



ATTACHMENTS MINUTES

Ordinary Council meeting

Monday, 12 July 2021

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STV PUBLIC FORUM

What does the voter need to know about STV in multi-seat elections?

LARRY BALDOCK, 12 JULY 2021

Three main questions!

- 1. What problem were we trying to solve in FPP?**
- 2. Can you elect more than one candidate with only one vote?**
- 3. What happens when valid preferences are not counted?**

One Request.

26. Summary of advantages and disadvantages of this option are set out below:

Advantages	Disadvantages
More equitable model as both general and Māori electors vote for one councillor.	Electors vote for only one councillor out of 12 councillors.
More geographic representation of communities of interest than other options.	Does not identify and represent city-wide communities of interest.
More easily understood system than other options and direct relationship with electors and ward councillor.	Potential for perception that the ward member represents their ward only.
This arrangement may address the previous Council's challenges.	Less potential for electing a more diverse group of councillors than options 1 and 2.
Potential for less costs for candidates standing in general wards.	Potential for higher costs for candidates standing in Māori ward.
Will help avoid the risk of voters preferences not being counted under STV and the potential distortion of the voters intention.	

From the DIA website

“STV means that you have one vote, but can indicate your preferences for all the candidates.

Under an **STV** electoral system, voters rank candidates in their order of preference.

Under **STV**, you would write '1' next to the name of your favourite candidate, '2' next to your second favourite candidate and so on.”

It works well when you are electing just one candidate for a seat like the election for the Mayor as the results from 2019 show.

2019 Triennial Elections

Mayor

Result type: Final

Number of vacancies: 1

Quota at first iteration: 19,164.

Legend...

- ITER The iteration number at which a candidate is elected or rejected
- VOTES The votes received by the candidate at the point of election or exclusion
- QUOTA The quota or the absolute majority determined at the iteration
- NTV The number of non-transferable votes determined at the iteration
- KEEP The candidate's final keep value determined at the last iteration
- SURPLUS The number of transferable votes at the iteration

CANDIDATE	STATUS	ITER	VOTES	NTV	QUOTA	KEEP
POWELL Tenby	elected	9	17,299.000000000	8,629.000000000	14,850.000000000	1.000000000
BROWNLESS Greg	excluded	9	12,400.000000000	8,629.000000000	14,850.000000000	0.000000000
CLOUT Kelvin	excluded	8	8,635.000000000	4,961.000000000	16,684.000000000	0.000000000
HOLLIS Andrew	excluded	7	5,715.000000000	2,401.000000000	17,964.000000000	0.000000000
ROBSON John	excluded	6	3,474.000000000	1,534.000000000	18,397.000000000	0.000000000
GUY Murray	excluded	5	2,128.000000000	937.000000000	18,696.000000000	0.000000000
STOKES Christopher	excluded	4	1,142.000000000	519.000000000	18,905.000000000	0.000000000
NAGELS Jos	excluded	3	974.000000000	313.000000000	19,008.000000000	0.000000000
KINGI RangilMarie	excluded	2	703.000000000	43.000000000	19,143.000000000	0.000000000
WALLEN Les	excluded	1	222.000000000	0.000000000	19,164.000000000	0.000000000

1st preference results

ITER	CANDIDATE	VOTES
1	POWELL Tenby	12,486.000000000
1	BROWNLESS Greg	7,978.000000000
1	CLOUT Kelvin	6,295.000000000
1	HOLLIS Andrew	3,964.000000000
1	ROBSON John	2,982.000000000
1	GUY Murray	1,893.000000000
1	NAGELS Jos	916.000000000
1	STOKES Christopher	897.000000000
1	KINGI Rang Marie	695.000000000
1	WALLEN Les	222.000000000

If that had been an **FPP election** Tenby Powell could have won convincingly with **12,436 votes.**

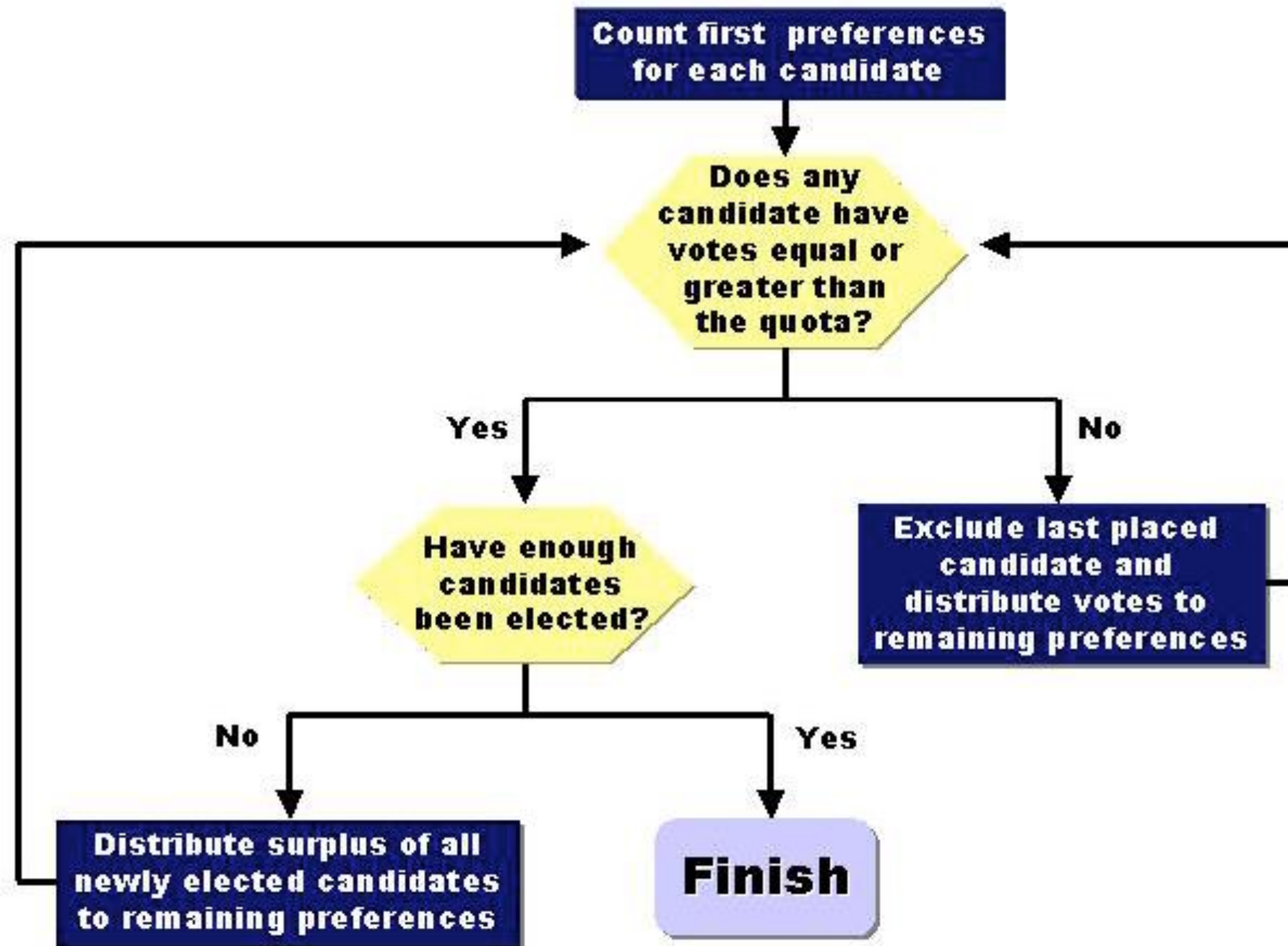
Under STV 32% of the voters chose Tenby as their first choice for Mayor.

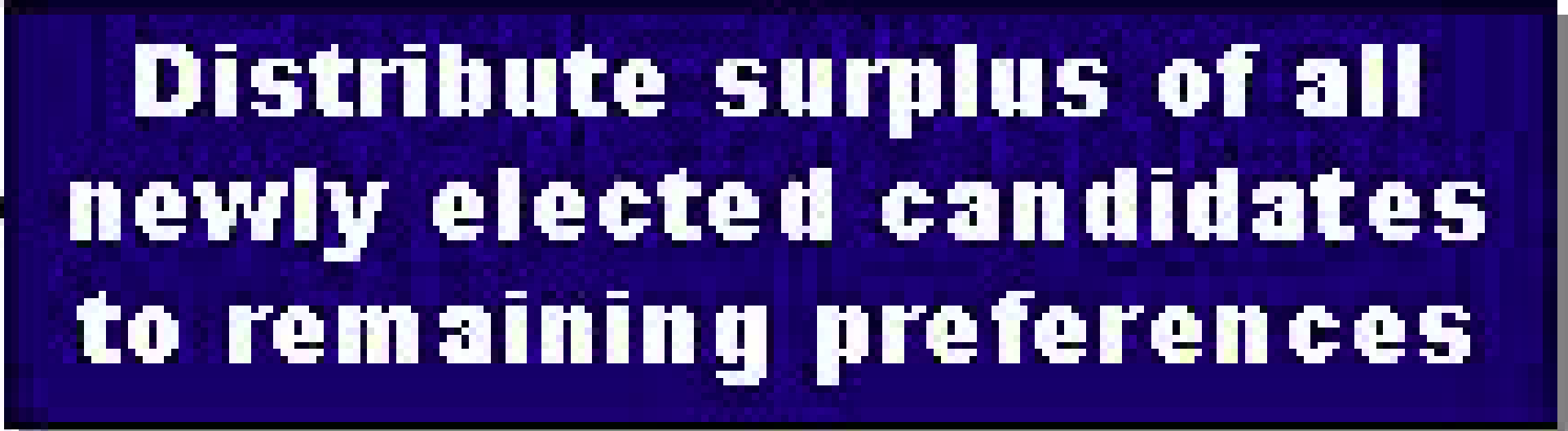
In 2016 Greg Brownless was elected Mayor with 9110 votes or 27% of the voters.

With the voters being able to rank their preferences and the requirement for the winner to eventually achieve the 'Quota; or absolute majority under STV, **more voters identify with the winning candidate.**

STV may be a more unifying way of electing our representatives.

HOW VOTES ARE COUNTED UNDER STV





**Distribute surplus of all
newly elected candidates
to remaining preferences**

Distribute surplus newly elected candidates does not mean all their 2nd preference are distributed as we shall see in the Te Papa/welcome Bay Ward results.

Trying to elect more than one candidate under STV is like the Black Caps trying to win a T20 or ODI but having to rely on some rain and the The Duckworth Lewis Mathematical System.

Once the 'Meeks Mathematical System' begins to operate in STV for a multi-seat election, some very strange results can emerge.

Single Transferable Vote (STV) - How it works

HYPOTHETICAL CITY COUNCIL DOWNTOWN WARD ELECTION OF THREE (3) COUNCILLORS		Number Here
Rank candidates in order of preference... 1 2 3 etc		↓
BRANDO, Marlon		
HEPBURN, Audrey		
LENNON, John		
MONROE, Marilyn		
PRESLEY, Elvis		

Instead of ticking the candidates you want to vote for, on an STV voting paper you rank the candidates in order of preference.

Put a "1" beside the candidate you like best, then a "2" beside your second choice, "3" by your third choice, and so on.

You can vote for as many or as few candidates as you like.

The voter naturally thinks that when they put a 1 beside their first choice that they are helping that candidate to get elected and that is correct.

The problem occurs because the voter assumes, understandably, that the person who gets their '2' alongside their name will have that ranking assist them to get elected also.

Simply put, if their first choice is elected or eliminated then their 2nd vote will be transferred to their second choice to represent them on Council.

But is that really what happens?

Let's see what actually occurred in the Te Papa/Welcome Bay Ward election in 2019.

Te Papa-Welcome Bay Ward

Result type: Final

Number of vacancies: 2

Quota at first iteration: 3,224.333333334

CANDIDATE	STATUS	ITER	VOTES	NTV	QUOTA	KEEP
SALISBURY Tina	elected	8	2,907.000000000	2,208.000000000	2,488.333333334	0.826749717
GRAINGER Bill	elected	10	2,386.628584334	2,514.653000910	2,386.115666364	1.000000000
LARSEN Anna	excluded	10	2,368.356987437	2,514.653000910	2,386.115666364	0.000000000
MOLLOY Terry	excluded	7	1,880.000000000	1,452.000000000	2,740.333333334	0.000000000
POAD Rob	excluded	6	1,403.000000000	824.000000000	2,949.666666667	0.000000000
TUHORO A.J.	excluded	5	1,128.000000000	394.000000000	3,093.000000001	0.000000000
GRINDLEY David	excluded	4	700.000000000	241.000000000	3,144.000000001	0.000000000
WU Waitu	excluded	3	612.000000000	118.000000000	3,185.000000001	0.000000000
DAVIDSON Alan	excluded	2	453.000000000	47.000000000	3,208.666666667	0.000000000
SHERLOCK Jim	excluded	1	330.000000000	0.000000000	3,224.333333334	0.000000000

Te Papa/Welcome Ba Ward 1st and 2nd preference results 2019

NAME	No.1	No.2 Pref	DAVIDSON	GRAINGER	GRINDLEY	LARSON	MOLLOY	POAD	SALISBURY	SHERLOCK	TUHORO	WU
MOLLOY	1543	281	58	298	39	210	0	152	267	50	65	123
SALISBURY	1506	211	41	101	58	324	136	242	0	47	224	124
GRAINGER	1478	218	112	0	115	158	322	117	209	85	69	71
LARSON	1340	159	52	99	52	0	135	138	433	32	121	119
TUHORO	991	269	16	45	40	132	50	66	248	15	0	110
POAD	917	103	38	57	101	80	66	0	255	79	62	76
GRINDLEY	604	55	28	55	0	58	24	169	95	38	35	47
WU	542	63	17	60	29	79	37	68	101	43	45	0
DAVIDSON	424	47	0	64	27	73	40	40	60	23	13	25
SHERLOCK	330	47	29	29	33	22	36	61	18	0	13	42
TOTALS	9673	1453	391	808	492	1136	846	1053	1686	412	659	737

Top 5 Candidates 1st & 2nd combined

Tina Salisbury	1506	1686	3192
Anna Larsen	1340	1136	2476
Terry Molloy	1543	846	2389
Bill Grainger	1476	808	2284
Rob Poad	917	1053	1970

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WU	542	63
DAVIDSON	424	47
SHERLOCK	330	47
TOTALS	9673	1453

We can't assume that under FPP that Tina Salisbury and Anna Larsen would have been elected because of the 1453 voters who did not make a 2nd preference vote under STV. They are different voting systems

But how did the fourth ranked candidate of combined 1st and 2nd preferences end up being elected ahead of Terry Molloy and Anna Larsen?

Anna Larsen	Terry Molloy	Bill Grainger	Rob Poad
324	136	101	242

The 803 voters who gave Tina Salisbury their 1st preference and then their 2nd preference to one of the candidates above would never have expected that if she was the first to be elected that not all of their 2nd preferences would not have been transferred to them. In fact only a very small percentage of these 2nd preferences were counted, probably less than 15%.

The rest became NTV's, Non-transferable votes.

When that happened the obvious advantage Anna Larsen & Terry Molloy had over Bill Grainger was lost.

At iteration 6, before Terry Molloy was excluded, only 28 votes separated Terry and Bill Grainger and at Iteration 7 after Terry Molloy was excluded, only 5 votes separated Bill Grainger and Anna Larsen.

What a difference the excluded votes from Tina Salisbury would have made in the final result.

This is worse than the 'Duckworth Lewis System!'

It is now like you're in the ODI World Cup final and you discover that the winner will be decided on the number of boundaries they scored and not runs and wickets?

It's hardly 'cricket' is it?

Conclusions!

Of course the counting in 2019 was done according to the law and rules.
The election result was correct under the STV system!

But was it an accurate reflection of the intent of the voters in Te Papa/Welcome Bay
Ward? I don't think so.

It would be the only time when picking a winner is a bad thing.
Under STV it means your second pick may be penalised!

**In an election where there are 2 positions to fill, the 1st and 2nd preferences
are vital and they all should be counted first before the iterations begin.**

Since we can't change STV for the 2022 elections I believe it is vitally important for
the community to consider this when they submit on their preferences in the
representation review.

Perhaps the report you are considering in your agenda today should mention another advantage for Option 4

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