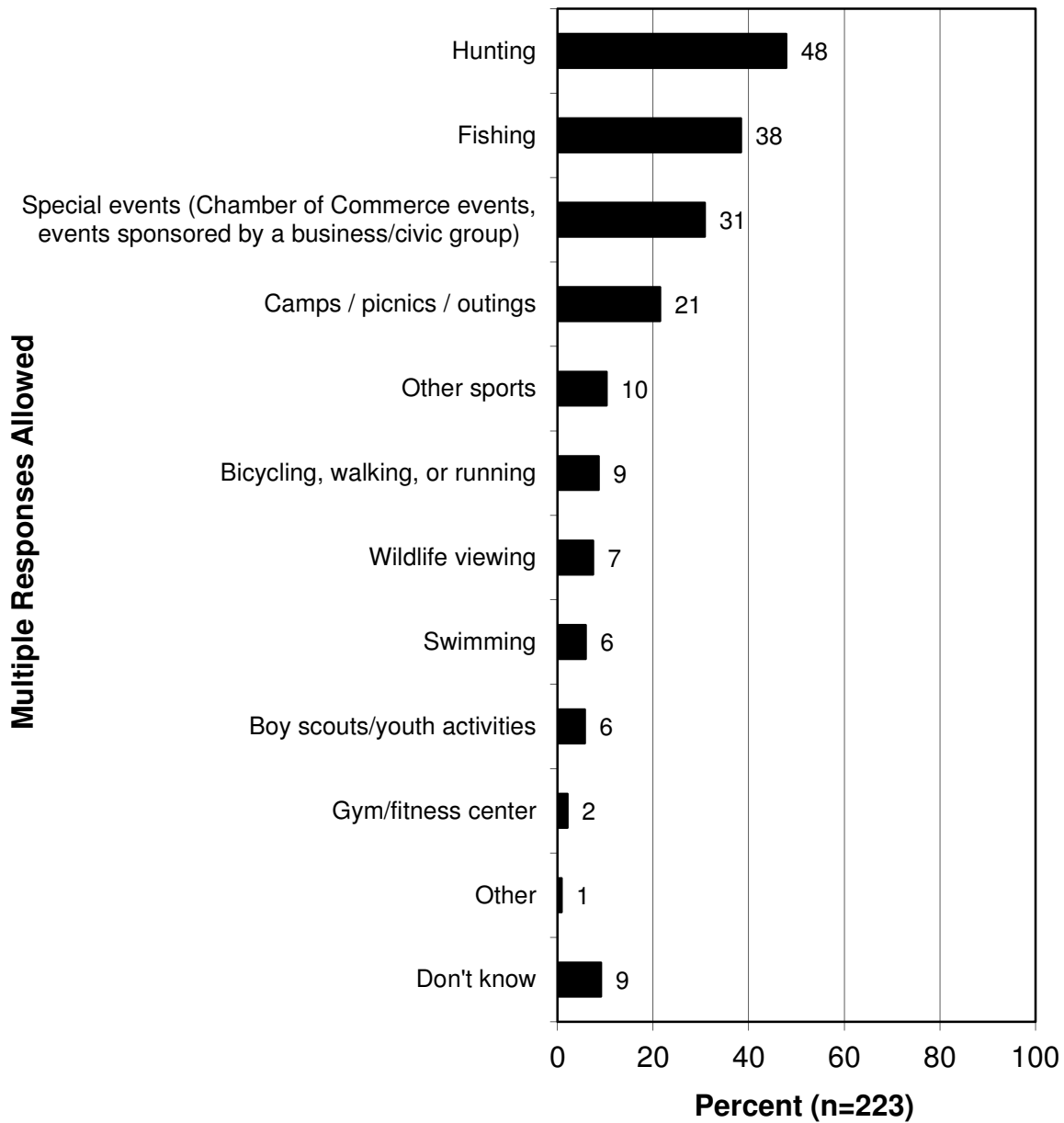
**Q64. Before this survey, were you aware that Fort A.P. Hill offers recreational activities to the public?**



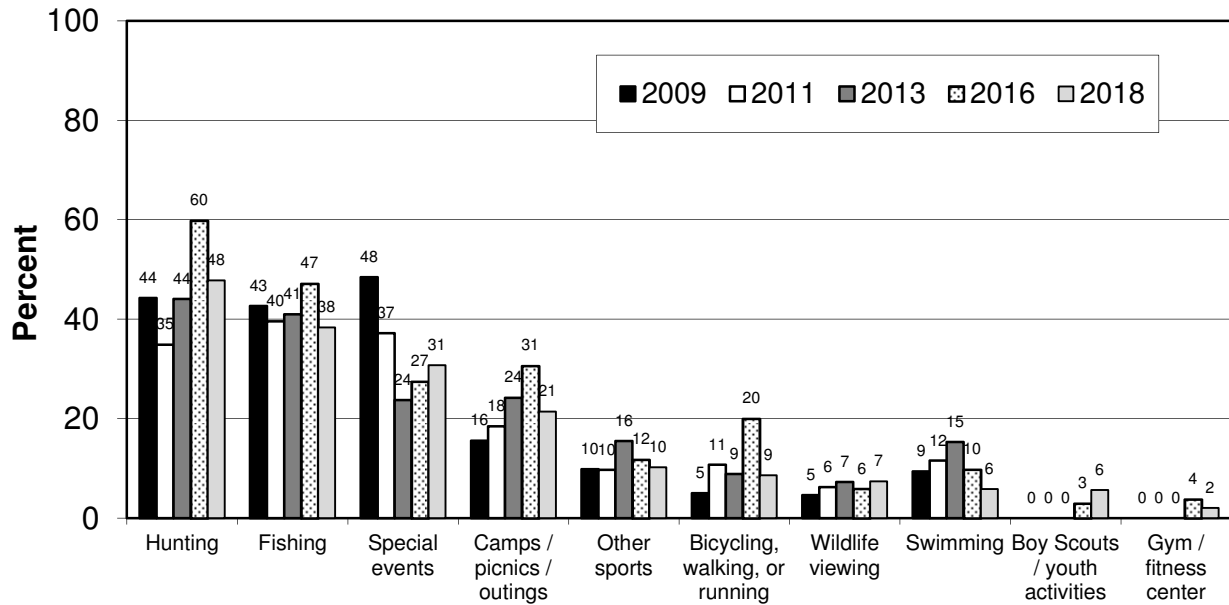
**Q64. Before this survey, were you aware that Fort A.P. Hill offers recreational activities to the public?**



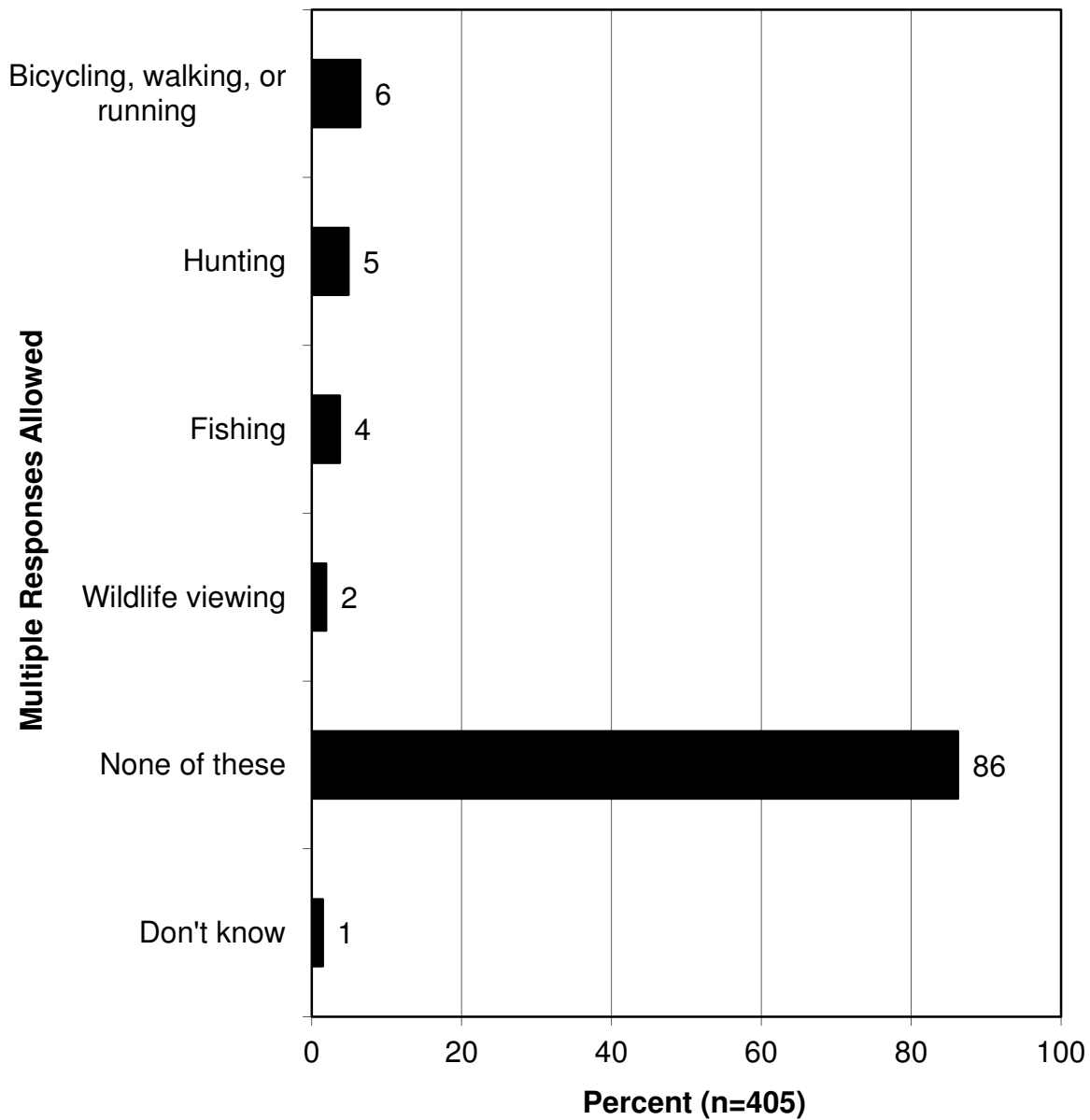
**Q67. What activities were you aware of? (Asked of those who were aware that Fort A.P. Hill offers recreational activities to the public.)**



**Q67. What activities were you aware of? (Asked of those who were aware that Fort A.P. Hill offers recreational activities to the public.)**

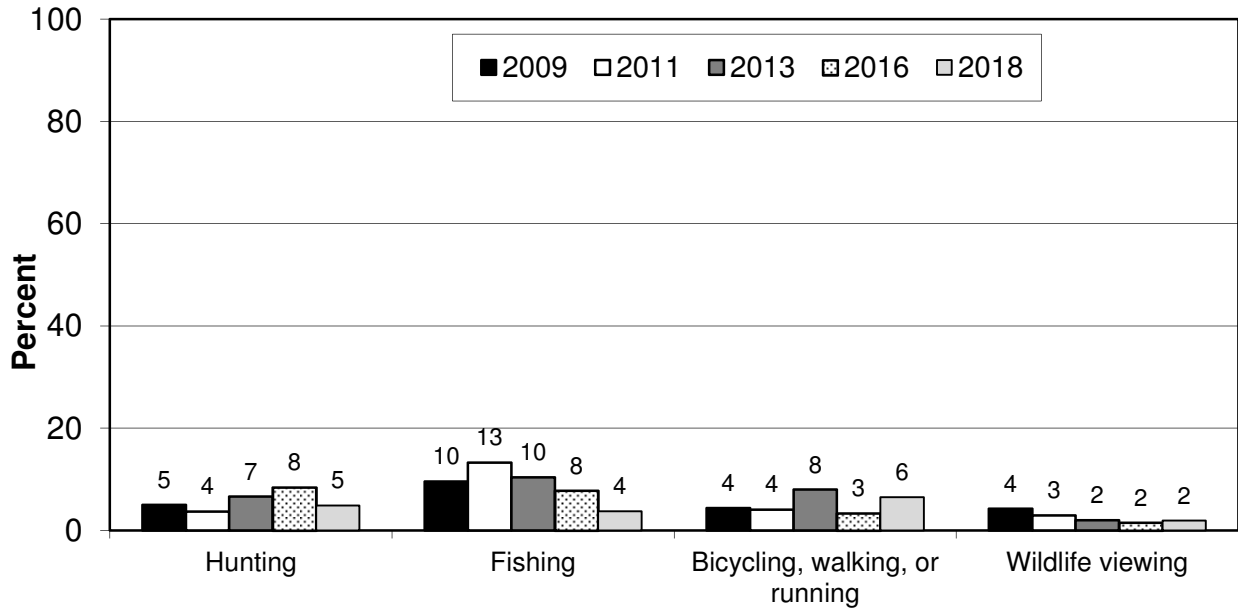


**Q71. Fort A.P. Hill offers limited outdoor recreation activities, to the extent that they do not conflict with scheduled training. In the past 2 years, have you participated in any of the following activities on Fort A.P. Hill?**

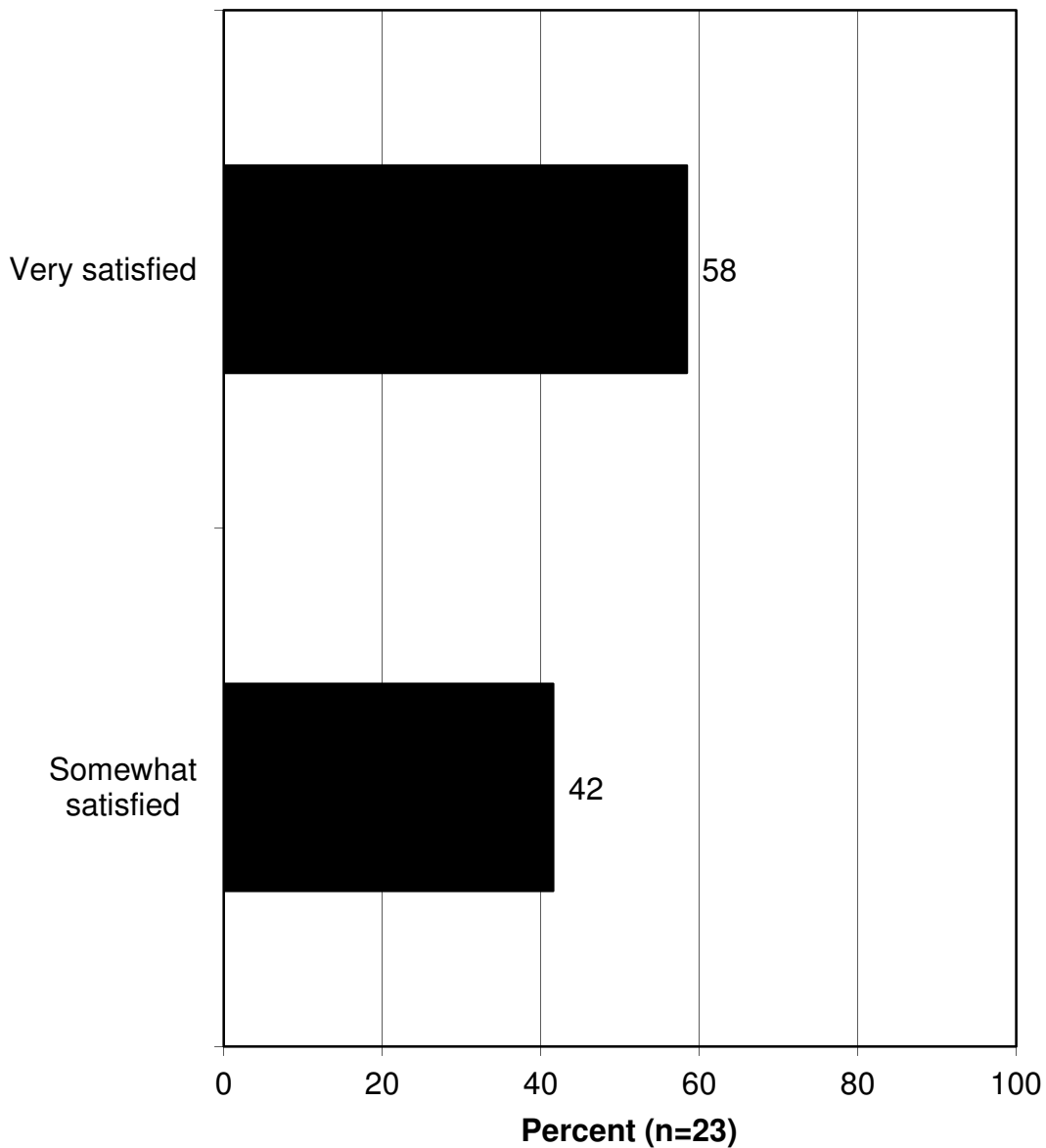




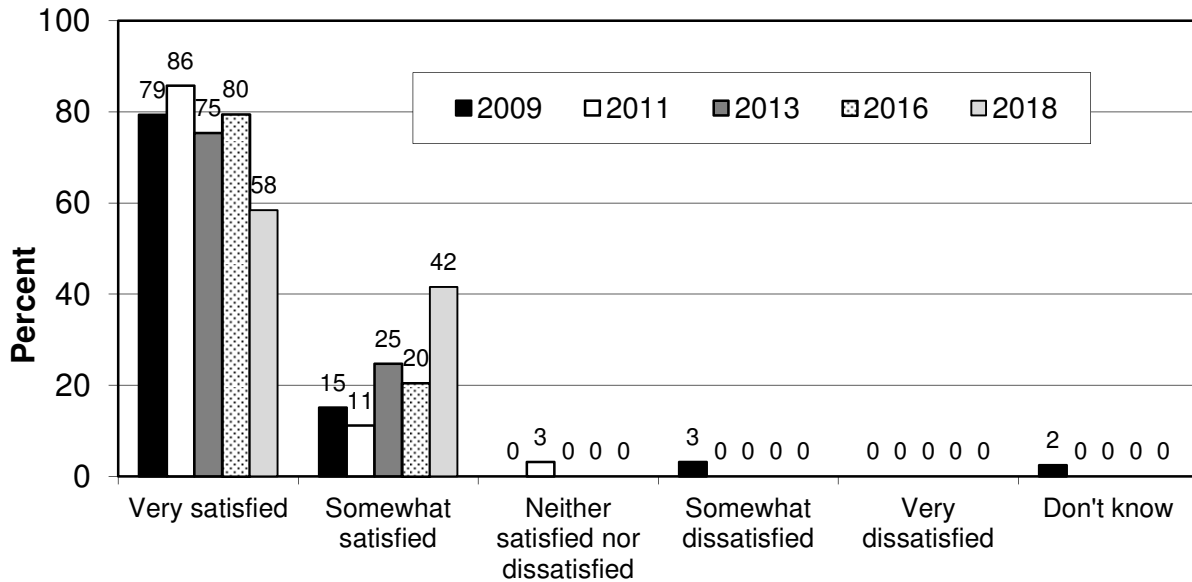
**Q71. Fort A.P. Hill offers limited outdoor recreation activities, to the extent that they do not conflict with scheduled training. In the past 2 years, have you participated in any of the following activities on Fort A.P. Hill?**



**Q72. Were you satisfied or dissatisfied with your overall hunting experiences on Fort A.P. Hill over the past 2 years? (Asked of those who have participated in hunting on Fort A.P. Hill in the past 2 years.)**



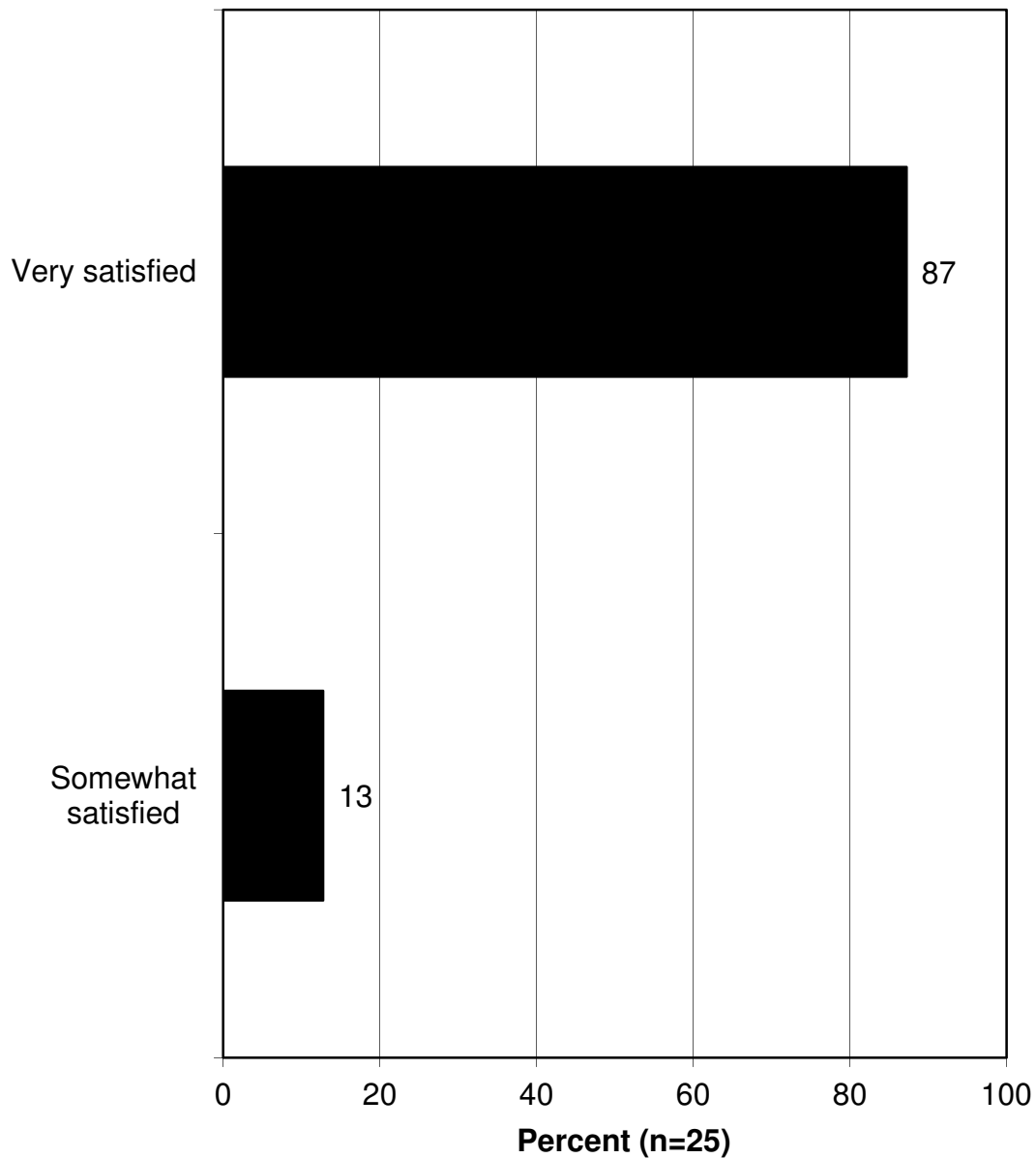
**Q72. Were you satisfied or dissatisfied with your overall hunting experiences on Fort A.P. Hill over the past 2 years? (Asked of those who have participated in hunting on Fort A.P. Hill in the past 2 years.)**



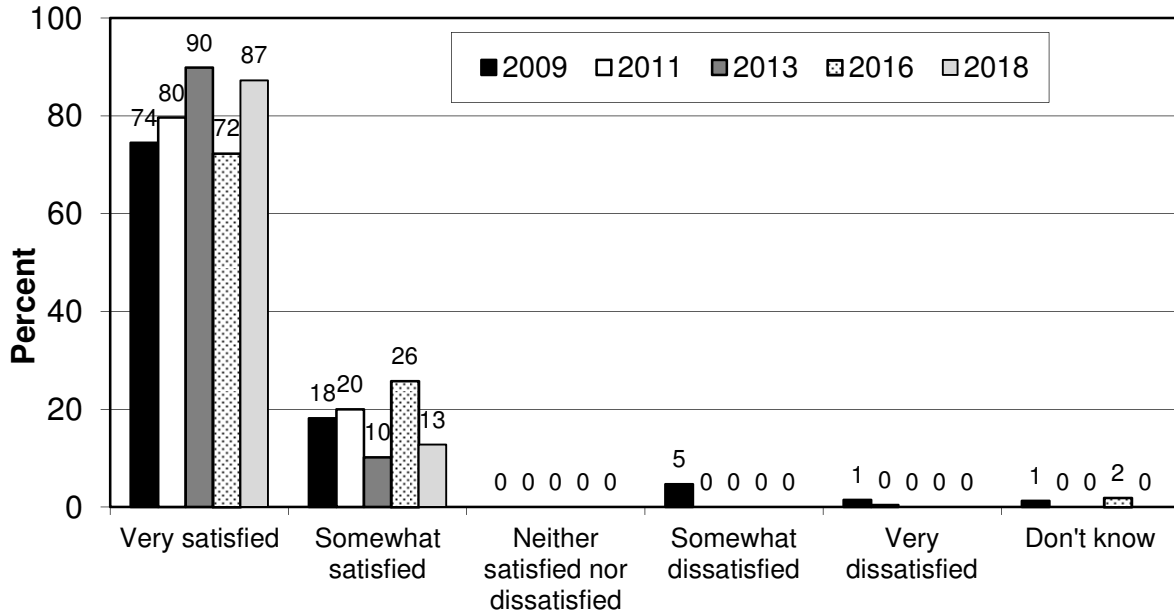
	2009	2011	2013	2016	2018
Satisfaction	94	97	100	100	100
Dissatisfaction	3	0	0	0	0

Rounding may cause apparent discrepancies in sums; calculations made on unrounded numbers.

**Q73. Were you satisfied or dissatisfied with your overall fishing experiences on Fort A.P. Hill over the past 2 years? (Asked of those who have participated in fishing on Fort A.P. Hill in the past 2 years.)**



**Q73. Were you satisfied or dissatisfied with your overall fishing experiences on Fort A.P. Hill over the past 2 years? (Asked of those who have participated in fishing on Fort A.P. Hill in the past 2 years.)**



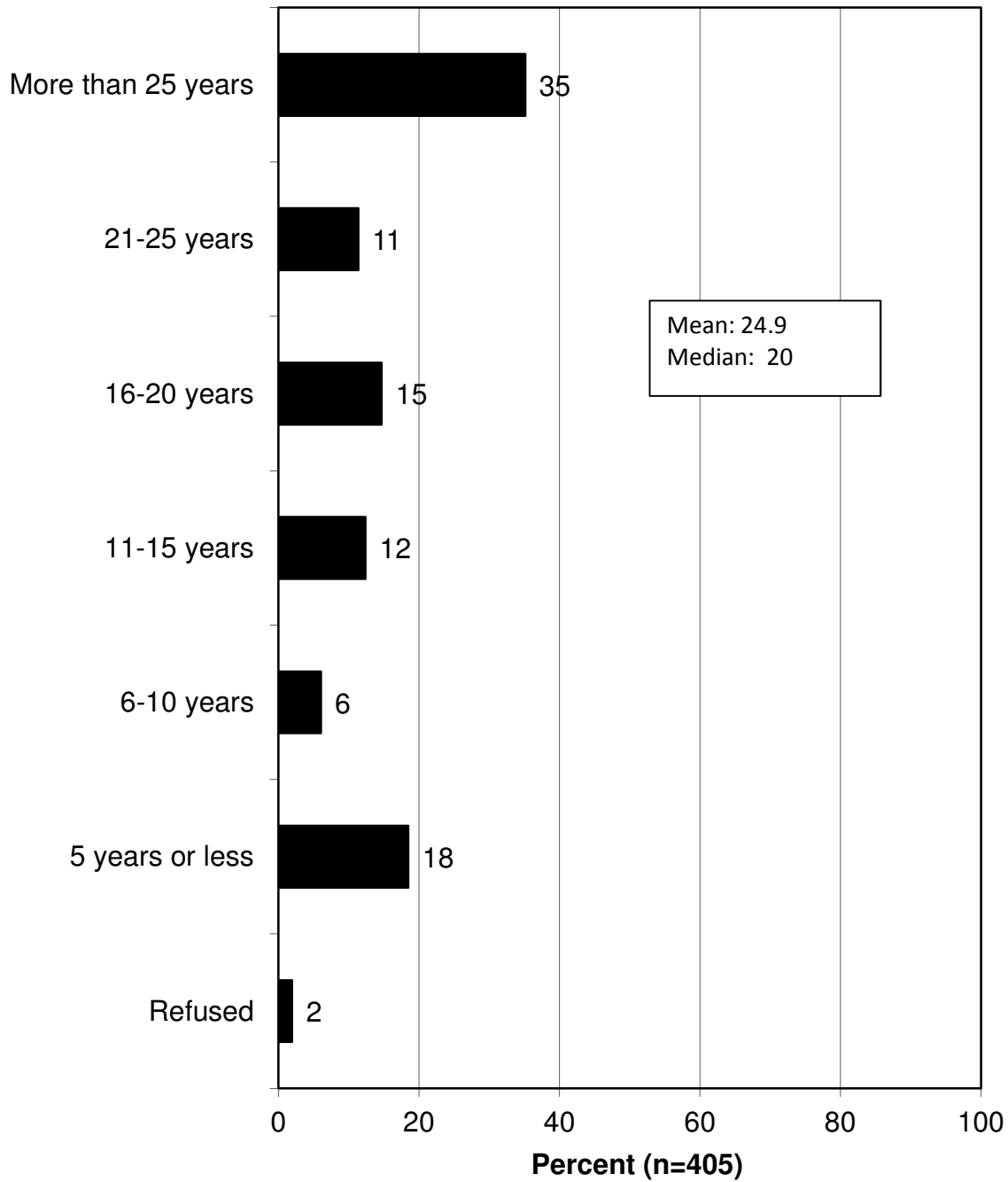
	2009	2011	2013	2016	2018
Satisfaction	93	100	100	98	100
Dissatisfaction	6	0	0	0	0

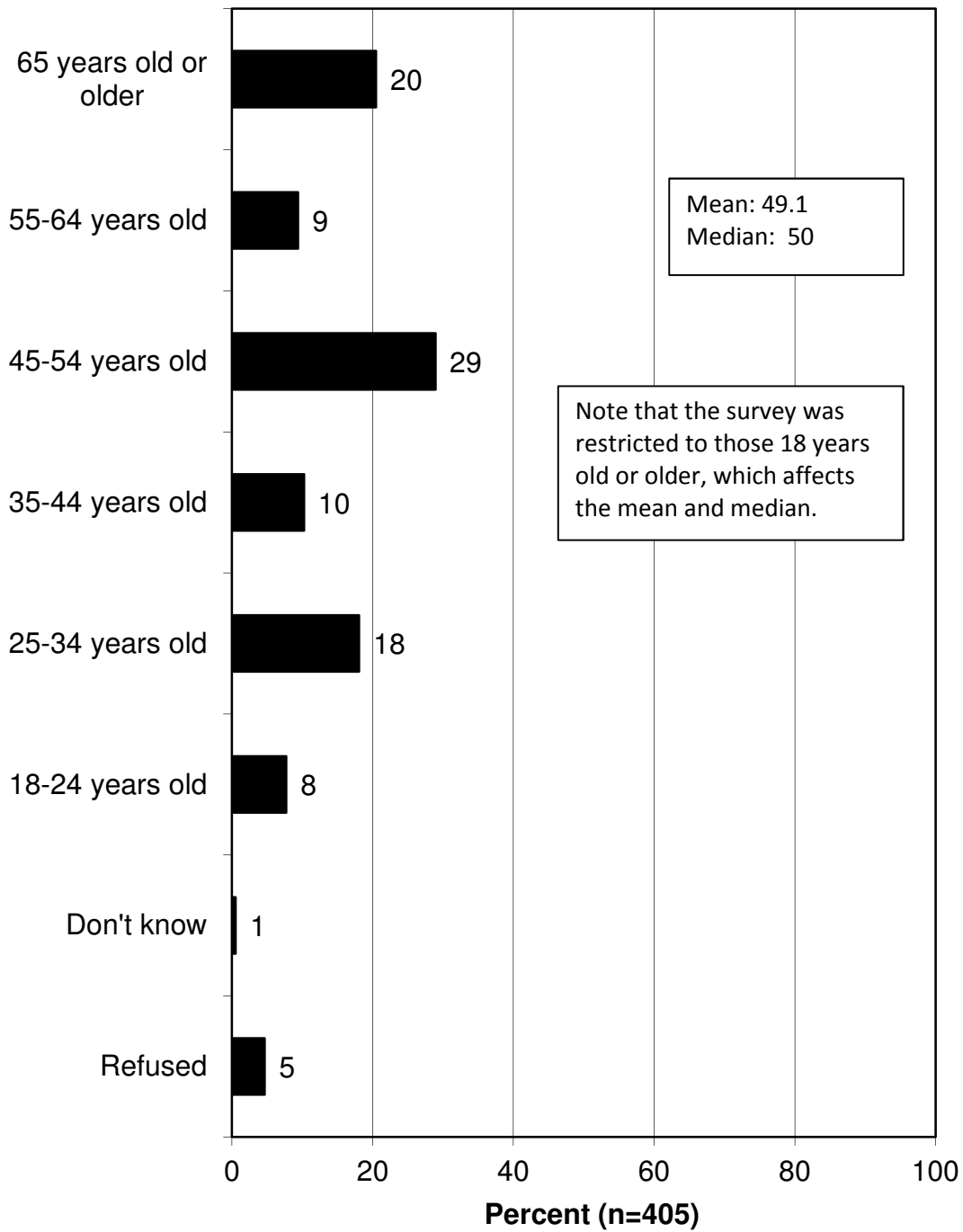
Rounding may cause apparent discrepancies in sums; calculations made on unrounded numbers.

**DEMOGRAPHIC DATA**

- The mean number of years lived in the area around Fort A.P. Hill among adult residents was 24.9 years; the median was 20 years.
  
- The weighted proportions of respondents' age and gender are also shown. Note that the age was restricted to 18 years old or older to participate in the survey.

### Q80. How many years have you lived in the area around Fort A.P. Hill?



**Q84. May I ask your age?**



**Q92. Respondent's gender (observed by interviewer, not asked).**



## ABOUT RESPONSIVE MANAGEMENT

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

Since 1985, Responsive Management has conducted telephone, mail, and online surveys, as well as multi-modal surveys, on-site intercepts, focus groups, public meetings, personal interviews, needs assessments, program evaluations, marketing and communication plans, and other forms of research measuring public opinions and attitudes. Utilizing our in-house, full-service survey facilities with 75 professional interviewers, we have conducted studies in all 50 states and 15 countries worldwide, totaling more than 1,000 projects and almost \$60 million in research.

Responsive Management has conducted research for every state fish and wildlife agency and most of the federal resource agencies, including the U.S. Fish and Wildlife Service, the National Park Service, the U.S. Forest Service, the Bureau of Land Management, the U.S. Coast Guard, and the National Marine Fisheries Service.

We have also provided research for many nonprofit and nongovernmental organizations, including the National Wildlife Federation, the National Shooting Sports Foundation, the National Rifle Association, the Archery Trade Association, the Izaak Walton League, the Rocky Mountain Elk Foundation, Ducks Unlimited, SCI, and Dallas Safari Club. Other nonprofit and NGO clients include Trout Unlimited, the Sierra Club, the American Museum of Natural History, the Ocean Conservancy, the National Association of State Boating Law Administrators, and the BoatUS Foundation.

Responsive Management conducts market research and product testing for numerous outdoor recreation manufacturers and industry leaders, such as Winchester Ammunition, Vista Outdoor (whose brands include Federal Premium, CamelBak, Bushnell, Primos, and more), Trijicon, Yamaha, and others.

Responsive Management also provides data collection for the nation's top universities, including Auburn University, Colorado State University, Duke University, George Mason University, Michigan State University, Mississippi State University, North Carolina State University, Oregon State University, Penn State University, Rutgers University, Stanford University, Texas Tech, University of California-Davis, University of Florida, University of Montana, University of New Hampshire, University of Southern California, Virginia Tech, West Virginia University, and many more.

Our research has been upheld in U.S. Courts, used in peer-reviewed journals, and presented at major wildlife and natural resource conferences around the world. Responsive Management's research has also been featured in many of the nation's top media, including *Newsweek*, *The Wall Street Journal*, *The New York Times*, CNN, and on the front pages of *The Washington Post* and *USA Today*.

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