



# Accessible Voting Through RAAV

## Lessons Learned Together for Better Elections

# Research Alliance for Accessible Voting

- The US Election Assistance Commission ordered a study of Accessible Voting in response to Congressional mandate.
- Grants provided to two groups, of which RAAV is one, to look at ways to make voting more accessible and to better understand what methodologies will or won't work to assist elections officials in conducting better elections for voters with accessibility needs. 3 year study.

# GOALS of RAAV

We will continue to work on technologies and approaches that address a variety of barriers to voting:

- Disabilities as defined by the Americans with Disabilities Act (ADA)
- Lack of educational opportunity
- Difficulties due to aging or other life circumstances
- Limited English proficiency

# RAAV Partners

- Clemson University – Project Manager
  - Dr. Juan Gilbert and Team
- The Center for Accessible Information
- Association of Assistive Technology Act Programs (ATAP)
- Paraquad
- Tennessee Disability Coalition
- Election Center (National Association of Election Officials)
- Rutgers – School of Management and Labor Relations
- Election Data Services
- Carnegie Mellon University Silicon Valley

# With all that has been done, why this?

- Need to view the problem differently
- First time to have funds to study what works well and not so well; as well as research to lead to new methods and new technologies
- Growing problem in accessibility needs in elections
- Ideas for immediate impact on elections
- Ideas for future impact on elections



# Numbers that affect Accessibility Needs

- Depending on what study you look at, the numbers of people in 2012 with accessible needs ranged from a low of 36 million to a high of 54 million
  - Census Bureau 2010 American Community Survey and 2005 Survey of Income and Program Participation
  - If this follows the normal American statistical numbers, roughly 75% of are of voting age population (Census estimates 307 million population, 234 million VAP)

# Numbers that affect Accessibility Needs

- Tidal Wave is Coming
- US Census lists Baby Boomers as those between 1946 and 1964:
  - VAP: 45 and older in 1998 were 80 MM
  - Same group in 2012 were 120 MM and it continues to grow over next 20 years.
  - Add to it that life is extended now (average citizen living an additional 15 to 30 years)
  - Source: US Census Bureau – 2012 Statistical Study Table 399 Voting Age Population

# What Does This Mean for Elections?

- We will need to rethink the layouts of polling places, rethink how to serve best and likely expect there will be increased costs ... but maybe not
  - Seating in Polling Sites may be needed. Better tools to see ballots; cognitive issues likely to grow; accessible machines may be needed by majority of voters; queue management; new wave of voting equipment can be used by all voters
- Or there may be changes to how we conduct elections



# What Does This Mean for Elections?

- It is not just poll workers that are aging.
- Add these to the traditional set of voters with access needs
- What you will hear today focuses on a large and growing problem but with experts on the various kinds of accessibility issues

# RAAV Survey: Rutgers

- Lisa Schur – Rutgers School of Management and Labor Relations
- Meera Adya – Burlington Blatt Institute at Syracuse University
- Doug Kruse - Rutgers School of Management and Labor Relations

# Survey Data - Summary

- People with disabilities turnout less to vote than people without disabilities
  - Polling place accessibility is one factor (2009 GAO report says that only 27% of polling places in 2008 had NO impediments to voting).
  - According to Schur & Ayda, average is 12% lower in 2008 and 2010
- National Survey of 3,022 voters with and without disabilities in 2012

# Survey Data - Summary

- Voters with disabilities were oversampled to represent 2,000 of the sample and those without disabilities were 1,022
- Oversample was to insure that enough respondents were sampled to reach solid conclusions of their experience in voting in 2012 election.

# Survey Data - Summary

**Table 4: Voted Early or by Mail**

Among those who reported voting in 2012

	Voted early in polling place or election office		Voted by mail	
No disability	30.4%		17.3%	
Any disability	42.1%		28.1%	
Disability gap	11.7%	**	10.8%	**
By type of disability:				
Hearing impairment	43.5%	**	28.4%	**
Visual impairment	41.0%	**	26.5%	**
Cognitive impairment	41.9%	**	30.1%	**
Mobility impairment	44.8%	**	31.0%	**
Difficulty dressing or bathing	51.0%	**	39.6%	**
Difficulty going outside alone	47.8%	**	36.0%	**

\* Difference from non-disability sample is significant at 95% level    \*\* 99% level



# Survey Data - Summary

**Table 5: Voter Registration**

	Disability	No Disability	Disability Gap	
Registered to vote	69.2%	71.5%	-2.3%	**
Voted if registered	82.1%	87.5%	-5.4%	**
How registered to vote:				
Went to a town hall or county/ government registration office	31.5%	22.4%	9.1%	**
At a department of motor vehicles	21.9%	30.9%	-9.0%	**
At a public assistance agency	2.7%	1.3%	1.4%	**
Registered by mail	15.8%	16.3%	-0.5%	
Registered at polling place	8.8%	7.7%	1.1%	**
Filled out form at a registration drive	7.2%	6.1%	1.1%	**
At a school, hospital, or on campus	4.9%	7.1%	-2.2%	**
Registered using the Internet/online	1.3%	3.9%	-2.6%	**
Other	6.0%	4.3%	1.7%	**

\* Difference from non-disability sample is significant at 95% level    \*\* 99% level

# Much Good News/Much to Do

- What the survey shows is that voters with disabilities are feeling much better about their experience at the polls
- At the same time, we continue to experience difficulties in voting so of which can be fixed without great costs but some necessary changes.

**Table 7: Why People Did Not Vote if Registered**

Why didn't vote	Disability	No Disability	Disability Gap
Illness or disability (own or family's)	43.6%	8.2%	35.4% **
Not interested, felt my vote wouldn't make a difference	12.3%	17.0%	-4.7% **
Didn't like candidates or campaign issues	9.7%	13.8%	-4.1% **
Too busy, conflicting work or school schedule	5.9%	22.4%	-16.5% **
Forgot to vote (or send in absentee ballot)	2.8%	4.3%	-1.5% **
Transportation problems	6.1%	2.8%	3.3% **
Out of town or away from home	3.1%	10.1%	-7.0% **
Registration problems (i.e. didn't receive absentee ballot, not registered in current location)	4.0%	6.0%	-2.0% **
Inconvenient hours, polling place or hours or lines too long	2.0%	2.9%	-1.0%
Bad weather conditions	0.6%	0.9%	-0.2%
Other	10.0%	11.8%	-1.8%

\* Difference from non-disability sample is significant at 95% level \*\* 99% level

**Table 8: Polling Place Difficulties in 2012**

			Type of Impairment				Disability Severity	
	Any Disability (1)	No disability (2)	Hearing (3)	Visual (4)	Cognitive (5)	Mobility (6)	No need for help in daily activities (7)	Need help in daily activities (8)
When you voted in the polling place, did you have any:								
1 Difficulty in finding or getting to the polling place	5.9%	1.6%	1.6%	11.2%	11.6%	3.8%	1.6%	10.5%
2 Difficulty in getting inside the polling place (for example, steps)	3.6% **	0.2%	6.4%	3.2% *	4.1%	4.4% **	2.0% **	5.4% *
3 Difficulty waiting in line	8.3% *	3.5%	8.9%	4.6%	7.7%	9.4% *	10.6% *	5.8%
4 Difficulty reading or seeing the ballot	11.7% **	0.9%	12.6% **	21.5% **	20.0% **	8.2% **	6.5% *	17.2% *
5 Difficulty understanding how to vote or use the voting equipment	10.3% **	1.3%	6.4%	14.6% *	20.1% **	9.7% **	3.7% *	17.3% *
6 Difficulty communicating with poll workers or other officials at the polling place	1.6%	1.2%	2.0%	2.1%	1.0%	1.6%	1.6%	1.6%
7 Difficulty writing on the ballot	4.5%	0.3%	0.7%	2.9% *	7.8%	1.0%	2.0%	7.2%
8 Difficulty operating the voting machine	1.3%	0.9%	2.6%	1.8%	1.4%	1.8%	0.5%	2.2%
9 Other type of difficulty in voting	3.8%	0.6%	0.9%	1.2%	7.2%	1.6%	1.5%	6.3%
"Yes" to any of above	30.1% **	8.4%	26.9% **	44.3% **	43.2% **	31.2% **	21.1% **	39.7% *
Sample size	1040	710	264	197	344	651	562	478

\* Difference from non-disability sample is significant at 95% level \*\* 99% level

**Table 9: Voting Methods and Difficulties**

	Any Disability (1)	No disability (2)
How did you record your vote? Did you:		
Write on a ballot	48.9%	52.4%
Punch buttons on a machine	12.2%	13.1%
Flip switches on a machine	1.4%	1.8%
Touch a computer screen	36.9%	31.8%
Use some other method	0.6%	0.8%
If wrote on ballot:		
Difficulty reading or seeing the ballot	13.8% **	0.8%
Difficulty understanding how to vote or use the voting equipment	12.8% *	1.3%
Difficulty writing on ballot	9.6%	0.5%
If punched buttons on machine:		
Difficulty reading or seeing the ballot	10.8% **	0.0%
Difficulty understanding how to vote or use the voting equipment	8.0% **	0.0%
Difficulty using voting machine	4.1% *	0.3%
If touched a computer screen:		
Difficulty reading or seeing the ballot	9.9% *	1.5%
Difficulty understanding how to vote or use the voting equipment	8.3%	2.0%
Difficulty using voting machine	2.1%	2.9%

\* Difference from non-disability sample is significant at 95% level \*\* 99% level



**Table 10: Overall Ease or Difficulty of Voting**

			Type of Impairment				Disability Severity	
	Any Disability (1)	No disability (2)	Hearing (3)	Visual (4)	Cognitive (5)	Mobility (6)	No need for help in daily activities (7)	Need help in daily activities (8)
Overall ease or difficulty of voting								
Very easy	76.0% **	86.4%	79.8%	71.8% *	69.4% *	76.4% *	81.8%	70.0% **
Somewhat easy	17.6%	11.2%	14.8%	20.7%	20.7%	17.8%	15.5%	19.7%
Neither easy nor difficult	0.6%	0.7%	0.5%	0.8%	0.2%	1.1%	0.8%	0.4%
Somewhat difficult	2.7% *	0.8%	4.5%	5.8%	3.3%	4.0% *	1.6%	3.8% *
Very difficult	3.1%	0.9%	0.4%	0.9%	6.4%	0.7%	0.4%	6.0%
Somewhat or very difficult	5.8%	1.7%	4.9%	6.7%	9.7%	4.7%	2.0%	9.8%
Sample size	1037	709	263	195	343	650	559	478

\* Difference from non-disability sample is significant at 95% level \*\* 99% level

**Table 11: Specific Difficulties for Those Who Found Overall Process Difficult**

All figures refer to voters with disabilities in 2012

	Overall voting process was:		
	Somewhat or very difficult (1)	Somewhat easy (2)	Very easy (3)
When you voted in the polling place, did you have any:			
1 Difficulty in finding or getting to the polling place	47.6%	7.9%	2.3%
2 Difficulty in getting inside the polling place (for example, steps)	12.9%	6.1%	2.3%
3 Difficulty waiting in line	22.8%	15.4%	5.5%
4 Difficulty reading or seeing the ballot	58.6%	11.6%	8.1%
5 Difficulty understanding how to vote or use the voting equipment	68.1%	7.6%	6.4%
6 Difficulty communicating with poll workers or other officials at the polling place	8.1%	2.5%	0.7%
7 Difficulty writing on the ballot	49.7%	5.0%	1.2%
8 Difficulty operating the voting machine	3.2%	3.7%	0.4%
9 Other type of difficulty in voting	47.7%	1.8%	1.0%
"Yes" to any of above	93.7%	46.8%	21.1%
Sample size	56	149	817

**Table 12: Polling Place Difficulties in Past 10 Years**

	If voted at polling place in 2012		If voted at polling place in last 10 years but not in 2012	
	Disability (1)	No disability (2)	Disability (3)	No disability (4)
When you voted in the polling place, did you have any:				
1 Difficulty in finding or getting to the polling place	5.9%	1.6%	3.3%	1.5%
2 Difficulty in getting inside the polling place (for example, steps)	3.6% **	0.2%	5.4% **	0.0%
3 Difficulty waiting in line	8.3% *	3.5%	9.4%	2.8%
4 Difficulty reading or seeing the ballot	11.7% **	0.9%	14.9% **	1.8%
5 Difficulty understanding how to vote or use the voting equipment	10.3% **	1.3%	10.5% **	2.7%
6 Difficulty communicating with poll workers or other officials at the polling place	1.6%	1.2%	5.0%	1.4%
7 Difficulty writing on the ballot	4.5%	0.3%	1.3% *	0.0%
8 Difficulty operating the voting machine	1.3%	0.9%	5.0% *	0.0%
9 Other type of difficulty in voting	3.8%	0.6%	2.5% *	0.0%
"Yes" to any of above	30.1% **	8.4%	28.6% **	10.2%
Sample size	1040	710	403	116

\* Difference from non-disability sample is significant at 95% level \*\* 99% level

**Table 14: Problems in mail voting**

	Any Disability (1)	No disability (2)
Voted by mail in 2012	23.8%	16.4%
If voted by mail:		
Any difficulty in reading or filling out mail-in ballot	13.4%	2.2%
Need for assistance in completing mail-in ballot	11.3%	0.4%

\* Difference from non-disability sample is significant at 95% level \*\* 99% level

**Table 15: Need for Assistance and Use of Special Features**

Among those who voted at polling place in 2012

	Disability (1)	No disability (2)
Needed assistance in voting	29.5% **	10.7%
If yes, who provided assistance		
Election official	42.2% **	71.6%
Family member	42.2% **	18.8%
Friend	9.0% **	2.1%
Home care aide	0.5%	0.0%
Other	3.6% *	5.2%
Needed but none provided	2.5%	2.3%
Used extra features or devices to help vote	6.5%	
If yes, what features or devices		
Large display	58.1%	
Magnifier or visual aid	32.7%	
Earphones	10.1%	
Seating/lowered machine	2.2%	
Other	1.0%	
Features or devices were set up and ready to use	75.4%	
Election officials knew how to set up and use features		
Yes, no problems	96.9%	
Yes, but some delay or problem	1.7%	
No	1.4%	
Sample sizes		
Total	1034	708
If needed assistance in voting	431	69
If used extra features or devices	54	

\* Difference from non-disability sample is significant at 95% level \*\* 99% level



**Table 16: Treatment by Election Officials**

Among those who voted at polling place in 2012

			Type of Impairment				Disability Severity	
	Any Disability (1)	No disability (2)	Hearing (3)	Visual (4)	Cognitive (5)	Mobility (6)	No need for help in daily activities (7)	Need help in daily activities (8)
How respectful were election officials								
Very respectful	86.8%	84.7%	86.4%	84.2%	88.5%	82.2%	85.3%	88.3%
Somewhat respectful	8.2%	6.8%	10.2%	12.2%	8.5%	11.2%	8.5%	7.9%
Neither respectful nor disrespectful	3.2%	5.3%	2.0% *	1.4% *	1.5% *	4.5%	4.4%	2.0% *
Somewhat or very disrespectful	1.7%	3.2%	1.5%	2.2%	1.5%	2.1%	1.7%	1.8%
How helpful were election officials								
Did not need help	59.8% **	79.8%	59.7% **	45.5% **	48.6% **	60.5% **	65.0% **	54.2% **
If needed help:								
Very helpful	92.6%	87.4%	94.5%	92.5%	94.1%	91.1%	92.6%	92.5%
Somewhat helpful	5.7%	4.6%	5.0%	6.1%	5.1%	7.0%	6.5%	5.0%
Not helpful at all	1.7%	8.0%	0.5% *	1.5%	0.8% *	1.8%	0.9% *	2.4%
Sample size	1037	709	263	195	343	650	559	478

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**Table 17: Preference for How to Vote**

"If you wanted to vote in the next election, how would you *prefer* to cast your vote?"

All respondents (whether or not voted in 2012)

			Type of Impairment				Disability Severity	
	Any Disability (1)	No disability (2)	Hearing (3)	Visual (4)	Cognitive (5)	Mobility (6)	No need for help in daily activities (7)	Need help in daily activities (8)
In person in polling place	58.0% **	67.7%	66.1%	67.9%	57.7% *	55.0% **	65.5%	51.5% **
By mail	25.0% **	13.6%	22.6% *	21.0% *	23.7% **	29.0% **	21.4% **	28.1% **
On the Internet	9.6% **	16.1%	4.1% **	4.1% **	10.7%	7.7% **	9.3% **	9.9% *
By telephone	5.0% **	1.5%	5.4%	3.5%	4.5% **	6.1% *	1.6%	7.9% **
Don't know	2.4% *	1.0%	1.8%	3.4%	3.5% **	2.2%	2.2%	2.6% *
Sample size	2000	1022	496	401	731	1331	929	1051

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# Things That Work

- All voting equipment should be setup and ready for use for ANY voter –
  - Waiting for an accessible needs voter means that the unit is not ready and poll workers often indicate they don't know how to make it function.
- Many of the problems with polling place accessibility have to do with signage but also standing, seeing the ballot, marking the ballot – See Table 9 and Table 11.

# Attitudes Are Important

- Ask all to think if it was them or one of their relatives who had an accessible need how would they want them to be treated?
- Which is correct?
  - Voting is an individual right of eligible US citizens?
  - Or voting is available only if we can afford it?

# Issues That Concern Election Officials

- What concerns do you have that you hope we can answer?
- What do you wish existed that you have been unable to locate?

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Subject: Accessible Voting

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