

City of Saint Paul

Charter Review Committee of the Charter Commission
Single Transferrable Voting (STV)

Charter Commissioner John Paul (Jack) Kirr
March 27, 2017

City of Saint Paul

Charter Review Committee of the Charter Commission

The Charter Commission is Responsible¹ for

- **Improving the government** of Saint Paul by studying and analyzing issues and concerns of the City
- **Educating citizens** about the Charter and encouraging involvement in the Commission's work
- **Serving as a resource and providing oversight** in solving problems that are deemed unsolvable by the City Council or inappropriate for the Council to address
- **Hearing petitions regarding the Charter** from the public and the City Council
- **Keeping the Charter current** by reviewing the provisions and language to keep it up-to-date and coordinated with State laws

¹ <https://www.stpaul.gov/departments/city-council/charter-commission>

Basis of Comparison – City Council Elections

- Two full City Council elections (2011 and 2015) have been run under the Single Transferable Voting¹ (STV) method
- This analysis also includes the STV 2013 Ward 1 City Council Special Election
- This analysis also compares the traditional 1995, 1999, 2003 and 2007 City Council elections
- 2 of 14 City Council races in 2011 and 2015 triggered a STV Instant Runoff (Ward 2 in both cases)
- The 2013 Ward 1 City Council Special Election also triggered a STV Instant Runoff
- Ward boundaries changed in 2011 – between the 2011 and 2015 STV elections
- Saint Paul does not provide detailed STV automated *electronic ballot images* – unlike Minneapolis

¹ Ord. No. 17665, § 5, 6-29-89; C.F. No. 05-909

Comments and Questions

- There is not much data to evaluate STV with only two full City Council cycles and 15 total City Council races
- Most City Council races (12 of 15 or 80%) were decided at the first round (equivalent to traditional voting)
 - STV Instant Runoff settled the outcome when no candidate reached the *threshold* in the first round
- The cost to date to implement STV – about \$185,000 – is a **Sunk Cost**
 - The appropriate way to evaluate the cost of STV versus traditional is what each will cost from **today and in future**
- Several factors may help understand STV – But it is **not clear** whether those factors **also apply** to traditional voting

Turnout – Does STV increase or decrease voter turnout? Can it be known one way or the other?

- Does it depend on other factors like incumbency, the number or quality of candidates? Other initiatives?

Ward and Precinct Demographics – Are there clear voting patterns and trends between wards and/or precincts?

- Different in STV than in traditional voting? Can the differences be quantified?

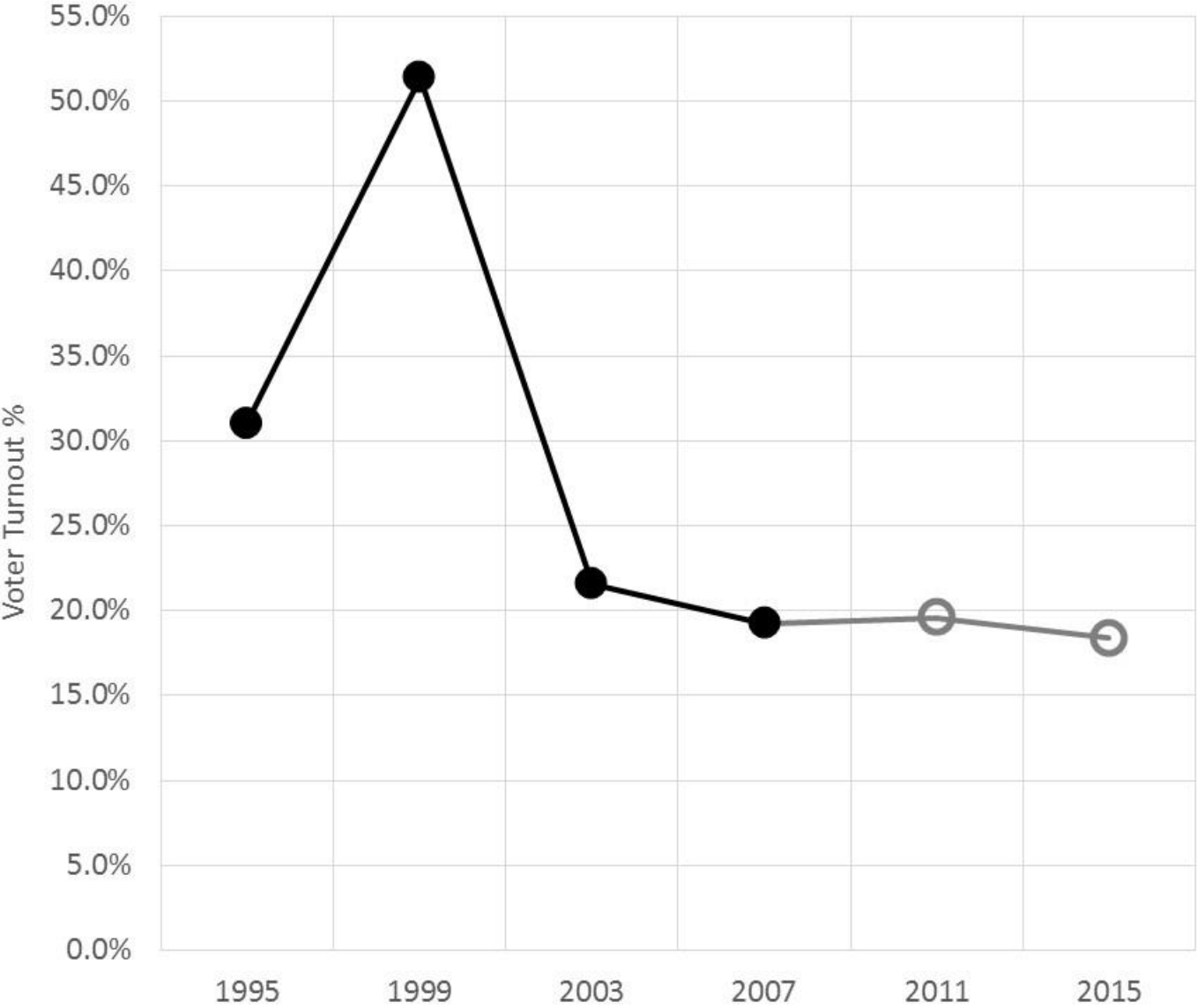
- Election-to-election comparisons (whether STV or traditional) are difficult when ward and precinct boundaries change

Comments and Questions, Continued

- Is the **Charter Commission** debating a “**False Choice**” fallacy? Is this really an either/or choice STV versus traditional?
- Are there other, better voting systems than either STV or traditional to **achieve all the city’s election goals**?
 - Higher Turnout
 - Representative of Voter Preferences
 - Competitive
 - Low Cost
 - Fair
- **Will these goals be achieved by changing to traditional voting?** Remaining with STV? Does the Commission know?
- Does the Charter Commission have a **responsibility** to help improve the city election system?

City of Saint Paul
Voter Turnout % All Wards
City Council Elections 1995-2015

○ STV



Voter turnout decreased in three of last four full City Council elections and long-term trend is down

1999 Election

- City Council
- School Board
- Ballpark Initiative Ordinance
- Billboard Initiative Ordinance
- Council Salary Charter Amendment

Does the City have a Turnout Issue?

Is STV or Traditional Better to Improve Turnout?
What if Neither? How does Commission know?

What is **Commission** doing to improve **Turnout**?

Summary of STV City Council Elections

		2011							
Ward Precinct		Type	Candidates Excl Write-In	Total Registered	Persons Voting	Turnout	Winner	% of Votes	Runoff?
All	All		20	156,760	30,682	19.6%			
1	All	INCUMBENT	4	21,218	3,672	17.3%	CARTER	60.6%	No
2	All	INCUMBENT	5	24,189	5,423	22.4%	THUNE	✓	Yes
3	All	OPEN	4	28,083	7,894	28.1%	TOLBERT	50.7%	No
4	All	INCUMBENT	2	26,464	4,455	16.8%	STARK	76.6%	No
5	All	OPEN	2	19,143	3,771	19.7%	BRENDMOEN	50.2%	No
6	All	INCUMBENT	2	18,306	3,453	18.9%	BOSTROM	58.1%	No
7	All	INCUMBENT	1	19,357	2,014	10.4%	LANTRY	93.2%	No

		2013							
Ward Precinct		Type	Candidates Excl Write-In	Total Registered	Persons Voting	Turnout	Winner	% of Votes	Runoff?
1	All	OPEN	7	21,009	4,961	23.6%	THAO	✓	Yes

		2015							
Ward Precinct		Type	Candidates Excl Write-In	Total Registered	Persons Voting	Turnout	Winner	% of Votes	Runoff?
All	All		18	151,966	27,923	18.4%			
1	All	OPEN	2	20,248	3,061	15.1%	THAO	84.2%	No
2	All	OPEN	6	23,773	5,807	24.4%	NOECKER	✓	Yes
3	All	INCUMBENT	1	27,746	5,440	19.6%	TOLBERT	91.9%	No
4	All	INCUMBENT	2	24,383	5,524	22.7%	STARK	61.4%	No
5	All	INCUMBENT	3	18,623	3,991	21.4%	BRENDMOEN	56.2%	No
6	All	INCUMBENT	3	18,073	2,221	12.3%	BOSTROM	73.8%	No
7	All	OPEN	1	19,120	1,879	9.8%	PRINCE	94.8%	No

- 9 of 15 City Council races were Incumbent
- 3 of 15 races triggered a STV Instant Runoff - 2 were Open and 1 was Incumbent
- **71.0%** average Winning % of all Non-Runoff races
- Open races do not always have multiples candidates

Does the City have a Competition Issue?

Is STV or Traditional Better to Improve Competition?
What if Neither? How does Commission know?

What is **Commission** doing to improve **Competition**?

City of Saint Paul

2013 Election
Ward 1 Reallocation
Hand Count Totals

	First Choice	%	+/- First Choice	Subtotal	% of Total Ballots
Dai Thao	1,347	28.2%	623	1,970	41.3%
Noel Nix	1,167	24.5%	555	1,722	36.1%
			b 1,178	3,692	77.4%
Johnny Howard	728	15.3%	(728)	-	0.0%
Debbie Montgomery	682	14.3%	(682)	-	0.0%
Kazoua Kong-Thao	396	8.3%	(396)	-	0.0%
Mark Voerding	265	5.6%	(265)	-	0.0%
Paul Holmgren	178	3.7%	(178)	-	0.0%
Write-in	7	0.1%	(7)	-	0.0%
Suspended Ballots	188		(188)	-	0.0%
			a (2,444)	-	0.0%
			c (1,266)	1,266	26.5%
Total Votes Cast	4,958				
Less Suspended Ballots	(188)			(188)	-3.9%
Total Ballots	4,770	100.0%		4,770	100.0%

a Votes for *Mathematically Impossible to be Elected* Candidates 2,444
= b Total Activated (Thao or Nix as Subsequent Choice) 1,178
+ c Total Inactivated Ballots (Neither Thao nor Nix as Any Choice) 1,266

Notes

a Howard, Montgomery, Kong-Thao, Voerding, Holmgren & Write-in did not have enough votes in later rounds to win.

b Thao and Nix got 1,178 second through sixth choice votes reallocated from all the other candidates.
In other words, 1,178 ballots from all the other candidates had Thao or Nix as a second through sixth choice.
These 1,178 ballot choices were added to the first round votes for Thao and Nix.

c There were 1,266 ballots that did not have Thao or Nix as any choice. These ballots are considered "inactivated."

Fairness is a Feeling
What’s fair to some isn’t always fair to all

STV Instant Runoff Calculations Seem to Be Contentious
‘Inactive’ ballots act like a *‘Primary Within a General’*

Is it Fair?

- 26.5% of first choices did not carry to the total (‘inactive’)
- Ballots with the second place finisher as the first choice have subsequent choices that are never reallocated

All reallocations happen with subsequent choices from candidates who are mathematically unable to win – except for the second place finisher

Hypothetical Primary + General = Two Total Elections

Primary (Top 2 Advance)			General ^a			Total (Primary + General) ^b		
Voters		%	Voters		%	Voters		%
Abraham	12	24.0%	Abraham	49	49.0%	Abraham	49	38.3%
Bill	10	20.0%	Bill	51	51.0%	Bill	51	39.8%
Donald	9	18.0%				Donald	9	7.0%
Eugene	8	16.0%				Eugene	8	6.3%
Franklin	7	14.0%				Franklin	7	5.5%
Hubert	4	8.0%				Hubert	4	3.1%
Total	50	100.0%	Total	100	100.0%		128	100.0%
						Donald	9	7.0%
						Eugene	8	6.3%
						Franklin	7	5.5%
						Hubert	4	3.1%
						Subtotal	28	21.9%

a Voters for Donald, Eugene, Franklin and Hubert do not vote in the General

b Primary voters for Abraham and Bill also vote for them in the General

Fairness is a Feeling
What’s fair to some isn’t always fair to all

Is it Fair?

- Who won the most votes?
- Was there a **majority**?
- Were 21.9% of votes ‘inactivated’?

- Do the results **Represent** voter preferences?

- That (city) elections are ‘**non-partisan**’
When political **parties** endorse candidates?

- That **only two candidates** moved to the General?
- Does this electoral method foster **Competition**?

- Are two-step elections Low Cost? **Lower Cost**?

Fairness is a Feeling

What's fair to some isn't always fair to all

Is it Also Fair?

- Voters changed from traditional way they vote to STV
- 3rd parties rarely win any races in traditional (or STV) systems
- Only two Republicans have been Mayor since WW II
- **All** electoral methods have **strengths and weaknesses**

What is **Commission** doing to improve **Fairness**?

Summary

- Is the **Charter Commission** debating a “**False Choice**” fallacy? Is this really an either/or choice STV versus traditional?
- Are there other, better voting systems than either STV or traditional to **achieve all the city’s election goals**?
- **Will these goals be achieved by changing to traditional voting?** Remaining with STV? Does the Commission know?
 - Higher Turnout
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- Does the Charter Commission have a **responsibility** to help improve the city election system?

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Appendix

- 1999-2015 Voter Turnout by Ward
- 2011 Election Details By Choice
- 2015 Election Details By Choice
- 2015 Ward 2 STV Instant Runoff Reallocation
- Minneapolis Automated *Electronic Ballot Image* Example
- Minneapolis 2009 and 2013 Elections Executive Summary

City of Saint Paul
Voter Turnout By Ward

	Total Number of Votes					Trend	Total Registered					Trend	Turnout %					Trend
	1999	2003	2007	2011	2015		1999	2003	2007	2011	2015		1999	2003	2007	2011	2015	
All	76,326	32,652	30,620	30,682	27,923		148,473	151,424	159,160	156,760	151,966		51.4%	21.6%	19.2%	19.6%	18.4%	
1	7,635	4,965	4,628	3,672	3,061		17,735	19,477	21,052	21,218	20,248		43.0%	25.5%	22.0%	17.3%	15.1%	
2	12,046	5,400	5,199	5,423	5,807		23,578	21,269	23,595	24,189	23,773		51.1%	25.4%	22.0%	22.4%	24.4%	
3	16,519	6,925	5,329	7,894	5,440		26,658	28,983	29,043	28,083	27,746		62.0%	23.9%	18.3%	28.1%	19.6%	
4	13,134	4,898	4,058	4,455	5,524		25,173	26,530	26,306	26,464	24,383		52.2%	18.5%	15.4%	16.8%	22.7%	
5	9,449	5,101	4,181	3,771	3,991		18,747	18,400	20,046	19,143	18,623		50.4%	27.7%	20.9%	19.7%	21.4%	
6	8,429	2,034	4,736	3,453	2,221		17,610	17,714	19,154	18,306	18,073		47.9%	11.5%	24.7%	18.9%	12.3%	
7	9,115	3,329	2,489	2,014	1,879		18,974	19,051	19,964	19,357	19,120		48.0%	17.5%	12.5%	10.4%	9.8%	

	Change in Total Number of Votes				Change in Total Registered			
	2003	2007	2011	2015	2003	2007	2011	2015
All	-43,674	-2,032	62	-2,759	2,951	7,736	-2,400	-4,794
1	-2,670	-337	-956	-611	1,742	1,575	166	-970
2	-6,646	-201	224	384	-2,309	2,326	594	-416
3	-9,594	-1,596	2,565	-2,454	2,325	60	-960	-337
4	-8,236	-840	397	1,069	1,357	-224	158	-2,081
5	-4,348	-920	-410	220	-347	1,646	-903	-520
6	-6,395	2,702	-1,283	-1,232	104	1,440	-848	-233
7	-5,786	-840	-475	-135	77	913	-607	-237

	% Change in Total Number of Votes				% Change in Total Registered			
	2003	2007	2011	2015	2003	2007	2011	2015
All	-57.2%	-6.2%	0.2%	-9.0%	2.0%	5.1%	-1.5%	-3.1%
1	-35.0%	-6.8%	-20.7%	-16.6%	9.8%	8.1%	0.8%	-4.6%
2	-55.2%	-3.7%	4.3%	7.1%	-9.8%	10.9%	2.5%	-1.7%
3	-58.1%	-23.0%	48.1%	-31.1%	8.7%	0.2%	-3.3%	-1.2%
4	-62.7%	-17.1%	9.8%	24.0%	5.4%	-0.8%	0.6%	-7.9%
5	-46.0%	-18.0%	-9.8%	5.8%	-1.9%	8.9%	-4.5%	-2.7%
6	-75.9%	132.8%	-27.1%	-35.7%	0.6%	8.1%	-4.4%	-1.3%
7	-63.5%	-25.2%	-19.1%	-6.7%	0.4%	4.8%	-3.0%	-1.2%

CANDIDATE	WARD	CHOICE	COUNT	%	CHOICE	COUNT	%	CHOICE	COUNT	%	CHOICE	COUNT	%	CHOICE	COUNT	%
MELVIN W. CARTERIII	1	1	2,177	60.6%	2	552	28.1%	3	213	21.2%	4	162	28.1%	5	113	42.0%
JOHNNY HOWARD	1	1	1,010	28.1%	2	792	40.3%	3	236	23.4%	4	133	23.1%	5	75	27.9%
ANTHONY J. FERNANDEZ	1	1	269	7.5%	2	422	21.5%	3	333	33.1%	4	85	14.7%	5	20	7.4%
JAMES MICHAELMCEIVER	1	1	122	3.4%	2	176	9.0%	3	199	19.8%	4	177	30.7%	5	32	11.9%
WI WRITE-IN**	1	1	15	0.4%	2	21	1.1%	3	26	2.6%	4	20	3.5%	5	29	10.8%
TOTAL			<u>3,593</u>	<u>100.0%</u>		<u>1,963</u>	<u>100.0%</u>		<u>1,007</u>	<u>100.0%</u>		<u>577</u>	<u>100.0%</u>		<u>269</u>	<u>100.0%</u>

CANDIDATE	WARD	CHOICE	COUNT	%	CHOICE	COUNT	%	CHOICE	COUNT	%	CHOICE	COUNT	%	CHOICE	COUNT	%	CHOICE	COUNT	%
DAVE THUNE	2	1	2,079	38.8%	2	953	24.7%	3	360	16.6%	4	113	12.4%	5	151	27.0%	6	74	30.1%
BILL HOSKO	2	1	1,378	25.7%	2	895	23.2%	3	543	25.0%	4	165	18.2%	5	110	19.6%	6	69	28.0%
JIM IVEY	2	1	1,435	26.8%	2	1,268	32.8%	3	416	19.1%	4	167	18.4%	5	84	15.0%	6	36	14.6%
CYNTHIA P. SCHANNO	2	1	343	6.4%	2	514	13.3%	3	519	23.9%	4	218	24.0%	5	75	13.4%	6	22	8.9%
SHARON ANDERSON	2	1	118	2.2%	2	219	5.7%	3	310	14.3%	4	229	25.2%	5	117	20.9%	6	19	7.7%
WI WRITE-IN**	2	1	8	0.1%	2	17	0.4%	3	27	1.2%	4	16	1.8%	5	23	4.1%	6	26	10.6%
TOTAL			<u>5,361</u>	<u>100.0%</u>		<u>3,866</u>	<u>100.0%</u>		<u>2,175</u>	<u>100.0%</u>		<u>908</u>	<u>100.0%</u>		<u>560</u>	<u>100.0%</u>		<u>246</u>	<u>100.0%</u>

CANDIDATE	WARD	CHOICE	COUNT	%	CHOICE	COUNT	%	CHOICE	COUNT	%	CHOICE	COUNT	%	CHOICE	COUNT	%
CHRIS TOLBERT	3	1	3,959	50.7%	2	1,462	30.0%	3	512	21.6%	4	223	21.9%	5	97	35.0%
JOHN MANNILLO	3	1	2,563	32.8%	2	1,779	36.5%	3	515	21.7%	4	173	17.0%	5	77	27.8%
EVE STEIN	3	1	1,098	14.1%	2	1,222	25.1%	3	836	35.2%	4	141	13.8%	5	48	17.3%
TYLOR J. SLINGER	3	1	164	2.1%	2	352	7.2%	3	470	19.8%	4	430	42.2%	5	16	5.8%
WI WRITE-IN**	3	1	24	0.3%	2	53	1.1%	3	40	1.7%	4	52	5.1%	5	39	14.1%
TOTAL			<u>7,808</u>	<u>100.0%</u>		<u>4,868</u>	<u>100.0%</u>		<u>2,373</u>	<u>100.0%</u>		<u>1,019</u>	<u>100.0%</u>		<u>277</u>	<u>100.0%</u>

CANDIDATE	WARD	CHOICE	COUNT	%	CHOICE	COUNT	%	CHOICE	COUNT	%
RUSS STARK	4	1	3,284	76.6%	2	390	39.8%	3	185	60.1%
CURTIS STOCK	4	1	958	22.4%	2	500	51.1%	3	85	27.6%
WI WRITE-IN**	4	1	43	1.0%	2	89	9.1%	3	38	12.3%
TOTAL			<u>4,285</u>	<u>100.0%</u>		<u>979</u>	<u>100.0%</u>		<u>308</u>	<u>100.0%</u>

CANDIDATE	WARD	CHOICE	COUNT	%	CHOICE	COUNT	%	CHOICE	COUNT	%
AMY BRENDMOEN	5	1	1,853	50.2%	2	718	50.0%	3	227	47.2%
LEE HELGEN	5	1	1,817	49.2%	2	659	45.9%	3	201	41.8%
WI WRITE-IN**	5	1	23	0.6%	2	59	4.1%	3	53	11.0%
TOTAL			<u>3,693</u>	<u>100.0%</u>		<u>1,436</u>	<u>100.0%</u>		<u>481</u>	<u>100.0%</u>

CANDIDATE	WARD	CHOICE	COUNT	%	CHOICE	COUNT	%	CHOICE	COUNT	%
DAN BOSTROM	6	1	1,962	58.1%	2	467	42.5%	3	250	47.5%
BEE KEVIN XIONG	6	1	1,397	41.4%	2	586	53.3%	3	242	46.0%
WI WRITE-IN**	6	1	19	0.6%	2	47	4.3%	3	34	6.5%
TOTAL			<u>3,378</u>	<u>100.0%</u>		<u>1,100</u>	<u>100.0%</u>		<u>526</u>	<u>100.0%</u>

CANDIDATE	WARD	CHOICE	COUNT	%	CHOICE	COUNT	%
KATHY LANTRY	7	1	1,649	93.2%	2	310	80.9%
WI WRITE-IN**	7	1	120	6.8%	2	73	19.1%
TOTAL			<u>1,769</u>	<u>100.0%</u>		<u>383</u>	<u>100.0%</u>

CANDIDATE	WARD	CHOICE	COUNT	%	CHOICE	COUNT	%	CHOICE	COUNT	%
DAI THAO	1	1	2,503	84.2%	2	544	47.3%	3	336	68.2%
TRAHERN JEENCREWS	1	1	416	14.0%	2	551	48.0%	3	109	22.1%
WI WRITE-IN**	1	1	<u>54</u>	<u>1.8%</u>	2	<u>54</u>	<u>4.7%</u>	3	<u>48</u>	<u>9.7%</u>
TOTAL			<u>2,973</u>	<u>100.0%</u>		<u>1,149</u>	<u>100.0%</u>		<u>493</u>	<u>100.0%</u>

CANDIDATE	WARD	CHOICE	COUNT	%	CHOICE	COUNT	%	CHOICE	COUNT	%	CHOICE	COUNT	%	CHOICE	COUNT	%	CHOICE	COUNT	%
REBECCA NOECKER	2	1	2,390	41.4%	2	1,413	33.8%	3	344	16.0%	4	107	12.5%	5	95	14.5%	6	90	15.8%
DARREN TOBOLT	2	1	2,207	38.3%	2	1,459	34.9%	3	328	15.3%	4	121	14.2%	5	114	17.4%	6	117	20.5%
BILL HOSKO	2	1	840	14.6%	2	698	16.7%	3	654	30.4%	4	167	19.6%	5	95	14.5%	6	100	17.5%
PAT FEARING	2	1	110	1.9%	2	216	5.2%	3	333	15.5%	4	192	22.5%	5	112	17.1%	6	46	8.1%
SHARON ANDERSON	2	1	93	1.6%	2	186	4.4%	3	218	10.1%	4	117	13.7%	5	82	12.5%	6	134	23.5%
MICHAEL C JOHNSON	2	1	75	1.3%	2	158	3.8%	3	225	10.5%	4	150	17.6%	5	157	24.0%	6	83	14.6%
WI WRITE-IN**	1	1	<u>54</u>	<u>0.9%</u>	2	<u>54</u>	<u>1.3%</u>	3	<u>48</u>	<u>2.2%</u>	4	<u>-</u>	<u>0.0%</u>	5	<u>-</u>	<u>0.0%</u>	6	<u>-</u>	<u>0.0%</u>
TOTAL			<u>5,769</u>	<u>100.0%</u>		<u>4,184</u>	<u>100.0%</u>		<u>2,150</u>	<u>100.0%</u>		<u>854</u>	<u>100.0%</u>		<u>655</u>	<u>100.0%</u>		<u>570</u>	<u>100.0%</u>

CANDIDATE	WARD	CHOICE	COUNT	%	CHOICE	COUNT	%
CHRIS TOLBERT	3	1	4,484	91.9%	2	722	77.0%

WI WRITE-IN**	3	1	<u>397</u>	<u>8.1%</u>	2	<u>216</u>	<u>23.0%</u>
TOTAL			<u>4,881</u>	<u>100.0%</u>		<u>938</u>	<u>100.0%</u>

CANDIDATE	WARD	CHOICE	COUNT	%	CHOICE	COUNT	%	CHOICE	COUNT	%
RUSS STARK	4	1	3,293	61.4%	2	799	45.5%	3	272	47.3%
TOM GOLDSTEIN	4	1	2,039	38.0%	2	866	49.3%	3	247	43.0%
WI WRITE-IN**	4	1	<u>35</u>	<u>0.7%</u>	2	<u>92</u>	<u>5.2%</u>	3	<u>56</u>	<u>9.7%</u>
TOTAL	4		<u>5,367</u>	<u>100.0%</u>		<u>1,757</u>	<u>100.0%</u>		<u>575</u>	<u>100.0%</u>

CANDIDATE	WARD	CHOICE	COUNT	%	CHOICE	COUNT	%	CHOICE	COUNT	%	CHOICE	COUNT	%
AMY BRENDMOEN	5	1	2,202	56.2%	2	544	26.0%	3	346	32.2%	4	177	43.7%
DAVID J. GLASS	5	1	1,485	37.9%	2	669	32.0%	3	346	32.2%	4	156	38.5%
DAVID SULLIVAN- NIGHTENGALE	5	1	215	5.5%	2	840	40.2%	3	336	31.3%	4	44	10.9%
WI WRITE-IN**	5	1	<u>14</u>	<u>0.4%</u>	2	<u>39</u>	<u>1.9%</u>	3	<u>47</u>	<u>4.4%</u>	4	<u>28</u>	<u>6.9%</u>
TOTAL			<u>3,916</u>	<u>100.0%</u>		<u>2,092</u>	<u>100.0%</u>		<u>1,075</u>	<u>100.0%</u>		<u>405</u>	<u>100.0%</u>

CANDIDATE	WARD	CHOICE	COUNT	%	CHOICE	COUNT	%	CHOICE	COUNT	%	CHOICE	COUNT	%
DAN BOSTROM	6	1	1,571	73.8%	2	400	39.4%	3	306	44.7%	4	196	60.9%
EDWARD DAVIS	6	1	290	13.6%	2	321	31.6%	3	160	23.4%	4	50	15.5%
KEVIN T. BRADLEY	6	1	251	11.8%	2	273	26.9%	3	199	29.1%	4	59	18.3%
WI WRITE-IN**	6	1	<u>16</u>	<u>0.8%</u>	2	<u>21</u>	<u>2.1%</u>	3	<u>20</u>	<u>2.9%</u>	4	<u>17</u>	<u>5.3%</u>
TOTAL			<u>2,128</u>	<u>100.0%</u>		<u>1,015</u>	<u>100.0%</u>		<u>685</u>	<u>100.0%</u>		<u>322</u>	<u>100.0%</u>

CANDIDATE	WARD	CHOICE	COUNT	%	CHOICE	COUNT	%
JANE PRINCE	7	1	1,574	94.8%	2	260	83.6%
WI WRITE-IN**	7	1	<u>87</u>	<u>5.2%</u>	2	<u>51</u>	<u>16.4%</u>
TOTAL			<u>1,661</u>	<u>100.0%</u>		<u>311</u>	<u>100.0%</u>

City of Saint Paul

2015 Election

Ward 2 Reallocation

Hand Count Totals	First Choice	%	+/- First Choice	Subtotal	% of Total Ballots
Rebecca Noecker	2,391	41.7%	391	2,782	48.5%
Darren Tobolt	2,208	38.5%	236	2,444	42.6%
			b 627	5,226	91.1%
Bill Hosko	840	14.6%	(840)	-	0.0%
Pat Fearing	110	1.9%	(110)	-	0.0%
Sharon Anderson	94	1.6%	(94)	-	0.0%
Michael C Johnson	76	1.3%	(76)	-	0.0%
Write-in	19	0.3%	(19)	-	0.0%
Suspended Ballots	70		(70)	-	0.0%
			a (1,209)	-	0.0%
			c (582)	582	10.1%
Total Votes Cast	5,808				
Less Suspended Ballots	(70)			(70)	-1.2%
Total Ballots	5,738	100.0%		5,738	100.0%

a Votes for <i>Mathematically Impossible to be Elected</i> Candidates	1,209
= b Total Activated (Noecker or Tobolt as Subsequent Choice)	627
+ c Total Inactivated Ballots (Neither Noecker nor Tobolt as Any Choice)	582

Notes

- a Hosko, Fearing, Anderson, Johnson and Write-in did not have enough votes in later rounds to win.
- b Noecker and Tobolt got 627 second through sixth round votes reallocated from all other candidates.
- In other words, 627 ballots from the other candidates had Noecker or Tobolt as the second through sixth choice.
- These 627 ballot choices were added to the first round votes for Noecker and Tobolt.
- c There were 582 ballots that did not have Noecker or Tobolt as any choice. These ballots are considered "inactivated."

Ward and Precinct	1st Choice	2nd Choice	3rd Choice
MINNEAPOLIS W-1 P-01	ABDUL M RAHAMAN "THE ROCK"	undervote	undervote
MINNEAPOLIS W-1 P-01	ALICIA K. BENNETT	MERRILL ANDERSON	ALICIA K. BENNETT
MINNEAPOLIS W-1 P-01	ALICIA K. BENNETT	STEPHANIE WOODRUFF	undervote
MINNEAPOLIS W-1 P-01	BETSY HODGES	ALICIA K. BENNETT	MARK ANDREW
MINNEAPOLIS W-1 P-01	BETSY HODGES	BETSY HODGES	BETSY HODGES
MINNEAPOLIS W-1 P-02	ALICIA K. BENNETT	ABDUL M RAHAMAN "THE ROCK"	JOHN LESLIE HARTWIG
MINNEAPOLIS W-1 P-02	ALICIA K. BENNETT	NEAL BAXTER	DAN COHEN
MINNEAPOLIS W-1 P-02	ALICIA K. BENNETT	STEPHANIE WOODRUFF	BETSY HODGES
MINNEAPOLIS W-1 P-02	BETSY HODGES	ABDUL M RAHAMAN "THE ROCK"	MARK ANDREW
MINNEAPOLIS W-1 P-03	ABDUL M RAHAMAN "THE ROCK"	JAMES "JIMMY" L. STROUD, JR.	undervote
MINNEAPOLIS W-1 P-03	ALICIA K. BENNETT	BETSY HODGES	MARK ANDREW
MINNEAPOLIS W-1 P-03	ALICIA K. BENNETT	undervote	undervote
MINNEAPOLIS W-1 P-03	BETSY HODGES	ALICIA K. BENNETT	BOB FINE
MINNEAPOLIS W-1 P-03	BETSY HODGES	ALICIA K. BENNETT	DON SAMUELS
MINNEAPOLIS W-1 P-03	undervote	overvote	JACKIE CHERRYHOMES
MINNEAPOLIS W-1 P-06	MARK ANDREW	overvote	undervote

Minneapolis Automated ***Electronic Ballot Image*** Example

Detailed automated electronic data

- Easy to download
- Easy to analyze (See next slide)

City of Minneapolis
2009 and 2013 Elections
Executive Summary

	2009			2013			2013 Mayor Only % of Ballots					2013 Ward Only % of Ballots				
	Ballots Cast	Registrations	Turnout	Ballots Cast	Registrations	Turnout	Over-Vote	Under-Vote	No Vote	Duplicate	Duplicate X3	Over-Vote	Under-Vote	No Vote	Duplicate	Duplicate X3
Ward	45,968	234,028	19.6%	80,099	239,985	33.4%	0.2%	24.2%	0.8%	2.0%	1.2%	0.2%	63.2%	5.6%	4.8%	3.5%
1	4,016	17,697	22.7%	5,942	19,209	30.9%	0.2%	20.5%	0.2%	1.8%	1.2%	0.1%	72.7%	5.4%	3.7%	2.2%
2	2,842	20,005	14.2%	5,156	18,705	27.6%	0.1%	19.5%	0.1%	1.1%	0.5%	0.3%	93.2%	9.6%	4.3%	2.8%
3	2,257	15,969	14.1%	6,206	20,027	31.0%	0.2%	24.7%	0.8%	1.9%	1.1%	0.2%	52.2%	1.9%	3.3%	2.0%
4	3,322	15,491	21.4%	3,940	17,086	23.1%	0.3%	23.9%	0.6%	3.4%	2.0%	0.3%	71.0%	3.0%	5.4%	2.8%
5	2,200	12,900	17.1%	3,621	15,388	23.5%	0.2%	29.7%	5.4%	5.1%	3.2%	0.1%	40.3%	3.4%	6.7%	4.5%
6	1,982	14,655	13.5%	5,051	15,023	33.6%	0.5%	57.9%	3.7%	4.1%	2.7%	0.4%	78.2%	3.3%	5.9%	4.1%
7	4,532	23,639	19.2%	6,594	19,651	33.6%	0.2%	20.1%	0.2%	1.3%	0.8%	0.1%	88.1%	14.8%	11.9%	10.9%
8	3,239	16,601	19.5%	6,062	17,322	35.0%	0.4%	19.7%	0.2%	2.4%	1.4%	0.0%	88.0%	13.6%	12.0%	11.1%
9	3,035	14,149	21.5%	4,310	12,658	34.0%	0.3%	23.8%	0.7%	3.1%	2.0%	0.1%	41.2%	3.0%	4.3%	2.9%
10	3,431	19,343	17.7%	5,933	19,456	30.5%	0.1%	23.9%	1.0%	1.3%	0.8%	0.1%	63.7%	2.5%	2.4%	1.2%
11	4,235	19,973	21.2%	7,800	20,100	38.8%	0.1%	20.5%	0.3%	1.3%	0.7%	0.1%	68.1%	5.8%	2.8%	1.7%
12	4,818	20,779	23.2%	8,742	22,108	39.5%	0.3%	22.0%	0.2%	1.7%	0.9%	0.1%	45.2%	4.0%	2.5%	1.2%
13	6,059	22,827	26.5%	10,742	23,252	46.2%	0.2%	20.9%	0.1%	1.1%	0.5%	0.1%	38.5%	2.6%	1.3%	0.6%

Questions

Why did the 2013 STV Minneapolis election have higher turnout (33.4%) than the 2015 STV Saint Paul election (18.4%) ...

... When the 2009 STV Minneapolis and 2011 STV Saint Paul had the same turnout (19.6%)?

Does anybody know **voter intent?**
Without asking the voter?