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**ANALYSIS OF INFORMALITY IN WERRIWA DURING  
THE MARCH 2005 BY-ELECTION**

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Author Gina Dario & Rod Medew

**Enquiries**

Information on Research publications are available on the AEC website: [www.aec.gov.au](http://www.aec.gov.au).

Other enquiries can be made by e-mail to the AEC: [info@aec.gov.au](mailto:info@aec.gov.au) Phone (02) 6271 4411

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### **Werrriwa By-Election Timetable**

Issue of Writ	Monday 14 February 2005
Close of Rolls	Monday 21 February 2005
Close of Nominations	Thursday 24 February 2005
Polling Day	Saturday 19 March 2005

## Introduction and Methodology

On Saturday 19 March 2005, electors in Werriwa, New South Wales cast their ballots in a federal by-election; 16 candidates nominated. Overall informality was 13.15 percent, an increase from 7.98 percent at the 2004 Federal election.

Every election has some degree of informal votes cast. The AEC has published several research papers on informality. *The Informal Vote Survey – House of Representatives 2001 Election*<sup>1</sup> provided an analysis of informality in Australia, reviewing the sociological factors that are high predictors of informality. In 2005, the AEC also published a paper: *Analysis of Informal Voting During the House of Representatives 2004 Election* that examined possible factors that may have contributed to the *increase* in informality levels between 2001 and 2004.<sup>2</sup> More on the history and background on formal voting requirements and informality can also be found in the Electoral Backgrounder Number 18 on *Informal Voting* published by the AEC.<sup>3</sup>

There is a mandatory preferential voting system in the federal election for the House of Representatives, by which a ballot will be considered *informal* if:

- All squares are not completed with a sequential number of preferences,
- An insufficient or illegible number of preferences is expressed,
- Ticks, crosses, or some other non-numerical symbols are used instead of numbers,
- Ballots are blank, or have marks that may identify the voter, or are deliberately informal with marks, slogans, etc.
- The initials of the presiding officer do not authenticate ballots.

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<sup>1</sup> Medew, R. 2003. “Informal Vote Survey – House of Representatives 2001 Election”, Canberra: Australian Electoral Commission.

<sup>2</sup> Dario, G. 2005. “ Analysis of Informal Voting During the House of Representatives 2004 Election”, Canberra: Australian Electoral Commission.

<sup>3</sup> Electoral Backgrounder Number 18, *Informal Voting*, Australian Electoral Commission, August 2004. ISSN No 1440-8007. [http://www.aec.gov.au/\\_content/how/backgrounders/18/EB\\_18\\_Informal\\_Voting.pdf](http://www.aec.gov.au/_content/how/backgrounders/18/EB_18_Informal_Voting.pdf)

These ballots do not count towards any candidate, and are counted separately. For analytical purposes, the AEC sorts and categorises informal ballot papers into several categories for analysis.

Since federation there have been 141 by-elections. It is generally accepted that by-elections have unusual outcomes. Newman and Bennett claim that by-elections are held in such different and unusual circumstances that none can be regarded as typical.<sup>4</sup> One common outcome of by-elections is a low voter turnout compared to general elections. Since 1924 the average by-election turnout has been 87.7% compared to 94.5%. Another phenomena in by-elections are often an increase in informality rates. While some of the by-election informality rates do not appear to be abnormally high, it is important to observe the rate relative to the base rate (the federal election).

The following table identifies the last 5 by-elections and the informality rate.

**Table 1 By –Election Informality Rates**

By Election	Date	Federal Election	Fed Election Informality%	By-Election Informality%	Percentage Point Change
Holt	6 Nov 1999	3 Oct 1998	4.5	7.2	2.7
Isaacs	12 Aug 2000	3 Oct 1998	3.6	8.2	4.6
Ryan	17 Mar 2001	3 Oct 1998	2.3	3	0.7
Aston	14 Jul 2001	3 Oct 1998	2.8	5.8	3.0
Cunningham	19 Oct 2002	10 Nov 2001	4.8	7.7	2.9
Werriwa	19 Mar 2005	9 Oct 2004	8.0	13.1	5.1

This paper seeks to analyse the informal vote in Werriwa, and identify factors that may have influenced or may explain informality levels during the March 2005 by-election.

### **Analysis of Werriwa**

The AEC maintains ballot papers from each election by Polling Place. Informal ballots from the 2005 Werriwa by-election were sorted by informality and categorised by the same informality types used in the analysis of the 2004 Election.

At the 2004 federal election, the informal vote in Werriwa was 7.98 percent, with seven candidates listed on the ballot. The national informality level for 2004 was 5.18 percent. In an attempt to limit the level of informality at the by-election, (especially given an exceptionally high number of candidates - 16), the Australian Electoral Commission conducted a series of public information campaigns to remind electors that they must number all squares and not use ticks and crosses for their ballots to be counted as valid. Statistics<sup>5</sup> show that many of the electors living in the division of Werriwa are from culturally and linguistically diverse backgrounds. The 2003 analysis on Informality revealed a correlation between informality levels and electors from Non-English Speaking Backgrounds (NESB).

<sup>4</sup> see 'House of Representatives by-elections 1901-2005' Research Brief, Parliamentary Library.

<sup>5</sup> This data has been extracted from the Australian Bureau of Statistics CDATE2001 database.

**Table 2: Breakdown of languages spoken in Werriwa as a percentage of the total population**

<b>Language</b>	<b>Percent of population in Werriwa</b>	<b>National percentage</b>
English	58.32 %	79.36 %
Arabic	4.26 %	1.11 %
Australian indigineous languages	0.00 %	0.07 %
Cantonese	1.32 %	1.19 %
Mandarin	0.75 %	0.73 %
Other – Chinese	0.36 %	0.20 %
Croatian	0.91 %	0.37 %
French	0.47 %	0.21 %
German	0.28 %	0.40 %
Greek	1.17 %	1.40 %
Hindi	3.21 %	0.25 %
Hungarian	0.14 %	0.13 %
Indonesian	0.22 %	0.20 %
Italian	3.07 %	1.87 %
Japanese	0.02 %	0.15 %
Khmer	0.56 %	0.12 %
Korean	0.06 %	0.21 %
Macedonian	0.80 %	0.38 %
Maltese	0.43 %	0.22 %
Netherlandic	0.09 %	0.21 %
Persian	0.13 %	0.13 %
Polish	0.71 %	0.31 %
Portuguese	0.32 %	0.13 %
Russian	0.16 %	0.18 %
Samoan	1.00 %	0.12 %
Serbian	0.96 %	0.26 %
Sinhalese	0.15 %	0.11 %
South Slavic	0.19 %	0.08 %
Spanish	3.00 %	0.49 %
Tagalog	2.25 %	0.42 %
Tamil	0.13 %	0.13 %
Turkish	0.50 %	0.27 %
Vietnamese	2.17 %	0.92 %
Other languages	6.02 %	1.91 %
Not stated	5.46 %	4.71 %

Following are the informality results from the 2005 by-election with comparisons to the 2001 and 2004 elections:

**Table 3: Summary of Werriwa Informality**

	2001		2004		2005 by-election	
Total number of votes cast:	78138		84306		77291	
Total number of informal votes:	6651		6724		10162	
Percentage of Informality:	8.51%		7.98%		13.15 %	
Number of Candidates	8		7		16	
Category of Informality	2001 Ballots	2001 % of total informality	2004 Ballots	2004 % of total informality	2005 by-election ballots	2005 by-election % of total informality
Blanks	1170	17.59%	1404	20.88%	1873	18.43 %
Number '1' Only	2299	34.57%	2482	36.91%	927	9.12 %
Ticks and Crosses	949	14.27%	983	14.62%	489	4.81 %
Langer Style *	266	4.00%	N/A*	N/A*	N/A*	N/A*
Non-sequential	691	10.39%	793	11.79%	3659	36.01 %
Voter Identified	1	0.02%	1	0.01%	1	0.01 %
Marks	1266	19.03%	699	10.40%	2209	21.74 %
Slogans making numbers illegible	9	0.14%	0	0.00%	268	2.64 %
Other * (includes other symbols)	0	0.00%	48	0.71%	122	1.20 %
Incomplete Numbering (grouped with 'Other' in 2001)	N/A*	N/A*	314	4.67%	614	0.12 %

Overall informality from the 2004 Federal Election to the 2005 by-election increased by 5.17 percentage points.

The NSW State election was held in March 2003. At the 2004 federal election for the House of Representatives, informal ballots due to the elector marking 'Number 1 only' or 'non-sequential' made up almost 50 percent of overall informality in NSW. This category decreased significantly from 36.91 percent (Werriwa) at the 2004 federal election to only 9.12 percent at the by-election. This could suggest that more time between a federal and state election for states with *optional* preferential voting may decrease informality levels in this category.

Important also is the absence of the Senate election at by-elections. There is no advertising by political parties to place a '1' only in the Senate square and no combined House of Representatives and Senate 'how to vote' cards. There is consequently only one ballot paper handed to the elector on polling day.



Previous research undertaken by the AEC has argued that the difference in the voting system between the House of Representatives and the Senate may impact on the informal vote<sup>6</sup>. The difference between the two systems may also be compounded by ‘How to Vote Cards’ and the order the voter completes their papers (Senate and House of Representatives). At by-elections there is no Senate election and consequently no advertising by political parties to place a ‘1’ only in the Senate square and no combined ‘how to vote’ cards. There is consequently only one ballot paper handed to the elector on polling day. The absence of the Senate ballot paper at the Werriwa by-election may have made voting easier for the elector and may have contributed to the substantial decline in ‘number 1’ only.

As evidenced in the analysis from the 2004 election, as the number of candidates increases, so does the overall level of informality. As the number of candidates more than doubled, the informality rate would be expected to increase. Indeed, the category of informality “Non-sequential” increased to 36.01 percent from 11.79 percent at the by-election.

The analysis of 2004 election produced the following regression:

**Table 4 Regression Analysis of Candidates/Informality**

	Coefficient	Standard error	T-stat	P-value
Intercept	0.002591	0.000604	4.278721	3.28351E-05
No. Of candidates	0.003193	0.000279	11.42212	5.94221E-22

This regression indicates that as the number of candidates increases, the informality rate will increase by 0.3 percent. Applying the coefficient and intercept from this regression to the by-election, we would have the following equation:

$$\hat{Y} = b_0 + b_1$$

Projected informality by-election = 7.98 + 0.3(9) + 0.2 = 10.88%

Although the actual informality rate was higher at 13.15 percent, this projection only factors in changes in the number of candidates. In the Australian context, factors which can influence informality levels include differences in the voting systems between the States and the Commonwealth, differences in the voting arrangements between the House of Representative and the Senate, and sociological factors. Given the significant increase in “Scribbles / Marks” ballots, their analysis could provide further insight into why the overall informality level increased.

Given the extremely high number of candidates, an analysis of the informality data collected provides further information on how many electors began to number their ballots, but stopped at some point, rendering the ballot informal with an insufficient number of preferences expressed.

**Analysis of Invalid Ballots: “Scribbles / Marks”**

In Werriwa, the percentage of informal ballots due to scribbles / marks on the ballot (without valid preferences stated) doubled from 10.40 percent in at the 2004 federal election, to 21.74 percent at the 2005 by-election.

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<sup>6</sup> A discussion of the differences between the Senate and the House of Representatives voting system and the impact on informal voting is found in ‘Research Report 1 – Informal Vote Survey House of Representatives 2001 Election’

This category of informality increased significantly between 2001 and 2004 at the Federal level (6.49 percent to 14.27 percent), and at the State level for New South Wales (5.49 percent to 9.62 percent). During the by-election, approximately 22 percent of informal votes were invalid due to “Scribbles and Marks”.

An analysis was conducted of the ballots informal due to “marks/scribbles” for the by-election to examine more closely the types of scribbles and marks that rendered them invalid. The ballots were sorted into the following categories:

- (a) Line or X through whole or most of ballot
- (b) Same symbol, mark or number in all boxes  
E.g. all ticks or crosses, single number, smiley face, zeros, etc.
- (c) Non profane phrases/comments written on ballot with no other marks  
E.g. “I don’t care”, “I don’t know any of candidates”, “ Not interested”, “racist democracy”, “What’s the use”
- (d) Profanity
- (e) “Waste of Time/Money”
- (f) Write-in Candidate  
E.g. “Snoopy”, “Jesus” or “me”
- (g) Profanity/criticism towards particular candidates or politicians  
E.g. “All politicians are liars”, “I hope that bleep bleep Latham is paying for this”, “They are all liars and thieves in it for political power”
- (h) First choice is clear, but rest of ballot is invalid/incomplete
- (i) Comment / phrases protesting no liberal candidate  
E.g. “No liberal, no vote”
- (j) Expressly stated informal  
E.g. “No vote”, “Invalid” “None of the above” No preferences” “Donkey vote” “There should be optional voting”
- (k) Miscellaneous – everything else  
E.g. mix of ticks, crosses and/or numbers, partial or full random number sequences, graphics/cartoons, illegible figures/marks, numbers begin formally, the rest with ticks or x’s through the ballot, etc. Additionally, some would be considered “Langer Style”.

The analysis revealed the following overall percentages as a total of the number of ballots invalid within the general category of “scribbles /marks”:

**Table 5 – categories as percentage of total informality**

<b>Type of mark</b>	<b>Percentage of total informality</b>
(a) Line or X through whole or most of ballot	25.09 %
(b) Same symbol, mark or number in all boxes	22.12 %
(c) Non profane phrases/comments	6.11 %
(d) Profanity	7.26 %
(e) “Waste of Time/Money”	1.68 %
(f) Write-in Candidate	2.83 %
(g) Profanity/criticism towards particular candidates or politicians	4.16 %
(h) First choice is clear, but rest of ballot is invalid/incomplete	1.06 %
(i) Comment / phrases protesting no liberal candidate	2.96 %
(j) Expressly stated informal	2.30 %
(k) Miscellaneous – everything else	24.42 %

The analysis indicates that scribbles/marks are an expression of the voter to render the ballot informal intentionally. It also indicates that informality levels may escalate when a

major political party is not represented in the choice of candidates on a ballot. This may manifest either through explicit comments on behalf of the voter or through other marks rendering the ballot informal. If category (a) and (i) are combined in table 6 this represents 28% of the total informal vote cast.

The complete breakdown of votes and categories by polling station is listed in the Appendix A.

## **Conclusions**

This analysis represents an early research effort by the Australian Electoral Commission to examine trends within categories of informality. The analysis of the informality at the Werriwa by-election confirms a major finding in previous reports on informality in Australian House of Representatives Elections. Namely, that a very strong predictor of a rise in informality is an increase in the number of candidates on the ballot paper.<sup>7</sup>

This research also supports the argument that as long as there is a differential electoral system between the Senate and the House of Representatives, some level of informality will exist. This may be compounded by 'How to Vote Card' cards and the order the elector completes the two ballot papers in.

The analysis of the by-election also revealed that the level of informality might increase when a candidate from a major political party does not contest a seat in an election.

In *Research Report Number 7 – Analysis of the Informal Voting During the 2004 House of Representatives Election*<sup>8</sup>, concerns were expressed at the proximity of the NSW and QLD State elections compared to the next federal election. The research stated that if stakeholders do not address the impact of optional preferential voting in these 2 States, the informality levels were likely to remain high. This research suggests that for States with optional preferential voting, the further away a federal election is from the State election, the less chance there is of a voter marking 'Number1' only on the ballot paper. This research also notes that the absence of a Senate election at by-elections may impact on the reduction of the informal category - 'Number1' only.

The AEC and its stakeholders need to address the impact of "how to vote" cards, and optional preferential voting in New South Wales and Queensland, or informality is likely to remain high at federal elections.

The AEC will undertake analysis of informality at future events in order to identify any trends or interpretation on a national, state/territory, and divisional level. The results of future analysis will assist the AEC with the development of targeted public awareness campaigns.

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<sup>7</sup> Medew, R. 2003; Dario, G. 2005

## Appendix A Informality by Polling Place

Polling Place	Total Number of Informal	Informality level for Polling Place	SEIFA index for Polling Place	Total # of marks scribbles	Percentage of Marks Scribbles	Line or X through whole ballot	Same symbol/mark/number in all boxes	Innocuous comments or phrases	Profanity	First choice clear, misc symbols/incomplete on rest	"Waste of time/money"	Third party write-ins jokes	Profanity/criticism towards candidates/politicians	Misc: incomplete random #s, mixed #s, partial xs, etc.	Protest because of no liberal candidate	Explicitly stated informal
Austral	254	10.26 %	951.33	69	27.17%	28	18	2	7	1	1	3	3	6		
Campbellfield	202	8.09 %	731.43	50	24.75%	9	13	2	3		1	2	1	18	1	
Cartwright	104	11.64 %	734.52	17	16.35%	3	7							7		
Casula	587	5.94 %	976.39	136	23.17%	44	35	3	10		2	8	4	29	1	
Casula South	243	4.31 %	1012.00	61	25.10%	31	10	6	2		2		1	7	1	1
Cecil Hills	403	5.34 %	1021.56	95	23.57%	18	24	10	2	4		3	1	29	3	1
Cecil Hills North	60	16.44 %	1038.80	22	36.67%	4	9	3	2				1	2	1	
Curran	158	7.93 %	703.09	30	18.99%	7	5	2	4			1	1	10		
Dalmeny Drive	137	5.95 %	1028.16	25	18.25%	7	2	2	3		2			8		1
Glenfield	303	8.15 %	981.17	65	21.45%	16	20	5	4				6	11	2	1
Glenfield East	183	4.98 %	987.50	54	29.51%	19	6	4	3	1	1	1	2	12	2	3
Green Valley	423	5.44 %	935.39	96	22.70%	20	22	9	7	2	1	3	1	28	1	2
Green Valley North	285	12.38 %	907.68	49	17.19%	12	17		5	2			2	10	1	
Greenway Park	365	5.03 %	1036.56	62	16.99%	16	6	1	7	1		4	7	14	5	1
Guise	167	7.27 %	654.33	42	25.15%	10	2		3	1		2	2	20	2	
Hinchinbrook	391	5.64 %	981.36	78	19.95%	16	18	5	5	1		3	7	21	1	1
Hinchinbrook North	199	13.64 %	949.84	42	21.11%	10	6	1	4		1	3		14	1	2
Hoxton Park	262	6.53 %	983.50	46	17.56%	11	9	1	3		1	4	7	9	1	
Ingleburn	530	5.86 %	987.72	132	24.91%	24	28	11	5	3	4	5	9	32	7	4
Ingeburn High	128	4.20 %	1031.58	33	25.78%	6	7	6	3		1	1	2	3	4	
Ingeburn North	78	4.95 %	1020.17	19	24.36%	6	6		2		1	1		2	1	
James Busby	134	12.72 %	922.47	21	15.67%	3	5		1			1		11		
Kemps Creek	117	9.41 %	969.62	33	28.21%	5	13						1	9	1	4
Leumeah North	137	4.34 %	1007.45	41	29.93%	8	5	2	8		1		3	11	3	
Liverpool West	144	13.90 %	821.68	31	21.53%	8	4	2	2					15		
Lurnea	363	5.89 %	889.18	78	21.49%	26	17	5	4		1	1	7	14	3	
Macquarie Fields	400	6.24 %	959.26	96	24.00%	23	17	6	7	1	4	4	6	23		5
Macquarie Fields North	161	14.72 %	966.86	48	29.81%	9	16	3		1		2	4	11	2	
Miller	195	6.90 %	740.83	45	23.08%	9	11	1	1		2		2	19		
Minto	298	8.03 %	900.34	57	19.13%	10	19	3	10		2	1	1	7		4
Prestons	523	11.86 %	967.07	120	22.94%	33	22	9	10	2			2	35	2	5
Prestons West	231	3.30 %	1049.45	57	24.68%	12	21	3	3			2	2	12	1	1
Robert Townson	344	5.25 %	1015.73	74	21.51%	22	9	8	11	1	3	1	2	12	2	3
Sackville Street	306	6.27 %	969.50	62	20.26%	17	15	3	5		1		3	12	4	2
ST. Andrews	335	7.78 %	1024.86	73	21.79%	28	11	6	4		2	3	2	12	3	2
St. Andrews South	228	6.80 %	973.42	47	20.61%	6	10	4	6		4	2	1	11	1	2
The Grange	169	4.25 %	833.84	50	29.59%	6	11	5	6	1		3		17		1
West Hoxton	109	10.22 %	963.00	32	29.36%	8	4	1	1					16	2	
Whiddon Homes	45	3.15 %	N/A	1	2.22%	1										
Special Hospital Team1	15	N/A	N/A	5	33.33%		4							1		
ABSENT	0	N/A	N/A	0		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
POSTAL	218	N/A	N/A	21	9.63%	5	2	3	1				1	3	4	2
PRE_POLL	219	N/A	N/A	43	19.63%	11	13	1		2				8	4	4
PROVISIONAL	9	N/A	N/A	2	22.22%		1							1		
Totals	10162			2260	22.24%	567	500	138	164	24	38	64	94	552	67	52

Percent of total scribbles and marks

25.09% 22.12% 6.11% 7.26% 1.06% 1.68% 2.83% 4.16% 24.42% 2.96% 2.30%

## Appendix B Incomplete Ballots

Category	Number of ballots	% of total informality	% of <sup>9</sup> n = 614
1 only	927	9.12 %	
1, 2	109	1.07 %	17.75%
1, 2, 3	96	0.94 %	15.63%
1, 2, 3, 4	39	0.38 %	6.35%
1, 2, 3, 4, 5	38	0.37 %	6.18%
1, 2, 3, 4, 5, 6	112	1.10 %	18.24%
1, 2, 3, 4, 5, 6, 7	22	0.22 %	3.58%
1, 2, 3, 4, 5, 6, 7, 8	17	0.17 %	2.76%
1, 2, 3, 4, 5, 6, 7, 8, 9	11	0.11 %	1.79%
1, 2, 3, 4, 5, 6, 7, 8, 9, 10	43	0.42 %	7.00%
1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11	13	0.13 %	2.11%
1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12	21	0.21 %	3.42%
1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13	20	0.20 %	3.25%
1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14	73	0.72 %	11.88%

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<sup>9</sup> This percentage is based on the total number of non-sequential (614) and does not include the category '1' only (927).

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