Childhood Poverty in West Vancouver: Fact or Fiction?

A Discussion Paper by

Ralph Sultan, MLA

Examining the correlates of low-income families with children in British Columbia, and the suggestion that West Vancouver has one of the highest childhood poverty rates in Canada … and perhaps in most of the industrialized world.

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A Discussion Paper
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Executive Summary

- Critics report that West Vancouver has one of the highest childhood poverty rates in British Columbia, that British Columbia itself has the highest childhood poverty rate in Canada, and that Canada has almost the highest childhood poverty rate of any industrialized nation.
- Since my constituents could therefore described as being among the worst of the worst of the worst I must pay attention and ask why, who, and where? And what can be done about it?
- A statistical analysis was performed on family data drawn from 54 B.C. communities. It confirms the obvious: that some families have lower incomes than others.
- Statistics Canada, the source of the data on which conclusions have been founded , does not measure or report "childhood poverty," despite representations to the contrary.
- The prevalence of lower-income families in a community is strongly related to several factors: the presence of immigrants, whether family partners are married and living together, whether there has been in-migration from other provinces of Canada, the prevalence of seniors in the community, the average participation rate in the labour force, and whether or not there is a preponderance of government or utility-type jobs.
- The prevalence of lower-income families *with children* in a community is strongly related to whether or not incomes generally are lower in the community, the incidence of persons who cannot speak English or French, the incidence of persons who have not graduated from high school, and the incidence of single mothers in the community.
- The reported incidence of lower-income families with children in West Vancouver is particularly due to the presence of a high proportion of immigrants.
- The presence of single mothers is also a powerful factor in determining the incidence of lower-income families with children in any community.
- On an after-tax basis, the proportion of a community consisting of Off-Reserve Aboriginals is <u>not</u> correlated with the incidence of lower family incomes.
- The provincial government expends roughly 10 per cent of its budget on programs aiming to assist lower-income families with children. Nationally, governments redirect approximately 10 per cent of our GDP to persons of lower income.
- The proposition that West Vancouver has, in effect, one of the highest childhood poverty rates in the industrialized world is, I conclude, exaggerated nonsense, which is not to suggest that low incomes are not present in every B.C. community, even affluent West Vancouver.
- Since well over half of the variance in the reported incidence of families with low income is attributable to single moms and immigrants, governments should focus greater attention on settlement programs for immigrants, and upon increasing the capacity of single mothers to improve their economic status through programs such as all-day kindergarten and affordable day care.

Acknowledgements and Disclaimer

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However, none of them bear any responsibility whatsoever for the errors, ideological biases, inconsistencies and unfortunate lapses in methodology which undoubtedly crept into this report, nor should they be held accountable in any fashion for the conclusions and policy suggestions herein, which are strictly my own, as a Private Member of the Legislative Assembly (MLA) of the Province of British Columbia.

This year-long project was essentially funded by myself. I did not receive funds to assist in its preparation from any arm of the Government nor did I receive funds from the Legislature of British Columbia. I typed it myself with my own two fingers, and did the regressions and plotted the charts on my own computer. The laptop on which I performed this work is the property of the Legislature. Initial large-scale correlations were performed by a Vancouver economics consulting firm at no charge to me, for which I am grateful. The actual work of quite large-scale (by my standards) raw data entry was paid for by me but coordinated in part by my part-time Legislative Assistant in Victoria, an employee of the Legislature. Ministries of the Government responded without charge to my requests for information on their spending programs, according to my specification. Experts generously reviewed the manuscript and tried their best to correct errors in it; for which they received not a penny of reward and not much thanks.[1]

[1] And while protesting my independence, apart from Government, let me also concede that as a member of the Government Caucus, meeting Cabinet Ministers and ministerial staff on a daily basis, I was given rather free access to data and analyses – certainly in comparison to members of the Opposition, or persons walking into the

Acknowledgements and Disclaimer -- continued

Caucus paid to photocopy the report, and my riding association paid for the postage to distribute it. My Constituency Assistant prepared the distribution list under my direction. The personal web site, on which I posted it, is maintained by my constituency association, using money contributed by my constituents, not taxpayer dollars.

Accordingly, this discussion paper was neither Government inspired, Government funded nor Government directed, and was certainly not a project of the Legislature. It was strictly my own personal project from day one, and remains so. I now belatedly thank those who helped make it possible.

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West Vancouver, B.C.
November 15, 2010

Legislature off the street. In that sense, therefore, let me acknowledge my intimacy with Government, which is probably how the public sees me.

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Overview

Why is there so much childhood poverty in West Vancouver? The community which I represent in the British Columbia Legislature is more typically associated, in the average person's mind, with affluence.

The author of this extended memorandum is a politician representing the riding of West Vancouver-Capilano in the British Columbia Legislature – as a Private Member or "back bencher." From my perch in the back rows I was puzzled by the rankings of "childhood poverty" showing my riding as one of the worst performing – one of the poorest in fact -- in the province.

I was also puzzled by frequent reports indicating that British Columbia itself ranked worst in Canada, in terms of the prevalence of childhood poverty. I was similarly surprised to find a reputable analysis showing Canada in 15th place among the 17 most advanced countries in the world.

In other words, my own political riding was one of the worst, within a province which was indisputably the worst, in a country which was close to the worst. I appear to live in one of the world capitals of childhood poverty.[2]

A chastening report card indeed!

If the report card was valid, I had a duty to understand better why my riding endured this sad state of affairs, and an obligation to try to ameliorate the situation. So I launched into a detailed examination of the numbers.

A funny thing happened on the way back from the computer. While the general poverty label was found to be suspect, analysis highlighted for me two issues which were not suspect: the plight of single mothers and the plight of immigrants in our communities.

[2] The key variable modelled in this study is the "% low-income families in the community, with children." The key variable in the press release of First Call, which has been most active in raising the alarm about childhood poverty in British Columbia, is described as "% of children living in low-income families." The two definitions are not quite identical although undoubtedly highly correlated. It is quite clear that the data referenced in their press release are based on the first definition, families with children, and not the second, children alone.

Overview -- continued

Here is how I proceeded with my review. I examined the source of the poverty data: Statistics Canada's 20% census of economic families, taken in 2006. I quickly learned that Statistics Canada does not use the term "poverty;" if refers to "low income." The translation of low income into poverty has been the work of other social critics. Accordingly, to say that Statistics Canada measures childhood poverty is simply not true.

Nevertheless, why – even on a "low income" basis, does West Vancouver, indeed all of British Columbia, perform so poorly? To find out, I used the same source data referred to by the critics, and performed what is commonly called a "cross-sectional analysis" of 54 communities within British Columbia. My goal was to reveal those community characteristics commonly associated with having a high proportion of low-income families with children.

My analysis proceeded in two stages. My first enquiry aimed to discover the community characteristics most common where there is a high incidence of low income families – whether they have children or not.

Using regression analysis, I identified six factors[3] which, working in unison, were significantly related to the incidence of low income in the community. They are the proportion in the community of:

1. Foreign immigrants;
2. Persons married and living with spouse or partner (as opposed to living apart);
3. Migrants from a different province in the last year;
4. Seniors;
5. Participants in the labour force – whether holding jobs or not – and;
6. Persons employed in a government or utility-type jobs.

The first of these six factors, "% immigrant," has a positive relationship; that is, the greater the proportion of immigrants, the more likely households report low

[3] By which we mean the explanatory variables – working concurrently --predicting the proportion of low-income families which may be found across 54 British Columbia communities in the 2006 20% Statistics Canada household census. By "concurrent" I mean that these six variables, independently but working together, each explained a portion of the variability of the measured proportion of families of low income in that community (both with and without children, for starters) in a simple regression equation. By "children" (in Statistics Canada's world) or the slang expression "kids," I refer to persons under the age of 18.

incomes. The other five factors are negatively associated; that is, if these factors are present in large numbers then it is much less likely one will find lower-income households in a community.

These six factors, working in combination in a regression equation, can be interpreted as explaining 82 per cent of the variation one discovers in the reported percentage of lower-income households in the community. [4]

One anticipated explanatory factor was surprisingly absent: the percentage of *Off-Reserve Aboriginals* to be found in households in the community when measured on an <u>after-tax</u> basis. (The Statistics Canada household census data employed in this study, based on municipal boundaries, did not encompass O*n-Reserve Aboriginals.)*[5]

The second stage of my analysis added children to the family mix. Turning to factors associated with the proportion of "*low-income family <u>with children</u>*" in each community, my analysis revealed four explanatory factors, concurrently significant, that one finds more frequently in a community reporting a high prevalence of low-income families with children. Such disadvantaged families with children are more often found in communities with a higher proportion of:

- Lower incomes generally (with or without kids) – as referred to several paragraphs earlier
- Persons without a high school education
- Persons who cannot speak English or French[6]
- Single moms[7]

These four factors, working in unison, can be interpreted as explaining almost 69 per cent of the variability in the measured statistic "% low income with children" across the same 54 communities.[8]

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[4] In statistical language, the unadjusted R-squared statistic.

[5] A reviewer notes that after-tax statistics are not reported when they would not be comparable with statistics for on-Reserve aboriginals. However, aboriginals are included in the census; it is simply that the data used herein did not encompass on-Reserve aboriginals.

[6] One knowledgeable reviewer disputes the critical importance of English or French: "Not having English or French language skills does not necessarily mean low income. People pass through survival mechanisms and many immigrants create their own ghettoes and make business among themselves."

[7] By the expression "single moms" I refer to lone-parent economic households headed by a female.

Overview -- continued

In considering the many community characteristics which might help explain the high incidence of low-income families with children, it was clear to me that two factors stood out: *single moms*[9] and *immigrant.*

Significantly, more than half of the variance in the reported incidence of low income families with children, in these communities, may be attributed to these two factors alone: the incidence of single mothers and immigrants.

With respect to single moms, one hardly needs the evidence of statistical analysis to appreciate that single mothers struggle hugely, particularly if they are thinly educated or living in communities having other earmarks of household low-income: fewer government jobs, low participation in the labour force, fewer seniors, low in-migration from other provinces, or an abundance of persons not married with spouse. However, the relative dominance of single moms in the data startled me.

With respect to the immigrant factor, what was not previously obvious to me was the extent to which immigrant families with children faced apparently enduring income challenges. It now seems obvious – and is clear from the regression results -- that the cultural, economic, and social adaptation problem is compounded when householders speak neither English nor French. Incidentally, the data also suggest that holding advanced education credentials of foreign origin offers only limited advantages. Again, the clear dominance of this factor was a surprise.

How prevalent are single moms? Very, I would be inclined to say. Provincially – based on averages recorded for the 54-community sample of data employed herein -- 12.2% of economic families are headed by a female lone parent, a proportion that drops to 10.0% in North Vancouver District and 8.5% in West Vancouver.[10]

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[8] See prior footnote for reference to the statistician's unadjusted R-squared statistic in a regression equation.
[9] By the slang expression "single mom" I refer to female heads of single-parent economic families.
[10] It may be noted that the author represents a political riding consisting equally of constituents in West Vancouver and in North Vancouver. Percentages may vary slightly from the raw data averages and medians reported in the final section of this report, due to varying years considered, sampling considerations, and other factors.

Overview -- continued

Approximately 105, 000 *lone female-parented* families with children in British Columbia[11] were interviewed in the Statistics Canada survey.[12] No doubt many of them fall into Statistics Canada's low-income category, since their median incomes were in the range of $33,000. This is about half the median income of families as a whole and one-quarter less than the median income of their *lone male-parented* counterparts.[13]

The proportion of single-parent families seems to be on the rise, surely something to ponder in terms of the direction of social policy.

How prevalent are immigrants? Very prevalent. They can be measured in multiple ways, but as reported in the household survey, there is a *54-community average* (not population weighted) of about one in five persons falling into this category. For the province's total population, we know the figure is closer to one in three. West Vancouver is above-average in the importance of its immigrant population (37.1%) and in North Vancouver District the immigrant population is highly significant too (31.7% as measured by the Statistics Canada survey).

> Side Note on "One in Three": The disparity between one in three and one in five is accounted for by the fact that immigrants are disproportionately represented in a handful of the larger communities such as Vancouver, Richmond and Surrey – as well as the North Shore. It may be noted that for the province of British Columbia as a whole, 27% of persons counted by Statistics Canada in its 20 per cent sample survey were categorized as "immigrant". If we simply average the percentages, community by community – many of them smaller communities in the hinterland -- the percentage is a much lower 20%. It is the individual communities, 54 of them, which form the basis of our analysis, not weighted by population. In contrast, for the "families headed by single moms" factor, the 54-community average of percentages (12.2%) is not much different from the all-province percentage (12.9%). Apparently single moms, unlike immigrants, are not more prevalent in the larger urban areas.

So much for incidence; what about remedies? If single moms and immigrants are over-represented among low-income families with children, what is the government doing to help them?

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[11] An "economic family", in Statistics Canada's parlance, is defined in a Footnote to Table 13 of this report.

[12] Household surveys, surveying only a portion of the population – herein 20% of the families -- are not to be confused with the periodic Statistics Canada census which endeavours to count all persons in the population.

[13] Based on my estimates using the raw data summaries shown in final section of this report.

Overview -- continued

To assist economically struggling households, including single moms, immigrants and others, the provincial government has responded vigorously in a variety of ways. There are two types of assistance:

- *Tax spending*: income tax exemptions and special tax preferences (or what may be termed "tax expenditures"). For example, removing low-income persons from the tax rolls; and
- *Program spending:* directly targeted provincial government programs aimed at assisting those of lower income -- particularly where children are involved. For example, targeted hot lunch programs.

On the tax expenditure side, I very crudely estimate about $100 million per year of spending by the British Columbia government of specific benefit to low-income families with children. On the program spending side, I roughly estimate expenditures in the range slightly below $4.0 billion annually by the British Columbia government. Total provincial spending specifically targeted at low-income families with children may therefore sum to the range of $4.0 billion. On a per household basis, British Columbia's combined spending (tax and program) on low-income household with children, may therefore total in the approximate range of $40,000 per low-income family.

By coincidence, a four-person family living in West Vancouver in 2006 with an income of $40,000 was considered borderline poor according to Statistics Canada's common measure.[14]

The Federal government likewise offers very significant tax expenditures and social program expenditures aimed at low-income households, particularly those with children.

Adding up all of the surprisingly numerous programs in place, and the significant tax expenditures built into our tax code to benefit families of low income – a trend enhanced, by the way, by our current government – one does not have difficulty estimating spending adding up to approximately 10 per cent of the total B.C.

[14] See table 12 for LICO cutoffs as they applied in 2006.

government budget. Federal government programs add another large overlay of spending and benefits. It appears that both levels of senior government combined re-channel to low-income persons about 10 per cent of our GDP.

I believe there are policy implications. Government already spends mightily to assist families of low income with children. Perhaps the spending could be smarter and more focused. If we aim to further reduce the incidence of beleaguered families with children in British Columbia, the provincial government may wish to consider increasing the proportion of its effort devoted to two types of programs:

- Enhanced settlement programs for immigrants, with more attention to the language skills of incoming immigrants (in cooperation with the federal government.)

- Enhanced pre-kindergarten, kindergarten, and affordable day-care programs which would allow single mothers to more actively participate in the work force. In this regard, the current extension of government-paid all-day kindergarten to all families in B.C. is a partial solution of utmost importance. I did not commence this study in order to advocate for affordable day care but find myself driven to that position by the data.

Significantly, I also conclude that the data on which all these conclusions rest, are probably patchy at best. Accordingly, another policy conclusion is that we should more rigorously examine the basis of the information upon which all analysis -- and all rhetoric -- hinges. The low-income cutoff (LICO) yardstick is itself an aging relic. The CRA[15] income data to which LICO is applied, show puzzling peculiarities. Accordingly, the incidence of low-incomes (per the LICO benchmark) should not be accepted as the final word on the prevalence of low income with children in West Vancouver, in British Columbia, or for that matter, anywhere else in Canada.

[15] Canadian Revenue Agency, the tax collection arm of the Federal government.

Overview -- continued

To sum up, having perused all of the data, I am not persuaded that my riding of West Vancouver-Capilano is one of the worst in a province which is the worst in our country which itself is just about the worst in the world. Nonsense, I say.

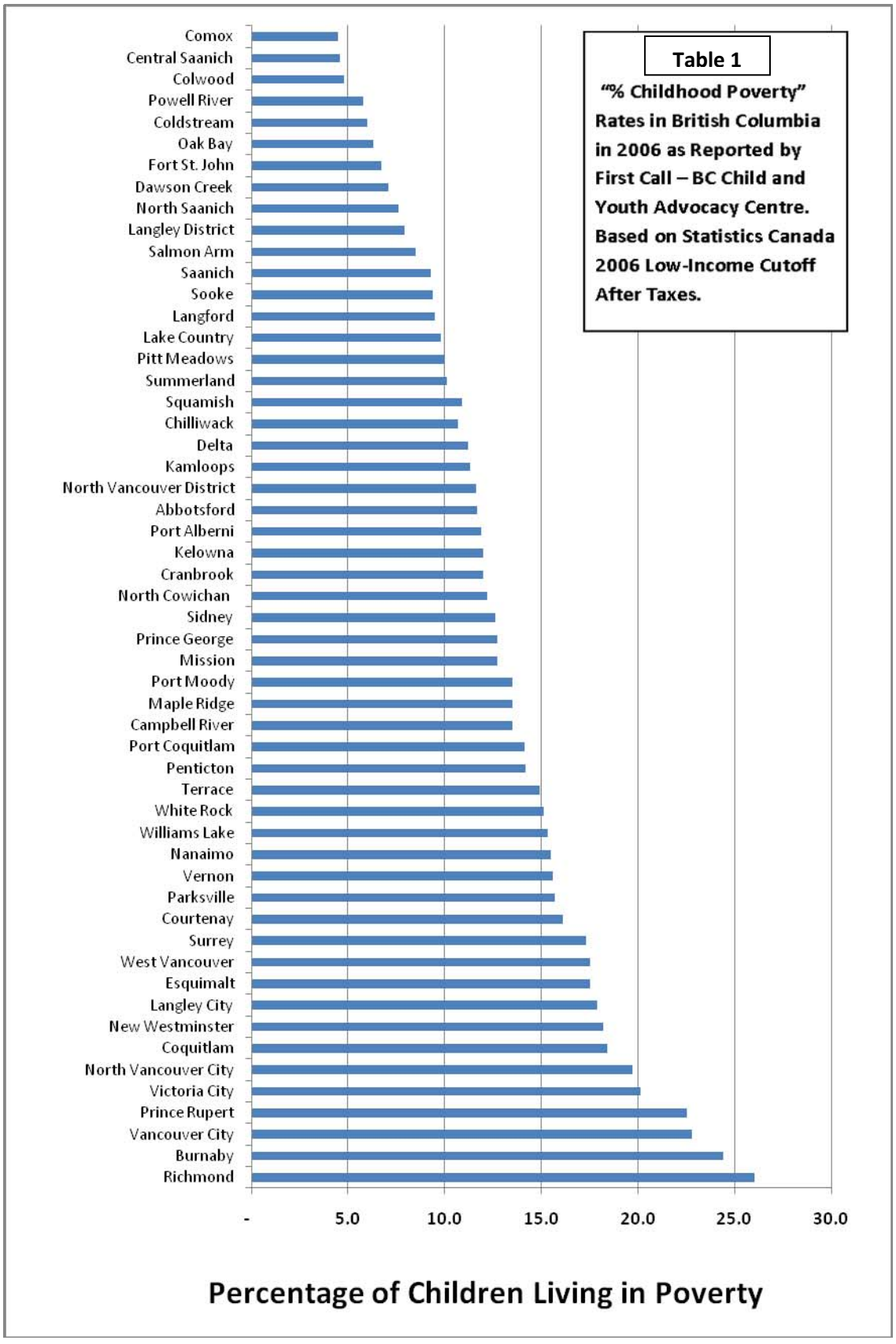
But that should not be interpreted as a denial of the presence of systematic income weaknesses across the province. British Columbia has a lot of poor, needy, and underprivileged families. That is hardly news. But what has been instructional for me, is the prominence in the data of the two demographic sectors I have singled out: single moms and immigrants, particularly those who speak neither French nor English. These disadvantaged households would clearly benefit from a more focused policy approach.

The principal problem may not be the monetary magnitude of governments' response, but rather its design, its focus and its administration -- and, no doubt, the intractability of the underlying social condition.

Side Note: the following Table 1 (Chart 1), which is simply a bar chart of First Call's distributed tables, is presented by First Call as a presumed ranking of the percentage of *children* below the LICO cutoff, community by community. However, referring to Statistics Canada source data reveals that First Call's data is actually a ranking of the percentage of *low-income families with children* (per LICO) community by community. It is this latter statistics which is the focus of my study. The distribution of children, child by child, in low income families, will differ from the distribution of low income families, family by family, to the extent that the average number of children in a family varies according to income.

Having pointed to the desultory showing of West Vancouver in this bar chart ranking, one is tempted to go on and ask what on earth is going on in Richmond, with (according to First Call) over one-quarter of its children living in poverty – in striking contrast to every other significant community in the province.

Percent of Children Living in Poverty in 54 B.C. Communities



Detailed Report

I. Origins of the Study

Each spring, as regularly as the blooming of our daffodils and cherry trees, British Columbia's First Call advocacy group issues a press release denouncing the provincial government for its lamentable record on "childhood poverty." [16] This is followed by Opposition Party harangues in the B.C. Legislature, where I spend a good portion of my life on the hard government benches listening to them. With admirable dexterity they weave the childhood poverty theme into pronouncements ranging from hospitals to highways. It is an all-summarizing, useful and condemning catch phrase.

[16] Excerpts from First Call press release: **NEWS EDITORS - FOR IMMEDIATE RELEASE May 5, 2008, BC'S CHILD POVERTY RATE STILL WORST IN CANADA FOR FIFTH CONSECUTIVE YEAR IN 2006.** British Columbia had the worst child poverty rate of any province in 2006 for the fifth consecutive year, Statistics Canada reported Monday. The BC child poverty rate using Statistics Canada measures before income taxes rose to 21.9 percent, with 181,000 children living in poverty. The rate using after-tax measures rose to 16.1 percent, with 133,000 children living in poverty. Michael Goldberg, provincial chairperson of First Call, the BC Child and Youth Advocacy Coalition, urged the province to take the problem of child poverty seriously, rather than arguing that the current situation has improved markedly since the data were collected. "We've heard that same old, tired, pointless argument from the provincial government year after year," he said. "It's time for the premier and the minister of employment and income assistance to start working to end child poverty rather than pretending it will go away on its own. It's also time for the official opposition to come forth with concrete ideas …

Detailed Report

A cycle or two ago, First Call published "childhood poverty" statistics community by community. I display their numbers in Chart 1 of this discussion paper. To be sure, these numbers are not First Call's invention, they are the official census data of the Federal Government's competent and careful Statistics Canada agency.[17] [18] What has been changed are the labels.

Every fifth year, Statistics Canada polls one household in five, asks them to fill out the now rather well-known "long form," and publishes their findings in detailed reports indicating whether, on average, houses are in good repair, people are on social assistance, how much money they make and from what sources, and -- if respondents are married, whether they still live with their spouses. It is a sociological goldmine. The most recent census was taken in 2006.

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[17] First Call (A Perry) has helpfully provided the following description of data sources.

"The most recent data on child poverty by municipality is from the 2006 census, and it is summarized on our web site at: http://www.firstcallbc.org/pdfs/EconomicEquality/3-press%20release%20may%2008.pdf " [Author's note: as reported subsequently by a reviewer of this discussion paper, link not active in November 2010.]

"These figures use the low income cut off (LICO) measure, and include both the before and after tax rates. LICOs are set according to the proportion of family income spent on basic necessities such as housing, food and clothing. These cut-offs vary according to family size, the size of the community in which they live and its location. The LICO is a measure of how well off some Canadians are in relation to others. The before and after tax income measures are useful in determining the success of tax credits, allowable deductions and transfers as levers of income re-distribution.

"This data is available on the Statistics Canada web site in their 2006 community profiles. You can search by community name, and scroll down right to the bottom of the page to see the percentage of children in low income in that community.

"The community profiles are available here: http://www12.statcan.gc.ca/census-recensement/2006/dp-pd/prof/92-591/index.cfm?Lang=E. "

First Call continues:

"A more detailed discussion of poverty measures is available on page 5 of our 2007 paper Child and Youth Development and Income Inequality, which can be downloaded from: http://www.firstcallbc.org/pdfs/EconomicEquality/3-lit%20review.pdf"

Source: email correspondence to the author from First Call who have been unfailingly helpful.

[18] More recently, see First Call media release, *A Time for Leadership in Fighting Childhood Poverty,"* November 24, 2010. See www.firstcallbc.org. This latest press release was countered by a Government bulletin pointing out that under this present B.C. government, in the past decade the percentage of families with children classified as "low income" per LICO, has steadily declined, whereas under the previous government, it had, more often than not, increased.

First Call states that one quarter of children in Richmond are living in poverty, with Vancouver and Burnaby close behind. My own political riding of West Vancouver-Capilano does not come across particularly well either.[19]

My West Vancouver-Capilano political constituency, stretching across both West Vancouver and a relatively prosperous sector of North Vancouver, is not normally associated with severe economic deprivation.[20] Nor are West Vancouverites inclined to point the finger at local deprivation.[21] The disconnect between First Call's alarming report on my home town, and the flyers stuffed into my mail box advertising million dollar homes, is disquieting. I was motivated to discover where, in my riding, these poor children could be found. I wanted to better understand what the government was doing to identify them, and what steps – and what further steps if appropriate – our government was taking to improve their lot. As their political representative, it is, in fact, my obligation to do so.

II. Childhood Poverty in West Vancouver

First Call has assessed West Vancouver's childhood poverty problem as 11th worst among 54 British Columbia communities. Similarly, they reported [and I quote] "British Columbia's child poverty rate fell significantly in 2007 – [but is] still the worst of any province, Statscan reported Wednesday." To be 11th worst among 54 communities within a province which is already the worst, is unsettling.[22]

[19] When I wryly pointed out to a health official First Call's ranking of the city of Richmond as being at the absolute pinnacle of childhood poverty in B.C., he replied, "Yes, we wondered about that too, and got into a car and drove around Richmond to see where it might be, and couldn't find any!"

20 This discussion paper analyzes, in depth, only the West Vancouver half of my political constituency.

21 The Venerable Louis Rivers, St. Cristopher Church, Anglican Diocese of New Westminster, comments, "We raise a ton of money in West Vancouver each year which we send to deal with poverty on the Downtown East Side. But if I ever suggested there is poverty in West Vancouver I'd be in a ton of trouble."

[22] NEWS EDITORS - FOR IMMEDIATE RELEASE June 3, 2009, CHILD POVERTY RATE DROPS SIGNIFICANTLY, BUT BC STILL WORST OF ANY PROVINCE. First Call office, Vancouver, 604-873-8437, Julie Norton, Provincial Chairperson, Adrienne Montani, Provincial Coordinator. www.firstcallbc.org.

If that was not bad enough, the usually reputable Conference Board has chimed in with the information that "with more than 12 per cent of the working-age population living in poverty, Canada is in 15th place out of 17 countries——ahead of only Japan and the United States." [23] [24] [25]

Table 2: Median income before tax of all economic families, and percentage of families below the Statistics Canada Low Income Cutoff (LICO) in 2005

	West Vancouver District	North Vancouver District	British Columbia
All Families			
Median family income	$105,448	$90.772	$65,787
% of families low-income on before tax basis	12.1	10.3	13.3
% of families low-income on after-tax basis	10.2	8.2	9.9
Male lone-parent			
Median family income	$81,268	$72,258	$51,274
% of families low-income on before tax basis	21.2	8.8	18.8
% of families low-income on after-tax basis	19.7	6.5	13.9

[23] Quote from report by the Conference Board of Canada examining Canada's poverty rate compared to other OECD countries. Their finding: "Canada's Record on Poverty Among The Worst of Developed Countries—And Slipping." News Releases 10-21, "Canada's Record on Poverty Among The Worst of Developed Countries—And Slipping," The Conference board of Canada, Ottawa, September 17, 2009.

[24] Note also that the United Nations Children's Fund, UNICEF, recently issued a report on the well-being of children in various countries. This report was characterized in the media as placing Canada 17th out of 24 industrialized nations in terms of the material well being of its children (Greenaway, *"Poorest Children being left behind in Canada: UNICEF*," Postmedia News, December 3, 2010). However, an examination of the actual UNICEF report suggests that on all aspects of child well being, Canada was ranked by UNICEF in the middle of the pack, with an index of 11.8 compared with the Netherlands 4.2 (the best) and the UK's 18.2 (the worst). In terms of being poor, as measured by relative income, unemployment rates and what the children themselves say, Canada was ranked 6th best out of 24 by UNICEF, with Sweden the best with 1st ranking, and Poland the worst at 24th. Reference:
http://www.unicef.ca/portal/Secure/Community/502/WCM/HELP/take_action/Learn_more/IRC7/IRC_material.pdf

[25] Note also the respected ***The Economist,*** November 27, 2010, page 47, in an article entitled "*Poverty in Canada, Mean Streets, The persistence of poverty amid plenty,*" declared that "when it comes to poverty, [Canada] ranks 22nd-worst out of the 31 countries in the OECD. … One of the keenest slashers [of welfare payments] was British Columbia, which despite being one of the richest provinces has one of the highest rates of child poverty (10.4%) after taxes on family income…"

	West Vancouver District	North Vancouver District	British Columbia
Female lone-parent			
Median family income	$47,226	$48,017	$35,958
% of families low-income on before tax basis	27.7	27.2	33.5
% of families low-income on after-tax basis	21.7	21.0	25.6

Table 2 Source: 2006 Census Profile - Summary Version. Statistics Canada data as distributed by BC Stats. See http://www.bcstats.gov.bc.ca/secure/bulletins/cenpro06/detailed/choose.asp . Data based on 20% sample, long questionnaire Data Services, BC Stats.

Note 1: Statistics Canada explains that measures of low income known as 'low income (before tax) cut-offs (LICOs)' were first introduced in Canada in 1968 based on 1961 Census income data and 1959 family expenditure patterns. At that time, expenditure patterns indicated that Canadian families spent about 50% of their total income on food, shelter and clothing. It was arbitrarily estimated that families spending 70% or more of their income (20 percentage points more than the average) on these basic necessities would be in 'straitened' circumstances. With this assumption, low-income cut-off points were set for five different sizes of families. Since its initial publication, Statistics Canada has clearly and consistently emphasized that the LICOs are not measures of poverty. Rather, LICOs reflect a consistent and well-defined methodology that identifies those who are substantially worse-off than average. These measures have enabled Statistics Canada to report important trends, such as the changing composition of those below the LICOs over time. Source: Statistics Canada

Note 2: These are *2005* summary data on low income for West Vancouver, North Vancouver (District) and all of British Columbia as incorporated into the 2006 Statistics Canada report. The degree of income redistribution built into our revenue system is perhaps revealed by the 13.3% of families provincially falling below LICO on a pre-tax basis, versus 9.9% on an after tax basis in that particular year.

So there you have it, West Vancouver is among the worst in B.C. which is dead last in Canada, which country ranks near worst in the world. It seems we might have a little problem.[26]

[26] The outcry is hardly confined to First Call. See previously footnoted quotes based on UNICEF and The Economist. To quote one recent Vancouver newspaper story, "Contrary to British Columbia's glossy marketing campaign, the province isn't the best place on earth, at least if you happen to be a poor child. In fact, for seven years running, B.C. has had the highest child-poverty rate in Canada. The National Council of Welfare, an advisory body to the federal government, says that during the boom years from the mid-1990s to 2007, child-poverty rates in B.C. diverged from those of other provinces. In 1999, as the national poverty rate fell, the rate in British

Let's clean up some careless rhetoric. The quotation in First Call's press release notwithstanding, we can be confident that Statistics Canada uttered no such conclusions about childhood poverty. I prefer Statistics Canada's less dramatic actual language:

> *"Media, researchers and policy-makers interested in measures of low income are typically concerned with the extent to which individuals in the population are living in poverty. Unfortunately, defining poverty is far from straightforward. The underlying difficulty is that poverty is a question of social consensus, defined for a given point in time and in the context of a given country. Decisions on what defines poverty are subjective and ultimately arbitrary.*
>
> *"Given this, Statistics Canada has always referred to the low-income cut-offs and low-income measures as indicators of the extent to which some Canadians are less well-off than others based solely on income and as such, are low income and not poverty measures."* [27]

But even by Statistics Canada's less pejorative "low income" designation,[28] West Vancouverites might ponder the detailed rankings for 54 communities across this province[29]. The prevalence of low-income children is three times greater in West

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Columbia jumped up to 16.4 per cent, making it the highest in Canada for the first time, [and] it remains the highest in the country despite strong economic and employment growth in the province, the council says**."** Ros Guggi and Sam Cooper *Our growing challenge: Day 1, BC's high child-poverty rate, The Province,* 12-Sep-2010, Page A08, (One is tempted to note that in the year in which it is suggested B.C.'s childhood poverty rate jumped out in front of other provinces to 16% whilst the national rate fell, British Columbia enjoyed an NDP government, but that would be an excessively partisan barb.)

[27] Statistics Canada, Income Statistics Division, Catalogue no. 75F0002MIE — No. 004, Research Paper, Income Research Paper Series. ISSN: 1707-2840, ISBN: 978-0-662-45960-6

[28] Definition of low income before tax cut-offs (LICOs): Income levels at which families or persons not in economic families spend 20% more than average of their before tax income on food, shelter and clothing. For additional information and a table of low income cut-offs, refer to the 2006 Census Dictionary, Catalogue no. 92-566-XWE.

[29] Chart 1 shows First Call's ranking of 54 municipalities (communities or areas of residence) with respect to the label "% children in poverty." While Chart 1 is presented by First Call as a representation of the percentage of poverty-stricken children (persons below age 18), community by community, it is actually a plotting of Statistics Canada data for the estimated percentage of households with children, and also with low income per the LICO, all

Vancouver than it is in the former mill town of Powell River, four times greater than in Vancouver Island's Comox, and twice as common as in Salmon Arm, a community actively diversifying from the hard-hit forestry sector into tourism and other endeavours.

West Vancouverites might also ponder the pre- and after-tax measures[30] of "low income with children" in local comparison with North Vancouver District (the other half of my political riding), and in comparison with the province as a whole. Both West Vancouver and North Vancouver median family incomes are comfortably higher than elsewhere in the province.[31] However, on the measure of the "percentage of families headed by a single parent which are low income," whether male (19.7%) or female (21.7%) , West Vancouver does less well according to these data. [32]

This is puzzling since families headed by female single-parents – earning only 57 per cent of their male counterparts -- are less prevalent in West Vancouver (8.5%) than in North Vancouver (10.0%) and significantly lower than the 54-community[33] average of 12.2%.

So why is West Vancouver – despite its relatively high median incomes and lower incidence of families headed by single moms -- reporting such an unexpectedly high percentage of "low-income families with children"? What is going on?

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on an after-tax basis. My discussion paper therefore focuses upon the correlates of the statistic "% of low income families with children (as defined by LICO)," community by community within B.C. which is not exactly the same thing as the % of low income children. It is not quite clear where the source data on First Call's income distribution of children may be obtained, but perhaps I did not search hard enough to find it.

[30] Table 2, showing pre and post-tax measures of low income in West Vancouver and North Vancouver

[31] After-tax income of households - The after-tax income of a household is the sum of the after-tax incomes of all members of that household. After-tax income of household members refers to total income from all sources minus federal, provincial and territorial taxes paid for 2005. Source: Statistics Canada

[32] Without disputing the thrust of the conclusions herein, a reviewer reminds the author of the hazards of indiscriminately comparing economic families and census families data. I admit to defeat on this distinction.

[33] By "community" we mean Statistics Canada's "area of residence."

III. The Analytical Approach

My exploration of childhood poverty unfolded in three stages:

- First, examining how the numbers are collected and assessing their reliability as measures of poverty.[34]
- Next, determining what characteristics of each community are prominently associated with these low-income numbers[35]. I use the awkward phrase "are prominently associated with" since the direction of causality – or even the existence of causality – between, say, the size of the community and the prevalence of low income (for example, whether big cities cause low income, or whether low incomes cause big cities, or whether there is absolutely no causality whatsoever in either direction) can engender endlessly inconclusive speculation.
- Finally, surveying the ameliorative public policies which governments have deployed, and considering what additional policies governments might contemplate to assist families of low income with children. [36]

My unit of study is the individual community – 54 of them, at one point in time. This is what is sometimes called a cross-sectional study, not a longitudinal study setting out to examine trends over time. The analysis is based on semi-aggregate data, not microdata. I began by examining the correlates of low income in these 54 British Columbia communities, which encompass about 3.3 million persons and an estimated 892,775 "economic families." [37] Almost three-quarters of all British Columbians live in these

[34] see Appendix A (The Data) and Appendix B (Measuring Low Income) for my assessment.
[35] see Sections III and IV of this report
[36] See the "Conclusions" section of this report for some policy recommendations.

[37] "Economic family" in the definition of Statistics Canada, refers to a group of two or more persons who live in the same dwelling and are related to each other by blood, marriage, common-law or adoption. As of 2001, same-sex partners are considered to be common-law partners. Thus they are considered related and members of the same economic family. Children may or may not be present. However, a family cannot consist of one person.

communities.[38] To collect the family data which are the primary basis of this report, Statistics Canada's sampling rate within each of the 54 communities was one in five; not a 100% census. Nevertheless, a robust sample.

IV. Low Income Cutoffs for Economic Families

Within each community, the unit of study is the "economic family."[39] It is not the individual. On average, according to the *2006* Statistics Canada 20% household survey -- the primary foundation of this report -- 11.2 percent British Columbia economic families were categorized as "low income" since their aggregate family income fell below the Low Income Cutoff (LICO) as crafted by Statistics Canada. More recent surveys place that percentage at 9.9% (after tax).[40]

How does Statistics Canada determine the Low Income Cutoff? [41] It is defined for you in a table. For those not inclined to statistical methodology, let us merely accept that Statistics Canada surveys households to ascertain, community by community, how many families are "low income" by Ottawa's arbitrary measure, and similarly how many are "low income with children" -- using that same LICO yardstick.[42]

Table 3 shows, in summary form, the LICO table for 2006.[43]

[38] Where are the other one-quarter of British Columbians? Presumably living in other than these 54 communities – urban areas not captured in the defined geographic entities, other smaller communities, villages, unincorporated areas and also what we sometimes call "the boonies" of this vast province. That is to say, in census subdivisions excluded from (BC Stats) tables because they do not meet a community or city definition. At least that is my theory of where they went – but then these aren't my data, I'm simply analyzing what has been given to me.
[39] For Statistics Canada's definition of "economic family: see the footnote to Table 13. In B.C. 15.2% of persons are not economic family members. The prevalence of low income (after tax) is 13.1% for all persons in B.C., but only 9.9% for families in B.C., and 29% for persons not in economic families. The economic families on which Statistics Canada's family low income data are based, do not include persons living alone nor those living only with unrelated persons.
[40] Note that 11.2% refers to the unweighted 54-community average.
[41] Further information on the definition of LICO is provided in Appendix B and in the footnotes to Table 13.
[42] Table 13 shows the 2006 table of Low Income Cutoffs, varying by size of family, and size of city across Canada. For a more detailed discussion of the faults and virtues of LICO see Appendix B.
[43] Statistics Canada relied primarily upon 2005 Revenue Canada Agency reported incomes for its economic family income statistics. Alternatively, economic families could self-report their incomes to Statistics Canada.

Table 3: If you and others in your household together earned less than the following in 2006, then you were considered "low income" by Statistics Canada (thousands of dollars, before tax, rounded)

	Big City[44] Population half a million and over	**City** Population 100,000 to half a million	**Medium** Community Population 30,000 to 100,000	**Small** Community Population under 30,000	**Rural** Resident
1 person	$21	$18	$18	$17	$15
2 persons	$26	$23	$23	$21	$18
3 persons	$32	$28	$28	$25	$22
4 persons	$39	$34	$34	$31	$27
5 persons	$45	$38	$38	$35	$31
6 persons	$50	$43	$43	$39	$35
7 persons and more	$56	$48	$48	$44	$39

In other words, if you lived in West Vancouver in 2006, wife and husband, two children, then you must have earned at least $39 thousand (pre-tax) annually to stay out of the low-income category. Today (October 2010), considering the inflation which has since occurred, add about ten per cent to that number.

It is useful to repeat Statistics Canada's caution that these are simply indicators of "the extent to which some Canadians are less well-off than others based solely on income and as such, are low income and not poverty measures." Or, as I might amend, not necessarily "low income" to some beholders, but certainly a group we can, without challenge, describe as "of lower income."

In the next sections I have tried to better understand the characteristics of communities which have a high incidence of families with lower income, and, also, the characteristics of communities showing a high incidence of families of lower income who have children (that is, family members under age 18), incorporating as one explanatory factor what I call the "poorness" of the community as a whole.

[44] My own invented nomenclature for City, Large Community, etc.

My first impulse was to adopt a two-stage approach: to first try to understand low income, with or without kids; then to try to understand low income with kids.

Subsequently I was challenged to demonstrate that my two-stage approach really added value, in terms of tweaking out two unique sets of statistically potent correlate factors. (I rose to the challenge. An advance look at my answer: After a lot of statistical muddling, not much!)

My original hypothesis was that once you understand some of the underlying correlates associated with a high incidence of "poorness" among families in a community, then you are probably well launched into understanding the additional correlates explaining the incidence of families of low income *with kids* in a community. This did not exactly prove to be the case. Nevertheless, the low income analysis proved worthwhile in terms of understanding community poorness, with or without children in the economic unit.

V. The Correlates of Low-income Families

I started out by examining the simple one-on-one correlates of general "poorness" in the community. What factors are closely identified with the prevalence of "lower-income families" in a community --setting aside, for the moment, whether or not they have children.

> *Side Note: What is "correlation"? To suggest a probably spurious correlation, it might be that when a community has relatively few low-income families it also seems to have lots of houses painted green. How about the real world? I set out to discover potent one-on-one community correlates of poorness.*
>
> *Persons of a statistical bent might prefer the terminology "explanatory variables." I have tended to shun that terminology, since it is not necessarily true that A causes B any more than B causes A, or whether the fact that two dimensions of communities invariably seem present in unison is anything other than random happenstance; i.e., correlation does not imply causation.*

The bar charts of Tables 4 and 5 tell you probably more than you really wanted to know about the correlates of "low-income families" in British Columbia communities – both positive correlations and negative.

A strong correlation factor means when you find one you frequently find the other. For example, Table 4 tells us that the biggest positive correlate of the incidence of poorness in a community is the incidence of visible minorities in the community.

What community descriptors did I actually sift through? -- a whole lot of them, over 350 in fact, since Statistics Canada and BC Stats are prolific generators of numerical household data, all potentially interesting. [45]

The community descriptors considered are listed at the back of this report. I grouped them into 17 broad categories:

- Population size and growth of the community
- Age profile of the community
- Size, recency and languages of the immigrant population
- Labour force and unemployment, workplace permanence
- Education statistics for the community
- Household status (single family, multi-family, etc.)
- Income, govt. transfers, income assistance, employment insurance
- Employment profiles – industries, job classifications
- House value, type, size and condition, owned, rented.
- Municipal taxes, and federal tax returns filed
- Businesses, number, startups, bankruptcies
- Marital status
- Incidence of lone-parent families
- Mobility interprovincial and in and out of country
- Whether minding seniors and children
- Incidence of visible minorities
- Incidence of aboriginal

[45] With 357 descriptors across 54 communities, we ended up manipulating a data base with over 19,000 entries – 19,278 to be exact. Individual variables in the Source Data are summarized at the end of this report.

Specific descriptors within each group were examined for their one-on-one correlation with the incidence of low-income families, community by community.[46] The results of our analysis are shown in chart form. Note that two types of correlation exist: *positive*[47] and *negative*[48]

The strongest positive correlate of low income is a virtual tie between two different community descriptors.

- There is a correlation coefficient of about + 0.7 between "% low-income families in the community" and the variable "% of persons in the community who are visible minority."
- There is also a correlation coefficient of about + 0.7 with the descriptor "% of persons with first language not French or English."

Both of these measurements are associated with having lots of immigrants in the community. Indeed, if one scans the variables (in descending strength of positive correlation from top to bottom)[49] *one observes a preponderance of descriptors associated with immigrants*, supplementing other community descriptors pertaining to persons living more than one per room, multi-family households, shelter costs as a high percentage of family income, persons working outside of Canada, persons who are single, and single mothers, and others.

To be abundantly clear, the *positive* correlation between % low income in the community, and % not speaking French or English in the community, means that the higher the proportion of those speaking neither English nor French, the higher

[46] When examining the correlates of 54 communities on the basis of 17 categories of descriptive variables, the statistician may raise issues of "degrees of freedom." However, the preponderance of analysis in this report is one-on-one correlation between two variables with 53 degrees of freedom. A correlation coefficient over .25 is judged relevant for our analysis. We are considering here the "Pearsonian correlation coefficient," which is the most popular measure of dependence between two quantities. The closer the coefficient is to either −1 or 1, the stronger the correlation between the variables. If the variables are independent, Pearson's correlation coefficient is zero.

[47] Table 4
[48] Table 5
[49] Table 4

the proportion of lower-income families in the community. Again, this correlation is not necessarily causal.

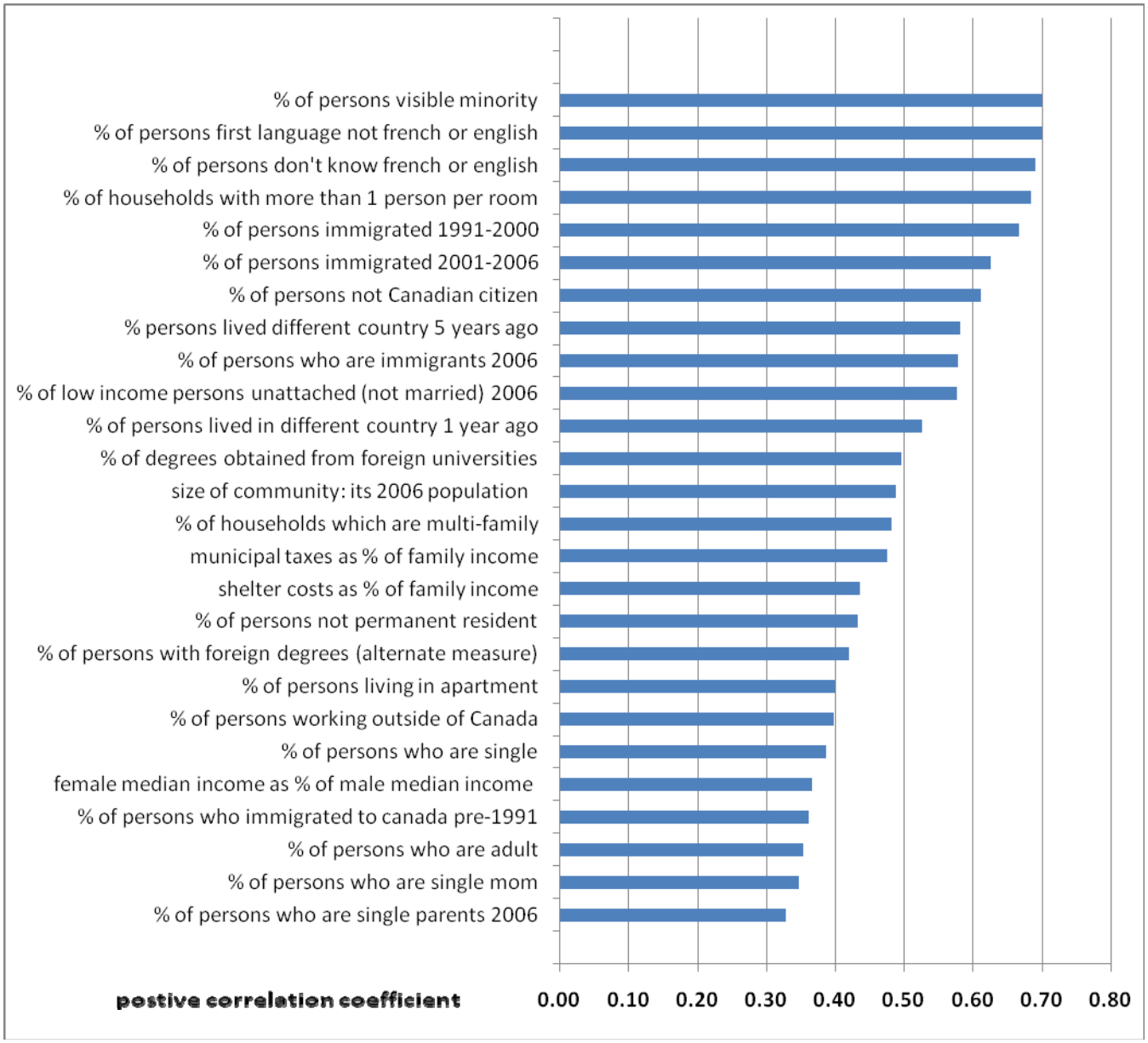
I also found strong *negative* correlations.[50] Let us draw attention, for example, to a significant negative correlation in Table 5 between the prevalence of low-income families and the percentage in the community of persons married and living together, yielding a correlation coefficient of about -.53. Thus, the lower the incidence of being married and living together, the greater the incidence of low-income households in the community – on average. Put another way, even after adjusting for the number of persons in the family per the LICO table, married and living together beats living apart from a cost of living perspective – but maybe everybody always knew that.

It is interesting to scan the full list of negative correlates, or what I choose to call "low-income suppressors." Factors suppressing the incidence of low-income families in the community include a blend of job types, the availability of pension income, college graduation, self-employment, being older, and having a larger than average in-migration into the community from other provinces in Canada (presumably drawn by higher wages, lower taxes, and superior economic opportunity.)

To summarize, Tables 4 and 5 show, in descending rank order of significance, an array of correlates of low-income households – per LICO --in the community, whether children are present in the household or not.

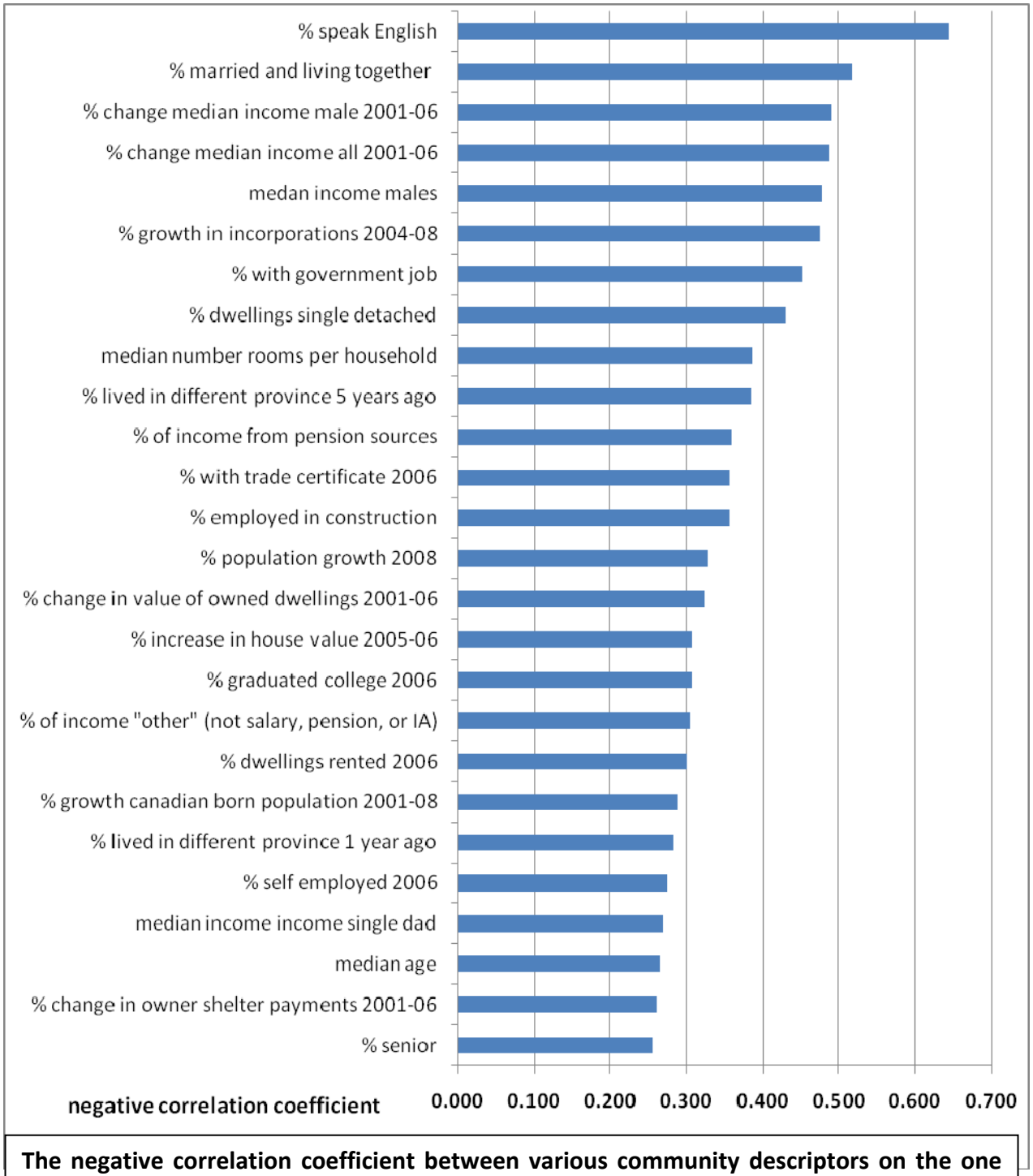
[50] Consider Table 5 ("The Negative Correlates of Low Income") for a correlation ranking of several community factors.

Table 4: Positive Correlates of Proportion of Low Income Families in the Community



The positive correlation coefficient between various community descriptors on the one hand, and the percentage of households categorized as "low income" in that community. Based on the 2006 Statistics Canada census, 1992 LICO basis, after-tax, for 54 British Columbia communities. A coefficient of 1.0 means there is perfect positive correlation; a coefficient of zero means there is no correlation whatsoever from a statistical point of view.

Table 5: Negative Correlates of High Proportion of Low Income Families



The negative correlation coefficient between various community descriptors on the one hand, and the percentage of households categorized as low income per LICO in that community. Based on the 2006 Statistics Canada census, after-tax basis, for 54 British Columbia communities. A coefficient of 1.0 means there is perfect negative correlation; a coefficient of zero means there is no correlation whatsoever from a statistical perspective.

VI. The Correlates of Low-income Families With Children

Add children to the family equation. The focus of this discussion paper is upon *families with children*. But at the risk of straying out of context, let us also consider the incidence of *children living in low-income families*.

According to Statistics Canada's *2007* report (and the year is important since numbers do tend to hop around depending on year and survey methodology), there were 105,000 children in B.C. living in economic families below the Low Income Cutoff threshold. This was 21% fewer than the reported 137,000 children living in sub-LICO families one year earlier, and in fact the lowest since 1991. In percentage terms, 13 per cent of children lived below the LICO cutoff, down from 16 per cent a year earlier.[51] The fact that these estimated percentages in the data vary a good deal from year to year could be cause for concern when we know that socio-demographic trends move slowly. Sampling variation as we move from one data source to another is a likely explanation (see Appendix A).

Side Note: A child is considered to have low income in Statistics Canada's world, if he or she lives in a low-income *economic family* as that term is used by Statistics Canada, with qualifying thresholds defined in the LICO table according to size of family and size of community.[52] LICO cutoffs are presented by Statistics Canada on both a pre-tax and after-tax basis, revised annually to take inflation into account.

[51] Statistics Canada 2007 Report, "Income in Canada."

[52] Tables 6 and 7 show, respectively, The Positive Correlates of "Low Income with Kids" and The Negative Correlates of "Low Income with Kids." The term "kids" is our own colloquial expression for persons under the age of 18. When Statistics Canada talks of children, it means persons with at least one parent, and they could be of any age. Our use of the word "children" or "kids" is more in line with colloquial usage – persons under the age of 18 -- but this does not strictly conform to Statistics Canada usage or definitions.

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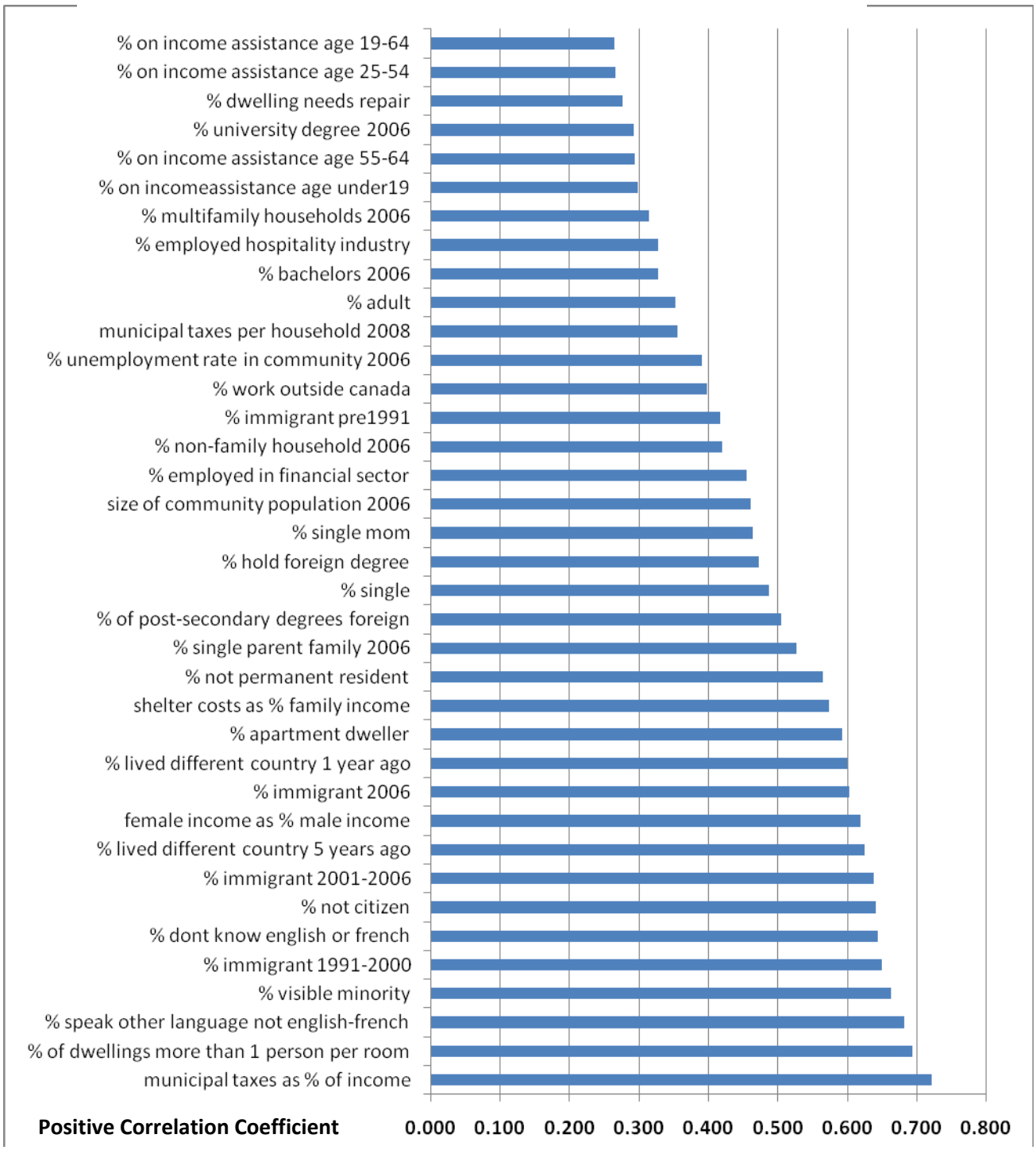
Now go back to considering the incidence within a community of low-income families with children. With children present, the positive correlates are as shown in Tables 6 and 7. Not much new here: the significant correlate list for low-income families with children is similar to the previous list of factors significantly correlated with low-income families. Now emerging, however, are such intriguing positive factors as women who earn more in comparison with men (suggesting that low income with kids may be partly related to income performance weaknesses in the male breadwinner), as well as a preponderance of single moms (that is, no male breadwinner at all).

I also noted (Table 6) such positive correlation factors as unemployment (no surprise there: no job = low income), high municipal taxes in proportion to income (not commonly singled out as a low-income factor and tax regressivity factor which municipal and metro politicians might well ponder), living in larger communities (bigger cities are associated with poorer families – as measured by the LICO table), being on income assistance (no surprise there), and living in a house which needs repairs which is what one should expect.

On the negative correlation side (Table 7), I identified such factors as living in single detached dwellings (if you do, you are less likely to be low income with kids), high male median income, English-speaking, college graduate, moved to B.C. from a different province, and having a higher income (which is essentially tautological –using different words to say the same thing twice). Note also that being employed in *construction* and having a *government/utility* type job means that one is less often relegated to the low-income-with-kids column, as does being married and living together. The numbers, in other words, tend to reveal those pleasant factors reminiscent of the idealized, clichéd, middle class life, particularly if one is fortunate enough to live within the warm bosom of government, or catch a high-paying construction job. Should any of this surprise us? Hardly. But the strength of the impression is quantified.

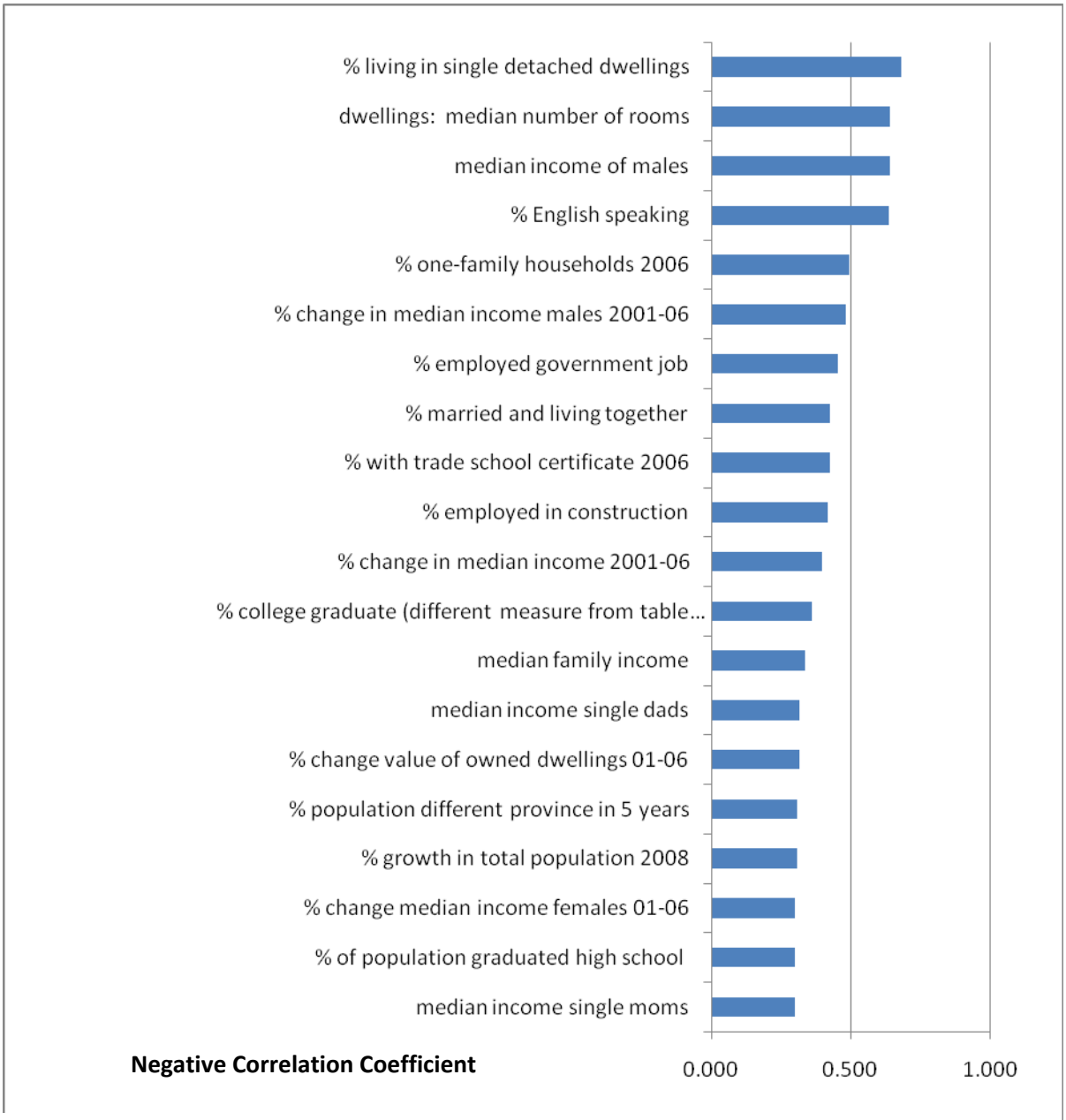
Table 6
The Positive Correlates of "Low Income with Kids"



This bar chart shows the magnitude of the higher-ranking positive correlation coefficients calculated between various descriptors of 54 communities in British Columbia, and the percentage of economic families with children under 18 years categorized in 2006 as being "low income" in those communities, as determined by the Statistics Canada census using the Low Income Cutoff (LICO) on an after-tax basis. A coefficient of 1.0 means there is perfect positive correlation; a coefficient of zero means there is no correlation whatsoever from a statistical point of view.

Table 7

The Negative Correlates of "Low Income with Kids"



This bar chart shows the magnitude of the higher-ranking negative correlation coefficients calculated between various descriptors of 54 communities in British Columbia, and the percentage of economic families with children under 18 years categorized in 2006 as being "low income" in those communities, as determined by the Statistics Canada census using the Low Income Cutoff (LICO) on an after-tax basis. A coefficient of 1.0 means there is perfect negative correlation; a coefficient of zero suggests no statistical correlation whatsoever.

VII. Simultaneous Factors: Regression Analysis

While this one-on-one analysis of the correlates of low income, and the correlates of low-income with kids, is revealing and often confirms my own private impressions of the world, there are few surprises.

What is not offered is any predictive mechanism, any statistical tool moving beyond simple association to some greater sense of causality. To move into this realm, I cautiously embraced regression analysis, so that multiple factors could be considered simultaneously -- what analysts of bolder nature may designate to be "explanatory variables." Regression analysis allows one to compensate for multiple explanatory variables so that their independent contributions to an outcome of interest – in this case, the prevalence of low income – can be teased out.

I proceeded, as previously described, with a 2-stage analysis: first, seeking out the most powerful multiple factors which predict low income in general; and having done that, seeking out the most powerful factors working together to predict low income with kids. The 2-stage strategy was intended to enrich the causal portrait, but in the end not much enrichment was achieved – since I could explain most of the incidence of "poor with children" without relying heavily on the over-all poorness of the community to do so. To me, this was unexpected.

Predicting Low Income

I present first my regression equation ("Equation A") showing possible predictors of low income – after tax -- in the community.[53] [54] (Having children is not considered at this point.) The six concurrently significant explanatory variables emerging from this regression analysis are:

[53] Table 8

[54] The dependent variable refers to low income per LICO on a pre- tax basis. The subsequent analysis of low-income families with children is conducted on an after-tax basis. See footnote 47 for my rationale for this switch.

- % immigrants in the community
- % of community married and with spouse
- % of community which has moved from a different province in the last year
- % of community which is senior
- % of community participating in the labour force
- % of community with a government or utility type job

These six measurements can be said to "explain" 82 per cent of the variability in the percentage of low-income households across all of these 54 communities in British Columbia.[55]

You may ask, what happened to all of the other high-correlation factors previously identified, one-on-one? For the most part, they are co-linear or intermediate with the above factors -- in a sense, therefore, they are redundant. Their explaining power is largely subsumed within the above six significant factors. This also means that one could substitute other highly co-linear descriptors and get almost the same results. For example, one could substitute the percentage who speak neither French nor English for the percentage that are immigrant, and obtain roughly comparable results.[56]

Ten of the 12 strongest positive correlates of "poorness in the community" (Table 4) essentially describe immigrants. One measure of immigration might be almost as good as another.

Collectively, the above six explanatory variables -- only one of them immigrant -- gave us the most potency when introduced into a regression equation. You might say that the single surviving immigrant statistic was the nominee of the others. A powerful nominee as it turned out. One will suffice.

[55] We use the term "to explain" by some percentage, with reference to the R-square statistic calculated from the regression equation, this statistic being the proportion of variance of the dependent variable accounted for by the combination of independent or explanatory variables in the equation. The R-square statistics reported in this study are not adjusted for the number of explanatory terms in the model. R-square as employed herein is simply the proportion of variability in a data set that is accounted for by the statistical model. F-values tend to be large given the sample size.

[56] But note that we use the immigrant factor in stage one regressions and the language factor in stage two regressions. Accordingly, one could say we are, in the second stage, teasing out the additional impact of language, as a supplementary factor over and above the immigrant factor, in our quest to understand low incomes in the community.

Predicting Low Income with Kids

In my second stage of analysis, I narrowed the regression analysis from poorness in general to poorer households with children.

As a test of the simple proposition that *low-income families with children are more likely to be found in low-income communities*, Equation B (Table 9) shows a regression of "low income with kids" on "low income." The proposition is confirmed. The single variable "% low-income family in community" explains fully half of the variability in "% low-income family with children in community".[57] [58]

We can expand the equation's explanatory powers by adding three additional factors: single moms, whether or not English or French are spoken (another proxy for "immigrant"), and education. I therefore present a 4-variable regression equation to explain community percentages of low-income families with children. And I recognize that in my analysis, the immigrant factor is at work cumulatively, both in stage one (explaining poorness) and in stage two (explaining an additional degree of poorness with kids).

Equation C shows the four variables which, in combination, appear to best explain low income with kids. They are:

[57] Again, relying on the R-square statistic as our measure of the percentage explaining power of the equation; here R-squared equals about 50%.

[58] It should be noted that having explained the incidence of low-income families over-all (or "poorness") in the community per LICO 2006 on an after-tax basis, the subsequent analysis of the incidence of low income families with children in the community per LICO is presented on a pre-tax basis. Exploring that same data on an after tax basis does not alter conclusions materially. In transitioning to an *after-tax* measure of the incidence of low-*income families with children*, the over-all explanatory power of the model drops by 5 percentage points, which is an argument for using pre-tax data. Shifts in the relative importance of explanatory variables are as follows: not being a high school graduate becomes less significant, poorness in the community overall becomes slightly less important, not speaking English or French increases in importance, and being a single mother declines slightly in importance. One might possibly read into these differential impacts some modest measure of effect of the tax code on various categories of taxpayers. . LICO today generously offers its services on both a pre-tax and an after-tax basis.

- % low-income families in community with or without kids (the 50% factor referred to above)
- % in community without high school education
- % in community not speaking English or French
- % in community who are single moms

Supplementing the core "poorness" variable with another three variables, increases explanatory capability significantly: from 50% to almost 69%. The four factors combined explain 68.7 per cent of the variability in the percentage of low-income households with children across 54 British Columbia communities, as detailed in equation C.[59].

It should be noted that the high school education factor is only marginally significant,[60] based both on the elasticity or magnitude of education's impact as well as the test of statistical significance[61] [62]

Clearly, the most important drivers "explaining" the prevalence of low-income families with children in a community, are the general prevalence of low income (or what I choose to call "poorness") in the community, as well as the prevalence of non-English speaking persons, and the prevalence of single mothers. Not being particularly well educated certainly does not help the families' economic situation either.

Now, my surprise: My final regression equation deleted poorness in the community as an explanatory variable. In other words, turning my back on my carefully plotted two-step analytical strategy. What an embarrassment! It turned out that "single mother" and variants of "immigrant" alone will explain most of the

[59] Table 10.

[60] I will defend "education's" inclusion on the basis of my early training in the Schlaifer-Raiffa school of Bayesian analysis and the incorporation of prior (judgmental) probabilities in drawing inferences based upon sampling.

[61] The t-test.

62 We may assess the elasticity of impact of the various factors associated with low-income families with kids approximately as follows: (a) the proportion of low-income-families with-kids in a community tends to increase on averge approximately one percentage point for each percentage point increase in the proportion of single moms; (b) the proportion tends on average to increase approximately one percentage point for each percentage point increase in the proportion who cannot speak English or French; (c) it will tend to increase on average about half a percentage point for every point increase in the low-income prevalence in the community generally; and finally (d) the proportion will increase about one tenth of one percentage point for every percentage point increase in the proportion of persons who did not graduate from high school.

variation in the incidence of lower income families with children across these 54 communities. While the additional crutch of community poorness added some explaining power too, it was not as much as I had anticipated.

Another way to interpret this result is that similar factors are at work to explain the incidence of poorer families in the community, and the incidence of poorer families with children in the community. My two-stage analysis therefore added some, but not much, value.

The conclusion of significance is that two factors alone, "single moms" and "immigrants," together explain well over half of the variation in the incidence of lower-income families with children in communities across British Columbia.[63]

[63] The most recent First Call media release also emphasizes the single mom factor. It points out "The risk of poverty for female lone-parented families is 31%, two and a half times greater than for children in 2-parent families…" BC Child and Youth Advocacy Coalition, "*A Time for Leadership in Fighting Childhood Poverty,"* November 24, 2010, www.firstcallbc.org.

Table 8

Regression equation A: possible predictors of "% low income" in community

I offer a 6-explanatory variable model which encompasses 82% of the variability in the dependent variable "% low income" in the community, of what we might simply call "poorness." In other words, crudely put, give me your community values on these six factors, and I may be able to predict about 82% of the variance (from the average) of your community's *percentage low income*. The equation is:

Explanatory variable	b-weight of variable in the equation	t-statistic (a measure of significance)
% immigrant in community	99.96	6.3
% married in community	-.4661	-9.0
% moved from a different province	-1.0652	-2.6
% senior	-.5560	-4.6
% participation rate in the labour force	-0.598	-5.2
% with a government or utility type job	-0.156	-2.4
Constant	85.74	8.7

R-squared 82%, F 35.7. degrees of freedom 47

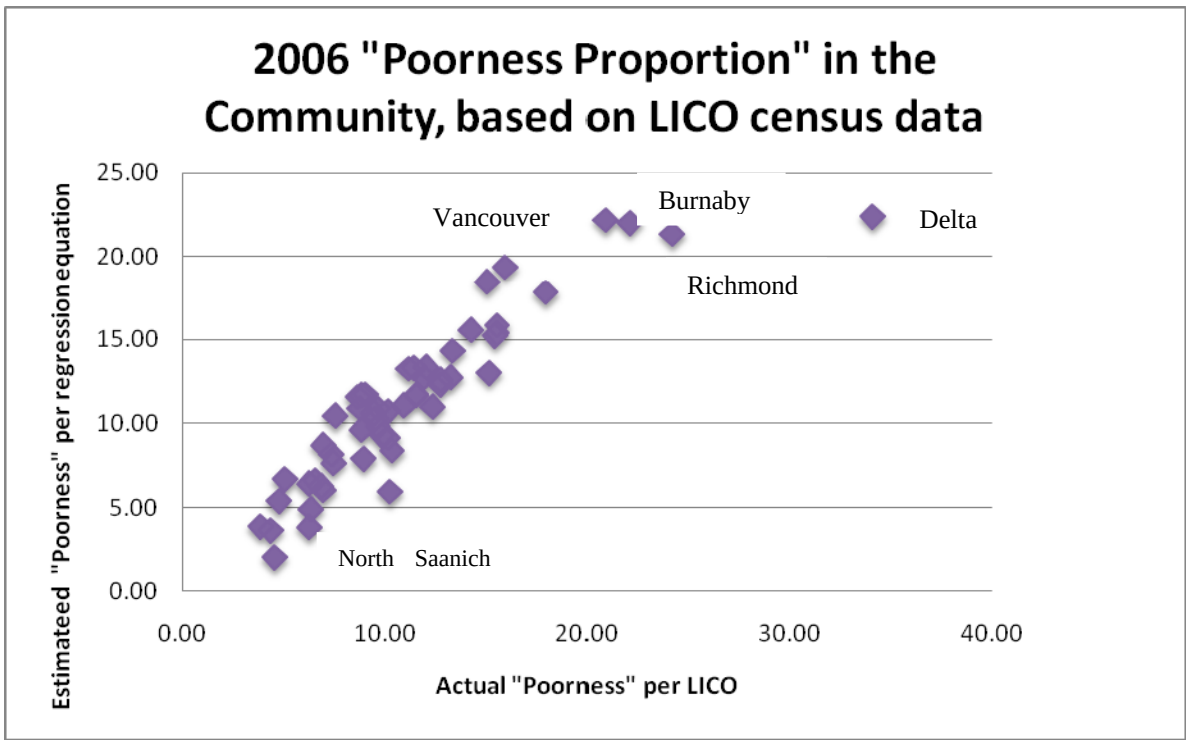
Testing mean values of explanatory variables in the equation

row		Column A	Column B
	Explanatory variable	b-weight of variable	Mean value of explanatory variable
1	% immigrant in community	.9996	2.4250
2	% married and together in community	-.4661	50.35
3	% moved from a different province within 1 year	-1.0652	1.45
4	% senior	-.5560	16.31
5	% participation rate in the labour force	-0.598	65.2037
6	% with a government or utility type job	-0.156	24.6099
7	Constant	85.74	
Test	Sum of A1*B1 + A2*B2 +A3*B3 + A4*B4+A5*B5+A6*B6+A7		11.2407

Predicted average value of % low income in community (after tax) 11.24
Actual average value of % low income in community (after tax) 11.24

Charting Poorness: Actual vs. Estimated

While the 82% R-squared statistic of this simple regression equation seems impressive enough, how effective is it in predicting general "poorness" (according to LICO) on a community by community basis? Put another way, are there hints to be gleaned from visually examining significant community outliers in the data. The chart below plots actual versus the estimated incidence of "poorness" proportion or incidence, based on regression calculations for 2006 household census data, for the 54 communities.



Delta (high on both actual and estimated poorness scales) stands out, depicting a modest tendency for LICO to overstate poorness by the norms of other communities. Delta notwithstanding, visual examination verifies the pretty good fit between actual (per LICO) and estimated (per regression) "poorness." This surprised me, given the notorious difficulty of explaining cross-sectional study, given the enormous diversity in economies, demographics, and income prospects in disparate communities scattered around this vast province– and also given, one suspects, huge variations in the willingness to answer accurately probing questions arriving in the mail. I emphasize again, this plot is based on the percentage of economic units reporting incomes below the LICO cutoff, whether children are present in the household or not.[64]

[64] The data are LICO-based, 2006 census, after tax.

Table 9

Regression equation B: possible predictor of % low income with children" in the community on the singular basis of "%low income"

Can we explain the propensity for a community to have a lot of poor families with children simply on the basis of its having a lot of poor people? Well, it is about half of the story, actually. The following simple 1-variable model encompasses 50% of the variability in the dependent variable "% low income with children" in the community. The explanatory variable is "% low income in the community." Put crudely, if you tell me your community's *% low income* statistic, I may be able to predict about 50% of the variance (from the average) of your community's *% low income with children*. The equation is:

Explanatory variable	b-weight of equation	t-statistic (a measure of significance)
% low income in community	.662	7.18
Constant	5.53	4.82

R-squared 49.7%, F 51.5 degrees of freedom 52

Testing mean value of explanatory variable in the equation

row		Column A	Column B
	Explanatory variable	b-weight of equation	Mean value of explanatory variable
1	% low income in community	.662	11.24
2	Constant	5.53	
	Sum A1*B1 + A2		12.98

Predicted average value of % low income with kids in community after tax: 12.98
Actual average value of % low income with kids in community after tax 12.98

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Table 10

Regression equation C: possible predictor of % low income with children" in the community on the basis of "% low income" and 3 other factors

But we can do better than 50% (per the last table). Below, I offer our 4-explanatory variable model which encompasses 69% of the variability in the dependent variable "% low income with children" in the community. In other words, crudely put, tell me your community values on these 4 factors, and I may be able to predict about 69% of the variance (from the average) of your community's *percentage low income with children.* The equation is:

Explanatory variable	b-weight of equation	t-statistic (a measure of significance)
% no high school	0.100	0.87
% low income in community	.412	3.01
% don't speak English or French	.9909	2.50
% single mom	.7720	4.30
Constant	.863	0.43

R-squared 68.7%, F 26.8. degrees of freedom 49

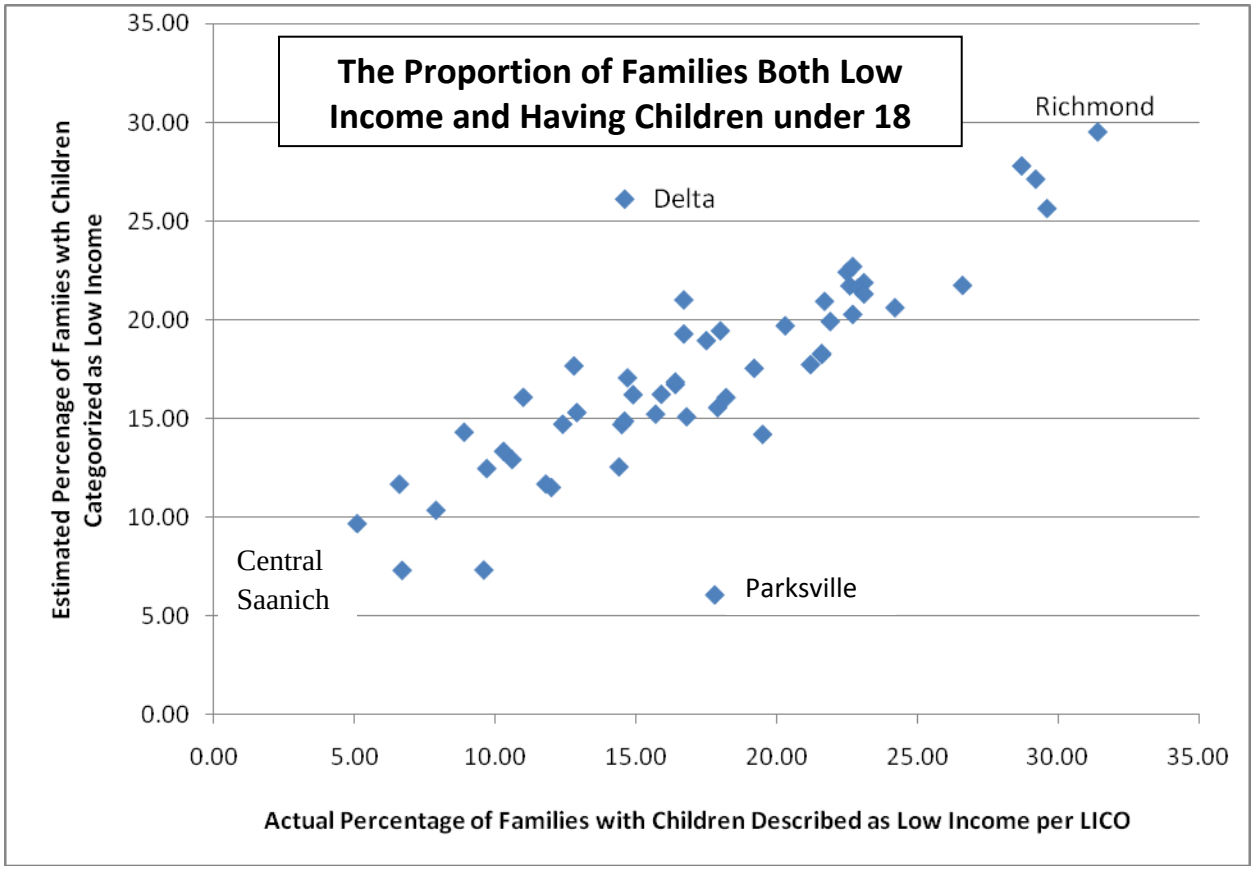
Illustration. Testing mean values of explanatory variables in the equation

row		Column A	Column B4
	Explanatory variable	b-weight of equation	Mean value of explanatory variable
1	% no high school	0.100	11.90
2	% low income in community	.412	11.24
3	% don't speak English or French	.9909	1.255
4	% single mom	.7720	12.183
5	Constant	.863	.8635
	Sum A1*B1 + A2*B2 +A3*B3 + A4*B4+ +A5		17.33

Predicted average value of % low income in community: 17.33

Detailed Report -- continued

I have plotted the actual (per LICO) versus estimated (per regression equation) data for the percentage of families with children living under lower income conditions as defined by LICO, for the 54 communities in the study.



Actual (per LICO) versus estimated (per regression equation) data for the percentage of families with children living under lower income conditions as defined by LICO

The chart illustrates the quite strong explanatory power of the regression equation, with the community of Richmond at one extreme (percentage of families low income with children being high in the census survey, and high in the model estimate); also depicting Central Saanich at the opposite extreme (with low actual "poor with kids" and low estimated of the same statistic. Charted and also on display are also the outliers of Parksville (high actual poor with kids; low estimated poor with kids); and Delta (high on estimated percentage poor with kids but low in actuality per LICO and the census.) The regression equation for "poor with children" shows a pretty good fit to these community data, propelled in part by the explanatory power of each community's "poorness" factor when it was introduced into the equation.

To rehash the 1-step versus 2-step debate, I must acknowledge those reviewers of some statistical sophistication who questioned the 2-step nature of my modeling effort.

One line of skepticism asked if it would not be simpler to put all relevant explanatory variables directly into a single equation addressing at once the issue of "low income with children" in the community. And that is what I eventually did.

Another line of skepticism suggested that due to the undoubted collinearity between "% low income" in the community, and "% low income with children" in the community (i.e., high correlation) we should be suspicious of any regression equation which explains the second of these two characteristics on the basis of the first, since the second essentially incorporates the first.[65] Accordingly, it is suggested, a more robust test would be to insert "% low income in the community and *not having children)* as a non-collinear explanatory variable. On that basis, the estimated R-squared statistic would be uncontaminated by collinearity.

This useful criticism prompted me to construct a new series of 54-community data; namely, % low income minus % low income with children. It turns out that this statistic is a negative. There are, on the surface, more low-income families with children than there are low-income families. Across all 54 communities, the average prevalence of "low-income families with children" exceeds the prevalence of "low-income families" by 2.9 percentage points on a pre-tax basis, and 2.4 percentage points on an after-tax basis. Hmm. How can this logically be?

The solution is the realization that Statistics Canada is not measuring the % low income with children" as a subset of "% low income." Rather, we are in this study implicitly analyzing how Statistics Canada builds its LICO table. On the basis of LICO's definitions, you are more likely to be poor in British Columbia if you have children than if you do not have children. In the world of LICO, one set of families (with children) is not a subset of the other (with or without children). Accordingly, this particular line of skepticism was, in my conclusion, unhelpful.

[65] For example, one reviewer expresses suspicion that including the "independent" variable of "% low-income families in a community" may be producing an inflated R-squared statistic, since the variable "% low-income families in a community with or without children" is very close in construction to the variable ""% low-income families in a community with children." What results may be a form of circular specification, where the equation -- almost equivalent to y=y -- is not explaining very much. See the text for my response.

What happened to my equations explaining low income with children when I omitted poorness of the community at large as an explanatory variable? See Table 10:

Table 10: Regression Equation Possibly Explaining the Incidence of Low-Income Families with Children Among 54 British Columbia Communities.

Explanatory variable	b-weight of equation	t-statistic (a measure of significance)
% no high school	.097	0.78
% don't speak English or French	1.82	5.92
% single mom	.957	5.27
Constant	2.23	1.07

R-squared 62.9%, F 30.7. degrees of freedom 50

I should not overstate the apparent redundancy of community poorness in explaining poorness with children. It is still statistically significant but omitting it from the equation yields the loss of only 6 percentage points of "explaining" power (R-square statistic). Omitting it does however, contribute to the further diminution in the importance of the high school graduation factor, and results in the even greater dominance of language ability (a proxy for "immigrant") and the single mother factor in the equation.

The simplified, stripped-down equation "explains" more than 60 per cent of the variability in the measured incidence of low-income families with children in these communities – as measured by the LICO table.

So, in trying to answer the collinearity criticism, we found out that we really don't need the crutch of low income in the community to account for a high proportion of the incidence of low-income families with children in the community. Two highly potent factors –"immigrant" and "single mom" will do.

VIII. Poor Correlates of Poor

So much for the factors highly correlated, either singularly or in unison, with either having low income or being "poor with children." Now turn the analysis upside down. What can we learn from those community descriptors studied which turned out to be not very correlated with low income?

The following community descriptors had *weak* correlations[66] with either "poorness" overall, or with the percentage of households "poor with children."

Weak correlations encompassed such community descriptors as: fraction of income obtained from investments, fraction of income obtained from self-employment, fraction of income received from government transfer payments including EI[67] and IA[68], the number of business firms per capita, business bankruptcies per capita, the ratio of business startups to bankruptcies, the number of business incorporations per capita, the fraction of the population in managerial or professional occupations, the fraction of population divorced, the fraction of population living common law, the fraction of population widowed, the fraction of population which is female, the fraction of persons holding multiple jobs, the fraction of households with children, the fraction of population baby-sitting, the fraction of population looking after seniors, the population growth rate of the community, the median value of houses in the community, the rate of increase in the value of houses, and the fraction of the population which is aboriginal (see next section).

Some of the *insignificant* correlations are a surprise. For example, one might tend to associate a high proportion of persons living on EI or IA (employment insurance or income assistance) to be earmarks of low-income communities, but this is not the case. Indeed, one can see in these findings support for the proposition that EI and AI (what we used to call "welfare" in the old days) is succeeding in keeping households from falling below LICO. Similarly, there is a surprising (to me) lack

[66] I arbitrarily selected a correlation coefficient of 0.2 or smaller as being relatively "insignificant."
[67] EI in old fashioned parlance is UI or unemployment insurance, now referred to as employment insurance.
[68] IA in old fashioned parlance is "welfare" now referred to as income assistance.

of correlation between poorness and the intensity and success rate of smaller business activity in the community. If starting a small business is the easy pathway out of being poor, there is scant evidence for it in these data. One might similarly hypothesize the absence of poorness would be strongly associated with a high degree of investment income or tax-exempt income in the community, but that theory is not supported by the data either.

Finally, neither looking after seniors, nor babysitting the kids, is associated with the percentage of "poor" in a community. I don't have a theory to explain that, but perhaps the reader can invent one.

Aboriginals

I was confident that the proportion of Aboriginals or First Nations in the community would be a powerful correlate of low incomes, given the social conditions lamentably characteristic of many Aboriginal populations. The data gave me another surprise.

While informal discussions with government officials, plus my own observations, suggested that the incidence of Aboriginal or First Nations persons in the community would be a powerful predictor of the prevalence of lower income families, *this did not prove to be the case.*[69]

Curious about this finding, I examined the correlation between the descriptor "% Aboriginal in the community" and eight other measures of the prevalence of low income in the community:[70]

- % low-income families in the community in 2006
- % low-income unattached individuals in community in 2006

[69] One reviewer suggests that this might be due to the possibility that many Aboriginals are under-employed, but that because the number of unemployed overall is larger than the number of Aboriginals this washes out the significance of "Aboriginal status" in the models; i.e. Aboriginal and unemployment are co-linear but unemployment is stronger. In response I point out that the unemployment rate did not prove to be a particularly useful or significant explanatory variable (unlike the labour force participation rate) in the low-income regression analyses, perhaps due to presence of a well-developed employment insurance system.

[70] Table 10

- % low-income private households in community in 2006
- % low income before tax
- % low income after tax
- % low income before tax with kids
- % low income after tax with kids

Only the second from last, "% low income *before tax* with kids" showed a significant correlation with the descriptor "% Aboriginal ". And tellingly, when measured on an *after-tax* basis, the significant correlation disappeared.

The Statistics Canada 20% census data of 54 British Columbia communities reviewed in my study is based on municipalities rather than provincial electoral districts. Accordingly it does not encompass Aboriginals living *on Indian Reserves;* such IR's are not part of the legal description of a municipality. It encompasses only *non-Reserve* Aboriginals living in these 54 cities and towns across the province. Note that in Statistics Canada's household census, persons self-identify themselves as "Aboriginals."[71]

Estimates of the percentage of Aboriginals living off-Reserve varies from 50 per cent[72] to 70 per cent[73]. It has been explained to me by knowledgeable sources that these different percentages emerge from varying definitions of the Aboriginal population. A total of 101,000 persons described themselves as Aboriginal in the 54 communities encompassed by the 2006 British Columbia household census (roughly 3 per cent of all those surveyed.) [74] [75]

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[71] See the previous discussion on page 6 and 7 as well as footnote 4 and footnotes herein.

[72] According to Environics Institute's independent polling as well as its analysis of Statistics Canada data, as reported in *The Urban Aboriginal Peoples Study,* "about half of Canada's 1.2 million aboriginal people live in urban centres." Globe and Mail. April 6, 2010. Furthermore, "the number of people who self identify as Aboriginal is growing everywhere – in rural areas, on reserves and in cities. Half of Aboriginal peoples in Canada now live in urban centres." Op. cit. page 14. The latest census shows 1.7 million people reporting at least some aboriginal ancestry, up from 1.3 million in 2001 and 1.1 million in 1996. Sue Bailey, *Canadian Press,* 2008/01/15. She also reports 54 per cent of those who consider themselves North American Indian, Métis or Inuit live in or near urban areas.

[73] According to Calvin Helin, Tsimshian Nation lawyer, "off-reserve people … that's 70 percent of the population." Interview published by Frontier Centre for Public Policy, June 25, 2007. http://www.fcpp.org/publication.php/1800

[74] Using the Aboriginal Identity definition, the following table provides Aboriginal statistics for British Columbia: http://www12.statcan.gc.ca/census-recensement/2006/dp-pd/tbt/Rp-eng.cfm?TABID=1&LANG=E&APATH=3&DETAIL=0&DIM=0&FL=A&FREE=0&GC=0&GK=0&GRP=1&PID=89121&PRI

I have not pursued further the issue of why, on the basis of these data, low-income families may present themselves on a pre-tax basis, but not on an after-tax basis, among Off-Reserve Aboriginals, when measured by LICO yardsticks of the all-Canada Low Income Cutoffs.[76] But it presumably derives from the unique taxation status of Aboriginals in our society.

In sum, in understanding poorness, what is not a strong correlate can be as helpful to our insight, as what is.

IX. Government Programs Which Assist Low-Income Families with Children

The Statistics Canada census of 2006 – not a complete census of everybody in the province, mind you, but a 20% sampling of economic families living in 54 communities -- revealed about 100,000 low-income families in British Columbia, on the basis of the LICO cutoff.

There is ample evidence that children who grow up in low-income households, often tend to present lower wellness, greater frequency of acute disease, higher involvement in the criminal justice system, lower achievement in school, higher incidence of mental illness and of obesity, and a reduced likelihood of being "ready to learn" when beginning school. And that is just for starters.

Governments are hardly oblivious to the many unhappy outcomes associated with low income. Both the Federal government and the British Columbia government – as well as municipalities -- expend a great deal of money and effort trying to

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D=0&PTYPE=88971,97154&S=0&SHOWALL=0&SUB=734&Temporal=2006&THEME=73&VID=0&VNAMEE=&VNAMEF= .

[75] It appears that almost half of Aboriginal Identity persons in B.C. are not reported in the British Columbia community statistics employed in this report.

[76] One of the reasons off-Reserve aboriginals might not do so well, relative to other Canadians, on a pre-tax basis but not on an after-tax basis, is that some of them may have tax-exempt income such as employment income earned on the Reserve. The fact that they are no longer living on the Reserve may be due to high mobility as well as different reference periods (for example, 2005 for income but May 2006 for residence.)

improve the circumstances of low-income families with children. We briefly survey some of these programs:

a) The Magnitude of Transfer Payments in Canada

Canadian governments, both national and provincial, attempt to reduce the difference in earnings between rich and poor through transfer payments. On a combined basis, these two levels of government are estimated *to transfer 10% of our country's GDP annually*, or more than $150 billion per year, to individuals, about half of this representing federal government transfers including family and youth allowances, and the child tax benefit, another quarter representing provincial transfers, and the final quarter representing federal and Quebec pension plans. By any standard, I judge this to be a significant redistribution of our national income.[77] [78] [79]

b) Social Program Spending by the B.C. Government

Much provincial assistance to lower income households with children is delivered *in-kind* – through services ranging from hot lunch programs to subsidized social housing.

As a general rule, Federal benefits are taxable while provincial *benefits in kind* are not. Income data reported by Statistics Canada is the income reported to CRA, the

[77] **Source:** Government transfer payments to persons, 2003-2007, Statistics Canada, CANSIM, table (for fee) 384-0009 and Catalogue no 13-213-XDB. Last modified: 2009-11-16.

[78] Similarly Statistics Canada, CANSIM, tables on Welfare statistics - **Updated April 11, 2010.** (including stats on welfare leavers and welfare expenditures) Poverty/income statistics

[79] Expenditures on major transfer programs (five years' worth of expenditures on Old Age Security, child benefits, Canada/Quebec Pension Plan, social assistance, Workers compensation and much more)

Canada Revenue Agency – in most cases (unless the respondent chooses to self report to Statistics Canada, which apparently most do not.) It appears that CRA does not measure the intrinsic value of in-kind services rendered differentially to low-income recipients and accordingly does not count them as part of their income, even though the value of such might logically seem to have the effect of removing a number of low-income persons from the low-income category per LICO.

But just how significant is *in-kind* spending? It is not that easy to add up. Provincial program spending relevant to this study is principally concentrated in four British Columbia ministries.[80] Details are shown in Appendix C, the result of much digging, cajoling and guesstimating by me and others trying to assist. My final approximation of the taxpayer sums involved is as follows:

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i. Program spending by the Ministry of Children and Family Development of particular benefit to lower-income families with children is in the approximate range of $1.3 billion.

ii. Program spending by the Ministry of Housing and Social Development of particular benefit to lower-income families with children, is in the approximate range of $1.7 billion.

iii. Program spending by the Ministry of Education of particular benefit to children of lower-income families is in the approximate range of slightly under $0.4 billion.

iv. Program spending by the Ministries of Health and Healthy Living of particular benefit to lower-income families with children is in the approximate range of somewhat more than $0.5 billion.

In addition, legal aid programs of the Ministry of Attorney General may provide an additional $20 million of assistance to lower-income families with children. The Welcome BC program of the Ministry of Advanced Education and Labour Market Development could easily add another $30 million to the estimate. The point of this exercise is to measure program spending uniquely targeting low-income families with children, and not available to every one of all income levels.

[80] Analysis based on summer 2010 ministry definitions prior to the current (November 2010) major re-shuffle.

Adding up program expenditures targeting low-income families with children, across all six ministries, yields what I believe to be a reasonably conservative approximation: the sum of $3.9 billion per year.[81] [82]

c) Tax expenditures targeting those of lower income

Services are one thing; simply handing over cash is another. Instead of targeting social services – on a differential basis – to families of low-income with children – governments may simply reduce their income taxes, or remove them entirely from the income tax rolls.

The current British Columbia government, in what some may regard as fairly aggressive income redistribution, has in the nine years-plus since coming to power in May 2001, steadily reduced the impact of the provincial income tax on lower income persons, including those with children, and has steadily eliminated them entirely from the tax rolls. B.C. now has the lowest provincial income tax in Canada for low-income earners. [83]

In this respect, I judge the fiscal strategy pursued by the current B.C. government to be somewhat unique. British Columbia is one of the few Canadian jurisdictions which has chosen to reform its tax system by reducing or eliminating income taxes across the board, but particularly for low-income persons, in contrast to other provinces which levy much higher taxes at the upper end of the income scale in

[81] In the 2009-2010 fiscal context.

[82] A knowledgeable reviewer comments: "The one section (of your report) I am most uncertain about is the translation of the cost of provincial and federal programs ostensibly directed to the "poor" and the assumption that these dollars arrive there in their totality and have beneficial impact. Because most of these are deeply rooted bureaucracies, I suspect only a portion of the dollars finds its way to individually benefitting the status of those in need.

[83] But note a conceptual disagreement: Some point out (correctly) that the income tax cuts for low-income persons are smaller in dollar terms than the cuts enjoyed by higher income persons. I respond (correctly) that income tax cuts for lower income persons are higher n percentage terms. Some say this means income tax cuts are therefore focussed on high income persons more than upon low-income persons. I disagree. If there is no income to cut, the dollars cut are minimal. In percentage terms, lower income persons have received greater cuts than those of higher income.

order to finance high payments in kind (i.e. social services) at the low end of the income scale – to persons who must still pay income tax!

As I see it, B.C.'s strategy is more effective, leaving more money in the pockets of the poor to spend as they choose. Freedom to choose is important to household welfare. For example, in B.C.:

- Persons earning under $18,800 annually pay no provincial income tax.
- Due to tax cuts since 2001 (when the current Government came into office), an additional 325,000 low-income British Columbians now pay no income tax at all.
- About 40 per cent of low and middle-income earners in British Columbia pay no income tax at all.[84]

Cash flows to lower-income families with children through multiple other avenues; viz.,

- The Federal and Provincial governments cooperate to provide low-income families with special support. They receive up to $385 each month ($4,620 per year) for each child through combined child tax benefits (Canada Child Tax Benefit, BC Family Bonus, National Child Benefit, and the Universal Child Care Benefit.)
- Families with earnings also receive the federal Working Income Tax Benefit (WITB) and the BC Earned Income Benefit (now being phased out) which was designed to encourage families to escape the welfare trap and support themselves by working.
- With introduction of the harmonized federal-provincial sales tax – a value-added tax -- low-income families receive a maximum B.C. HST tax credit of $230 per family member. This HST credit will accrue to 1.1 million British Columbians (estimated annual cost in the range of one-quarter billion dollars.)

One may roughly estimate the cumulative ten-year incremental 2001-2010 tax benefit accruing to families earning less than LICO in British Columbia, as a result of these B.C. income tax reductions. I estimate the low-income tax saving is very

[84] Jon Kesselman, "Income Tax Death Good News for HST?" page A11, *Vancouver Sun,* November 24, 2010.

approximately in the range of $1.5 billion per year or as much as a cumulative $12 billion since the 2001 accession to office of this present provincial government. As for the portion of these tax savings arriving at the doorstep of low-income families with children, let's use a low-ball estimate of $100 million annually – although it could easily be much higher.

As an order of magnitude estimate, this may approximate an extra $1,000 per year of B.C. tax expenditures accruing to each lower-than-LICO family annually. [85] [86] For low-income families with children, we therefore estimate approximately $100 million annually in income tax expenditure.

What stands out is the relatively small order of magnitude of tax expenditure, versus the relatively large order of magnitude of program spending, when assessing government activity targeted to the low-income family with children, even in a province such as British Columbia which endeavours to deliver tax savings and not simply more government programs. Taking these very rough estimates at face value, the ratio is approximately 40 to 1. One reason, of course, is that lower-income family income is so small in the aggregate, the result is tax expenditures targeting them are therefore not of momentous fiscal impact, even when income taxes are entirely eliminated for lower-income families.[87]

[85] In order to estimate what I would consider to be the implied scale of British Columbia tax expenditures on lower-income tax filers, we may consider the approximate 3.07 million tax filers in 2006 in this province, and then classified each individual into (a) personal income tax distributions in 6 untaxed income categories below $20,000 per annum, and .(b) two taxed income categories between $20,000 per annum and up to $30,000 per annum; and (c) one tax category in the range between $30,000 and $34,999. In a hypothetical future word, if a flat tax of 5% was applied to each tax filer in these income ranges, cumulatively representing about two-thirds of all tax filers, I roughly estimate additional income tax revenue to the province of $1.6 billion. This would equate crudely to incremental tax revenues in the range of $500 per lower income person. The real tax system of British Columbia does not, of course, in any way resemble this hypothetical and very approximate construction.

[87] A knowledgeable analyst points to the crudity of my income tax expenditure guesstimations, and suggests a stronger approach would be to compare quintiles of the distribution of the provincial income tax. It is pointed out that currently, the bottom 50% of B.C. tax filers pay only about 3% of the total provincial income tax while the top 5% of tax filers pay about 48% of the total provincial income tax. If it were possible to get comparable quintile distributions for both 2000 (before the accession to office of the present government) and today (2010), one might better discern whether the income tax system has become more progressive (which is my assertion) or more regressive – or neither. Unfortunately, I could not track down a source of data to compute these important numbers. So I resorted to less elegant calculations to buttress my convictions. The statistics of this footnote confirm that

Adding program expenditures (roughly $3.9 billion) and tax expenditures (I guesstimate $100 million) yields the estimate -- on an order of magnitude basis -- that the B.C. government expends about $4 billion each year to assist lower-income families with children. This is approximately 10% of total provincial government spending.

On a purely arithmetic basis, the combined sum of program spending and tax spending, for the benefit of low-income family with children, is probably sufficient to lift the typical low-income family above the LICO cutoff. But it is no doubt of little comfort to assure low-income families that when all the government services targeting them are added up, they are doing rather well. I, at least, would not volunteer to deliver that good news.

One final point: some social scientists point out that it is not simply about money. Numerous studies, as well as popularly held observation, demonstrate that children in low-income homes are more likely to be "vulnerable," as measured on multi-faceted scales. However, while the incidence of vulnerable children may be higher when measured as a percentage of the reference population, it is not necessarily where the bulk of the vulnerable may be found. Researchers at the University of British Columbia, lead by Clyde Hertzman, have pointed out that the numerical bulk of the "vulnerable" children are actually to be found in the more populous middle-income and upper-income households in neighbourhoods across the province. [88] [89]

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sharply cutting the income tax rate or even eliminating income taxes entirely (i.e., tax expenditures) for those of lower income, comes with but a small sacrifice in total government revenues since they already pay so little. And that is what this government has done.

[88] Gleason, Myers, Paris, and Strong-Boag, *Lost Kids*, University of British Columbia Press, 2009.

[89] Human Early Learning Partnership (HELP), *C. Hertzman, Director,* A research institute within the College for Interdisciplinary Studies, an , interdisciplinary research partnership of faculty, researchers and graduate students from UBC Vancouver, UBC Okanagan, UVic, SFU, UNBC, and TWU. . (Referring to University of British Columbia, University of Victoria, University of Northern British Columbia, and Trinity Western University, respectively.) Numerous publications and studies, including, for example (citing UBC Public Affairs): Disadvantaged neighbourhoods set children's reading skills on negative course: UBC study. A landmark study from the University of British Columbia finds that the neighbourhoods in which children reside at kindergarten predict their reading comprehension skills seven years later. The study, published this week in the journal Health & Place, finds children who live in neighbourhoods with higher rates of poverty show reduced scores on standardized tests seven years later – regardless of the child's place of residence in Grade 7. The study is the first of its kind to compare the relative effects of neighbourhood poverty at early childhood and early adolescence.

Indeed, one might draw from this survey of the extent and cost of a myriad of a government programs aimed at improving the welfare of lower-income families with children, questions as to their efficacy. This may be a supporting argument for my suggested greater focus on single-moms and immigrants, even in affluent communities such as West Vancouver.[90]

X. So What About West Vancouver?

All of which brings us back to where we started: West Vancouver. What do we conclude when First Call so rudely called the world's attention to our problem of "childhood poverty" in supposedly affluent West Vancouver? [91]

I applied the two regression equations developed for all of British Columbia communities in this study, to predict respectively the "low income" and "low income with children," performance of West Vancouver. This would help us judge whether West Vancouver is in lock step with British Columbia norms, all things considered.

On the basis of the first regression estimate, Table 11, it appears West Vancouver is expected to have an above-average presence of low-income families, largely on the basis of a high presence of immigrants, but also due to the relative dearth of comfortable government-type jobs in West Vancouver. However, the actual presence in West Vancouver of families with below-average incomes, as reported

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[90] For example, see the social indicator and vulnerability mapping publications of Professor Clyde. Hertzman, UBC (HELP project referenced above). I am further much persuaded by the analyses of Professor Paul Kershaw of the University of British Columbia, who testified recently before the Select Standing Committee of Children and Families of the Legislature. Kershaw's thesis is that we are under-investing in our children, which will have troubling long-term consequences for the health and wealth of our society. Testimony of Paul Kershaw, Assistant Professor, Human Early Learning Partnership, University of British Columbia, before the Select Standing Committee on Children and Youth of the British Columbia Legislature, Report of Proceedings (Hansard) Friday, May 21, 2010. MLA Joan McIntyre, West Vancouver-Sunshine Coast, Chair.

[91] One reviewer wrote: "If there is so much poverty in West Vancouver why do so many people try to move here?"

to CRA and eventually disseminated by Statistics Canada, is only slightly greater than the B.C. average. Hence, our ability to "explain" general poorness in this community is not bad -- but not terrific either.

On the basis of the second regression estimate, Table 12, pertaining to low-income families with children, West Vancouver is predicted to have a modestly higher presence of such families than the experience of the province as a whole. However, this predicted above-average presence is far below the actual incidence in West Vancouver as reported by Statistics Canada. The large variance between actual and predicted suggests one of two things is going on: there is something mysteriously different about West Vancouver which my best efforts and a lot of computer massaging of the data could not uncover, or alternatively, the underlying data may be unreliable.

Based on the regression equation's *predicted* incidence of low income with children in West Vancouver (14.2%), versus the 54-community average of 17.3% -- and boldly comparing "% children data" and "% families with children data" -- we conclude that our model places this community into an "average" or "superior" position with respect to the incidence of low-income children. Our reported ranking is, of course, seriously otherwise.

Table 11: Predicting the Prevalence in West Vancouver of Families with Low Income (after tax)

Explanatory Variables	West Vancouver	54-Community Average in B.C.
% immigrant prior to 1991[92]	5.4%	2.4%
% married and living together	56.7%	50.4%
% lived in different province one year ago	1.1%	1.5%
% senior	23.0%	16.3%
% participation rate in the labour force	57.7%	65.2%
% holding government or utility-industry jobs	18.1%	24.6%

[92] See Appendix A for discussion of various measures of "immigrant" – this particular "prior to 1991" measure (a subset of all immigrants, clearly) seeming to have unexpected significance.

Dependent Variable		
Predicted % low-income families	13.4%	11.2%
Actual % low-income families[93]	12.1%	11.2%

Table 12: Predicting the Prevalence in West Vancouver of Low-income Families with Children (before tax)

Explanatory Variables	West Vancouver	54-Community Average in B.C.[94]
% low income in community	12.1%	11.2%
% not high school graduate[95]	2.1%	11.9%
% don't speak English or French	1.3%	1.3%
% single mom[96]	8.9%	12.2%
Dependent Variable		
Predicted % low-income families with children	14.2%	17.3%
Actual % low-income families with children[97]	19.5%[98]	17.3%

Notes to Table 11: This table shows the application to West Vancouver of the 6-variable regression equation with dependent variable the percentage of families in the community which are categorized as falling below the Statistics Canada Low Income Cutoff in 2006, on an after-tax basis, and with explanatory variables: % of persons in community who have immigrated to Canada prior to 1991, % of households with persons married and living together, % of persons in the community who lived in a different province a year ago, the % participation rate among persons in the community in the labour force, the % of persons in community who are seniors, and the % of persons employed in a government or utility-type job.

West Vancouver has an above-average presence of reported low income (after-tax) families in comparison with the province as a whole, but the regression model predicts

[93] Per Statistics Canada and the LICO measurement, after-tax. For West Vancouver based on 11,905 economic families.
[94] Not population weighted, simply the average of each community's statistic.
[95] Age 25 to 64.
[96] Census family definition.
[97] Per Statistics Canada and their LICO measurements, pre-tax.
[98] A question raised was whether this refers to the proportion of persons under 18 with low income, or the proportion of families with children with low income. The statistic is simply the Statistics Canada pre-tax number for West Vancouver for the former, used along with 53 others as the dependent variable in the regression equation of interest.

an even higher percentage. Contributing to its higher presence of low-income families are the more-than-double presence of immigrants, the lower percentage of intra-provincial migrants, its below-average participation rate in the work force, and its relative dearth of government or utility-type employment. On the other hand, the higher presence of seniors in the population, and the higher percentage of persons married and still living together – what might be called the social stability factor -- act to suppress West Vancouver's low-income rate.

Notes to Table 12: This table shows the application to West Vancouver of the 4-variable regression equation with dependent variable the percentage of families with children in the community which are categorized as falling below the Statistics Canada Low Income Cutoff in 2006. The explanatory variables are: the % low-income families (after tax) in the community generally, the % of persons in community not high school graduates, the % of persons in community who do not speak either English or French, and the % of households in community headed by a single mother.

As prompted this discussion paper, West Vancouver is reported to have a higher-than-average presence of families with children and with incomes below the Statistics Canada Low Income Cutoff. Key factors contributing to this result are the reported higher percentage of families with lower incomes generally – the immigrant factor, as well as the above-average proportion of residents who speak neither French nor English. However, acting to suppress the reported percentage are West Vancouver's significantly below-average proportion of single mother households, and its significantly below -average proportion of persons who did not graduate from high school.

The resulting predicted percentage of low-income families with children in West Vancouver is below the provincial average, but the measured percentage of low-income families with children in West Vancouver is significantly higher than the provincial average.

The almost 30% under-prediction of the reported low-income percentage of families with children in West Vancouver, raises many questions. By the norm of other communities in British Columbia – by which I refer to the central tendency of the statistical model --West Vancouver's high immigrant population explains why the prediction is high. But why the prediction fails to be high enough, is a puzzle.

Other key explanatory factors beyond the hundreds of variables I have analyzed could be at play here; and I simply overlooked them. Or, alternatively, there may be errors in the statistics reported for this community. Checking up on the accuracy of the numbers reported to Statistics Canada is beyond the scope of this study.

Whatever the reason, my interpretation is that we do not see here a simple statistical estimating variance; but that other factors, as cited, may be at play. This is additional cause to disbelieve First Call's finding that West Vancouver has one of our province's highest childhood poverty rates. It would be prudent to adopt a similar measure of healthy skepticism with respect to their strong assertions concerning the province as a whole.

Conclusions

Low-income families exist in B.C.; that is an obvious reality, and there are often unhappy consequences attributable to it.[99] Whether all categorized by Statistics Canada as living below LICO are also living in poverty in West Vancouver -- or elsewhere in this province for that matter -- is strictly a value judgment, as Statistics Canada emphasizes over and over again. They are not in the poverty measurement business.

Certainly governments, both federal and provincial, are not oblivious to the situation of those struggling with lower incomes in our society– as demonstrated by their estimated redirection of about 10% of our GDP by the two senior levels of government, and as demonstrated by the allocation of about 10% of the British Columbia budget by the current provincial government, to lower-income families with children.

Could governments at all levels do more? They try. Policies which create economic growth help everyone. Encouraging broadly based investment and job creation is the daily meat of governments across the land. As the economic situation of the United States currently illustrates, stagnation is the jobs and income killer.

[99] Shirley Stocker, Executive Director of the CKNW Orphanz' Fund comments: "We hear the same reports year after year about BC having one of the highest rates of child poverty in Canada. Childhood poverty is simply a catch word aimed at getting attention. The issue is much broader. I commend you on effectively zeroing in on the main issues facing children and families in need. Low income single parent families, immigrants, youth, seniors, the disabled & mentally challenged,[are all] persons at serious risk. They are poor, needy, underprivileged and require greater assistance. Our organization, for example, funds upwards of $1 million dollars a year into the community, specifically working for children with special needs whose families are poor. The funding to do this work is provided by the citizenry because they know children in B.C. are hurting. … We are a wealthy province. We need to do a better job of looking after our families, and our children who are our future…. The BC Government has tended to cut programs that are essential to low income families in the areas of health, education and social services and turn around and advise families and new immigrants to seek funding through nonprofit agencies."

Conclusions -- continued

In terms of specifically targeted policies and actions to assist poorer families with children, beyond the rather broad array of program and tax spending already in place, I have a couple of suggestions which I believe are strongly supported by the data:

The highest payoff route to whittling down the incidence of low-income families with children in British Columbia, would probably entail greater focus on two types of programs:

- *Enhanced settlement programs* for immigrants, with more attention to the language skills of incoming immigrants (in cooperation with the federal government.)

- *Enhanced pre-kindergarten, kindergarten, and day-care programs* which would allow single mothers to more actively participate in the work force. In this regard, the current extension of government-paid all-day kindergarten to all families in B.C. is of the utmost importance as one portion of the solution.[100]

Canada aggressively encourages persons from many nations to emigrate to our shores. Each decade, there is an approximate ten percentage point gain the proportion of the population which is immigrant. If the systematic tendency dramatically revealed herein, whereby immigrant families seriously lag behind in reported incomes, then national policy makers should ponder the longer-term impact on Canadians' average per capita income which is implied.

I am also driven to the conclusion that we should more rigorously examine the basis of the low-income data upon which all analysis and rhetoric hinges. There is enough evidence of suspicious peculiarities in the data to suggest that the low-income thresholds (LICO) should not to be trusted as the final word on the incidence of low income with children in West Vancouver, in British Columbia, or in Canada.

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[100] However, a knowledgeable reviewer comments, "For the $94 million that the government is spending on all-day Kindergarten about 7,000 free child care spaces could have been created. Working parents who have children in all day K still have to pay $660 a month minimum for after-school care. You can see that many women who are making $12 to $20 an hour (for a 40-hour week earning $2,080 to $3,466 a month) it's pretty tight."

Conclusions -- continued

Since the provincial government spends a large chunk of taxpayer money on targeted social programming and tax expenditures influenced by these low-income statistics, we should surely invest in less controversial and more confidence-inspiring measurements of income. One should have greater assurance as to the magnitude and location of the low-income problem, and greater precision in measuring the effectiveness of programs to fix it.[101]

Finally, one might hope for a turning down of the volume of polarizing rhetoric claiming British Columbia is the worst, and implying that even West Vancouver is among the worst of the worst of the worst. [102] [103] As one reviewer (see footnote) has pointed out, it fails to encourage dialogue and solutions, and relegates this vital issue to a dialectic on political ideology.

[101] Statistics Canada apparently agrees. In their May 26, 2010 publication, Zhang, Xuelin (author), *Low Income Measurement in Canada: What Do Different Lines and Indexes Tell Us?* They *assess* the existing LICO (Low Income Cutoff), LIM (Low Income Measure), and MBM (Market Basket Measure) and found that the various low income indicators tracked each other well in the long-run, but that in the short-run they often behaved differently. It appears to me that Statistics Canada, somewhat chastened by the heated political rhetoric and relabeling surrounding LICO, intends in the future to focus equally on all three measures. http://www.statcan.gc.ca/bsolc/olc-cel/olc-cel?catno=75F0002M2010003&lang=eng. I would be remiss not to report another concept of "poor" which is gaining ground; namely, that it is a function of income inequality in society. If the rich get richer, the poor get poorer even if their income does not fall. Gini coefficients have been around a long time to measure this.

[102] A statistician has pointed out a logical fallacy; that, given a probable bell-shaped curve distribution of low incomes within each community, within each province of Canada, and within the industrialized world, it does not necessarily follow that flunking in each category translates into flunking overall. One can still be the solitary best within a distribution of the average worst. In other words, the worst community in the worst province in the worst country would not necessarily be the worst community in the world.

[103] A reviewer comments: "The use of the "worst" or "last" as descriptors for levels of poverty or economic disadvantage (is) counterproductive. It fails to encourage dialogue and solutions, and relegates this vital issue to a dialectic on political ideology." I (the author) believe those two sentences just about wraps it all up. Amen.

Reflections

As we consider the moral, economic, and human issue of low incomes in our communities, particularly where children are involved, three quotations buzz around in my mind:

> The poor shall always be with us.
> ***Jesus, Matthew 26:11***

> The problem of the children is the problem of the State. As we mould the children of the toiling masses in our cities, so we shape the destiny of the State which they will rule in their turn, taking the reins from our hands. In proportion as we neglect or pass them by, the blame for bad government to come rests upon us.
> ***The Children of the Poor, Jacob August Riis, 1892***

> We hold the distinction of being the only nation in the history of the world that went to the poor-house in an automobile.
>
> ***Will Rogers, 1932***

It seems to me the great moral divide on this topic may boil down to whether you tend to lean toward the interpretation of Christ, Riis, or Rogers.

Regardless of ethical code, it has proven surprisingly easy for social critics of limited statistical training, to corral some numbers "proving" the worst when it comes to childhood poverty, and convincing others, globally, that this is in fact the case.

The problems are not simple and resist simple solutions. However, the clamour and imprecision of certain social criticism should not blind us to the genuine problems which exist – even in the context of dollar a day incomes elsewhere on the planet. Further development of targeted social programming along the lines suggested, with careful measurement of results, is recommended.

We repeat our bias to aim a greater share of spending in the direction of single moms and immigrants.

Appendices

Appendix A: The Data

Appendix B: Measuring Low Income

Appendix C: Social Program Spending by Government

Appendix A: The Data

In searching for correlates of low-income families with children, among these 54 British Columbia communities, the author engaged in unabashed "data mining" using various statistical techniques. I am fully aware of the degrees of freedom and statistical significance arguments – but the acid test of reasonableness guided my interpretations and my report.[104]

The raw data which I examined are shown in the "Data Sources" tables at the end of this report (shown in the web-based version of this report, at http://www.ralphsultanmla.ca/ralph-works/special-studies/

As tabulated on those pages, for each potential correlate of low income – or "poverty" as some would have it – I show the 54-community average (not population weighted), the minimum, the maximum, the median, and the standard deviation of each descriptive statistic.

First Call, the anti-poverty coalition which has most actively sounded the alarm over childhood poverty in British Columbia, uses Statistics Canada data. [105]

[104] And I am keenly aware of the acrid admonition: "Torture a data base long enough and it will admit almost anything."

[105] From: First Call [info@firstcallbc.org] September-22-09, To: Sultan, R, Subject: Child poverty data

The most recent data on child poverty by municipality is from the 2006 census, and it is summarized on our web site here: http://www.firstcallbc.org/pdfs/EconomicEquality/3-press%20release%20may%2008.pdf

These figures use the low income cut off (LICO) measure, and include both the before and after tax rates. LICOs are set according to the proportion of family income spent on basic necessities such as housing, food and clothing. These cut-offs vary according to family size, the size of the community in which they live and its location. The LICO is a measure of how well off some Canadians are in relation to others. The before and after tax income meaures are useful in determining the success of tax credits, allowable deductions and transfers as levers of income re-distribution.

This data is available on the Statistics Canada web site in their 2006 community profiles. You can

search by community name, and scroll down right to the bottom of the page to see the percentage of children in low income in that community. The community profiles are available here: http://www12.statcan.gc.ca/census-recensement/2006/dp-pd/prof/92-591/index.cfm?Lang=E

A more detailed discussion of poverty measures is available on page 5 of our 2007 paper Child and Youth Development and Income Inequality, which you can download here: http://www.firstcallbc.org/pdfs/EconomicEquality/3-lit%20review.pdf. [author's note web site not active November 15, 2010]. Source: Andrina Perry, Administrative Coordinator, First Call: BC Child and Youth Advocacy Coalition, 202-1193 Kingsway, Vancouver, BC V5V 3C9, Ph: 604-873-8437, Fx: 604-874-9898, Toll free: 1-800-307-1212

Appendix A: The Data – continued

These potential explanatory variables or correlates for low income, including those computed by myself as ratios , percentages, or aggregates – have been drawn from four principal data sources. They are:

Statistics Canada Census. Statistics Canada is the central statistics agency of the Government of Canada, based in Ottawa. The goldmine of household data on which this discussion paper is primarily based, is derived from Statistics Canada's compulsory "long form" survey of one in five households across Canada, done once every five years. Common nomenclature for this survey is "2006 Census 20% sample data." The remaining 4 out of 5 households respond to a much shorter list of questions, the sum of these two sets of queries constituting Canada's "census" of everybody. [106]

For the census, most areas of West Vancouver were served by self-administered mail-out/mail-back, or on-line internet, questionnaires in 2006, although some could have been dropped off at the household. Self-administered forms on the internet have also been used. To achieve targeted completion rates, the census is supplemented by door-to-door interviewing. Income data come mainly from Canada Revenue Agency tax filings; respondents are given a choice and about 80 per cent choose the CRA tax file retrieval option.

[106] For reference, see Statistics Canada community profiles. http://www12.statcan.ca/census-recensement/2006/dp-pd/prof/92-591/index.cfm?Lang=E. See also Community Profiles from the 2006 Census, Statistics Canada, 24 Jul 2009 ... Statistics Canada's Community Profiles present community level information from the 2006 Census of Population. Users can search for an area at *www12.statcan.ca/census-recensement/2006/.../index.cfm?...*

To poll one in five households yields a very robust sample of Canadians. Purely statistical error through sampling variation is not likely to be significant.[107]

As an aside, I note that the compulsory household census taken in 2006 may well be the last of this nature for the foreseeable future. After much controversy, the long form is being phased out in favour of a voluntary questionnaire for the next household census which will take place in 2011. [108]

Statistics Canada Annual Survey of Income and Labour Dynamics (SLID), is based on a smaller (than the census) and more elegantly designed longitudinal revolving panel of six independent samples. Due to the more limited sampling basis, sampling error could be more significant, particularly at the level of the individual community. Each year, two panels are surveyed to determine labour market experiences and income during the previous calendar year. Data from SLID used in this discussion paper relies mainly on telephoning to reach people, with supplemental letters advising respondents that Statistics Canada will be calling.

SLID involves about 34,000 households surveyed each year by means of a computer-assisted telephone interview. Recruitment into a SLID panel is on a voluntary basis; once recruited, a panel is unchanged from year to year. One presumes the sample size in British Columbia would be in the range of 4,000 households each year,[109] and if equally divided among 50 communities, each B.C. community might contribute in the range of 80 interviews – a pretty small sample, particularly when estimating small proportion numbers. If large population centres are sampled more heavily, there would be a corresponding reduction in SLID's

[107] Or, as one knowledgeable statistician put it, "sampling error is likely to be relatively small for the large communities we are discussing."

[108] The forthcoming voluntary survey proposed as a replacement to the long form has been titled the voluntary National Household Survey. There is consternation and controversy as to future reliability and comparability of data which will emerge. It appears that households in 2011 will be asked to fill out and return a questionnaire being mailed to 4.5 million households, a national sample of approximately 37%, but with returns and bias as yet unknown. I suspect the results will be patchy.

[109] More precisely, 5619 in the Vancouver metropolitan area, and 694 in Victoria metro, so 4,000 over-all for B.C.'s 54 communities would be in the ballpark.

already meager sample size in smaller communities. SLID's much smaller sample size in comparison with the 2006 Census, means that community-by-community low income comparisons are significantly less reliable. In short, when compared with the Census, SLID's different methodology, smaller samples, and voluntary nature, means it is inherently less statistically reliable at the community level -- particularly in the (probable future) absence of a compulsory Household Census for benchmarking.

BC Stats: This is the central statistical agency of the Province of British Columbia, operating an astonishingly diverse supermarket of numbers ranging from re-dissemination of core Statistics Canada information, to data on the environment to highways to forest fires, based on information original derived from surveys conducted by the provincial government ministries and agencies, as well as administrative files, frequently at the micro community level. This discussion paper has incorporated BC Stats data in such areas as community economic conditions, industry, small business, taxation, bankruptcies and incorporation, education, housing, social assistance and employment insurance, and employment mix by type of industry. Our shopping cart was full by the time we left the BC Stats supermarket.[110]

Revenue Canada: For purposes of income reporting in both its Census and its SLID, Statistics Canada gives survey respondents a choice: they can provide income information directly to Statistics Canada from their own memory or from records they access while filling out the questionnaire, or when talking to an interviewer, or they can authorize Statistics Canada to get it from CRA (the Canadian Revenue Agency, formerly called Revenue Canada.) About 80 per cent

[110] BC Stats, 2006 Census Profile - Summary Version. Registration required to view a more detailed version of this profile. See footnote 16 for the relevant BC Stats link http://www.bcstats.gov.bc.ca/secure/bulletins/cenpro06/detailed/choose.asp By community, e.g., North Vancouver, DM, A District Municipality located in Greater Vancouver, Geographic Classification *5915046.* For a map, browse to www.bcstats.gov.bc.ca/data/pop/maps/rdmaps2006/rd15.pdf. The BC Stats website contains sections devoted to census. See also www.bcstats.gov.bc.ca/census.asp and www.bcstats.gov.bc.ca/regions.asp

of respondents choose the latter. Income reporting for tax purposes leans heavily on adjustments for Federal transfer payments, but must inevitably omit much program spending and, I believe, refundable tax credits, as well as gifts and transfer payments (see discussion of income reporting flaws elsewhere in this paper.). Do you wonder exactly what definition of income is being talked about when considering the low level of income in our society? Simple: it is the number reported on your income tax form.

In summary, the data employed for this discussion paper are a heterogeneous *pastiche.* I worked with 357 different descriptors[111] across 54 communities. Blending numbers from various sources: two different Statistics Canada surveys, as well as BC Stats, and the Canada Revenue Agency.

As one example of this data *pastiche,* there are a couple of dozen different statistics and ratios which may be used to hint at the incidence of "immigrants" in a community, ranging from measures of languages spoken, to years elapsed since arrival in Canada, to citizenship, to whether or not a person was living in a different country one or five years ago. (All of these indicators are self-assessed by Statistics Canada survey respondents, introducing another element of uncertainty.) Is any one measure *the* absolute indicator of being an immigrant? No. But virtually all are significant. As it turns out -- curiously so in my opinion -- one of the more significant descriptors turned out to be the incidence of persons who immigrated to Canada prior to 1991. This is a counter-intuitive finding when assessing the prevalence of low income in a community and a quirk in the data which I did not explore further. What is clearer from the analysis, however, is the overwhelming importance of "immigrant" *however it might be measured*, when seeking correlates of lower income in our communities.

[111] Including in that number many descriptors computed as ratios, percentages and aggregates, based on other core descriptors. In actual modelling, we worked with far fewer than 357 independent explanatory variables.

Appendix A: The Data -- continued

Lumping data from various survey sources together into a single data base undoubtedly contributes to an analysis of uneven statistical quality. This may cause statistical purists to blanch, but is , I believe, commonplace among economists as well as population health researchers, public policy analysts, and others more interested in investigating important policy relationships than in quantifying the mathematical probability of a significant error of estimate.

Appendix B: Measuring Low Income

The statistical analysis underlying this discussion paper is based on the percentage of low-income families to be found within all families in the community. Actually, "families" is a misnomer; Statistics Canada refers to "economic units," carefully defined but essentially related persons living together. A child in this world is a person under the age of 18.

We are measuring the characteristics of families in the community, not individual children. Hence the focus of this discussion paper is not literally upon assessing and predicting the percentage of children; we are assessing and predicting the percentage of families with children. First Call's report might lead one to conclude that they are reporting on the incidence of low-income children, rather than the incidence of low income families with children – which need not be identical depending on variations in family size by income class -- but that is not the case.

To quote Statistics Canada, *"Statistics Canada's low-income rate measures the percentage of unattached individuals and families below the Low Income Cutoff (LICO). The LICO is the* after-tax *income below which most Canadians spend at least 20 percentage-points more than the average on food, shelter and clothing."* [112]

A. The Basis of the Low Income Cutoff (LICO)

Table 13 shows the Low Income Cutoffs (LICO) defined by Statistics Canada for 2006. Upon the validity of this table rests all else – the often-angry analysis, the

[112] Statistics Canada, Income of Canadians, The Daily, Monday, May 5, 2008, referring to 2006 numbers.

frequently emotional pleadings, and various income redistributions proposed to solve the poverty problem.[113]

Low-income cut-offs (LICOs) are income thresholds determined by analyzing actual family expenditure data, below which families will devote a significantly larger-than-average share of their income to the necessities of food, shelter and clothing. To reflect differences in the costs of necessities among different community sizes and different family sizes, LICOs are defined for 5 categories of community size (including rural areas as a separate category) and 7 categories of family size – yielding 35 income cutoff numbers in total.[114]

The baseline household survey which determined the average percentage of household income spent on the "necessities" of food, shelter and clothing, is 18 years old, based on a 1992 Statistics Canada survey. Researchers went into the field and investigated how different sized families in different sized communities across Canada spent their money. It focused particularly on how much of their income families spent on three essentials: food, shelter and clothing.

One 35-entry table of averages was computed for all of Canada, to be applied without variation from Newfoundland to British Columbia. Local costs of living came into consideration only to the degree they impacted how money was spent in any one community at the time the survey was taken some 18 years ago, thereby influencing the all-Canada averages. A single table for Canada, the LICO table, emerged.

For example, it was estimated that in 1992 the all-Canada average family of four living in a community of between 30,000 to 99,999 persons spent 43% of its after-tax income on food, shelter and clothing. To determine the boundary ("cutoff") of low-income, Statistics Canada arbitrarily decided that a family spending, on food,

[113] The inappropriateness of basing poverty conclusions on such evidence is hardly a novel finding. BC Stats, the statistical arm of the British Columbia government, recently published a paper by Dan Schrier entitled "Low Income Cut-Offs are a Poor Measure of Poverty," BC Stats**,** Earnings & Employment Trends, November 2009 , http://www.bcstats.gov.bc.ca/pubs/eet/eet0911.pdf. A key point made by Schier is: "It is possible to be worse off than the average citizen without being poor. "

[114] Statistics Canada Income Research Paper Series, ISSN: 1707-2840 ISBN: 978-0-662-45960-6

shelter and clothing, more than an additional 20% of their after-tax income (that is, 43 plus 20 equaling 63 per cent of after-tax income) on food, shelter and clothing, was by definition "low income." [115]

Each year since 1992, the LICO table has been updated for inflation, by the all-Canada Consumer Price Index. Thus, the 35 LICO cutoffs have increased from year to year, reflecting inflation in the economy. It is suggested that while LICO was originally a measure of relative incomes, it has over the years become a *de facto* measure of absolute income.

Note that in 2010 the same LICO table applies, regardless of location across Canada, and without regard to local wage structures or the local cost of living, and regardless of changes in the mix of spending on clothing, food and shelter in the intervening 18 years. Accordingly, one common explanation of the high reported rates of poverty in B.C.; namely the rather high cost of living on the West Coast in comparison with New Brunswick – is not correct. The same LICO table – adjusted for community size -- applies to define low income, whether in West Vancouver (recent median income $48,728) or Corner Brook (recent median income $20,916) where we suspect million dollar homes are less common.[116] In short, those who point to the high cost of living in B.C. as a reason for the high level of "poverty" in this province do not understand the construction of the LICO table.[117] [118]

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[115] The 63 per cent cut-off may ring a familiar bell to readers of the Vancouver Sun newspaper (April 29, 2010) since Royal Bank Economics Research this week published data on the high housing costs in this city. The RBC Housing Affordability measure captures the proportion of pre-tax household income needed to service the costs of owning a home. RBC's Housing Affordability measure for a detached bungalow for Vancouver is 69 per cent (up 1.4 percentage points), On that basis, even without considering the need for food and clothing, one might conclude that the average Vancouverite is living below the low-income cut-off. RBC, Toronto, March 15, 2010. http://www.rbc.com/newsroom/2010/0315-housing.html

[116] Keeping in mind that Corner Brook is a much smaller community than Metro Vancouver to which West Vancouver belongs for LICO table purposes, and that accordingly a different cell in the LICO table applies. Urban families of Corner Brook (population 19,976) in two-person families face a LICO of $13,976. Urban residents of West Vancouver in two-person families face a LICO of $20,956 since they are counted as part of the urban area of Vancouver (population 1,953,252).

[117] For example: "Mary Ellen Turpel-Lafond, B.C.'s independent representative for children and youth, said a number of factors could potentially contribute to B.C.'s rate being higher than the national average, including

lower minimum wages and the higher costs of housing, food and clothing. But even then, compared to other provinces, we are simply not where we could or should be," she said. From Tamara Baluja, *Despite Decrease, [continued from last page]: B.C.'S Child Poverty Rate Still Highest In Canada. B.C. Children And Youth Rep Says Low Minimum Wages And Higher Costs Of Living To Blame*. **The Province**, June 19, 2010

[118] A good source for the tables (2005 data was used for the Census income, not 2006), one may consult either Statistics Canada, **Low Income After-Tax Cutoffs (1992 base) for Economic Families and Person Not in Economic Families, 2005.** Also, the counterpart table on a pre-tax basis. http://www12.statcan.gc.ca/census-recensement/2006/ref/dict/tables/table-tableau-17-eng.cfm. And for pre-tax, tableau-18.

Appendix B: Measuring Low Income -- continued

One can easily quibble with LICO. The same 1992 market basket of food-clothing-shelter, averaged right across Canada continues to apply although now some 18 years out of date. The same Consumer Price Index applies, ignoring probable differences in cost of living acceleration in different parts of the country. And so on. [119]

Private analysis suggests that from a British Columbia perspective, LICO thresholds by community size appear to exaggerate the actual differences in the cost of food, clothing and housing as between large communities and small in our province. This may not necessarily be true across Canada, however.

Because LICO has its flaws, it should be used with caution if not healthy skepticism. But it survives because it has the virtue of an 18-year history, familiarity, and a certain consistency of long-term trend line with alternative measures of low income and disadvantage.

And let us remind ourselves again of Statistics Canada's prudent caveat: they are not purporting to measure poverty, since poverty is in the eye of the beholder. [120] If somebody else wants to attach the label of "childhood poverty" that is not Statistics Canada's affair. [121]

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[119] Some other caveats which no doubt have some influence on the reported prevalence of low income families per LICO:

a) It can happen that a family with children will incur low income levels for a certain time while the children are young and the parents re-adjust their participation in the work force – temporarily.
b) Immigrants that arrived in 2006 would be listed but would have no income. Those arriving in 2005 may have income but for only part of the year.
c) Newborns are counted in family size determination, but are present for only part of the year. The same data inaccuracy applies to families where one of the members has died during the year, but whose income is still counted for that year.
d) Persons receiving transfers from family members who are not living with them and accordingly not in the "family" – a rather common immigrant phenomenon.

[120] If we want to look unassailably genuine poverty in the face, we might ponder the following United Nations estimates of the proportion of employed people living below $1 (PPP) per day in 2009. In the entire World 42.9%, in Developing Regions 56.3%, in Northern Africa 6.4%, in Sub-Saharan Africa 66.8%; in Latin America and the Caribbean 12.7%; in Eastern Asia 67.4%; in Southern Asia 60.9 %; in South-Eastern Asia 53.5%; in Western Asia 8.7%, and in Oceania 51.6 %. Source: The United Nations, Millenium Goals Report 2010. Indicator 1.6. United Nations Inter-Agency and Expert Group on the Millennium Development, Goals Indicators and MDG Indicators Database (http://mdgs.un.org).

[121] BC Stats, the official statistics agency of the British Columbia government, takes a somewhat more pro-active stance. Schier, op. cit.

Appendix B: Measuring Low Income -- continued

B. Reporting Error

Another potential source of discrepancy and misinformation derives from reporting errors: Whether people answer[122] the survey truthfully, whether everybody in the community is accessed with equal probability, whether others systematically hide, distort, and lie, are always – as in any survey – questions which must receive sober assessment.

Some immigrant groups come from parts of the world where the midnight knock on the door from government, followed by subsequent disappearances of loved ones, is all too common – which probably affects their willingness to cooperate with any intrusive government data-gathering process. Many do not want to be on anybody's list. Undoubtedly, there are data errors. There always are.

C. Problems in Measuring Income

Perhaps the most intractable issue pertains to the accuracy of surveyed income data. After all, the core of our analysis rests upon reported incomes, high and low. In a Statistics Canada 20% query, the respondent is given a choice: provide income data based on their own memory or personal records, or else give Statistics Canada permission to access Canada Revenue Agency (CRA) data from tax returns on file. While many would prefer to fill in their own interpretations of income, there are probably cultural variations across our vast and variegated country. It appears a majority of Canadians refer surveyors to CRA.

[122] Statistics Canada cautions that one may sort and dice the household survey data set to identify lowest and highest levels of family incomes, but must consider that because of the sampling variation, no specific Census sub-divisions (CSD) or Census Tract (CT) with low income prevalence levels may be easily singled out as the "winner" or "loser" from such an exercise.

Appendix B: Measuring Low Income -- continued

How reliable are the income data? That is the question.[123]

If there are two BMW's in the driveway, and a known record of international entrepreneurship and business operations locally and abroad, how faithful are respondents in tallying their global income for some paper questionnaire coming in the mail from Statistics Canada? Indeed, how much of their income do they report to anybody?

Transfers from abroad are "gifts" and are not income; the for-cash service sector undoubtedly grows, and B.C.'s booming marijuana trade probably does not show up in the government numbers.

Sarlo of the Fraser Institute has long maintained that Statistics Canada needs to do more thorough research on unreported income, and few would be surprised to learn that a large proportion of the cash income of families is not reported.[124] [125]

Tax planning can reduce tax liabilities – even if sometimes stepping into the gray zone. As one small example– probably more relevant in British Columbia's high taxation past rather than today – one urban myth involved persons filing their income tax returns in Alberta, by making sure they spent New Year's Eve in Calgary, while living in warmer Vancouver the rest of the time. However, I am

[123] A knowledgeable expert remarked to me that response bias is reduced in the case of a mandatory census in comparison with voluntary; and there is also respondent recall error as well as processing error once the data have been collected.

[124] Christopher Sarlo, *What is Poverty? Providing Clarity for Canada.* Fraser Institute, 2008 - www.fraserinstitute.org/commerce.web/-

[125] A knowledgeable reviewer from one of the immigrant communities wrote, "The signs for poverty are misunderstood by Statistics Canada or those who design the survey. Men send money from their home country, the wives stay home and have zero incomes which distorts the statistics."

Appendix B: Measuring Low Income -- continued

assured that CRA's tax linkage programs have no difficulty tracking down mobile persons who endeavour to shop their residency from province to province.

While tax differentials which might motivate one to locate one's residency elsewhere is much diminished under the present B.C. government, it is an illustration of how, in a global economy with a mobile, transient, population, income tax authorities face compliance challenges in abundance. Questions of income reporting accuracy appear to be growing in our globalizing world -- one strong argument in favour of a policy shift toward greater reliance on consumption taxes. [126] [127]

[126] For the curious who may want to examine their own poverty as of 2009, both before- and after-tax tables are available from http://www.statcan.gc.ca/pub/75f0002m/2010005/tbl-eng.htm.

[127] A knowledgeable reviewer comments: "The problem with poverty in reality is far from what the statistics show. There is an inconsistency in what people report when it comes to income. People have income from elsewhere. None of the factors identified can really explain why poverty exists! People who own their property cannot really be called poor even though their reported income is zero. Poor people live in rental places and live from pay cheque to pay cheque and struggle with daycare resources all the time."

Appendix B: Measuring Low Income -- continued

Table 13: Before-Tax Low-Income Cut-Offs (LICOs), 2006

Population of Community of Residence					
Family Size	**500,000 +**	**100,000-499,999**	**30,000-99,999**	**Less than 30,000***	**Rural**
1	$21,202	$18,260	$18,147	$16,605	$14,596
2	$26,396	$22,731	$22,591	$20,671	$18,170
3	$32,450	$27,945	$27,773	$25,412	$22,338
4	$39,399	$33,930	$33,721	$30,855	$27,122
5	$44,686	$38,482	$38,245	$34,995	$30,760
6	$50,397	$43,402	$43,135	$39,469	$34,694
7 +	$56,110	$48,322	$48,024	$43,943	$38,626

Notes 1: This table uses a 1992 household benchmark survey to measure the cost of expenditures on necessities (food, shelter, clothing), with numbers updated annually by the consumer price index for Canada. Population category less than 30,000 includes cities with a population between 15,000 and 30,000 and small urban areas (under 15,000). Published by the Canadian Council on Social Development, reproduced from Statistics Canada's Catalogue # 75-F0002MIE.
http://www.ccsd.ca/factsheets/economic_security/poverty/lico_06.htm

Note 2: West Vancouver would be in the 500,000 population category, being lumped with Metro Vancouver for LICO table purposes. A West Vancouver family of four earning less than $39,000 in 2005 would be considered “low income” – or in the alternative language preferred by some – “living in poverty.”

Note 3: While this LICO table encompasses a “family” of one person, Statistics Canada excludes persons living alone or with unrelated persons (a room-mate, for example) from their definition of “economic family” for the purposes of low family income reporting and analysis. Possibly confusing.

Note 4: Since Table 13 refers to data almost 5 years old, one might mentally add about 10% to the above numbers to bring them more up to date; or alternatively, we could go to the latest Statistics Canada table. However, the above numbers are the relevant ones for Statistics Canada’s categorization of “poorness” underlying this discussion paper.

Appendix C:

Social Program Spending by Government

The Estimated Dollar Magnitude of Various B.C. Government Programs Focused on Assisting Low-Income Families with Children

This appendix quantifies program spending focused on assisting low-income families with children, in six ministries of the British Columbia provincial government.

1) Programs of the Ministry of Children and Families (MCFD)

The annual budget for the Ministry of Children and Family Development (MCFD) is $1.33 billion, making it one of the larger program delivery agencies of government. This Ministry provides a full range of services and interventions to 20,000 children and youth needing assistance, and their families. It is a growth area, with its budget increased 40% since 2001. Most, but not all, of this spending is targeted to low-income families with children and youth.

MCFD spending is allocated to several program areas:

a) **Children in Care**: In many ways this is the core program of the ministry. At time of writing (June 2010) MCFD was looking after 4,448 children with continuing custody orders. Funding specifically supporting these children in care and families is currently $453 million a year – a $96 million or 21 per cent increase since 2000/01. While the Ministry has 4,448 children with continuing custody orders -- meaning that these children are under the legal guardianship of the province -- this is an average number of children in care

b) because the number is constantly changing. The total number of children in care in the province averages about 8,500 (including the aforementioned children with continuing custody orders and also including children with other guardianship arrangements, but which the Ministry is still supporting in some way. The Ministry states an annual average of $33,800 is spent for each child in care. [128]

c) **Child Care Low-income Subsidies** total more than $300 million -- of which $154 million is administered by MCFD. Child care subsidies support about 50,000 individual children under 18 in this province (about half of the 54-community cohort identified by Statistics Canada as living in lower-income households.) The qualifying income support threshold was raised in 2005 from $21,000 to $38,000. BC's childcare budget has increased 42 per cent since 2001. A single parent making $30,000 a year with two children under age six, for example could receive $965 a month. This parent could make as much as $59,000 a year before becoming ineligible for a partial subsidy.

d) **Early Childhood Development Programs** account for expenditures in the approximate magnitude of $23 million, administered by MCFD. Under this program, MCFD has, since 2001, supported 259 different family resource programs across the province, aimed at improving parenting skills, supporting parental education, and providing healthier environments for children of age 0 to 6.

e) ***Children and Families with Special Needs*** are funded by MCFD at the expenditure rate of almost $200,000 per year. MCFD's budget for children with special needs has more than doubled since 2001.

f) **A new *Extended Family Program*** is now available to families. It pays kinship caregivers at a per diem rate which matches (with the addition of the

[128] The Ministry cannot give a precise expenditure amount attributable to the "Extended Family Program" because it is a new program funded from existing programs -- not a "program" with allocated spending in the traditional sense. It is rather an option for children in care, providing flexibility in the Ministry for certain circumstances where children supported by the Ministry can reside with relatives (as opposed to foster families). The former "Kith and Kin" program has been absorbed by this Extended Family Program.

g) maximum Child Tax benefit) approximately the same dollar amount received by restricted foster care providers. Total budgeted expenditures on this program are under negotiation at the time of writing this memo, which makes it impossible to determine a dollar figure for program cost.

h) ***Post Adoption Assistance Programs*** provided $16.7 million in 2009-2010 to adoptive families with demonstrated financial need, to help pay for services related to special needs children who have been adopted.

i) MCFD also funds ***Bursaries for Youth in Care***, support services for youth in care, as well as outreach services on the street and drop-in centres for youth, and 80 safe house and emergency beds. We roughly estimate that total budgeted spending could be in range of $15 million per annum.

j) Since 2002-2003 British Columbia has invested more than $20 million through the **Human Early Learning Partnership** (HELP) to monitor and evaluate childhood development upon entering kindergarten.

k) Since 2003 the province has invested over $27 million in the **Success by 6 Program**, to support early learning, nutrition and family services in more than 250 communities.

l) **Child Care.** The government provides $65 million per year in operating funds to support more than 90,000 child care spaces throughout the province, double the number since 2001. The government has also provided $35 million in capital funding for child care operators since 2001 (including nearly $7 million to First Nations communities) to build more than 6,500 new childcare spaces. The pace of expansion accelerated to 3,000 new spaces in 2009.

m) The number of **Aboriginal Children** served by a delegated agency has tripled. Funding for delegated agencies will total more than $65 million this year a 145% increase since 2003/04 when the figure was $27 million.

n) **Office of the Representative for Children and Youth,** the advocacy office providing oversight to the Ministry, is funded at $7 million annually. This is an independent office of the Legislature.

The MCFD program cost of items a) through l), specifically targeted to assisting children and youth who are in disadvantaged circumstances, adds up to an estimated $1.3 billion

2) Programs of the Ministry of Housing and Social Development (HSD)

Currently (2010/2011) the Ministry of Housing and Social Development (HSD) is responsible for social program spending in the range of $2.7 billion, making it one of the larger program delivery agencies of government.

HSD has two principal thrusts: Firstly, to provide social assistance to persons age 19 and older, including families with children. Secondly, to shelter those in straitened circumstances through providing and subsidizing a wide range of social housing.

❖ Social Assistance

The BC Employment and Assistance program of HSD (more familiar to some as "welfare") is an enormous $1.5 billion program serving nearly 134,000 recipient households and concurrently supporting 37,000 children under the age of 19.

Supplementing BC Employment and Assistance is the **Healthy Kids Program**, budgeted at $20 million annually, and providing dental and optical care benefiting 35,000 households with 60,000 kids.

The Magnitude of Social Assistance in British Columbia:

It is estimated that currently just over 10 percent of single mothers collect income assistance in B.C. In contrast, in the 1990's about half of single mothers collected welfare ("income assistance"). In that earlier decade of the '90's, 1 in 7 children lived in families which were collecting welfare. Social Assistance (welfare) programs in that earlier era cost the taxpayer $2 billion per year – or one-third more than it costs taxpayers now.

In contrast, through the decade just completed (2001-2010, only 1 out of 10 single mothers was on income assistance (an 80 per cent decline), and only 1 in 23

children lived in families collecting social assistance. The welfare burden on B.C. taxpayers today is in the range of $1.5 billion.

While the participation rate in welfare has gone down for various reasons (policy shifts, retraining, and employment incentives) the welfare stipend paid in B.C. has been raised to about the Canadian average.

HSD used Statistics Canada's Longitudinal Administrative Database (LAD) to track what happens to the clients who leave income assistance. These data show that 80 percent were employed in the year after they left and they continued to increase their earnings in subsequent years. Two years after leaving income assistance, the after-tax income of former income assistance clients was two to three times higher than what they would have received on income assistance. It is a remarkable success story.

Housing is the other principal thrust of HSD. In 2010/11, the provincial government will spend over $560 million on housing, more than four times the 2001 level. 'These are the major components of this half billion dollar program:

- **Rental Assistance Program:** The provincial Rental Assistance Program provides more than 8,000 low-income working families with dependent children and with household incomes under $35,000, with cash assistance up to $765 per month for rent. In 2008/09, the family income eligibility threshold for the Rental Assistance Program was raised to $35,000 from $28,000. Rental subsidies can range up to approximately $9,200 per year for a family of four. The total cost of the program is $40 million annually.
- **Social Housing:** Since 2001 almost 2,000 units of housing have been acquired by the provincial government for subsidized housing purposes. In 2009 the province invested $34 million to acquire 15 social housing properties located in 15 communities, providing over 600 units of housing. Today the social housing program is budgeted at $164 million and serves 20,000 households of which 16,000 have kids under 18.

- **Independent Social Housing**, This $413 million program serves 40,940 households of which 19,920 are low-income families with dependent children.

- **Single Room Occupancy and Affordable Housing Buildings:** The government has invested $190 million to purchase and renovate single-room occupancy hotels and affordable housing buildings across the province – a total of over 1,560 rooms. It is also investing through partnership agreement with the City of Vancouver to create approximately 1,580 long-term supportive housing units at 14 sites, of which approximately 570 units at 6 sites are underway.

- **Innovative Housing Solutions**: This is a $250 million housing endowment fund created in 2007 to support innovative housing solutions.

- **Community Living BC:** This $680 million program delivers care and supervision to about 12,500 individuals with developmental disabilities.

- **Homelessness**, particularly in the Downtown East Side of Vancouver is a visible social problem. The Province provides $30 million annually to subsidize over 7,000 units of social and supportive housing in the Downtown East Side of Vancouver.

- **Emergency Shelters and Outreach**. The 2008 budget provided $104 million over four years to fund emergency shelters, homeless outreach programs, and other measures to address homelessness. In 2010-11, the government will invest over $215 million in emergency shelters and housing for the homeless.[129]

In conclusion, targeted spending on low-income families (i.e., below the LICO income cutoff) by HSD on both income assistance and housing, totals the following:

[129] Note: To ascertain the number of served clients in total, the, various program numbers cannot be added since recipients may access more than one program simultaneously.

Housing	0.56 Billion
Income assistance	1.5 Billion
Community Living BC	0.7 Billion
Total	$2.76 Billion

In terms of the portion of the aforementioned programs impacting low-income households *with children*, I guesstimate that total spending on HSD programs where children are involved may be in the range of $1.7 billion annually.

As a further personal guess, it seems that about 100,000 households with children may be served by HSD.[130]

3) Programs of the Ministry of Education

The Ministry of Education's annual budget is in the range of $5.2B per year. making it the second largest spending agency of the provincial government.[131] It works through locally elected School Boards to fund teachers' salaries, operate education facilities, and prescribe curriculum policy to school systems from kindergarten to Grade 12 (K-12) right across the province. Outcomes typically rank very high when test scores are compared with those of other jurisdictions and other countries.

Programs and innovations of particular benefit to low-income families with children in school include the following:

- The government has committed $280 million over three years to implement **full-day no-tuition kindergarten** for all five-year olds in B.C.

[130] This would represent virtually all of the number of LICO-defined low-income households in 54 communities surveyed by Statistics Canada in B.C. IF the estimates are reasonably accurate, spending would approximate $15,000 per household with children.

[131] Adding school district service delivery adds an additional $5.44 billion to expenditures [budget estimate 2010/11].

- **StrongStart BC and early learning programs** have become a focal point of programs aiming to improve academic progress in the early years, particularly among the children of disadvantaged households. In only three years, the province has invested $43 million to establish StrongStart B.C. Centres across the province. More than 310 centres now operational offer socialization and early learning opportunities to children.

- **Special funding programs for ESL/ESD** (English as a Second Language and English as a Second Dialect – for aboriginal students) trigger supplementary school district grants on the order of $77 million and $61.5 million respectively, per annum.

- The **School Start-Up Supplement** (not to be confused with StrongStart) assists over 14,000 families with 21,000 children better afford the tools and supplies they need for their children's' success at school. Annual budgets are in the range of $2.5 million. This program is funded by the Ministry of Housing and Social Development.

❖ The Education Ministry's **Community Link** program provides $51 million annually to vulnerable children. Community Link serves approximately 220,000 students (about 20% of the school population), based on school district estimates of vulnerability. The funding formula is an interesting lexicon of disadvantage: half of funding is determined by historical funding levels of local needs-driven programs preceding Community Link; the other half is based on community socio-economic measures including:

- rate of early births
- size of the baby at birth
- rate of early deaths
- income assistance
- community educational levels including the number of people who have completed high school or post secondary education,
- crime statistics
- alcoholism statistics[132]

[132] The funding formula is currently under review. (July 2010).

Appendix C: Program Spending -- continued

- **Community Link** School Based Programs (SBP), are delivered at school and have the primary purpose of improving educational outcomes for vulnerable children (defined as children living in socio-economic deprivation). The $51 million is allocated as follows:

- **School Meals (26%)**
  The program provides meals (breakfast, snack, lunch or a combination) to be sure hungry students are able to concentrate, and engage with their classes. A stated goal is increasing attendance. There is a cost recovery element to this funding – parents pay what they can.
- **Support Workers (35%)**
  Support Workers address a range of needs of socio-economically disadvantaged students (academic, social, health, behavioural). They are often a key component of an alternate program - aimed at keeping at-risk youth in school. This includes youth and family workers/ school-based social workers/ mental health workers, and builds connections between isolated, at-risk students and the school environment (teachers and peers). The program addresses challenging behaviours, which may stem from dysfunctional family environment
- **Community Schools (8%)**
  Community Schools is programming that responds to the socio-economic need of a neighbourhood by incorporating the community into the life of the school (family literacy programs, community activities, access to a phone/equipment to assist with a job search or community agency referrals). The program includes out of school recreation or academic programming provided at no cost for needy students. Community-based services are located at the school, thus families with transportation barriers can easily access the services – as well, school-based services are less intimidating than going to an unfamiliar office environment.

Appendix C: Program Spending -- continued

- **High Vulnerability Schools** (formerly referred to as 'inner-city' schools) **(10%)**

  These schools have a high concentration of poverty in the community. The program includes homework clubs - recognizing that students may not have a safe and or/appropriate place at home to study. After school sports, arts and recreational activities are provided - in other communities families are able to pay for their children to participate in organized sports or to take dance or music lessons. It also includes mentorship programs bringing together students in secondary schools with younger students in order to increase grade to grade transition rates, build connections and provide role models.

- **School Grants for Vulnerable Students (5%)**

  The program is for schools with pockets of poverty in communities with generally higher socio-economic status. Funding provides subsidies so all students can participate in their education program and activities (i.e. field trips, gym strip, appropriate winter clothing, hygiene products). A non-stigmatizing lunch program is available for individual students, rather than a meal program for the whole school. The program adopts a school level response to making sure individual students have what they need to fit in socially and succeed academically.

Other Services (16%)

- This includes targeted literacy and other academic programs for specific socio-economically disadvantaged populations. Funding may be provided to cost shared mental health clinicians or social workers targeted to support disadvantaged students. Also available is programming to support school safety and anti-bullying particularly aimed at socio-economically disadvantaged children.

These various Community Link programs have the common goal of improving the educational outcomes of vulnerable children. Who are the vulnerable? Literature identifies them as children from socially and

economically deprived backgrounds. In BC they comprise three principal groups: children from families on Income Assistance (welfare), Aboriginal children, and Children in Care.

Well over half of the approximately 1,600 public schools in this province[133] receive one or more SBP services. About 13% of them receive three or more services.

In terms of the aforementioned Education Ministry programs aiming to improve the situation of children living in low-income households, I judge that annual outlays of the Education Ministry aggregate in the range of $368 million.

4) Programs of the Ministries of Health Services and Healthy Living and Sport

The 2010/11 annual budget for the Ministries of Health Services and Healthy Living and Sport is $14.81 billion, making Health the largest spending activity of government.[1] These Ministries directly manage a number of provincial programs and services including wellness, prescription drug insurance, ambulance services, vital statistics and most physician services across the province. A significant portion of these services is targeted to low-income families with children.

Expenditures specifically impacting low-income families with children are:

- Low-income families are fully or partially exempt from paying Medical Services Plan premiums under the Medical Services Plan **MSP Premium Assistance** program. Commencing in 2009 approximately 887,000 British

[133] in 2001/02

[1] Adding health authorities and hospital societies accounts for an additional $11.1 billion of expenditure [budget estimate 2010-11].

Appendix C: Program Spending -- continued

Columbians have had their MSP premium costs reduced or eliminated. Premium Assistance totals $632 million serving 1.2 million persons

- **Supplementary MSP benefits** cost the Ministry of Health Services an additional $63.8 million. The program makes funds available for services (such as medically required optometry, osteopathy, dental surgery and surgical podiatry) for all insured beneficiaries and funds for partial compensation of services (such as chiropractic, naturopathy, physical therapy, massage therapy and non-surgical podiatry & acupuncture) to British Columbians who qualify for MSP premium assistance.

- Under **Fair PharmaCare**, 300,000 qualifying low-income families pay lower prices for pharmaceuticals than the prices paid by persons with higher income. Fair PharmaCare recipients are subsidized to the extent of $563 million, serving 580,000 recipients.
- **PharmaCare Plan C** (income assistance recipients) is $289 million, serving 160,000 recipients.
- **PharmaCare Plan F** (children in At Home program) $4.5 million serving 2,440 recipients
- Government has waived $9.2 million of BC Ambulance fees for 118,400 low-income British Columbians.

In terms of the portion of aforementioned programs specifically impacting low-income households *with children*, I guesstimate that the outlays of the Health Ministries may involve total annual sums in the range of $550 million.

5) The Ministry of the Attorney General

Legal aid: the government provides the Legal Services Society $66.5 million to provide civil and criminal legal aid in 2010/11. In 2009/10 the government spent an additional $30 million on access to justice services beyond the funding provided to the legal aid program including $11 million to support family justice services, such as providing mediation services to people of modest means who have family issues arising from separation and divorce.

We guesstimate that perhaps in excess of $20 million of the aforementioned $100 million involves low-income families with children.

6) The Ministry of Advanced Education and Labour Market Development

While immigration is largely a Federal government responsibility, there is a provincial government felt need for more vigorous efforts to integrate the over than 40,000 newcomers from foreign countries settling in B.C. each year. The

volume of intake is, from my perspective, breathtakingly large by any standard: in ten years, equaling about 10 per cent of the population, with many from countries of different cultural norms, different languages, and different education systems.

Welcome BC, managed through this ministry, is one of the main vehicles for settlement activity, consuming well over $1/4 billion since inception four years ago in 2006. Welcome BC encompasses:

- English language services, serving from 12 thousand adults in 2006/07 to about 18,000 in 2008/09.
- Pilot programs for early childhood development in Surrey, Richmond, Burnaby, Langley and Vancouver, aimed at children 0 to 6 years and their families.
- Through improved ties with the Federal Government, bringing in over half a billion dollars of Federal money for settlement funding in the past ten years.

A significant portion of funding is aimed at helping immigrants find jobs, receive recognition of their advanced education, and attract business-class immigrants who will invest in British Columbia.

We estimate that perhaps $30 million of annual funding is targeted from this Ministry to assisting families of lower income with children.

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About the Author

I have been accused by political opponents as being a "poverty denier" – but can claim some familiarity with low-income households with children, having grown up during the 1930's in a family of ten living in a 3-bedroom house in East Vancouver, and having been employed by my house painter father at the age of twelve in order to assist family finances.

My statistical training was largely received at Harvard University where statistics, mathematical economics, and econometrics were among the special fields I offered while earning a PhD in economics, and where I subsequently taught survey methods among other subjects.

My consideration of the sensitive issues in this report reflects sometimes conflicting influences in my life: my ten years as a professor at the Harvard Business School, sometimes referred to as the "West Point of Capitalism," and my family roots in Sweden, where social democracy has often softened the harsher judgments of a market economy.