

Who Heads to the Polls?  
Exploring the Demographics of Voters  
in British Columbia

March 2010



BCStats



## **CONTACT INFORMATION**

This paper was prepared by Joanna Burgar & Martin Monkman.

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## EXECUTIVE SUMMARY

Across established democracies, the proportion of citizens who turn out to vote has been on a steady decline since the 1960s. British Columbia is no exception. In 1983, 71% of registered voters turned out at the polls, but since then the turnout rate in B.C. has fallen, and in 2009 only 55% of the 2.9 million registered voters cast a ballot.<sup>1</sup>

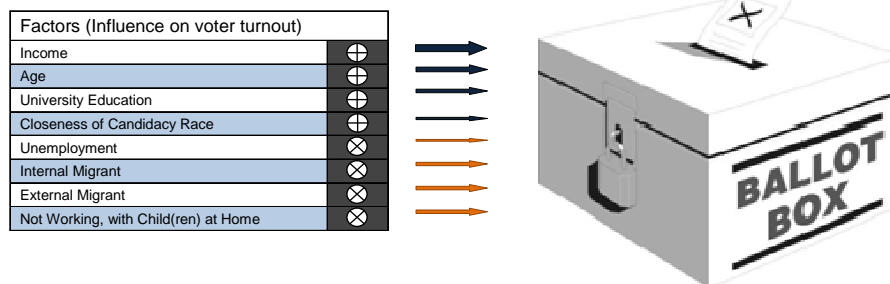
### Demographics predict voter turnout

This study found that eight demographic characteristics are related to voter turnout. It was found that neighbourhoods<sup>2</sup> that were most likely to vote had:

- higher median income,
- larger proportions of older individuals, and
- a greater proportion of university educated citizens.

Neighbourhoods with lower turnout rates had:

- higher proportions of individuals moving into the neighbourhood from other parts of B.C. or Canada,
- greater proportions of recent immigrants to Canada,
- a higher unemployment rate, and
- a larger fraction of the population not in the workforce and with children at home.



In addition, this study also identified that the more competitive the campaign race in an electoral district, the higher the voter turnout for the neighbourhoods falling within that electoral district.

<sup>1</sup> It should be noted that not all individuals who are eligible to vote register; this report deals only with registered voters.

<sup>2</sup> Neighbourhoods are defined for the purposes of this study as a Census Tract within a Census Metropolitan Area.

## Demographics: some finer details

The analysis shows that these factors predict voting behaviour to differing degrees when controlling for other factors. That is to say, the factors don't apply equally, depending on the other characteristics of the neighbourhood.

For example, in those electoral districts where the incumbent was not re-elected, only three factors predict turnout: the closeness of the race, income, and the proportion of recent immigrants to Canada (external migrants).

For the youngest 10% of census tracts, only two factors predict turnout rate: the proportion of internal migrants (people who moved from other parts of B.C. or Canada) and the proportion of people not in the workforce and with children at home. As these two characteristics increase, voter turnout decreases.

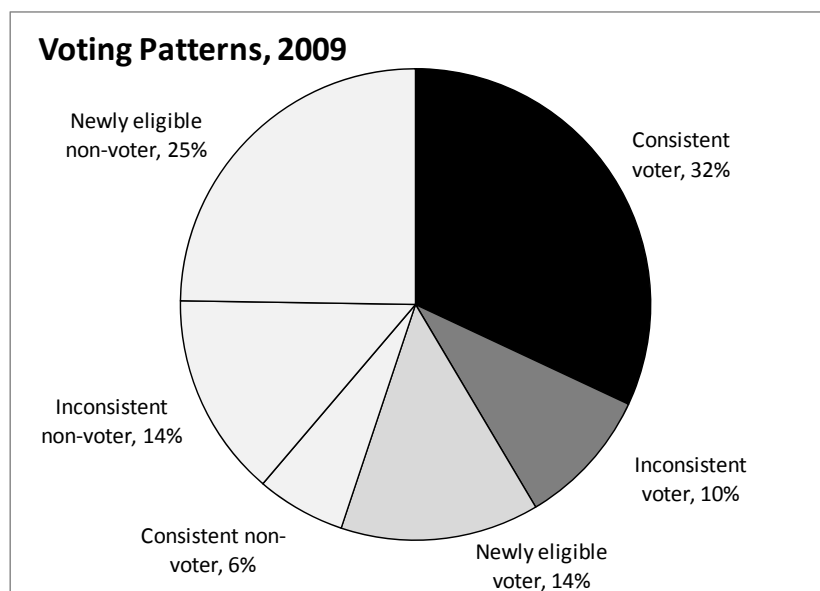
Other characteristics tested were population density and the proportion of new and established immigrants to Canada. For those neighbourhoods with a fast growing immigrant population, higher voter turnout is associated with higher median incomes and smaller proportions of people who have moved into the Census tract from both outside and inside Canada.

## Returning to the polls...

Of the 2.9 million registered voters for the 2009 British Columbia general election, one-third are consistent voters – they cast ballots in the 2001, 2005, and 2009 general elections. Consistent non-voters (registered in all three elections but voted in none) make up only 6% of the registered voters.

The remainder of voters were split between inconsistent voters (eligible since 2001 but not voting in either 2001 or 2005, 10%), and newly eligible voters (not registered for 2001, 14%).

The inconsistent non-voters made up 14% of the electorate, while newly eligible non-voters accounted for a quarter of the total.

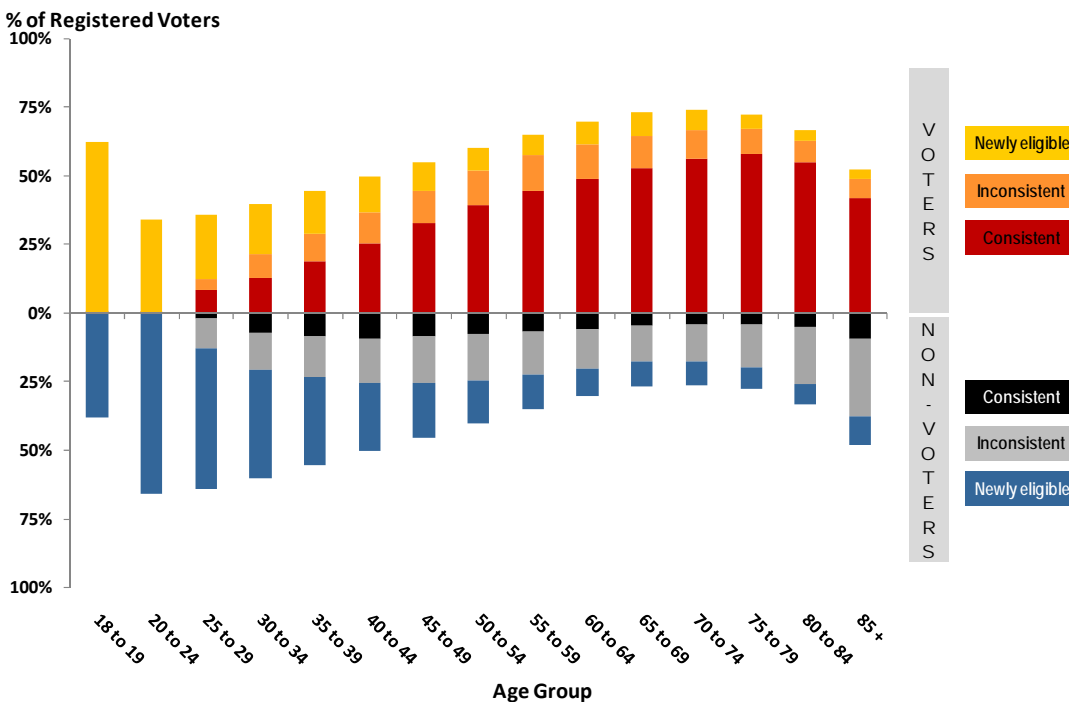


...depends on age

Three-quarters (74%) of the registered voters aged 70-74 cast a ballot in the 2009 general election, the largest proportion of any age cohort. Each successively younger age group had fewer registered voters actually voting than the next older group – only one-third (34%) of the 20-24 year old group cast a ballot in the three elections.

The exception to the “younger people don’t vote” trend was the 18 and 19 year old cohort. Three out of every five registered voters in this age group cast a ballot. However, this may be an artefact of the voter registration process – most of these individuals may have had to consciously make an effort to register, unlike older individuals who would already be on the voters list.

A similar pattern applies for consistent voters. Over half (58%) of registered voters aged 75-79 cast a ballot in the 2009 general election. Each successively younger age group had fewer consistent voters than the next older group – only 13% of the 30-34 year old group (all of whom were old enough to vote in all three elections) cast a ballot in the three elections.



## **The paradox**

Many of these findings present a paradox – since the 1960s, when declining turnout rates were first noted, many of these socio-demographic characteristics have moved in the direction that would suggest higher voter turnout. For example, a greater proportion of British Columbians possess a university education. The conclusion to be drawn is that although socio-demographic factors explain the differences in turnout in a single election, they do not explain the long-term trend of declining turnout rates.

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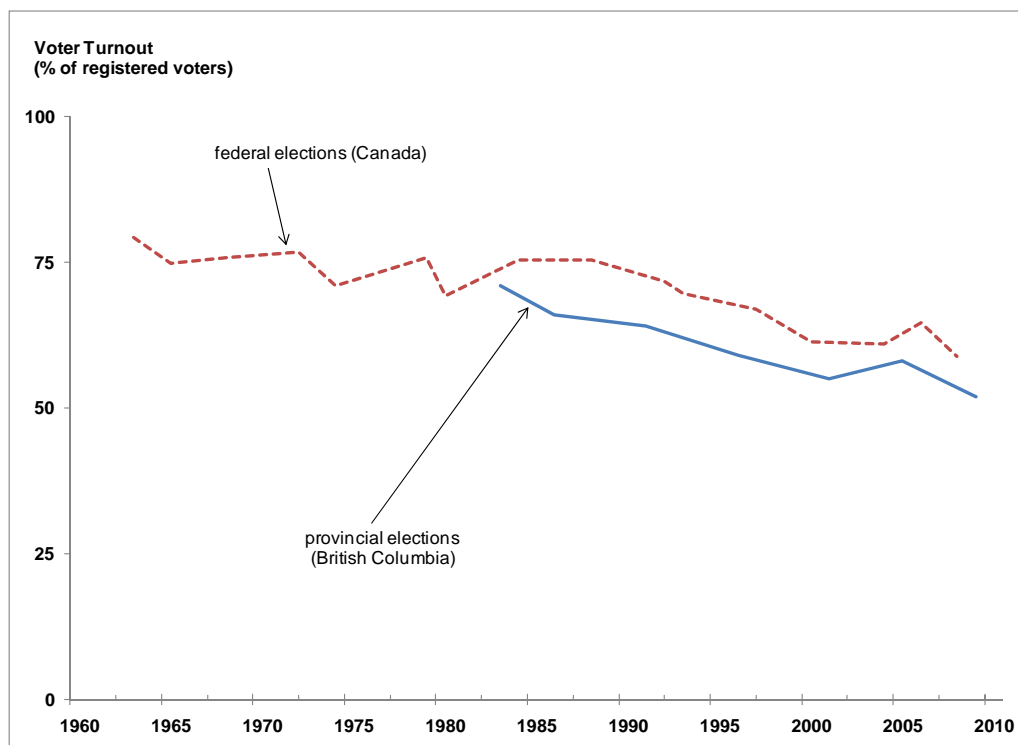
# 1. Introduction

## Declining voter turnout

Of the 2.9 million individuals in British Columbia who were registered to vote in the 2009 provincial general election, only 55% exercised this right. In the seven provincial general elections since 1983, where 71% of registered voters cast a ballot, voter turnout has consistently declined. The general election of 2005 is the one exception; there was an increase of 2.8% over 2001 turnout rates. However, the increased participation was short-lived as the general election four years later had one of the lowest recorded voter turnouts.

British Columbia is not alone in this trend. Voter turnout is declining at both the provincial and federal level across Canada, and in other established democracies<sup>3</sup>.

Figure 1: Voter turnout, federal & provincial elections<sup>4</sup>



<sup>3</sup> Niemi, Richard G. and Herbert F. Weisberg. eds. *Controversies in Voting Behavior*. Washington, D.C: CQ Press, 2001.

<sup>4</sup> Sources: Elections Canada, Elections BC.

A plethora of social science research has centred on the motivations behind what makes an individual choose to vote versus not vote. The traditional expectation is that a citizen is more likely to vote if they perceive that their vote will have an effect on the outcome of the election, that there is a benefit of voting, and that these two factors are greater than the perceived cost of voting. Recent research in experimental economics suggest that the benefit of voting is not only the benefit that voting may have to oneself, but also includes an altruistic component, where an individual will vote as a function of the benefit that their vote will have on other people affected by the success of the individual's preferred candidate.<sup>5</sup> Altruism can be seen as an interaction effect, where the likelihood of voting will decrease if either the citizen does not care about others or does not believe that the average individual will benefit if the citizen's preferred candidate is elected. Other models suggest that voting behaviour is influenced by civic duty or out of a sense of ethical obligation.<sup>6</sup>

Aligning with the current research on voting behaviour, one would expect that the recent declines in voter turnout are due to either a decrease in perceptions that a citizen's vote matters and that there is a benefit to voting or to an increase in the cost of voting, or some combination of the two. In 1997 Elections Canada analyzed data from the 1997 federal election to determine the factors influencing voter turnout, focusing on demographic, psychological, political and contextual explanations. Through a multivariate analysis, the study found ten factors that significantly influence voting behaviour in the context of a federal election.<sup>7</sup> Of these, five were socio-demographic. The list of factors identified in the 1997 study is shown in Table 1. The current analysis undertaken by BC Stats using the 2009 provincial election focussed solely on socio-demographic characteristics, and found many similar influencing factors.

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<sup>5</sup> Fowler, J.H. (2006). Altruism and Turnout. *The Journal of Politics*, August, pp. 674-683. The altruistic voting model is as follows:  $P(B_S + \alpha NB_O) > C$ , where P is the probability that the preferred candidate will prevail;  $B_S$  is the direct benefit that voting has on oneself; N is the other people affected by the outcome of the election who would gain an average benefit  $B_O$  if the individual's preferred candidate was elected;  $\alpha$  is the amount that the individual cares for others, or the altruism effect; and C is the cost of voting.

<sup>6</sup> Feddersen, T.J. and A. Sandroni. (2006). A Theory of Participation in Elections. *Quarterly Journal of Political Science*, September, pp. 1271-1282.

<sup>7</sup> Coulson, T. (1999). Voter Turnout in Canada: The Findings from the 1997 Canadian Election Study. *Electoral Insight*, November, pp. 18-21.

**Table 1: Determinants of Voter Turnout (1997 Canadian Election Study)**

Indicator Variables	Coefficient*
<b>Socio-demographic</b>	
Young	-0.11
New immigrant	-0.06
Non-Christian	-0.06
University graduate	0.07
Retired person	0.07
<b>Psychological</b>	
Low political interest	-0.04
High information	0.09
<b>Political</b>	
No party identification	-0.10
<b>Contextual</b>	
Unaware of voting options	-0.07
No important issue	-0.12
Intercept	0.87

\*The coefficients are interpreted as the percentage change in voting resulting from a unit change in the indicator variable. For example, retired persons were found to be 7 per cent more likely to vote than non-retired persons.

## British Columbia in 2009 – analysis of voting behaviour

In the period following the 2009 general election in British Columbia, BC Stats undertook two pieces of research into voting behaviour. The first was a survey administered shortly after the election, designed to measure voter and non-voter satisfaction with the election process, and to analyze motivations and other behavioural elements that underlie voting behaviour.<sup>8</sup>

The current report presents the second area of research, examining the relationships between specific demographic variables on voting behaviour.

Chapters Two and Three in the report centre on characteristics of the individuals who were registered to vote: the region in which they reside, and their age.

In Chapter Four, the regional component of voting behaviour is examined, through the incorporation of the demographic characteristics of the neighbourhood in which the voter resides. These demographic characteristics are analyzed to determine the best predictors of voter turnout.

<sup>8</sup> BC Stats (2009). *2009 Elections BC Post-Election Voter/Non-Voter Satisfaction Survey Executive Summary Report*, available at <http://www.elections.bc.ca/index.php/resource-centre/surveys/>

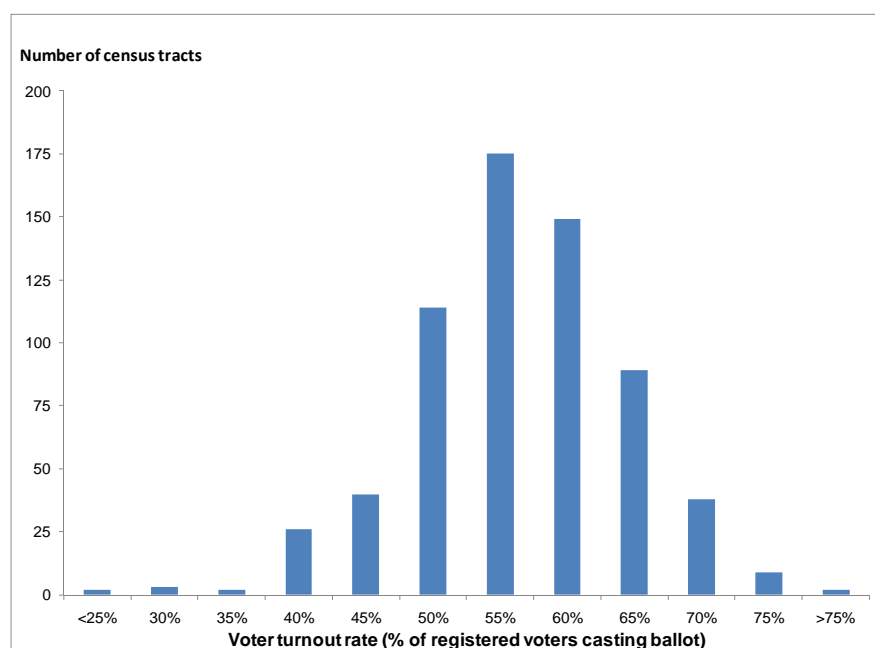
## 2. Geography

The first analysis examined voting patterns by geography. While voter turnout was 55% across British Columbia, at the Electoral District level this ranged from a high of 67% in Delta-South, to a low of 33% in Peace River-North.<sup>9</sup>

Much of the analysis that follows examined voters at the neighbourhood level. For this, the reference geography is the Statistics Canada Census area known as the “census tract” (CT). In British Columbia, there are 649 census tracts the largest urban areas of the province, in - four Census Metropolitan Areas (CMAs) and four Census Areas (CAs).<sup>10</sup> Just over three-quarters of all British Columbians live in a CMA, and therefore within a census tract. For the remaining 24% of British Columbians, the smallest level of Census geography is the Census Sub-Division (CSD). These rural CSDs are, in terms of population, roughly the same size as the typical Census Tract.

Voter turnout in the province’s neighbourhoods and small towns is even more variable than at the Electoral District level. The lowest turnout of registered voters within a Census Tract was 13%, while the highest was 76%. The distribution of turnout rate, by the number of Electoral Districts in each turnout category, is shown in Figure 2.

**Figure 2: Voter turnout, count of census tracts**



<sup>9</sup> Elections BC, *Report of the Chief Electoral Officer on the 39th Provincial General Election and Referendum on Electoral Reform - May 12, 2009*. Available at <http://www.elections.bc.ca/index.php/resource-centre/reports/>

<sup>10</sup> See Appendix D, Census Metropolitan Areas.

### 3. Voter Profiles

One way to analyze voting is to group registered voters by their past voting behaviour. Moving beyond whether an individual had voted in 2009, Table 2 groups voters into five broad categories based on voting patterns (including registration) in the three previous provincial general elections (2009, 2005, and 2001).

#### Consistent Voters and Non-voters

Consistent Voters were those who were registered for all three general elections, and cast ballots in all three. This group, one-third of all registered voters (numbering 955,000), represents the core of 2009 voters – over half (58%) of voters in 2009 had cast a ballot in the two previous general elections as well.

Consistent Non-voters were registered for all three general elections and did *not* vote in any one of the three. This relatively small group of 183,000 was 6% of registered voters.

#### Inconsistent Voters and Non-voters

Roughly one in ten individuals (just under 287,000) were inconsistent voters – registered to vote since 2001, they voted in 2009, but had not voted in either 2001 or 2005.

A greater number – 14% of all individuals registered in 2009 – were inconsistent non-voters. Also registered since 2001, this group of nearly 422,000 British Columbians did not vote in 2009, but had cast a ballot in either 2001 or 2005.

#### Newly Eligible Voters and Non-voters

Nearly two out of every five individuals registered to vote in 2009 – nearly 1.15 million British Columbians – was new to the voters list in either 2009 or 2005. Two-thirds of these “newly eligible” (or 25% of all registered voters, numbering 740,000) did not cast a ballot in 2009.

Table 2: The six voting profiles, based on voting patterns from 2009, 2005 and 2001

Voting Profile	Voted in			Population	
	2009?	2005?	2001?	Count	Percentage
<b>VOTER (2009)</b>					
Consistent Voter	Yes	Yes	Yes	955,212	31.9
Inconsistent Voter					
Profile A	Yes	Yes	No	134,473	4.5
Profile B	Yes	No	Yes	97,259	3.2
Profile C	Yes	No	No	48,598	1.6
Profile D	Yes	not registered	Yes	2,544	0.1
Profile E	Yes	not registered	No	3,695	0.1
<i>SubTotal: Inconsistent Voter</i>				286,569	9.5
Newly Eligible Voter					
Consistent Voter A	Yes	not registered	not registered	179,814	6.0
Consistent Voter B	Yes	Yes	not registered	167,717	5.6
Newly Inconsistent A	Yes	No	not registered	61,163	2.0
<i>SubTotal: Newly Eligible Voter</i>				408,694	13.6
<b>TOTAL VOTER</b>				<b>1,650,475</b>	<b>55.1</b>
<b>NON-VOTER (2009)</b>					
Consistent Non-Voter	No	No	No	183,147	6.1
Inconsistent Non-Voter					
Profile A	No	Yes	Yes	204,210	6.8
Profile B	No	Yes	No	72,044	2.4
Profile C	No	No	Yes	139,206	4.6
Profile D	No	not registered	Yes	1,870	0.1
Profile E	No	not registered	No	4,281	0.1
<i>SubTotal: Inconsistent Non-Voter</i>				421,611	14.0
Newly Eligible Non-Voter					
Newly Inconsistent B	No	Yes	not registered	137,352	4.6
Consistent Non-Voter A	No	not registered	not registered	291,401	9.7
Consistent Non-Voter B	No	No	not registered	311,476	10.4
<i>SubTotal: Newly Eligible Non-Voter</i>				740,229	24.7
<b>TOTAL NON-VOTER</b>				<b>1,344,987</b>	<b>44.9</b>

\*“not registered” includes those who were not eligible (primarily due to age or residence) and those who were eligible but not registered. It is speculated that the majority of the individuals who were registered in 2001, not registered in 2005, and registered again in 2009 (Profiles D and E) had moved from British Columbia and later returned.

## Voting Across the Ages

More than half of the registered voters aged 50 or higher turned out to vote. This switched for younger registered voters – for every age category younger than 45, more individuals did not vote than voted, with one notable exception.

Interestingly, 18 and 19 year old newly eligible voters were more likely to vote than not. Nearly two-thirds (62%) of 18 and 19 year old registered voters cast a ballot in the 2009 general election. This may be a result of the fact that many of these newly eligible voters consciously registered to vote. Older newly eligible voters may have been automatically registered through links to the federal voters list (which in turn is maintained in part through linkages to the Canada Revenue Agency's tax records).

However, the trend reversed for those individuals with a first opportunity to vote in their twenties, with two-thirds (66%) of registered 20-24 year olds not voting. This pattern observed in the data may be an artefact of the decrease in administrative disenfranchisement. Presently a Canadian citizen may vote in a British Columbia election if they are:

- 18 years of age or older on election day,
- have been a resident of British Columbia for at least six months prior to election day,
- a resident of the electoral district,
- registered to vote (this can be done in conjunction with voting), and
- not otherwise disqualified from voting.

A number of significant changes occurred between the 2001 and 2005 general elections in the *Election Act* to increase voter eligibility. In 2003 individuals incarcerated for longer than two years were given the right to vote. In 2004 Elections BC was able to update the voter registry using the federal voters list and British Columbia became the first jurisdiction in North America to offer fully automated 24 hour a day Internet voter registration. In addition, steps were taken to improve the coverage and accuracy of the voter registration list. This may account for the increase in 2005 voter turnout.

However, it may also be a reason for the large number of newly eligible non-voters in the 20 to 24 year old age group. As noted earlier, there is the potential that many of these individuals did not self-register but instead were registered through other methods. In addition, it is assumed that there is a high proportion of transient individuals in this age group.

Not only were older individuals more likely to vote, the data show that older individuals were more likely to be *consistent* voters. Half or more of eligible voters aged 60 to 84 were classified as consistent voters, with a maximum of 74% of those registered voters between 70 and 74 years of age.

The increase in consistent voters across the ages may be a function of stage of life, rather than a result of generational differences. Social and psychological research and theory has found that individuals in their forties through sixties are more altruistic<sup>11</sup>, which suggests that as citizens enter middle adulthood they are more motivated to vote.

The decrease in consistent voters from individuals 75 years of age and older may be related to mobility and the increased cost (i.e., where cost refers to the overall cost of voting, encompassing time, effort and financial cost) of going to the polls, especially as there is a corresponding increase in the number of inconsistent non-voters aged 75 years and over.

In absolute numbers, the greatest number of voters is found in the 50-54 age category (nearly 188,000). Because of the impact of the baby boom on voter demographics, 43% of voters were between the ages of 45 and 64.

Registered voters under the age of 40 accounted for one-quarter (23%) of voters but 43% of all non-voters.

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<sup>11</sup> Erik K. Erikson describes eight stages of psychosocial development, one of which argues that as individuals enter middle adulthood they feel the need to create or nurture things that outlast them by creating a positive change that benefits other people. (From: Alalay, M. (2007). *Psychology of Crisis: An Overall Account of the Psychology of Erikson*. *Ekev Academic Review*, Fall, pp. 15-34.)



Figure 3: Voter profile, by age group - percentage of age group

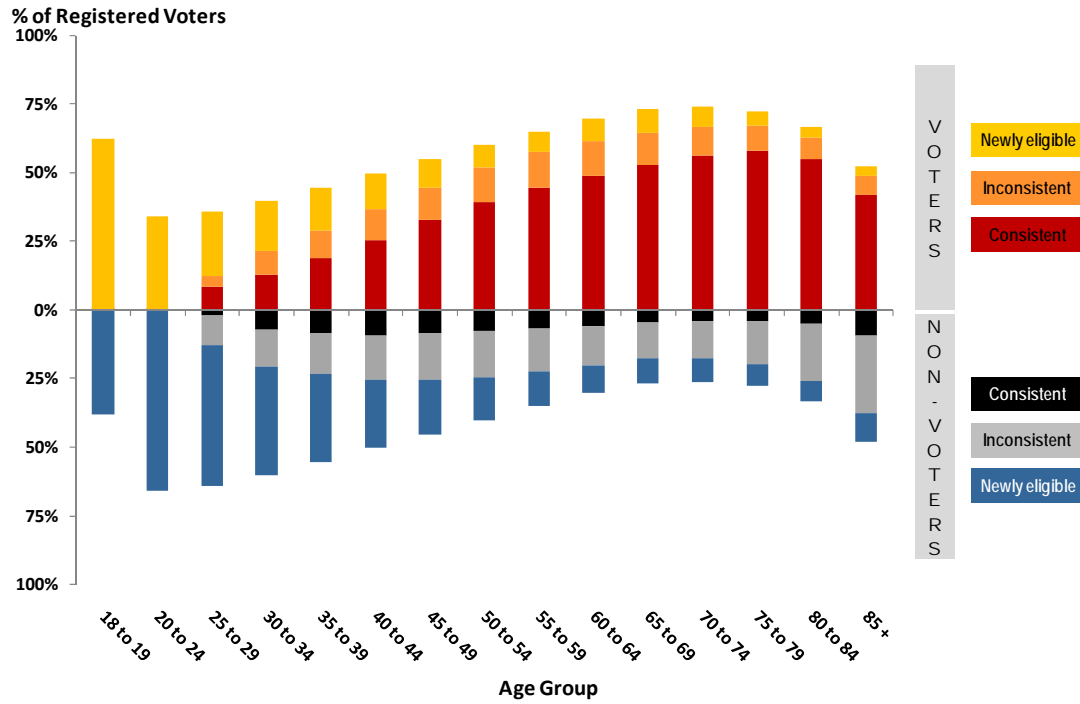
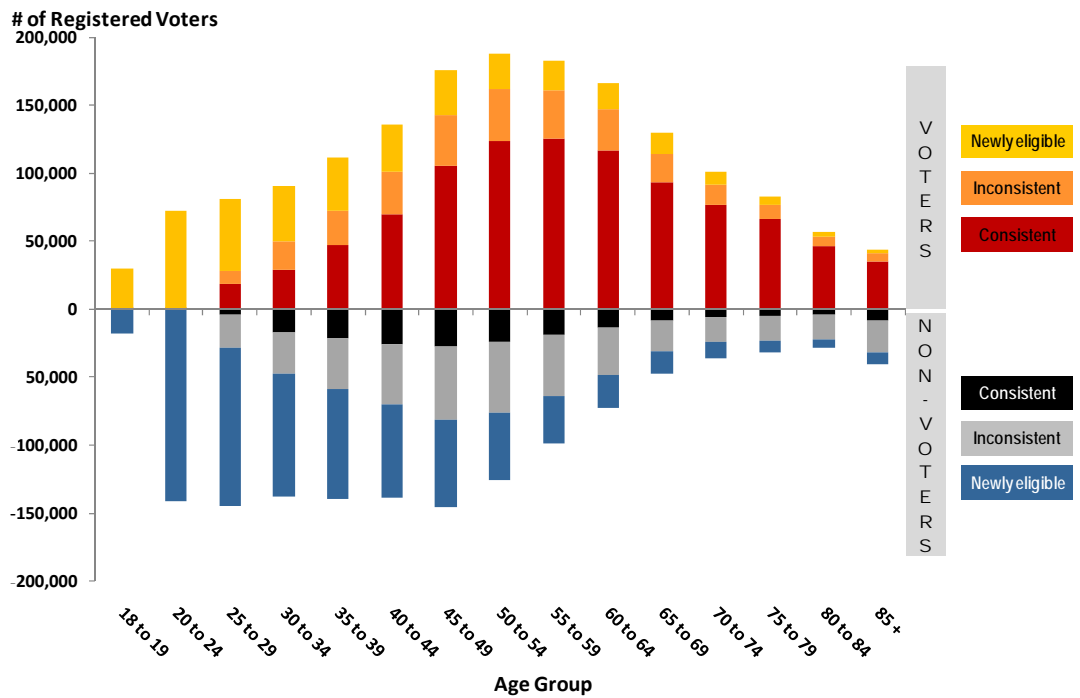


Figure 4: Voter profile, by age group - number of voters



## 4. Demographic Characteristics of Voters & Non-Voters

Previous research has identified a number of demographic characteristics associated with voting behaviour. This study was undertaken with the objective of testing earlier research, while at the same time exploring other possible explanatory variables.

Where possible, demographic variables were selected for analysis based on findings from both the 1997 Canadian Election Study and the 2009 British Columbia Voter/Non-voter Satisfaction Survey.<sup>12</sup> Individual voter turnout records from the 2009 provincial election were joined with demographic information at the neighbourhood<sup>13</sup> level.

This was then used to create a table containing the demographic characteristics of the province's 649 Census Tracts, and the proportion of voters in each of the five major voting typologies. Regression analysis was then applied to determine which of the demographic characteristics of the neighbourhood best predicted voting behaviour.<sup>14</sup>

### What influences voting behaviour?

Based on this analysis, eight factors were found to significantly predict voter turnout.<sup>15</sup>

This study corroborates previous findings regarding voter turnout<sup>16</sup>. It was found that neighbourhoods<sup>17</sup> that were most likely to vote had:

- higher median income,
- larger proportions of older individuals, and
- a greater proportion of university educated citizens.

Neighbourhoods with lower turnout rates had:

- higher proportions of individuals moving into the neighbourhood from other parts of B.C. or Canada,
- greater proportions of recent immigrants to Canada,
- a higher unemployment rate, and
- a larger fraction of the population not in the workforce and with children at home.

<sup>12</sup> See Appendix C for the full list of variables included in this study, as well as how they relate to the 1997 Canadian Election Survey variables.

<sup>13</sup> The neighbourhood level refers to a census tract as the unit of analysis, or where census tracts do not exist, a census sub-division as the unit of analysis.

<sup>14</sup> See Appendix A for details surrounding the research methodology and the numerical results of the regression analysis.

<sup>15</sup> It is important to note that there are relationships – sometimes strong relationships – between the different demographic factors that were analyzed. The interrelationships between the demographic characteristics in the model can be found in Appendix B.

<sup>16</sup> Coulson, T. (1999). Voter Turnout in Canada: The Findings from the 1997 Canadian Election Study. *Electoral Insight*, November, pp. 18-21.

<sup>17</sup> Defined for the purposes of this study as a Census Tract within a Census Metropolitan Area.

In addition, this study also identified that the more competitive the campaign race in an electoral district, the higher the voter turnout for the neighbourhoods falling within that electoral district.

**Table 3: Correlations between voter turnout and demographic variables in the model (Pearson correlation score, -1 to 1)**

Demographic variable	Correlation with Percentage of population who voted in 2009 by all of those eligible to vote
Median 2005 after tax income	0.706
Average age of population per census tract	0.283
Percentage of population who moved into census tract from elsewhere in BC or Canada between 2001 and 2006	-0.114
Percentage of population who moved into census tract from outside Canada between 2001 and 2006	-0.394
Percentage of private households with children at home and not in the labour force	-0.441
2009 election - closeness of electoral race	0.208
Unemployment rate	-0.451
Percentage of population over 15 with completed university education (including degrees, certificates and diplomas)	0.208

\*\* Correlations are significant at the 0.01 level (2-tailed).

### The influences vary by voting profiles

The next step in the analysis was to examine the relationship between these demographic factors and the different voter types.

Income remained the single biggest predictor of the proportion of three of the four voting profiles. The other demographic characteristics, notably the age of the neighbourhood and the proportion of internal migrants, were the next biggest predictors.

Interestingly, voter turnout was poorly predicted for inconsistent voters, a group comprising 15% of the populace eligible in the 2009 election. Income does not play a role for predicting voter turnout, but instead age, the proportion of internal migrants, and the competitiveness of the campaign race were the three factors that significantly influenced voting behaviour among these individuals across the province.

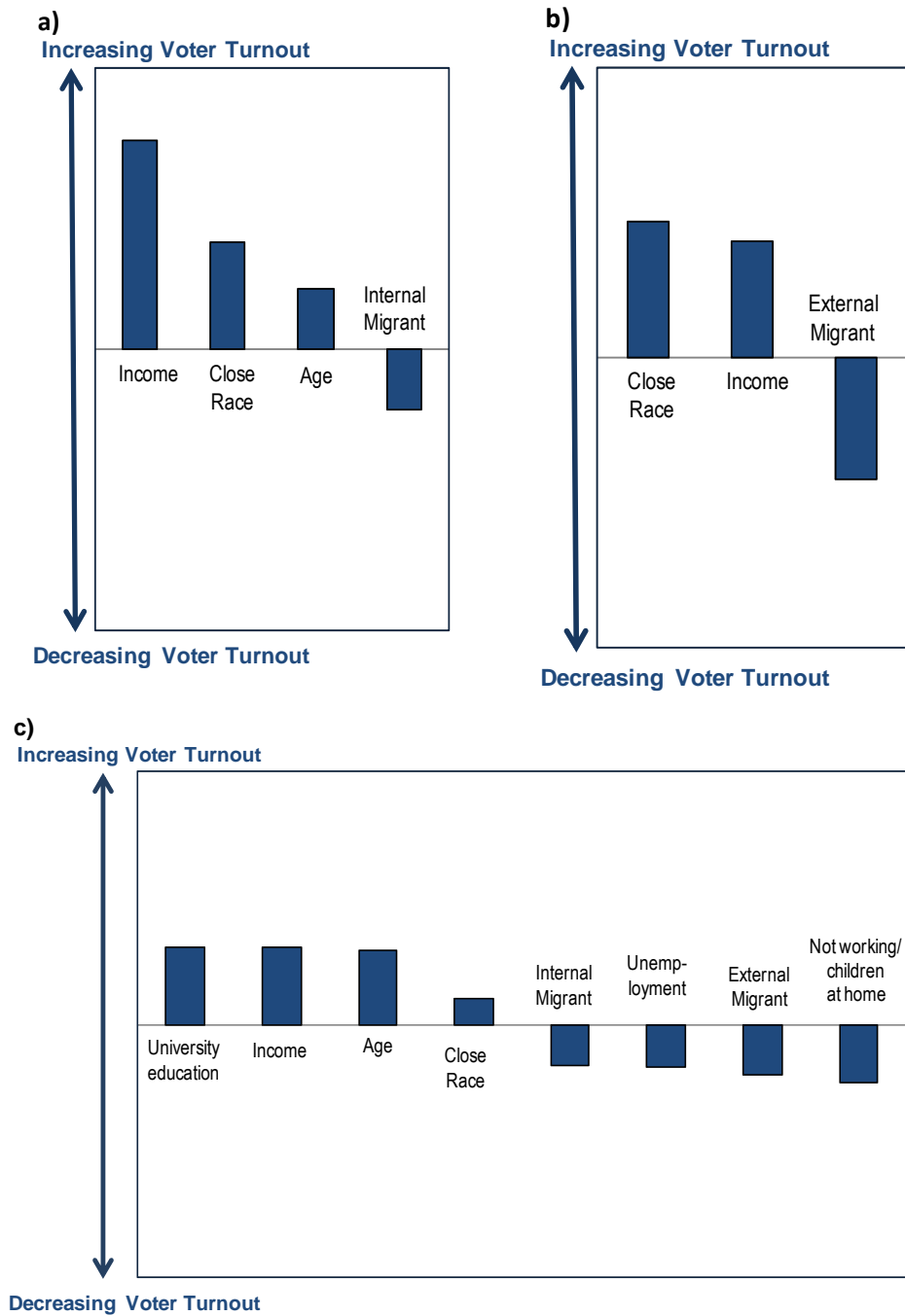
## Incumbents change the picture

Voting behaviour was greatly influenced by the presence of an incumbent running for re-election. When there was no incumbent running for re-election voter turnout could be explained by four factors: median income, closeness of the candidacy race, average age and the rate of internal migration within the neighbourhood.

A slightly different story unfolded when an incumbent was running for re-election but was not the successful candidate; in this case three factors (close race, income, and immigrant population) predicted voter turnout.

In the more common event of an incumbent being re-elected, the factors predicting voter turnout were aligned with the factors predicting overall voter turnout. Figure 5 illustrates the relationship between the demographic factors and their influence on voter turnout.

Figure 5. Factors influencing voter turnout when a) no incumbent ran for re-election; b) an incumbent ran for re-election, but was not re-elected; and c) the incumbent was re-elected<sup>18</sup>.



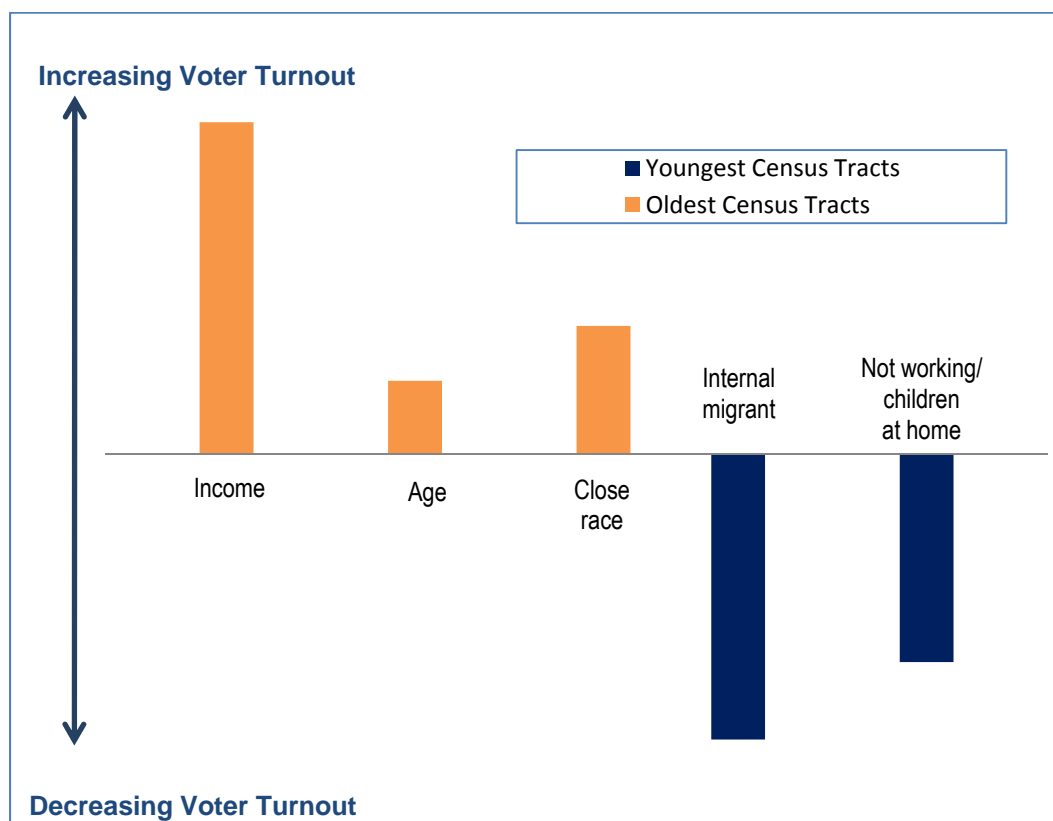
<sup>18</sup> Standardized Beta Coefficients for these Figures are included in Appendix A.

## Impact of age on what influences voting behaviour

In order to deconstruct voting behaviour based on age, census tracts were grouped into three categories: those with the oldest average ages<sup>19</sup>, the youngest average ages<sup>20</sup>, and those in between.

In older census tracts, as income, age, and the closeness of the race increased there was a greater likelihood that the population of the census tract would vote. For younger census tracts increasing proportions of recent internal migrants and non-working families were correlated with increased voter turnout.

Figure 6. Factors influencing voter turnout in oldest and youngest Census Tracts<sup>21</sup>



<sup>19</sup> Oldest average age refers to those census tracts that fell into the top 10 percentile for average age.

<sup>20</sup> Youngest average age refers to those census tracts that fell into the bottom 10 percentile for average age.

<sup>21</sup> Standardized Beta Coefficients for Figure 6 are included in Appendix A.

## Impact of immigration on what influences voting behaviour

Census tracts were categorized based on the ratio of new immigrants to the existing immigrant population. A high<sup>22</sup> ratio corresponds to a fast growing immigrant population. A low ratio is indicative of either an established immigrant population or a population with only a few recent immigrants.

For neighbourhoods with growing immigrant populations the likelihood of **not** voting increased within census tracts with lower incomes and an influx of recent arrivals (i.e., people who have moved into the census tract) from both inside and outside Canada.

In those Census tracts where the immigrant population was growing slowly, the two most meaningful relationships with voter turnout were income and average age – as those two demographic characteristics increased, so too did voter turnout.

**Table 4: Demographic variables with meaningful relationship with voter turnout, by fast growing and slow growing immigrant populations**

Demographic variable	Variables correlated with voter turnout by type of Census Tract	
	Fast growing immigrant population	Slow growing immigrant population
Median 2005 after tax income	✓	✓
Average age of population per census tract		✓
Percentage of population who moved into census tract from elsewhere in BC or Canada between 2001 and 2006	✓	
Percentage of population who moved into census tract from outside Canada between 2001 and 2006	✓	

Proportion of recent immigrants as % of total immigrant population. “Fast growing immigrant population” where  $\geq 30\%$  of immigrants are recent arrivals in Canada. “Slow growing immigrant populations” are where  $< 30\%$  of immigrants are recent arrivals in Canada.

<sup>22</sup> A high ratio refers to census tracts where  $\geq 30\%$  of recent immigrants comprised the total immigrant population. 30% was chosen as a cut-off as it is the average proportion of recent immigrants to the total immigrant population.

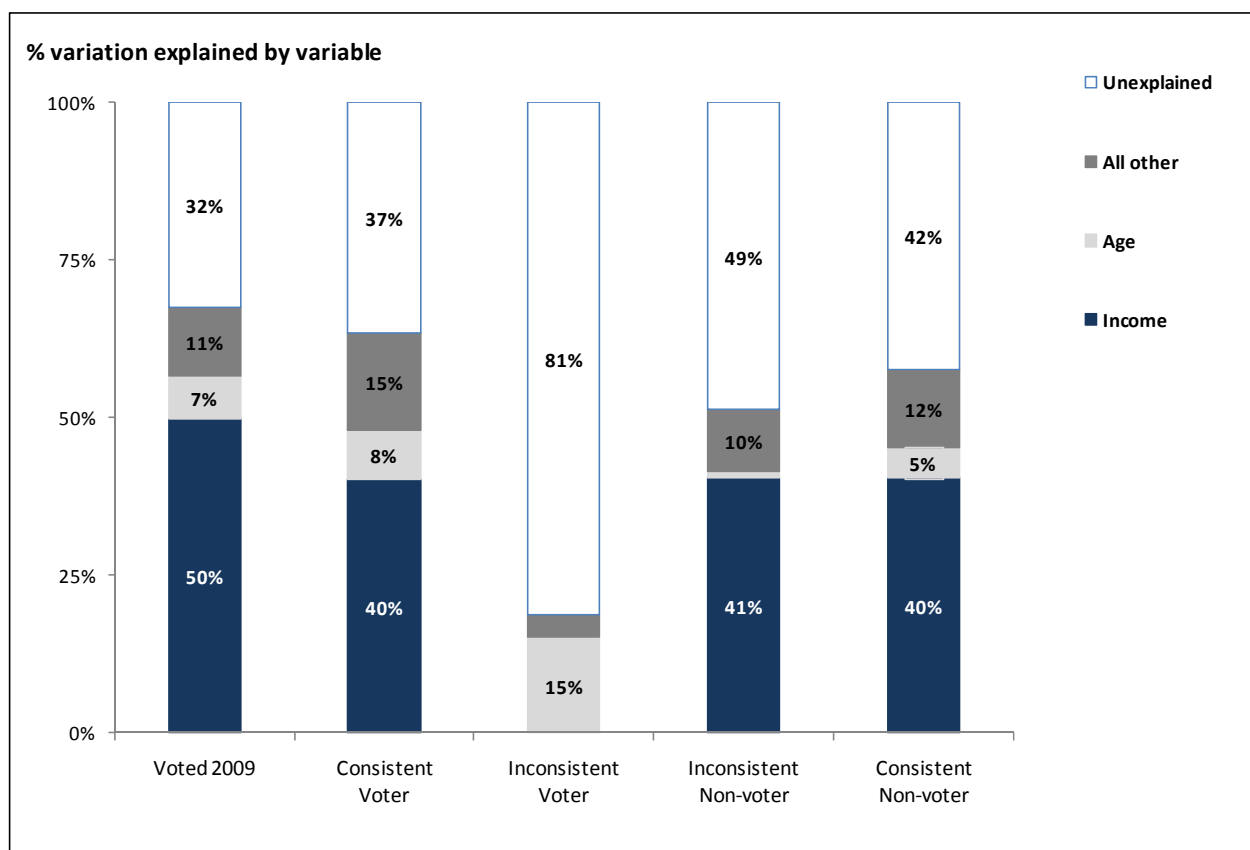
## Different factors influence the different voter profiles

As noted earlier, registered voters were grouped into different profiles based on their previous voting behaviour. The socio-demographic characteristics of these profile groups were examined to determine what factors predict voting behaviour.

As shown in Figure 7, three of the four profile groups tested were very similar to the overall model. That is, income remained far and away the strongest single predictor of voting behaviour, with the other factors having smaller influences.

For inconsistent voters, however, very little of the variation in the proportion of inconsistent voters in each census tract was explained by the variables that were tested. Age was the strongest (that is, census tracts with the higher average ages had higher turnout) but only explained 15% of the variation.

**Figure 7: Variance in voter turnout explained by various demographic characteristics, by voting profile**





## 5. Conclusions

While voter turnout varied significantly across British Columbia, it was also associated with a number of demographic characteristics.

Using information on neighbourhood characteristics, this analysis has established that higher turnout rates were associated with:

- higher median income,
- larger proportions of older individuals, and
- a greater proportion of university educated citizens.

Lower turnout rates were associated with:

- higher proportions of individuals moving into the neighbourhood from other parts of B.C. or Canada,
- greater proportions of recent immigrants to Canada,
- a higher unemployment rate, and
- a larger fraction of the population not in the workforce and with children at home.

A close electoral race was also associated with higher voter turnout.

The age of the voter played a significant role in their voting behaviour. Older voters, peaking at age 70-74, had higher turnout rates, and greater proportions of consistent voters, than their younger counterparts.

Many of these findings present a paradox – since the 1960s, when declining turnout rates were first noted, the population of British Columbia is on average older, and with a greater proportion possessing a university education. In addition, there are fewer families with children and more of those have both parents or the parent in single parent families in the workforce. Furthermore, in 2009, unemployment rates in B.C. were at record-low levels compared to other years when an election was held.

The conclusion to be drawn is that although socio-demographic factors explain the differences in turnout in a single election, they do not explain the long-term trend of declining turnout rates.

# APPENDICES

## 6. Appendix A: Methodology and Regression Tables

An assessment of the demographic attributes, or factors, that were the most influential determinants of voter turnout is provided in this report.

The first step was to correlate voter turnout at the census tract level with a variety of demographic variables. These variables are described in greater detail in Appendix C.

### Multiple regression

Multiple regression is a statistical technique that permits one to assess which of the factors “really matter” when it comes to influencing voter turnout. Some of the factors will be more important than others in predicting voting behaviour. This is not to say that the other factors are not important – but rather that there are other factors that better explain the variation in voter turnout.

The correlation matrix (Table 5) shows the strength of the relationship between all of the variables that were in the model. As is clear, there are strong relationships between the demographic variables – for example, education and income. The first column shows the strength of the relationship between voter turnout and the demographic variables; the remaining columns show the strength of the relationships within the demographic variables.

As can be seen, the median income of the Census Tract has the strongest correlation with voter turnout in the Census Tract, but income is also inversely correlated with the unemployment rate. (The inverse relationship is shown by the “-” sign in front of the Pearson correlation score, indicating that as the unemployment rate increases, the median income falls.)

The multiple regression method takes into consideration all of the relationships, and controls for the inter-relationships when explaining voter turnout. In this way, although income and unemployment rates are each correlated with voter turnout, combining the two provides a better predictor than either one alone.

The inverse of this is that some variables are not “in the model” because they either have little or no correlation with voter turnout, or they are strongly correlated with other variables that are already included in the model and therefore add no additional improvement in the explanation of voter turnout.

**Table 5: Correlations between variables in the model (Pearson correlation score, -1 to 1)**

	Percentage of population who voted in 2009 by all of those eligible to vote	Median 2005 after tax income	Average age of population per census tract	Percentage of population who moved into census tract from elsewhere in BC or Canada between 2001 and 2006	Percentage of population who moved into census tract from outside Canada between 2001 and 2006	Percentage of private households with children at home and not in the labour force	2009 - closeness of electoral race; larger the number the more competitive the race	Unemployment rate	Percentage of population over 15 with completed university education (including degrees, certificates and diplomas)
Percentage of population who voted in 2009 by all of those eligible to vote	—								
Median 2005 after tax income	.706(**)	—							
Average age of population per census tract	.283(**)	.039	—						
Percentage of population who moved into census tract from elsewhere in BC or Canada between 2001 and 2006	-.114(**)	.092(*)	.023	—					
Percentage of population who moved into census tract from outside Canada between 2001 and 2006	-.394(**)	-.336(**)	-.156(**)	-.157(**)	—				
Percentage of private households with children at home and not in the labour force	-.441(**)	-.479(**)	.067	-.165(**)	.517(**)	—			
2009 - closeness of electoral race; larger the number the more competitive the race	.208(**)	.099(*)	-.012	.104(**)	-.142(**)	-.121(**)	—		
Unemployment rate	-.451(**)	-.553(**)	-.003	-.066	.167(**)	.318(**)	-.044	—	
Percentage of population over 15 with completed university education (including degrees, certificates and diplomas)	.208(**)	.325(**)	-.021	-.190(**)	.545(**)	.269(**)	-.066	-.181(**)	—

\*\* Correlation is significant at the 0.01 level (2-tailed).

\* Correlation is significant at the 0.05 level (2-tailed).

The modeling process works by starting with the strongest correlation, and then adding additional demographic variables to improve the “R Square” (or “R<sup>2</sup>”) value. Each regression model is accompanied by an adjusted R<sup>2</sup> value. This correlation coefficient, also known as the “best fit figure”, indicates how much of the variance in voter turnout is explained by the factors included in the model. That is, the higher this number, the stronger the model, meaning the right factors are being included.

**Table 6: Model summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.706(a)	.499	.498	.05473
2	.753(b)	.567	.566	.05090
3	.771(c)	.595	.593	.04929
4	.793(d)	.629	.627	.04719
5	.806(e)	.650	.648	.04584
6	.812(f)	.660	.656	.04527
7	.815(g)	.664	.660	.04501
8	.824(h)	.679	.675	.04401

Dependent Variable: Percentage of population who voted in 2009 by all of those eligible to vote

Model 1 Predictors: (Constant), Median 2005 after tax income

Model 2 Predictors: (Constant), Median 2005 after tax income, Average age of population per census tract

Model 3 Predictors: (Constant), Median 2005 after tax income, Average age of population per census tract, Percentage of population who moved into census tract from elsewhere in BC or Canada between 2001 and 2006

Model 4 Predictors: (Constant), Median 2005 after tax income, Average age of population per census tract, Percentage of population who moved into census tract from elsewhere in BC or Canada between 2001 and 2006, Percentage of private households with children at home and not in the labour force

Model 5 Predictors: (Constant), Median 2005 after tax income, Average age of population per census tract, Percentage of population who moved into census tract from elsewhere in BC or Canada between 2001 and 2006, Percentage of private households with children at home and not in the labour force, 2009 - closeness of electoral race; larger the number the more competitive the race (1-lopsidedrace09)

Model 6 Predictors: (Constant), Median 2005 after tax income, Average age of population per census tract, Percentage of population who moved into census tract from elsewhere in BC or Canada between 2001 and 2006, Percentage of private households with children at home and not in the labour force, 2009 - closeness of electoral race; larger the number the more competitive the race (1-lopsidedrace09), Unemployment rate

Model 7 Predictors: (Constant), Median 2005 after tax income, Average age of population per census tract, Percentage of population who moved into census tract from elsewhere in BC or Canada between 2001 and 2006, Percentage of private households with children at home and not in the labour force, 2009 - closeness of electoral race; larger the number the more competitive the race (1-lopsidedrace09), Unemployment rate, Percentage of population who moved into census tract from outside Canada between 2001 and 2006

Model 8 Predictors: (Constant), Median 2005 after tax income, Average age of population per census tract, Percentage of population who moved into census tract from elsewhere in BC or Canada between 2001 and 2006, Percentage of private households with children at home and not in the labour force, 2009 - closeness of electoral race; larger the number the more competitive the race (1-lopsidedrace09), Unemployment rate, Percentage of population who moved into census tract from outside Canada between 2001 and 2006, Percentage of population over 15 with completed university education (including degrees, certificates and diplomas)

**Table 7: Model 8 (Final Model) Beta Coefficients**

	Standardized Beta Coefficient
Percentage of population who voted in 2009 by all of those eligible to vote	
Median 2005 after tax income	.398
Average age of population per census tract	.268
Percentage of population who moved into census tract from elsewhere in BC or Canada between 2001 and 2006	-.191
Percentage of population who moved into census tract from outside Canada between 2001 and 2006	-.213
Percentage of private households with children at home and not in the labour force	.143
2009 - closeness of electoral race; larger the number the more competitive the race	-.109
Unemployment rate	-.207
Percentage of population over 15 with completed university education (including degrees, certificates and diplomas)	.208

## Additional Regression Models: Demographic Characteristics of Voters & Non-Voters

	Standardized Beta Coefficient
<b>No Incumbent Ran for Re-election</b>	
Median 2005 after tax income	0.741
2009 - closeness of electoral race; larger the number the more competitive the race (1-lopsidedrace09)	0.380
Average age of population per census tract	0.212
Percentage of population who moved into census tract from elsewhere in BC or Canada between 2001 and 2006	-0.213

	Standardized Beta Coefficient
<b>An Incumbent Ran for Re-election, but was not Re-elected</b>	
2009 - closeness of electoral race; larger the number the more competitive the race (1-lopsidedrace09)	0.468
Median 2005 after tax income	0.402
Percentage of population who moved into census tract from outside Canada between 2001 and 2006	-0.420

	Standardized Beta Coefficient
<b>The Incumbent was Re-elected</b>	
Percentage of population over 15 with completed university education (including degrees, certificates and diplomas)	0.308
Median 2005 after tax income	0.307
Average age of population per census tract	0.295
2009 - closeness of electoral race; larger the number the more competitive the race (1-lopsidedrace09)	0.104
Percentage of population who moved into census tract from elsewhere in BC or Canada between 2001 and 2006	-0.162
Unemployment rate	-0.170
Percentage of population who moved into census tract from outside Canada between 2001 and 2006	-0.197
Percentage of private households with children at home and not in the labour force	-0.233

	Standardized Beta Coefficient
<b>Overall (All Census Tracts)</b>	
Median 2005 after tax income	0.398
Average age of population per census tract	0.268
2009 - closeness of electoral race; larger the number the more competitive the race (1-lopsidedrace09)	0.143
Percentage of population who moved into census tract from elsewhere in BC or Canada between 2001 and 2006	-0.191
Percentage of private households with children at home and not in the labour force	-0.213
<b>Youngest Census Tracts</b>	
Percentage of population who moved into census tract from elsewhere in BC or Canada between 2001 and 2006	-0.682
Percentage of private households with children at home and not in the labour force	-0.497
<b>Oldest Census Tracts</b>	
Median 2005 after tax income	0.791
Average age of population per census tract	0.174
2009 - closeness of electoral race; larger the number the more competitive the race (1-lopsidedrace09)	0.305



## 7. Appendix B: Variables Tested in the Model

Descriptions of each variable can be found in Appendix C.

### Primary Model

Indicator Variable	Detailed Description of Indicator Variable	In model?	Similar to CES?	In CES model?
Income	Median 2005 after-tax income	✓	✓	✓
Low Income	Prevalence of low income in 2005 after-tax (as a percentage) in private households			
Age	Average age of neighbourhood (either census tract or census sub-division) based on age of individual as of May 12, 2009	✓	✓	✓
Recent Internal Migrant	Proportion of population who moved into neighbourhood from elsewhere in BC or Canada between 2001 and 2006	✓		
New Internal Migrant	Proportion of population who moved into neighbourhood from elsewhere in BC or Canada one year prior to census day (May 16, 2006)			
Population Change	Population percent change 2001 to 2006			
Recent External Migrant	Proportion of population who moved into neighbourhood from outside of Canada between 2001 and 2006	✓	✓	✓
New External Migrant	Proportion of population who moved into neighbourhood from outside of Canada one year prior to census day (May 16, 2006)			
1 <sup>st</sup> Generation	Proportion of total neighbourhood population 15 years and over who is first generation Canadian			
2 <sup>nd</sup> Generation	Proportion of total neighbourhood population 15 years and over who is second generation Canadian			
3 <sup>rd</sup> Generation or more	Proportion of total neighbourhood population 15 years and over who is third generation or more Canadian			
Visible Minority	Proportion of visible minorities within the population			

Indicator Variable	Detailed Description of Indicator Variable	In model?	Similar to CES?	In CES model?
Not Working with Child(ren) at Home	Proportion of private households with child(ren) at home and not in the labour force, by population of private households with children at home	✓		
Employed with Child(ren) at Home	Proportion of employed labour force with child(ren) at home within private households, by population of private households with child(ren) at home			
Employed with <6 year Child(ren) at Home	Proportion of employed labour force with child(ren) under six years of age at home within private households, by population of private households with child(ren) under six years of age at home			
Employed with both >6 and <6 year Child(ren) at Home	Proportion of employed labour force with child(ren) both over and under six years of age at home within private households, by population of private households with child(ren) both over and under six years of age at home			
Employed with >6 year Child(ren) at Home	Proportion of employed labour force with child(ren) over six years of age at home within private households, by population of private households with child(ren) over six years of age at home			
Child(ren)	Average number of children at home per census family			
Closeness of Race	Closeness of electoral race (for 2009, 2005 and/or 2001, depending on the analysis); the difference between the percentage of popular vote for the winning candidate and second place candidate	✓	✓	
Unemployment	Unemployment rate of the population 15 years and over who are in the labour force	✓	✓	
Participation	Participation rate of the population 15 years and over who are in the labour force			
University Education	Proportion of total neighbourhood population 15 years and over who has graduated University with a degree, diploma or certificate.	✓	✓	✓
More than High School Education	Proportion of total neighbourhood population 15 years and over who has an Apprenticeship, Trades, College, CEGEP, non-University or University degree, diploma or certificate			

Indicator Variable	Detailed Description of Indicator Variable	In model?	Similar to CES?	In CES model?
Less than High School Education	Proportion of total neighbourhood population 15 years and over who does not have a high school certificate or equivalent (if an individual does not have a high school certificate but has completed a higher level education, they are included in the higher level education category)			
Marginal Occupation	Proportion of the population with an occupation that is working in a marginal occupation (see glossary for list of marginal occupations)			

## Secondary Analysis

To deconstruct voting behaviour further, the regression analysis was re-run based on selected criteria:

VARIABLE	GROUPING	CATEGORIES
Age	Grouped into percentiles, selecting for the top and bottom 10 <sup>th</sup> percentiles.	<ul style="list-style-type: none"> <li>• Younger Neighbourhoods</li> <li>• Older Neighbourhoods</li> </ul>
Immigrant Ratio	Grouped based on the proportions of the recent immigrant population, total immigrant population and total population of a neighbourhood	<ul style="list-style-type: none"> <li>• Small Immigrant Population</li> <li>• Growing Immigrant Population</li> <li>• Established Immigrant Population</li> </ul>
Incumbent	Grouped based on the presence of an incumbent and whether or not the incumbent was re-elected	<ul style="list-style-type: none"> <li>• No Incumbent</li> <li>• Incumbent Not Elected</li> <li>• Incumbent Elected</li> </ul>
Population Density	Grouped into 25 percentile rankings, using neighbourhood population divided by neighbourhood land area in square kilometres	<ul style="list-style-type: none"> <li>• Least Densely Populated</li> <li>• Less Densely Populated</li> <li>• More Densely Populated</li> <li>• Most Densely Populated</li> </ul>

## 8. Appendix C: Glossary<sup>23</sup>

**After-tax Income:** refers to total income minus federal, provincial and territorial income taxes paid for calendar year 2005. Total income refers to income from all sources, including employment income, income from government programs, pension income, investment income and any other income. Federal and provincial taxes paid refer to taxes on income, after taking into account exemptions, deductions and non-refundable tax credits. These taxes are obtained from the income tax files for persons who allowed access to their income tax data and from direct responses to the 2006 Statistics Canada Census questionnaire for others. The after-tax income of a household is the sum of the after-tax incomes of all members of that household.

**Children:** refers to blood, step- or adopted sons and daughters (regardless of age) who are living in the same dwelling as their parent(s), as well as to grandchildren in households where there are no parents present. Sons and daughters who are living with their spouse or common-law partner, or with one or more of their own sons and/or daughters, are not considered to be members of the census family of their parent(s), even if they are living in the same dwelling. In addition, sons and daughters who do not live in the same dwelling as their parent(s) are not considered members of the census family of their parent(s).

### **Education:**

A. Less than High School refers to a person who does not hold a secondary (high) school graduation certificate or equivalent, classified as junior or senior matriculation, general or technical-commercial.

B. Other trades certificates or diplomas such as pre-employment or vocational certificates and diplomas are brief programs completed at community colleges, institutes of technology, and similar institutions.

C. A journeyman's or journeyperson's certificate in the trades is obtained through successful completion of the examinations for a Certificate of Qualification (COQ). Candidates for the exam must have several years of work experience in the trade or have received their registered apprenticeship certificate through a combination of on-the-job training and in-school training.

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<sup>23</sup> Definitions are taken from "Statistics Canada, 2010, 2006 Census Dictionary, Catalogue No. 92-566-X, 519pp.

D. College, CEGEP and other non-university certificates or diplomas are obtained from: a community college; a CEGEP (both general and professional); an institute of technology; a school of nursing; a private business school; a private or public trade school; or a vocational school. Included in this category are teaching and nursing certificates awarded by provincial departments of education, with the exception of teachers' or nurses qualifications at the bachelor level or above obtained at university-affiliated faculties of education or nursing. College certificates or diplomas of two years or more usually have a minimum entrance requirement of secondary (high) school matriculation or its equivalent.

E. University certificates or diplomas are commonly connected with professional associations in fields such as accounting, banking, insurance or public administration. If a bachelor's degree is a normal prerequisite for a university certificate or diploma course, as may occur with teaching certificates, then the latter is classified as a university certificate above the bachelor level.

F. University degrees are obtained through degree-granting institutions.

**External Migrant:** Census division or residence 5 years ago: County, regional county, municipality, regional district, etc., where the enumerated person lived on May 16, 2001, five years before Census Day.

Component of migration: People who moved from one city or town to another in Canada between May 16, 2001 and May 16, 2006 are 'internal migrants'. People who came from another country between May 16, 2001 and May 16, 2006, to live in Canada, are 'external migrants'. The components of migration divide 'migrants' into three categories based on whether:

- they lived in the same province on May 16, 2006, as they did on May 16, 2001 (intraprovincial migrants),
- they lived in a different province on May 16, 2006, from the one they lived in on May 16, 2001,
- interprovincial migrants, and
- they lived outside Canada on May 16, 2001, five years before Census Day (external migrants).

## **Generation Status:**

**1<sup>st</sup> Generation:** Persons born outside Canada. For the most part, these are people who are now, or have ever been, landed immigrants in Canada. Also included in the first generation are a small number of people born outside Canada to parents who are Canadian citizens by birth. In addition, the first generation includes people who are non-permanent residents (defined as people from another country in Canada on Work or Study Permits or as refugee claimants, and any family members living with them in Canada).

**2<sup>nd</sup> Generation:** Persons born inside Canada with at least one parent born outside Canada. This includes (a) persons born in Canada with both parents born outside Canada and (b) persons born in Canada with one parent born in Canada and one parent born outside Canada (these persons may have grandparents born inside or outside Canada as well).

**3<sup>rd</sup> Generation or More:** Persons born inside Canada with both parents born inside Canada (these persons may have grandparents born inside or outside Canada as well).

**Household:** Refers to a person or a group of persons (other than foreign residents) who occupy the same dwelling and do not have a usual place of residence elsewhere in Canada. It may consist of a family group (census family) with or without other persons, of two or more families sharing a dwelling, of a group of unrelated persons, or of one person living alone. Household members who are temporarily absent on Census Day (e.g., temporary residents elsewhere) are considered as part of their usual household. For census purposes, every person is a member of one and only one household. Unless otherwise specified, all data in household reports are for private households only. A private household refers to a person or a group of persons (other than foreign residents) who occupy a private dwelling and do not have a usual place of residence elsewhere in Canada.

**Immigrant Population:** Refers to people who are, or have been, landed immigrants in Canada. A landed immigrant is a person who has been granted the right to live in Canada permanently by immigration authorities. Some immigrants have resided in Canada for a number of years, while others have arrived recently.

**Immigrant ratio:** the proportion of immigrants who arrived in Canada between 1996 to 2006 arrival in the total immigrant population per census tract. The average census tract has a ratio of .27 recent immigrants to the total population so .30 was used as the threshold to determine census tracts with high or low ratios. Those with  $>.30$  were considered growing immigrant populations. Those with a ratio of  $\leq .30$  were examined to determine if they could be categorized as an established immigrant population (i.e., the number of total immigrants to total census tract population is high and therefore producing a low ratio even though many immigrants are settling in that census tract) versus a census tract with a small immigrant population (i.e., very few recent immigrants settling into that census tract). Percentile rankings were used to determine census tracts with large or small immigrant populations; those census tracts with an immigrant population comprising 25% or less (i.e., ranked in the bottom 50<sup>th</sup> percentile) of the total population were considered to have a small immigrant population. Comparatively, those census tracts with more than 25% of the total population comprising the immigrant population were considered to have large immigrant populations. For instance, a census tract to be categorized as having a “small immigrant population” 30% or less of recent immigrants would comprise the total number of immigrants, which in turn would be 25% or less of the total census tract population. Conversely, an “established immigrant population” is a census tract where more than 30% of recent immigrants make up the total immigrant population, which in turn comprises more than 25% of the total census tract population.

**Internal Migrant:** Census division or residence 1 year ago: County, regional county municipality, regional district, etc., where the enumerated person lived on May 16, 2005, one year before Census Day.

Component of migration: People who moved from one city or town to another in Canada between May 16, 2005 and May 16, 2006 are ‘internal migrants’. People who came from another country between May 16, 2005 and May 16, 2006, to live in Canada, are ‘external migrants’. The components of migration divide ‘migrants’ into three categories based on whether:

- they lived in the same province on May 16, 2006, as they did on May 16, 2005 (intraprovincial migrants),
- they lived in a different province on May 16, 2006, from the one they lived in on May 16, 2005,
- interprovincial migrants, and
- they lived outside Canada on May 16, 2005, one year before Census Day (external migrants).

**Labour force activity:** Refers to the labour market activity of the population 15 years of age and over in the week (Sunday to Saturday) prior to Census Day (May 16, 2006). Respondents were classified as Employed, Unemployed, or Not in the labour force. The labour force includes the employed and the unemployed. Refers to the labour force in the week (Sunday to Saturday) prior to Census Day (May 16, 2006), expressed as a percentage of the population 15 years of age and over.

**Participation rate:** Reported for the population 15 years of age and over (excluding institutional residents). The participation rate for a particular group (age, sex, marital status, geographic area, etc.) is the total labour force in that group, expressed as a percentage of the population 15 years of age and over, in that group.

**Not in the labour force:** Refers to persons who, in the week (Sunday to Saturday) prior to Census Day (May 16, 2006), were neither employed nor unemployed. It includes students, homemakers, retired workers, seasonal workers in an 'off' season who were not looking for work, and persons who could not work because of a long-term illness or disability.

**Unemployment rate:** Refers to the unemployed expressed as a percentage of the labour force in the week (Sunday to Saturday) prior to Census Day (May 16, 2006). The unemployment rate for a particular group (age, sex, marital status, geographic area, etc.) is the unemployed in that group, expressed as a percentage of the labour force in that group, in the week prior to enumeration.

**Occupation:** Refers to the kind of work persons were doing during the reference week, as determined by their kind of work and the description of the main activities in their job. If the person did not have a job during the week (Sunday to Saturday) prior to enumeration (May 16, 2006), the data relate to the job of longest duration since January 1, 2005. Persons with two or more jobs were to report the information for the job at which they worked the most hours. Reported for the population 15 years of age and over, excluding institutional residents, who worked since January 1, 2005.



**Marginal Occupation:** refers to a person who is employed in one or more of the following occupations (naming convention follows the National Occupation Classification for Statistics 2006):

- B1 Finance and insurance administration occupations
- B2 Secretaries
- B3 Administrative and regulatory occupations
- B5 Clerical occupations
- D3 Assisting occupations in support of health services
- G2 Retail salespersons and sales clerks
- G3 Cashiers
- G5 Occupations in food and beverage service
- G7 Occupations in travel and accommodation, including attendants in recreation and sport
- H8 Trades helpers, construction and transportation labourers and related occupations
- I2 Primary production labourers
- J2 Assemblers in manufacturing
- J3 Labourers in processing, manufacturing and utilities

**Visible minority:** refers to the visible minority group to which the respondent belongs. The *Employment Equity Act* defines visible minorities as ‘persons, other than Aboriginal peoples, who are non-Caucasian in race or non-white in colour’.

## 9. Appendix D: Census Metropolitan Areas and Census Areas

Table 8: Census Metropolitan Area and Census Area population, 2009

CMA ID	CMA/CA	POPULATION*	% of B.C. POPULATION
915	Kelowna, CMA	184,375	4%
925	Kamloops, CA	100,364	2%
930	Chilliwack, CA	88,890	2%
932	Abbotsford, CMA	173,133	4%
933	Vancouver, CMA	2,318,526	52%
935	Victoria, CMA	351,314	8%
938	Nanaimo, CA	98,771	2%
970	Prince George, CA	86,301	2%
	Sub Total	3,401,674	76%
	Other B.C.	1,053,533	24%
	TOTAL B.C.	4,455,207	100%

\*Estimate July 1, 2009 – BC Stats

If you have any questions  
about the information in this report,  
please contact  
BC Stats.  
250-356-0025

