If the property tax in Alberta becomes more restricted to the financing of property services, educational program budgets can look to federal, provincial, and local sources of incremental and replacement revenues. At the federal level, unconditional grants might be appropriate, similar to the 50-percent of operating costs grants now used for post-secondary education; a federal value-added tax could be enacted for distribution to provinces or municipalities on a population or enrollment basis; and the Federal Government could absorb the costs of social welfare programs now financed at municipal levels. At the provincial level, the most likely alternative to local property taxes for education is the complete absorption of education expenditures along the lines of the New Brunswick experiment. At the local level, incremental tax sources, such as municipal income and sales taxes, could be administered at the provincial level and rebated to municipalities (if and when Alberta joins the other nine provinces in levying a general sales tax.) From a revenue and equity point of view, the province may also want to reconsider the death and estate tax as a source of revenue since the Federal Government has withdrawn from this tax field. (Author)
In considering alternative directions for tax policy in relation to financing all levels of education in Canada during the remaining years of this century, I have assumed that the percentage of personal income in Canada and the provinces needed for this activity will either increase or remain stable. That is, the prospect of any significant reduction in educational fiscal need is virtually nil. This is not to deny the obvious fluctuations in specific enrolment levels which will occur, but even temporary declines in total enrolment at all levels of education will be offset by upward pressures on per student costs.

The significance of this assumption is obvious; we are not looking at potential revenues sources to simply replace existing sources. We must also consider incremental, in addition to replacement, revenue needs.

**The Deteriorating Position of the Property Tax**

Within this context, we can contemplate the future of property taxation. On several scores, the property tax turns out to be in an acutely vulnerable position. In the first instance, if the revenue needs of education are an increasing function of quality and urbanization variables, then the property tax fails because of its regressiveness. I will substantiate the degree of property tax regressiveness in just a moment. For the time being it is sufficient to suggest that a regressive tax fails consistently to solve the problems of an urbanizing society, because as the demand for public services in urban areas increases—
partly as a function of the need to attain and preserve a higher quality of life—a regressive tax fails to provide the base for even a constant level of public services. That is, if the tax base is regressive, it will not respond to the increasing demands on the public sector, even as the total and per capita incomes of urban areas increase. Clearly, a regressive tax is one which fails to keep pace with increasing incomes, either on a personal or aggregate basis.

You are all as aware as I am of the fiscal failure of municipalities in Canada and throughout North America, where the inability of property taxes to keep pace with public service demands has resulted in a growing dependence of localities on senior levels of government for inter-governmental fiscal grants. While this tendency is by no means undesirable, it should be recognized that it results from a provincial and national revenue base which is relatively progressive, juxtaposed to the continued regressiveness of the property tax system. Thus, it can be clearly anticipated that unless alternative local revenue bases are utilized, there will be a growing municipal dependence upon the fiscal generosity of senior governments.

With regard to the degree of regressiveness of property taxes, the problem assumes larger dimensions than fiscal invalidity in the cities. More precisely, in a society which specifies equity as the overriding objective of its tax system, and in which ability-to-pay is universally accepted as the only operational principal of taxation which meets that objective in a general way, property taxation again finishes a distant loser in a rank ordering of revenue sources. That is, property taxation fails to meet equity requirements because it violates the
principal of ability-to-pay. Who says so? Virtually everyone who has studied the incidence of taxation in relation to income groups finds that the lowest income group pays a greater percentage of its income in the form of property taxation than any other single group of income recipients. Consider, for example, the study by Dr. Gillespie for the Royal Commission on Taxation.\(^1\) Using what he called a broad income base, Gillespie estimated that in 1961 the taxpayers in the under-$2,000 income class paid about 16 percent of their incomes in the form of property taxation. This, of course, is based partially on some incidence assumptions with regard to the forward shifting of business property taxes to consumers in the form of higher prices. Taxpayers in the highest income group studied, those with incomes greater than $10,000 in 1961, allocated somewhat less than four percent of their income to property taxation—16 percent for the lows, about four percent for the highs. Moreover, virtually every study done by professional economists comes to the same general conclusion. For example, my studies in the State of Colorado for 1962 found similar incidence results—a little more than 19 percent for the under-$2,000 income group compared to about four percent for the $10,000-$15,000 group, and less than two percent for the $15,000 and above class.\(^2\) Incidentally, one of the interesting findings of one of those studies was

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\(^1\) W. I. Gillespie, "Incidence of Taxes and Public Expenditures in the Canadian Economy," Study No. 2 of the Royal Commission on Taxation, Queen's Printer, Ottawa, 1964.

that the regressiveness of property taxation as a source of school finance carries over to regions as well as individuals. For example, low income rural areas in Colorado paid a higher percentage of total and per capita income in school taxes than did high income suburbs of Denver, despite the fact that the state picked up as much as 85 percent of the educational tab in rural areas through the foundation plan.

More recently and closer to home, Mr. Al Colquhoun, instructor in the business department of the Southern Alberta Institute of Technology and a graduate student at the University of Calgary, found in his master's thesis that in 1966 in the City of Calgary the under-$2,000 income group paid about 18 percent of its income in the form of property taxes. For the $10,000 and above income group the corresponding estimate of property taxes as a percentage of income was just under five percent. 3

Thus, while no one pretends to know with great precision the incidence of property taxes by income group, most informed opinion based on empirical studies finds the property tax to be the most regressive, and thus the most inequitable, tax in Canada and North America. It is likely that only social insurance taxes even approach property taxes in their degree of regressiveness.

In addition to its fiscal impotence as a source of revenue for cities, and to its incompatibility with the equity principle of ability-to-pay, it now turns out that the property tax is under fire from yet another direction—for education, it may turn out to be illegal.

Already property taxation as the basic support for public schools in the United States is under attack as denying equal opportunity principles supposedly guaranteed by constitutional law and exacerbated by troublesome racial questions in that country.\(^4\) Of course, this challenge to the legality of the property tax may never reach into Canada, but at the same time we should not casually dismiss the creativity of the legal profession and legal process.

For all these—and other—reasons, at any rate, the property tax is under serious attack. Its inability to adjust to the nature of the attack leads me to believe that it is too vulnerable to survive in its present form. It shows no propensity, for example, to lend itself to the kind of reform that would stifle the charge of regressiveness. I know of no serious attempt to adjust property taxation assessment practices or mill rates to reflect ability-to-pay considerations by making assessment and mill rates an increasing function of market value. In fact, it is widely believed by professional economists that the assessment practice is actually regressive—that is, that higher priced properties are assessed at lower percentages of market value than less valuable properties.

Thus, for the purposes of this paper, I will operate on the assumption that Canadian cities will require additional tax revenues as they contemplate the public sector demands of the future. The inability of the property tax to adjust to the basic principles of taxation

\(^4\)See, for example, Serrano v. Priest, 5 Cal. 3d 584, 487, p. 2d. 1241 (1971) and Hobson v. Hanson, 327 F. Supp. 844 at 849.
that most Canadians seem to accept probably means that it will play a declining role in the future. More precisely, property taxation will eventually be increasingly restricted to the municipal activities more closely related to property ownership, such as police and fire protection, utility services, etc. In this context, it will proceed along a benefits received rather than ability-to-pay direction, in which case it will be infinitely more comfortable in trying to satisfy equity requirements.

Alternative Strategies for Financing Education

Federal Grants. On the assumption, therefore, that we are looking at the need for property tax replacement revenues as well as possible incremental revenues for educational finance, what are the potentials for assistance from the federal government? Looking first at direct forms of federal taxation, we can at least wonder about the possibility of generalizing the direct grant system now used for post-secondary finance. Under current provisions of law the federal government makes a direct payment to the provinces equal to 50 percent of the operating costs of post-secondary education or $15 per capita, at the option of the province. This amount is enhanced by specific equalization payments to some provinces. The sources of these federal grants are four points of personal income taxes and one point of corporation income taxes rebated to the province. In 1969-70 this meant provincial receipts of about $600 million. Thus, just as an example, five to ten points of personal income tax rebated to the provinces for educational foundation support would mean a minimum flow of about $500 million at five personal income tax points and something over $1 billion for ten personal income tax points. To put this amount in perspective, consider elementary and
secondary expenditures in Canada in 1968 as reported in the most recent review of provincial and municipal finances published by the Canadian Tax Foundation. In 1968 total expenditure for elementary and secondary education amounted to $3.5 billion. About 41 percent of this total, or $1.4 billion derived from local governments; most of the rest, about $1.9 billion came from provincial governments. Thus, five to ten points of personal income tax, amounting to something like $500 million to $1 billion, is of great significance in relation to a 1968 municipal expenditure of $1.4 billion.

The pros and cons of this tax source are easily identifiable. On the plus side, it would represent a replacement tax and incremental tax source which would clearly satisfy ability-to-pay equity requirements since the personal income tax system is progressive by all definitions—i.e., the marginal rates increase as income increases and average and total tax percentages increase as a function of increasing income. On the minus side it would involve difficulties in federal-provincial relationships, since each government would like to see the other assume responsibility for the resulting tax increase. I assume here that the education increment would not be absorbed by decreases in other forms of federal and provincial spending. Thus, the federal government would be reluctant to increase personal income taxes by five to ten points for fear of violating recently revised rate structures; obviously preferring to collect the taxes for and rebate them to provincial governments. But that, of course, is not a federal grant and the provinces will opt for

direct federal involvement. In addition, both levels of government might be fearful of the disincentive effect of incremental personal income taxes, particularly in view of recent reforms. Also, of course, in Canada where the marginal tax rate for taxable income of $10,000 is already 35 percent combined federal and provincial and more than 50 percent for $25,000 taxable income, both levels of government will be leary about political repercussions of a five to ten point increment.

Indirect Federal Taxes as a Source of Federal Grants. If increased personal income taxation as a source of federal support for elementary and secondary education is not politically viable, is there anything on the horizon by way of indirect taxes which looks more promising? Certainly the most discussed form of incremental tax in recent years is the value added tax. The VAT is essentially a form of sales taxation but because of its ubiquitous nature it is only effectively levied at a national level. As the name implies, it is a tax levied at successive stages of commodity production according to the value added by the various processing activities. For example, a petroleum refinery would be taxed on the value of the refined product less cost of purchased oil—a crude illustration, to say the least. At any rate, the tax base is the value added by each stage of production and is assumed to shift forward to the consumer in final product price, thus being a form of general sales tax. The VAT is usually levied only against consumption, as opposed to capital goods. Thus, in Canada in 1972, the calculation of the tax base might start at $57 billion, which was the seasonally adjusted annual rate of personal consumption expenditure during the first quarter of this year. If we assume that tax policy requires items such
as food and drugs to be exempted from the consumption tax base directly
or through income tax credits, let us further assume we have a final
consumption tax base of $50 billion. A five percent value added tax
against a $50 billion tax base yields about $2.5 billion, contrasted to
the $2.7 billion of property taxes collected by municipalities in Canada
in 1969. Thus, the magnitudes are permissive of further exploration of
the desirability of VAT as a complete or partial substitute for local
property taxes—with VAT collected by the federal government and allocated
to local governments on the basis of population, or perhaps some other
demographic variables; or allocated alternatively to provincial government.

I note with some interest that current proposals for a VAT in
the United States have become a lively political issue, with the democrats
assailing a VAT as intolerably wicked and the republicans suggesting that
Mr. Nixon was really just kidding when he proposed it as a potential
source of federal grants to state and local government, and as a partial
substitute for local property taxes. Economics Nobel Prize winner Paul
Samuelson of MIT has found the VAT lacking because it is not as progres-
sive as the personal income tax. Yet, if David may challenge Goliath
in this matter, I suggest that the VAT is not being considered as a
substitute for the personal income tax but as a partial substitute for
the property tax. Thus, at least we should ask, how does it compare to
the property tax in terms of regression or progression? The answer is
that as a form of sales tax the VAT tax on a consumption base is mildly
regressive, but much less regressive than a property tax. Moreover, by
excluding food and drugs or giving tax credit for food and drug purchases
the VAT can be made roughly proportional to income. Thus, in the context of a partial replacement for the regressive property tax, the VAT comes off with fairly high marks. One of its major problems is its indirectness, which means that it is a more disguised form of public revenue than an extended personal income tax would be.

The VAT as a partial substitute for local property taxes could be developed with differing strategies and counterparts. For example, if a VAT were implemented as a substitute for local property taxes for education and federal grants to localities implemented accordingly, it would still be feasible for provinces to apply property taxes on non-residential property for educational foundation support. A VAT could be implemented within the framework of an upper limit on local property tax, say two percent of assessed community wealth, assessed uniformly across Canada, with the VAT rebated to localities to fill the void. Canada could be vulnerable internationally to a VAT tax because of its dependence upon export markets as a source of economic stability and growth. In this context, however, international trade agreements already allow a VAT country to enact countervailing import duties at the rates assessed on comparable domestic products or to exempt export products from the tax entirely. I make no special case for a VAT, except to comment on its potential contribution to the search for property tax alternatives. Clearly, it doesn't suffer from the same maladies which cast suspicion on the continued health of property tax as a source of educational finance.

Two other federal possibilities for relieving property taxation in education warrant brief attention. One possibility that has intrigued economists for several years is a general consumption expenditure tax, which might also be levied at the federal level for subsequent abatement to municipalities or provinces. The general expenditure tax would differ from a sales tax in many ways, most importantly in that it would be collected at the end of an accounting period using as a tax base the total value of expenditures for consumption made by a taxpaying unit. As such, it could apply a progressive rate structure to the expenditure base and is suggested as an alternative to personal income taxation since it would substitute an expenditure base for income in determining ability-to-pay. I must confess, however, that the idea has not had the same zing when proposed to policy makers as when discussed in graduate courses in economics. As the present time, therefore, it does not have the same political sex appeal as the VAT.

Before considering potential revenue sources at the provincial level, let me terminate the discussion of federal grants by reference to another form of local tax relief which could be implemented at the federal level and provide for incremental provincial funds for education in the process. What would be the revenue impact of a federal decision to fund the complete costs of welfare programs in Canada? The first impact would be something like 3/4 of a billion dollars available to provincial and local government for alternative patterns of spending or for tax relief. In 1968, local and provincial expenditures for welfare totalled about

$663 million. If the federal government under the Canada Assistance Plan would fund 100 percent rather than 50 percent of welfare costs, the resultant savings to local and provincial governments would now approach $750 million. In one sense, therefore, this would be the maximum amount by which incremental expenditures by local and provincial governments for education could be made, depending upon complete or partial relaxation of local property taxes as a source of elementary and secondary school funds.

Provincial Alternatives in School Finance

Deserving of equal time in any discussion of provincial alternatives for school finance is the New Brunswick experience with its equal opportunity program. As most of you already know, New Brunswick in 1967 (1) absorbed the total costs of welfare, education, health and the administration of justice from local government; (2) brought about the abolition of counties as units of local government; and (3) implemented a tax reform which eliminated personal property taxes at the local level, shifting concurrently to a province-wide real estate tax.

Very briefly, what are some of the lessons we may have learned from the New Brunswick experiment? In the first instance, New Brunswick found that such a major step could not be accommodated without substantial new provincial revenue sources. The most obvious alternatives for provincial governments which follow New Brunswick's lead are increased income taxes, increased sales taxes and/or increased and revised property taxes based on a uniform assessment and tax system.

The New Brunswick experience also appears to have laid to rest some of the inhibitions that have militated against provincial experiment-
ation with program funding. It has, for example, clearly fixed financial responsibility for elementary and secondary education at the provincial level. In the process it has seemed to make some progress in the difficult direction of equalizing educational opportunity. Yet, at least by some accounts, the New Brunswick plan has left significant room for local administration and discretion.\(^7\)

Provincial funding of all equal opportunity costs of elementary and secondary education, however, leaves one intriguing question. Within a province-wide plan, will local school boards or a particular school be allowed to supplement provincial expenditures for specific enrichment programs? Suppose, for example, in Alberta that no public kindergarten program is forthcoming as it is or is proposed in all other provinces. Can local boards or specific schools contemplate additional revenue sources from local taxpayers, or a subset thereof, for picking up kindergarten costs, with the consent of affected taxpayers? Can such entities use local property taxes, as accepted by local taxpayers, for other kinds of enrichment programs which makes their total offering superior to the programs generated by provincial funding? Is this not just a desirable extension of consumer sovereignty to educational enrichment programs? I would be interested in your responses to these questions.

Returning to the question of incremental and perhaps replacement revenues for provinces, the property tax will probably be required to

\(^7\) See, for example, Advisory Commission on Intergovernmental Fiscal Relations, In Search of Balance—Canada's Intergovernmental Experience, Washington, D.C., 1971.
bear some weight but on a declining basis over time. The obvious alternatives to declining property tax revenues are increased income and sales taxes at the provincial level, both of which will yield more equitable results than property taxes. Again, provincial income taxes are progressive and enjoy extremely low administrative cost burdens since the federal government acts as the collection agency. Provincial sales taxes can be made roughly proportional to income and, while more difficult to administer than income taxes, seldom impose a costly administrative burden.

Perhaps more interesting, however, are the possibilities inherent in federal tax reform which saw the federal government remove itself from gift and estate taxation. Obviously, the door for provincial imposition of gift and estate taxation is wide open and already many provinces have moved in this direction. Alberta, true to its conservative economic tradition, has refused to consider moving with other provinces into the gift and estate tax void. Thus, Alberta remains something of a tax haven for those who would escape not only sales taxation but gift and estate taxation as well. How long this policy will remain politic and realistic is a source of much interesting conjecture.

Revitalizing the Local Revenue Base. Certainly the most frustrated of all potential tax reformers must be those who envision local government as a legitimate area of activity. For decade after decade after decade local government remains intransigent in the vital matter of developing its own alternatives to property taxation. The agonized responses to demands for local tax reform are usually the same—we can't innovate because we are locked in by provincial and federal governments who have
already appropriated alternative tax bases. Yet I have found nothing in the physical laws of the universe, nothing in the theory of human nature and certainly nothing in Canadian statutory and common law which condemns local government to a continuation of its dreary tax history.

It is true, of course, that efficiency criteria will be better met if local government revenue bases are expanded through increased use of revenue sharing with senior government. For example, probably the most efficient and equitable system for increasing the flow of funds to local government would be a rebate of income taxes, either from federal or provincial sources. This, presumably, would require an increase in income tax rates at either the personal or corporate level, or both, unless it were accompanied by a corresponding reduction in direct grants from federal and/or provincial government. In this case, however, there would be no incremental support for local government and in the final analysis we are looking for additional funds—not the same amount of funds for local government simply in rebate rather than grant form.

If provincial and federal governments, however, demonstrate continued reluctance to allocate incremental income tax receipts to local government, then local governments must survey their own revenue potentials. Income taxation, based upon appropriate enabling legislation by provincial and possibly the federal government, would yield efficient and equitable results when applied at the local level. Simultaneously, it would provide for a revenue base responsive to rising per capita and aggregate income levels. From the point of view of administrative efficiency, however, a locally administered income tax suffers in comparison with a federally-rebated income tax in the sense that it requires separate administrative
machinery and this machinery will ordinarily effect the nature of and equitability of the income base use. For example, local government experience in the United States has been that payroll taxation is the most feasible system for extending income taxation to local government. The obvious shortfall of this tax base, of course, is the fact that it doesn't cover property income and therefore loses much of the attraction that income taxation's ability-to-pay principle affords. Attempts are made to cover this shortfall but so far they have been most expensive administrative experiments. Another characteristic of payroll taxation that may make it less attractive than its federal and provincial income tax counterparts is the fact that it is usually levied on a proportional rather than graduated basis.

Sales taxation as a source of revenue for local government has an extensive history. In Canada, according to the Canadian Tax Foundation, there are no general sales taxes at the municipal level but various kinds of sales taxes applied to selected products. For example, motor fuel and fuel oil is subject to municipal taxation in Newfoundland; amusements and admission taxes yield municipal revenues in Newfoundland, Prince Edward Island, and Quebec. Other forms of specific sales taxes are found in cities in Newfoundland and Manitoba. General sales taxes are found in many cities in the United States, including some of the larger ones.

Thus, enabling legislation is not available for general municipal sales taxes in Canadian provinces, there remains the possibility of an expanded set of special sales taxes by local government. Certainly hotel and motel accommodations and restaurant meals will come under increasing scrutiny by municipal authorities if senior governments do
not increase the flow of shared revenues. Difficult questions of tax administration will arise as will problems of how to apply specific taxes without raising the problem of regressivity; temporary lodging and restaurant services could prove attractive for this reason. Provinces with general sales taxes could offer administrative aid to local government, perhaps going as far as collecting and rebating funds to local government.

On the other hand, it probably warrants re-emphasis that optimality with regard to local revenue flows probably lies in an expanded system of provincial and/or federal grants. These revenues would vary from an expanded system of conditional and unconditional grants to a system of revenue sharing, based, for example, on higher income tax collections. Other systems, however, are possible and a federal value added tax illustrates some of the potential.

Efficiency in Government—The Expenditure Side of Educational Finance

In closing, I'm afraid on a negative note, I would be doing a disservice to pass over a recent announcement by the Department of Education relating to the adoption of a new accounting system for schools in Alberta. This accounting system is referred to as PAB, or program accounting and budgeting. It is a variation, and I fear a misconception, of the planning-programing-budgeting system that has within the last ten years been developed in various areas of government as a means of integrating planning, budgeting and management activities in the public sector. Note that I did not refer to the accounting process as one of the basic elements of PPBS—sometimes referred to as PPBES in education circles.
To put my own prejudices on the line, let me first indicate that I think PPBS is the most important development in an operational system of public spending in our lifetimes. PPBS affords significant opportunities for maximizing the payoff of public spending. It is several steps beyond the attempts at performance budgeting which occurred in the 1950's and several miles beyond the forms of benefit-cost analysis that economists have advocated as a means of determining optimal levels and directions of public spending. PPBS is, as noted above, a technique which requires an integration of planning, budgeting and management activities within the constraints of fixed budgets in an effort to maximize the attainment of government objectives.

As such, PPBS is a process that emphasizes three basic elements in the expenditure of public funds: (1) objective determination; (2) program analysis; and (3) program evaluation. It is clearly one of the major payoffs of a PPB system that systematic analysis of program objectives must become a point of departure for subsequent analysis. This element alone sets PPBS apart from prior systems such as performance budgeting, in which input-output relationships were sometimes analyzed without reference to program objectives; thus clearing the way for more efficient attainment of a set of outputs which might have little if anything to do with program objectives.

A second vital element in the rationalization of public spending in the last decade has been the development of formal elements of program analysis as a major facet of PPBS. The process which has won or is winning the day is program analysis as a means of comparing program alternatives in the realization of program objectives. Thus it becomes
more difficult for governmental agencies to perpetuate outmoded programs when the essence of program analysis is to contemplate alternative ways of doing the government's business in relation to specified objectives.

The third vital element of PPBS is program evaluation which extends prior concern for input-output relationships to a systematic analysis of how output categories are related to specified objectives.

Please note, then, that specific concern for new accounting systems pre-supposes that the three basic elements of PPBS are receiving continued attention. Then, in the development of PPBS or program budgeting if you prefer, it will be necessary to develop, for example, multi-year program and financial plans through which the basic elements of a revised budgeting system is implemented. But simply to develop a new accounting system which substitutes program category expenditures for object-of-expenditure categories puts the cart before the horse, simultaneously leaving the horse without any significant push.

What really bothers me about developing a revised accounting system is that this process in no way substitutes for the basic elements of PPBS. When it doesn't perform what a legitimate PPB system should, will this be used to denigrate the efficacy of PPBS? If and when that happens, you may rest assured that much of the resulting storm will emanate from my office at the University of Calgary.

Finally, then, I am reminded of some classic language I used to hear from an attorney friend in Washington, D.C. He suggested, in all seriousness, that his specific remedies for social problems should not be regarded as a "pancreas". In the same context, let me hasten to add that I don't envision PPBS as a pancreas, nor even a panacea, for public
policy. It should be approached in relation to what it has to offer administrators in the public sector—a potentially useful device for bringing together planning, budgeting and management activities of government in a way that promises improved efficiency in these public programs.