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**Presents**

# **Americans' Perceptions about Surveillance**

Published by Ponemon Institute, LLC

Report Date, March 16, 2006

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# Americans' Perceptions about Surveillance

By Dr. Larry Ponemon, March 16, 2006

Ponemon Institute is pleased to report the results of a U.S.-based survey completed in March 2006. This research was independently conducted to understand what Americans think about surveillance in their daily lives. In this study, we asked a representative sample of 889 individuals what they thought about the following surveillance issues.

- Government's monitoring of emails and the Internet
- Employers' monitoring of emails and the Internet
- Video cameras in public restrooms
- Passenger screening at airports
- One-way mirrors or video cameras in store's dressing room
- Hidden traffic cameras
- Spyware on personal computers
- Government's wiretaps of phones
- Companies recording of customer service phone conversation
- Electronic (RFID) tags in products
- Implanted chips to verify identity

Overall findings suggest that respondents have mixed concerns about different surveillance methods used by business or government. The issues or possible practices of most concern are:

- ✓ About 90% of respondents either said "No" or "Unsure" about the use of telephone wiretaps by government.
- ✓ Over 85% of respondents either said "No" or "Unsure" about software on their personal computers (a.k.a. spyware) that monitors Internet browsing or shopping behavior.
- ✓ Over 72% of respondents either said "No" or "Unsure" to the use of electronic tags (a.k.a. RFID) embedded in products that could be used to track identity from short distances.
- ✓ Almost all respondents disliked the idea of the government implanting chips in people for identity verification purposes.

The possible surveillance practices of least concern for are:

- ✓ Over 66% of respondents do not mind having their telephone conversations recorded when contacting customer service representatives.
- ✓ About 57% of respondents do not mind having their employer monitor email and Internet activities in the workplace.
- ✓ Over 57% of respondents do not mind if the police department uses hidden cameras to monitor traffic or speeding.
- ✓ Over 52% of respondents do not mind being selected for additional passenger screening at an airport.
- ✓ About 49% respondents do not mind retailers using one-way mirrors or video cameras in the store's dressing rooms.
- ✓ Over 31% of respondents are "Unsure" about the use of video cameras in public restrooms for preventing illegal or dangerous acts. About 29% are not concerned.

Our findings reveal that respondents' perceptions about surveillance are related to key demographic variables. On average, women appear to hold more negative perceptions about surveillance than men. Respondents with advanced education tend to hold the most negative perception. With respect to age, both younger and older respondents appear hold more negative perceptions about surveillance than individuals in the middle-age range.

## Caveats to this survey

There are inherent limitations to survey research that need to be carefully considered before drawing inferences. The following items are specific limitations that are germane to most telephone surveys.

- ✓ Non-Response Bias: The current findings are based on a sample of survey responses. We attempted to contact a representative sample of individuals. It is always possible, however, that individuals who did not participate are substantially different in terms of underlying beliefs from those who completed the interview task.
- ✓ Sampling-Frame Bias: Because our sampling frame is a purchased list, the quality of results is influenced by the accuracy of contact information and the degree to which the list is representative of individuals who are informed about current events. We also acknowledge that the results may be biased by media coverage at the time of the study.  
  
Compensation was used to motivate participation. While compensation was held to a nominal amount, we acknowledge potential bias caused by compensating subjects.
- ✓ Self-Reported Results: The quality of survey research is based on the integrity of confidential responses received from subjects. While certain checks and balances can be incorporated into the survey process, there is always the possibility that a subject did not provide a truthful response.

## Sample

A random sampling frame of 8,120 adult-aged individuals who reside within the United States was used to recruit participants to this telephone survey. Our panel was selected from a national database purchased from a leading national survey sampling organization.

A two step procedure was used to verify the sampling frame. All telephone numbers were verified to ensure that primary contact was accurate. In addition, we also analyzed our final sample against a national census data for residents who are 18 years or older. The factors used in our analysis of the sample quality were age, gender, and reported household income. Respondents were paid \$5 if they agreed to complete the telephone interview including demographic items.

In total, 930 respondents completed their survey results during the research period. Of returned surveys, 41 were rejected because of incomplete or inconsistent responses. A total of 889 usable surveys were used as our final sample. This sample represents a 10.95% net response rate. The margin of error on all adjective scale responses is  $\leq 2\%$ .

For response accuracy, the survey contained fixed response questions that were framed as attributions or statements about the acceptability of different surveillance methods. On average, respondents completed all survey items within a ten minute timeframe. Respondents were given the following information before starting the survey.

Dear Participant,

We want to know your opinion concerning the use of surveillance by business and government. We greatly appreciate your response to all survey questions. Please be assured that we do not collect any personally identifiable information. If you have any questions, contact Ponemon Institute at [research@ponemon.org](mailto:research@ponemon.org) or call our toll-free number at 1.800.887.3118.

Thank you in advance for your participation.

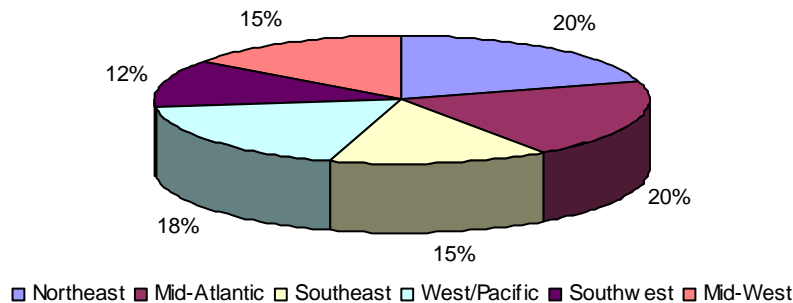
Following are the response statistics and geographic distribution across major regions of the United States. The tables also report sample response statistics.

Response Characteristics	Total	Pct %
Sampling frame	8120	100%
Responses	930	11.45%
Rejections	41	0.50%
Final sample	889	10.95%

U.S. Regions	Freq	Pct%
Northeast	180	20%
Mid-Atlantic	178	20%
Southeast	129	15%
West/Pacific	163	18%
Southwest	109	12%
Mid-West	130	15%
Total	889	100%

The following pie chart shows the distribution of the current survey. As shown, the Northeast and Mid-Atlantic regions represent the largest regions. The smallest region is the Southwest.

**Distribution of Sample Respondents Across the United States**



## Survey Results

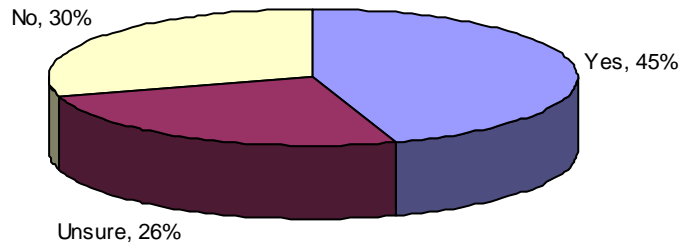
Following are the detailed results for all 11 surveillance scenarios. For accuracy purposes, responses were captured using a five-point adjective scale: Strongly Agree, Agree, Unsure, Disagree and Strongly Disagree. To simplify our presentation, however, the analysis of responses was reduced into three categories:

- Yes = strongly agree + agree
- No = strongly disagree + disagree
- Unsure

Scenario 1: Government's monitoring of emails and Internet:

1. I do not mind if the government monitors emails and Internet searches for inappropriate or illegal content.	Freq.	Pct%
Strongly agree	172	19%
Agree	227	26%
Unsure	227	26%
Disagree	118	13%
Strongly disagree	144	16%
Total	888	100%

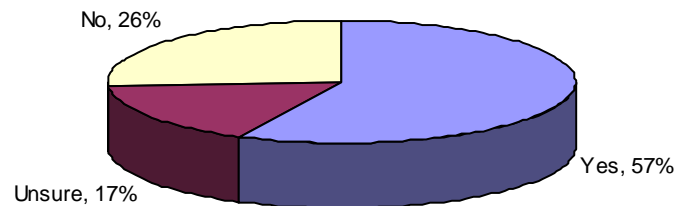
### Government's monitoring emails and Internet



### Scenario 2: Employer's monitoring of emails and Internet:

2. I do not mind if my employer monitors emails and Internet searches for inappropriate content (when I'm at work).	Freq.	Pct%
Strongly agree	285	32%
Agree	221	25%
Unsure	147	17%
Disagree	153	17%
Strongly disagree	79	9%
Total	885	100%

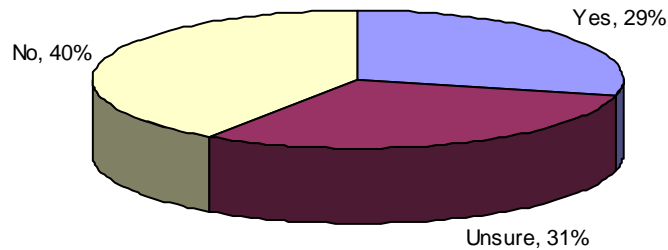
### Employer monitoring email and Internet



### Scenario 3: Cameras in public restrooms:

3. I do not mind if cameras are used in public restrooms to make sure that people do not engage in illicit or dangerous activities.	Freq.	Pct%
Strongly agree	60	7%
Agree	186	22%
Unsure	267	31%
Disagree	259	30%
Strongly disagree	89	10%
Total	861	100%

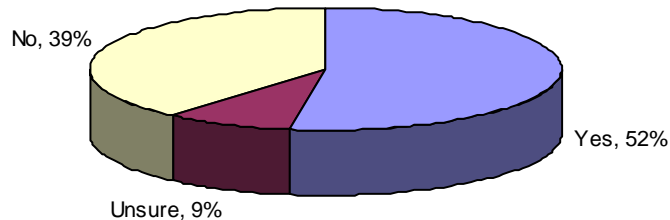
**Camera in a public restrooms**



**Scenario 4: Additional passenger screening at airport:**

4. I do not mind being selected for additional passenger screening procedures at an airport.	Freq.	Pct%
Strongly agree	179	20%
Agree	285	32%
Unsure	78	9%
Disagree	240	27%
Strongly disagree	103	12%
Total	885	100%

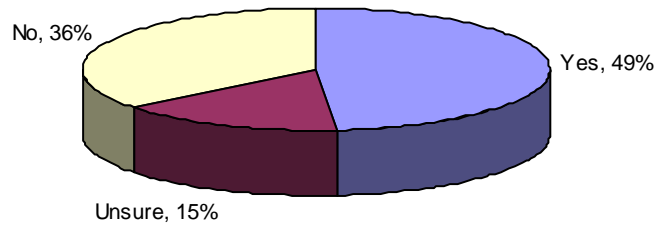
**Additional passenger screening at airport**



**Scenario 5: One-way mirror or camera in store's dressing room:**

5. I do not mind if a clothing or department store uses a one-way mirror or hidden camera in dressing rooms to make sure merchandise is not stolen or damaged.	Freq.	Pct%
Strongly agree	143	16%
Agree	287	32%
Unsure	137	15%
Disagree	163	18%
Strongly disagree	154	17%
Total	884	100%

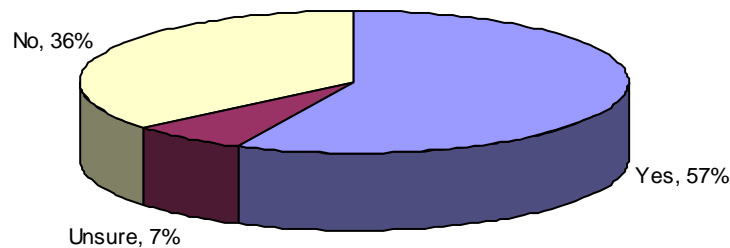
**One-way mirror or hidden camera in store's dressing rooms**



**Scenario 6: Hidden camera that monitors traffic**

Response	Freq.	Pct%
6. I do not mind if the local police department uses hidden cameras to detect traffic violations such as speeding or failure to stop at a red light.		
Strongly agree	328	37%
Agree	176	20%
Unsure	62	7%
Disagree	119	13%
Strongly disagree	200	23%
Total	885	100%

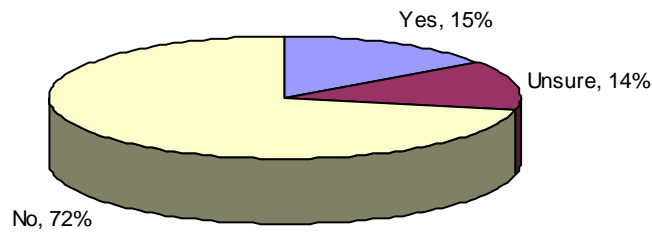
**Hidden cameras that monitor traffic**



**Scenario 7: Spyware on personal computer:**

Response	Freq.	Pct%
7. I do not mind if an Internet company downloads software on my personal computer to capture information about my online browsing and shopping behavior.		
Strongly agree	45	5%
Agree	87	10%
Unsure	120	14%
Disagree	269	30%
Strongly disagree	365	41%
Total	886	100%

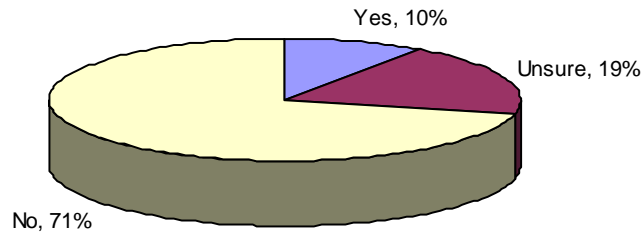
**Spyware on personal computer**



**Scenario 8: Wiretap phones by government:**

8. I do not mind if my telephone calls are wiretapped by the government.	Freq.	Pct%
Strongly agree	31	4%
Agree	56	6%
Unsure	167	19%
Disagree	228	26%
Strongly disagree	402	45%
Total	884	100%

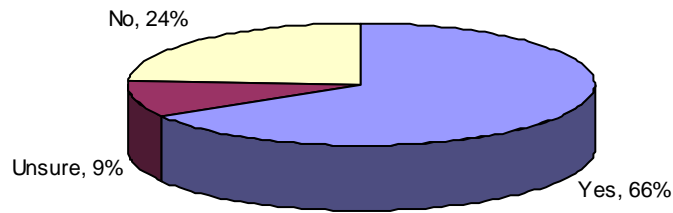
**Wiretap phones by government**



**Scenario 9: Recording customer service phone conversation:**

9. I do not mind if telephone calls to customer services (such as my credit card company) are recorded for possible future uses.	Freq.	Pct%
Strongly agree	356	40%
Agree	231	26%
Unsure	84	9%
Disagree	164	19%
Strongly disagree	50	6%
Total	885	100%

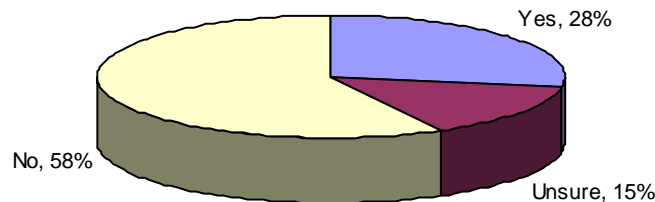
**Recording customer service phone conversation**



Scenario 10: Product tag that identifies you from a short distance:

10. I do not mind if products that I buy have an electronic chip (called an RFID tag) that identifies me from short distances.	Freq.	Pct%
Strongly agree	38	4%
Agree	207	23%
Unsure	129	15%
Disagree	317	36%
Strongly disagree	196	22%
Total	887	100%

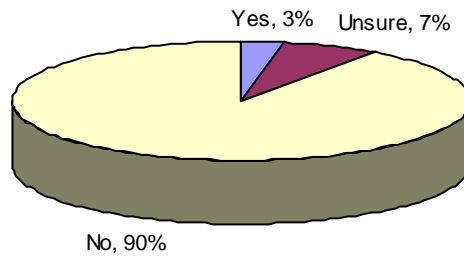
**Electronic tracking tag in products**



Scenario 11: Implanted chip for identity verification:

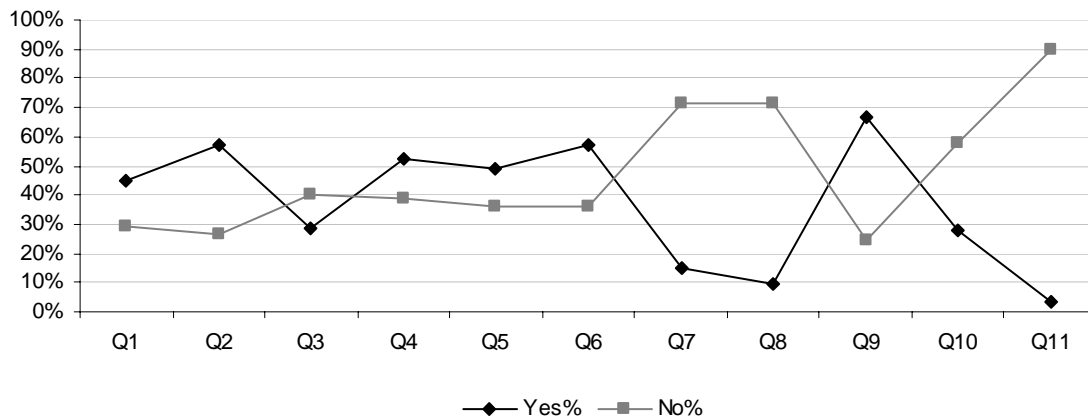
11. I do not mind if the government implanted a chip that can be used to identify every citizen.	Freq.	Pct%
Strongly agree	7	1%
Agree	21	2%
Unsure	60	7%
Disagree	175	20%
Strongly disagree	621	70%
Total	884	100%

### Implanted chip for identity verification



Following is a recap of percentage “Yes” and percentage “No” responses for 11 survey scenarios. As can be seen below, the largest gaps between “Yes” and “No” responses are Q11 (implanted chip), Q8 (wiretap), and Q7 (spyware). The smallest gap concerns Q3 (public restroom), Q4 (airport screening), Q5 (dressing room) and Q6 (traffic monitoring).

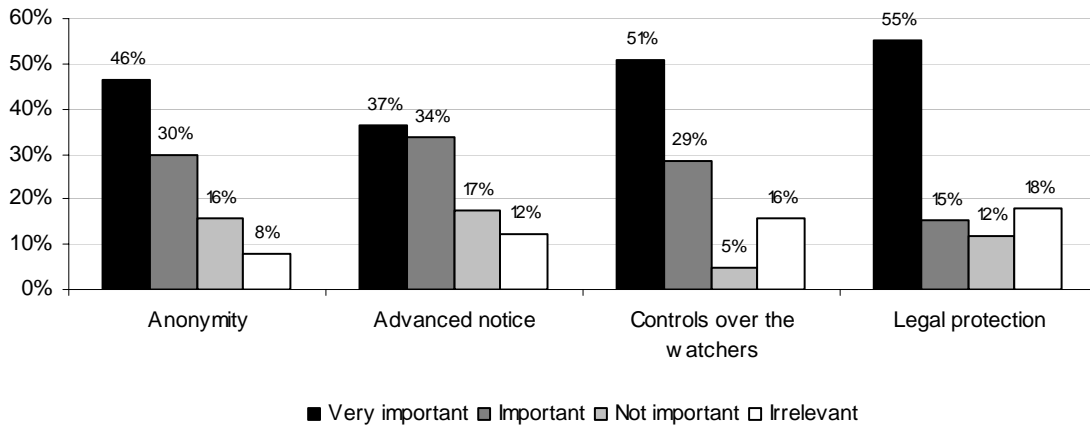
### Percentage of "Yes" and "No" responses for all 11 survey questions



What factors do respondents consider important to their opinions or beliefs about surveillance? Our survey asked individuals to rate four factors using the following four-point opinion scale: Very Important, Important, Not important or Irrelevant:

- Anonymity – The surveillance method does not capture or keep personally identifiable information.
- Notice – The organization using surveillance provides notice to you in advance of its use.
- Controls over the watcher – There are controls over those who watch the public.
- Legal protection – Individuals have legal recourse against organizations that abuse or misuse surveillance.

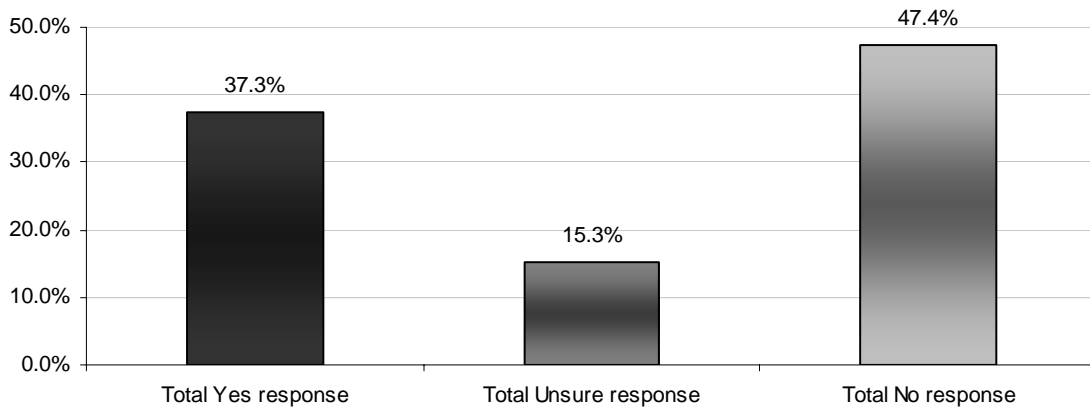
### What factors do respondents consider important?



As can be seen, all four factors are considered by most respondents as “Important” or “Very Important.” It is interesting to note that the two important aspects are: legal protection (Very Important = 55%) and controls over the watchers (Very Important = 51%).

The next chart shows the combined average percentage “Yes”, “Unsure” and “No” responses across all 11 survey items. The total “Yes” percentage (Yes%) is presented for self-reported demographic categories collected in our instrument, including: education, age, household income and gender.

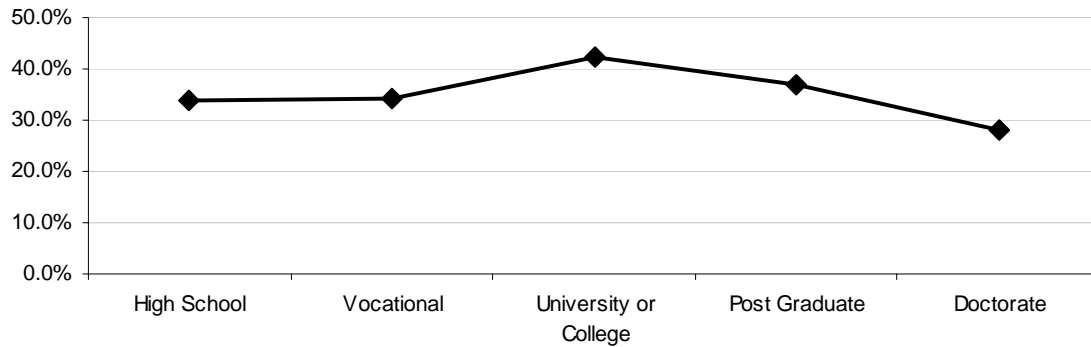
Aggregated responses for all 11 survey items



Education level: As can be seen, the Yes% is highest for individuals with University or College credentials.

What is your highest level of education?	Yes%	Freq.	Pct%
High School	33.7%	258	29%
Vocational	34.3%	169	19%
University or College	42.2%	338	38%
Post Graduate	37.1%	97	11%
Doctorate	28.1%	24	3%
Average/Total	37.3%	886	100%

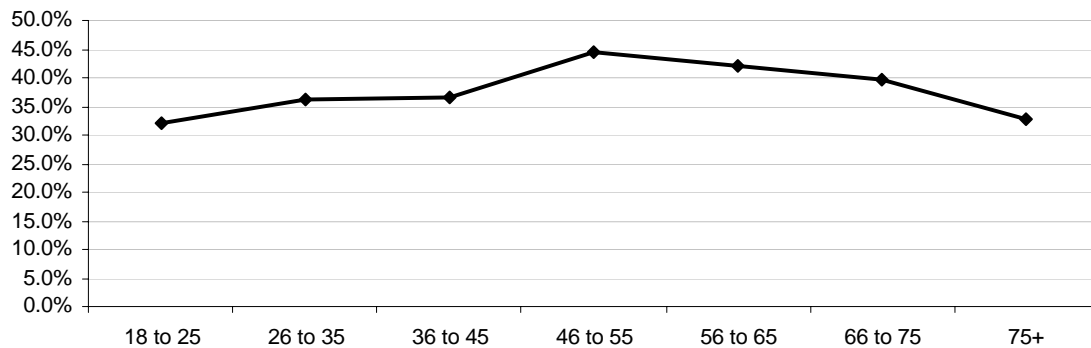
**Percentage of the average "Yes" response to all survey items by the respondent's highest level of attained education**



Age range: The Yes% is highest for individuals between 46 and 55 years. The Yes% appears to be lowest for respondents between 18 and 25 years and those more than 75 years old.

Please check your age range?	Yes%	Freq.	Pct%
18 to 25	31.9%	177	20%
26 to 35	36.3%	176	20%
36 to 45	36.5%	201	23%
46 to 55	44.5%	124	14%
56 to 65	42.1%	107	12%
66 to 75	39.8%	56	6%
75+	32.7%	45	5%
Average/Total	37.3%	886	100%

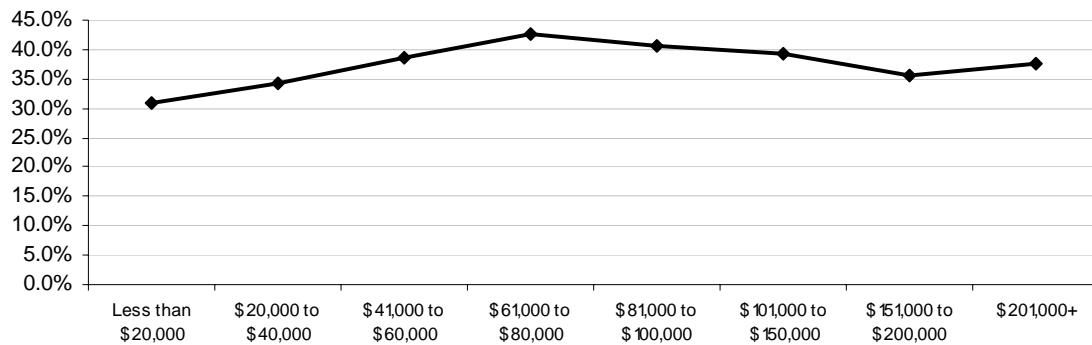
**Percentage of the average "Yes" response to all survey items by the respondent's age range**



**Household income range:** The Yes% appears to be highest for individuals in the middle income ranges. Respondents in the lowest income brackets appear to have the lowest Yes% response. Interestingly, individuals in the two highest income brackets appear to have lower Yes% than individuals in the middle categories.

Approximately, what is your household income (US\$)?	Yes%	Freq.	Pct%
Less than \$20,000	31.0%	119	13%
\$20,000 to \$40,000	34.1%	158	18%
\$41,000 to \$60,000	38.6%	187	21%
\$61,000 to \$80,000	42.5%	132	15%
\$81,000 to \$100,000	40.5%	106	12%
\$101,000 to \$150,000	39.2%	71	8%
\$151,000 to \$200,000	35.7%	85	10%
\$201,000+	37.7%	26	3%
Average/Total	37.3%	884	100%

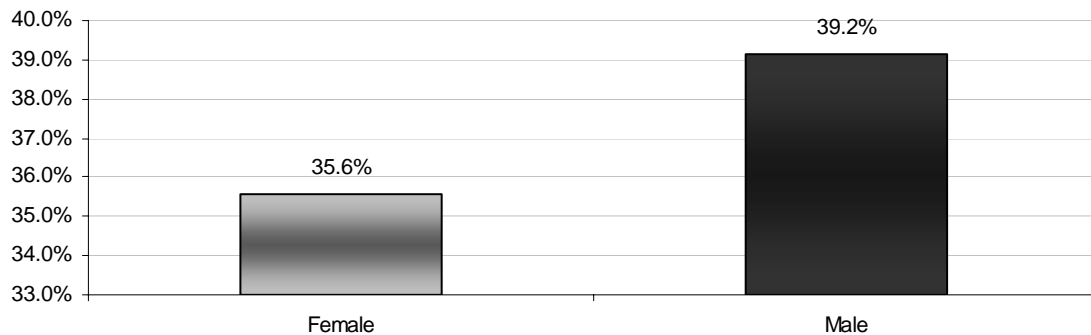
**Percentage of the average "Yes" response to all survey items by the respondent's self-reported household income range**



**Gender:** It appears that males have a higher Yes% than females. This statistically significant difference suggests women are more concerned about surveillance issues than men, at least with respect to the 11 scenarios presented in our survey.

Please check:	Yes%	Freq.	Pct%
Female	35.6%	457	52%
Male	39.2%	429	48%
Average/Total	37.3%	886	100%

Percentage of the average "Yes" response to all survey items for female and male respondents



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## Ponemon Institute, LLC

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