

Methodological Issues in Pre-Election Polling:  
Lessons from ABC News' 32-Night Tracking Poll

Daniel Merkle, ABC News  
Gary Langer, ABC News  
David Lambert, TNS

Contact:  
Daniel Merkle  
ABC News  
47 W. 66<sup>th</sup> St.  
6<sup>th</sup> Floor  
New York, NY 10023  
212-456-3564  
daniel.m.merkle@abc.com

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Pre-election polls present unique methodological challenges. Unlike surveys that simply sample a known population, pre-election polls in effect seek to sample an unknown population, one that in reality won't exist until on or about Election Day – voters. The election preferences of non-voters are not germane in seeking to measure and evaluate vote preferences. Thus pre-election polls must make their best estimate of the voting population – a modeling process that lays a new level of complexity over the existing methodological issues in survey research of a known population.

This paper explores these factors and how they affect survey estimates. The issues covered include variability in short-term political party identification, the use of party ID as a weighting factor in likely voter modeling, measurement of voter registration, day of week effects, callbacks, fresh vs. live sample, and listed vs. unlisted phone numbers. The data are from ABC News' 2004 pre-election tracking poll of over 21,000 respondents, the only media-sponsored daily tracking poll conducted in this election.<sup>1</sup>

### **Tracking Methodology**

The tracking poll was conducted over 32 consecutive nights from October 1 through November 1, 2004. A tracking poll is a series of consecutive, one-night, stand-alone polls reported in a rolling multi-night average. Approximately 600 general population respondents were interviewed each night, rising to approximately 1,000 in each of the last five nights. In all, 21,265 interviews were conducted.

A sample of telephone households in the continental United States was selected via random digit dialing. Each night's sample included a mix of 60 percent "fresh," or

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<sup>1</sup>ABC News and the *Washington Post* cooperated in data collection (conducted by TNS) then independently modeled, analyzed and reported the data.

new numbers, and 40 percent previously called numbers. Interviewers asked to speak to the household member age 18 or over at home who had the last birthday. Sampling, data collection and tabulation were conducted by TNS of Horsham, PA. The cooperation rate across all waves was 54 percent and the response rate was 37 percent.<sup>2</sup>

Each night's data were weighted using demographic information on age, race, sex and education from the March 2003 Current Population Survey. Data were analyzed using a variety of likely voter models that represented different assumptions about the composition of the electorate and produced a range of turnout scenarios. Party identification was used as a factor in likely voter modeling, as described below.

### **Vote Estimates**

ABC News' practice is to develop a range of "likely voter" models, which may employ elements such as self-reported voter registration, intention to vote, attention to the race, past voting, age, respondents' knowledge of their polling places and political party identification. The level of voter turnout produced by these models is evaluated and differences across models are diagnosed when they occur.

While ABC News' likely voter modeling is intended to produce the best possible vote estimate, we reject the myth of pinpoint accuracy in pre-election polls. A good final poll, rigorously conducted and with accurate modeling, should come within a few percentage points of each candidate's actual support. Any more indicates a problem, but

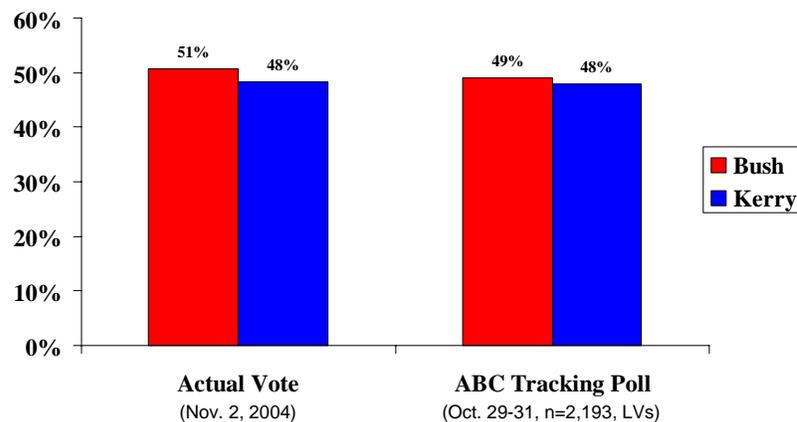
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<sup>2</sup>The cooperation rate is AAPOR's CR3. The response rate is computed using AAPOR rate RR3: completed interviews / [(completed interviews + partial interviews) + (refusals + noncontacts + other) +  $e$ \*(unknown households + unknown other)]. We set  $e$  at .20 based on estimates from previously published RDD telephone surveys with similar field period lengths (Keeter, Miller, Kohut, Groves and Presser (2000, p. 127)).

any closer, in our view, is the luck of the draw. Winning the horse-race lottery is not sufficient grounds for a substantive evaluation of the quality of any pre-election poll.

The final vote estimate released by ABC News, based on data collected October 29-31, was within two points on the Bush percentage and exactly matched the Kerry percentage of actual vote (Figure 1). This is in line with previous ABC News pre-election polls since 1984 which have also closely estimated the final outcome. Since that time, the average absolute error on the major party candidates has been 1.5 percentage points.

Figure 1  
Final ABC Tracking Poll and Actual Vote



Vote preferences among subgroups also can indicate the reliability of pre-election survey estimates. While there's no official record of the vote by population groups, we can compare subgroup estimates from ABC's tracking poll with the National Election Pool's much larger national Election Day exit poll.

Each of these sources has different advantages and disadvantages. Exit polls are conducted with actual voters (including a small national sample of absentee voters

contacted by RDD telephone survey), and the national exit poll is based on a very large sample size (12,219 in 2004). At the same time, exit polls are based on cluster samples and therefore have larger design effects than telephone surveys. Good-quality pre-election polls conducted via RDD are based on modeled rather than actual voters, have smaller sample sizes, and almost no design effect.

In overall vote, the ABC data were more accurate. The NEP national exit poll overestimated Kerry's vote by three percentage points and underestimated the Bush vote by the same amount, before the data were weighted to the final election result (Edison Media Research and Mitofsky International, 2004). Among subgroups, there's close correspondence between the final vote-weighted exit poll and ABC's final pre-election poll (which is not weighted to actual vote) (Table 1). On average, estimates of Bush's support differ by 2.7 percentage points between the two polls. For Kerry's support the average difference is somewhat smaller, 2.0 points. It's slightly larger for Bush because, as noted, the tracking poll underestimated his support by two points while estimating Kerry's support exactly. The conclusions one would draw only differ for one of the subgroups, those who are 60 and older: Bush did slightly better among this group in the exit poll whereas Kerry did slightly better in the tracking poll.

### **Underrepresented Groups**

ABC News' pre-election poll methodology – particularly its likely voter modeling – is reviewed and refined as necessary. Likely voter models prior to 2004 underrepresented younger voters and did not explicitly include first-time voters. These groups

Table 1  
Candidate Support  
ABC News Tracking Poll vs. NEP Exit Poll

	Bush Support			Kerry Support		
	Tracking poll	Exit poll	Abs. diff	Tracking poll	Exit poll	Abs. diff
All	49	51	2	48	48	0
Men	53	55	2	43	44	1
Women	45	48	3	52	51	1
Married men	58	60	2	38	39	1
Single men	42	45	3	55	53	2
Married women	53	55	2	45	44	1
Single women	34	37	3	63	62	1
Democrat	13	11	2	85	89	4
Republican	91	93	2	8	6	2
Ind/other	45	48	3	49	49	0
Liberal	14	13	1	84	85	1
Moderate	40	45	5	57	54	3
Conservative	78	84	6	19	15	4
18-29	40	45	5	57	54	3
30-44	53	53	0	43	46	3
45-59	52	51	1	45	48	3
60+	46	54	8	50	46	4
H.S. or less	48	51	3	49	48	1
Some college	53	54	1	43	46	3
College graduate	49	52	3	48	46	2
Post graduate	44	44	0	54	55	1
White	55	58	3	42	41	1
Black	10	11	1	85	88	3
Hispanic	41	44	3	56	53	3
Union households	36	40	4	60	59	1
Evangelical white Protestant	76	78	2	22	21	1

Note: Tracking data based on likely voters.

didn't vote in large enough numbers, or differently enough, for their under-representation to make a substantive difference in our estimates.

The 2004 election campaign included substantial discussion of young and first-time voters (as well as cell-phone-only voters, who tend to be younger). ABC News moved to sharpen some of its models to increase the representation of these populations. This was done by a variety of measures, including incorporating a question asking whether respondents were first-time voters and adding a follow-up to the voter registration question. We also for the first time separately identified absentee voters; and for diagnostic purposes we added a question to the exit poll measuring cell-phone-only voters to see if their exclusion from the tracking sample significantly affected our pre-election estimate. It did not.

The traditional registration question asks respondents if they're registered to vote at their present address. For those who said no, a follow-up was added in 2004 asking if they were currently registered at some other address. Eighty-one percent of adults said they were registered at their present address; an additional four percent were registered elsewhere. This small group would have been missed by the traditional question. (It's important to note that 85 percent registration overstates actual voter registration in this country by six percentage points.<sup>3</sup> The point of the exercise in likely voter modeling, however, is not to accurately estimate the number of registered voters. That probably could be done quite precisely with a battery of specific registration questions. The purpose here, instead, is to model likely voters; self-asserted registration is simply a factor in that modeling process.)

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<sup>3</sup> Based on data collected by the Associated Press.

As expected, respondents who reported being registered at another address were significantly younger and more likely to be first-time voters (Table 2). At the same time, they were less politically engaged and much less likely to say they were certain to vote.

The extra effort to include young and first-time voters improved the representation of these groups. In 1996 and 2000, 17 percent of voters in the national exit polls were ages 18-29. The ABC News tracking estimates were lower, 11 and nine percent respectively. In 2004, the exit poll estimate was again 17 percent but the final tracking poll estimate was closer, 16 percent. Also in 2004, first-time voters were 11 percent in the exit poll and eight percent in the final tracking poll.

Table 2  
Registered at present residence  
(n=12,835)      Registered elsewhere  
(n=556)

Men	48	46
Women	52	54
18-29	<b>17</b>	<b>44</b>
30-49	<b>40</b>	<b>39</b>
50-64	<b>26</b>	<b>12</b>
65+	<b>18</b>	<b>6</b>
White	<b>80</b>	<b>75</b>
Nonwhite	<b>20</b>	<b>25</b>
Democrat	<b>34</b>	<b>30</b>
Republican	<b>31</b>	<b>28</b>
Independent	<b>28</b>	<b>31</b>
Liberal	18	21
Moderate	43	43
Conservative	34	33
Certain will vote/or already voted	<b>90</b>	<b>58</b>
Very closely following the 2004 election	<b>57</b>	<b>33</b>
First-time voter	<b>10</b>	<b>21</b>

Note: Distributions in bold are significantly different at  $p < .01$  using a Chi-Square test. Based on registered voters.

### **Party Identification**

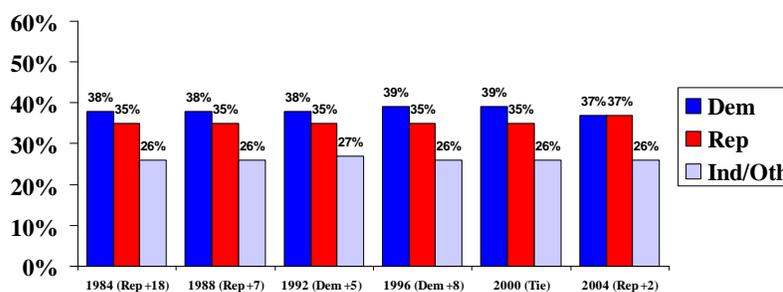
The use of political party identification as a weighting factor in likely voter models is a subject of debate among opinion researchers (Pew Research Center, 2004a; Pew Research Center, 2004b; Zukin, 2004; Langer and Merkle, 2004). In 2000 (long before the debate reached its more recent pitch), after an extensive evaluation of the issue, ABC News began employing party ID as a factor in its tracking poll's likely voter modeling. We took this action on the basis of a modeling analysis we conducted after the 1996 election, in which we found that applying a party ID factor would have brought our final pre-election poll results closer to the exit poll results for party ID in 1984, 1988, 1992 and 1996 alike, and would have slightly improved our vote estimates in 1988, 1992 and 1996, with no change in 1984.

After the 2000 election we presented a detailed analysis of that year's data, including an examination of the effects of party ID as a factor in modeling (Langer and Merkle, 2001). It showed that party ID factoring in 2000 slightly improved the party ID distribution but had essentially no effect on the estimate of vote preference — no more than a single point on any given day in that 21-day tracking poll, and zero effect on our final estimate.

Proponents of using party ID in likely voter modeling have noted the remarkable stability of party ID in exit polls conducted in presidential elections from 1984 through 2000 (Figure 2): Democrats accounted for either 38 percent or 39 percent of voters, Republicans 35 percent and independents 26 percent or 27 percent. What made that

stability even more impressive were the differing vote margins in these elections — Rep +18, Rep +8, Dem +6, Dem +9, and a tie.

Figure 2  
Party ID by Election Year  
Exit Polls



Opponents of the practice note that party ID can and does change, and that polls measuring the dynamics of the race — rather than simply attempting to predict its outcome — need to measure and report this change, not suppress it. In fact, the 2004 exit poll did show a slight change in party ID for the first time in at least two decades (Figure 2). The Democratic percentage decreased by two points while the Republican percentage increased by the same amount. The share of independents has remained unchanged over the last 20 years.

Some have suggested that the change in the Democratic and Republican proportions in 2004 is evidence that using party ID as a weighting factor is wrongheaded (e.g., Pew Research Center, 2004b). The issue is best resolved by an examination of available data – and of the various approaches available.

The traditional schools of thought on party ID weighting have been unforgiving. The first says that party ID is a volatile opinion measure which makes it impossible to use as a weight. The second says that party ID is akin to a demographic, and, because of its importance in political views, should – even must – serve as a weight. Both these positions, in our view, are unnecessarily absolutist.

Green, Palmquist and Schickler's (2002) comprehensive study of partisanship finds that party ID is very stable over time. They conclude: "In terms of persistence over time, party identification finds a much closer parallel to other social identities, namely religion, ethnicity, and social class" (p. 75). Part of their analysis is based on panel surveys which they use to study partisan stability at the individual level, after controlling for measurement error. Other survey researchers have used similar data to argue that party ID is unstable (e.g., Pew Research Center, 2004a). But these analyses ignore the implications of measurement error and therefore overstate the amount of true change.

Green et al. (2002) also analyze aggregate data over time from Gallup, CBS News and the National Election Studies and find that "the distribution of partisanship evolves slowly over time, both during and between election campaigns" (p.87) (see also Langer et al. 2004).

ABC News does not use party ID as a factor in pre-election polls before tracking begins. These polls, done well in advance of Election Day, are not predictive, and do not seek to model actual turnout. Shifts in allegiance, when they do occur, often appear as consistent, multi-night, event-based changes rather than trendless, night-to-night variability. ABC News noted and reported, for example, shifts in party ID around the 2004 conventions — more Democratic self-identification after the Democratic National

Convention, more Republican self-identification after that party's convention (Langer, 2004a; Langer, 2004b).

Tracking polls are another animal. Conducted only in the final weeks of the campaign, their focus increasingly is not simply on a sampled population, but on a modeled population of likely voters. While they measure the election “if it were today,” an implied predictive element seeps into these estimates as Election Day draws near, and the views of non-voters become increasingly irrelevant. These surveys must therefore sharpen their best estimate of actual likely voters, and not let the accuracy of their portrayal of the race fall victim to sampling variability or model-induced fluctuations.

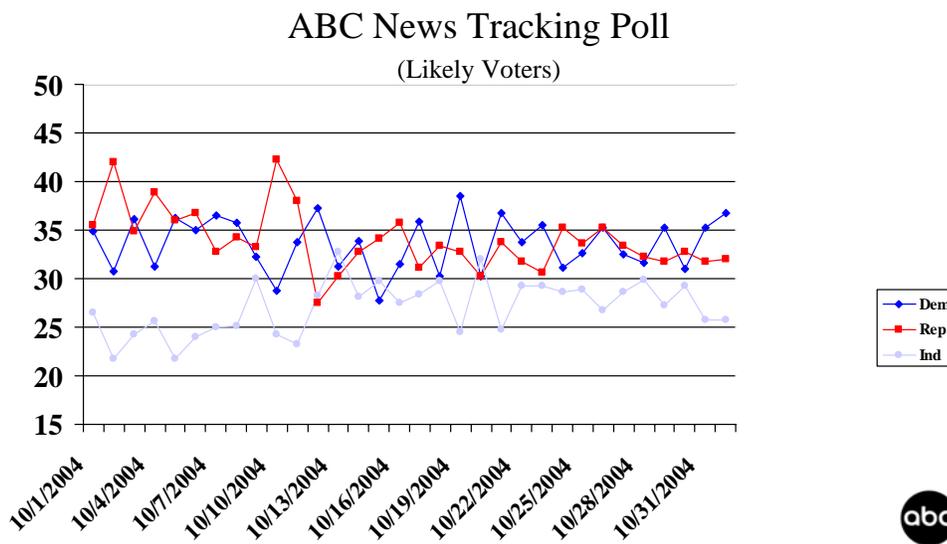
In previous tracking polls, we’ve observed large night-to-night movement in party ID that appears to represent trendless sampling variability rather than actual changes in partisan self-identification. This was again the case in 2004.

As shown in Figure 3, the night-to-night party ID numbers fluctuated in what appears to be random movement. Over the course of a month of daily tracking, Democrats ranged from 28 to 40 percent of the sample, Republicans from 28 percent to 42 percent and independents from 22 percent to 33 percent. This mirrors the normal night-to-night variability in standard, multi-night ABC News polls.

Those who denounce party weighting may point to this as evidence of large opinion changes in party ID. These are large shifts, but are they real? To test this notion, we computed 31 wave-to-wave change scores for the three party ID response categories. Only seven of the 93 comparisons were statistically significant at the 95 percent confidence level, scarcely different than the five we’d expect to see based on chance

alone. Similarly, only one of the 93 wave changes was significant at the 99 percent confidence level, exactly what would be expected by chance.

### Figure 3 Party ID by Wave



This variability is consistent with previous ABC News tracking polls. Table 3 shows the ranges and standard deviations in party ID for ABC News tracking polls from the last three elections.<sup>4</sup> Each shows fairly wide ranges in the party ID numbers. The standard deviations vary somewhat by year, but none of these differences are statistically significant using the Levene test for homogeneity of variance.

Table 3  
Wave by Wave Party ID Estimates, 1996-2004

	Democrat		Republican		Independent	
	SD	Range	SD	Range	SD	Range
1996	2.75	9.8	2.33	9.7	2.74	10.5
2000	2.91	10.9	2.76	10.2	3.09	11.3
2004	2.94	10.6	2.32	8.7	1.98	8.0
Levene Stat:	.051, n.s.		.417, n.s.		1.59, n.s.	

Note: Based on likely voters.

<sup>4</sup> The number of nights of tracking varied for each election with a minimum of 21 nights. Therefore, these comparisons are based on the last 21 nights of tracking for each year. Samples sizes were larger for waves just before the election. For this analysis, these waves were subsampled so the sample sizes were in line with earlier waves.

In 2004 there was significantly more volatility in the Republican percentages in the first half of tracking than in the second (Table 4). During this time period, from September 30 through October 13, there were four debates, three presidential and one vice-presidential. The standard deviation for the Republican percentage in waves one through 16 was 14.7. It was only 5.1 in waves 17 through 32. There was also more variability in the independent percentages in the first half, although the difference was not statistically significant using the Levene test. The Democratic variability did not differ between the two halves.

Table 4  
Wave by Wave Party ID Estimates, 2004

	Democrat		Republican		Independent	
	SD	Range	SD	Range	SD	Range
Waves 1-16	2.89	9.5	3.84	14.7	3.09	11.0
Waves 17-32	2.98	9.3	1.68	5.1	2.18	7.5
Levene Stat:	.023, n.s.		4.42, p<.05		2.10, n.s.	

Note: Based on likely voters.

Erikson, Panagopoulos, and Wlezien (2004) reported that the Gallup likely voter model accentuated the random variability in party ID.<sup>5</sup> Variability of this nature affects portrayals of the race, given the very high correlation between party ID and vote preference. The question is whether surveys are measuring actual changes in opinion, or instead are reporting who's moving into and out of their likely voter models; and, if the latter, whether such movement is real, or an artifact of the model. Claims that this movement is meaningful seem to be contradicted by its trendless variability as well as by

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<sup>5</sup> Also the wording of the party ID question can influence the variability of responses (Green et al., 2002). Gallup's wording asks for party ID "as of today" which results in more variability than questions, such as ABC News', which ask respondents how they usually think of themselves, "generally speaking."

the difference in party ID variability among registered and likely voters (Erikson et al., 2004).

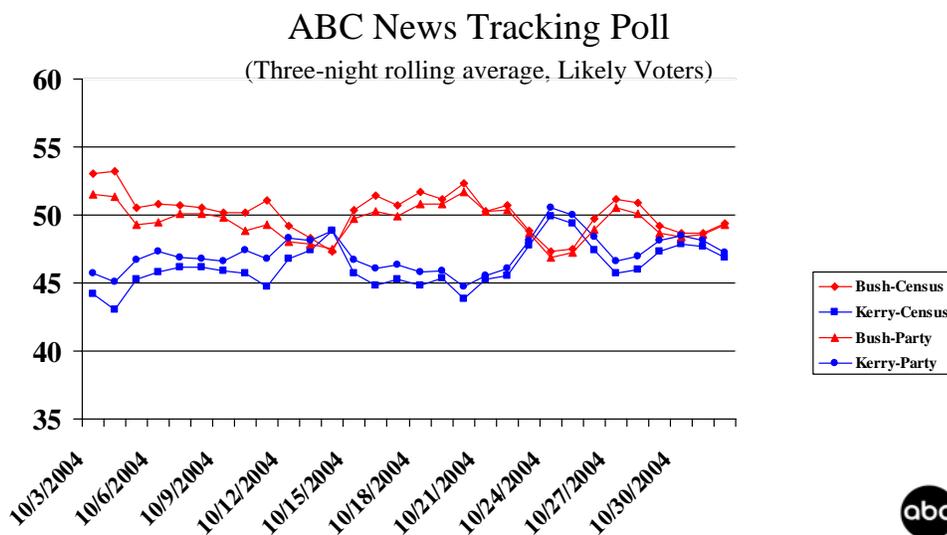
While random movement in party composition can distort a poll's horse-race estimates, it's also true that actual change can occur. ABC News, therefore, in 2000 created a compromise position on party weighting that falls between the two traditional schools of thought: We compute an average of party ID as measured in the nightly tracking poll, and party ID as measured in recent presidential election exit polls. This averaging approach allows us to pick up real movement in party ID, if and when it occurs, while constraining random variability. It reflects our conclusion that, on one hand, the stability in party ID in recent elections is persuasive, but not necessarily fully predictive; and, on the other, that some variability in party ID in tracking polls may be real, but that it also can reflect sampling or modeling variability, rather than true movement in voter attitudes.

What is the effect of this modeling? Figure 4 shows the 2004 tracking poll vote estimates weighted two ways: 1) Using the standard demographic weighting for age, race, sex and education based on Census data; 2) Using the demographic weighting as well as the party factoring just described. Vote estimates changed by no more than two points as a result of the party weighting across the three-night rolling averages and, on average, Bush and Kerry's support changed by less than a single percentage point. In the final estimate reported by ABC News, party weighting did not change the vote estimates at all (Figure 5).<sup>6</sup>

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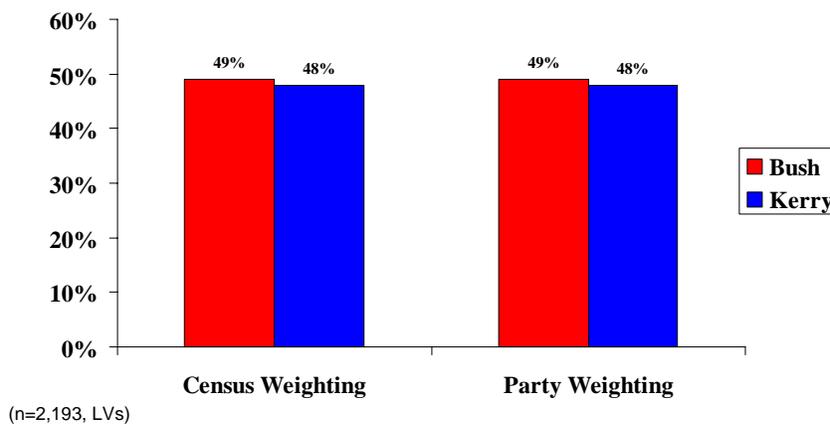
<sup>6</sup> ABC's final release was based on data collected October 29-31. Tracking continued through November 1. For the final three waves of tracking (October 30-November 1), party weighting also did not change the vote estimates.

## Figure 4 Vote Over Time



## Figure 5 Vote by Type of Weighting

Final ABC Tracking Poll (10/29-10/31)



As noted, the party factoring in 2000 didn't change vote estimates by more than one point. Party factoring had slightly more of an impact in 2004 because of the longer

field period and the greater variability in party ID during the early part of tracking, during the time of the debates.

Looking just at the final 19 estimates from the three-night rolling averages in 2004 (to match the number in 2000) we find that the vote didn't change by more than a point as a result of party factoring in 2004, the same as in 2000. In addition, the average amount of change across the three-night rolling averages was similar in both elections across this comparable time period. In 2004, the average change was .48 of a percentage point for Bush and .68 for Kerry.<sup>7</sup> In 2000 it was .45 for Bush and .42 for Gore.

The reason party factoring did not change the final vote estimates in 2004 was because the final Democratic-Republican split in the tracking poll was very close to previous exit polls (and the 2004 exit poll), and the party factoring changed it only minimally (Figure 6). Independents were somewhat overestimated in the tracking poll compared with the exit poll. In six of the past seven presidential elections, independents have been 26 percent of voters (in the seventh election it was 27 percent). The final tracking estimate using Census weighting had independents at 33 percent. With party factoring, independents were adjusted to 29 percent of the sample.

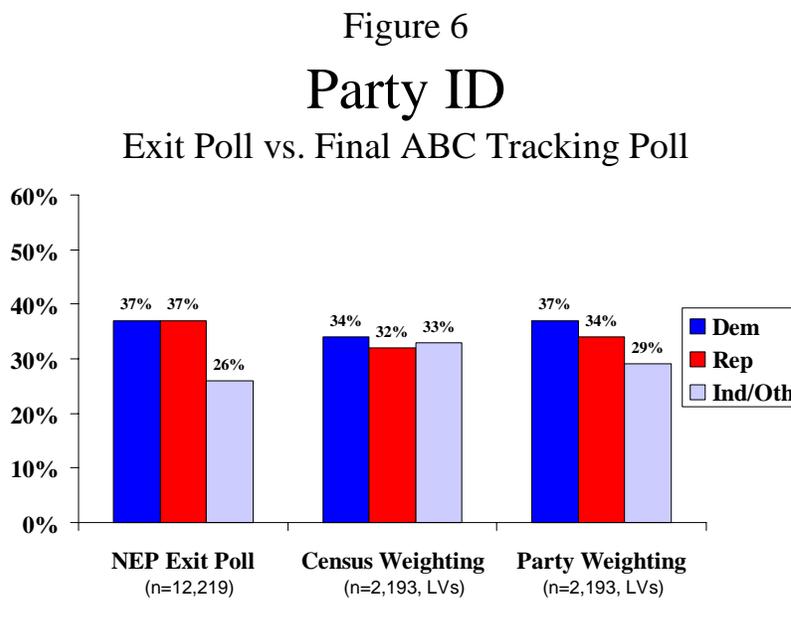
It's noteworthy that party factoring improved the tracking poll's party ID distribution even though it used an exit poll estimate for party from prior years that was slightly different than the actual 2004 exit poll distribution.

Some critics of using party ID from exit polls in likely voter modeling point out that it's the equivalent of weighting a poll to a poll, which may increase sampling error. It still, however, may improve the estimates. Exit polls are based on much larger sample sizes than tracking polls — at least 12,000 voters in each election since 1992— with

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<sup>7</sup> The averages are based on the absolute value of the differences.

correspondingly low margins of sampling error, of one percentage point or less. It's also possible to combine the state exit polls to get a national estimate with even lower sampling error. For 2004, this cross-survey analysis, based on 73,751 interviews, yields the exact same estimate of party ID as the national exit poll.



Exit polls also are based on samples of actual voters rather than likely voter estimates. And they're post-stratified to actual vote, which is highly correlated with party ID. All these increase the reliability of exit poll estimates.

Opponents of using party ID in modeling also note that it introduces judgment into the process. However, judgment is required across all components of likely voter modeling — what elements to include, how to compute them, what turnout to anticipate.

In the end, the party ID weighting improved the final estimate of party ID but had no impact on the final vote estimates in 2004 and only a marginal impact on estimates during the course of tracking (see also Langer and Merkle, 2001). Why bother? To make

our likely voter modeling as precise as possible, even if such efforts ultimately don't affect the bottom line. Such also was the case with a variety of more traditional best practices, as discussed below.

### **Traditional Methodological Considerations**<sup>8</sup>

In addition to the challenges of polling for an unknown population, likely voters, pre-election polls must also deal with more traditional methodological concerns common to all polls. These include concerns about possible day-of-week effects, noncontacted numbers and the sampling frame.

#### Day of Week

In recent elections, some critics have suggested that there are partisan biases in Friday-Saturday sampling and that pre-election polling should not be conducted on these nights. To explore this contention we compared the partisan make-up of the tracking samples for Sundays through Thursdays with Fridays and Saturdays. As seen in Figures 7 and 8 there is no difference for party ID or the vote. This is consistent with results we reported based on the 1996 and 2000 tracking polls (Langer and Merkle, 2001).

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<sup>8</sup> The analyses in this section are based on all available tracking data. Therefore, for party ID the results are based on the general population and for vote the base is registered voters.

Figure 7  
Party ID by Day of Week  
ABC News Tracking Poll

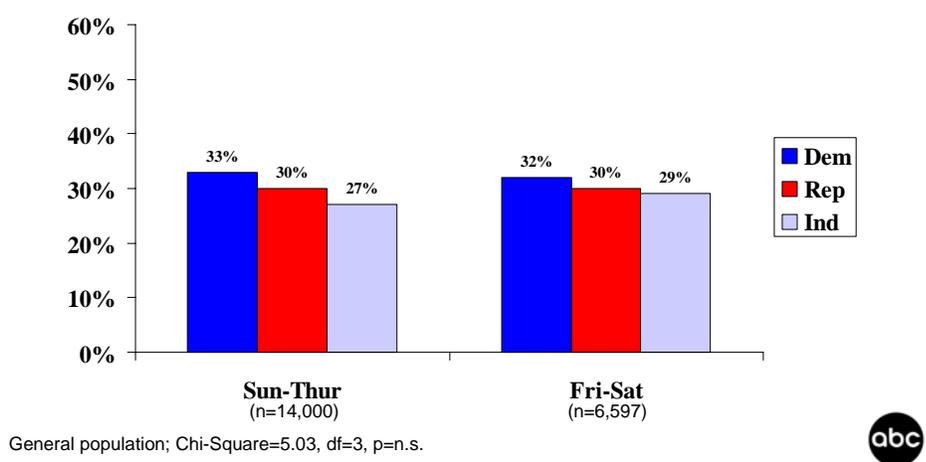
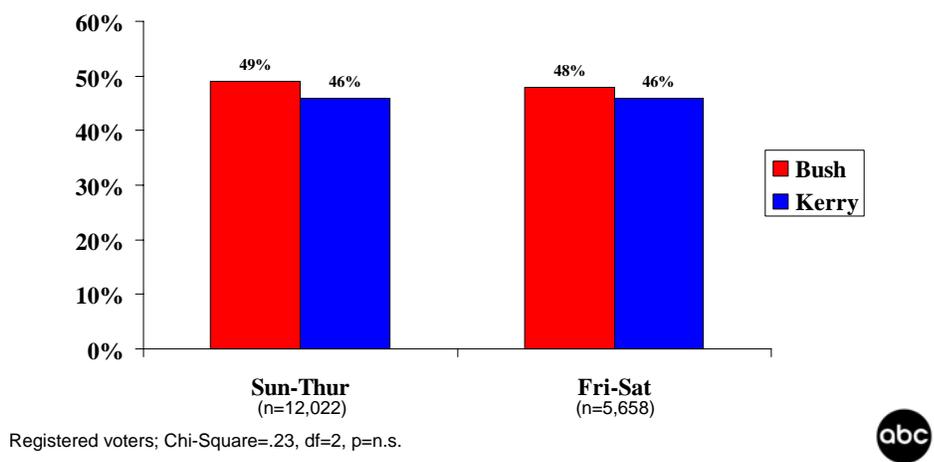


Figure 8  
Vote by Day of Week  
ABC News Tracking Poll



### Type of Sample

Each wave in tracking is a stand-alone sample and can be considered an independent one-night poll, with minimal ability to make repeated callbacks. One way to address concerns about potential differences between easy and hard-to-reach respondents is to incorporate “live,” or previously dialed, sample, with the fresh sample for each night of tracking. In 2004, each wave included 60 percent fresh numbers and 40 percent previously dialed numbers for which interviews were not completed.

This was changed from a 70/30 percent fresh/live mix in 2000 to approximate more closely the call distributions in ABC News’ standard multi-night polls. The change reduced the number of completes that were based on one dialing. In 2004 tracking, 50 percent of interviews were complete on the first call, down from about two-thirds in 2000. This was closer to what’s obtained in ABC’s standard multi-night polls, which averaged 42 percent of completes on the first call in 2004.

Figures 9 and 10 show the party ID and vote distributions for live and fresh samples. For both variables, there is not a significant difference between estimates of these two types of samples. In 2004, as was the case in 2000, this best-practice approach had no discernable effect on our estimates.

Figure 9  
**Party ID by Sample Type**  
 ABC News Tracking Poll

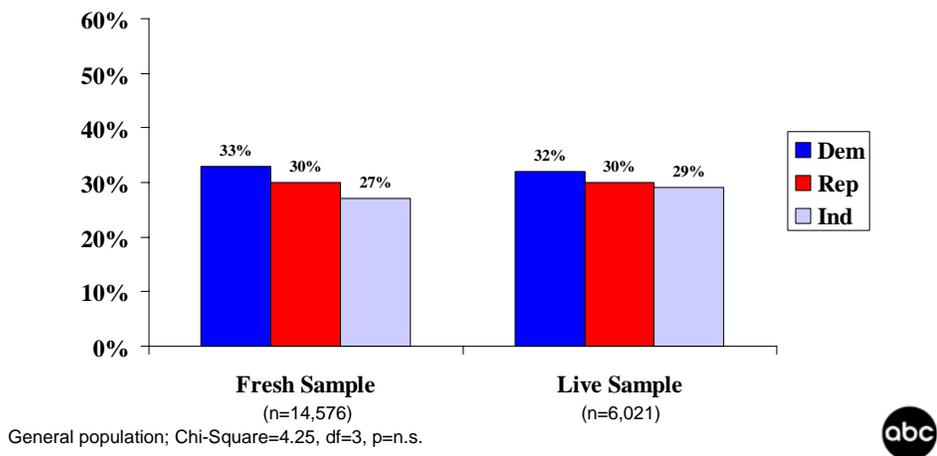
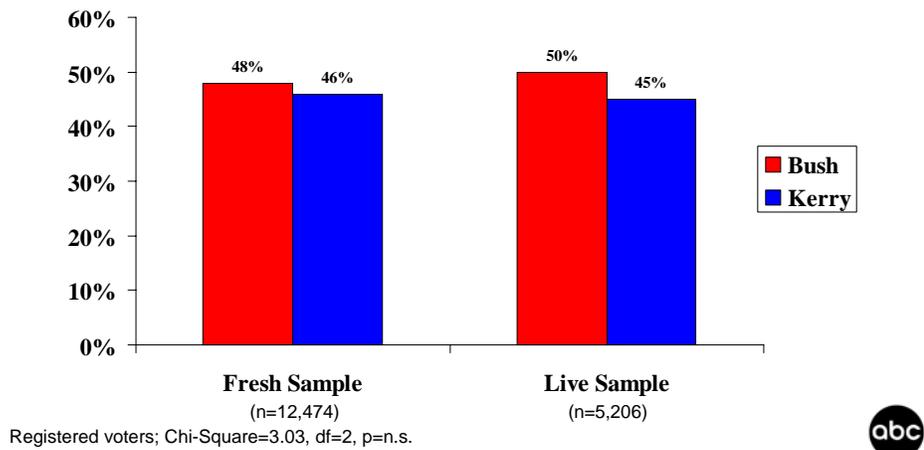


Figure 10  
**Vote by Sample Type**  
 ABC News Tracking Poll



## Callbacks

Another way to look at contactability is to consider the number of calls it takes to complete an interview. The relationship between the number of calls and party ID is statistically significant (Chi-Square=22.93,  $p < .01$ ). Respondents interviewed after four or more attempts are slightly less likely to call themselves Democrats and slightly more likely to say they're independents (Figure 11). However, these differences are not large and are not practically significant. Figure 12 shows no difference in vote estimates by the number of calls.

These findings are consistent with results from the 2000 tracking poll (Langer and Merkle, 2001) as well as research on surveys with longer field periods and a greater number of callbacks which show little or no impact of multiple callbacks on substantive survey estimates (e.g., Merkle, Bauman and Lavrakas, 1993).

Figure 11  
Party ID by Number of Call Attempts  
ABC News Tracking Poll

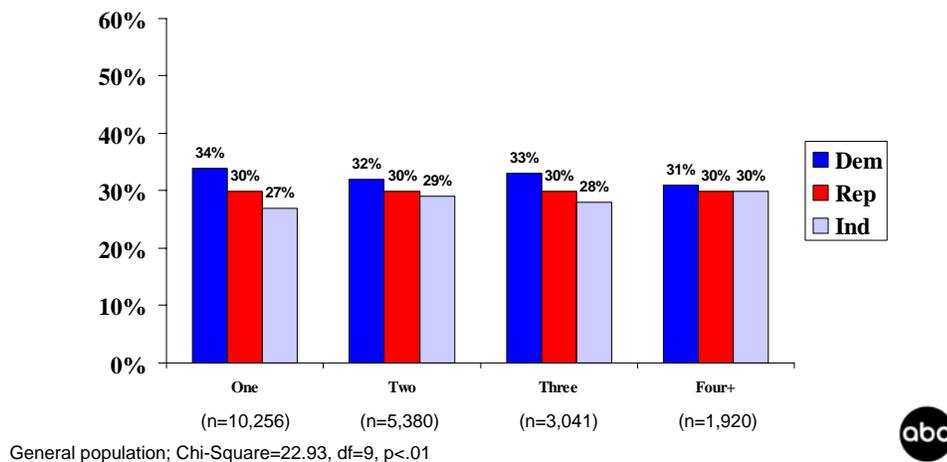
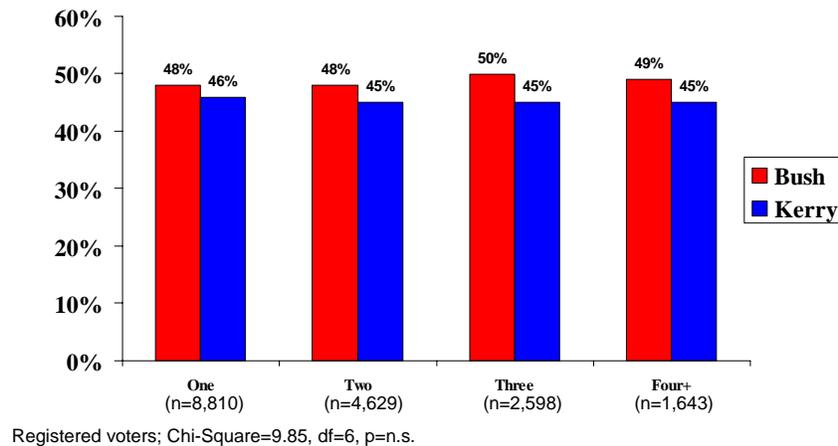


Figure 12  
**Vote by Number of Call Attempts**  
 ABC News Tracking Poll



### Listed vs. Unlisted

Another polling issue that periodically surfaces relates to the sampling frame. While most telephone pollsters use random digit dialing, some advocate listed samples. Survey methodologists typically advise against using listed samples of the general population because of the large noncoverage (Lavrakas, 1993). There have been very few studies that have systematically studied this issue (Guterbock, 2003). Champions of the use of listed samples have yet to document the reliability of the approach.

Each phone number in the 2004 tracking poll was checked against a database of listed numbers and flagged as either listed or unlisted. For party ID, there's a statistically significant difference between listed and unlisted numbers (Chi-Square=17.72,  $p < .01$ ), although the difference is not large (Figure 13). Those with listed numbers are slightly more likely to call themselves Republicans. There's also a significant difference in the vote question (Chi-Square=21.50,  $p < .01$ ). Across tracking, among registered voters,

listed numbers show Bush over Kerry by five points, whereas the unlisted numbers show Kerry +2. (Figure 14).

Figure 13  
**Party by Listed/Unlisted**  
 ABC News Tracking Poll

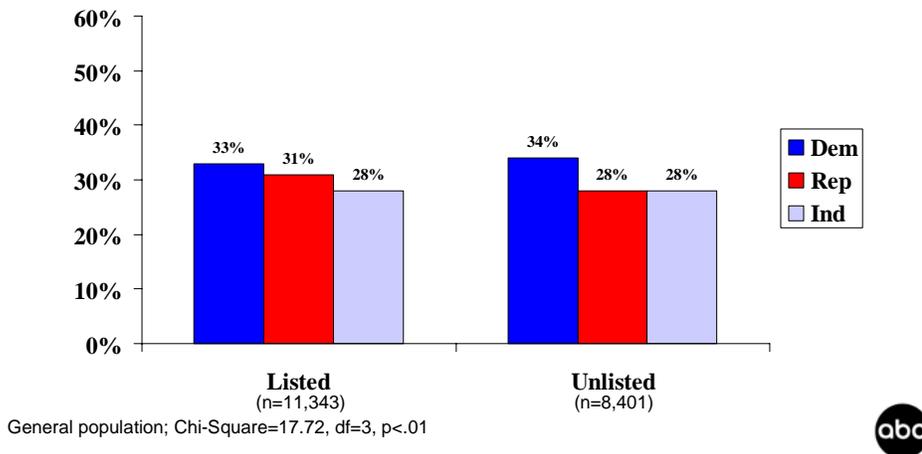
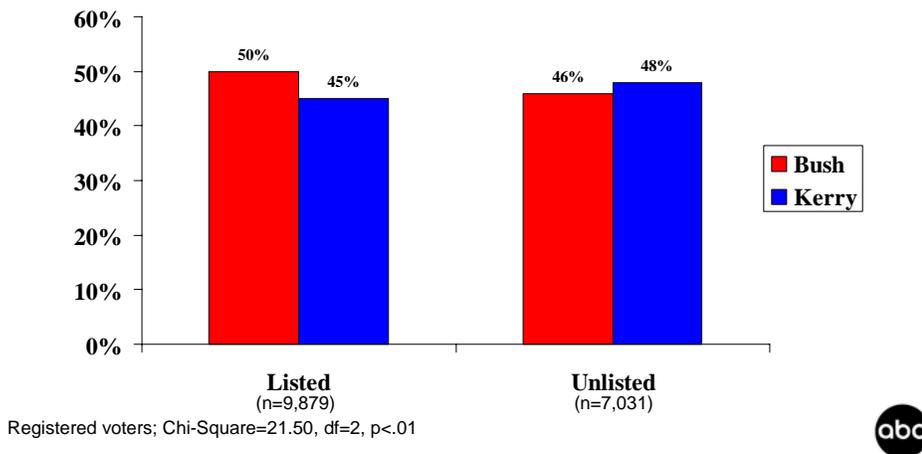


Figure 14  
**Vote by Listed/Unlisted**  
 ABC News Tracking Poll



## **Conclusion**

This paper explores the impact of methodological factors on tracking poll estimates. An assumption underlying critiques of using party ID as a weighting factor is that it biases the data, especially when the actual partisan distribution differs from previous elections. The data presented here show that our party weighting procedure had a minimal impact on the data over the course of tracking and, as in 2000, didn't change our final vote estimates whatsoever. However, it improved our estimate of party ID among actual voters as reflected in the exit poll, as it did in 2000 and would have in 1984, 1988, 1992 and 1996 alike. In that sense it added precision, however slightly, to our likely voter modeling.

Another criticism of the media tracking polls is that interviewing on Fridays and Saturdays produces biased results. There's no evidence of such a bias. Data from ABC's 2004 tracking poll, as well as from 1996 and 2000, show that no partisan bias is introduced by interviewing on the weekend. Likewise, attempts to interview those who are relatively hard to contact by incorporating live numbers into the sample and conducting callbacks did not meaningfully affect estimates. We did observe some partisan differences for listed and unlisted numbers; more research is warranted on the potential biases in listed samples.

In all, the findings of this paper underscore the robustness of pre-election polling. For the most part, the methodological factors examined here did not greatly affect the data. Nonetheless, given the importance of pre-election polls in campaign news coverage, it's incumbent on pre-election pollsters to employ the best methodologies possible and continuously evaluate their effectiveness.

## **References**

- Edison Media Research and Mitofsky International (2004). "Evaluation of Edison/Mitofsky Election System 2004." January 19. Last accessed May 3, 2005: <http://www.exit-poll.net/election-night/EvaluationJan192005.pdf>
- Erikson, R.S., Panagopoulos, C. and Wlezien, C. (2004). "Likely (and Unlikely) Voters and the Assessment of Campaign Dynamics." Public Opinion Quarterly, 68, 588-601.
- Green, D., Palmquist, B. and Schickler, E. (2002). Partisan Hearts and Minds: Political Parties and the Social Identities of Voters. New Haven: Yale University Press.
- Guterbock, T.M., Hartman, D.E., and Hubbard, R.A. (2003). "RDD Vs. Listed: An Experimental Study of Coverage Error, Costs, and Nonresponse in a Statewide Telephone Survey." Paper presented at the annual conference of the American Association for Public Opinion Research, Nashville, TN.
- Keeter, S, Miller C., Kohut A., Groves R.M. and Presser S. (2000). "Consequences of Reducing Nonresponse in a National Telephone Survey." Public Opinion Quarterly 64:125-148.
- Langer, G. (2004a). "After His Convention a Tepid Bump for Kerry." ABC News, August 2. Last accessed: May 4, 2005: <http://abcnews.go.com/images/pdf/958a1AftertheDemocraticConvention.pdf>
- Langer, G. (2004b). "Campaign Enters Decisive Phase with an Advantage to Bush." ABC News, September 9. Last accessed: May 4, 2005: <http://abcnews.go.com/images/pdf/961a1Post-LaborDayPolitics.pdf>
- Langer, G. and Merkle, D.M. (2004). "ABC News' Polling Methodology and Standards: The Nuts and Bolts of our Public Opinion Surveys." ABC News. Last accessed May 3, 2005: <http://abcnews.go.com/US/story?id=145373&page=1>
- Langer, G. and Merkle, D.M. (2001). "The ABC's of Election Polling." Paper presented at the annual conference of the American Association for Public Opinion Research, Montreal, Canada.
- Langer, G., Morris, D., Sussman, D. and Demos, T. (2004). "Party ID: The Long March to Political Parity." Paper presented at the annual conference of the American Association for Public Opinion Research, Phoenix, AZ.
- Lavrakas, P.J. (1993). Telephone Survey Methods: Sampling, Selection and Supervision. Newbury Park: Sage Publications.

Merkle, D.M., Bauman, S.L. and Lavrakas, P.J. (1993). "The Impact of Callbacks on Survey Estimates in an Annual RDD Survey." In Proceedings of the Section on Survey Research Methods. Alexandria, VA: American Statistical Association.

Pew Research Center (2004a). "Party Affiliation: What It Is and What It Isn't." September 23. Last accessed May 3, 2005:  
<http://people-press.org/commentary/pdf/97.pdf>

Pew Research Center (2004b). "Pre-Election Polls Largely Accurate: Lessons from Campaign '04." November 23. Last accessed:  
<http://people-press.org/commentary/display.php3?AnalysisID=102>

Zukin, C. (2004). "Sources of Variation in Published Election Polling: A Primer." October, 2004. Last accessed: <http://www.aapor.org/pdfs/varsourc.pdf>