

# 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
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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