

Time to Bring Effective Voting to Queensland Local Government Elections

Submission to the Law, Justice and Safety Committee
of the Queensland Parliament

by the

Proportional Representation Society of Australia

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The Proportional Representation Society of Australia and its constituent branches work to strengthen democracy in a voter-oriented non-partisan manner.

Our objective is to secure the adoption of the *quota-preferential* method of proportional representation for the election of representative bodies.

Quota-preferential counting to determine multiple vacancies is the best way for an electoral system to implement *effective voting* as an operating principle, in order to always produce representative outcomes: by design, high proportions of the votes cast are guaranteed to contribute directly to the election of candidates, and the breadth of significant opinion in a community is therefore certain to be found on council or in parliament.

Quota-preferential methods encourage extensive ongoing debate and local campaigning in public elections if voters wield real polling-day influence because no-one can be guaranteed a safe seat.

Our Branches have played an active part in analysis of results and advocacy of local government electoral reform in New South Wales, Victoria, South Australia and Western Australia at various times, particularly in relation to voting and counting arrangements and the information that electors receive about candidates. Some have been involved more broadly in additional electoral matters that impinge upon voters' influence.

In general, we support also better use of technology and greater flexibility or discretion being available in administrative processes as long as official impartiality is not compromised, nor voter influence weakened.

Prospective candidates should be encouraged to put themselves and their ideas forward for testing among voters. However, care must be taken to ensure that it is straightforward to cast a formal vote so that the electoral system cannot be brought into disrepute by any proliferation of candidates to the extent that what is asked of voters becomes a mocked imposition.

To retain public credibility and good-will, the election process and outcome must be seen as *fair* to voters, candidates and groups or parties where these form in pursuit of common goals. Electors must be able to discern that they have real influence if they are to become and remain engaged.

Our submission concentrates in some operational detail on the best voting method for Queensland local government elections, but we also address other matters through which voters can be empowered. In particular, we show that:

- single-vacancy electoral districts fail to accurately reflect voters' views;
- current first-past-the-post arrangements in undivided Queensland council areas are unsatisfactory;
- moving away from winner-take-all arrangements is better for democracy; and
- application of quota-preferential principles best reflects voters' wishes.

We look forward to the Queensland Parliament making the significant changes necessary to augment voter influence and fairness, and bring its electoral arrangements to the forefront of Australian practice.

Effective voting brings focus on policies and candidates and discourages scheming

In the pursuit of fairness, the best guiding principle is that of *maximising effective votes*, or equivalently, *minimising wasted votes*.

Electors regard their participation as worthwhile because it is clear that their views are being directly heeded in the election of councillors. This is also the best assurance that major decisions made by the next council will reflect majority thinking or understanding among voters.

Only through effective voting can we always be certain of having representative councils where widely-held views on different sides of issues are given direct voice by councillors, and there is an ongoing incentive for all of them to work for the best interests of their area.

Close correspondence between voters' expressed wishes and outcomes also renders pointless any thoughts of scheming for boundary or other electoral system changes that might bring advantage to one group or another, or the running of dummy candidates to tilt particular outcomes. Candidates, groups and in some instances where they operate, parties, soon come to understand that their best strategy is simply to obtain greater support through improved attractiveness of policies and quality of individuals nominated.

Single-vacancy districts fail to accurately reflect voters' views

The great distortions of campaigning activity that tend to occur in winner-take-all situations are unhealthy for local democracy as the composition of councils elected that way might be quite different from the relative incidence of elector views.

When there is a single vacancy, typically only around half the formal votes are effective. Individual candidates can be successful with much fewer than half of the

first preferences. At least in Queensland with optional preferential voting, success through extremely low levels of support in a crowded field is uncommon.

Groups with moderate but not majority levels of support may not achieve much or any representation and go into persistent negative mode in the hope of riding a wave of discontent into control next time around. However, in some instances dissatisfied electors may be reluctant to nominate against longstanding incumbents who are viewed as unbeatable.

The experience in Queensland's mayoral and single-vacancy councillor elections generally matches that in other states: a fair few uncontested elections, many instances when just two or three candidates nominate, and voters not having a choice of at least six aspirants very often.

The Gold Coast elections of 2008 provide a useful illustrative example: there were two divisions with just two candidates nominating, eight with three, three with four and just one with five. Had there instead been an undivided area, a similar number of candidates overall might have nominated, but individual voters would have had far greater choice than they actually experienced.

The Liberal Party attracted 28% first-preference support, varying from 17% to 35% in individual divisions. Eleven Liberal candidates were runners-up. None was elected – the closest fell around 4% short.

This will be the usual outcome in such circumstances under a winner-take-all system unless the remainder of the vote is heavily fragmented. In contrast, under any system of proportional representation with wards each returning a reasonable number of councillors or in an undivided area, three or four Liberals would most likely have been successful.

Although the ambit of this inquiry does not extend to future Brisbane City Council electoral arrangements, the results there in 2008 illustrate the usual winner's bonus when there are single vacancies and the instability that small shifts in support can cause.

The Liberal Party was elected in sixteen wards (61.5%) and Labor in ten (38.5%), with respectively 57.2% and 42.8% of the two-party-preferred vote: 6.3% of formal ballot papers became exhausted.

Had just 500 voters shifted towards the Liberals in each ward, they'd have secured 21 representatives (80.8%) for a little under 60% of the two-party-preferred vote and Labor just five. On the other hand, a shift of 500 voters in the opposite direction in each ward would have left the Liberals with 14 representatives (53.8%) for just under 55% of the two-party-preferred vote and Labor with 12.

In systems of proportional representation, large changes in representation do not occur on small changes in voter support unless qualifying thresholds for election are present.

Current first-past-the-post arrangements in undivided council areas are unsatisfactory

The winner-take-all dangers of first-past-the-post arrangements to determine multiple vacancies are well known from Australian experience in Senate elections between 1902 and 1917. It was usual for one party to win all three vacancies in any state and lop-sided outcomes in the entire chamber when public sentiment in the different states aligned meant that the Senate did not at that stage develop as an important contributor to our system of parliamentary democracy.

The situation was not improved by determining each vacancy sequentially through multiple-majority-preferential voting as then occurred until the change to quota-preferential proportional representation in the amending legislation of 1948.

There was a similar multiple-majority-preferential experience in New South Wales local government elections regularly until the Wran Government returned the default option to quota-preferential proportional representation when more than two vacancies are being filled at one time. Additionally, quite a few returning officers complained about the length of time it took to finalise outcomes if more than a handful of vacancies were being filled.

Because of the winner-take-all nature of first-past-the-post arrangements, where groups are active, their members quickly understand that all of them attract at least a floor level of support and that it is in their interests to nominate as many candidates as there are vacancies, or at least seek to enter into mutual-support arrangements of that type with others whose thinking and policies are similar.

If competition is reasonably fierce, there is also a temptation to organise or promote the candidacy of dummy candidates with views ostensibly similar to those of one's major protagonists, in order to dilute the likely levels of base support for the perceived real opposition. Such a proliferation of candidates will tend to lower the threshold for success, and, if carried out as planned, make it easier for manipulators to prosper and achieve extra representation as their side wouldn't expect to experience such artificially-induced splintering.

Where there are candidates of outstanding appeal, some supporters may regard their election as a certainty and wonder whether their own votes would better be given to others with similar views and approaches, but far less assured of success. If too many such electors independently adopt such a strategy, one or more of the perceived "sure things" may fail to be elected.

More often though, there is a significant difference between the greatest and fewest votes for elected candidates, which can lead to overall representation that markedly distorts levels of expressed voter support.

At times, especially when organised groups campaign energetically, there may also be bunching of numerous candidates' support levels around the lowest successful number of votes, underlining both the element of fortune involved and the instability of outcomes if voter views were to shift slightly.

Detailed analysis of Queensland local government elections in undivided areas is difficult in part because candidates are not grouped on the ballot-paper and therefore local campaign knowledge is required for any authoritative comprehensive work.

In addition, information is not readily available about how many voters contributed to the election of one or more candidates in particular elections. This must be at least as many as the votes received by the most popular candidate, but could be quite a deal more in most cases other than when essentially two groups are contesting in a polarised fashion.

A little bit of inductive algebra shows that if the successful candidates in an election to fill t vacancies achieve in descending order percentages n_1, n_2, n_3, \dots and n_t and if the percentages of voters contributing respectively to the election of $t, (t-1), (t-2)$ and 2 candidates are a_1, a_2, a_3, \dots and a_{t-1} , then the proportion of voters with at least some degree of direct satisfaction through effective voting can be expressed as $(n_1+n_2+n_3+\dots+n_t-(t-1)a_1-(t-2)a_2-\dots-a_{t-1})\%$.

Some other general observations can still be made about such elections. In addition, as Labor and Green candidates were officially nominated in the Townsville election of councillors in 2008, a closer study of that outcome is possible.

As illustrated below by 2008 outcomes in undivided areas, low proportions of effective votes become more likely as the number of candidates escalates relative to vacancies to be filled.

The following table sets out key summary data for elections where low proportions of effective voting occurred. The proportion of voters supporting one or more of the successful candidates may be somewhat higher than the percentage of effective votes depending on whether voting occurred in group patterns to a significant degree.

Only a re-examination of ballot-papers would establish whether whole blocs of votes tended to be effective (in which case the two measures will more or less coincide) or whether there was a reasonably even spread of numbers of voters from supporting just one elected candidate through to having all or nearly all of their mandatory number of votes effective.

Table: Summary information from 2008 council elections in undivided areas with low percentages of effective votes

Council	Vacancies	Candidates	% Votes Effective
Hope Valley	4	19	31.2
Gympie	8	42	33.5
Yarrabah	4	17	39.5
Mackay	10	37	40.4
Lockyer Valley	6	21	41.8
Cherbourg	4	12	44.8
Roma	8	24	46.3
Townsville	12	49	46.8
Dalby	8	23	47.6
Toowoomba	10	36	48.6

By way of very pronounced contrast, when there are four vacancies and the single transferable vote is used, at least 80% of votes will be effective: there are no qualitative differences as to degree of effectiveness except possibly when a voter contributes to a candidate's election and the ballot-paper is then transferred at fractional value to a candidate who is not successful.

Unless voters mark very few preferences and there is no adjustment to the quota as ballot-papers exhaust, the proportion of effective votes rises to a guaranteed minimum of nearly 86% when there are six vacancies, nearly 89% when there are eight, nearly 91% when there are ten, and somewhat more than 92% when there are twelve.

In Townsville, eight ALP candidates and two Greens nominated and disturbingly only just over 90.5% of participating electors voted (formally) for twelve candidates as required by the legislation.

The Labor candidates received between 25,409 (31.6%) and 34,544 votes (42.9%) and only one of them was elected. Seven candidates had support within 2,000 of the bottom level, reflecting a base level of support similar to that achieved by the party in the mayoral election.

Elected candidates had between 33,538 (41.7%) and 47,040 votes (58.4%), at the lower end of the spectrum in 2008 for percentage spread between the lowest and the highest successful in undivided areas.

Had 4,000 fewer electors chosen each elected non-Labor candidate and instead turned in a dispersed manner to one of those nominated by Labor, two more ALP candidates would have been successful. Two further Labor successes would have eventuated if an additional thousand voters then also made such a non-concentrated switch from elected non-Labor to Labor candidates.

The two Greens achieved respectively 14,336 (17.8%) and 17,095 votes (21.2%) and were both unsuccessful.

Under any system of equitable proportional representation. Labor would have won four or five of thirteen vacancies (preferable to twelve because, as set out below, a majority of votes then always translates into a majority of council places) as the party's base level of support was around one-third. The Greens, who achieved just 7% support in the separate mayoral poll, would probably have taken one vacancy but possibly two if they polled more strongly through the appeal of individual candidates when only a single first preference was available to voters.

Moving away from winner-take-all arrangements

Once an important decision is made about the desirability to abandon winner-take-all approaches on the basis of their unwarranted distortions of voters' wishes, as set out in the issues paper inviting submissions, there is a choice between

- quota-preferential systems with multiple vacancies, which are relatively common in Australia; and

- the party list systems and hybrids that developed in Europe and Scandinavia, where preferential voting has never been a feature of local experience.

Party list methods of the d'Hondt highest-average type (in which vacancies are sequentially filled by the party that has the highest ratio of votes to potential seats if it took the next place) should not be contemplated as an experimental novelty, because they are all vastly inferior, from both a voter's perspective and in relation to fairness to candidates, to the quota-preferential methods already long in use in Australia when multiple local government, state or federal vacancies are filled simultaneously.

At their worst, party list methods may even prevent independents from standing or promote very centralised control of groups or parties, often leading to splintering of parties and separate candidacy by those dissatisfied with particular decisions or policies.

They are inherently non-preferential as used overseas, potentially wasting very high proportions of votes through both chance allocation of the last places, and any other arbitrary factors, such as pre-set elimination thresholds, that are relatively common. Unless a preferential element is grafted on as has occurred in Australian settings, there need be no limit to the percentage of votes wasted and therefore the potential artificial boost in the numbers of seats allocated to the largest parties.

The proliferation of different sets of divisors for sequential seat allocation

- 1,2,3 (d'Hondt)
- 1,3,5 ... (Sainte-Laguë)
- 1.4, 3, 5 (modified Sainte-Laguë)

and rules for qualifying for seats through the meeting of thresholds or some other measure of support:

- either an arbitrary percentage usually in the 3-5% range;
- or related to the number of vacancies being filled (as in the South Australian and Australian Capital Territory examples below based differently on the Droop quota, or using the Hare or Imperiali quotas);
- or allowing parties to declare alliances for the purpose of maximising their seat allocation

is testament to how historical factors in particular overseas countries have thrown up problems or anomalies that have been addressed as local conditions dictated or allowed.

There is simply no agreement about which principles should prevail to achieve a satisfactory highest-average outcome in particular circumstances whereas the logic of maximising vote effectiveness pervades quota-preferential systems.

Australia's limited and quickly-abandoned exposure to list systems in South Australian Legislative Council and Australian Capital Territory Legislative Assembly elections provides very powerful local evidence that their use should not be contemplated and quota-preferential principles should be applied instead.

In particular, there is no need for artificial exclusion thresholds of the type:

- used in South Australia for Legislative Council elections during the 1970s and which showed how easy it is for such arrangements to produce outcomes not in keeping with voters' expressed wishes; or
- which operated under the disastrous modified d'Hondt scheme inflicted on the Australian Capital Territory in its first two self-government Legislative Assembly elections of 1989 and 1992, and which highlighted the instability that can arise when groups or parties receive support levels close to the threshold.

In the case of South Australia, the exclusion threshold was set at half the Droop quota guaranteeing election for one of eleven places (the first whole number greater than one-twelfth of the votes, just over 8.3%). Parties or independents obtaining less than 4.17% of the formal votes were excluded and a *single transfer* made to the eligible party or independent left that had each of those voters' highest preference.

Seats were then allocated for each quota obtained and finally in order of descent of the fractional parts of a quota until all vacancies were filled.

At the 1975 election, the assessed support levels for qualifying parties, after transfers from excluded candidates, were Labor 48.6%, Liberal 30.9% and Liberal Movement 20.5%: they were therefore allocated respectively six, three and two seats. Not only did Labor win a majority of seats despite having a minority of the vote, but also there was a major discrepancy in the ratios of votes to seats for the three parties.

In 1979, after the distribution of votes from excluded groups, the Liberal Party had 52.0% support, Labor 40.5% and the Australian Democrats 7.4% and those parties obtained respectively six, four and one seats. On this occasion it was Labor with the noticeably unfavourable votes-to-seats ratio, having just failed to match the fractional part of a quota received by the Australian Democrats. This outcome highlighted the inbuilt advantage for qualifying parties with less than a quota of votes and also drew attention to the importance of the exact nature of any arbitrary threshold lower than the quota for seat distribution.

By 1982, this party list system had been replaced by the single transferable vote and the election each time of eleven MLCs that has remained in place ever since without controversy about its inherent fairness. Had there been no transfer from parties and candidates with support below the exclusion threshold, on both occasions quite large numbers of votes would simply have been wasted and much greater distortions of the people's will could have occurred.

Under the modified d'Hondt scheme imposed upon the Australian Capital Territory for the transfer of self-government responsibilities in 1989, seventeen members were elected at large, and the level of support guaranteeing election (again the Droop quota, the first integer greater than one-eighteenth of the formal votes, just under 5.6%) was also the qualifying threshold.

On the first occasion, the Fair Elections Coalition fell just 117 votes short of the threshold while others excluded received first-preference support levels of 4.8%,

4.1% and 4.0%. Their votes and those for other excluded candidates were transferred once, to the highest-ranked successful party on each ballot paper, to establish seat allocation to parties and groups. This helped the Residents Rally to get four members elected despite starting with just 9.6% of first preferences, less than two full quotas, whereas had support for the Fair Elections Coalition instead risen slightly above the threshold, both it and the Residents Rally would each have secured two seats.

Despite intense public dissatisfaction after the prolonged count to determine which candidates within groups or parties were elected, and the antics of some of the elected parties that followed, the same system was imposed again by the federal parliament in 1992, at the same time as there was a plebiscite about the electoral system to be used in future: the Hare-Clark system was adopted by a resounding two-to-one majority and has operated successfully since.

On this occasion, the Michael Moore Independent Group obtained 73 votes more than the quota and picked up two seats on this account, whereas two parties with 4.6% and 4.5% support respectively were excluded at the outset.

The two ACT outcomes again highlighted the arbitrariness of the qualifying threshold imposed and illustrated how a handful of votes determining whether a party, group or candidate falls just above or just below it can affect the allocation of several seats. Had there not been any preferential element and transfer of votes, parties with 35-40% support (and even less on the first occasion in 1989 with 117 candidates) could have entertained hopes of securing a majority of seats on that basis alone.

Such instability is not present when the single transferable vote is used as at most one seat will depend on whether a particular party, group or independent has an important handful of votes or not.

Quota-preferential principles

Australians are used to quota-preferential methods in Senate elections, those for the Assemblies in Tasmania and the Australian Capital Territory, and those for the Legislative Councils in New South Wales, South Australia, Western Australia and Victoria. There has also been a lengthy usage of them in New South Wales and Tasmanian local government elections, and more recent introduction and extensive use in South Australia and Victoria (and successful brief use in Western Australia before an unfortunate reversion to first-past-the-post methods that may help incumbents, but will again fail to give voters fair representation).

Outcomes closely follow voter support levels because, as a fundamental principle, wastage of votes is kept to a minimum through transfers of surpluses of elected candidates, and votes of excluded candidates.

First, as in most preferential elections, it is important to realize that each elector has just one vote. The marking of preferences on a ballot-paper indicates the order in which a voter wants to assist individual candidates: the marking of further preferences can never be to the disadvantage of candidates supported most strongly.

The aim is to have as many people as possible definitely voting effectively, that is directly helping to elect one or more candidates to fill available vacancies.

The (Droop) quota is the lowest number of votes at which candidates are mathematically certain of being elected. Applying the pigeon-hole principle, this quota is usually calculated by dividing the total formal votes by one more than the number of vacancies to be filled, and increasing the answer to the next highest whole number. That way the number of candidates to be elected can achieve the quota but not a further one, whereas too many candidates could be elected in some circumstances if a lower quota were used.

When there are small numbers of voters, it often makes sense to value each vote at 100 or 1,000 and thereby further minimise wastage by in effect taking calculations to two or three decimal places.

Once a candidate reaches the quota, there is no need for more votes to be piled up. In fact, to minimise wastage of votes, any surplus beyond the quota is distributed to the continuing candidates (those neither yet elected nor excluded) in accordance with the wishes of those whose whole vote hasn't been used up in the process.

This transfer, originally only of the last parcel of votes received by the elected candidate as a matter of practicality, will usually be at a fractional value. Other more sophisticated transfers of all votes contributing to a quota are also possible, but care should be taken not to introduce anomalies through the disregard of the value at which the elected candidate received each ballot-paper: the soundest procedures all involve the same proportion of each ballot-paper's remaining value being taken to contribute to the candidate's election and the remainder transferred to the highest-ranked continuing candidate.

If there isn't a surplus to distribute, the candidate with the fewest votes is excluded. All votes credited to that candidate are transferred to the next available continuing candidates, as indicated on each of the ballot-papers involved. Because these votes have not helped the excluded candidate, they move on at the same value as that at which they were received.

Finally, the exclusion of a candidate may mean that there are exactly as many continuing candidates as there are vacancies still to be filled. In that case, all these continuing candidates are declared elected without the need for further transfers, though these will be undertaken if countback is used to determine any future casual vacancies.

The best quota-preferential arrangements: Droop quota and odd numbers of vacancies

With the single transferable vote, the level of maximum potential vote wastage falls away very quickly from:

- nearly one-half with a single vacancy;
- just under one-third if there are two;
- almost one-quarter if there are three;

- slightly under one-fifth if there are four; through to
- just under one-tenth if there are nine vacancies.

Having fallen from potentially 50% vote wastage to slightly below 10% among single-digit numbers of vacancies, thereafter increases in vote effectiveness are much more gradual. For instance if there are:

- 15 vacancies, at most 6.25% of votes will be wasted;
- 19 vacancies, no more than 5% of votes will be ineffective; or
- 29 vacancies, at the worst 3.3% of votes will be wasted.

Bearing in mind that the Droop quota was derived using the pigeon-hole principle, whenever there is an odd number of vacancies to be filled, because the maximum number of wasted votes is just less than the quota, a majority of votes will always translate into a majority of the vacancies to be filled.

On the other hand, if there are two vacancies, just one-third support will guarantee half the available representation. If there are four vacancies, 40% support will guarantee half the representation, and 60% is required to obtain three places: in some circumstances starting with first preferences in the low 30s might turn out to be enough to get two candidates elected.

If, as in Senate elections since 1984, there are six vacancies, 42.6% support will guarantee half the representation and 57.1% is required to achieve a majority, something achieved only once in nearly thirty years, in Queensland in 2004.

By the time one is dealing with 12 vacancies as at a double dissolution election, the quota is just under 7.7% and 46.2% is enough for half the representation, whereas a little over 53.8% is required to guarantee a majority of places.

As the number of vacancies increases further, the quota continues to decrease and the targets for half the representation and a majority of seats are respectively half a quota either side of 50%. While no longer nearly as badly distorting as for small even numbers, this is still always inferior to the majority-support-becomes-majority-representation situation that would apply for the odd number immediately above or below the even number in question.

As our preference is for mayors to be elected from among the elected councillors to minimise any prospect of fractious relationships or dealings, the Proportional Representation Society of Australia recommends that an odd number of council vacancies be filled as much as possible.

In most cases, an undivided area will require candidates and councillors to show a lively interest in what is best for the entire region or area, rather than be preoccupied with scrapping for particular very localised improvements or facilities irrespective of the relative merits of various proposals. Voters are given a much wider choice of candidates and can individually decide whether it is more important to support someone located nearby or others, perhaps at a distance, who appear to espouse the most attractive policies.

As both more votes will be effective and individual voters will have greater choice in an undivided area, the Proportional Representation Society of Australia would endorse either:

- legislation simply mandating such arrangements; or
- those arrangements serving as a legislated default from which communities could depart with proposals for division into wards only in accordance with guidelines to protect the integrity of voter influence, and only after obtaining approval at a poll of electors.

Election of all members of council at the same time once every four years means that more votes will be effective than if half the council faced the voters every two years and is therefore by far our preferred arrangement, in line with what currently happens in Queensland.

As the preservation of the majority principle in every election is fundamental to democratic practice, we believe that any divided area should return an odd number of councillors, preferably five or more to avoid excessive proportions of wasted votes, but sometimes three (with possibly as much as 25% wastage) when practical considerations so dictate.

Universal application of the majority principle in every election would thwart those whose win-at-all-costs mentality might otherwise lead them to start thinking in terms of trying to arrange boundaries with odd numbers returned in areas where their support is relatively strong, and with even numbers of vacancies in their pockets of weakest support.

Ideally, every ward should return the same number of councillors so that levels of wasted votes are not higher in one or other part of a council area than elsewhere. If there are different levels of representation in various wards, smaller shifts in voter support more quickly lead to changes in representation in the wards or divisions where the greatest numbers of councillors are being elected and the quotas involved constitute the lowest proportions of recorded formal votes.

Should electors have indicated through appropriate processes that they want several divisions, it is necessary to have in place a maximum level of permitted deviation from the overall council average of the ratio of electors to councillors in any of the wards or divisions.

That maximum level is a matter of practical judgement and it would not be unreasonable to either maintain the current provisions or tie it to percentage variation permitted for Legislative Assembly elections. If quota-preferential methods are in use and single-member vacancies are simply not permitted, the guaranteed fairness of outcomes when there are always odd numbers of vacancies will guard against thoughts of groups trying to create significant advantage from manipulating boundaries and ward representation levels.

It is important to recognise that the Droop quota is superior to the Hare quota that is sometimes suggested: the latter is established by dividing the number of formal votes by the number of vacancies and rounding up to the next integer. The problem with the

Hare quota is that it asks too much of elected candidates and therefore makes possible iniquitous outcomes such as majorities of votes turning into minorities of councillors elected, as illustrated below by a simple example.

Suppose that there are three vacancies and that the two candidates in Team A get respectively 40% and 14% and that the two in Team B get respectively 24% and 22% of first preferences.

With the Droop quota at just over 25%, there would be a surplus of 15% of first preferences from the most popular candidate available for transfer (each paper would have remaining value $\frac{3}{8}$ for others), going predominantly to the other member of Team A and helping elect that person. Consequently Team A would fill two of the three vacancies.

On the other hand, with the Hare quota at around 33.3%, the transfer value of each ballot-paper for the candidate in Team A elected on first preferences would be $\frac{1}{6}$ and, even if all second preferences remained within Team A, that would not be enough for the running-mate to overtake either candidate in Team B. Consequently the minority of votes for Team B, set out fairly evenly for its two candidates, would translate into a majority of seats.

This flaw, arising from setting the quota for election too high and thereby wasting some votes that elected candidates do not strictly need, explains why there is very little use of the Hare quota, and certainly not in public elections in Australia.

Maximising voter involvement and influence

In the view of the Proportional Representation Society of Australia, the best quota-preferential systems in operation in Australia are the Hare-Clark systems of proportional representation in Tasmania for House of Assembly and local government elections, and in the Australian Capital Territory for Legislative Assembly elections. For both Assembly elections, the single-transferable vote is used in multi-member electorates each returning an odd number of MPs, five or seven, and 85 per cent or more of votes are effective.

The Robson Rotation and countback features used for all of those elections leave voters with an additional attractive choice of candidates and considerable influence over the composition of their next Assembly or council. There is extensive serious ongoing campaigning by incumbents and aspirants everywhere as no areas are taken for granted or deemed too difficult to potentially reward effort.

Quota-preferential methods are also used for most local government elections in New South Wales, Victoria and South Australia, as well as for their Legislative Councils and that of Western Australia, and for the Senate federally.

Apart from the definition of the quota, there is little uniformity in specific arrangements associated with the quota-preferential counting of votes. Small improvements sometimes occur unilaterally, for instance in Western Australia's fairly recent move to using the Weighted Inclusive Gregory Method for defining further transfer values in the most general case dealing with ballot-papers bearing several

distinct transfer values when received by an elected candidate. Consideration of the principles involved will always provide sound guidance about whether particular suggestions should be embraced.

What is required for a formal vote?

Before looking at the more technical aspects of counting, it is important to first establish what should constitute a formal vote.

There is room for debate about whether more than one preference should be *required* rather than just *encouraged*, but it is clear that a high threshold for acceptance of ballot papers is an unwarranted imposition on voters: for instance, the example under the current first-past-the-post arrangements of nearly 10% of ballot-papers being declared informal in Townsville in 2008 is clearly unacceptable, and on the other hand optional preferential voting already applies in Queensland in relation to single vacancies.

Some voters and commentators suggest that there should be at least as many preferences as there are vacancies in quota-preferential elections as that way there is a guarantee that no candidate will be elected without receiving any votes. That unlikely prospect can be disregarded as a possibility in public elections, and instead a judgement made about the trade-off that exists between maximised levels of formal voting if requirements are not onerous, and the prospect of large numbers of votes occasionally being exhausted towards the end of the scrutiny because on many ballot-papers there will be no further preferences for continuing candidates.

The Proportional Representation Society of Australia's view is that it is preferable to have more formal votes, and aim to get voters to understand that the marking of further preferences can never harm the prospects of those whom they support most strongly, rather than unnecessarily deny electors a vote if they fail to mark some arbitrary number of preferences.

It is for instance possible to introduce the concept of a reducing quota as ballot-papers become exhausted, and to place as much as possible of the remaining value of non-transferable papers within the quota of the candidate they just helped to elect, by carefully defining the transfer value when dealing with that candidate's surplus. Where not all preferences need be expressed, to minimise vote wastage, the transfer value can be defined as either the surplus divided by the number of papers for continuing candidates (as happens in New South Wales and the Australian Capital Territory) or by the vote weight for continuing candidates, with the proviso that it remain at the value received by the elected candidate if this results in a potential increase: this would have the effect of including the remaining value of non-transferable ballot-papers within the quota of elected candidates to the maximum extent possible, rather than automatically attributing a level of exhaustion to them as happens in Senate elections.

The ACT approach of asking on the ballot-paper for at least as many preferences to be marked as there are vacancies, but accepting fewer, would be perfectly satisfactory: a similar approach is taken with those voting below-the-line in New South Wales local government quota-preferential elections needing only mark at least as many

preferences as half the number of vacancies (and repetitions or omissions after the first preference initially being disregarded). The South Australian local government, Victorian Legislative Council and Tasmanian criteria of requiring at least as many preferences as there are vacancies and not allowing early mistakes would tend to increase levels of informal voting above those that would apply under a more permissive approach, but still constitute a major advance over current onerous arrangements for the Senate or the Legislative Councils of South Australia and Western Australia.

In a functioning democracy with proper educational materials and promotional effort in place, it can be left to informed electors to assess the risk of wasting their vote if it is not certain their first-preference candidate (or ones shortly thereafter) will either be elected or become the last to be excluded. The risks associated with this approach are far more palatable than those applying when electors may be daunted by the nomination of large numbers of candidates whom they are happy to disregard for one reason or another: in particular, if formality provisions are moderate, there is no incentive for anyone to try to enlist perhaps numerous nuisance or dummy candidates to bring the process of voting into disrepute or to create confusion about stances on particular issues.

Should columns be introduced on the ballot-paper?

At the moment, there is simply a draw for places within a single column on the ballot-paper in Queensland local government elections.

Unusually, there is no provision for candidates wishing to nominate in groups to ask for a separate column on the ballot-paper as has been available in Senate elections since passage of amending legislation in 1940.

While this makes it a little more difficult for groups to stage-manage the order in which their candidates are elected, it also makes it harder for voters to establish the extent of various groups and cast a vote according to particular policies that they advocate.

If columns are allowed on the ballot-paper in future, ideally Robson Rotation would be introduced to share out access to the best places in group columns and that way ensure that councillors are elected through conscious voter choices rather than an ability to achieve a rather high place within a particular column.

By spreading any reflex down-the-column vote evenly among its candidates, Robson Rotation raises first-preference support levels for all individuals within particular columns, and makes it harder for those with strong internal influence to get themselves elected early in a scrutiny at the possible cost of later unnecessary exclusion for some of their running-mates. No easy ways are left open for candidates elsewhere on the ballot-paper with limited first-preference support to cobble together a fortuitous quota, as has happened for instance in some Senate and Legislative Council elections.

Should grouping in columns be allowed, the Proportional Representation Society of Australia would strongly caution against any thought being given to splitting the

ballot-paper into above-the-line and below-the-line components and allowing group voting tickets to be registered before voting begins, or letting voters rank the order in which groups rather than candidates should get access to their vote. Such concentration of influence within fewer people would be inimical to the historical spirit of local government in Queensland as well as opening up virtual lotteries for the last few vacancies to be filled.

A far more preferable approach would be to simply make it straightforward to cast a formal vote alongside the names of individual candidates.

Why have by-election polls at all?

The opportunity should be taken to fill casual vacancies by countback if possible rather than resort to incongruous by-elections as a default except perhaps in the last months of a council term.

Under quota-preferential arrangements, individuals are elected once they achieve a quota of support rather than through some form of majority approval, and therefore the replacement is best determined by a re-examination of the votes that elected the vacating councillor (or ultimate predecessor at the previous election) rather than through some form of majority approval. Otherwise, instead of all electors having a single transferable vote, some may end up with more than one effective vote for part of their council's term.

The Proportional Representation Society of Australia believes that countback, along the lines of the Hare-Clark system in Tasmania and the Australian Capital Territory rather than the complete recount set out in Western Australian legislation with special provisions to ensure that all continuing incumbents are unaffected, should take the place of by-election polls in the overall scheme of things. It would have universal applicability, tend to result in additional polling-day choice of candidates for electors, and most likely maintain the stability of representation throughout the term of any council.

First, the adoption of countback would mean that every councillor had been before the people at the previous election, when the rest of council had made their case to voters in relation to the next four years. Those who had lost their representative would determine the replacement through the re-examination of the quota for the vacating councillor (or ultimate predecessor at the previous general election). No-one would have more than one effective vote.

Groups hoping for or anticipating some success would be inclined to endorse more candidates than they might with by-election polls in place to fill casual vacancies, to ensure that one or more was always available to fill any casual vacancy arising in the next four years. If there were doubts on this score and council polarised to a degree, incumbents would perhaps be less likely to resign.

Replacements would always occur within a predetermined time period through indication by a specified date of consents to serve by unsuccessful candidates at the previous election, and subsequent administrative action to then quickly re-examine the relevant quota of votes, in practice perhaps by running a computer program. Only

in the unlikely event of a complete absence of consenting defeated candidates would electors need to mark ballot-papers afresh.

Examining the quota of the vacating candidate or ultimate predecessor would emphasise the point that each election produces an outcome over the full term of council. There is far less likelihood of a change in the balance of a council through this approach than through a full recount where changes in the order of exclusion can sometimes trigger altered preference flows and lead to unexpected outcomes.

Questions surrounding transfer values

There are numerous approaches to defining transfer values in Australasia even after a decision has been made about whether to minimise exhaustion arising from ballot-papers for elected candidates that are non-transferable.

Where candidates are not elected on first preferences, in Tasmania and the Australian Capital Territory, only the last parcel taking a candidate beyond the quota is considered for further transfer: all votes received earlier are deemed to have had their remaining value used up in the candidate's election. In accordance with Senate procedures before 1984 and some overseas experience, in New South Wales local government and Legislative Council elections there is sampling from the parcel taking a candidate beyond the quota in accordance with the incidence of the next preference to determine which ballot-papers are deemed to constitute the surplus.

Elections for the Senate and Legislative Councils of South Australia and Victoria result in all papers contributing to a quota being examined for further preferences and moving on at the same value regardless of what they were worth when received by the candidate: this unweighted approach can remarkably result in a transfer value increasing straight after the ballot-paper has just helped elect a candidate

Following a review of the literature and of what can and ought to happen by Dr Narelle Miragliotta and publication of her paper *Determining The Result: Transferring Surplus Votes in the Western Australian Legislative Council*, the Weighted Inclusive Gregory Method was introduced for both local government and Legislative Council elections in Western Australia to eliminate anomalies of the increasing-transfer-value type. It operates on the basis of stipulating that the same proportion of each ballot-paper's transfer value when received contributes to the candidate's election and the remainder is available for transfer to continuing candidates.

Further sophistication is possible through the Meek method used in some New Zealand local government and hospital board elections, which reduces the quota as votes exhaust and allows ballot-papers to be transferred to candidates already elected, resulting in immediate adjustment downwards of previous transfer values because of the composition of the new surplus. This can only be done in practice through computer entry and counting.

The Proportional Representation Society of Australia supports including all ballot-papers received when transferring surpluses of elected candidates, but rejects as irredeemable the flawed unweighted approach currently adopted in Senate scrutinies.

It is essential to avoid known distorting anomalies by recognising differences in how much particular groups of ballot-papers have contributed to any candidate's election and treating all voters equitably when assessing their contribution to a candidate's election.

All members of a council should be elected on the same basis

On a council a mayor has exactly the same voting power as each other councillor, so it is important that the democratic basis of support for each councillor, including the mayor, be likewise exactly the same. The key principle of the council as a body being more important than its chair should not be undermined.

Federal and state political leaders are elected by their fellow MPs, and are not popularly elected as such, and it is difficult to see why mayors should be an exception to that practice, when their fellow councillors see much more of them, much more closely than the electorate at large.

There does not seem to be any consistent principle in electing mayors by popular election separately from councillors and trusting that those arrangements will work in practice: it seems to be an unnecessary reduction in the power and responsibility of councils that can sometimes place at risk their ability to conduct business according to the highest standards that voters would expect, as well as imposing further constraints if the majority principle is to be applied through the election always, in both wards and undivided areas, of an odd number of councillors.

Should separate popular mayoral elections continue to be held anywhere in Queensland in spite of the election of the mayor by councillors being a superior arrangement, there is no sound reason why potential candidates should be placed in a position where they might be compelled to make the invidious choice between standing for the position of mayor or standing for that of a councillor.

Tasmania, where local government elections occur for, as nearly as practicable, half the seats on each council every two years, requires a mayor to either be a continuing councillor or to have been successful in the concurrent council election. A mayor there does not become a councillor by virtue of being elected mayor, but can only be mayor if he or she holds office as a councillor.

In the event that a mayoral candidate does not establish that eligibility, ballot-papers in the mayoral election are counted with any preferences for him or her on ballot-papers being disregarded. In particular, where first preferences have been expressed for ineligible candidates, those ballot-papers are initially set out for the eligible candidate with highest preference, if one exists.

Because election as a councillor requires a much smaller percentage of the municipal-wide vote than does election as mayor, it is extremely unlikely in practice that a candidate with enough support to be elected mayor would not also be elected as a councillor, and such an outcome does not appear to have occurred in Tasmania.

NSW, which allows popular election of mayors and permits dual candidacy in such instances, has an inferior approach that inequitably creates two classes of councillor:

the mayor, who also becomes a councillor, does so on the basis of a majority vote of the whole municipality that is determined first, while the remainder of the councillors are usually chosen through a quota-preferential scrutiny that follows. Any preferences in the election for councillors that are marked for an elected mayor who is a dual candidate are simply ignored.

If separate mayoral elections are held, forcing candidates to choose whether to nominate for mayor or seek election as a councillor unnecessarily would deprive voters of the full level of choice that they should have available.

Principles to apply in relation to some other issues

Some of our members would emphasise the preferred route of giving electors an electoral system in which they can have confidence to increase the prospects of achieving their engagement and willing participation as voters, instead of achieving such goals by menacing them with the prospect of a fine for not voting. Nevertheless, the Proportional Representation Society of Australia would not oppose continuation of the current compulsory voting provisions in Queensland.

Among undivided councils, in Queensland attendance voting was still slightly in the majority (counting councils rather than voters) in 2008, whereas only eight of 79 areas in Victoria have attendance voting and few in Western Australia, and all elections in South Australia and Tasmania are postal.

The Society is comfortable with the conduct of postal elections by a central body such as the Electoral Commission that is properly resourced and experienced in such matters. This occurs in South Australia, Tasmania, Western Australia and Victoria.

Such arrangements give voters more time to think about issues and candidates, as typically each mailout of ballot-papers will also contain statements from individual candidates that conform to legislative guidelines about length and standard of factual accuracy: they are also by far the cheaper option in many cases, and avoid scrambling locally by presiding officials who are not necessarily completely au fait with all the requirements of electoral legislation.

The Proportional Representation Society of Australia would also be comfortable with individual councils or ratepayer polls making decisions in favour of attendance voting, though in such cases it would also have to be clear who was going to be responsible for the recruitment of the necessary election-day personnel. In New South Wales, where attendance voting is the norm, the Electoral Commission has responsibility for all council elections.

If attendance voting does take place somewhere, the preferred approach would be to have as many of those electors who will be travelling on polling day made aware of opportunities to vote beforehand, and to have absent voting available within the council area in the case of division into wards.

Voter knowledge of the available options would be greatly facilitated through an official mailout to all electors that included helpful information about electoral arrangements as well as candidate statements, as occurs for postal ballots in South

Australia, Tasmania, Victoria and Western Australia. Candidate statements should conform to guidelines about length, layout and factual accuracy and be lodged at the time of nomination, precluding how-to-vote recommendations that are often associated with tactical nomination of dummy candidates and other unscrupulous attempts to manipulate preference flows.

As councillors should be accessible to electors, insisting that their principal place of residence be within the council area is an appropriate prerequisite for nomination, as in state and federal elections.

There does not appear to be any reason for excluding non-resident owners and lessees from enrolling and voting if they are making a significant bona fide contribution to the finances of a council, particularly as electronic forms of enrolment and transfer of particulars of changes in ownership become easier to implement.

Legislation in the various states should be examined to see what are the best safeguards in Queensland conditions against possible abuse through inappropriate multiple nomination of lessees of the same property, or structuring ownership arrangements to take advantage of possible loopholes. As the level of contribution to council's finances does not confer additional rights to influence decisions, no-one should have more than one vote in the council area even if potentially otherwise qualified to enrol in more than one ward or division.

Our overall standard test to be applied when appraising potential options is always whether or not voter influence will be enhanced equitably and to what degree, and whether proposals are clearly fair to all candidates.