

Election 2014 (Final Result)

Data Insights



October 2014

To celebrate the launch of our data analytics practice we have put together some quick statistics on the election results. Whilst the overall results are well known and publicised, some interesting observations arise when combined with last year's census data.

The results presented here don't do justice to the true power of data analytics; such are the limitations of using aggregated publicly available data. Nevertheless, there is always some 'juice' to be squeezed from any dataset.

Background information

While there are 120 seats in Parliament there are only 71 electorates around the country, including the seven Māori seats.

Nationwide results

The chart below illustrates the clear victory to National. The results in respect of the 71 electorates around the country showed National led the party vote in 60 electorates with Labour leading the other 11.

The results for electoral candidates are a bit more diverse. National won the candidate vote in 41 electorates against Labour's 27. The other three electoral seats went to the Māori Party, Act and United Future. Under MMP, these parties get their seats in Parliament thanks to the candidate vote, despite National or Labour achieving a majority party vote in each of these three electorates.

There was one change which occurred following the inclusion of the special votes in the results: National overtook Labour for the party vote in Dunedin North.

MMP vs. FPTP

If the party vote victories by electorate are anything to go by, National, which won in 60 electorates, would have fared even better under FPTP.

It is interesting to note the absence of the Green Party in the chart below. Despite being New Zealand's third largest party (by overall party vote percentage), the Green Party failed to achieve either a party vote victory or a candidate victory in any electorate. Clearly the Green Party would need to adopt a different strategy under a FPTP system. New Zealand First is in the same position.

The statistics

On page 2 we set the scene for the country as a whole. We take a look at the overall proportions for each party and set the scene in terms of age, income and family makeup.

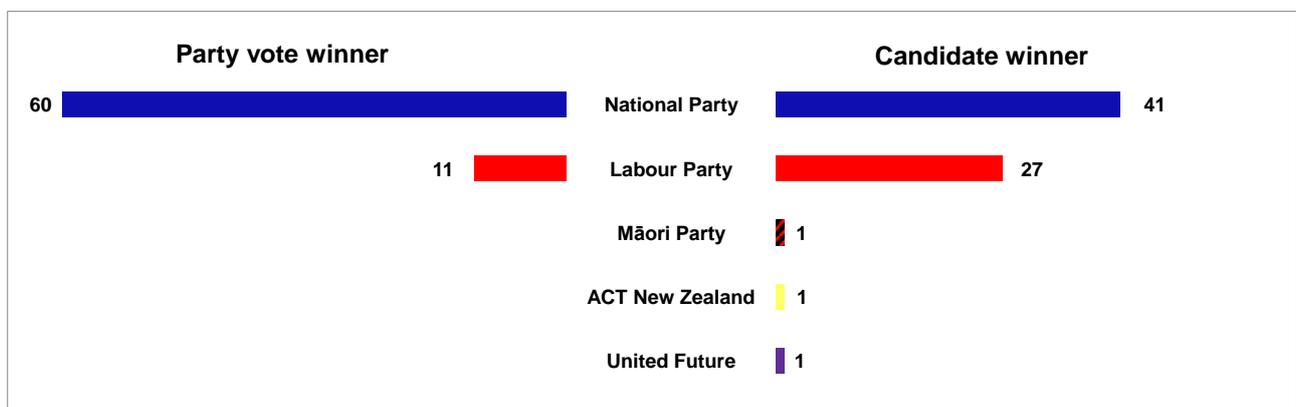
Then further on we get to the interesting parts:

- How do the results differ by electorate?
- Do the results support the notion that NZ First targets the older vote? Are there older electorates and younger ones?
- Could a different strategy have paid off better for the Conservatives?

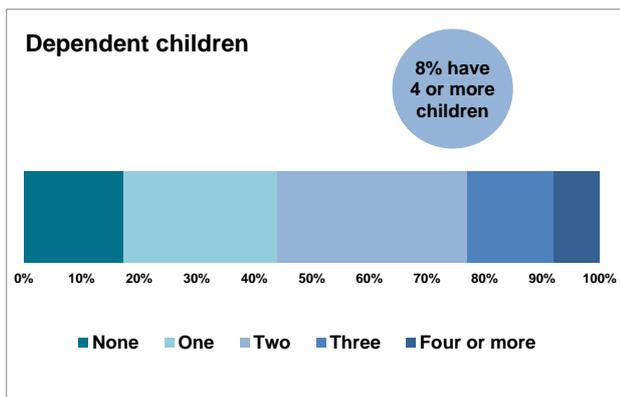
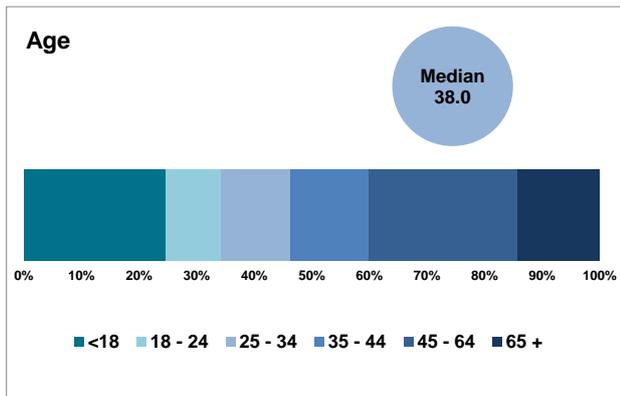
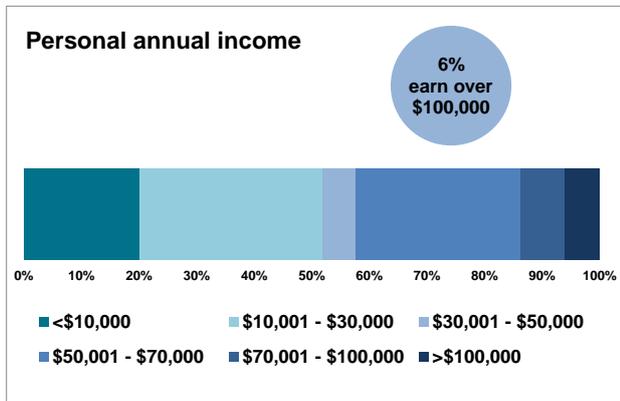
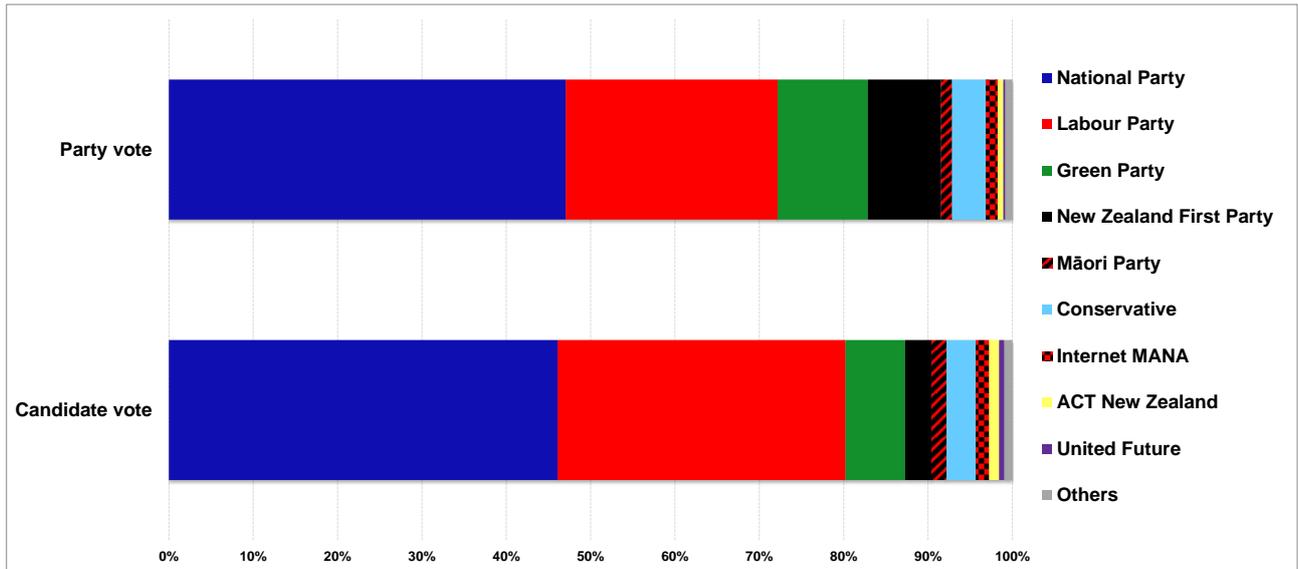
We take a look at a few of the interesting electorates and then do a two-way analysis of the party vote.

Further information

We have the full results available for all 71 electorates so please contact the authors below if you would like a copy.



Nationwide view



The chart above illustrates the overall election result by party vote and candidate vote. While National achieved similar results (47% party vote vs. 46% overall candidate vote), the mixed results for Labour, the Green Party and NZ First are interesting. Labour clearly failed to secure the party vote (25%) but managed to retain several high profile MP's in electorates such as New Lynn, Mt Albert and Mt Roskill, as well as winning the candidate vote in all but one of the Māori seats. The Green Party and NZ First won 11% and 9% of the party vote respectively but neither party was close to winning an electorate seat.

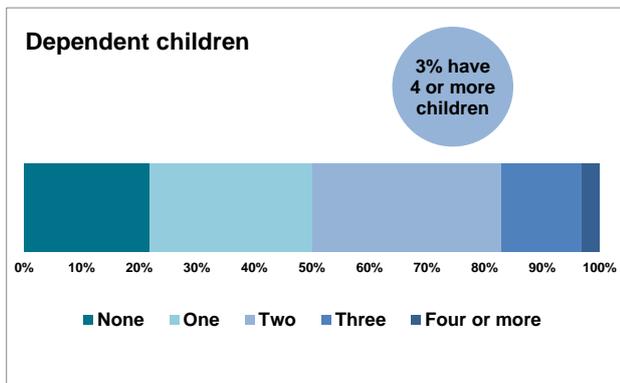
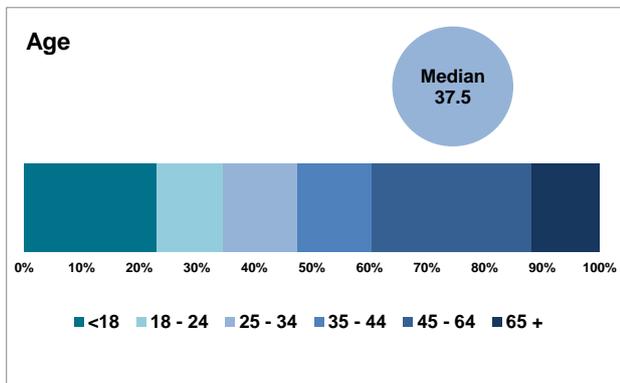
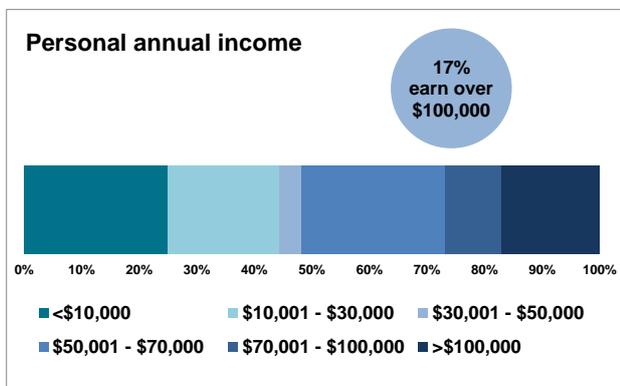
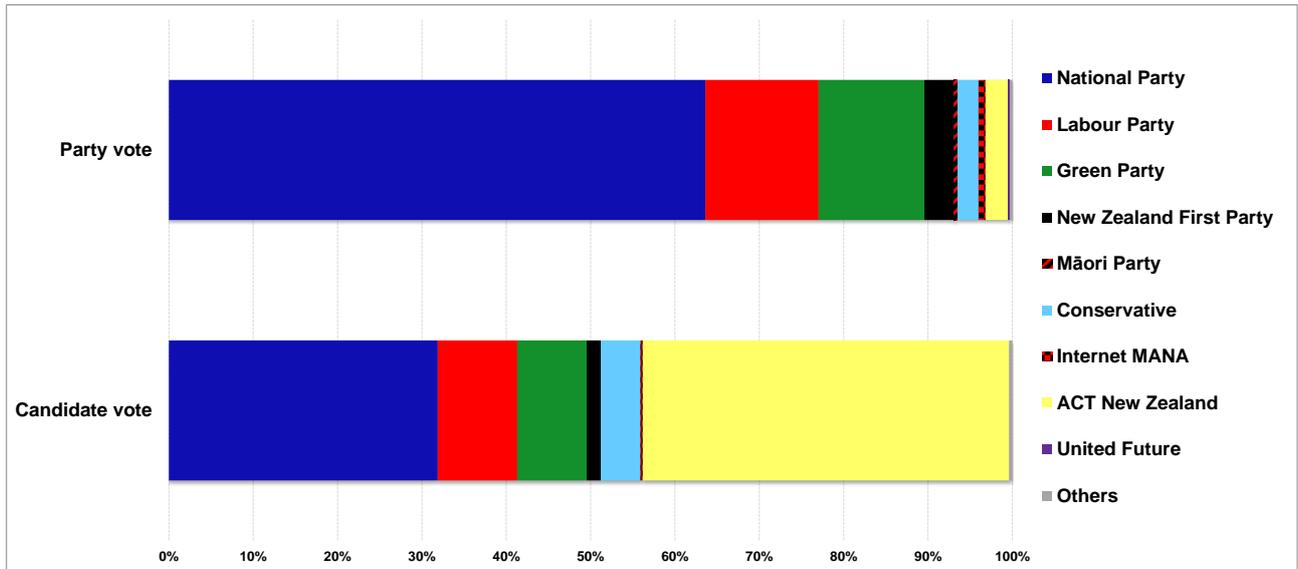
Whilst there is no individual voter data available for analysis we can look at certain features of each electorate that might explain voter behaviour. The charts to the left, based on the 2013 Census data, illustrate the spread of income, age and family size for all of New Zealand.

The income chart shows the spread of annual income from all sources for individuals aged 15 and over, whether working or otherwise. On this basis 6% of individuals across New Zealand earn over \$100k p.a. This figure ranges from 1% in the Māngere, Manukau East and Manurewa electorates to 17% in the Epsom and Tāmaki electorates.

The age chart shows that the median age of New Zealanders is 38. This means that half the population is older than 38 and half the population is younger. The oldest electorate is Ōtaki which has a median age of 48. The Māori electorates are the youngest with median ages between 23 and 26.

The dependent children chart illustrates the number of children under 18 per family. Across NZ 8% of families have four or more dependent children. North Shore has the lowest proportion with 3% while Māngere has the highest with 20%.

Epsom



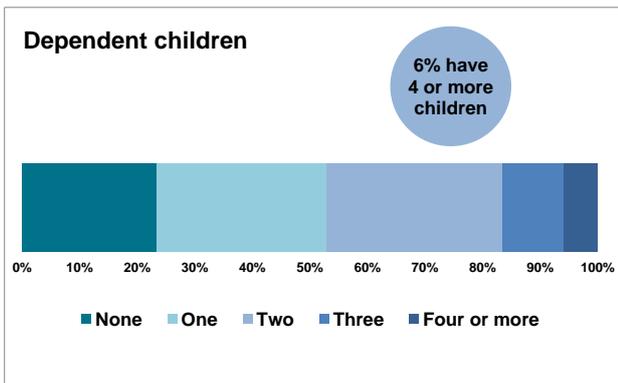
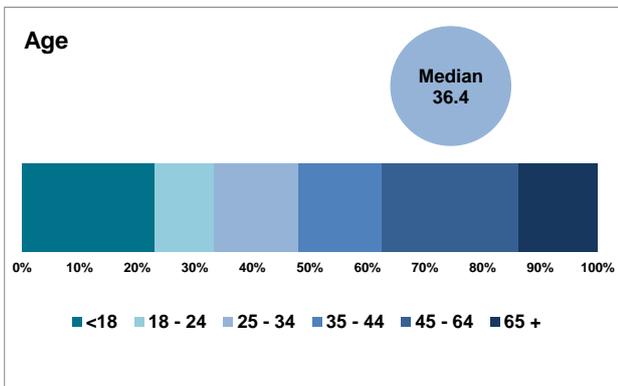
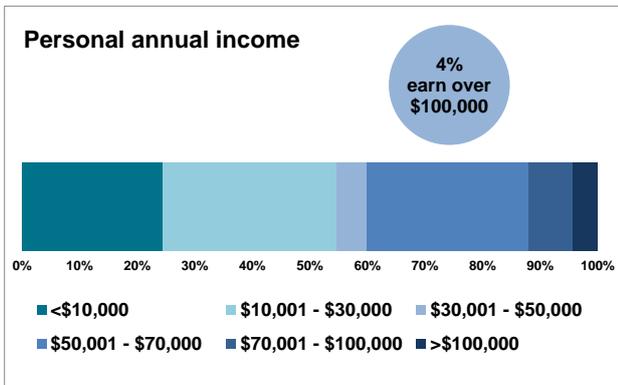
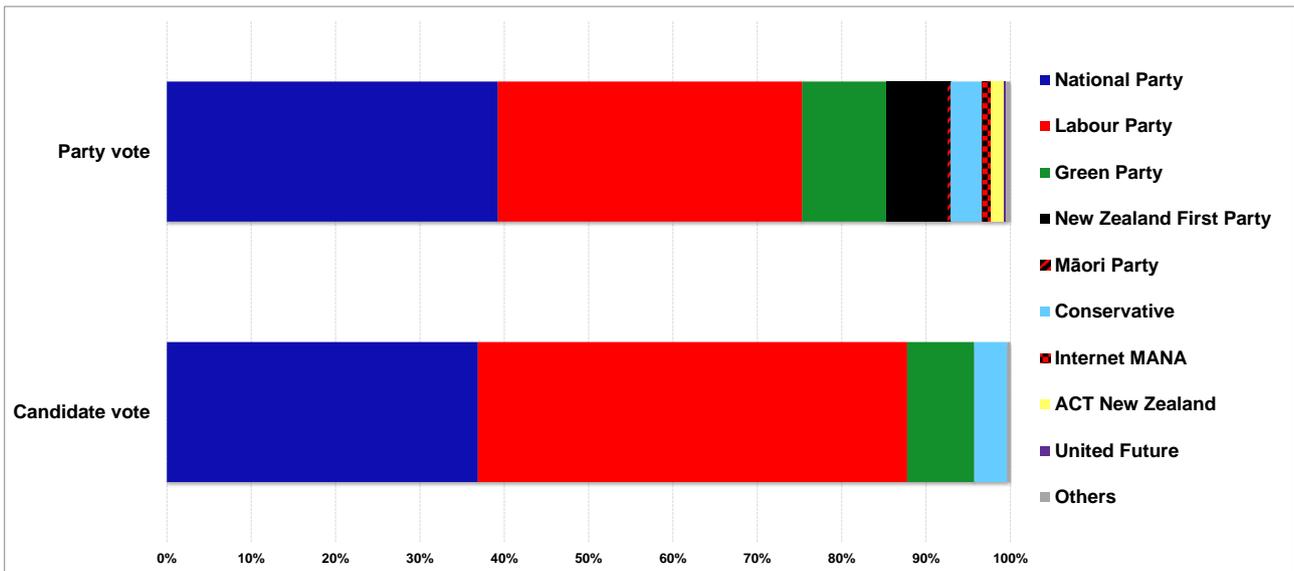
Tactical voting has become a hallmark of the Epsom electorate as is evident in the chart above. While National won 63% of the party vote, ACT won the candidate vote with 43%. It is interesting that National still gained 32% of the candidate vote despite not actively contesting the seat. It has been suggested that Labour and Green Party supporters gave their candidate vote to National in an attempt to counteract the deal struck between National and ACT. Indeed the much lower candidate vote percentages for Labour and the Green Party compared to their party vote results does give some weight to this theory.

The income chart to the left illustrates what is widely known about Epsom – it is a wealthy electorate. The proportion of individuals earning over \$100k p.a. – 17% – is one of the highest in the country and nearly three times higher than the nationwide figure.

The age chart shows that the median age of the Epsom electorate is much the same as that for the rest of New Zealand. However, the age spread of Epsom is slightly narrower than the rest of the country, with fewer people in the under 18 and over 65 categories.

Epsom has one of the lowest proportions of large families in the country. Just 3% of families have four or more dependent children, less than half the national average of 8%, while 22% of families have no dependent children. This provides some evidence of a relationship between higher income and fewer children.

New Lynn



New Lynn is an interesting electorate. The seat was retained by David Cunliffe but Labour lost the party vote to National, as illustrated in the chart above. This was a common phenomenon for the Labour Party - out of the 21 general (non-Māori) electorates where it won the seat, Labour won the party vote in only 4 electorates (this figure is down from 5 electorates based on the preliminary results). This suggests some loyalty at a personal level for the Labour candidates rather than support for the party.

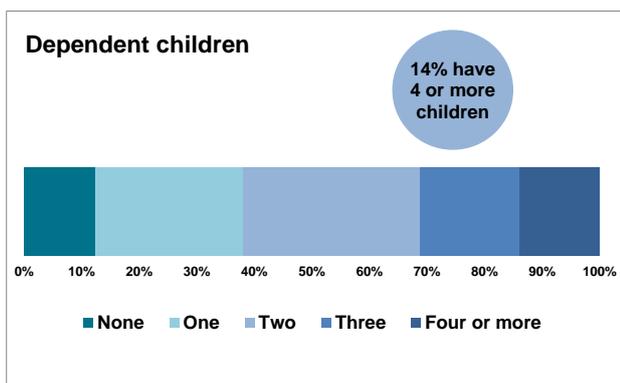
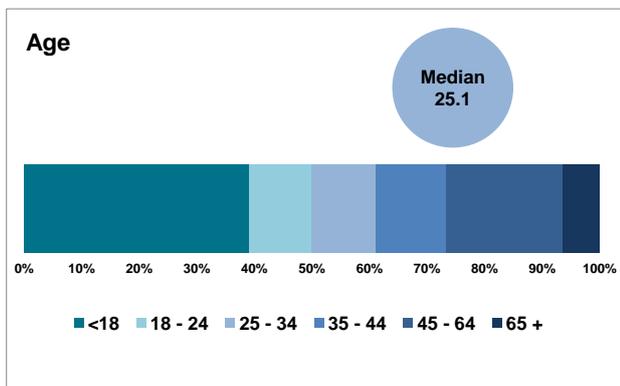
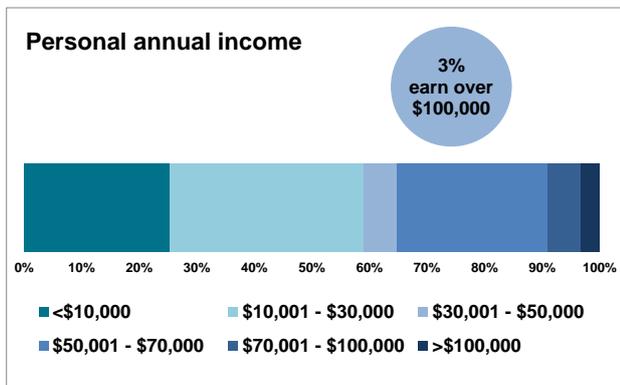
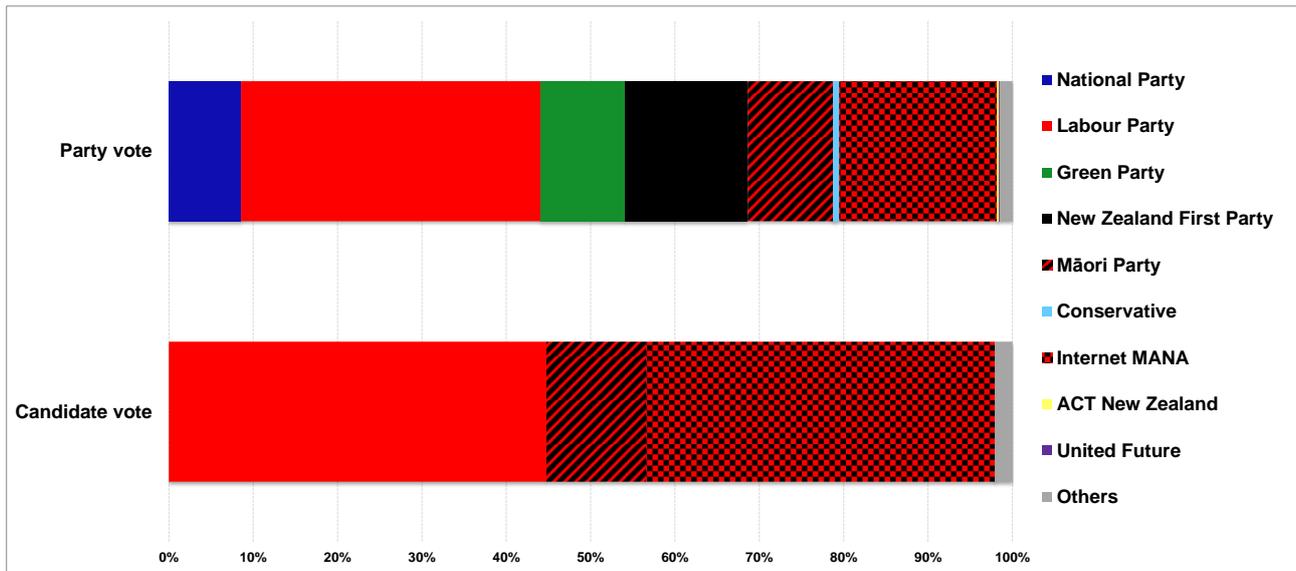
The New Lynn electorate also shows a curious geographical split of party support with polling booths in the southern part of the electorate such as Titirangi, Laingholm, Green Bay and Blockhouse Bay favouring National and northern polling booths such as in Avondale, Mt Roskill, and New Lynn favouring the Labour Party. A surprising exception to this trend is Glen Eden where National won the party vote.

The geographical split of party support is perhaps indicative of a two-tiered electorate. The income chart to the left shows that just 4% of the New Lynn electorate earn over \$100k, compared to 6% nationwide, and a relatively high proportion (25%) earn less than \$10k, compared to the national average of 20%.

The lower income of the electorate might be explained, in part, by New Lynn's lower median age of 36.4 compared to the national median age of 38.

The dependent children chart to the left shows that, at 6%, the proportion of families with four or more dependent children is less than the national average of 8%. Families with no children or one child make up 53% of the electorate compared with 44% New Zealand-wide.

Te Tai Tokerau



The Māori electorates cover much larger geographical areas than the general electorates. Te Tai Tokerau stretches from the Auckland harbour bridge to Cape Reinga. Because of this one might expect the election results for the Māori electorates to be less homogenous than that for the general electorates. In addition, the Census data for the Māori electorates does not perfectly capture those Māori who are actually enrolled on the Māori roll. Rather, all people who identified as being of Māori descent are included in the Census data charts, regardless of whether they voted in the Māori or general roll.

Te Tai Tokerau was a high profile electorate this year with the Internet MANA Party's ticket to Parliament relying on Hone Harawira retaining his seat. The result of the candidate vote, which saw Labour's Kelvin Davis triumph over Hone Harawira by 739 votes, was widely unexpected.

The National Party did not contest the candidate vote in the Māori seats but, perhaps surprisingly, still picked up some party votes.

The income chart shows that the proportion of individuals in Te Tai Tokerau earning less than \$10k is relatively high at 26% compared to 20% nationwide, though this is correlated with age.

The median age of the electorate of 25.1 is nearly 13 years younger than the national median of 38. This is highlighted in the chart to the left which shows 39% of the electorate are aged 18 and younger (cf. 25% nationwide), and just 6% are aged over 65 (cf. 14% nationwide).

The large proportion of the electorate aged 18 and younger is further illustrated in the dependent children chart to the left, which shows that 14% of families have four or more dependent children, compared to 8% nationwide.

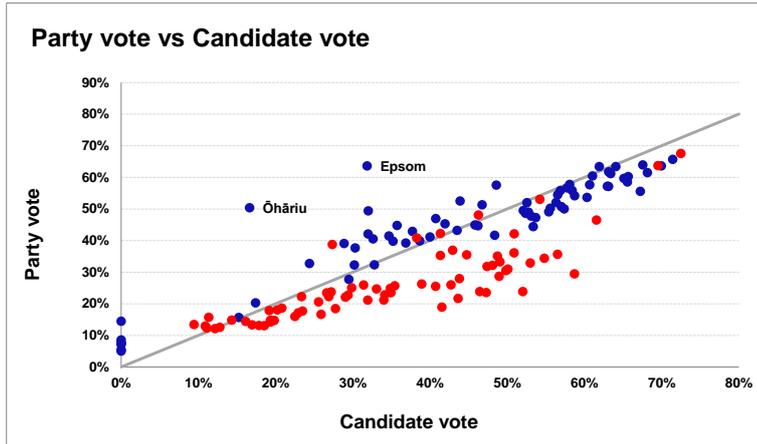
Two-way analysis of party vote

In this section we compare the party vote percentage for each electorate to:

- The candidate vote percentage
- The proportion of the electorate earning over \$100k (as defined on Page 2)
- The median age of the electorate

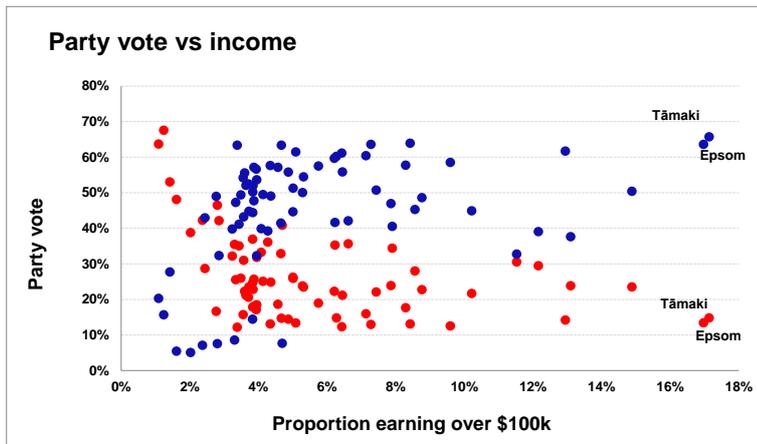
In the charts that follow each dot represents an electorate. The dots are colour coded according to party.

National vs. Labour

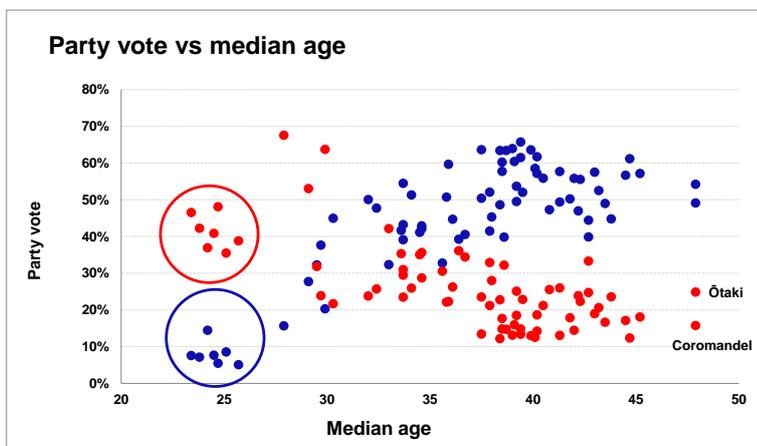


The charts to the left illustrate the results for the National Party (blue dots) and the Labour Party (red dots).

The first chart shows the relationship between the party vote result and the candidate vote result. Dots above the grey line indicate stronger party support than candidate support, and below the line vice versa. The chart clearly shows Labour performed poorly in the party vote compared to the candidate vote. National's results were much more consistent between party vote and candidate vote with some notable outliers – Epsom and Ōhāriu – where National did not strongly contest the candidate vote.



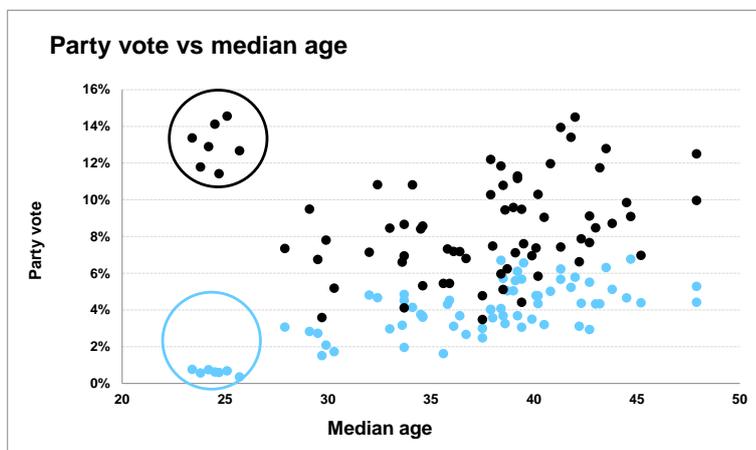
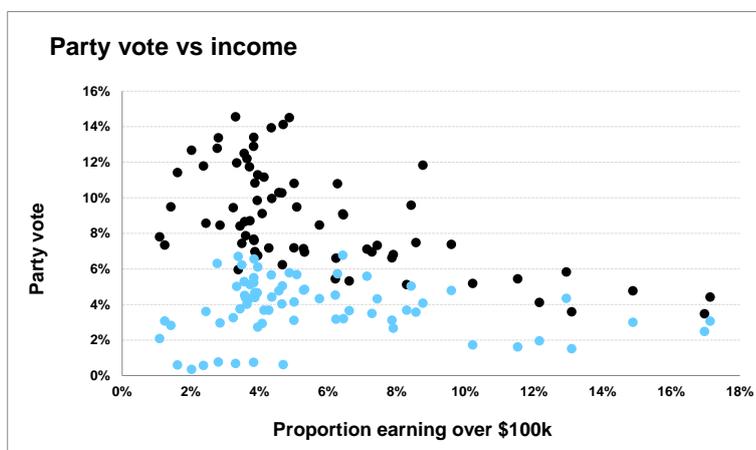
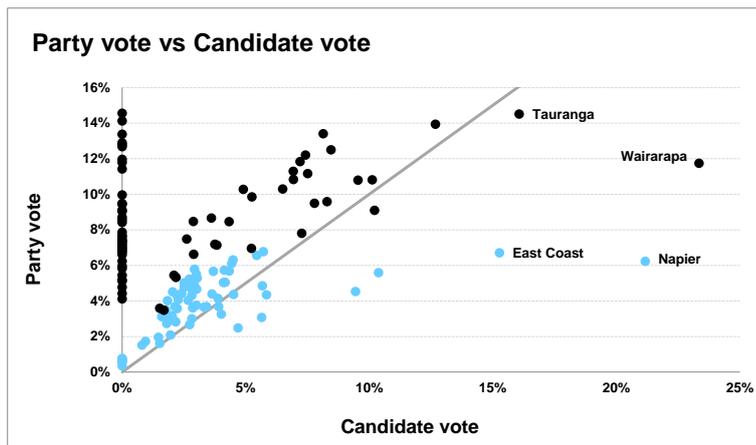
The second chart shows the relationship between the party vote result and the wealth of an electorate, as measured by the proportion of individuals earning over \$100k. Neither the blue nor the red dots show any significant correlation by income, indicating that both National and Labour achieve fairly broad support across income levels.



The third chart illustrates the relationship between the party vote result and the median age of an electorate. We can see a weak upward relationship in the blue dots indicating that older electorates might favour the National Party. Similarly we can see a weak downward relationship in the red dots indicating younger electorates favour the Labour Party. What this chart doesn't address is the difference between correlation and cause and effect i.e. does National hold an ageing support base, or do preferences changes as voters grow older?

The circled dots are the younger Māori electorates, which are interesting in that they show consistently high support for Labour across all seven electorates.

NZ First vs. Conservatives



The circled dots are the Māori electorates, which again display very consistent party vote results across all 7 electorates. Interestingly, support for NZ First in the Māori electorates is amongst the highest in the country.

The charts to the left illustrate the results for the New Zealand First Party (black dots) and the Conservative Party (light blue dots).

The first chart shows the relationship between the party vote result and the candidate vote result. Again, dots above the line indicate stronger party vote support than candidate support. Most dots are above the diagonal line illustrating that both parties performed better in the party vote than in the candidate vote. The Conservatives actually gained 3.9% of the party vote and 3.5% of the candidate vote overall but this was largely due to strong support for the Conservative candidate in the Napier (Garth McVicar) and East Coast electorates. Interestingly, support for the NZ First candidate in Tauranga remains strong, long after Winston Peters last stood there.

The cluster of black dots along the vertical axis indicates electorates where a NZ First candidate did not stand. The lack of light blue dots along the axis shows that the Conservatives stood a candidate in almost every electorate.

The second chart illustrates that support for NZ First is more concentrated in the less wealthy electorates, while the Conservatives have fairly consistent support across all income levels.

The third chart suggests that NZ First support is correlated with age in that the party vote is higher in older electorates, although the relationship is perhaps not as significant as often claimed. Similarly there is a weak relationship between support for the Conservative Party and age, where the party vote is higher in older electorates.

<p align="center">ABOUT MELVILLE JESSUP WEAVER</p> <p>Melville Jessup Weaver is a New Zealand firm of consulting actuaries. The firm was established in 1992 and has offices in Auckland and Wellington. The firm is affiliated to Towers Watson, a global professional services firm that helps organisations around the world optimise performance through effective people, risk and financial management. Towers Watson has offices in 25 countries and the business covers human resources services, reinsurance and Tillinghast.</p>	<p align="center"><i>For further information please contact:</i></p> <p><i>Jeremy Holmes 09 300 7318</i> jeremy.holmes@mjlw.co.nz</p> <p><i>Andrew Mirams 09 300 7152</i> andrew.mirams@mjlw.co.nz</p> <p>Although every care has been taken in the preparation of this newsletter, the information should not be used or relied upon as a basis for formulating business decisions or as a substitute for specific professional advice. The contents of this newsletter may be reproduced, provided Melville Jessup Weaver is acknowledged as the source.</p>
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