

**IN SEARCH OF EQUITY: RETHINKING THE
RESIDENTIAL PROVINCIAL PROPERTY TAX SYSTEM
IN BRITISH COLUMBIA**

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Abstract

Applying four equity criteria, we find that the provincial property tax (PPT) system in British Columbia is inequitable. First, the system discriminates against renters in the allocation of property tax relief. Second, the system can “use up” more tax room in low income municipalities with weak fiscal capacity such as Vancouver, worsening their ability to provide equal levels of public services. Third, the system does not ensure school districts across the province with equal per-household incomes pay equal amounts of taxes, and fourth, it fails to provide a larger property tax credit to those with lower incomes. This paper proposes three alternatives to the existing PPT system. We discover replacing the Home Owner Grant (HOG) program with the Ontario method of property tax relief would be the most equitable. Alternatively, a different PPT formula could be used in conjunction with the revenue-neutral substitution of income tax cuts for the HOG.

Keywords: Taxation - British Columbia; Property tax - British Columbia; Tax incidence; Intergovernmental fiscal relations - British Columbia; Education- British Columbia- Finance

Executive Summary

The residential provincial property tax system in British Columbia consists of two distinct but interrelated programs: the residential provincial property tax (PPT), commonly referred to as the “school tax,” and the Home Owner Grant (HOG). The province levies the residential PPT on all residential properties in British Columbia, which it uses to finance programs including health care, education, and social services. Unlike the local government property tax (LGPT), the PPT is an ability to pay tax, meaning that its burden bears no relationship to the benefits of the services it finances. The HOG is a form of residential property tax relief provided to homeowners mainly to offset the PPT.

This analysis utilizes four standards of equity to measure the PPT system’s equitableness, including simple neutrality, equal opportunity, horizontal equity and vertical equity. Simple neutrality is found to exist when rules of the tax system apply equally to all groups. Equal opportunity exists when residents of various municipalities are not disadvantaged in their ability to access public services as a result of the PPT system. Horizontal equity refers to a situation where school districts with equal household incomes pay on average a similar amount of tax, while vertical equity exists when the system does all it can to ensure that those with higher incomes pay a larger share of their income in PPT relative to those with lower incomes.

We find that the PPT system is non-compliant with each of these criteria. Simple neutrality is violated because homeowners but not renters receive property tax relief, making British Columbia the only province to provide property tax relief to one but not the other. Equal opportunity is denied by a PPT system that can “use up” more tax room in low income municipalities with weak fiscal capacity such as Vancouver, worsening their ability to provide equal levels of public services. Horizontal equity is not achieved because school districts with equal incomes are taxed unequally. Finally, vertical equity is compromised because the PPT system may deny a tax credit to lower income households.

In our view, the characteristics of a desirable PPT system include one that does not impose dramatically different tax burdens on different school districts across the province because of higher property values. Also, it should seek to provide lower income earners with larger portions of tax relief relative to higher income earners. Finally, it should treat all groups equally in terms of eligibility for property tax relief.

Policy options to reform the PPT system based on equity principles include the following: Replace the HOG with an income-tested tax credit akin to what is currently in use in Ontario. This option would reduce the PPT burden in high-tax, low income districts, would provide relief to renters, and would reduce the tax burden for low income households. It could do so at no additional cost to the government. Another feasible option includes more fundamental reform of the PPT system, which includes a different method of calculating the PPT burden across school districts, combined with the substitution of provincial personal income tax (PIT) rate reductions for the elimination of the HOG. This would be simple, effective, and also relatively equitable.

Dedication

This paper is dedicated to my family and friends.

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Glossary

Provincial Property Tax (PPT)	Property tax levied on the provincial level that is a source of general government revenue; referred to as “school tax”
Local Government Property Tax (LGPT)	Property tax levied on the municipal or regional level that is a source of local government revenue
Home Owner Grant (HOG)	\$470 grant provided to homeowners (more in certain cases) to offset provincial property tax (in addition to LGPT in certain cases)
Simple Neutrality	Equality before the law
Equal Opportunity	Equal access to public services
Horizontal Equity	Equal treatment of those in similar economic circumstances
Vertical Equity	Unequal treatment of those in unequal economic circumstances
Fiscal Capacity	Statistical measure of a municipality’s ability to raise revenues for public services; typically measured on the basis of a municipality’s average income.
Fiscal Disparity	Unequal distribution of fiscal capacity between municipalities
Ontario Property Tax Credit (OPTC)	Refundable income tax credit available to Ontario renters and homeowners, 1972 to present
RentAid	Refundable income tax credit available to British Columbian renters, 1975 to 1983
Income Test	A formula used to ensure only those with defined levels of income receive a tax credit; also known as a means test

1 Background: Residential Provincial Property Tax System in British Columbia

1.1 The Residential Provincial Property Tax System

The residential provincial property tax system consists of two distinct but interrelated programs: the residential provincial property tax (PPT), and the Home Owner Grant (HOG). The residential PPT, commonly called the “school tax,” is a property tax that residents must pay to the province alongside the property taxes paid to local governments and other institutions.¹ The HOG is a form of residential property tax relief provided to homeowners mainly to offset the PPT. The following sections will examine each of these programs in further detail, clarifying what they are and how they function.

1.2 Provincial Property Tax

1.2.1 Purpose of the PPT

In 2004, the province raised a total of \$1.491 billion through the PPT, accounting for 11.3 percent of total provincial taxation revenues.² Of this, \$563.8 million was paid by the residential sector.³ This was more important than the fuel tax (\$461 million), three quarters of the corporate income tax (\$776 million), and over a tenth of the personal income tax (\$4.878 billion).⁴

The PPT, despite the name “school tax,” is not directly related to school financing. A source of general government revenue, the PPT instead goes directly to the provincial treasury where it is consolidated with the general revenue fund. From there it is allocated towards all provincial

¹This includes local government property taxes for municipal and regional governments (LGPT), property taxes for the British Columbia Assessment Authority (BCAA), and property taxes for the Municipal Finance Authority (MFA).

²British Columbia, 2003/2004 Public Accounts (Victoria: Ministry of Finance, 2004), 94.

³British Columbia, “Schedule 703: Total Taxes and Charges for all Property Classes,” Local Government Statistics (Victoria: Local Government Department, Ministry of Community Services): http://www.mcaws.gov.bc.ca/lgd/infra/munfin/tax2004/Sch703_2004.xls;

⁴2003/2004 Public Accounts, 94.

programs, which primarily consist of healthcare, education, and social assistance. In 2004, the province spent 42 percent of its budget (and thus the PPT) on healthcare, 27 percent on education, 11 percent on social services, and the remaining 20 percent on transportation, economic development, and protection services.⁵ Schools are financed through the K-12 Funding Allocation System, which distributes funding from the general revenue fund to school districts based on need, rather than income or levels of taxation.⁶ It was only prior to 1990 that the PPT was levied by school districts to directly finance schools.⁷

The PPT is intended to be an ability to pay tax and not a benefits tax. A benefits tax is one that finances services whose benefits are more or less limited to the taxpayer who pays it. The local government property tax (LGPT), which finances local services including roads, sewers, police and fire services, typically complies with this requirement.⁸ An ability to pay tax, on the other hand, is one that burdens individuals regardless of their use of the services it finances. The PPT, in financing provincial public services such as health care, education and social services that are provided equally to all British Columbians regardless of PPT contributions or income, fulfils this requirement.⁹ This finding is important since a benefits tax and an ability to pay tax will be judged according to different principles of tax equity that we discuss in further detail below.

⁵2003/2004 Public Accounts, 93.

⁶British Columbia, Funding Allocation System (Victoria: Ministry of Education): <http://www.bced.gov.bc.ca/k12funding/>

⁷British Columbia, Ministry of Education: Annual Report 1990-1991 (Victoria: Ministry of Education, 1991), 56. School districts still have the authority to raise taxes for schools through local referendums, although this is rarely done.

⁸This view is held since local government services such as water and sewer services are property-related and primarily benefit those paying the property tax. This view relies on a number of key assumptions, including the absence of tax exporting, which may exist to a greater or lesser degree depending on our theoretical assumptions of tax incidence, discussed below. We must also assume that the benefits of the services do not spill over into surrounding jurisdictions. See: Paul Hobson, "Efficiency, Equity and Accountability Issues in Local Taxation," in Urban Governance and Finance: A Question of Who Does What ed. by Paul Hobson and France St. Hilaire (Montreal: Institute for Research on Public Policy, 1997), 117.

⁹The PPT may act as a benefits tax if provincial programs disproportionately benefit those paying higher PPT. However, given that the majority of programs financed by the PPT are provided equally to all British Columbians, this would be by chance and not design; individuals or families requiring more health care or education services are not required to pay more PPT.

1.2.2 Burden of the PPT

Currently, the province applies a different tax rate on an individual basis for each of the province's 60 school districts. This tax rate (or mill rate, which is a tax per \$1000 of property value) is highest in districts where average property values are low, and lowest in districts where average property values are high. Table 1 shows this mill rate for a sample of 14 school districts, and the resulting PPT that the median house within each district must pay before we account for the HOG.

Table 1: 2004 PPT Payments of Median Households in 14 British Columbian Municipalities

	<i>School District</i>	<i>Mill Rate (tax per \$1000)</i>	<i>Median House Value</i>	<i>PPT on Median House</i>
Valemount	57	5.635	\$67,673	\$381
Nakusp	10	5.361	\$90,211	\$484
Cranbrook	5	4.797	\$107,000	\$513
100 Mile House	27	5.350	\$96,713	\$517
Courtenay	71	4.187	\$152,900	\$640
Prince George	57	5.635	\$117,342	\$661
Nelson	8	4.856	\$143,639	\$697
Fort St. John	60	4.973	\$144,000	\$716
Fernie	5	4.797	\$161,016	\$772
Abbotsford	34	3.774	\$217,667	\$822
Victoria	61	3.015	\$289,648	\$873
Langley District	35	3.302	\$267,000	\$882
Vancouver	39	2.759	\$406,588	\$1,122
North Vancouver District	44	2.627	\$444,848	\$1,169

Source: British Columbia, "Schedule 704: Taxes and Charges on a Representative House," and "Schedule 702: 2004 Tax Rates," in Local Government Statistics (Victoria: Local Government Department, Ministry of Community Services): <http://www.mcaws.gov.bc.ca/lgd/infra/munfin/tax2004/index.htm>

1.2.3 Calculation of the PPT

Since a single mill rate applies to a single school district, two conditions exist: 1) homes having higher assessed values within a given school district must pay higher PPT relative to lower assessed homes, and 2) homes of equal value must pay equal amounts of tax. However, this is no longer true when we compare homes across school districts. The median house value in 100 Mile House, for instance, is \$10,000 less than in Cranbrook, but pays roughly the same PPT. The median house in Prince George is worth roughly \$35,000 less than that in Courtenay, but pays \$21 more in PPT.

Before 1982, the PPT was levied according to a uniform tax rate applied across the province, which saw equal valued homes contributing equal amounts in PPT.¹⁰ But this was seen as unfair in that such a system burdened taxpayers in the major metropolitan regions of the province who have tended to have high property values and who had far higher property tax burdens compared to those in rural areas. This disparity was worsened by unevenly rising real-estate values in metropolitan centres, especially in the year 1981.¹¹ Since then, the province has applied a more complex tax formula that reduces the rural-urban disparity. While this has reduced the inequities of the uniform tax rate system, a 1988 GVRD report notes that “it would appear that the inequities in school financing which existed prior to 1982 under the uniform mill rate have been perpetuated under the present funding arrangements.”¹² We will discuss this possibility below.

The details of this more complex formula are as follows. The province sets a tax revenue target for residential properties equal to 10 percent of school expenditures, which is usually around \$1 billion. The province then divides this amount into two equal portions. It calculates a provincial per-household amount that will raise half of this portion, and a uniform provincial mill-rate to raise the other half. The province multiplies this provincial per-household amount by the number of households in a school district, and applies the uniform mill rate to the district’s assessed residential value. The sum of these two calculations is the amount of tax revenue each district is to raise. The province finally calculates a district-specific mill rate to realize the targeted district PPT revenue.

¹⁰Even though school districts were responsible for applying the residential PPT at this time, the tax rate was in effect determined by the provincial education grant program, which was based on a municipality’s revenue raising capacity as determined by a uniform tax rate, known as the “basic levy.” Those districts with higher property values were seen to be able to pay a higher share of their schools’ budgets and so were given a smaller grant, forcing them to levy school taxes to an amount that corresponded to the basic levy.

¹¹A similar point was made in: British Columbia, Building Partnerships: A Finance System for Public Schools (Victoria: Education Funding Review Panel, Final Report, 1992), 28-9.

¹²GVRD, Report on Real Property Taxation Issues in Greater Vancouver (Burnaby, Greater Vancouver Regional District, 1988), 2.7

As example of application of the PPT formula, in 2004, the Vancouver School District had 21 percent of the province's residential property value. Under a uniform mill rate, Vancouver residents would contribute 21 percent of the province's residential PPT, despite having only 14 percent of the province's population. However, as a result of the post-1982 formula, Vancouver only contributed 18.3 percent of the total provincial residential PPT. The same holds for the GVRD. With 66.4 percent of the province's assessed residential property value in 2004, the GVRD would have paid two-thirds of the province's PPT under the uniform mill rate, despite having only 50.7 percent of the province's population. Under the new formula, it pays only 61.5 percent.¹³ As is apparent, even under the new formula the province's major metropolitan area still pays a disproportionate amount of the PPT.

While this formula reduces the tax burden on districts with a disproportionate share of the province's residential property value compared to a uniform rate, this leads to the situation where houses of equal value do not pay similar PPT. For instance, if we compare a \$200,000 home in Vancouver (a relatively inexpensive home) and a \$200,000 home in Cranbrook (a relatively expensive home), the Vancouver household pays \$552, and the Cranbrook household pays \$959.

1.3 Home Owner Grant

1.3.1 Program Characteristics

The PPT is complemented by a relatively large property tax relief component, which since its introduction in 1957, has been known as the Home Owner Grant (HOG). The major purpose of the HOG is to reduce the property taxes homeowners must pay. In 2004, the province provided \$420.2 million in property tax relief for the PPT through the HOG.¹⁴ This amounted to a little under half the total PPT the province initially levied from residential properties. Without property tax relief, the province would have levied \$984 million in PPT revenue from residential properties.

The current HOG formula provides \$470 for all regular homeowners, and \$745 for seniors, disabled, or veterans. In situations where the amount of PPT owed is lower than these amounts,

¹³All data contained in this paragraph is from: British Columbia, "Schedule 703: Total Taxes and Charges for all Property Classes, Schedule 701: Assessed Values for the Year 2004, Schedule 702: 2004 Tax Rates," in Local Government Statistics.

¹⁴"Schedule 705: Analysis of Home Owner Grants for 2004," Local Government Statistics.

the balance can be used to reduce the LGPT in addition to the PPT.¹⁵ In 2004, \$32.3 million of the total 2004 HOG budget of \$452.5 million was provided to offset the LGPT. This amounted to 7.1 percent of the total HOG budget.¹⁶

The municipalities receiving larger amounts of relief for LGPT are generally very isolated, remote communities with very low property values relative to the school district's average; these communities therefore pay a low PPT. This means more of the grant is available to offset the LGPT. Radium Hot Springs, for instance, a small town in the Rocky Mountains, allocates 58.8 percent of its HOG budget to offsetting the LGPT. On the other hand, those with higher property values compared to the school district's average, such as Anmore or Belcarra, two wealthy municipalities in the Lower Mainland, require their entire HOG budget to offset the higher PPT.¹⁷

Significantly, the HOG worsens the disproportionate burden the PPT imposes on the GVRD. When we consider the HOG, the GVRD ends up paying 67.5 percent of the province's residential PPT, while Vancouver now pays 24.4 percent, despite having 51 and 14 percent of the province's population respectively.¹⁸

In the past, the Home Owner Grant was complemented by a property tax relief program for renters as well. This included the Elderly Citizen Renters Grant (1972-3), the Renters Resource Grant (1974), RentAid (1975-83), and the Renters Tax Reduction (1990-1993) programs. The latter two programs provided a property tax credit that renters could claim on their income tax returns, similar to the Manitoba Education Property Tax Credit (EPTC) and the Ontario Property Tax Credit (OPTC).

Since the NDP cancelled the last renter's tax credit program in 1993, however, no such programs providing renters with property tax relief have existed, although since 1995, members of housing cooperatives and equity housing societies have been eligible for the HOG.¹⁹

¹⁵Building Partnerships, 29.

¹⁶“Schedule 705: Analysis of Home Owner Grants for 2004,” Local Government Statistics.

¹⁷Ibid.

¹⁸See Appendix 1.

¹⁹Hansard, 1995 Legislative Session: 4th Session, 35th Parliament (British Columbia: Hansard Debates of the Legislative Assembly, Monday, March 15, 1995) 19.25.

1.3.2 Allocation of the Home Owner Grant

The \$470 (or \$745 for seniors) HOG is allotted to eligible homeowners whose homes have an assessed value of less than \$685,000. To be an eligible homeowner, one's home has to be a "principal residence," in that it must be "the usual place where an individual makes his/her home," or "the place where an individual lives and conducts his/her daily affairs." Tax relief is not available for summer cottages, second homes, or rental properties.²⁰

The grant is phased out to those with more expensive homes by \$5 per \$1000 of house value in excess of the \$685,000 threshold.²¹ Owners of homes of assessed worth in excess of \$779,000 do not receive any portion of the HOG. Since its introduction in 1993, governments have ensured the phase-out threshold is high enough so that approximately 95 percent of homeowners in British Columbia receive some portion of the grant.²²

There is a minimum tax payable required to receive the HOG. A regular household must pay more than \$350 in property taxes (LGPT and PPT included), and seniors, disabled, and veterans must pay more than \$100. This is ensured through providing relief only for taxes owed in excess of \$350; a regular household paying \$351 in taxes, for instance, would receive \$1 in property tax relief, as would a senior, disabled, or veteran household paying \$101 in property taxes. Regular households have to pay \$820 in property taxes (LGPT and PPT) to receive the full property tax credit; senior, disabled, or veteran households have to pay \$570.

Overall, this is a confusing system of taxation. Local "school taxes" are determined by the provincial government, are collected by municipal governments on behalf of the province, are partially offset by the HOG, and are ultimately not directly allocated to school financing as the name implies, but are allocated to provincial general revenue.

²⁰British Columbia, Home Owner Grant Eligibility Criteria (Victoria: Ministry of Small Business and Revenue): <http://www.rev.gov.bc.ca/hog/eligible.htm>

²¹Property Taxation Statutes Amendment Act (No. 2), 1993 (S.B.C. 1993, c. 63, s. 6).

²²The goal of providing relief to roughly 95 percent of homeowners has begun in 1993 and continues today. See: Hansard, 1994 Legislative Session: 3rd Session, 35th Parliament (British Columbia: Hansard Debates of the Legislative Assembly, Tuesday, March 22, 1994), 13.10; British Columbia, Proposed Increase to Home Owner Grant Threshold (Victoria, Ministry of Finance News Release, Jan. 5, 2005).

2 Analytical Scope

A discussion of the PPT system raises broad questions of provincial-local fiscal relations and more fundamental questions of taxation. One of these questions is to what extent the PPT is a necessary source of provincial revenue. The BC Liberals have most recently raised this question during their time in opposition, suggesting that the PPT be abolished.²³

The case for the PPT is one of relative tax efficiency. Were the residential PPT eliminated, raising equivalent revenue would require substantial increases in taxation across income or consumption. For instance, to replace it with the income tax would require a 10 percent increase in personal income tax rates. But increasing the reliance on these taxes would not be efficient given that the marginal cost of funds associated with these taxes - the total cost to the economy associated with their increase - is relatively high. As Jon Kesselman argues, a tax on residential property can reduce the government's reliance on more distorting types of taxes.²⁴

The elimination of the PPT could be considered in connection with a reorientation of provincial-local responsibilities that is revenue-neutral for British Columbia; that is, if it entails no net costs to the provincial treasury. For instance, the province could vacate the entire property tax base to local governments. This could be carried out in exchange for a reduction of provincial funding of municipal budgets, which would increase local fiscal responsibilities. Also, it could be given to school districts in exchange for greater local funding responsibilities.

However, these options would require that we discuss broader issues of governance that are beyond the scope of this paper. The following analysis seeks to improve the equity of incidence of the PPT through changes that do not challenge the underlying structure of provincial-local fiscal and governance relationships in British Columbia. For now, we will assume that the PPT

²³Hansard, *1992 Legislative Session: 1st Session, 35th Parliament* (British Columbia: Hansard Debates of the Legislative Assembly, May 28, 1992), 3.18: 1888.

²⁴Jon Kesselman, "Provincial Tax Policies in the New Economy: The Case of British Columbia," *Canadian Business Economics* (Fall, 1995): 35.

should remain a major source of provincial government revenue. Also, we do not examine the non-residential PPT, although this element of the tax is also significant.

3 Defining and Measuring Equity

3.1 Methodology

In the following section, we develop a three-stage continuum of equity that will allow us to determine whether the PPT system is equitable or not.²⁵ This continuum will rely on the classifications of equity Lee Friedman sets out in his work *The Microeconomics of Public Policy Analysis*.²⁶ These classifications, which are defined in further detail below, are divided into two categories of equity concepts, those related to process, and those related to outcomes:

Process Concepts

- simple neutrality (equality before the law)
- equal opportunity (equality of opportunity)

Outcome Concepts

- horizontal equity (individuals in equal economic circumstances pay equal taxes)
- vertical equity (individuals in unequal economic circumstances pay unequal taxes)

Process concepts of equity are the most basic; they are concerned with whether the rules and methods of distribution among individuals are fair. Equality before the law - what we refer to as simple neutrality - and equal opportunity are two common process concepts of equity. Outcome concepts, on the other hand, are concerned with whether the benefits or costs of programs are fairly distributed. Horizontal equity exists when those in equal circumstance are treated equally in terms of the taxes they pay; vertical equity exists when those with higher incomes pay higher taxes. These are explored in further detail below.

²⁵This notion that government programs may exist on a scale of equity is based on the idea put forward in: Kennedy Stewart, "Measuring Local Democracy: The Case of Vancouver," *Canadian Journal of Urban Research* 6.2 (1997), 160-189.

²⁶Lee Friedman, *The Microeconomics of Public Policy Analysis* (Princeton: Princeton University Press, 2002), ch. 5.

This is by no means an exhaustive list of the various equity concepts useful to the analysis of public policy. Should a public policy comply with these four criteria, it will be referred to as “equitable.” Should it only exhibit two or three of these qualities, it will be referred to as “somewhat equitable.” If it exhibits one or none of these qualities, it will be referred to as “inequitable.”

3.2 Equity

A general notion of equity is that people in similar circumstances should be treated equally by the law. English jurist William Blackstone characterizes equity as the “soul and spirit of all law,” arguing that “positive law is construed, and rational law is made, by it.” In this sense, “equity is synonymous to justice.”²⁷ In the words of Henry Sidgwick: “in laying down the law no less than in carrying it out, all inequality affecting the interests of individuals which appears arbitrary, and for which no sufficient reason can be given, is held to be unjust.”²⁸

3.3 Process Concepts of Equity

3.3.1 Simple Neutrality

Simple neutrality refers to the most basic requirements of equity, where all discernible groups are equal before the law. This form of equity is often protected by constitutional rights, such as by Section 15 of the Canadian Charter of Rights and Freedoms which states that “every individual is equal before and under the law and has the right to the equal protection and equal benefit of the law without discrimination and, in particular, without discrimination based on race, national or ethnic origin, colour, religion, sex, age or mental or physical disability.”²⁹ Simple neutrality is ensured by the Equal Protection Clause of the 14th Amendment in the United States Constitution as well, which states that no state shall “deprive any person of life, liberty, or property, without due process of law; nor deny to any person within its jurisdiction the equal protection of the laws.”³⁰

²⁷William Blackstone, Commentaries on the Laws of England: Book 3 9th ed. (London: W. Strahan, 1783), ch. 27.

²⁸Henry Sidgwick, The Methods of Ethics (Chicago: University of Chicago Press, 1962), 267-8.

²⁹Canada, Canadian Charter of Rights and Freedoms, Section 15, Subsection 1.

³⁰United States, United States Constitution, Amendment 14, Equal Protection Clause.

In Friedman's words, simple neutrality stands when "the distribution of shares within a suspect group [is] identical to the distribution of shares among all others."³¹ It is violated when there is discrimination against groups, which, "whether intentional or not but based on grounds relating to personal characteristics of the individual or group, has an effect which imposes disadvantages not imposed upon others or which withholds or limits access to advantages available to other members of society."³² For instance, a violation of simple neutrality occurred when the poll tax employed by some American states charged people to vote. As a 1966 Supreme Court ruling found, this program discriminated against a group of people in the electoral process by virtue of their wealth - a violation of the equal protection clause found in the 14th Amendment.³³

Because discrimination between groups may have legitimate reasons, simple neutrality is not an absolute requirement. For our purposes, simple neutrality exists in a property tax system when all groups are treated equally with respect to application of the tax and property tax relief, unless there are justifiable reasons to the contrary. This simply asks to what extent different rules apply to different groups in the workings of the PPT system, and whether there is a justifiable reason for this differentiation.

3.3.2 Equal Opportunity

Equal opportunity is essentially a stricter definition of simple neutrality. It requires that all individuals, unless there is a justifiable reason to the contrary, have "the same chance of obtaining a share of a given size."³⁴ Violations of this element of equity are most apparent in the context of providing public services - education in particular. For instance, the numerous court rulings which declared education systems unconstitutional across the United States - including the landmark 1976 *Serrano vs. Priest* decision in California - were based on the argument that school financing violated wealth neutrality; that is, school financing depended on the wealth of a school district. This was seen to violate equal opportunity in that a child in a poorer district would not have access to the average standard of education (assuming education quality is related to education expenditures), and would thus not be able to enjoy the life-improving opportunities of education later in life.³⁵

³¹Friedman, 132.

³²*Andrews v. Law Society of B.C.*, 1 S.C.R. 143 (1989), 144.

³³*Harper v. Virginia State Board of Elections*, 383 U.S. 663 (1966).

³⁴Friedman, 131-2.

³⁵*Ibid.*, 146-150.

Equality in education and school financing is a typical example of equal opportunity. But it also extends to equality in health care, employment insurance, social assistance and on a more basic level, municipal services. For instance, the national government, through the Equalization Program, attempts to ensure that all citizens, regardless of their province's wealth, have equal access to the basic social programs provided by provinces.³⁶ Most provinces, through provincial-local equalization programs, also attempt to ensure that citizens of different municipalities have equal access to municipal services regardless of municipal wealth.³⁷ British Columbia is one of three provinces that do not do this.

3.3.2.1 Measuring Equal Opportunity

In the context of property tax systems, equal opportunity stands when the province's utilization of a municipality's property tax base does not affect a municipality's fiscal capacity. Fiscal capacity is essentially a measure of a municipality's "wealth," or its ability to convert economic resources into public services. Municipalities with strong fiscal capacity may deliver more public services than those with weak fiscal capacity. Equal opportunity may be undermined when the PPT system consumes, or "uses up," more tax room in low income municipalities with weak fiscal capacity instead of in municipalities with strong fiscal capacity. This would make it more difficult for low income municipalities to deliver equal levels of public services, and would undermine equal opportunity.

Disagreement exists on what basis we should measure fiscal capacity. Some analysts believe we should measure this capacity based on a municipality's wealth as embodied in its property value. By this measure, referred to as the *representative tax system* (RTS) approach, municipalities with expensive properties have higher revenue raising capacities and thus higher levels of fiscal capacity than those with less expensive properties. It should therefore be equitable that they contribute greater amounts of property taxes to provincial revenues.³⁸

³⁶Canada, Canadian Constitution Act, Part 3, Section 36(2).

³⁷Enid Slack, Intergovernmental Fiscal Relations and Canadian Municipalities: Current Situation and Prospects (Ottawa: Federation of Canadian Municipalities Report, 2002).

³⁸Carol Cohen, Robert Lucke and John Shannon, "The ACIR Representative Tax System Method for Estimating the Fiscal Capacity of the Fifty State-Local Systems" in Measuring Fiscal Capacity ed. by H. Clyde Reeves (Boston: Oelgeschlager, Gunn & Hain, 1986), 11-12.

Our belief, however, is that a municipality's property tax base is not an accurate proxy of fiscal capacity. As Friedman argues, "there is no law that requires the property tax base to be used as the measure of district wealth, nor is there any economic argument that maintains that total property value is the proper measure of a district's fiscal capacity." According to Friedman, "most analysts think that the level of personal income in a district is an important determinant of true fiscal capacity."³⁹ For this reason, we will rely on the *income-with-exporting* methodology developed by Helen Ladd, John Yinger, and others to measure fiscal capacity.⁴⁰ Essentially, this approach posits that average income is the most logical measurement of a municipality's ability to pay for public services, providing we take into account the tendency of some types of property classes to export their taxes to other jurisdictions, referred to as *tax exporting*.⁴¹ This methodology is described in more detail below and in Appendix 3.

3.4 Outcome Concepts of Equity

3.4.1 Horizontal Equity

Horizontal equity, as noted, refers to the equal treatment of those in similar circumstances in terms of taxation. Generally speaking, those who have similar incomes should pay similar amounts of taxes. This element of tax fairness is relatively uncontroversial. As Richard Musgrave argues, horizontal equity is a "minimal rule of fairness." The only area where disagreement may exist relates to what is meant by "similar circumstance."⁴² Typically, two taxpayers are seen to face similar circumstances when they have equal annual incomes. However, this definition is debatable. What is defined as *taxable* income will depend on the number of deductions and exemptions for which one is eligible. Broader definitions of income may be desirable, such as *net* income.⁴³

³⁹Friedman, 157.

⁴⁰Katherine Bradbury, "Structural Fiscal Distress in Cities- Causes and Consequences," New England Economic Review(January/February, 1983): 32-43; Katherine Bradbury, "Urban Decline and Distress: An Update," New England Economic Review(July/August, 1983): 39-57; Helen F. Ladd and John Yinger, America's Ailing Cities: Fiscal capacity and the Design of Urban Policy (Baltimore: John Hopkins University Press, [1989] 1991).

⁴¹For a theoretical discussion of the merits of such an approach, see: Ronald F. Ferguson and Helen F. Ladd, "Measuring the Fiscal Capacity of U.S. Cities," in Measuring Fiscal Capacity.

⁴²Richard A. Musgrave, "Horizontal Equity, Once More," National Tax Journal 43.2 (June, 1990), 113. : 113-122.

⁴³Lifetime income may be an even more desirable indicator of similar circumstance, but such measures do not exist. See Bird and Slack, 106-109.

Furthermore, it is held that “similar circumstance” should include some measure of home equity. As Kesselman argues, “wealth in the form of home ownership is a supplementary measure of households’ abilities to pay taxes.”⁴⁴ Arguably, an individual with equal income but a more valuable home should be required to pay more taxes.

There is merit to this assumption that higher valued property is an appropriate measure of economic wealth across households within a municipality. However, this assumption no longer holds in measuring comparable abilities to pay across municipalities. Real-estate markets across the province exist in entirely different contexts, the comparison of which we believe cannot be made in isolation from income levels of various jurisdictions. In this we take the view supported by the 1988 Sullivan Royal Commission on Education, which states: “we agree that assessed property values [on the provincial level] are not an ideal measure of ability to pay.”⁴⁵ The Greater Vancouver Regional District Report on Taxation made a similar judgement, arguing that the “application of this ‘wealth tax concept’ to measure [greater] ability to pay is inappropriate on a Province-wide basis because it assumes a similarity of circumstances that does not exist between communities that are geographically far apart.”⁴⁶

One of the fundamental flaws of the assumption that residential assessed value is a reasonable measure of wealth is the fact that housing is a consumption choice that reflects, among other things, a trade-off between land prices and transportation costs. Particularly when we look across municipalities in a metropolitan region, property “wealth” may simply be a reflection of capitalized transportation cost savings.⁴⁷ People who choose to spend more of their income on housing may be choosing to substitute higher housing costs for higher transportation expenses. As Helen Ladd argues, just because some households “choose to spend more of their income on access (in the form of higher housing prices)...does not mean they have greater ability to pay

⁴⁴Kesselman, 36.

⁴⁵Barry M. Sullivan, A Legacy for Learners (British Columbia: The Report of the Royal Commission on Education, 1988), 176.

⁴⁶Report on Real Property Taxation Issues in Greater Vancouver, 3.0.

⁴⁷Those who argue that land value capitalizes transportation costs include: William Alonso, Location and Land Use: Toward a General Theory of Land Rent (Cambridge: Harvard University Press, 1964); Edwin Mills and Bruce Hamilton, Urban Economics 4th ed. (Boston: Scott Foresman and Company, 1989); Arthur O’Sullivan, Urban Economics 5th ed. (Boston: McGraw-Hill/Irwin, 2003).

taxes.”⁴⁸ To tax jurisdictions with higher property values may be to tax somebody’s decision not to spend his or her income on commuting.⁴⁹

For the purposes of this paper, horizontal equity will not require that all individuals with equal incomes pay similar amounts of property taxes within an individual school district; those with more valuable housing should be required to pay more taxes. However, on the provincial level, we believe it requires the median households of different school districts with equal income to pay roughly equal amounts of PPT.

3.4.1.1 Exceptions to Horizontal Equity: The Benefits Principle

There are justifications to limit horizontal equity, the most important of which is the benefits principle of taxation. This principle states that an individual’s tax burden should reflect the benefits received from a government service. Should an individual receive a disproportionate benefit from a specific service, that individual should be required to pay more taxes.⁵⁰ As Charles Tiebout’s classic article makes clear, in the context of property taxation, the rationale of the benefits principle is primarily efficiency-related. By holding local governments responsible for local taxation and spending decisions, the benefits principle keeps local governments aware of the costs of their actions - which in turn forces governments to be more efficient, competitive, flexible and accountable. In an ideal model, local benefits taxation facilitates efficient levels of taxation and service provision across municipalities.⁵¹

⁴⁸Helen Ladd, “Measuring Disparities in the Fiscal Condition of Local Governments,” in Fiscal Equalization for State and Local Government Finance ed. By John E. Anderson (Westport, Connecticut: Praeger, 1994), 27.

⁴⁹Importantly, income spent on transportation is not subject to the same taxation as housing. Whereas the wealth embodied in property is subject to an annual tax, the wealth embodied in automobiles is not. The only tax on transportation is the tax on fuel, which many argue is not in itself enough to cover the social and environmental costs of driving let alone the capital costs of highway infrastructure. See: H. William Batt, “Stemming sprawl: The Fiscal Approach,” in Suburban Sprawl: Culture, Theory and Politics ed. by Mathey J. Lindstrom and Hugh Bartling (Landham, MD: Rowman and Littlefield, 2003).

⁵⁰This benefits principle of taxation can only be applied to the financing of goods that are private in nature, in that they may be priced and may burden only those who benefit from it. Public goods cannot be financed on a similar principle since their benefits are public in nature and cannot be measured, nor the costs recovered on a benefits-basis.

⁵¹Charles M. Tiebout, “A Pure Theory of Local Expenditures,” Journal of Political Economy 64.5 (October, 1956): 416-24.

3.4.2 Vertical Equity

Vertical equity exists when more affluent people contribute more in taxes than the less affluent. For instance, there is widespread agreement that federal income taxes should require people with higher income to pay higher taxes and a higher proportion of income as tax. Such a taxation system is referred to as *progressive* (taxation increases faster than income), in contrast to *proportional* (taxation increases in proportion to income), or *regressive* (taxation increases more slowly than income).

Determining whether or not there is vertical equity requires an assessment of the incidence of a tax, i.e., who pays what proportion of the tax. It is more difficult with property taxes, than with income taxes, to assess incidence. There are two general theoretical assumptions regarding the incidence of the property tax that we must review: the “traditional view” and the “new view.”⁵² In the traditional view of property taxation, the tax is regressive. It acts as an “excise tax” on the services of structures, which falls on consumers. Since low income people spend more of their income on housing than those with high income, the traditional view holds that the tax is regressive.⁵³

In the “new view” of property tax incidence, the property tax is progressive in that it falls on owners of capital. This result appears when we look at the entire economy, where tax increases in one district are eventually passed onto owners of capital everywhere. This occurs since capital flows to lower-tax jurisdictions. But because there are diminishing marginal rates of return on capital, capital becomes less productive as it increases in the destination jurisdictions. In this way, capital owners on the national level will eventually bear the tax. Since there is a correlation between capital ownership and household income, the new view holds that the property tax is progressive.⁵⁴

Any analysis of property tax incidence will be inconclusive. First, if the property tax is capitalized - the value of the property is reduced at the time of imposition of the tax - it is unclear

⁵²For a good, if dated, background on this debate, see: R.M. Bird and N.E. Slack, Residential Property Tax Relief in Ontario (Toronto: University of Toronto Press, 1978), ch 3.

⁵³Jack Goodman, Houses, Apartments, and Property Tax Incidence, (Harvard: Joint Center for Housing Studies: Paper presented at the annual meeting of the American Real Estate and Urban Economics Association, January 2005).

⁵⁴Jon Kesselman and Ron Cheung, “Tax Incidence, Progressivity, and Inequality in Canada,” Canadian Tax Journal 52.3 (2004), 776.

what relation exists between the amount of property tax and the income of the current owner. Second, the marketplace may not be in equilibrium; this is important to the new view in that the incidence may not yet be determined. Nevertheless, it can be said that both views inform different angles to the question of incidence. Typically, the traditional view has use in explaining the incidence when a single jurisdiction increases taxes: in the short run the effect will probably be regressive. In the long run, however, this tax increase will eventually be paid by capital owners everywhere, and the new view will prevail.⁵⁵

For our purposes, a vertically equitable PPT system is one that is progressive with respect to income. We will apply our own rough approximation of the tax burden with respect to income using the median household income and tax burden data for 151 British Columbian municipalities. Should the extent of progressivity remain unclear, we will define a vertically equitable PPT system as one that cannot be made more vertically equitable – through a more progressive property tax credit or some other clearly progressive means.

In conclusion, the PPT system must meet four criteria for us to classify it as equitable. It should ensure simple neutrality through the treatment of all individuals equally in the application of rules and eligibility criteria, should ensure equal opportunity by way of an equitable consumption of fiscal resources across jurisdictions, should tax school districts with similar incomes equally to achieve horizontal equity, and should tax low income less than high income households to achieve vertical equity. Only when these requirements are met may we classify British Columbia's property tax system as equitable. If two or three of these criteria are met, the system may be classified as somewhat equitable. If it meets one or none of these criteria, we will classify it as inequitable.

⁵⁵As a side-note, the new view has importance to the debate of whether the LGPT is a benefits tax. Should it be borne by capital users everywhere, then it follows the tax is not a benefits tax and cannot be construed as such. If this is true, the tax has to be its opposite, an ability to pay tax like the PPT. See: Hobson, 122.

4 Simple Neutrality

In this section, we will consider to what extent various groups are treated equitably by the existing property tax system. For instance, are there any classes or groups of people that do not receive the HOG, or are treated differently by the eligibility rules of the PPT system in any way?

Although there are no households exempt from paying the PPT, not all households are eligible for the HOG. While the HOG is available to homeowners to help reduce property taxes, the system provides no similar help to renters, making British Columbia the only jurisdiction in Canada that provides property tax relief yet provides none to renters. As a group united by a common characteristic - the lack of homeownership - renters constituted 34 percent of the 1,495,900 British Columbian households in 2001. Whereas in 2004 homeowners were provided with \$420.2 million in property tax relief for the PPT, renters received none.

We could justify this allocation of property tax relief if renters did not pay property tax. In contrast to homeowners, the legal incidence of the PPT does not fall upon renters, but rather upon landlords. The question becomes, are landlords able to pass off the property tax to renters indirectly through the rent?

Provided that the PPT acts as an excise tax on capital, it is likely that landlords pass off at least some portion of the tax onto tenants - the percentage of which will depend on a number of factors. In the traditional view, the portion of the property tax that falls on renters is that portion which falls on structures; the portion of the tax that falls on the land component of a property will fall on the landowner. This rests on the assumption that the supply for structures is perfectly elastic, and that the demand for structures is highly inelastic - i.e. renters are not mobile. In this case, the entire amount of the tax on the structure component will fall on tenants. If the supply of land is fixed and completely inelastic, the entire portion of the land-component of the tax will be

passed onto landowners. If we assume these assumptions are true, it follows that renters pay half of the property tax.⁵⁶

In one study examining the incidence of property taxes in 147 municipalities within Metropolitan Boston, Massachusetts, it was found that for every tax increase of \$1.00, the renter only paid \$0.15.⁵⁷ The most that renters paid was \$0.25 for every \$1.00 increase in the property tax. This suggests that the common assumption that renters bear 50 percent of the tax is too high.

However, an important finding of the Boston study is that the demand for rental properties is elastic, meaning renters are mobile and presumably have options to avoid any tax increases by moving into neighbouring municipalities that do not increase theirs.⁵⁸ This higher elasticity of demand may not exist in British Columbia, especially in the major urban areas where the majority of renters live. Vancouver and Victoria both have amongst the lowest rental vacancy rates across Canada, at 1.3 and 0.6 percent respectively, far lower than the Canadian average of 2.7 percent as of October 2004.⁵⁹ The elasticity will also be lower if, as in the case of the British Columbia PPT, the rate is established simultaneously over a number of jurisdictions.

While the percentage of the property tax that renters pay may be not quite as low as this study suggests, it may nevertheless be quite low for other reasons. First, there is a large “illegal” suite market in a number of major rental housing markets across the province. This market likely increases the elasticity of demand for purpose-built rental housing, reducing the amount of the PPT that landlords can pass onto tenants. Furthermore, renters in the illegal suite market may benefit from property tax relief indirectly. Because many homeowners with illegal tenants receive the HOG, this tax reduction may be passed on to tenants in the form of lower rents.

It is worth bearing in mind that assessment practices tend to under-value owner-occupied housing and over-value multi-family rental housing.⁶⁰ This means that whatever incidence may exist, it is likely higher in real terms given that renters pay higher taxes compared to homeowners on a market-based comparison of property values.

⁵⁶Bird and Slack, 36; Kitchen, 87.

⁵⁷Robert J. Carroll and John Yinger, “Is the Property Tax a Benefit Tax? The Case of Rental Housing,” National Tax Journal 47.2 (June, 1994): 295- 316.

⁵⁸Ibid., 307

⁵⁹CMHC, Rental Market Report, (Ottawa: Canadian Mortgage and Housing Corporation, 2004), 5

⁶⁰Harry Kitchen, “Pricing of Local Government Services,” Urban Governance and Finance, 141

Given the absence of precise conclusions, a reasonable range of estimation may be that renters pay between 25 and 75 percent of the property tax levied on apartments.

Based on these assumptions, we are able to approximate the PPT that the typical renter-household pays. Estimates suggest that across the GVRD in 2004, the average owner-household contributed \$1191 in PPT, the average renter-household contributed \$422, assuming renter-households bear 100 percent of the PPT burden.⁶¹ Given our range of incidence, if we assume a 25 percent burden, the average renter-household contributed \$105.5 in the PPT in the GVRD, if we assume it is 75 percent, the average renter-household paid \$316.5 in PPT.

If renters pay 50 percent of the PPT assessed on rental properties and if renters comprise approximately one third of all households, then an equitable system of PPT relief would provide them with approximately \$40 million.⁶² Based on simple neutrality, either property tax relief should be given to renters and homeowners, or it should be denied to homeowners. Failing to do either, the provincial government has created a state of inequity.

4.1.1 Other Simple Neutrality Violations

There are other apparent simple neutrality inequities in the PPT system. For instance, those paying low property taxes or with homes more valuable than \$685,000 do not receive the HOG. However, these would appear to be exceptional circumstances that we can justify. Those paying low property taxes are assumed to be paying mostly the LGPT. It is undesirable to offset these taxes as it undermines the advantages of a local benefits tax. Those with expensive homes do not receive the HOG because they are assumed to have a greater ability to pay taxes. This is assumed to be vertically equitable, which will be discussed below. Both of these cases would appear to be

⁶¹These figures are based on British Columbia Assessment data showing the aggregate value of owner and non-owner occupied housing in the GVRD in 2004. This data reports total number of owner occupied housing. The number of non-owner-occupied housing units was calculated based on the factor difference between owner and renter housing reported in the 2001 Census. Based on this data, the average owner-occupied unit was valued at \$412,396, the average non-owner-occupied unit at \$145,988. For 2004 the GVRD's average weighted education tax mill rate was 2.89. Multiplying this mill rate times the respective average unit values yields the above average annual tax payments.

⁶²This figure of \$40 million is 9 percent of that paid to homeowners. It is based on the fact that there are half as many renters as homeowners and the average renter pays \$211 in PPT compared to the average owner-occupier who pays \$1191. If PPT tax relief is proportional to total PPT paid, then renters should receive \$40 million (= \$452 million HOG x 0.5 x [\$211/\$1191]).

justifiable violations of simple neutrality, in contrast to the case of renters not receiving property tax relief, and should be judged according to concepts of equity discussed below.

5 Equal Opportunity

In this section we will consider whether the PPT system undermines equal opportunity or the ability of people to enjoy equal levels of public services in various jurisdictions. In other words, does the PPT system ensure that residents of different municipalities or jurisdictions are still able to access equal levels of public services at equal levels of taxation?

To answer this question, we must measure a municipality's ability to deliver public services, and determine how this is affected by the PPT and the HOG. To do this, we will rely on the *income-with-exporting* measure mentioned above.⁶³ Described in more detail in Appendix 3, this measure captures a municipality's fiscal capacity, which is essentially an approximation of a municipality's ability to deliver a standard set of public services relative to its neighbours at a standard tax burden. This methodology measures fiscal capacity based on a municipality's average income. Generally, low income municipalities will have low levels of fiscal capacity.

As Ladd and Yinger point out, taxes levied by overlying jurisdictions "have a profound impact on city fiscal [capacity]."⁶⁴ When the province collects property tax, this "uses up" some of the fiscal revenue resources otherwise available to a municipality. If the PPT uses up municipal fiscal capacity unequally, there will be extra tax room available to some municipalities but not to others. This becomes problematic when the PPT uses up more fiscal resources in low income municipalities with weak fiscal capacity instead of those with strong fiscal capacity. The HOG, in providing relief for this tax, "frees up" some fiscal capacity available to municipalities. This becomes problematic where fiscal resources are disproportionately freed up in high income municipalities with strong fiscal capacity instead of weak fiscal capacity.

⁶³Studies that make use of this methodology include: Rebecca Hendrick, "Assessing and Measuring the Fiscal Health of Local Governments: Focus on Chicago Suburban Municipalities," Urban Affairs Review 40 (2004): 78-114; Howard Chernick, "Fiscal Capacity in New York: The City versus the Region," National Tax Journal 51.3 (September 1998): 531-40; Helen L. Ladd, Andrew Reschovsky and John Yinger, Measuring the Fiscal Condition of Cities in Minnesota: Final Report (Minnesota: Minnesota Legislative Commission on Planning and Fiscal Policy, March 1991), 92-3.

⁶⁴Ladd and Yinger, America's Ailing Cities, 190.

To determine this impact, we apply this methodology to 20 municipalities in British Columbia's largest metropolitan region, the Greater Vancouver Regional District (GVRD). All data are obtained from the 2001 Census, as well as local government statistics obtained from the Province, described in Appendix 3. Importantly, due to data limitations, this analysis does not isolate the impact of the residential from the non-residential PPT. This is significant in that non-residential PPT rates are applied at a flat rate across the province; they do not include a per-household component as does the residential portion. This means the following results of the PPT's impact will be exaggerated. It does not mean that the general results will be invalid. Both the residential and non-residential PPT disproportionately burden jurisdictions with higher property values (although the residential portion does this to a lesser extent), and both will have the same direction of impact on fiscal health.

Table 2 illustrates the impact of the PPT and the HOG on fiscal health. Note the municipalities that are made worse off when the PPT and HOG are added to their fiscal health measures include Vancouver, Burnaby and North Vancouver City. The City of Vancouver, for instance, ends up with a fiscal health deficit that is twice what it would be without the PPT and the HOG. Its fiscal health, without the PPT and HOG is minus 7.5 percent. This means it would need an increase in its budget equal to 7.5 percent to deliver the standard set of public services at a standard tax rate. After the PPT and HOG are considered, fiscal health declines to minus 15.4 percent and then to minus 18.9 percent. Other municipalities clearly benefit from the PPT system. These tend to be wealthy suburban municipalities. For example, Langley District's fiscal health surplus of 14.2 percent increases to 16.6 percent and then to 18.9 percent as a result of the PPT and HOG respectively.

Although the PPT and HOG do not negatively affect low-income municipalities across the board, they do increase fiscal disparities. Fiscal disparities are calculated using a coefficient of variation that measures the disparities between municipalities weighted by population. Because the fiscal health of populous municipalities such as Vancouver is affected negatively, the overall level of fiscal disparity is also adversely affected. Originally, the coefficient of variation between fiscal health scores across the GVRD amounts to 11.8 percent. It increases to 12.8 percent as a result of the PPT and then to 14.4 percent as a result of the PPT plus HOG.

Table 2: Deviation of 2001 Municipal Measures of Fiscal Capacity from GVRD Average, before and after Impact of PPT and HOG (%)

	(1) <i>Standardized Fiscal Capacity</i>	(2) <i>Fiscal Capacity Considering Effect of PPT</i>	(3) <i>Fiscal Capacity Considering Effect of PPT and HOG</i>
Anmore	12.4	-7.4	-12.3
Belcarra	14.2	-5.8	-7.6
Burnaby	-6.0	-8.2	-8.6
Coquitlam	-3.8	2.8	4.6
Delta	19.2	19.1	20.8
Langley City	-13.2	-8.6	-6.9
Langley District	14.2	16.6	18.9
Lions Bay	41.3	40.9	42.7
Maple Ridge	-15.3	-3.5	0.5
New Westminster	-27.0	-16.2	-14.6
North Van City	-14.5	-17.8	-17.7
North Van District	16.6	17.7	19.9
Pitt Meadows	20.9	29.7	32.6
Port Coquitlam	-0.7	10.4	12.5
Port Moody	7.9	11.3	13.3
Richmond	5.1	-2.3	-2.0
Surrey	-5.4	5.0	6.3
Vancouver	-7.5	-15.4	-18.9
West Vancouver	36.7	24.8	22.5
White Rock	-21.3	-15.6	-6.6
CV	11.8	12.8	14.4
Marginal Variation+		1.0	1.6

CV=Coefficient of Variation: standardized measure of inequality that controls for a municipality's population size; Zero indicates perfect equality, 100 indicates perfect inequality;

+ =marginal variation in CV caused by each fiscal policy

Source: Calculations done by author using same data and methodology described in Appendix 3

5.1.1 The PPT and Fiscal Capacity

Both elements of the PPT system - the PPT and the HOG – affect fiscal disparities. The PPT affects fiscal disparities because it is calculated such that it disproportionately burdens a jurisdiction with higher assessed property values. As we note, municipalities such as Vancouver contribute a disproportionate share of the PPT; while it had only 14 percent of the province's population, it contributed 18.3 percent of the province's residential PPT in 2004. The PPT burdens Vancouver disproportionately compared to the GVRD as well, requiring it to contribute 30.2 percent of the region's residential PPT despite only having 27.6 percent of the region's population.

However, high property values do not necessarily mean that a municipality has good fiscal capacity. Municipalities such as Vancouver have high property values and pay disproportionate amounts of PPT on a per capita basis. But because it has fewer high income residents, which gives it a weak fiscal capacity score, it in fact has a lower ability to deliver a standard set of public services relative to the average municipality in the GVRD. Requiring such municipalities to pay disproportionately large amounts of PPT further reduces Vancouver's fiscal capacity.

To address this problem, the government could alter the way in which the PPT is calculated such that it is entirely dependent on the per-household component of the formula. As we recall, the formula consists of a per-household and property-value component. Phasing out the property value component and requiring all school districts to raise equal amounts of property tax on a per-household basis after perhaps a ten year phase-out period is one option. Of course this would be acceptable insofar as the PPT does not currently finance local schools but is a general provincial ability-to-pay tax, and only insofar as we subscribe to the belief that property value is not an adequate indicator of ability to pay on the provincial level.

The second option would be to remediate the disproportionate property tax burden through the provision of a larger property tax credit (HOG) to households in jurisdictions with higher PPT, which is what is done in Ontario. Both options would have the same effect of reducing property taxes in high-tax jurisdictions while increasing taxes in low-tax jurisdictions.

5.1.2 The HOG and Fiscal Disparities

Unlike the PPT, the HOG worsens fiscal disparities. It does so primarily because it is not distributed equally across municipalities, and appears to provide less tax relief to municipalities with weak fiscal capacity. For instance, whereas Vancouver contributes 30.2 percent of the GVRD's residential PPT before the HOG, this increases to 35.4 percent after the HOG. Bear in mind it only has 27.6 percent of the region's population. When we factor in the effect of the entire HOG (i.e. subtract total amount of HOG including that which is used to offset municipal property taxes from a municipality's total PPT), this worsens slightly, with Vancouver now contributing 36.0 percent of the region's property taxes.

5.1.2.1 Distributional Effects of HOG

The unequal distribution of the HOG can be seen in Table 3 below. The per-household HOG varies across the Greater Vancouver Regional District (GVRD), from \$210 in Vancouver to \$415 in Langley District. Note that North Vancouver City, another low-income city, receives a below average amount of property tax relief as well.

Table 3: Per-household HOG for GVRD Municipalities in 2001

Anmore	\$263	North Vancouver C	\$257
Belcarra	\$326	North Vancouver D	\$405
Burnaby	\$302	Pitt Meadows	\$397
Coquitlam	\$356	Port Coquitlam	\$361
Delta	\$412	Port Moody	\$367
Langley C	\$304	Richmond	\$371
Langley D	\$415	Surrey	\$355
Lions Bay	\$397	Vancouver	\$210
Maple Ridge	\$395	West Vancouver	\$255
New West	\$253	White Rock	\$383
GVRD Weighted Average			\$305

Source: "Schedule 705: Home Owner Grant Analysis," obtained from Mark Westby in the Home Owner Grants Program Administration, Ministry of Small Business and Revenue.

This variation exists on account of the following factors within each municipality: the percentage of households whose home is worth more than \$685,000 (who do not receive property tax relief), the percentage of these that are senior-households (who receive a larger share of tax relief), and the percentage of renter households (who do not receive property tax relief).

Through a simple regression model, we can determine the importance of each variable in explaining the variation in the average per-household HOG between 20 municipalities in the GVRD. A table of this data is provided in Appendix 2. This analysis reveals the following results:

Table 4: Variation in Per-Household HOG: Regression Results⁶⁵

	<i>Coefficients</i>	<i>Probability Coefficient is Zero</i>
Intercept	17.38	.458
Percent Renter Households	-4.67	.000
Percent Eligible Homeowners	4.58	.000
Percent Senior Households	1.89	.000

What this tells us is that for every ten percentage point increase in renter households in a municipality, there is a corresponding decline in property tax relief equal to \$47. For every ten percentage point increase in the share of eligible homeowners, tax relief increases by \$46. For every ten percentage point increase in eligible senior households, property tax relief increases by \$19 per-household.

Those municipalities with many ineligible high-valued homes, or with many renters, will receive less property tax relief, while those with more eligible homes and more senior households will receive disproportionately more property tax relief. For instance, Vancouver, with 56 percent renter households, will receive \$102.74 less in per-household property tax relief relative to the average provincial municipality with 34 percent renter households.

Many of the municipalities with proportionately more renters are municipalities with lower levels of fiscal capacity, clearly demonstrated in Figure 1 below. Providing (or not providing) property tax relief to renters and homeowners on an equivalent basis would not only resolve the problem of simple neutrality, it would also solve the problem of equal opportunity through increasing the fiscal resources of low income municipalities with more renters.

⁶⁵This model has an adjusted Rsquare of 97.7, and a very large F-ratio (269.9). The functional form of the model appears as follows:

$$y = 17.38 + 4.67x_1 - 4.58x_2 + 1.89x_3,$$

where,

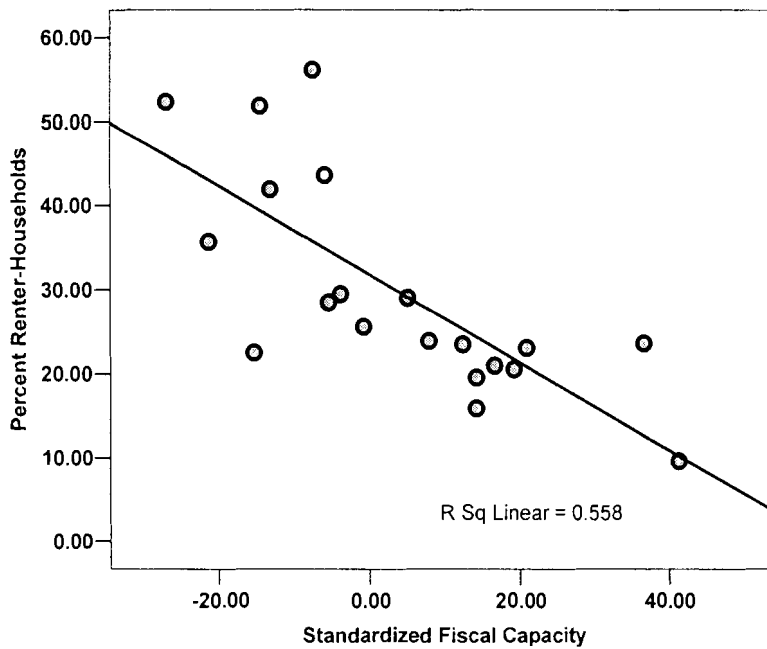
y: average per household Home Owner Grant tax relief

x1: Eligible-Owner Households as percent of all owner households

x2: Renter Households as percent of all households

x3: Senior-Owner Households as percent of all owner households

Figure 1: Renter-Households and Fiscal Capacity in the GVRD



In conclusion, we do not assume property values relate to a municipality's fiscal capacity and its ability to deliver public services. The problem thus exists that municipalities with high property values paying higher amounts of PPT may in fact have lower average incomes and have below-average fiscal capacity. The PPT thus may use up the fiscal resources of low-income municipalities to a greater degree than that of more wealthy municipalities. We conclude by stating that this situation justifies a PPT system that either taxes an equal per-household amount from all jurisdictions, or provides a larger credit to residents in low-income jurisdictions with low fiscal capacity facing higher PPT, which would achieve the same outcome. It is also important that the province either provide property tax to renters or eliminate the HOG for homeowners. Failing to do this, we cannot claim that the PPT system is equitable with respect to equal opportunity.

6 Horizontal Equity

In this section, we will attempt to address the question as to whether the PPT burdens households across school districts with equal income equally. Median households of prominent municipalities in various school districts are compared in terms of their income and their PPT burdens.

One of the weaknesses of this approach is that we are not able to collect accurate median PPT burden and income data for all school districts. For districts such as Vancouver, it corresponds primarily with the median income and burden of Vancouver City residents. However, in other, non-urban districts, we do not have any median income or PPT burden data other than that which exists for prominent municipalities within those districts. Thus, we need to assume that the data for these prominent municipalities is reflective of the median burden and income of these school districts as a whole.

6.1.1 PPT and Horizontal Equity

Despite these shortcomings, the evidence suggests that the median households of various districts, despite having similar incomes, do not pay equal amounts of the PPT. In some circumstances, this disparity is clearly problematic. For instance, the median household of Vancouver, with an income of \$42,026, contributed \$1,121 in the PPT. The median household of Chilliwack, with a similar median income of \$42,042, contributed a third less than this, at \$739. Cranbrook, with a median household income of \$42,873, contributed just \$513. Similar inequities exist across the province, which we can see below in table 5 and in the table included in Appendix 1.

6.1.2 Net of HOG PPT and Horizontal Equity

The Home Owner Grant program worsens these inequities. As we point out above, by distributing a \$470 grant to each homeowner household, the median Vancouver household ends up paying \$651, Chilliwack \$269, and Cranbrook \$43. The ratio between what Cranbrook and Vancouver residents pay widens from 1:2.2 to 1:15. The median household in Kimberley does

not contribute any PPT, and instead gets an additional tax break for its LGPT. Similar inequities exist across the province, as is apparent in Appendix 1.

Table 5: Regional Variations in Median PPT and Income 2001/2004

	<i>Median Household PPT 2004 (Pre HOG)</i>	<i>Median Household PPT 2004 (Post HOG)</i>	<i>Median Household Income 2001</i>
Kimberley	409.34	-60.66*	41,087
Langley City	850.43	380.43	41,891
Vancouver	1121.60	651.60	42,026
Chilliwack	739.04	269.04	42,042
Kelowna	843.01	373.01	42,216
Cranbrook	513.28	43.28	42,873

Source: British Columbia, "Schedule 704: Taxes and Charges on a Representative House," in Local Government Statistics; Median income data from the 2001 Census for each municipality, obtained from: Canada, 2001 Community Profiles (Statistics Canada):

<http://www12.statcan.ca/english/profil01/CP01/Index.cfm?Lang=E>

*=This negative sum is the amount of property tax relief available to offset the LGPT; the median household in this case pays \$0 PPT.

The inequities that existed prior to 1982 under the uniform mill rate PPT were larger, but under the post-1982 formula they have not been eliminated. Districts with higher property values, especially those within metropolitan areas (such as Vancouver) continue to contribute a far higher share of their income in PPT net of HOG relative to the rest of the province. It seems questionable that these inequities can be justified based on the argument that property values are indicative of greater ability to pay. As we argue above, real-estate markets across the province exist in entirely different contexts, the comparison of which we hold cannot be made in isolation from income levels of various jurisdictions.

Horizontal inequity may also emerge through providing a larger grant to seniors. All else being equal, a senior household will be required to pay \$275 less property tax. However, compared to elderly renters or non-seniors, home-owning seniors with equal incomes are found to have high levels of home equity and financial resources.⁶⁶ Thus, there is no basis for this supplemental grant on grounds senior households have a lower ability to pay. This inequity could be resolved through providing an equal grant to all seniors.

⁶⁶Raj Chawla and Ted Wannell, "Property Taxes," Statistics Canada: Perspectives on Labour and Income 4.7 (July, 2003): 12-18; Cara Williams, "Finances in the Golden Years," Statistics Canada: Perspectives on Labour and Income 4.11 (November, 2003): 5-13.

6.1.3 Inequity and the Benefits Principle

There may be an exception to our requirement of horizontal equity were the PPT a benefits tax. But as we note above, the PPT is an ability to pay tax; there is no reason why households in similar circumstances should not pay similar amounts of taxes.

This argument does not extend to the LGPT. Because we assume that the LGPT under certain conditions is a local benefits tax, taxpayers benefiting from a higher level of municipal services should pay for them. The issue this brings to question is an important component of the HOG; the fact that it will offset the LGPT in cases where the PPT owed is less than the amount of the grant. In 2004, the median house in a total of 38 municipalities did not pay any PPT net of HOG and instead received a tax reduction for their LGPT. In total, \$32.3 million was directed towards the offsetting of the LGPT in British Columbia, 7.1 percent of the total HOG budget. On the basis of the benefits principle of taxation, this is undesirable and should be eliminated.

7 Vertical Equity

In this section, we will consider the question as to whether the PPT system burdens households with higher incomes more than those with lower incomes. In other words, to what extent is the PPT system progressive?

As we note above in the review of the property tax incidence literature, it is difficult to determine whether a property tax is progressive or regressive with respect to income. Our conclusions will first depend on our underlying assumptions of whether the tax, in the traditional view, is an excise tax on the services of structures and is therefore regressive, or if, according to the new view, the tax is a tax on capital and is consequently progressive. Beyond this, it will be difficult to determine the incidence of a property tax on existing owners given that it tends to be capitalized into the value of property, burdening the owner when the tax was first introduced. Furthermore, incidence on renters is unclear and subject to a large degree of speculation. The incidence of property tax relief programs is equally beset with theoretical limitations.

In light of the different initial incidence assumptions, and other limitations, a review of the incidence literature that uses aggregate data or family data suggests the property tax is regressive with respect to owner-households, especially in British Columbia. In a study based on 1992 family expenditure data, shown in table 6, it is found the lowest income group (with income below the bottom decile) paid a share of income in property taxes 7.9 times that of the highest income group (with income above the top decile).⁶⁷ In a recent Statistics Canada tax incidence study using 2001 data, it too found that the most regressive property taxes were in British Columbian municipalities. In Vancouver, for instance, the property tax burden facing residents in the lowest income quartile is 5.35 times higher than that facing the highest income quartile.⁶⁸ In Richmond, the property tax burden facing residents in the lowest income quartile is 5.65 times

⁶⁷Harry Kitchen, Municipal Revenue and Expenditure Issues in Canada (Toronto: Canadian Tax Foundation: Canadian Tax Paper No. 107, 2003), 94.

⁶⁸Boris Palameta and Ian Macredie, "Property Taxes Relative to Income," Statistics Canada: Perspectives on Labour and Income 75-001 6.3 (March, 2005), 14-24.

higher. In Burnaby, this ratio is 5.03; in North Vancouver City it is 4.12, and in Kelowna it is 2.88.⁶⁹

This regressivity is reduced considerably when we measure in relation to home equity (value of home net of outstanding mortgage). In a 1992 study shown in table 6, we find that the burden facing groups with low home equity is generally lower than that facing groups with higher home equity, although mid-income groups faced the highest burden.

Table 6: Property Tax as a Percentage of Gross Family Income and Homeowner's Equity, 1992, by Tenths

	<i>As Percentage of Income</i>		<i>As Percentage of Homeowner's Equity</i>	
	BC	Canada	BC	Canada
First	12.55	8.66	0.99	1.47
Second	4.60	4.79	0.90	3.21
Third	4.66	4.01	1.05	2.42
Fourth	3.91	3.36	1.30	3.21
Fifth	2.81	2.92	1.30	4.85
Sixth	2.86	2.80	1.36	2.37
Seventh	2.25	2.43	1.69	3.70
Eighth	2.23	2.41	1.37	3.58
Ninth	2.16	2.26	1.47	2.12
Tenth	1.58	1.92	1.06	2.08

Source: Harry Kitchen, *Municipal Revenue and Expenditure Issues in Canada*, (Toronto: Canadian Tax Foundation: Canadian Tax Paper No. 107, 2003), 94-96.

7.1 PPT and Vertical Equity

Unfortunately, these studies only gather total property tax payment information from those surveyed, which presumably takes into account the HOG. The study does not allow us to isolate the incidence of the PPT from that of other property taxes, and does not allow us to determine its incidence.

To overcome this limitation, we have conducted an analysis of the 2004 PPT payments made by the median household in each of the 151 British Columbian municipalities using 2001 income data. We do this through first dividing into 5 groups of 30 municipalities, calculating the average median tax burden of each group. As we can see in table 7, we find that the burden of the 30 lowest income municipalities had a pre-HOG PPT burden (1.58 percent), 1.27 times that for the

⁶⁹*Ibid.*

average median household in the 30 highest-income municipalities (1.32 percent). A similar result appears when we divide the 151 municipalities into five groups of roughly equal populations and weight the cities within each group according to population. Doing this, we discover that the burden facing the lowest-income group of municipalities (1.91 percent) is 1.26 times that of the highest-income group of municipalities (1.51 percent).⁷⁰ This implies that there is not a progressive relationship between the PPT burden and income levels of the median household of municipalities across British Columbia.

7.2 HOG and Vertical Equity

Little is known about the distribution of the HOG across income-groups. One of the problems is that the distributional effects of property tax relief are unclear. Just as property taxes are likely capitalized into the value of a property, it is probably true that so too is property tax relief. Because it simply reduces the property taxes households must pay, property tax relief benefits the initial homeowner at the time tax relief was initially provided, increasing the value of the property in proportion to the relief. New homeowners likely do not benefit as taxes they save are made up in the higher value of their homes (although they do stand to lose if property tax relief is eliminated). Renters, presuming they are willing to spend more income on rent with a property tax credit, will demand more rental housing. This increased demand may eventually translate into higher rents. This “transitional gains” problem arises with most government programs that act as price reductions for a given good. However, on the other hand, this increase in demand may spur the construction of more rental housing in the long-term, which would bring benefits to markets such as Vancouver, where there is a shortage of rental properties. With respect to the existing HOG, renters do not directly benefit from it. However, there is a large illegal suite market in Vancouver. The owners of homes with such suites are likely eligible for the HOG, and so the reduced property tax payments may be passed onto basement-suite renters in the form of lower rents. Nevertheless, given the unclear relationship between the benefits of the HOG and the current recipients, the impacts of the HOG across income groups are unclear.

⁷⁰These findings are based on median household PPT payments for 2004 in 151 BC municipalities, obtained from: British Columbia, “Schedule 704: Taxes and Charges on a Representative House,” in Local Government Statistics; Median income data from the 2001 Census for each municipality, obtained from: Canada, 2001 Community Profiles (Statistics Canada): <http://www12.statcan.ca/english/profil01/CP01/Index.cfm?Lang=E>; See Appendix 1.

With these limitations in mind, we extend of the above analysis to determine the effect of the PPT net-of-HOG on the median household across each group of municipalities as we have defined them above. In the unweighted comparison shown in table 7, we find that the median house of the 30 lowest income municipalities had a post-HOG PPT burden (0.21 percent) that was about a third of that for the median household in the 30 highest-income municipalities (0.62 percent). This implies that the HOG has a progressive impact on the PPT. However, when we divide the 151 municipalities into population-weighted groups, a different picture emerges. The median house of the lowest-income group of municipalities has a burden (0.67 percent) that is about nine tenths that of the burden facing of the highest-income group (0.76 percent).⁷¹ The second and third lowest-income groups have a burden that is higher than or equal to the burden facing the highest income groups. Based on this rough analysis, the net-of-HOG PPT burden is neither clearly progressive nor regressive with respect to the median households of municipalities across British Columbia.

Table 7: 2004 PPT as Percentage of 2001 Median Household Income across 151 British Columbian Municipalities

	<i>Non Population Weighted Groups</i> ⁷²		<i>Population Weighted Groups</i> ⁷³	
	PPT Pre-HOG	PPT Post-HOG	PPT Pre-HOG	PPT-Post HOG
First	1.58%	0.21%	1.90%	0.67%
Second	1.59%	0.41%	2.43%	1.30%
Third	1.45%	0.43%	1.77%	0.74%
Fourth	1.25%	0.38%	1.73%	0.82%
Fifth	1.32%	0.62%	1.51%	0.76%

Source: British Columbia, “Schedule 704: Taxes and Charges on a Representative House,” in Local Government Statistics; Median income data from the 2001 Census for each municipality, obtained from: Canada, 2001 Community Profiles.

While the PPT system is not clearly regressive or progressive, and while the impact of property tax relief will have an unclear impact on the incidence of the property tax, the system could be made more progressive. Currently, all households, regardless of income, receive property tax

⁷¹These findings are based on median household PPT payments for 2004 in 151 BC municipalities, obtained from: British Columbia, “Schedule 704: Taxes and Charges on a Representative House,” in Local Government Statistics (Local Government Department, Ministry of Community Services): <http://www.mcaaws.gov.bc.ca/lgd/infra/munfin/tax2004/index.htm>, and median income data from the 2001 Census for each municipality, obtained from: Canada, 2001 Community Profiles (Statistics Canada): <http://www12.statcan.ca/english/profil01/CP01/Index.cfm?Lang=E>

⁷²In Appendix 1, these five groups are made up of 5 groups of 30 municipalities, i.e. municipalities 1-30, 31-60, 61-90, 91-120, 121-151.

⁷³In Appendix 1, these five groups are made up of municipalities 1-55, 56-66, 67-97, 98-111, 112-151. They are not exactly equal, but are groups of roughly 700,000 people.

relief, except for those whose homes are valued higher than \$685,000. Thus, even those in the highest income brackets may see their property taxes reduced. At the same time, poor individuals who happen to own highly valuable property will be required to pay higher taxes.

8 Findings and Policy Implications

The central finding of this analysis is that the PPT system is inequitable in that it does not comply with any of the four equity criteria we have set out. The findings, with policy implications presented as sub-bullets, follow:

- **Simple neutrality is not met because homeowners but not renters receive property tax relief.** We assume that renters pay a portion of the PPT indirectly through their rents. Whereas homeowners receive the HOG to offset their property taxes, renters receive no similar form of property tax relief to offset theirs.
 - Provide property tax relief to renters and homeowners on equal basis
- **Equal opportunity may be compromised by a PPT system that disproportionately uses tax room in low income municipalities with weak fiscal capacity.** Currently, the province may levy a disproportionate burden of the PPT on municipalities with low levels of fiscal capacity in the GVRD. This occurs because the PPT formula burdens districts with higher average property values that may also have low levels of fiscal capacity. The HOG has a similar effect in that it is disproportionately distributed to high income municipalities. It does this primarily since it is not distributed to renters, who tend to concentrate in low income municipalities. Both of these effects can make it more difficult for low income municipalities to deliver public services of equal quality to those in higher-income municipalities.
 - Provide property tax relief to renters and homeowners on equal basis
 - Levy equal per-household taxes from each district or provide larger property tax credit for higher-tax, low income districts
- **Horizontal equity is not achieved through taxing school districts with equal incomes unequally.** The existing PPT formula, through disproportionately taxing districts with

higher property values, assumes that property wealth is an appropriate indicator of ability to pay on the provincial level. We take the view of the Sullivan Royal Commission on Education that it is not. We also believe it is inequitable that a senior should receive a larger tax credit than a non-senior, despite having equal incomes.

- Levy equal per-household taxes from each district or provide larger property tax credit for higher-tax, low income districts
 - Provide equal property tax credit for seniors and non-seniors
-
- **Vertical equity is not maximized through failing to provide a larger tax credit to lower income households relative to higher income households.** The economic incidence of the PPT system is unclear. Depending on our underlying theoretical assumptions, it may be either progressive or regressive, although the empirical evidence suggests it may be regressive. The effect of property tax relief on incidence is also unclear, given it may be capitalized into property values. However, to the extent that a larger tax credit could be provided to low income households relative to high income households, the PPT system could be made more progressive.
 - Base property tax credit on income
 - Replace HOG with more progressive provincial personal income tax rates

9 Options

9.1 Property Tax Relief System Options

Three options in addition to the status quo are presented. The first alternative calls for the most radical changes, altering not only the way that property tax relief is delivered, but also the way that the PPT is calculated. The second and third options involve more subtle changes to PPT system, and involve alternatives to the HOG. Experience with the Renter's Tax Credit (RentAid) program employed in British Columbia from 1975 to 1983, and the Ontario Property Tax Credit (OPTC) program employed in Ontario since 1972 assists in understanding these options.

Each option allows us to balance different goals unrelated to equity. We discuss these goals below, but for now we should simply say that, in addition to equity, governments must consider the fiscal, political and administrative trade-offs that are involved.

9.1.1 Status Quo

The status quo remains a viable policy option for governments to pursue, primarily for political reasons. Despite the fact the existing property tax relief system is inequitable, and probably provides questionable benefits to homeowners given the capitalization of property tax relief, there are no major political pressures for change. Most renters are not aware that they are treated inequitably with respect to homeowners, and often do not know they pay property tax to begin with, whatever the incidence may be. The issue of equal opportunity and fiscal capacity inequity has not been widely studied, and will likely not create political pressure on governments. A government that so desires may quite feasibly continue to administer the Home Owner Grant program in its present form.

9.1.2 PPT Reform Option

This option would reform all elements of the PPT system - not only the way in which the PPT tax is assessed, but also the way that property tax relief is delivered. First, it would involve changing

the formula that determines how much property tax each school district is to pay. As we note, the formula currently depends on two components: the total value of a district's residential property and its population. This option would phase out the property value component so that all school districts, on average, contribute equal per-household amounts of property taxes. This could perhaps be done over 10 years, phasing out the property value component of the formula by 5 percent every year.⁷⁴ This would eliminate the problem of burdening low income districts with high property values. Owners of valuable property within a jurisdiction would of course still be required to pay more than owners or renters of less valuable property. But on average, members of each jurisdiction across the province would all contribute equally.

As part of this option, we would begin a phase-out of the HOG over a number of years, transferring the savings into a reduction in the provincial personal income tax (PIT) rate for medium to low income earners. In other words, while the province would continue to levy the \$984 million in residential property taxes, it would provide a reduction in the personal income tax rate equal in value to property tax relief delivered via the HOG. In this way, lower to mid-income renters and homeowners would pay lower taxes, ensuring that the changes to the PPT would not be regressive.

Lower income taxes are not the only option for governments wanting to maintain revenue neutrality. They may desire a lower PPT, or provision of tax-cuts in some other way (such as reduction to the provincial sales tax).

Administratively, this option would be the most simple. It would avoid the additional administrative complications required of a renters' tax credit or the HOG. It would simply require a different formula to calculate the PPT, and a reduced income tax rate for the bottom two income tax brackets.

9.1.3 RentAid Option

Few homeowners will want to forego their property tax relief in the process of making property tax more equitable. For this reason, it may be desirable to introduce a renter's property tax credit

⁷⁴At present, 50 percent of the PPT revenues are based on the property component, 50 percent on the per-household component. This option would see a 5 percent shift from the property value to the population component every year, which would eliminate it after 10 years.

modelled on the RentAid program used in British Columbia from 1975 to 1983. This option would maintain the existing Home Owner Grant, augmenting it with a smaller tax credit program similar to the existing sales tax credit, available on a refundable basis only to low income renters through the income tax system.

The tax credit would be administered by the Canada Revenue Agency (CRA), which can process a credit application for around \$.85 per claim.⁷⁵ Assuming half of the 512,365 renter-households in British Columbia apply for the credit, the program would have an annual administrative cost of less than \$220,000. This would be relatively simple to implement, given that the CRA currently administers a similar tax credit on behalf of Manitoba and Ontario and would be willing to provide this service to British Columbia.⁷⁶

The costs of the program would depend on the assumptions of tax incidence on renters, size of the credit, and choice of income tests. However, in order to get a rough idea of costs, we may make some broad assumptions. Assuming that the government is interested in strictly the equalization of tax burdens between homeowners and renters, a credit between \$100 and \$300 may be provided. Assuming half of renter-households are eligible for a credit of \$100, which is a generous estimate, we can guess that it would cost around \$26 million.⁷⁷ If a \$300 credit is supplied, it would cost around \$76.8 million.⁷⁸ These estimates would of course be different depending on the income test that we employ.

⁷⁵Administrative cost obtained from: Melene Sechman, Manitoba Tax Assistance Office: CRA charges one administration fee encompassing all tax credits. Figure is an approximate proration.

⁷⁶These conclusions are based on discussions with Tim Gahagan, Assistant Director Verification and Enforcement Division, Canada Revenue Agency, and officials in the Ministry of Provincial Revenue.

⁷⁷Assuming that 256,000 renter-households receive a \$100 credit.

⁷⁸Assuming that 256,000 renter-households receive a \$300 credit.

Administratively, this option would require the functioning of two parallel programs. The Home Owner Grant would continue to function through the ministry responsible for provincial revenue, while the tax credit would operate through the income tax system.⁷⁹

9.1.4 Ontario Option

This option would be less extreme than the PPT Reform option, but would still require the complete overhaul of the Home Owner Grant. Rather than simply providing an additional tax credit for renters, as with the RentAid option, this would provide a tax credit for all homeowners and renters who earn less than a certain amount of income. It would require the replacement of the Home Owner Grant with a tax credit similar to the Ontario Property Tax Credit (OPTC). The size of the credit would depend on two factors- the amount of taxes an applicant pays and their income. It would achieve this through providing a sliding-scale tax credit that would vary depending on one's total property tax payments. This credit would then be trimmed according to income. If an individual pays large amounts of property tax and is eligible for a large credit, the size of the credit would be trimmed according to size of income. As Richard Bird and Enid Slack argue, this system would relate "the 'net' burden of the tax more closely to 'ability to pay.'"⁸⁰

As with the RentAid option, this option would be administered by the Canada Revenue Agency, at a cost of around \$.85 per claim.⁸¹ Assuming around one million households in British Columbia apply for the credit (see discussion below), the program would have an annual administrative cost of around \$850,000. We assume that, given the CRA already processes

⁷⁹ Applicants would calculate the tax credit on the same page that one currently calculates the basic set of tax credits for low income individuals and families. RentAid's original stipulations required that married couples should be eligible for only one credit, for which the spouse earning the higher amount should file. The stipulations of the current sales tax and spousal credit are adequate, which simply requires one common-law or married spouse apply, using their combined income as the basis of the income test, which is currently set at \$15,000 (the credit would be reduced by 2 percent of income in excess of this threshold). For shared accommodations with non-family members, a designated tenant should claim and distribute the credit to roommates according to the proportion of rent each paid. Alternatively, each tenant should make an individual claim based on the amount of rent each contributed. Should tenants choose this method, the applicant should have to identify other claimants of the household and identify the holder of the receipts to ensure the combined rent claimed actually equalled the total. In addition, a renter receiving a shelter allowance under SAFER should not be eligible for the credit. See: Gregg Thompson, "Money Back for Rent," *The Ubysey* (February 26, 1976), 3.

⁸⁰ Bird and Slack, 93.

⁸¹ Administrative cost obtained from: Melene Sechman, Manitoba Tax Assistance Office: CRA charges one administration fee encompassing all tax credits. Figure is an approximate proration.

similar tax credits on behalf of Manitoba and Ontario, and that a tax collection agreement already facilitates such a tax credit, it would not be difficult to implement.⁸²

This option could be made revenue-neutral through the choice of income test and size of credit. Given that roughly two thirds of all households currently receive the HOG, we can expect a similar percentage would receive the tax credit, or around 1 million households. However, unlike the HOG, the tax credit would only benefit those with income below a certain level. This is an important point from the perspective of the stakeholders- a majority of all owner-households would likely continue to receive property tax relief.

In terms of program simplicity, this option would consist of a single program, perhaps titled the *British Columbia Provincial Property Tax Credit*. It would deliver property tax relief to all applicants through the income tax system, requiring one set of guidelines. Applicants would calculate the tax credit on the same page that one currently calculates the basic set of tax credits for low income individuals and families. As with the RentAid option, this would require a simple alteration to the refundable credit portion of the BC income tax forms.⁸³

A hypothetical example follows. Applicants first determine the size of their sliding scale credit, which depends on the amount of property taxes they pay. This is done through adding 10 percent of their property taxes to a base credit that would perhaps amount to \$350 (or the total amount of PPT paid, whichever is less), subject to a maximum credit. In this way, someone with higher property taxes receives a larger base-credit. The applicant would then subtract from this total 2

⁸²Implementation information obtained from officials in the Ministry of Provincial Revenue

⁸³As with the stipulations of the RentAid option, only British Columbia residents aged 16 or older may apply for the credit. Married or common-law couples may apply for only one credit, using their combined family income as the basis of the income test. If a partner resides in separate residences for medical, educational or business reasons, the program considers the partners involuntarily separated and allows both to apply for the credit. A taxpayer who was less than 19 the year before and received a Canada Child Tax Benefit payment for 2004 may not apply for the credit. Renters in a shared accommodation may only count their share of rent in calculating their occupancy costs. It may be desirable to include RentAid's requirement that the applicant should have to identify other claimants of the household and identify the holder of the receipts to ensure the rent claimed is accurate. Renters living in a household whose owner has received the HOG should not be eligible for the credit. In addition, a renter receiving a shelter allowance under SAFER should not be eligible for the credit.

percent of income in excess of a given threshold; only those with income below this threshold would receive the full credit.⁸⁴

To ensure that there is not an extreme transition into this new tax credit (i.e. jurisdictions with low PPT do not suddenly find themselves facing higher burdens), this alternative could begin with a large base credit of \$400, to which applicants would add 5 percent of property taxes, not 10 percent. In following years, the base credit could be reduced until the desirable balance is found.

⁸⁴The 1977 Blair Commission on the Reform of Property Taxation in Ontario proposed an interesting alternative to this formula. Similarly, it would increase the base-credit for those paying higher property taxes, but would reduce the credit for those with higher incomes. Rather than relying on the simple 'threshold' formula, it would rely on a 'sliding-scale' formula. It would reduce 90 percent of taxes for those below a certain income, less for those over a higher income level. This would be expressed as: $C=aT$ where a decreases from .9 to 0 for taxpayers as they climb income brackets. For instance, those with no taxable income would only pay 10 percent of property taxes, whereas those with incomes above say \$60,000 would have to pay all of their property taxes. Requiring low income households to pay some of their property taxes would give them a stake in pressuring municipal governments to keep taxes as low as possible. This would not be necessary in BC as the tax relief system is primarily provided for the provincial education property tax. There would be no reason why low income residents could not be compensated for 100 percent of their taxes. See: Ontario, Commission on the Reform of Property Taxation in Ontario (Toronto: Province of Ontario, 1977), found in: Bird and Slack, 111.

10 Evaluation of Options

The following criteria will be used in the evaluation of the property tax relief tools and systems proposed above.

- **Simple Neutrality:** By simple neutrality, we mean equity between taxpayers in terms of the rules governing who may apply for property tax relief. This will be achieved when renters and homeowners are equally eligible or ineligible for property tax relief. For equal eligibility to exist, identical eligibility rules are used. For example, if the Home Owner Grant is in effect a refundable tax credit, a renter's tax relief program should also incorporate a refundable tax credit. If an income-test is applied to renters, it should also be applied to homeowners.
- **Equal Opportunity:** This criterion refers to the need for a PPT system that does not use up more fiscal resources in municipalities with weak levels of fiscal capacity than in municipalities with high levels of fiscal capacity. An option will have a positive impact on this criterion when less tax room is used up in low-fiscal capacity jurisdictions. According to our analysis, this may be achieved not only when renters are provided with property tax relief, but also when low-income districts with higher property tax burdens are compensated for the higher PPT they must pay. Governments can achieve this through one of two ways. First, they may provide a larger credit to districts with higher property taxes relative to districts with lower property taxes of equal income. Second, governments can achieve this through altering the formula that calculates the PPT to ensure that all school districts contribute an equal per-household amount.
- **Horizontal Equity:** This criterion is achieved when districts with similar average incomes pay similar amounts of property taxes. Governments can achieve this the same way they would achieve equal opportunity - providing a larger credit to high tax jurisdictions or altering the way property tax levies are calculated to ensure each district contributes an equal per-household amount. It will also require that an equal grant is provided to seniors and non-seniors
- **Vertical Equity:** Given the difficulty in determining an option's compliance with this criterion, we will assume it is met when a property tax relief system applies an income-

test, and provides higher income taxpayers a smaller credit relative to lower income taxpayers. Alternatively, governments could achieve vertical equity through eliminating property tax relief and replacing it with a reduction in the provincial income tax rate for low to mid-income households.

- **Fiscal Impact :** This will depend on whether or not an alternative will dramatically affect government revenues. For instance, a program that doubles the budget requirements of the HOG would have a negative fiscal impact, whereas one that increases it marginally or not at all would have a positive fiscal impact.
- **Stakeholder Impact:** This criterion is concerned with an option’s impact on various stakeholder groups. In general terms, this will depend on whether or not an option impacts stakeholders including renters and homeowners and to what degree. A program that cancels property tax relief for all households without compensation in some other form will have a negative stakeholder impact, whereas one that does not impact any household will have no stakeholder impact.
- **Administrative Simplicity:** This criterion speaks to the need for a simple, uncomplicated and streamlined alternative. Options that add new complexities to the income tax system, or which require new legislation, are leaving aside other considerations, less desirable.

10.1.1 Criteria Matrix

We evaluate each of these property tax relief systems in the following analysis based on our criteria. A summary of these evaluations are provided in the following matrix. These assessments are based on evidence and lessons previous experiences with each alternative have provided, which are discussed below.

Table 8: Criteria Matrix

<i>Criteria</i>	<i>Status Quo</i>	<i>PPT Reform Option</i>	<i>RentAid Option</i>	<i>Ontario Option</i>
Simple Neutrality	Negative	Positive	Neutral	Positive
Equal Opportunity	Negative	Positive	Neutral	Positive
Horizontal Equity	Negative	Positive	Negative	Positive
Vertical Equity	Negative	Neutral	Neutral	Positive
Fiscal Impact	Neutral	Neutral	Negative	Neutral
Stakeholder Impact	Neutral	Neutral/Negative	Neutral	Neutral
Simplicity	Neutral	Positive	Negative	Neutral/Negative

Positive=has a positive impact on criterion
 Neutral=has a neutral impact on criterion
 Negative=has a negative impact on criterion

10.1.2 Status Quo

Simple Neutrality: Maintaining the status quo would not achieve our objective of resolving the discrimination renters currently suffer from under the HOG. It has a negative impact on simple neutrality.

Equal Opportunity: Maintaining the status quo would not achieve our objective of reducing inequality in municipal fiscal capacity across the GVRD. This requires equal treatment of renters and a more equitable PPT burden across districts. To the extent the PPT system is responsible for this inequity, it has a negative impact on equal opportunity.

Horizontal Equity: The existing horizontal unfairness inherent to the PPT system, where districts with similar incomes are not required to pay similar amounts of taxes, would not be resolved. For an option to have a positive impact on this criterion, it must equalize PPT burdens across school districts and provide equal amounts of property tax relief to seniors and non-seniors. Failing to do this, this option has a negative impact on horizontal equity.

Vertical Equity: Given that the incidence of the PPT is not entirely clear, it is not known to what extent the status quo contradicts or fulfils this criterion. However, we will assume that the status quo does not address vertical equity so long as property tax relief is not targeted more directly at lower income households. Failing to do this, this option does not fulfil this criterion.

Fiscal Impact: Governments would not need to dedicate new funds to the Home Owner Grant program, save for the incremental expansion in property tax relief as the number of homeowners grows and as property values continue to rise. Failing to resolve the fiscal capacity inequalities between municipalities will likely entail some economic costs, although one cannot quantify this. It is likely that in the long run, labour and capital may become inefficiently allocated as fiscal capacity differences remain uncorrected.⁸⁵

Stakeholder Impact: Maintaining the Home Owner Grant will have a neutral impact on homeowners, and will probably have a neutral impact on renters as well. Not only are renters generally unaware they are being discriminated against, but they are unlikely to assert themselves

⁸⁵For a more complete discussion of this effect, see: Robin Boadway and Paul A.R. Hobson, Intergovernmental Fiscal Relations in Canada (Toronto: Canadian Tax Federation, 1993), 32-3.

as stakeholders. On one hand, they are far less likely to vote than owner-households.⁸⁶ On the other hand, they are not as assertive in their rights as homeowners, which can be clearly seen when we compare the cancellation of RentAid in 1983 to the property tax reforms the NDP introduced in the early 1990s. The former hurt renters to a larger magnitude than the property tax reforms hurt homeowners.⁸⁷ However, the cancellation of RentAid drew only a passing mention in the days media, and was met with little if any resistance; the property tax reforms a decade later merited substantive newspaper articles, countless editorials, letters to the editor, all of which was accompanied by a noisy public protest and opposition from municipal politicians including then Mayor of Vancouver Gordon Campbell.⁸⁸ This forced the NDP to drop the proposed property tax surcharge on high-valued homes. While renters, which compose a third of BC's 1,534,340 households, represent a potential political force to be reckoned with, they will likely not assert themselves as stakeholders with respect to property tax relief.

Administrative Simplicity: Delivered through a single Ministry, the Home Owner Grant is relatively simple in its operation. It disseminates information from the same source, and all applicants apply with the same application. Furthermore, there is only one piece of legislation that authorizes property tax relief under this program. This option has a neutral impact on simplicity.

10.1.3 PPT Reform Option

Simple Neutrality: Eliminating the Home Owner Grant would resolve the discrimination renters currently suffer. Both would now be equally ineligible for property tax relief. This option would have a positive impact on simple neutrality.

⁸⁶Peter Dreier, "Start Your Engines: The Housing Movement and the Motor Voter Law," *Shelterforce: The Journal of Affordable Housing and Community Building*, 75 (May/June 1994)

⁸⁷It was projected that around \$40 million (or \$72 million in 2004 dollars) would be saved due to the cancellation of RentAid. Hansard, *1983 Legislative Session: 1st Session, 33rd Parliament* (British Columbia: Hansard Debates of the Legislative Assembly, October 6, 1983), 2575; The property tax surcharge on expensive homes was expected to net \$37 million (\$45.3 million in 2004 dollars) Hansard, *1993 Legislative Session: 2st Session, 35rd Parliament* (British Columbia: Hansard Debates of the Legislative Assembly, March 30, 1993). If we assume that there are twice as many homeowners as renters, renters suffered a loss of resources that was three times more than what homeowners suffered on a per-capita basis.

⁸⁸Tom Barrett, "Weary MLAs set for Break," *The Vancouver Sun* (September 30, 1983), A1.

Equal Opportunity: This option would eliminate both sources of equal opportunity inequities. First, through treating renters and homeowners equally, this would equalize the fiscal resources available to all municipalities in terms of property tax relief. Second, through lowering the tax take from jurisdictions with high property values but not necessarily high levels of income, the inequities of the PPT would be reduced. This could open up new revenue possibilities for low income municipalities with weak fiscal capacity but high PPT burdens, improving their ability to deliver a standard set of public services at a standard tax rate.

Horizontal Equity: Through lowering the tax take from jurisdictions with high property values but not necessarily high levels of income, this option will ensure that the average homeowner in each school district will pay equal amounts of property taxes.

Vertical Equity: This option will have a positive impact on vertical equity should the income tax break outweigh any distributional effects of a per-household PPT formula. As we note, districts with high taxes and high incomes would see their property taxes reduced under the new PPT formula, which would presumably have a regressive effect. Also, low-tax and low income jurisdictions would see their property taxes increase, which would also presumably be regressive. For this overall option to have a positive effect, these effects would need to be overcome by 1) high-tax and low income jurisdictions paying lower taxes; 2) low-tax but high income jurisdictions paying higher taxes, and; 3) the progressive effects of the cuts to the PIT, bearing in mind that low income individuals without taxable income would not benefit from this tax-break unless the sales tax credit is increased. Provided this occurs, this option could be considered progressive.

Fiscal Impact: This option could be made revenue neutral. The cost savings gained from eliminating the Home Owner Grant (\$452.5 million) would be redistributed back to taxpayers through the income tax system or allocated to other government priorities. The equivalent amount of property tax would be raised under this option, but its burden would be more equally distributed across the province.

Stakeholder Impact: Provided the per-household element of the PPT is phased in over a number of years and this option clearly links the gradual elimination of the HOG- also implemented over a number of years- with an income tax cut, we can assume that this would have a neutral impact on our stakeholders.

However, high income homeowners who would not benefit from the PIT rate cuts would stand to lose should their property values decline. Given that the affluent tend to be more vocal and politically active, this may have a negative stakeholder impact. Because the effect of the per-household formula would be to shift the PPT burden away from urban areas towards rural areas, this may exacerbate the long-standing feeling of exploitation rural areas often express towards the major urban regions of the province.

Administrative Simplicity: This option would perhaps be the simplest of all options. Through eliminating the Home Owner Grant, it would actually reduce legislation and abolish an existing program. The change to the PPT formula would require a simple change through an Order in Council, and would require no new legislation. The reduction in the personal income tax rate would require a simple change to the *Income Tax Act*. Importantly, this option would not complicate the income tax with an additional tax credit.

10.1.4 RentAid Option

Simple Neutrality: Low income renters will be eligible for property tax relief under this option, eliminating some of the inequities facing renters. However, this should not be considered the ideal solution to this inequity. An income test will be applied to renters but not homeowners, and both groups will still not be treated equally. High income renters will continue to be discriminated against relative to high income homeowners.

Equal Opportunity: Municipalities with more renters would receive a larger degree of property tax relief, increasing their revenue-raising options and thus increasing their fiscal capacity relative to other municipalities. However, this option would not provide equal relief to renters, nor would it equalize the different property tax burdens. Failing to do this, it would not be an optimal level of equalization.

Horizontal Equity: This option will not do anything to ensure school districts with similar household incomes but different property tax burdens are treated more equally.

Vertical Equity: This program will fulfil our requirements of vertical equity amongst renters. A high income renter will receive less property tax relief than a low income renter. However, this

vertical equity would not exist amongst homeowners, or between homeowners and renters. A high income homeowner will continue to receive similar amounts of property tax relief to a low income renter or homeowner.

Fiscal Impact: The exact costs of RentAid cannot be determined, not knowing the income breakdown of renters or the size of the credit that will be chosen. In our broad range or hypothetical tax credits, we have suggested that the costs of the program could lie anywhere between \$26 and \$78 million, assuming that half of all renter households are eligible for the credit. This would therefore have a negative fiscal impact. Should the government be faced with a deficit, this would require cuts to other areas or increased deficit financing. Should the government have a surplus, this would require foregone spending on debt-reduction, healthcare or other important spending priorities.

Stakeholder Impact: This program would likely have positive stakeholder impacts. It would not involve eliminating the HOG, and hence should have a neutral impact on the roughly two-thirds of the province's electorate who are homeowners and are more likely to vote. In providing an additional financial resource for renters, this would impact them positively. There would be some stakeholder impact; however, should the RentAid option be financed from foregone spending in what are perceived as more important priorities such as health care or education. It would also have negative stakeholder impacts should the property tax relief for renters be financed from an increase in property taxes across the board.

Administrative Simplicity: The RentAid option would see the implementation of a renter's tax credit unrelated to the existing Home Owner Grant program. New legislation would be necessary, falling under the *Income Tax Act*, which would augment, not replace the existing Home Owner Grant program. BC would administer the renter's tax credit as a separate program, with a different name and administrative organization. Information for property tax relief would be disseminated through different channels for both groups.

This option could be abused by applicants making multiple claims from the same household, from a household that already receives the HOG, or by applicants that are already eligible for SAFER. Restrictions on these activities would have to be enforced, perhaps through cross-checking records on a common computer database.

10.1.5 Ontario Option

Simple Neutrality: Providing all renters with property tax relief on an equal basis to all homeowners, this option will eliminate all the inequities that face renters.

Equal Opportunity: Through providing renters with property tax relief, and through providing a larger tax credit to high-tax jurisdictions that do not have high incomes, we can assume that this option would eliminate most of the inequities introduced by the PPT system with respect to equal opportunity on the metropolitan level. As an appraisal of the OPTC conducted by Richard Bird and Enid Slack reveals, since the average credit as a percentage of income is higher in low income regions, it does provide “greater benefits to municipalities with relatively low average incomes,” which we presume tend to have lower levels of fiscal capacity. In this way, the OPTC “systematically tends to transfer relatively larger amounts to lower-income regions, even though in general there is no clear association between income levels and property tax shares.” This occurs since high income municipalities with high taxes do not benefit from the larger credit they are eligible for (because of the income test) whereas low income municipalities with high taxes do. It concludes that the OPTC functions in a way that is “at worst neutral and at best operates in the presumably desired direction,” of a fairer geographic distribution of the property tax burden.⁸⁹ Presumably these extra tax benefits would be exploited by local governments, allowing municipalities with weak fiscal capacity to increase their taxes to bring services up to line.

Horizontal Equity: In eliminating the equal opportunity problems, the OPTC would also eliminate the horizontal equity problems. It would do this through increasing the tax credit in low income but high tax jurisdictions, bringing the tax burden into line with that which exists elsewhere across the province in districts with similar incomes. In other words, through providing a larger credit to households with higher property tax burdens, this would equalize to some extent different property tax burdens facing homeowners and/or renters with similar incomes in different jurisdictions.

Vertical Equity: This option will also fulfil our requirements of vertical equity amongst renters and homeowners to the extent that lower income households are eligible for a larger tax credit, which should have a progressive effect. However, the final economic incidence of the tax would

⁸⁹Bird and Slack, 116-7.

be as hard to discern as that of the tax itself. There is little to no empirical evidence showing the OPTC's effect on vertical equity in Ontario. The theory itself is unclear on the matter. To the extent that the tax credit will be translated into higher rental prices, renters would not clearly benefit. For homeowners, as with the HOG, the credit may simply translate into higher housing costs. Under the new view, the credit may result in a slight initial increase in the rate of return for capital in the province, which may have a progressive effect. Of course all of this assumes that the market perceives the credit as a reduction in the property tax. Given that it is obtained through the income tax, and that high income households will not receive tax relief, the connection may be less than clear.⁹⁰

Fiscal Impact: The Ontario option, depending on its exact interpretation, will remain more or less revenue neutral. Based on our model described above, where an equal credit is supplied to seniors and where an income threshold of approximately \$45,000 is used, and assuming all applicants get the full credit, it would cost the government approximately \$420 million, roughly the same as the existing budget. Unlike the RentAid options, this alternative would have a neutral fiscal impact.

Stakeholder Impact: This program would impact an important stakeholder group, the highest-income third of BC's households. If a large portion of this group have previously received the HOG, they would likely see its loss as a tax grab, and would likely protest as they did in 1993 when thousands of protestors took to the street to protest the NDP's proposed property tax surcharge.⁹¹ Furthermore, low-tax rural areas would be required to pay higher taxes. Unless the tax credit begins with a large base-credit (discussed above) so that low-tax areas are not suddenly faced with high taxes, this would have a negative stakeholder impact on rural areas.

On the other hand, the vast majority of households (two-thirds) would continue to receive some amount of property tax relief. The primary weakness of the property tax surcharge, as well as the other Home Owner Grant reforms the NDP introduced in the early 1990's, including the cut to the supplementary Home Owner Grant (1992), and the introduction of the phase-out threshold

⁹⁰Bird and Slack, 118.

⁹¹The property-tax surcharge, introduced in 1993, was to be a 0.5 percent surtax on homes valued at \$500,000 or more, and a 1.5 percent surtax on homes valued at \$900,000 or more. It was never implemented. See: Gordon Clark, "Beginning of Political End for NDP, Opponents Predict," The Province (April 6, 1993), A5; "Awakening the Beast of a Tax Revolt," Vaughn Palmer, The Vancouver Sun (April 7, 1993), A14; Art Perry, "Pt. Grey tax-fight signs go missing" The Province (Apr 15, 1993), A6.

(1993), was not that they would increase the taxes on high income households, but that they were not related to ability to pay.⁹² The attractiveness of implementing the Ontario option is that it would do just this. Through basing a property tax relief system on income, it would neutralize a criticism that is still used against property tax reform to this day.⁹³

Administrative Simplicity: The Ontario option would be relatively simple. Although it would require new legislation to replace the *Home Owner Grant Act*, and would also make the income tax system slightly more complicated, it would replace the HOG with a new tax credit, requiring little new legislation, and streamlining the provision of property tax relief to renters and homeowners through a single program.

In their analysis of the OPTC, Bird and Slack do not find any serious problems with the compliance or abuse of the program, although as with all tax systems, some abuse likely exists. Their chief criticism revolves around the credit's use of taxable income as the measure of ability pay, when ideally this definition should be broader.⁹⁴

⁹²The supplementary Home Owner Grant was introduced in 1990. It would provide an extra grant equal to 25 percent of the education tax not covered by the basic grant for 1990 and 50 percent of this amount in subsequent years, the benefits of which would be capped at \$1000; *Home Owner Grant Amendment Act, 1990 (S.B.C. 1990, c.9, s.2)*. The Home Owner Grant phase-out reduced the grant to homes valued in excess of \$400,000 at a rate of \$10 reduction per every \$1000; *Property Taxation Statutes Amendment Act (No. 2), 1993 (S.B.C. 1993, c. 63, s. 6)*.

⁹³Mark Milke, *Barbarians in the Garden City: The BC NDP in Power* (Victoria: Thomas & Black, 2001), ch. 2.

⁹⁴Bird and Slack, 106.

11 Next Steps

According to the equity criteria we have set out, the PPT system in British Columbia is inequitable. First, the system discriminates against renters in the allocation of property tax relief which in our view is incompatible with the requirement of equality in its most basic sense. Second, the PPT system uses up more tax room in low income municipalities with weak levels of fiscal capacity. Residents of these municipalities are thus not able to enjoy equal levels of public services. Third, the system does not ensure that districts with equal incomes pay equal amounts of property taxes. While this would not be problematic were property values an accurate indicator of one's ability to pay, we believe that this is not necessarily the case on the provincial level. Finally, the PPT system in British Columbia does not ensure that those with lower incomes receive a larger tax credit relative to those with higher income.

In our view, the characteristics of a desirable PPT system include one that does not impose dramatically different tax burdens on different school districts across the province because of higher property values. Also, it should seek to provide lower income earners with larger portions of tax relief relative to higher income earners. Finally, it should treat all groups equally in terms of eligibility for property tax relief, should the province choose to provide property tax relief.

Although governments may be tempted to pursue the status quo, there are preferable options from the perspective of equity. One attractive option is to replace the HOG with an income-tested tax credit akin to what is currently in use in Ontario. This option would reduce the PPT burden in high-tax, low income districts and would provide tax relief to renters, freeing up more fiscal resources for municipalities with low levels of fiscal capacity. This would not only improve upon equal opportunity and simple neutrality, it would also serve to equalize the tax burden in districts with higher taxes relative to those with lower taxes, achieving greater horizontal equity. Finally, through reducing property tax relief for high income earners, it would presumably make the PPT system more vertically equitable.

Governments may desire more fundamental reform of the PPT system. One option that we have proposed is that the PPT formula be shifted to a per-household formula, in conjunction with the elimination of the HOG, the savings in which would be transferred into a reduction in the PIT for low to mid-income earners and perhaps also an increase in the sales tax credit for those without taxable income. This option would shift the tax burden away from high-tax but low income districts, which would free up tax room for low income municipalities. This would also ensure all districts with equal income contribute equal amounts of tax. Of course high income districts would pay the same amount as low income districts, but this could be compensated by the PIT reductions. This option would be simple to implement, would avoid complicating the income tax system, and would be effective. Its impact on stakeholders, especially those in rural areas that would face higher PPT burdens, could be reduced by shifting the formula gradually over a 10 year period from the uniform mill-rate component to the per-household rate component.

Governments without pressing spending priorities, extra resources and a desire to minimize direct stakeholder impacts should consider the RentAid option. However, it would incorporate few of the necessary changes, and would require the unwieldy administration of two separate programs. This option could be considered as a short-term, stop-gap measure.

In conclusion, this study highlights the inequity associated with the existing PPT system as it relates to residential properties, and proposes some policy alternatives that focus solely on reforming the PPT system. Further study is required to ensure that the most equitable and effective option is selected. Examples of the type of analysis that would assist government include a study for British Columbia of the incidence of the PPT with HOG on renters and homeowners, examination of the equity effects over time, and a more in-depth analysis of the proposed alternatives.

Appendices

Appendices

Appendix 1: Median House Value, Income and PPT of British Columbian Municipalities

<i>Municipality</i>	<i>Population 2004</i>	<i>Median House Value 2004</i>	<i>Median PPT Pre- HOG 2004</i>	<i>Median Household Income 2001</i>	<i>Total Residential PPT Payments 2004 (\$000's)</i>	<i>Total HOG 2004 (\$000's)</i>
100 Mile House	1,828	\$96,713	\$517	\$33,153	\$341	\$212
Abbotsford	126,753	\$217,667	\$822	\$48,319	\$27,947	\$15,346
Alert Bay	615	\$85,000	\$503	\$37,320	\$109	\$79
Anmore	1,553	\$464,604	\$1,415	\$70,860	\$753	\$93
Armstrong	4,518	\$128,135	\$561	\$37,178	\$952	\$767
Ashcroft	1,868	\$91,430	\$527	\$40,318	\$375	\$310
Belcarra	715	\$450,000	\$1,371	\$100,995	\$491	\$81
Bowen Island	3,353	\$402,293	\$879	\$64,979	\$1,525	\$475
Burnaby	203,053	\$318,635	\$920	\$44,754	\$51,351	\$23,441
Burns Lake	2,028	\$77,370	\$494	\$43,671	\$337	\$190
Cache Creek	1,145	\$100,000	\$576	\$34,366	\$205	\$141
Campbell River	30,250	\$132,211	\$572	\$46,052	\$6,361	\$4,175
Castlegar	7,237	\$119,646	\$660	\$44,511	\$1,848	\$1,149
Central Saanich	16,494	\$277,794	\$802	\$61,486	\$4,868	\$2,635
Chase	2,552	\$102,000	\$468	\$27,666	\$542	\$439
Chetwynd	2,729	\$81,978	\$595	\$47,744	\$495	\$270
Chilliwack	69,193	\$180,885	\$739	\$42,042	\$16,139	\$9,452
Clinton	672	\$80,000	\$461	\$27,267	\$110	\$97
Coldstream	9,922	\$207,039	\$857	\$59,026	\$3,176	\$1,527
Colwood	14,864	\$243,077	\$819	\$59,987	\$3,461	\$1,977
Comox	12,279	\$148,306	\$621	\$49,105	\$2,977	\$2,122
Coquitlam	120,043	\$351,000	\$1,069	\$52,657	\$32,342	\$14,749
Courtenay	21,120	\$152,900	\$640	\$37,235	\$4,595	\$3,191
Cranbrook	19,660	\$107,000	\$513	\$42,873	\$3,645	\$2,806
Creston	5,053	\$150,000	\$728	\$32,970	\$1,078	\$954
Cumberland	2,768	\$122,000	\$511	\$38,073	\$463	\$422
Dawson Creek	11,320	\$84,100	\$611	\$43,805	\$2,328	\$1,439
Delta	102,113	\$295,000	\$893	\$66,303	\$26,672	\$13,477
Duncan	4,884	\$131,800	\$522	\$28,158	\$865	\$710
Elkford	2,683	\$85,758	\$411	\$65,430	\$451	\$320
Enderby	3,023	\$109,000	\$478	\$29,810	\$550	\$494
Esquimalt	17,083	\$222,341	\$670	\$40,101	\$3,304	\$1,991

Fernie	5,054	\$161,016	\$772	\$46,634	\$1,755	\$671
Fort Nelson	4,706	\$116,976	\$596	\$67,158	\$829	\$471
Fort St. James	2,004	\$100,000	\$638	\$60,053	\$368	\$225
Fort St. John	17,326	\$144,000	\$716	\$55,155	\$3,298	\$1,791
Fraser Lake	1,369	\$65,200	\$416	\$49,074	\$166	\$131
Fruitvale	2,062	\$87,000	\$480	\$49,902	\$351	\$307
Gibsons	4,216	\$190,245	\$628	\$36,220	\$1,125	\$720
Gold River	1,436	\$75,722	\$642	\$57,415	\$398	\$202
Golden	4,385	\$142,550	\$552	\$45,929	\$839	\$489
Grand Forks	4,184	\$104,700	\$485	\$32,761	\$801	\$706
Granisle	367	\$40,595	\$259	\$23,310	\$60	\$85
Greenwood	666	\$55,722	\$258	\$29,461	\$103	\$123
Harrison Hot Springs	1,542	\$156,416	\$743	\$37,535	\$746	\$292
Hazelton	355	\$78,850	\$479	\$58,554	\$48	\$34
Highlands	1,967	\$300,000	\$1,011	\$72,637	\$770	\$271
Hope	6,575	\$120,666	\$573	\$35,330	\$1,563	\$969
Houston	3,849	\$84,907	\$463	\$57,810	\$580	\$392
Hudson's Hope	1,159	\$95,900	\$477	\$58,301	\$156	\$118
Invermere	3,147	\$182,000	\$704	\$48,324	\$1,070	\$442
Kamloops	81,916	\$138,940	\$637	\$46,536	\$18,415	\$11,672
Kaslo	1,071	\$75,000	\$364	\$32,392	\$238	\$185
Kelowna	105,901	\$237,300	\$843	\$42,216	\$28,540	\$15,967
Kent	5,525	\$152,600	\$725	\$39,304	\$1,436	\$737
Keremeos	1,278	\$103,050	\$480	\$22,110	\$286	\$281
Kimberley	6,946	\$105,794	\$409	\$41,087	\$1,437	\$1,220
Kitimat	10,725	\$77,600	\$471	\$66,799	\$1,907	\$1,438
Ladysmith	7,130	\$141,978	\$584	\$42,440	\$1,639	\$1,258
Lake Country	10,091	\$230,000	\$817	\$48,967	\$3,150	\$1,429
Lake Cowichan	2,986	\$121,775	\$482	\$34,822	\$590	\$466
Langford	20,956	\$215,840	\$727	\$51,173	\$5,204	\$2,831
Langley	24,982	\$267,000	\$882	\$61,443	\$5,071	\$3,163
Langley City	94,775	\$257,590	\$850	\$41,891	\$27,436	\$12,722
Lantzville	3763	\$234,000	\$962	n/a	\$1,398	\$638
Lillooet	2,821	\$100,000	\$576	\$40,289	\$632	\$360
Lions Bay	1,421	\$477,000	\$1,042	\$92,510	\$628	\$198
Logan Lake	2,320	\$82,000	\$376	\$52,338	\$337	\$407
Lumby	1,703	\$105,331	\$436	\$34,750	\$278	\$256
Lytton	333	\$80,300	\$463	\$44,314	\$53	\$38
Mackenzie	5,458	\$78,859	\$444	\$69,076	\$788	\$573
Maple Ridge	70,792	\$254,059	\$857	\$55,632	\$18,677	\$9,607
Masset	967	\$50,000	\$351	\$51,470	\$172	\$111
McBride	743	\$100,000	\$563	\$44,770	\$90	\$86
Merritt	7,516	\$100,982	\$538	\$41,069	\$1,428	\$937
Metchosin	5,286	\$288,950	\$974	\$57,044	\$1,626	\$699
Midway	641	\$111,700	\$517	\$43,318	\$129	\$121
Mission	34,060	\$192,243	\$690	\$49,905	\$8,114	\$4,343
Montrose	1,090	\$108,409	\$598	\$51,014	\$254	\$208
Nakusp	1,789	\$90,211	\$484	\$37,033	\$416	\$260
Nanaimo	78,479	\$161,961	\$666	\$39,706	\$18,305	\$11,773

Nelson	9,793	\$143,639	\$697	\$38,599	\$2,395	\$1,384
New Denver	550	\$85,000	\$456	\$24,760	\$158	\$82
New Hazelton	765	\$54,736	\$332	\$35,259	\$104	\$73
New Westminster	57,834	\$317,100	\$1,036	\$40,784	\$13,485	\$6,828
North Cowichan	28,140	\$151,860	\$602	\$44,295	\$6,876	\$4,272
North Saanich	11,132	\$427,312	\$1,234	\$71,711	\$5,469	\$1,835
North Vancouver City	86,868	\$437,478	\$1,149	\$44,095	\$12,051	\$5,407
North Vancouver District	47,342	\$444,848	\$1,169	\$70,228	\$30,752	\$11,209
Oak Bay	18,405	\$435,219	\$1,312	\$58,905	\$8,743	\$2,983
Oliver	4,378	\$144,785	\$675	\$31,613	\$1,159	\$868
Osoyoos	4,611	\$152,554	\$711	\$32,094	\$1,920	\$987
Parksville	11,275	\$163,680	\$598	\$34,793	\$2,959	\$2,195
Peachland	5,090	\$201,589	\$716	\$37,800	\$1,602	\$969
Pemberton	2,203	\$315,904	\$742	\$53,347	\$557	\$216
Penticton	32,955	\$166,900	\$676	\$33,940	\$7,893	\$5,176
Pitt Meadows	16,087	\$207,066	\$698	\$57,892	\$3,821	\$2,197
Port Alberni	18,610	\$97,750	\$463	\$36,586	\$3,085	\$2,851
Port Alice	1,107	\$80,000	\$473	\$70,134	\$164	\$88
Port Clements	534	\$49,361	\$347	\$52,811	\$80	\$57
Port Coquitlam	56,413	\$252,843	\$770	\$59,926	\$12,499	\$6,915
Port Edward	659	\$72,800	\$474	\$40,694	\$119	\$74
Port Hardy	4,593	\$74,797	\$443	\$48,034	\$751	\$414
Port McNeill	2,908	\$125,000	\$740	\$65,584	\$579	\$311
Port Moody	26,757	\$292,256	\$890	\$64,932	\$7,423	\$3,384
Pouce Coupe	864	\$60,000	\$436	\$31,294	\$136	\$101
Powell River	13,716	\$110,107	\$534	\$42,905	\$2,914	\$2,307
Prince George	77,826	\$117,342	\$661	\$52,107	\$14,869	\$9,126
Prince Rupert	15,059	\$99,700	\$649	\$50,058	\$2,483	\$1,552
Princeton	2,691	\$75,500	\$402	\$32,094	\$510	\$407
Qualicum Beach	7,403	\$222,300	\$812	\$44,680	\$2,932	\$1,791
Quesnel	10,444	\$90,000	\$581	\$42,412	\$2,049	\$1,249
Radium Hot Springs	749	\$127,500	\$493	\$52,151	\$338	\$91
Revelstoke	7,932	\$95,827	\$548	\$44,661	\$1,638	\$1,076
Richmond	173,177	\$373,474	\$1,135	\$50,060	\$49,036	\$22,275
Rossland	3,689	\$125,000	\$690	\$51,056	\$946	\$579
Saanich	109,930	\$300,000	\$905	\$52,099	\$32,444	\$17,026
Salmo	1,140	\$68,416	\$332	\$29,923	\$171	\$159
Salmon Arm	16,510	\$142,860	\$626	\$38,956	\$3,991	\$2,555
Sayward	404	\$78,873	\$341	\$38,807	\$56	\$58
Sechelt	8,511	\$219,000	\$723	\$39,921	\$2,982	\$1,547
Sechelt Indian Government	792	\$108,231	\$357	\$24,229	\$187	\$146
Sicamous	3,022	\$131,937	\$578	\$33,777	\$989	\$458
Sidney	11,525	\$254,000	\$733	\$44,013	\$3,327	\$2,390
Silverton	231	\$82,568	\$443	n/a	\$87	\$49

Slocan	359	\$60,723	\$295	\$31,363	\$54	\$45
Smithers	5,652	\$112,538	\$614	\$55,724	\$1,119	\$663
Sooke	9,756	\$187,184	\$631	\$44,921	\$2,359	\$1,353
Spallumcheen	5,648	\$128,811	\$564	\$45,266	\$1,300	\$747
Sparwood	3,998	\$88,506	\$425	\$55,557	\$644	\$459
Squamish	15,431	\$261,297	\$614	\$57,058	\$3,265	\$1,874
Stewart	717	\$14,064	\$85	\$45,433	\$69	\$86
Summerland	11,285	\$174,700	\$708	\$42,941	\$3,399	\$2,101
Surrey	385,862	\$265,317	\$833	\$53,957	\$90,033	\$43,822
Tahsis	594	\$45,000	\$381	\$49,386	\$96	\$53
Taylor	1,291	\$86,600	\$431	\$54,788	\$191	\$151
Telkwa	1,421	\$108,000	\$589	\$55,309	\$263	\$191
Terrace	12,599	\$115,056	\$698	\$53,259	\$2,704	\$1,446
Tofino	1,716	\$299,156	\$1,077	\$47,572	\$823	\$164
Trail	7,862	\$78,352	\$432	\$37,314	\$1,455	\$1,412
Tumbler Ridge	2,464	\$39,900	\$290	\$64,175	\$348	\$320
Ucluelet	1,852	\$130,328	\$617	\$44,435	\$540	\$164
Valemount	1,247	\$67,673	\$381	\$36,192	\$201	\$167
Vancouver	579,716	\$406,588	\$1,122	\$42,046	\$179,740	\$50,815
Vanderhoof	4,662	\$99,290	\$634	\$45,621	\$1,046	\$570
Vernon	35,642	\$154,636	\$640	\$35,948	\$8,758	\$5,555
Victoria	77,744	\$289,648	\$873	\$34,344	\$19,200	\$8,608
View Royal	8,067	\$291,600	\$879	\$54,950	\$2,199	\$1,250
Warfield	1,756	\$94,000	\$519	\$59,312	\$334	\$322
Wells	262	\$42,750	\$276	n/a	\$42	\$31
West Vancouver	43,356	\$759,760	\$1,660	\$75,582	\$25,346	\$3,267
Whistler	9,809	\$1,161,5	\$2,730	\$58,906	\$18,342	\$373
		52				
White Rock	19,299	\$283,185	\$889	\$44,691	\$6,946	\$3,388
Williams Lake	11,865	\$133,209	\$713	\$49,907	\$2,113	\$1,253
Zeballos	232	\$51,025	\$433	n/a	\$50	\$24

Source: British Columbia, "Schedule 704: Taxes and Charges on a Representative House," in Local Government Statistics; Median income data from the 2001 Census for each municipality, obtained from: Canada, 2001 Community Profiles; To derive mill rate, divide pre-HOG PPT by house value and multiply by 1000. See also: "Schedule 702: 2004 Tax Rates," in Local Government Statistics. To determine post-HOG payments, subtract \$470 from pre-HOG PPT. Total residential PPT data obtained by multiplying mill rate by total assessed residential value; Assessed property value obtained from: British Columbia, "Schedule 701: Assessed Values for the Year 2004," in Local Government Statistics; To derive total assessed residential property, divide total PPT payments by mill rate and multiply by 1000. To determine total post-HOG PPT contributions, subtract total HOG from total PPT.

Appendix 2: Per-Household HOG Determinants 2001

	<i>Eligible -Owner Households as percent of all owner households</i>	<i>Senior -Owner Households as percent of all owner households</i>	<i>Renter House- holds as percent of all households</i>
Anmore	75.4	15.5	23.5
Belcarra	83.9	1.7	19.6
Burnaby	93.9	30.5	43.6
Coquitlam	94.4	20.8	29.5
Delta	95.0	22.7	20.6
Langley C	96.1	28.2	41.9
Langley D	92.8	23.9	15.9
Lions Bay	84.3	20.7	9.6
Maple Ridge	95.8	22.8	22.5
New West	93.9	28.2	52.4
North Van C	94.0	29.2	51.9
North Van D	92.6	26.3	21.0
Pitt Meadows	96.9	22.6	23.1
Port Coquitlam	95.1	15.6	25.6
Port Moody	97.3	13.7	23.9
Richmond	98.7	24.5	29.1
Surrey	93.1	25.1	28.5
Vancouver	83.3	29.7	56.2
West Van	57.3	45.7	23.6
White Rock	96.5	47.4	35.7
GVRD Average	91.5	24.0	38.9

Source: Percentage renters derived from 2001 Census; eligibility rates obtained from data provided by Mark Westby in the Home Owner Grants Program Administration, in the Ministry of Small Business and Revenue.

Appendix 3: Fiscal Capacity Methodology

Municipalities must compete with the PPT for government revenues. The PPT system, in taxing real property across British Columbia, “uses up” some of the tax resources that municipalities could otherwise access. To evaluate this interaction, it becomes important for policymakers to understand the impact the PPT has on a municipality’s ability to raise revenues from their own resources. This is especially important when the PPT system uses up resources between municipalities unequally. To do this, it becomes necessary to measure the fiscal capacity of municipalities, and model the impact of overlying provincial property taxes on this capacity.

The purpose of this section is to describe in further detail the methodology that we use to measure municipal fiscal capacity. Developed over the past two decades by Ladd, Yinger, Bradbury and others, the *income with exporting* approach to measuring fiscal capacity has become increasingly accepted as an adequate measure of municipal fiscal capacity.⁹⁵ Recent studies of the fiscal capacity of Chicago, New York, and Minneapolis, for instance, have relied on this methodology.⁹⁶ The author has not found Canadian applications of this method on the municipal level, although Alex MacNevin references Ladd and Yinger’s work in his recent assessment of Federal-Provincial equalization.⁹⁷

This study will only attempt to measure a municipality’s fiscal capacity. In doing so, we will not attempt to measure fiscal health. Fiscal health is a more sophisticated measure of a municipality’s fiscal situation that also includes a measure of a municipality’s expenditure need. Just as municipalities have different abilities to raise a given amount of revenue, so to do they have different abilities to provide the same levels of service at a given cost.⁹⁸ Measuring a municipality’s expenditure need, while desirable, relies on an analysis of police, fire, and general government expenditures that are beyond the scope of the following analysis. For now we remain restricted to the analysis of fiscal capacity.

⁹⁵Bradbury, 1983; Ladd and Yinger, 1991.

⁹⁶Hendrick, 2004; Chernick, 1998; Ladd and Reschovsky, 1991.

⁹⁷Alex, MacNevin, The Canadian Federal-Provincial Equalization Regime: An Assessment (Toronto: Canadian Tax Foundation Tax Paper 109, 2004), 250.

⁹⁸Ladd and Yinger, 81.

11.1 Unrestricted Fiscal Capacity

As Ronald Ferguson and Helen Ladd argue, unrestricted fiscal capacity refers to the:

“Maximum amount of revenue the city could raise from its potential tax bases, given a specified burden on local resident incomes and the use of equal tax rates for resident and non-resident taxpayers.”⁹⁹

For the purposes of this study, we will express the “specified burden” as a percentage of a residences’ income. Thus, given the specified per-capita burden, fiscal capacity will vary across municipality’s depending on 1) differences in the average income of residences, and 2) differences in the ability of cities to export part of the local tax onto non-residents.

Tax exporting exists since a municipality is part of a broader regional and international economy, and so taxes may ultimately be paid by taxpayers residing in a different city. Taxes on businesses, for instance, can burden international or regional consumers in the form of higher prices instead of the local property owner. We use the following formula to calculate the unrestricted fiscal capacity of the i th municipality taking tax exporting into account,

Equation 1:
$$FC_i = K * Y_i(1 + e_i)$$

Where FC_i is the unrestricted fiscal capacity of municipality i , K^* is the standard tax burden on residents defined as taxes paid by residents as a share of their income, Y_i is the household income of the residents of municipality i and e_i is the municipality’s export ratio, defined as the dollars of property taxes ultimately paid by nonresidents per dollar paid by residents.

11.1.1 Standard Burden

The standard burden, or K^* , is a weighted average of all property taxes paid by residents of the GVRD. It tells us how much revenue a municipality could raise at a standard tax burden. The standard tax burden is calculated through summing the share of the property taxes including general municipal property taxes (inclusive of grants in lieu of taxes), PPT, and taxes paid to regional and other governments, dividing this through total household income across the region. The formula below is used:

⁹⁹Ferguson and Ladd, 143.

Equation 2:
$$K^* = \sum_{i=1}^n f_i \left(\frac{MT_i + ST_i + RT_i}{Y_i} \right)$$

Where f_i refers to the share of the GVRD's population, MT_i to the general municipal property taxes, ST_i to the PPT, RT_i to regional taxes, and Y_i to aggregate household income for the i th municipality.

11.1.2 Export Ratios

Calculating a municipality's revenue raising capacity (RRC) requires us to derive an export ratio for each municipality in the comparison. This ratio, in reflecting the share of taxes ultimately paid by local residents, must take into account the fact that each property type will export taxes to differing degrees. For instance, owner-occupied residential housing will bear all the weight of a property tax, whereas commercial property will have a much greater ability to pass off the tax onto consumers or workers. To take this into account, an overall export ratio for each municipality is calculated through summing the weighted averages of the export ratio assigned to each individual property class. The following formula is used to calculate a municipality's overall export ratio:

Equation 3:
$$e_i = \sum_j w_{ij} e_{ij}$$

where e_{ij} is the export ratio for the j th type of property in the i th municipality, and w_{ij} is the weight for the j th type of property in the i th municipality. These weights are calculated as the assessed value of the j th type of property divided by the total assessed value of the property in the i th municipality:

Equation 4:
$$w_{ij} = AV_{ij} / TAV_i$$

where AV_{ij} is the assessed value of property type j , and TAV_i is the total assessed value of property in municipality i .

Because it is not possible using existing data to calculate an export ratio for each property type in each of the individual cities, this study will make use of generalized export ratios. These export ratios are derived from the extensive study done by Ladd and Yinger, which calculated the average export ratios across 86 American cities.¹⁰⁰ Following the example set by Howard Chernick who recently used these ratios in a study of New York’s fiscal capacity for the *National Tax Journal*, it will be assumed that there is ample evidence the following export ratios are appropriate.

Table 9: Export Ratios¹⁰¹

<i>Residential Property</i>	<i>Industrial Property</i>	<i>Commercial Property</i>	<i>State/Farm/Other</i>
0.05	2.0	1.5	10

11.2 Restricted Fiscal Capacity

A municipality’s fiscal capacity does not exist within a vacuum. Provincial fiscal and taxation policies, as well as outside sources of income for a city, can enhance or constrain a municipality’s revenue-raising capacity. For the purposes of this analysis, we are primarily concerned with the HOG and the PPT.

As we note, the PPT “uses up” some of the fiscal revenue resources otherwise available to a municipality. If the PPT uses up municipal fiscal capacity unequally, there will be extra tax room available to some municipalities but not to others. This becomes problematic when the PPT uses up more fiscal resources in low income municipalities with weak fiscal capacity instead of those with strong fiscal capacity. The HOG, in providing relief for this tax, “frees up” some fiscal capacity available to municipalities. This becomes problematic where fiscal resources are disproportionately freed up in high income municipalities with strong fiscal capacity instead of weak fiscal capacity.

To calculate revenue raising capacity that considers these external factors, we calculate what we call *restricted fiscal capacity* (RFC).

¹⁰⁰Ladd and Yinger, 1991, 71.

¹⁰¹Chernick, 538.

The RFC must take into account two scenarios that we are interested in, including:

- **Provincial Property Tax:** property tax administered by province for general government revenues
- **Home Owner Grant:** property tax relief program that offsets the PPT homeowners must pay

Provincial Property Tax: To take into account the PPT, we must calculate a municipality-specific standard burden that takes into account the tax capacity that is used by this overlying tax jurisdiction, represented by KC_i^* , for the i th municipality.¹⁰² This can be formalized as follows:

Equation 5:
$$RFC_i = KC_i^* Y_i (1 + e_i)$$

KC_i^* is simply the fraction of a municipality's resident income that the municipal government can access given the total PPT burden on municipal residents. We define KC_i^* as the sum of all provincial and local per capita taxes, divided by the total local taxes accessed by the average municipality multiplied by K^* . Formally, this is expressed as:

Equation 6
$$KC_i^* = K^* \left(\frac{AMT}{PPT_i + AMT + ART} \right)$$

where AMT is the weighted average per capita municipal tax revenue across the region, PPT_i is the total per capita PPT paid by the i th municipality, and ART is the weighted average of all other per capita property taxes, including the non-residential PPT, the regional property tax, the Municipal Finance Authority Tax and the British Columbia Assessment Authority taxes. This allows us to isolate the impact different per capita PPT contributions have on a municipality's fiscal capacity.

¹⁰²See: Ladd and Yinger, ch. 7.

Home Owner Grant: To calculate the impact of the Home Owner Grant, we simply revise the value of ST_i in the above calculation to take into account the per capita amounts of property tax relief distributed to each municipality. For instance, if a municipality pays \$400 in per capita PPT but receives \$150 in per capita Home Owner Grants, PPT_i will equal \$250.

11.3 Coefficient of Variation

For purposes of measuring overall disparity across the region under our unrestricted and restricted fiscal capacity scenarios, a standardized measure of inequality is utilized. Called a *coefficient of variation (CV)*, this calculation divides the standard deviation of the series, weighted for population, by the overall average fiscal health of the GVRD.¹⁰³ It provides us with a measure of inequality expressed as a percentage. A coefficient close to zero indicates differentials in fiscal capacity between cities are small, and a coefficient closer to the value of 100 indicates a large degree of variation. Formally, this term is expressed as:

Equation 7:
$$CV = \frac{\left(\sum_{i=1}^n (FC_{ij} - FC_j)^2 * \frac{P_i}{P} \right)^{0.5}}{FC_j}$$

Where CV is the coefficient of variation, FC_{ij} is the fiscal capacity for the i th municipality in the j th fiscal capacity scenario (i.e. restricted or unrestricted), P_i is the population of the i th municipality, FC_j is the weighted average fiscal capacity of the GVRD in the j th scenario, and P is the total population of the GVRD. A different CV is derived for each fiscal capacity scenario. This allows us to compare the impact of each individual interaction, or set thereof, on inequality across municipalities in the GVRD in their delivery of public services.

¹⁰³The coefficient of variation used is that which Lillian Hallin in an unpublished BC Government paper entitled “Regional Population Growth and Income Inequality” based on: Horst Alter and Thomas Greenberg, “Taxes, Transfers and Regional Disparities,” Statistics Canada: Perspectives on Labour and Income 75-001 (Winter, 1990): 51-61.

11.4 Fiscal Capacity Data Sources

A number of sources provide data for the 20 municipalities studied. Key income data comes from the 2001 Census, the latest year available for such data (all dollars expressed in 2002 dollars). Municipal property value data comes from the British Columbia Assessment Authority, which updates their database annually. Population counts rely on BC statistics, which is based on Canada census data.

Financial Operations at the Ministry of Community, Aboriginal and Women's Services provided all municipal revenue and expenditure data, including tax revenues by source, taxes collected for other governments, expenditures on police and fire protection, debt load, property tax mill rates and other data. The municipalities themselves furnish this information. As such, this study cannot guarantee cross-case consistency of data, which may vary depending on the time and resources municipalities dedicate to collecting statistics, as well as on the methodology they use in doing so. All financial data is adjusted according to the Statistics Canada consumer price index to 2002 dollars.

11.4.1 Municipal Population 2001

All of our per-capita values used in this paper rely on municipal population data provided by BC Statistics. These statistics are available online at: www.bcstats.gov.bc.ca/data/pop/popstart.htm Based on the 2001 Census data, these estimates are adjusted upward to account for what BC Stats considers undercounting in the Canada Census.

Table 10: 2001 Municipal Populations (BC Stats)

Anmore	1,403	North Vancouver City	46,236
Belcarra	712	North Vancouver District	85,904
Burnaby	202,421	Pitt Meadows	15,311
Coquitlam	117,816	Port Coquitlam	53,497
Delta	101,177	Port Moody	24,854
Langley City	24,673	Richmond	171,520
Langley District	90,685	Surrey	363,013
Lions Bay	1,439	Vancouver	569,475
Maple Ridge	65,924	West Vancouver	43,228
New Westminster	57,045	White Rock	19,047
		GVRD	2,055,380

11.4.2 Calculation of K* and KC*

K^* and KC^* are calculated based on the PPT, general municipal taxes, and taxes paid to regional and other governments. Across the GVRD, the PPT accounts for 40.1 percent, municipal taxes 53.4 percent, and regional taxes 6.5 percent of total property taxes collected. We obtain tax data from the Local Government Department in the Ministry of Community Services. Per capita amounts are based on population estimates described above. Dollar figures are converted into 2002 values.

Table 11: Per Capita Property Taxes 2001 (\$2002)

	<i>Provincial Property Tax</i>	<i>General Taxes</i>	<i>Regional Taxes</i>	<i>Total Taxes</i>
Anmore	709.81	283.87	46.21	1,039.89
Belcarra	718.91	469.73	185.52	1,374.17
Burnaby	477.95	771.61	71.91	1,321.47
Coquitlam	381.78	618.11	46.48	1,046.37
Delta	455.86	713.32	76.80	1,245.98
Langley City	408.83	562.91	57.24	1,028.98
Langley District	421.63	546.18	51.79	1,019.60
Lions Bay	462.70	359.74	60.77	883.21
Maple Ridge	338.64	438.59	71.94	849.17
New Westminster	357.77	629.56	45.80	1,033.13
North Vancouver City	486.91	657.31	76.57	1,220.79
North Vancouver District	439.91	570.52	55.88	1,066.31
Pitt Meadows	327.69	449.32	36.37	813.37
Port Coquitlam	329.02	509.08	42.32	880.42
Port Moody	412.12	617.49	49.00	1,078.62
Richmond	541.54	568.28	92.45	1,202.27
Surrey	341.71	385.88	56.44	784.04
Vancouver	537.29	695.77	100.75	1,333.81
West Vancouver	668.01	887.41	94.42	1,649.84
White Rock	401.20	683.27	43.47	1,127.93
GVRD Weighted Average	454.25	605.58	74.23	1,134.06

11.4.3 Average Income

Statistics Canada provides data on income collected in the 2001 Census. The income data used for this study is average household income, which is the sum of all income collected in each municipality divided by the number of households. The data is adjusted to 2002 dollars using Statistics Canada consumer price indexes.

Table 12: Average Household Income (\$2002)

	<i>Average Income</i>		<i>Average Income</i>
Anmore	96,812	North Vancouver City	55,403
Belcarra	99,250	North Vancouver District	88,642
Burnaby	56,831	Pitt Meadows	64,345
Coquitlam	66,050	Port Coquitlam	66,608
Delta	76,610	Port Moody	75,246
Langley City	52,170	Richmond	62,080
Langley District	72,055	Surrey	64,609
Lions Bay	143,612	Vancouver	59,210
Maple Ridge	62,599	West Vancouver	122,742
New Westminster	52,017	White Rock	63,609
		GVRD Weighted Average	64,853

11.4.4 Assessed Value

The British Columbia Assessment Authority provides the data on assessed property value for all municipalities in British Columbia. This data is the latest available for 2001, and may differ from the original 2001 compilation due to assessment appeals.

Table 13: Assessed Value for General Purposes 2001 (\$000's)

	<i>Residential</i>	<i>Industrial</i>	<i>Commercial</i>	<i>State/Other</i>
Anmore	170,195	0	454	8
Belcarra	130,426	0	3	0
Burnaby	14,269,335	519,188	3,697,179	174,288
Coquitlam	7,968,315	109,434	1,208,605	41,204
Delta	7,279,595	439,900	1,310,250	84,661
Langley City	1,257,405	45,541	440,701	8,738
Langley District	6,473,530	166,438	996,840	131,159
Lions Bay	246,831	0	696	178
Maple Ridge	4,124,646	73,266	392,299	16,218
New Westminster	3,346,630	136,659	534,790	18,353
North Vancouver City	3,538,586	128,290	900,592	9,250
North Vancouver Dist	8,910,351	131,870	667,472	33,784
Pitt Meadows	873,713	10,598	99,887	57,408
Port Coquitlam	3,029,842	97,389	485,826	13,415
Port Moody	1,724,311	99,420	161,015	5,091
Richmond	12,527,911	339,323	4,143,277	135,015
Surrey	22,135,923	492,365	3,080,099	138,294
Vancouver	51,636,586	421,699	13,570,205	289,061
West Vancouver	9,240,899	0	425,428	36,801
White Rock	1,704,969	0	106,934	4,295
GVRD	160,589,999	3,211,378	32,222,551	1,197,220

11.4.5 Home Owner Grant

We obtain Home Owner Grant data directly from the data files maintained by the Property Tax Transfer Section and Home Owner Grants Program Administration, both in the Ministry of Small Business and Revenue. Total refunds to GVRD municipalities amounted to \$224.4 million in 2001, which converted into 2002 currency levels results in our total of \$229.4 million.¹⁰⁴

Table 14: Per Capita Home Owner Grant by GVRD Municipality (\$2002)

Anmore	\$79.65	North Vancouver City	\$114.81
Belcarra	\$116.89	North Vancouver District	\$136.91
Burnaby	\$110.55	Pitt Meadows	\$137.53
Coquitlam	\$121.60	Port Coquitlam	\$119.94
Delta	\$133.40	Port Moody	\$126.23
Langley City	\$124.43	Richmond	\$122.69
Langley District	\$135.63	Surrey	\$113.02
Lions Bay	\$143.64	Vancouver	\$86.95
Maple Ridge	\$135.40	West Vancouver	\$96.45
New Westminster	\$115.31	White Rock	\$182.48
		GVRD	\$111.63

¹⁰⁴Data obtained from Penny Rae Schur, (250) 356-0907. All currency data is converted into 2002 levels to ensure comparability.

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