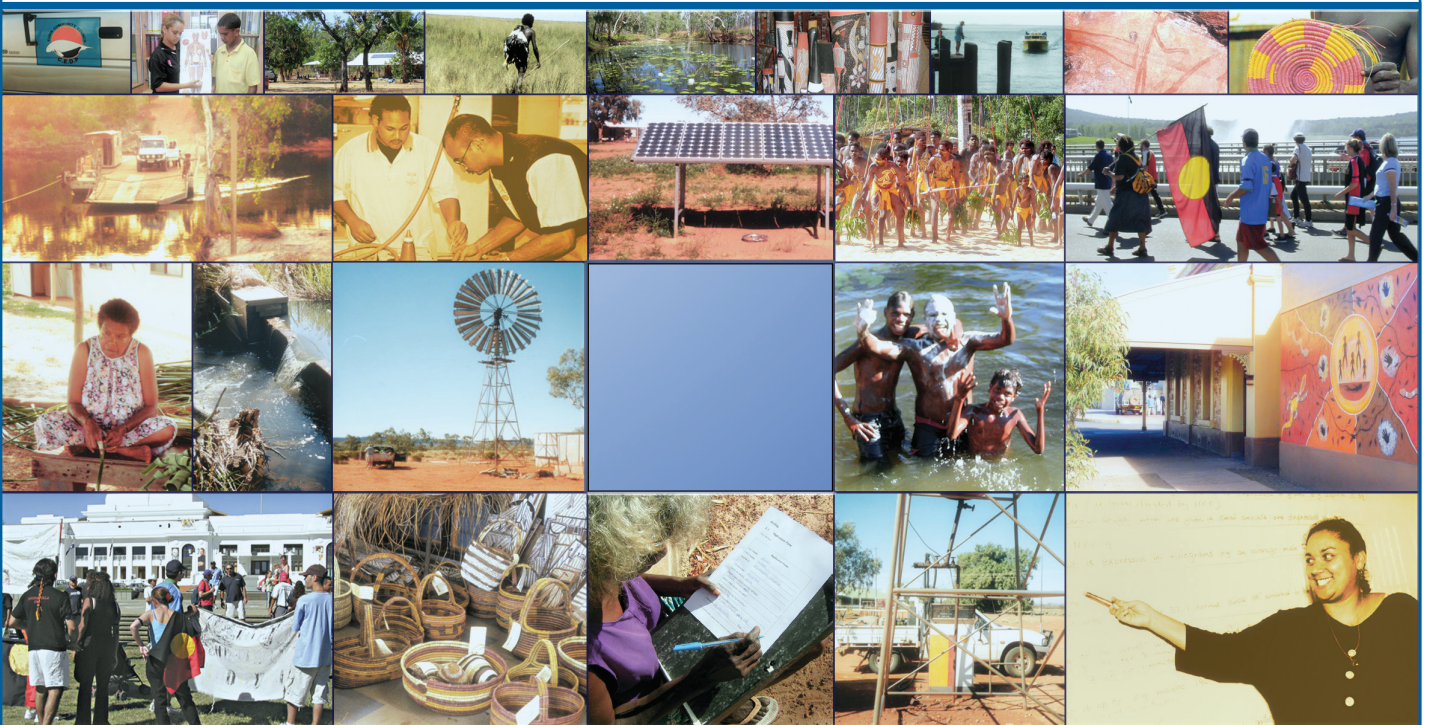


# Alice Springs' Unrepresentative Council: Cause for Intervention?

W. Sanders

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Enquiries may be directed to:

The Centre for Aboriginal Economic Policy Research  
Copland Building #24  
The Australian National University  
Canberra ACT 0200

Telephone 02-6125 8211  
Facsimile 02-6125 9730

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Professor John Taylor  
Director, CAEPR  
Research School of Social Sciences  
College of Arts & Social Sciences  
The Australian National University  
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# Alice Springs' Unrepresentative Council: Cause for Intervention?

W. Sanders

Will Sanders is a Senior Fellow and Deputy Director at the Centre for Aboriginal Economic Policy Research, Research School of Social Sciences, College of Arts and Social Sciences, The Australian National University.

## ABSTRACT

The paper explains how the vote counting system used in Northern Territory local government leads to very poor electoral outcomes which concentrate representation rather than spread it. It discusses how, in the case of Alice Springs, this has produced a narrowly based council with no representation from town camps. It argues that this vote counting system should be changed and notes that it is currently under review by the Northern Territory Government, partly because of this critique. However it also notes that some, including Alice Springs Town Council, are defending the existing system and that change is by no means assured, hence the question of the subtitle.

Keywords: Northern Territory local government electoral system, exhaustive preferential vote counting, Alice Springs Town Council.

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## INTRODUCTION

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The troubles of Alice Springs have been widely discussed in the Australian media since *The Weekend Australian* published Nicolas Rothwell's feature article 'Destroyed in Alice' in February (Rothwell 2011). Discussion has covered many things: violence, drugs, alcohol, sex, town camps, property crime, Aboriginal people coming in from outlying communities; and the idea of another Commonwealth intervention. One topic that has not been mentioned is Alice's highly unrepresentative Town Council, built on a little known electoral system used in Northern Territory local government called 'exhaustive preferential'. This article explains and critiques that electoral system and suggests that it is causing significant problems for both Alice Springs Town Council and other local governments in the Territory. It notes that the Northern Territory Government is currently reviewing the system and is possibly moving slowly towards change. But if change is not effected soon, it asks: is this electoral system cause for another Commonwealth intervention?

## EXHAUSTIVE PREFERENTIAL VOTE COUNTING

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The exhaustive preferential system counts votes in multi-member districts by running repeat single member elections. Preferentially marked votes are used to eliminate candidates with low numbers of votes and to redistribute votes down to a two-person contest, one of whom then has more than 50 per cent of the votes.<sup>1</sup> That person, let's call them A, is then declared elected and the whole process of vote counting starts again, but without A in this second election. A's No. 1 votes are now 'given' to whoever is marked No. 2 on the ballot. This is not preference distribution, as in the elimination of candidates on the way down to a two-person contest for a single member. Nor is it surplus allocation, as occurs in multi-member single-transferable-vote-proportional-representation (STVPR). It is simply the re-using of the same votes to run a second single member election in which A is no longer a candidate.

In this mistaken system, a likely outcome is that another candidate with a rather similar support base to A comes up through the field and wins, because they 'inherit' lots of A's votes marked No. 2. So rather than the second elected candidate reflecting a *different* portion of the votes and voters, it is highly likely that they reflect *much the same majority* as elected A. Representation is concentrated rather than spread.

This mistaken system is an Australian 'invention', which has come out of our unusual love of preferential vote marking. Most countries content themselves with ticks or crosses on ballot papers, while we cleverly mark with preferential numbers. But then what do we do with those numbers? In this instance, we count them in a common-sense but unsatisfactory way which leads to very unrepresentative elected bodies.

This mistaken system was used in the Australian Senate from 1919 to 1946, when there were three Senators to be elected from State-wide electorates in normal half Senate elections. In 55 of 60 Senate elections during this time (10 in each of the six States), the party that won the first Senate seat in a State then went on to win the second and third Senate seats as well (Reilly & Maley 2000: 42). This often created huge majorities in the Senate, which sometimes swung wildly between the major parties and between government and opposition. This was a large part of the reason why the Senate had such a bad reputation during these years.

In local government, where parties are not so dominant, this concentration of representation takes different forms. I first noticed the concentration in one of the Northern Territory's new remote shires in 2008, where there were three widely dispersed towns in a four-member district or ward. Quite rationally, people voted largely for candidates from their own town. With the distribution of preferences, the larger town, which had about 60 per cent of the population and hence votes, won the first seat easily. It then went on to win the second, third and fourth seats as well in the re-run single member elections of the exhaustive preferential system, sometimes with candidates who initially had very few votes but who inherited lots of

new votes after other candidates from their town had been elected. Meanwhile candidates from the two small towns who each had around 20 per cent of the initial votes, progressed little and failed to be elected to *any* of the four available seats for the ward (Sanders 2009). Four councilors from the big town was a problem for the shire, which needed its members to be spread geographically across the widely dispersed locations in order to be seen as acceptable and legitimate.<sup>2</sup>

What has this to do with Alice Springs? There are no widely dispersed locations in Alice Springs local government, nor strong parties. But there are still discernable voting groups. There is a somewhat conservative, right-leaning business-oriented voting group and there is a more left-leaning, socially-oriented voting group. Both these voting groups, I would suggest, contain Aboriginal people from the 'suburbs' who constitute about 10 per cent of Alice's population. Occasionally some of these suburban Aboriginal people are successful in being elected to the Alice Springs Town Council, as they can have quite good links and support into the 'settler' portions of these two voting groups. There are two such councilors in the current Alice Springs Town Council, which dates from elections in March 2008. But there is another social or voting group which has never been represented on the Council even though it too possibly represents about 10 per cent of Alice's population—the Aboriginal town camp residents.

Candidates who are readily recognisable as from the town camp constituency have stood for election to Alice Springs Town Council in the past; such as Geoff Shaw in 1996 who was then the general manager of the town camp association, Tangentyere. In a field of 21 candidates for 10 councilors to be elected from an undivided district which covered the whole town, Shaw came in fourth in the primary count with almost 10 per cent of No. 1 votes. However in the subsequent exhaustive preferential counting, Shaw progressed little. The three candidates above and below Shaw in the primary count were each elected to the first six vacancies, but Shaw was not progressing as he could not command 50 per cent of the vote in any of the repeated, reduced two-person races. The last four vacancies were won by candidates further down the primary count, as they 'inherited' votes from already elected councilors in these repeated single member elections. Even the candidate who had been 18th in the primary count with around 2 per cent of the primary vote progressed past Shaw (Sanders 2009). Because Shaw was identified with town camp interests with which many 'suburban' Alice Springs voters—it would appear a majority—do not greatly empathise, he simply could not win 50 per cent of the votes in any of these 10 repeated, single member elections as they reduced down to two-person races.

Past experience in presenting this scenario suggests that some readers will now be saying: 'what a stupid, unfair vote counting system'. But others will be saying: 'what's wrong with that, democracy is majority rule'. Certainly, if there is only one seat to be won in an area, elimination of candidates with low numbers of votes down to a two-person race in which one candidate then has more than 50 per cent of the votes is good practice. But to do this 10 times over if there are 10 seats to be won, is very *bad* practice. It risks majority tyranny and exclusion of even very significant minorities.

To illustrate this risk more simply and graphically, I have over the last year been using the example below.

**Table 1. Eleven votes for four candidates (some, but not all preferences filled in)**

	V1	V2	V3	V4	V5	V6	V7	V8	V9	V10	V11
C1	1	1	1	1	1	4	4	4	4	4	4
C2						1	1	1	2	3	2
C3						2	2	3	1	1	3
C4						3	3	2	3	2	1



Table 1 represents 11 votes cast for four candidates. The first five votes are for C1, the next three for C2, then two for C3 and one for C4. Preferences are shown for some but not all of the votes, which I will return to shortly.

Table 2 represents the elimination vote counting procedure for a single vacancy. C4 then C3 are eliminated and their preferences distributed to C2, who is elected with six votes. This is a good system, which Australia invented and of which we can be proud.

<b>Table 2. Preferential elimination vote counting for one vacancy</b>				
	Initial votes	Votes after 1st elimination	Votes after 2nd elimination	Result for 1 Seat
C1	5	5	5	
C2	3	4	6	C2 elected
C3	2	2	eliminated	
C4	1	eliminated		

But what if there are two or three vacancies? Exhaustive preferential just declares C2 elected, as in a single member election, then does the whole count over again without C2 in this second election. Table 3 represents this new count and C3 wins.

<b>Table 3. Exhaustive preferential counting for second vacancy</b>			
	Initial votes	Votes after 1st elimination	Result for 2 Seats
C1	5	5	
C2 elected	Re-allocated		
C3	4	6	C3 elected
C4	2	eliminated	

If there are three vacancies, under exhaustive preferential all this counting remains in place and another single member election is held in which the only two candidates are C1 and C4. Table 4 represents this third, repeated single member election, which is won by C4 with the same six votes recounted which originally elected C2.

<b>Table 4. Exhaustive preferential counting for third vacancy</b>		
	Initial votes	Result for 3 seats
C1	5	
C2 elected	Re-allocated	
C3 elected	Re-allocated	
C4	6	C4 elected

Exhaustive preferential leads, in this example, to six votes (V6-V11) being repeatedly counted to elect winning candidates and to the other five votes, for C1, being repeatedly ignored. The fact that in Table 1 I have not had to fill in the preferences of the first five votes in order to conduct this exhaustive preferential counting exercise reinforces this point.

This system of vote counting is appallingly unfair. It can repeatedly reward a bare majority, while repeatedly locking out a very substantial minority.

In Alice Springs, exhaustive preferential locks out town camp interests and creates a council which is very 'middle of the road'. There is not enough spread of representation on which to build a healthy local democracy. If Geoff Shaw had been representing Aboriginal town camp interests in Council since 1996, Alice Springs would have had a more diverse local democracy and Council might have done better in managing some of the challenges and troubles of this frontier urban centre.

## ALTERNATIVES?

The most obvious alternative to this system is to divide local government jurisdictions into single member districts or wards. This will introduce some greater diversity to local government where there are geographic concentrations of voting groups which are large enough to dominate particular wards. But devising ward boundaries down to such a localised level is lots of work. So what are the alternatives to exhaustive preferential vote counting, if we don't want to divide all local government areas into lots of tiny single member wards?

One alternative is to go back to what other countries do, and just count the No. 1 votes as if they are ticks or crosses. Table 5 shows the count in our 11 vote example, for one, two and three vacancies. This is called first-past-the-post vote counting.

Table 5. First-past-the-post vote counting for one, two and three seats		
	Votes	Results
C1	5	Elected if 1 seat
C2	3	Elected if 2 seats
C3	2	Elected if 3 seats
C4	1	

Given that we do mark preferences in Australia, another alternative is to eliminate candidates with low votes and distribute their preferences down to there being one more candidate left in the field than councilor positions available. Table 6 shows how this would work for two vacancies in our 11 vote example.<sup>3</sup>

**Table 6. Limited preferential elimination vote counting for two seats**

	Initial Votes	Votes after 1st elimination	Result for 2 Seats
C1	5	5	C1 elected
C2	3	4	C2 elected
C3	2	2	
C4	1	eliminated	

Were there three seats to be filled in our 11 vote example, the result under this limited preferential elimination vote counting, as I have called it, would be the same as in Table 5, as there are only four candidates for three seats.

Table 5 raises a substantial criticism of first-past-the-post and limited preferential elimination vote counting. Is it fair that candidates get elected with quite different numbers of votes? C1 with five votes, C2 with three votes and C3 with two votes if there are three seats available?

This is where the mathematicians come in. They suggest setting a quota of votes which all candidates have to reach depending on the number of seats available. This quota changes depending on the number of seats available. If there are four seats available, a candidate will be elected if they can get more than one-fifth of the votes. The logic behind this is that only four candidates can get more than one-fifth of the votes. Even in a very close, even election, any fifth candidate will inevitably fall just short of one-fifth of the votes. The quota, 'one-fifth of the votes plus one', is the smallest number that four candidates can get, but a fifth cannot.

This slightly more sophisticated method of vote counting is what political scientists call single-transferable-vote-proportional-representation or STVPR. Table 7 sets out the appropriate quotas for different numbers of seats available in an undivided area.<sup>4</sup>

**Table 7. STVPR quotas for number of seats available in an undivided areas**

Seats	10	9	8	7	6	5	4	3	2	1
Quota	1/11+1	1/10+1	1/9+1	1/8+1	1/7+1	1/6+1	1/5+1	1/4+1	1/3+1	1/2+1

If there are 10 seats available in an undivided area, any candidate who can attain the quota of more than one-eleventh of the votes will get a seat. So, under this vote counting system in the 1996 Alice Springs Town Council election, Geoff Shaw would have been elected straight away on the basis of his No 1 votes alone.

If there are eight seats available in an undivided area, as in the Alice Springs Town Council at present, then any candidate who can attain the quota of more than one-ninth of the votes will get a seat. This would spread the representation among Alice's voting (and social) groups and lead to a much more diverse council than the current one in which, through repeated single member elections, all candidates have to attract over one-half the votes across the whole town.

Most Australian readers will be more familiar with State half-Senate elections in which there are six seats available and candidates have to attain the quota of more than one-seventh of the votes, or Territory Senate elections in which there are two seats available and candidates have to attain the quota of more than one-third of the votes. This logical mathematical relationship between quotas and numbers of seats available can be clearly seen in Table 7.

Table 7 also reveals, in its right hand column, that the rule of requiring a candidate to attain more than 50 per cent of votes where there is one seat available in an area is also part of the mathematics of STVPR. Preferential elimination vote counting down to a two-person race for single member electorates is part of the STVPR system, not something different from it.

This is why I argue that repeated, single member elections using majority vote counting to fill multiple seats in a district is a mathematical mistake, as well as repeated historical one. Using the quota for one seat available when there are in fact five is as inappropriate as using the quota for five seats available when there are in fact 10 seats. Vote counting systems have mathematical logics which need to be followed.

## **CONCLUSION: COMMON-SENSE REVIEWED**

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The exhaustive preferential vote counting system is an Australian common-sense invention gone wrong. It is a disastrous mistake which wrongly extends good practice from single member elections to multi-member elections. The Senate was very poorly served by this mistake in the years from 1919 to 1946. In more recent years Alice Springs Town Council and other local governments in the Northern Territory have been similarly poorly served.

The Northern Territory Government is currently reviewing its vote counting system for local government, in part because of this critique. Some involved in the review process are convinced of the fundamental nature of the critique, but others are not and are inclined to defend the existing system. Alice Springs Town Council is among the defenders, arguing that it is good that all councilors must attract a majority of votes across the whole town. In response to my representations they argued that there was 'no room for minorities' on their Council. This is a short-sighted view. Alice needs a more diverse local democracy than this mistaken electoral system delivers. The Northern Territory Government needs to intervene in the narrow local democracies it has mistakenly established based on the exhaustive preferential vote counting system. It needs to give them a vote counting system which shares representation among voting groups, rather than repeatedly concentrates it. Otherwise, there will be cause for another higher-level intervention in the Northern Territory as soon as someone in authority in the Commonwealth fully understands the bizarre mathematics of this mistaken vote counting system and its effects on representation.

## NOTES

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1. On reading this article in *The Public Sector Informant*, a representative of the Proportional Representation Society of Australia (Victoria-Tasmania) Inc pointed out to me that their preferred terminology for this system is 'multiple majority preferential vote counting' and that it is currently also still in use in seven local government councils in New South Wales. They also noted that the term 'exhaustive preferential' is used by some authorities to describe a system in which one person is elected through a series of repeated votes in which the candidate with the least number of votes is eliminated between each round of voting.
2. A similar phenomenon of large towns winning all seats and smaller town missing out in multi-member electorates was noted in Victorian local government when this system was used there from the mid 1990s to 2003 (see Sanders 2009: 21).
3. The representative of the Proportional Representation Society of Australia pointed out that this system was used in some local governments in South Australia until 1999 and was referred to as 'bottoms up' vote counting.
4. If the quota is not a whole number it can be, and often is, rounded down to the whole number below. Thus the quota effectively becomes  $\frac{1}{m+1}$  of the votes, where  $m$  is the number of positions available.

## REFERENCES

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- Reilly, B. and Maley, M. 2000. 'The Single Transferable Vote and the Alternative Vote Compared', in S Bowler and B Grofman (eds), *Elections in Australia, Ireland and Malta under the Single Transferable Vote: Reflections on an Embedded Institution*, The University of Michigan Press, Ann Arbor.
- Rothwell, N. 2011. 'Destroyed in Alice', *The Weekend Australian*, February 19-20.
- Sanders, W. 2009. *Fueling Large Group Dominance and Repeating Past Mistakes: A Critique of the Northern Territory Local Government Electoral System*, DKCRC Report 59, Desert Knowledge Cooperative Research Centre, Alice Springs.