

**Public Opinion Surveys
and
Unidentified Flying Objects**

**50+ years of Sampling
Public Opinions**

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Public Opinion Surveys and Unidentified Flying Objects

ABSTRACT

Public opinion surveys fill an important need in business, politics, and advertising. For more than 50 years surveys of public opinions about Unidentified Flying Objects (UFO) have been conducted to satisfy a variety of customers. While the numbers have fluctuated from time to time, the general results of these surveys showed the public to be very aware of UFO sightings, interested in what may be causing them, and concerned that the government was not doing enough to resolve the mystery.

BACKGROUND

The modern era of UFO sightings began in 1947. Within a few weeks, more than 1,000 UFO sightings had been reported from all parts of the country. Citizens were demanding answers and the media was in a frenzy trying to satisfy the demand. Almost concurrently with the onset of sightings, public opinion surveys began measuring the public's interest in this new mystery.

Those surveys have continued to cover the UFO subject right up to the present time. What they show is a continuous high level of public interest in the subject for more than half of a century.

SURVEY SUMMARIES

The purpose of this paper is to summarize a large number of surveys of public opinions about UFOs, starting in 1947 and continuing to the present. Variables such as size of sample, how well the sample relates to the population, whether it is a probability or non-probability sample, timing, and who pays for the survey usually affect the outcome of the survey in some way. However, in the case of surveys of public opinions as related to UFOs, the outcome is surprisingly consistent. While the numbers do vary, the trend is almost always the same — a high level of interest and strong beliefs.

A summary of each survey has been extracted from the source material and presented herein. The sources are given. Appendix 1 provides a brief primer on the types of surveys available and their purpose.

GALLUP POLL – AUGUST 1947

Source: Jan Aldrich, Project 1947

What do you think these saucers are?

- | | |
|---|-----|
| • No answer, don't know | 33% |
| • Imagination, optical illusions, mirages | 29% |
| • Hoax | 10% |
| • U.S. secret weapon | 15% |
| • Weather forecasting device | 3% |
| • Russian secret weapon | 1% |
| • Searchlights on airplanes | 2% |

- Other explanations 9%

Totals more than 100% because some gave more than one answer.

90% of Americans had heard of flying saucers.

TRENDEX POLL – 1957

Source: St. Louis Globe Democrat – August 24, 1957

Do you believe there is some possibility that they (saucers) may be objects from outer space?

- Yes 25.3%
- No 52.9%
- Don't know 21.8%

A large number of those who said “no” accepted the existence of flying saucers, but said they believed they originated on the earth.

Anyone who said UFOs may come from beyond the earth was then asked if he thought the objects are manned by intelligent beings. About three of five said yes, one said no and one had no opinion.

GALLUP POLL – MAY 1966

Sources: St. Louis Post-Dispatch, Des Moines Register, May 8, 1966

Have you ever heard or read about flying saucers?

National Totals:

- Yes 96%
- No 4%

Men:

- Yes 96%
- No 4%

Women:

- Yes 95%
- No 5%

Have you, yourself, ever seen anything you thought was a flying saucer?

National Totals:

- Yes 5%
- No 95%

Men:

- Yes 4%
- No 96%

Women:

- Yes 6%
- No 94%

College education

- Yes 6%
- No 94%

High school education

- Yes 4%
- No 96%

Grade school education

- Yes 6%

• No	94%
Eastern region	
• Yes	5%
• No	95%
Midwest region	
• Yes	6%
• No	94%
Southern region	
• Yes	5%
• No	95%
Western region	
• Yes	3%
• No	97%

In your opinion are they something real or imagined?

National Totals:

- Real 46%
- Imagination 29%

Men:

- Real 41%
- Imagination 34%

Women:

- Real 50%
- Imagination 25%

College education

- Real 51%
- Imagination 26%

High school education

- Real 51%
- Imagination 27%

Grade school education

- Real 33%
- Imagination 36%

Do you think there are people somewhat like ourselves living on other planets in the universe?

National Totals:

- Yes 34%
- No 46%

Men:

- Yes 35%
- No 42%

Women:

- Yes 33%
- No 48%

College education:

- Yes 37%
- No 44%

High school education:

- Yes 38%
- No 44%

Grade school education:

- Yes 25%
- No 46%

More than 5 million Americans claim to have seen something they believed to be a flying saucer. About 10 times as many – or nearly half of the adult population – believe that these frequently reported objects are real.

TULANE UNIVERSITY POLITICAL SCIENCE SURVEY

Conducted by Dr. David R. Deener
Source: St. Louis Post, Nov. 5, 1967

Male undergraduates ranked highest in believing in flying saucers.
Over 50% of Tulane engineering students believed in flying saucers.

GALLUP POLL – 1971

Source: St. Louis Post-Dispatch, Nov. 29, 1973

A Gallup survey of leaders in 72 nations found 53% expressing a belief in the existence of human life on other planets. The survey was of leaders in science, medicine, education, politics, business and other fields.

INDUSTRIAL RESEARCH MAGAZINE SURVEY – 1971

Based on 90,000 readers, 27% with PhDs, 26% MS, 44% BS (Total 2,700 responses)
Source: National Enquirer, Sept. 5, 1971

Has the government revealed all it knows about UFOs?
• Yes 24%
• No 76%

Do UFOs definitely or probably exist?
• Yes 54%
• No 31%

Do UFOs come from outer space?
• Yes 32%

Do you know anyone who claims to have seen a UFO?
• Yes 36%
• No 64%

Have you ever observed a UFO yourself?
• Yes 8%
• No 78%
• Perhaps 14%

Do you think the government should support further research to document existence or non-existence of UFOs?
• Yes 49%
• No 51%

UNIVERSITY OF COLORADO STUDY

Dr. David Saunders study of 18,000 reports
Source: National Enquirer, August 27, 1972

More UFOs are sighted on Wednesdays than on any other day.

Most UFOs are sighted in the daytime.

Reports tend to come from areas where the education level is high.

AMERICAN INSTITUTE OF AERONAUTICS – 1973

Source: St. Louis Post-Dispatch, Nov. 27, 1973

Ten percent of AIAA members believe UFOs are vehicles from outer space.

GALLUP POLL – 1973

Source: The Houston Post, Dec. 6, 1973; St. Louis Post-Dispatch, Nov. 29, 1973

Have you, yourself, ever seen anything you thought was a UFO?

- Nationwide 11%
- College education 12%
- High school education 10%
- Grade school education 10%
- Eastern region 5%
- Midwest region 13%
- Southern region 14%
- Western region 10%

In your opinion, are they something real, or just people's imagination?

- Real 51%
- Imagination 28%
- No opinion 21%

Do you think there are people somewhat like ourselves living on other planets in the universe, or not?

- Yes 46%
- No 38%
- No opinion 16%

More than 15,000,000 Americans report having seen an unidentified flying object.

ILLINOIS STATE REGISTER POLL – SPRINGFIELD, ILLINOIS - 1974

Source: Illinois State Register, April 22, 1974

Have you or anyone you know personally ever seen a UFO in the Springfield area?

Total:

- Yes 6%
- No 93%

- Don't know 1%
- Men:
- Yes 5%
 - No 95%
- Women:
- Yes 6%
 - No 93%
 - Don't know 1%

NATIONAL ENQUIRER READER POLL – 1974

Source: National Enquirer, March 3, 1974

Do you believe that UFOs from other planets are visiting earth?

- Yes 92.7%
- No 7.3%

CANADIAN GALLUP POLL – 1974

Source: The Toronto Star, March 22, 1978

Have you heard or read anything about unidentified flying objects?

- Yes 67%

In your opinion are they something real, or just people's imagination?

- Real 36%

Have you, yourself, seen anything you thought was a UFO?

- Yes 8%

PSYCHIATRIST STUDY – 1974

By Dr. Berthold Schwartz

Source: National Enquirer, Aug. 25, 1974

A study of 30,000 patients of a state mental hospital over the past 75 years turned up “not one case of a patient who claimed to have had a UFO experience.”

ROPER POLL – 1974

Source: National Enquirer, Dec. 17, 1974

Do you believe in UFOs?

- Total:
- Yes 40%
 - No 47%
 - Don't know 13%

- Male:
- Yes 40%
 - No 47%
 - Don't know 13%

Women:	
• Yes	39%
• No	47%
• Don't know	14%
Eastern region:	
• Yes	39%
• No	47%
• Don't know	14%
Midwest region:	
• Yes	42%
• No	45%
• Don't know	13%
Southern region:	
• Yes	31%
• No	55%
• Don't know	14%
Western region:	
• Yes	53%
• No	34%
• Don't know	13%
College education:	
• Yes	51%
• No	37%
• Don't know	12%
High school education:	
• Yes	39%
• No	47%
• Don't know	14%
Grade school education:	
• Yes	21%
• No	61%
• Don't know	18%

FRENCH BRANCH OF MENSA INTERNATIONAL – 1975

Survey of Mensa members

Source: National Enquirer, June 10, 1975

Do you believe in UFOs?	
• Yes	93%
Are you willing to support new research?	
• Yes	76%
Have you seen a UFO?	
• Yes	49%
Do you believe UFOs are from outer space?	
• Yes	52%

UNITED STATES BRANCH OF MENSA INTERNATIONAL – 1976

Survey of Mensa members
Source: National Enquirer, June 1, 1976

Do you think UFOs are spaceships from other planets?

- Yes 64%

Do you believe UFOs are carrying passengers who are studying our behavior?

- Yes 51%

Have you seen a UFO yourself?

- 16%

DUTCH OPINION RESEARCH ORGANIZATION POLL – JULY 1976

Source: A.P.R.O. Bulletin, May 1977

Have you heard the term UFO?

- Yes 59%

Have you heard the term “flying saucer?”

- Yes 99%

Do you believe in extraterrestrial intelligence?

- Yes 77%

Do you believe UFOs are extraterrestrial spaceships?

- Yes 22%

Have you seen a UFO yourself?

- Yes 0.3%

U.S. AIRLINE PILOT SURVEY – 1977

Source: National Enquirer, Feb. 8, 1977

Do you believe intelligent life exists in outer space?

- Yes 70%

Do you believe UFOs may be spacecraft from another planet?

- Yes 52%

Do you believe the Defense Department is doing an adequate job of monitoring UFO sightings?

- Yes 30%

AMERICAN ASTRONOMICAL SOCIETY MEMBERSHIP SURVEY

By Dr. Peter Sturrock, 1977

Does the UFO problem deserve scientific study?

- Certainly/probably 53%
- Possibly 27%
- Probably not/certainly not 17%

Are you willing to contribute to the resolution of the UFO problem?

- Yes 80%

Do you see any way you could contribute to that resolution?

- Yes 13%

Would you like to obtain more information on the subject?

- Yes 75%

Scientists have thoughts and views but no answers concerning the UFO problem.

Although there is no consensus, more scientists are of the opinion that the problem certainly or probably deserves scientific study than are of the opinion that it certainly or probably does not.

A small fraction (5%) are likely to report varied and puzzling observations.

CANADIAN GALLUP POLL – 1978

Source: The Toronto Star, March 22, 1978

Have you heard or read anything about UFOs?

- Yes 81%

Have you, yourself, ever seen anything you thought was a UFO?

- Yes 10%
- No 71%
- Never heard of 19%

In your opinion, are they something real, or just people's imagination?

- Real 46%
- People's imagination 18%
- Don't know 16%
- Never heard of 19%

OPINION RESEARCH CORPORATION SURVEY – 1978

Source: National Enquirer, April 25, 1978

Do you believe in UFOs?

- Yes 35%

Are UFOs real?

- Yes 52%

Do you have an open mind about UFOs?
 • Yes 90%

Have you seen a UFO?
 • Yes 7%

More than 10 million Americans claim to have seen a UFO.

GALLUP POLL – 1978

Source: George Gallup Press Release dated May 28, 1978

Have you ever seen a UFO?
 Nationwide:
 • Yes 9%
 Eastern region:
 • Yes 9%
 Midwest region:
 • Yes 8%
 Southern region:
 • Yes 9%
 Western region:
 • Yes 14%
 College education:
 • Yes 9%
 High school education:
 • Yes 11%
 Grade school education:
 • Yes 5%

In your opinion, are UFOs something real or just people's imagination?

Nationwide:
 • Real 57%
 • Imaginary 27%
 Eastern region:
 • Real 53%
 • Imaginary 29%
 Midwest region:
 • Real 61%
 • Imaginary 26%
 Southern region:
 • Real 48%
 • Imaginary 32%
 Western region:
 • Real 69%
 • Imaginary 19%
 College education:
 • Real 66%
 • Imaginary 23%
 High school education:
 • Real 57%
 • Imaginary 27%

- Grade school education:
- Real 36%
 - Imaginary 38%

Thirteen million Americans have had a “close encounter.”

GALLUP YOUTH SURVEY – 1978

Source: St. Louis Post-Dispatch, June 7, 1978

Have you ever seen a UFO?

- Nationwide:
- Yes 14%
- Boys:
- Yes 15%
- Girls:
- Yes 13%

Are there people like us on other planets?

- Nationwide:
- Yes 65%
 - No 26%

Are UFOs real or imaginary?

- Nationwide:
- Real 61%
 - Imaginary 25%

WOMANPOLL NATIONAL SURVEY – 1978

Source: St. Louis Globe-Democrat, July 22-23, 1978

Does other intelligent life exist in the universe besides on Earth?

- All women:
- Yes 50%
 - No 30%
- Eastern region:
- Yes 55%
 - No 26%
- Midwest region:
- Yes 46%
 - No 35%
- Southern region:
- Yes 42%
 - No 35%
- Western region:
- Yes 58%
 - No 22%
- College education:
- Yes 56%
 - No 27%
- High school education:

- Yes 50%
 - No 29%
- Grade school education:
- Yes 38%
 - No 37%

OPTICAL SPECTRA JUNE READER POLL – 1978

Source: Optical Spectra magazine, September 1978

Are there planets other than ours with advanced forms of life?

- Highly probable 63%
- Quite possible 27%
- Highly improbable 10%

How do you regard the popular notion that some UFO reports may in fact be sightings of space vehicles from other civilizations?

- Quite conceivable 42%
- Highly improbable 43%
- Nonsense 15%

Would you favor intensification of efforts now being made to try to detect possible communications from outer space?

- Yes 52%
- No 48%

Do you think that more intensive governmental investigation of UFO phenomena is warranted?

- Yes 33%
- No 66%

INDUSTRIAL RESEARCH/DEVELOPMENT OPINION POLL – 1979

Source: Industrial Research/Development Magazine, Feb. 1979

Do you believe UFOs exist?

- Definitely 27%
- Probably 34%
- Probably not 20%
- Definitely not 8%

Do you know anyone who claims to have seen a UFO?

- Yes 36%
- No 64%

Have you observed a UFO yourself?

- Yes 8%
- No 82%
- Perhaps 10%

Do you think the government should support further research to document existence or non-existence of UFOs?

- Yes 51%
- No 49%

DUNEDIN TIMES READER SURVEY – 1979

Source: Dunedin Times, Dunedin, Florida, May 24, 1979

- Do you believe in the possibility of UFOs?
- Yes 78%
- Would you report a UFO if you saw one?
- Yes 13%

GALLUP POLL – 1982

Source: McCall's Magazine, May 1982; Houston Chronicle, May 18, 1982

- Do you believe life exists on other planets?
- Men:
- Yes 50%
- Women:
- Yes 43%
- Scientists:
- Yes 35%

PSYCHOLOGY TODAY READER SURVEY – 1984

Source: Psychology Today magazine, June 1984/September 1984

- Do you believe in UFOs?
- Yes 50%

MEDIA GENERAL – ASSOCIATED PRESS POLL – 1985

Source: Houston Post, Sept. 3, 1985; St. Louis Post-Dispatch, Sept. 4, 1985

- Do you believe there is intelligent life on other planets?
- Yes 47%
 - No 36%
- Is the search for life on other planets a good use of research money?
- Yes 49%
 - No 45%

PUBLIC OPINION LABORATORY SURVEY FOR THE NATIONAL SCIENCE FOUNDATION – 1986

Source: Huntsville, AL, Times, Feb. 16, 1986

Is it likely that some of the UFOs that have been reported are really space vehicles from other civilizations?

- Yes 43%
- No 50%

GALLUP POLL - 1987

Source: George Gallup Press Release dated March 12, 1987; Palm Beach POST, Mar. 14, 1987

Have you ever seen anything you thought was a UFO?

- Yes 9%

In your opinion, are UFOs something real or just people's imagination?

National:

- Real 49%
- Imaginary 30%
- Not sure 21%

Men:

- Real 50%
- Imaginary 31%
- Not sure 19%

Women:

- Real 49%
- Imaginary 28%
- Not sure 23%

Attended college:

- Real 56%
- Imaginary 26%
- Not sure 18%

No college:

- Real 44%
- Imaginary 33%
- Not sure 23%

Eastern region:

- Real 52%
- Imaginary 30%
- Not sure 18%

Midwest region:

- Real 48%
- Imaginary 27%
- Not sure 25%

Southern region:

- Real 39%
- Imaginary 39%
- Not sure 22%

Western region:

- Real 62%
- Imaginary 19%
- Not sure 19%

LONDON AETHERIUS SOCIETY SURVEY – 1987

Source: NEW SOCIETY, London, April 24, 1987

- Do you believe in life on other planets?
- Yes 79%
- Do you believe spacecraft from other planets are visiting earth?
- Yes 63%
- Do you know someone who has had a UFO sighting?
- Yes 30%
- Have you, yourself, seen a UFO?
- Yes 10%

ENQUIRER SURVEY – 1990

Source: National Enquirer, Nov. 6, 1990

- Do you believe that Earth has been visited by aliens from outer space?
- Nationwide:
- Yes 58%
 - No 42%
- Men:
- Yes 64%
- Women:
- Yes 53%

GALLUP MIRROR OF AMERICA SURVEY – 1990

Source: St. Louis Post-Dispatch, August 5, 1990

- Have you read or heard about UFOs?
- Yes 90%
 - No 10%
- Have you, yourself, ever seen anything you thought was a UFO?
- Yes 14%
 - No 85%
 - Don't know 1%
- In your opinion, are UFOs something real, or just people's imagination?
- Real 47%
 - Imagination 31%
 - Don't know 22%
- Do you think there are people somewhat like ourselves living on other planets in the universe, or not?
- Yes 46%
 - No 36%
 - Don't know 18%

Do you believe that extraterrestrial beings have visited Earth at some time in the past?

- Yes 27%
- No 41%
- Not sure 32%

ORANGE COUNTY (CA) REGISTER POLL – 1991

Source: Orange County Register, November 21, 1991

Do you believe there is intelligent life on other planets?

- Yes 58%
- No 28%
- Don't know 14%

Do you believe in UFOs?

- Yes 42%
- No 46%
- Don't know 13%

CARLETON UNIVERSITY (OTTAWA, CANADA) SURVEY – 1993/94

Source: Journal of Abnormal Psychology, November 1, 1993; The Houston Post, November 1, 1993

UFO reporters scored no worse than other people on tests of psychological health, intelligence, and fantasy-proneness. They appeared to be very normal.

MEDFORD, WISCONSIN NEWSPAPER POLL – 1994

Source: Medford Star News, July 14, 1993; July 21, 1993; Sept. 21, 1994; Sept 28, 1994

Do you think intelligent beings exist elsewhere in the universe, or only on Earth?

- Elsewhere 57%
- Only on Earth 6%

Have space aliens visited Earth in the past?

- Yes 33%

Is the Army covering up the recovery of alien bodies from the crash of a UFO in the New Mexican desert in 1947?

- Yes 60%

SCRIPPS HOWARD NEWS SERVICE/OHIO UNIVERSITY SURVEY – 1995

Source: Boston Herald, July 7, 1995; San Antonio Express News, January 20, 1996

Do you feel that flying saucers are real and that the federal government is hiding the truth about them from us?

- Very likely 19%
- Somewhat likely 31%
- Unlikely 43%

- Uncertain 7%

Do you believe in UFO?

Nationwide:

- Yes 50%
- No 50%

Republicans:

- Yes 40%

Elderly (over 65):

- Yes 34%

Church attendees:

- Yes 45%

Men are more likely than women to believe in UFOs.

Belief in aliens who visit Earth runs highest in the northeast and in major urban areas.

Belief in UFOs is least likely among Americans aged 55 and over, those with postgraduate degrees, and self-identified Republicans.

NEWSWEEK MAGAZINE POLL – 1996

Source: Sky News Teletext, July 1, 1996

Do you believe reports of UFOs are real?

- Yes 48%

Do you think the government is concealing UFO information?

- Yes 49%

Do you think UFOs are alien ships or life forms?

- Yes 20%

NATIONAL ENQUIRER POLL – 1996

Source: National Enquirer, July 23, 1996

Do you believe UFOs are real?

- Yes 83%

MARIST INSTITUTE FOR PUBLIC OPINION SURVEY – 1997

Source: The Denver Post, December 16, 1997

Do you think there is intelligent life on other planets?

- Yes 60%
- No 40%

Do you think life on other planets is more, less or about as intelligent as human life on Earth?

- More 47%

- Less 13%
- About the same 40%

Are our galactic neighbors friendly rather than hostile?

- Yes 86%

YANKELOVICH PARTNERS, INC. SURVEY – 1997

Source: USA Today, July 7, 1997

Do you believe the government is hiding evidence of intelligent life in space?

X-Files watchers:

- Yes 79%

X-Files non-watchers:

- Yes 82%

Do you believe a UFO crashed in Roswell in 1947?

X-Files watchers:

- Yes 65%

X-Files non-watchers:

- Yes 66%

Do you believe that intelligent beings live on other planets?

X-Files watchers:

- Yes 64%

X-Files non-watchers:

- Yes 45%

Do you believe space aliens have visited Earth?

X-Files watchers:

- Yes 42%

X-Files non-watchers:

- Yes 26%

CHAMBERLAIN RESEARCH CONSULTANTS SURVEY – 1997

Source: The Oshkosh (WI) Northwestern, August 29, 1997

Do you think intelligent beings from other planets have visited Earth?

- Yes 30.3%
- No 55.8%
- Undecided 13.8%

BRITISH FOCUS SCIENCE MAGAZINE SURVEY – 1999

Source: BBC News Sci/Tech, January 13, 1999

Do you believe alien life exists in the universe somewhere?

Nationwide:

- Yes 50.2%

Northwest region:

• Yes	43%
Southwest region:	
• Yes	65%
East Anglia:	
• Yes	58%

Pensioners are the most likely group to insist there is no intelligent life out there.

Appendix 1

Types of Surveys

Surveys Defined:

A survey is an investigation of what is present in a particular population. If the total population is surveyed, the result is a census, or a 100% survey. Usually, however, only a portion of the population is surveyed. This is called a sample survey.

Whether the survey results in a set of meaningless numbers or a package of useful data depends on how precisely the population and the characteristics to be measured are defined.

All surveys have a goal. The procedure used should be aimed at seeking the truth, not to prove one's biased viewpoint. If a census could be taken the results would not be hard to interpret; they would be quite clear, providing the survey was correctly prepared. Usually, a census cannot be taken due to cost, logistics, or other problems. The remaining choice is the sample.

In interpreting survey results it is desirable to ascertain if the results are representative, what type of sample was taken, and are the inferences, if any, correct?

A survey can fail to be representative if the investigator selects a satisfactory sample, but fails to get replies from a sizable portion of that sample. The result is a small subset of the sample that is really quite unlike the population, rather than typical of it.

The type of sample taken can vary greatly; but it is necessary to utilize the proper type, depending upon the purpose of the survey. Sample types can be "non-probability samples or probability samples.

Non-probability Samples:

Non-probability samples are usually not representative of the population. These may include Systematic Sampling, Quota Sampling, Accidental Sampling, Judgemental or Purposive Sampling, Snowball Sampling, Saturation Sampling, and Dense Sampling.

Systematic Sampling: Obtained by drawing every nth person from a predetermined list. An example is drawing every tenth name from the telephone book.

Quota Sampling: Obtained by selecting elements most accessible to the investigator, or possessing characteristics most interesting to the investigator.

Accidental Sampling: Selected only on the basis of convenience and economy.

Judgemental or Purposive Sampling: Samples are handpicked by the investigator to ensure that specific elements are included.

Snowball Sampling: Samples are taken by obtaining a list of friends belonging to a particular group, and then their friends and the friends of friends, and so on until the investigator sees a social pattern emerge.

Saturation Sampling: Obtaining all elements of a given population having characteristics of interest to the investigator.

Dense Sampling: Selecting a significant portion of a small (less than 1,000) population as the sample.

Probability Samples:

Specifies the probability of the inclusion of each element. The investigator must know or determine the size of the population from which the sample will be obtained, define the sample size, and assure that each element has an equal chance of being included in the sample.

Simple Random Sample: A technique that assures each element an equal and independent chance of being included in the sample. To obtain a random sample one must:

- Enumerate all elements of the population.
- Specify that each element has an equal and independent chance to be included.
- Draw numbers by the fish bowl technique, a table of random numbers, or a computer-determined array.

Stratified Random Sample: Used to obtain specific proportions of certain characteristics. Generally obtained by dividing the population into populations possessing the specific characteristics and then random sampling each population to the desired proportion.

Cluster or Area Sample: This is essentially a double random sample. It is obtained by listing all clusters (i.e. all cities in Colorado), giving each a number and then selecting a random sample of “n” size. The next step is to identify the elements of each selected cluster by number and pull “n” samples from each cluster. Proportional allocation is often used in cluster sampling. The Gallup Poll uses cluster sampling.

Error:

The inferences made as the result of the survey may be proper or improper depending on the size of the sample, the type of the survey and the purpose. Two kinds of error show up in surveys – bias and random. Bias can show up in the type of population and sample selected, or the way the survey is constructed. Random error is present when a sample rather than a census is taken. Random error can be controlled through use probability samples.