

## Methodology

### **Massachusetts U.S. Senate Poll**

Prepared by RKM Research & Communications

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#### **OVERVIEW**

The results of the Massachusetts U.S. Senate Special Election poll are based on telephone interviews with a random sample of 608 Massachusetts registered voters. Telephone interviews were conducted by landline (n = 409 – 67%) and cell phone (n = 199 – 33%). The survey was conducted by RKM Research & Communications. Interviews were conducted in English from June 15-19, 2013.

The survey was administered using a computer-assisted telephone interviewing (CATI) system. The CATI system allows data to be entered directly into a computerized database as interviews are conducted. A central polling facility in Portsmouth, New Hampshire was used to administer the survey. All interviews were conducted by paid, trained and professionally supervised interviewers.

#### **DESIGN AND DATA COLLECTION PROCEDURES**

##### **Sample Design**

The survey was conducted using a dual-frame design. A combination of landline and cell phone samples was used, and then subsequently combined into one. A random digit dial (RDD) sample was used to represent all registered voters in Massachusetts who have a residential landline phone. A probabilistic sample of cell phone numbers was used to represent registered voters who have a cell phone. Both samples were obtained from Survey Sampling International, LLC (SSI) according to RKM Research and Communications specifications.

Numbers for the landline sample were drawn with equal probabilities from active blocks (area code + exchange + two-digit block number) that contained three or more residential directory listings. The cellular sample was not list-assisted.

## **Contact Procedures**

As many as five attempts were made to contact every randomly selected telephone number. Calls were staggered over times of day and days of the week to maximize the chance of making contact with potential respondents. Each phone number received at least one daytime call when necessary.

For the landline sample, interviewers asked to speak with the youngest adult male or female currently at home based on a random rotation. If no male/female was available, interviewers asked to speak with the youngest adult of the other gender who was currently at home. This systematic respondent selection technique has been shown to produce samples that closely mirror the population in terms of age and gender when combined with cell interviewing.

For the cell sample, interviews were conducted with the person who answered the phone. Interviewers verified that the person was an adult and in a safe place before administering the survey.

All cooperating respondents from both samples were asked about their voter registration status. Registered voters continued with the full interview.

## **Margin of Error**

The survey has a maximum margin of error of 4.0 percentage points at the 95% confidence interval. The maximum margin of error is the estimated parameter based on the total sample—the one around 50 percent. For example, the margin of error for the entire sample of registered voters is +/- 4.0 percentage points. This means, in theory, in 95 out every 100 samples drawn using the same methodology, estimated proportions based on the entire sample will be no more than 4.0 percentage points away from their true values in the population. The maximum margin of error is lower when a sample parameter varies, either higher or lower than the one around 50 percent.

It is important to remember that sampling fluctuations are only one possible source of error in a survey estimate. Other sources, such as respondent selection bias, questionnaire wording and reporting inaccuracy may contribute additional error of greater or lesser magnitude.

## WEIGHTING AND ANALYSIS

Weighting is commonly used in survey analysis to compensate for patterns of non-response that might bias results. In addition to a probability of selection weight based on the number of residential and cellular phones that could be used to select respondents, the full sample was weighted to match the Massachusetts adult population estimates for gender, age, education, race/ethnicity and region. As shown, the unweighted results are generally close to estimated parameters. The calculated RIM weights (also known as iterative proportional weighting) were used to correct for variations in non-response.

**Table 1: Sample Demographics**

	Parameter	Unweighted	Weighted
<u>Gender</u>			
Male	48.5	43.1	48.5
Female	51.5	56.9	51.5
<u>Age</u>			
18-24	12.7	4.8	12.2
25-34	15.3	12.7	14.8
35-44	18.6	13.7	18.1
45-54	21.0	20.1	20.5
55-64	14.1	19.4	13.6
65+	18.3	25.7	17.8
	missing	3.8	2.8
<u>Education</u>			
Less than HS Graduate	10.0	4.0	9.8
HS Graduate	28.3	22.2	28.1
Some College	23.7	22.3	23.5
College Graduate	38.0	51.5	37.8
	missing	0.8	0.8
<u>Race/Ethnicity</u>			
White/not Hispanic	80.7	80.6	80.7
Black/not Hispanic	5.9	8.4	5.9
Hispanic	7.1	7.9	7.1
Other/not Hispanic	6.3	3.1	6.3
<u>Region</u>			
Metro Boston	55.0	55.1	55.0
Central	12.0	13.0	12.0
South/Islands	20.0	20.1	20.0
Western	13.0	11.8	13.0

## LIKELY VOTERS

The survey is based on complete and useable interviews with 608 registered voters. Because all registered voters do not vote in all elections, a “likely voter” model was constructed. The model is based on the following 4 questions:

How closely do you follow politics in Massachusetts? Would you say:

- |    |                       |    |                     |
|----|-----------------------|----|---------------------|
| 01 | Very closely          |    |                     |
| 02 | Moderately closely    |    |                     |
| 03 | Only somewhat closely |    |                     |
| 04 | Not closely           | 88 | Don't know / unsure |

How much thought have you given to the upcoming special election for U.S. Senator? Would you say:

- |    |                 |    |                     |
|----|-----------------|----|---------------------|
| 01 | A great deal    |    |                     |
| 02 | Moderate amount |    |                     |
| 03 | Only a little   |    |                     |
| 04 | Not at all      | 88 | Don't know / unsure |

How often do you vote in elections? Would you say:

- |    |                  |    |                     |
|----|------------------|----|---------------------|
| 01 | Always           |    |                     |
| 02 | Most of the time |    |                     |
| 03 | Occasionally     |    |                     |
| 04 | Never            | 88 | Don't know / unsure |

How likely is it that you will vote in the special election for U.S. Senate?

- |    |                     |    |                     |
|----|---------------------|----|---------------------|
| 01 | Definitely will     |    |                     |
| 02 | Probably will       |    |                     |
| 03 | Probably will not   |    |                     |
| 04 | Definitely will not | 88 | Don't know / unsure |

Each question was given equal weight in the calculation of our “likely voter” model. “Don’t know / unsure” options were excluded from our calculation. Response options were re-coded in reverse order (so that higher values are associated with a greater likelihood of turning-out on election day), the variables were then added together and the sum of this score was divided by four, to match the number of questions used to construct the index. From this, a “likely voter” model based on an expected turn-out of roughly 50 percent of registered voters was constructed, based on the 50 percent who scored highest on the index of “likely voters.” A separate “likely voter” model was constructed assuming a high turn-out of 75 percent of registered voters. Again, the index was based on the 75 percent who scored highest on the overall index of “likely voters.”

The “likely voter” model emphasized in this report is the one based on an expected turn-out of approximately 50 percent of registered voters. This model is based on 312 voters, with a maximum margin of error of +/- 5.6 percentage points.

The hypothetical “likely voter” model based on approximately 75 percent of “likely voters” is based on an unlikely turn-out of 75 percent of registered voters. This model is based on 458 voters, with a maximum margin of error of +/- 4.6 percentage points. The purpose of looking at this model is to take into consideration how an unexpected high turn-out might impact the election.

## **RESPONSE RATE**

Response rates for the sample of landline and cell phones were calculated separately. These rates are based on formulas established by the American Association for Public Opinion Research (AAPOR).

The AAPOR response rate for the landline sample is 13.2 (Response Rate 4).

The AAPOR response rate for the cell phone sample is 10.0 (Response Rate 4).