

Address-Based Sampling and the 2008 American National Election Survey: A New Paradigm for In-Person Household Surveys

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What is the ANES?

- The American National Election Studies (ANES) has provided high quality data on voting, public opinion, and political participation for over 60 years
 - Also called the ANES time series
- 2004 ANES conducted by University of Michigan
 - Example of in-person survey using field enumeration
- 2008 ANES conducted by RTI International

Historical Perspective of the ANES

- ANES is an in-person household (HH) survey
 - Previous ANES used a field enumerated frame
- Multi-stage area sampling design
- Equal probability of selection sampling method

Field Enumeration

- The traditional paradigm for area surveys
- Cost
- Time
- Diversity

Address-Based Sampling (ABS)

- ABS is a less costly alternative to field enumeration (FE)
 - FE traditional method for in-person household (HH) surveys
- An ABS frame is based on addresses from the USPS Delivery Sequence File (DSF)
 - Contains all USPS delivery points
- An address is a proxy for a HH
- Coverage of HHs not complete, differs by urbanicity

Changes for the 2008 ANES

- Address-Based Sampling (ABS)
- Oversampling of Latino-Americans and African-Americans
- Sample size nearly doubled
- First time survey available in Spanish

2008 ANES: Target Population

203.5 million U.S. citizens who were 18 or older on October 31, 2008, and who resided in households in the 48 coterminous states or the District of Columbia.

2008 ANES: Frame

- GeoLytics 2008 estimates at Census Block Group (CBG) level
 - Estimates of HHs
 - Citizenship rates
 - African-American and Latino-American HHs
- DSF from Marketing Systems Group (MSG)
 - Address counts by CBG

2008 ANES Sampling Frame

Frame	CBGs	Locatable Addresses	Estimated HHs
Included	203K (97.7%)	111.8M (99.2%)	112.6M (99.2%)
Excluded	4K (2.3%)	0.9M (0.8%)	0.9M (0.8%)
	<u>207K (100%)</u>	<u>112.7M (100%)</u>	<u>113.5M (100%)</u>

Stages of Sample Selection

2004 ANES

1. Counties / 8 largest MSAs
2. Census Blocks
3. Households
4. Adult Citizens

2008 ANES

1. Counties / 8 largest MSAs
2. Census Tracts
3. Census Block Groups
4. Households
5. Adult Citizens

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2008 ANES: Frame Supplementation

- Check for Housing Units Missed (CHUM) procedure
 - Protocols dynamically determine path of travel
 - Path of travel forms an interval to look for missing units
 - Training materials, sampling support, and monitoring are needed

2008 ANES: Frame Supplementation

- Check for Housing Units Missed (CHUM) procedure
 - Field staff use protocols to determine path of travel
 - Path of travel forms an interval to look for missing units
 - Training materials, sampling support, and monitoring are needed

Increased coverage of the HH population by approximately 5.6%

Response Rates

	<u>Pre-Election</u>		<u>Post-Election</u>	
	# Interviews	RR1	# Interviews	RR1
2004 ANES	1,212	66.1%	1,066	88.0%
2008 ANES	2,323	61.8%	2,102	90.5%

2008 ANES: Weight Adjustments

Adjust sample estimates for:

- Differential nonresponse
- Undercoverage of the sampling frame
- Over-sampling of minorities

Post-Stratification Adjustments

	<u>Adult Citizens</u>		Mean
	Survey	CPS	Adj.
2004 ANES	145.5M	196.2M	1.35
2008 ANES	165.1M	203.5M	1.23

Results from All Respondents

For whom did the respondent vote for President? -- 2008

Candidate	Unweighted		Weighted		Actual Popular Vote
	Estimate	Standard Error	Estimate	Standard Error	
Barack Obama	64.3%	1.2%	53.0%	2.9%	52.7%
John McCain	32.3%	1.2%	43.5%	2.9%	46.0%

For whom did the respondent vote for President? -- 2004

Candidate	Unweighted		Weighted		Actual Popular Vote
	Estimate	Standard Error	Estimate	Standard Error	
George W. Bush	49.3%	1.7%	48.7%	2.6%	50.7%
John Kerry	47.8%	1.7%	48.3%	2.5%	48.3%

Results from Latino-Americans

For whom did the respondent vote for President? -- 2004

Candidate	N	Unweighted Estimate		Weighted Estimate	
		Estimate	Standard Error	Estimate	Standard Error
George W. Bush	17	34.7%	6.8%	30.3%	8.4%
John Kerry	30	61.2%	7.0%	67.7%	8.5%

For whom did the respondent vote for President? -- 2008

Candidate	N	Unweighted Estimate		Weighted Estimate	
		Estimate	Standard Error	Estimate	Standard Error
Barack Obama	215	75.4%	2.6%	75.1%	2.8%
John McCain	62	21.8%	2.4%	22.2%	2.9%

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Planning the 2012 ANES

- Eliminate one stage of sample selection
- Increase number of pre-election interviews
- Conduct CHUM prior to start of field interview period

Concluding Remarks

- ABS is the new paradigm for area surveys
- CHUM increased coverage
- Cost-savings enabled other survey improvements
- ABS will be implemented on 2012 ANES