

Citizen Voting Age Data from a line-drawer's viewpoint

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Four Goals for Demographic Data

1. Measure total population
2. Assist in testing compliance with VRA Section 5
3. Measure for VRA Section 2 “majority” test
4. Assist in the identification of communities of interest

How do data measure “majority”?

1. Total population

- Does not reflect demographics of voters

2. Voting Age Population

- Better, but still not truly accurate in areas with non-citizens
- Fails to reflect different registration & turnout rates

3. Citizen Voting Age Population

- Identifies “eligible” population
- From ACS, which is less precise than decennial Census
- Also available, in a slightly different form, from Census Bureau’s Special Tabulation
- Fails to reflect different registration & turnout rates

4. Registration by surname

- Gets past any potential formal or socio-economic impacts on registration
- Introduces misleading surname error
- Introduces question of which surname list to use (the Census Bureau has more than one)
- Voter files have lots of address, geocoding and/or spelling errors
- Not available from Census Bureau

5. Turnout by surname

- Most accurately reflects power to impact election results
- Introduces variation between Presidential and non-Presidential elections
- Includes misleading surname error
- Includes question of which surname list to use
- Most voter files have lots of address, geocoding and/or spelling errors
- Not available from Census Bureau

CVAP Measures

- **ACS data**
 - Available in one-year, three-year, and five-year reports
 - Five-year report is available at the tract level (not block groups)
 - “Single-Race” data
 - i.e. a white & Asian-American respondent counted as “Other, 2-race”
- **Special Tabulation data**
 - Based on 2005-2009 ACS
 - Available at the block group level
 - Unless suppressed for privacy reasons
 - Compiled into “DoJ” aka “OMB” race categories
 - i.e. a white & Asian-American respondent counted as Asian-American

Data Sources

Data	Source
Total Population	2010 Census (PL94-171); blocks
Voting Age Population	2010 Census (PL94-171); blocks
Citizen Voting Age Population	American Community Survey (ACS); tracts
Citizen Voting Age Population by race & ethnicity	Census Special Tabulation; block groups
Registration by Hispanic and Asian-American surname	State databases; blocks Census surname lists
Turnout by Hispanic and Asian-American surname	State databases; blocks Census surname lists

Understanding ACS Data

Category	Availability
2009 ACS one-year data	Jurisdictions with Pop. 60,000+
2007-2009 ACS three-year data	Jurisdictions with Pop. 20,000+
2005-2009 ACS five-year data	Block groups and above
2010 Census PL94-171	Census blocks and above

Two Examples of ACS Data

Category	City of Phoenix	Long Beach, CA
2010 Census PL94-171	Not yet known	Not yet known
2009 ACS one-year data	1,593,660	462,594
2007-2009 ACS three-year data	1,567,371	460,874
2005-2009 ACS five-year data	1,536,632	462,823
2000 Census	1,321,045	461,522

Category	Phoenix	Long Beach, CA
2010 Census	Not yet known	Not yet known
2009 ACS one-year data	1,593,660	462,594
2008 ACS one-year data	1,525,257	470,932
2007 ACS one-year data	1,513,777	458,302
2006 ACS one-year data	1,429,637	466,718
2000 Census	1,321,045	461,522

← 3-yr. data (pointing to Phoenix 2009 ACS one-year data)
 ← 5-yr. data (pointing to Phoenix 2008 ACS one-year data)
 ← 5-yr. data (pointing to Long Beach, CA 2009 ACS one-year data)
 ← 3-yr. data (pointing to Long Beach, CA 2008 ACS one-year data)

Error factors

Category	City of Phoenix	Phoenix margin	Long Beach, CA	LB margin
2010 Census PL94-171	Not yet known		Not yet known	
2009 ACS one-year data	1,593,660	+/-61	462,594	+/-44
2007-2009 ACS three-year data	1,567,371	+/- 146	460,874	+/- 63
2005-2009 ACS five-year data	1,536,632	+/- 171, 0.01%	462,823	+/- 97, 0.02%
2000 Census	1,321,045	not available	461,522	not available

Category	Census Tract 06037294120	Tract margin	Block Group 060372941203	Block Group Margin
2010 Census PL94-171	Not yet known	Not available	Not available	Not available
2009 ACS one-year data	n/a	n/a	n/a	n/a
2007-2009 ACS three-year data	n/a	n/a	n/a	n/a
2005-2009 ACS five-year data	2,821	+/-402, 14.3%	803	+/- 296, 36.9%
2000 Census	2,529	Not Available	688	Not available

Special Tabulation error levels

- In ACS, the Bureau is reporting at Block Group level with an average (in California) 28.8% margin level.
- Imagine the margin of data elements not reported at the Block Group level in ACS (such as CVAP . . .).

Disaggregated Data

- To build ACS figures for proposed districts, one must disaggregate data to the Census Block level
- Where entire block groups and/or tracts are unified in a district, the disaggregation is re-aggregated & the margin data is OK
- But there is no way to calculate margin for split geographies
 - The margin is higher than what is reported for the unsplit geography

Sample 2001 Data Report

	District	Counts					Total	Percentages					Total	
		1	2	3	4	5		1	2	3	4	5		
	Total Pop													
	Deviation													
Total Population	Hispanic													
	Not Hispanic													
	NH White													
	NH African American													
	NH Native American													
	NH Asian													
	NH Pacific Islander													
	NH Some other race													
	NH Two or more races													
	Voting Age Population	Total VAP												
NH White VAP														
Hispanic VAP														
African-Am VAP														
Asian-Am VAP														
Other VAP														
Partisan Reg.	2010 Gen Tot Reg													
	2010G Dem													
	2010G Rep													
	2010G Oth													

Is this the 2010 version?

	District	Counts					Total	Percentages					Total
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	NH Asian												
	NH Pacific Islander												
	NH Some other race												
	NH Two or more races												
	Voting Age Population	Total VAP											
NH White VAP													
Hispanic VAP													
African-Am VAP													
Asian-Am VAP													
Other VAP													
Immigrants													
Total Citizens													
CVAP - ACS	Total Citizen VAP - ACS												
	Hispanic CVAP - ACS												
	Non-Hisp White CVAP - ACS												
	Asian CVAP - ACS												
	African-Amer CVAP - ACS												
	Other CVAP - ACS												
CVAP - Special Tab	Total CVAP - Special Tabulation												
	Hispanic CVAP - Special Tabulation												
	Non-Hisp White CVAP - Special Tabulation												
	Asian CVAP - Special Tabulation												
	African-Amer CVAP - Special Tabulation												
	Other CVAP - Special Tabulation												
Reg. by Surname	2008 Tot Reg												
	2008 Hisp Reg												
	2008 Asn Reg												
	2008 Fil Reg												
	2008 Tot Votes												
Turnout by Surname	2008 Hisp Votes												
	2008 Asn Votes												
	2008 Fil Votes												
	2010 Gen Tot Reg												
Partisan Reg.	2010G Dem												
	2010G Rep												
	2010G Oth												

One more complication

- The population totals for each county reported in ACS are not purely from ACS
- County-level ACS data is controlled by the Census Bureau's Population Estimates program, in particular by the "Current Population Survey"

Conclusions

1. Prepare, as much as possible
2. “Lawyer Up”
3. Line up your Experts
4. Follow what happens in the early states, especially if (when?) they go to court