TAX REFORM IMPACT ASSESSMENT PROGRAM

EXECUTIVE SUMMARY

1. Introduction

Although Puerto Rico's tax system has undergone significant revisions in 1987 and more recently in 1994 with further tax reductions enacted in 1999, it still fails to meet the standards of a high quality tax system in many important respects. In particular, it does not generate the revenues required for financing the country's public services – the first requirement of any tax system – and it is much too complex for the general tax-paying public to understand or to have any confidence that the system is being administered fairly and efficiently. The system also fails to meet the equity standards of a sound tax system. It scores low in terms of horizontal equity in that special preferences and exemptions result in substantially different tax burdens among individuals with the same ability to pay and also in terms of vertical equity to the extent that the pattern of tax burdens as income rises does not comport with society's notion of fairness.

For these reasons, this is an appropriate time to review the Puerto Rican tax system, particularly those elements impacting most immediately on individuals in their capacities as earners of wages and other income and as consumers of goods and services. Specifically, the primary goals of this review – more formally, the Tax Reform Assessment Project – are to examine critically Puerto Rico's structure of excise taxes and individual income tax in order to simplify the system, improve its equity and neutrality, and generate revenues adequate to the needs of the public sector.

Strictly in terms of revenue adequacy, the current tax system has been constrained by policies that have unduly reduced the tax bases of both income and indirect taxes. In contrast to most countries of the world, there is no broad-based consumption tax in Puerto Rico but rather a series of manufacturer's excise taxes and specific product taxes that collectively raise only about one-fifth of general fund revenues. Furthermore, the individual income tax base has been narrowed by special exemptions and deductions as well as by special tax rates applicable to various categories of income such as capital gains, interest income and pensions. These special provisions not only distort resource allocation but also force tax rates on ordinary wage income to be higher than they otherwise would need to be in order to maintain the same overall revenue stream. Thus, a fairer, more efficient, and more revenue-elastic system could result from broadening the tax bases of both consumption and income taxes and applying a moderate schedule of tax rates to these restructured bases.

The purpose of the Tax Reform Impact Assessment Project is to present to Puerto Rican decision-makers alternatives to the current tax system that are simpler, that facilitate enforcement and compliance and that are more efficient and more equitable. To accomplish this task, BearingPoint has examined in detail the specific policies embodied in the tax law, the economic, revenue and distributional effects of these policies, the legal framework for taxation in Puerto Rico as well as the organizational structure required to administer the law and the application of technology to tax administration. This Project has been directed towards developing a vastly improved tax system that is simpler, fairer and more efficient.

The starting point for the design of such an improved tax system is the "going-in position" of the Government of Puerto Rico. The centerpiece of this position is the introduction of broad consumption-based tax in the form of either a sales and use (SAU) tax or value-added tax (VAT). As discussed further below, the choice of the form of consumption tax most suitable for Puerto Rico required substantial analysis to assure that the new, reformed tax system works as designed. The second element of the "going-in position", reform of the income tax with particular attention to reducing tax rates, is also of critical importance. With broader bases, tax rates can be reduced, thereby contributing to economic efficiency, reducing incentives for tax evasion and encouraging improved compliance. When tax policy is simplified, a more effective regime for tax administration and tax compliance can be put into place.

It should be noted, however, that this program is best viewed not as separate elements but interrelated components in order to achieve the goals of equity, efficiency, competitiveness, simplification, and revenue adequacy. Thus, the components must fit together to accomplish these goals, allowing, of course, for possible trade-offs among them. Introducing new tax policies can be a risky undertaking, and policy-makers need to have reasonable assurances that the new regime will raise the revenues required and will not have unintended effects or impact adversely on taxpayers in unforeseen ways. This purpose -- to examine carefully how all the components of a comprehensive tax reform program interact to affect revenues and tax burdens – required the development of highly accurate, large-scale tax simulation models for quantifying these effects.

Finally, it needs to be emphasized that the even the best tax policy and legal structure are not self-implementing. A well-functioning tax compliance organization, composed of motivated and well-trained staff using modern technology, is required to achieve effective tax administration, uniformity in the application of the law to taxpayers and high rates of taxpayer compliance. The tax administration organization, as the tax law itself, must conform to high standards.

The remainder of this Executive Summary has four sections, following the four areas of work specified in the Terms of Reference for the Tax Reform Impact Assessment Project. These four sections are tax policy and modeling, tax legislation, tax compliance/organization, and implementation. Each section summarizes the major points of the individual reports and deliverables in each substantive area of work.

2. Tax Policy and Modeling

This section discusses the tax reform program developed by BearingPoint in consultation with Hacienda staff and the analytical tools developed to estimate the revenue and distributional effects of the reform program.

Tax Policy

The basic goals of tax policy -- specifically equity, efficiency or neutrality, simplification, and revenue adequacy – have been the guiding principles of our analysis throughout the policy design process. Attention to these principles resulted in a recommended program that, in our view, is both practical and well founded conceptually. The recommended program moves decisively in the direction of taxing all sources of income more uniformly under the income tax and replaces the haphazard structure of separate excises with the combination of a rationalized structure of limited excises and a general consumption tax with very few exceptions and a single tax rate.

On equity grounds, the program takes great care to relieve lower-income families and individuals of any income tax burden while also recommending a direct transfer program to compensate these same families and individuals for the higher expenses they will incur under the new consumption tax. The goals of both simplification and revenue adequacy have also been addressed with proposals to eliminate many sources of complexity and with the entire program designed to raise significantly higher revenues than under current law.

In designing our recommendations, we benefited greatly from extensive consultation with policy experts and staff of Hacienda with considerable experience in the practical realities of the Puerto Rico tax system. These consultations contributed significantly to making the proposed reform program a real-world exercise in policy formulation. As a consequence, we believe that the proposed program is practical as well as conceptually sound and that substantial gains would be realized if this program were to become the tax law of the land in Puerto Rico.

Income Tax Reform

The program for income tax reform involves a broad range of changes from current law relating to the definition of the tax base, the schedule of tax rates and the use of tax credits -- all designed to yield a fairer and more efficient income tax. The main characteristics of the proposed reform are to significantly reduce tax rates, particularly for middle-income taxpayers and to broaden the tax base. Table 1 presents our recommendations for the new schedules of tax rates and the standard deduction for married and single taxpayers. The major features of our proposed program include the following:

- **Tax rates.** The top marginal rate would be reduced to 28 percent (from a top rate of effectively 38 percent in the current system); the rate for middle income would be reduced from 28 percent to 18 percent; and the bottom tax rate would become 8 percent. Although the bottom rate is higher than the 7 percent rate of current law, other changes in the tax reform program, particularly the new personal tax credit (see below) effectively eliminates the tax burden for all individuals and families who would be subject to only the 8 percent tax rate (up to $15,000 of taxable income for families and $12,000 for single persons). The tax rate on corporations would be reduced from 39 percent to 37 percent.
- **Personal Credit.** All filers of individual income tax returns would receive a personal credit of $500 for each taxpayer (a joint return would have two taxpayers, or $1,000 in credits) and for each dependent. The credits would directly reduce tax liability and would replace the personal exemption of $3,000 for a joint return and $1,300 for a single return and the dependent exemption of $1,300. The credits would have the same value for each taxpayer regardless of his or her tax bracket.
- **Standard Deduction.** The proposed standard deduction for taxpayers who do not itemize their deductions would be $3,000 for married taxpayers filing jointly, the same as under current law. The deduction of $1,600 for singles is lower than the current law amount of $2,000. Again, other elements of the tax program, particularly the tax credits and the lower tax rates compensate for the somewhat lower standard deduction for single taxpayers.
- **Deductions and Exemptions.** The majority of the deductions and exemptions would be repealed and replaced with personal and wage credits. The primary remaining deductions would include: mortgage interest (either on a principal or secondary home but limited to loans of up to $500,000), retirement contributions (as a deduction from gross income), medical expenses, casualty losses and charitable contributions.
- **Capital Gains, Interest and Dividends.** While the set of different tax rates for capital gains, interest and dividends would be eliminated, these sources of income still would receive some preferential treatment. The proposed reform program would require that 70 percent of all capital gains, interest and dividends be included as ordinary income. For a taxpayer at the highest tax bracket, the effective marginal rate on such passive income would be 19.6 percent (0.70 x 28%).

Table 1. Tax Brackets, Rates and Standard Deduction under Income Tax Reform Program

A. Married Filing Jointly		
Brackets	Rates	Standard Deduction
$0-$15,000	8%	$3,000
$15,000-$50,000	18%	
Over $50,000	28%	
B. Married Filing Separately		
Brackets	Rates	Standard Deduction
$0-$7,500	8%	$1,500
$7,500-$25,000	18%	
Over $25,000	28%	
C. Single/Head of Household		
Brackets	Rates	Standard Deduction
$0-$12,000	8%	$1,600
$12,000-$35,000	18%	
Over $35,000	28%	

- **Wage Credit**. Wage earners would benefit not only from lower tax rates but from a new wage credit (replacing the credits of current law) equal to 6 percent of income up to a maximum credit of $1,425 for a single return (at $23,750 of wage income) and $2,850 for a joint return (at $47,500 of wage income). This credit would phase out at a rate of 6 percent from $33,750 to $57,500 of AGI for a single return and from $57,500 to $105,000 for a joint return.

- **Pension Credit**. The proposed program would repeal the $8,000 and $11,000 exclusion of pension income, replacing these with a pension credit equivalent to 12 percent of pension income up to a maximum credit of $2,400 for a single return (for pension income up to $20,000) and $4,800 for a joint return (for pension income up to $40,000). Further, the credit would be refundable if the amount of the credit exceeds the taxpayer's tax liability. The credit phases out at a rate of 6 percent from $30,000 to $70,000 of AGI for a single return and from $50,000 to $130,000 for a joint return.

  The pension credit provides a means of dealing with an important transition issue for pensioners. They will be immediately subject to the new consumption tax during their retirement years without having had the opportunity to benefit from lower tax rates, and thus being able to save more during their working years to compensate for the higher costs of consumption. The pension credit should, therefore, be phased out after a significant transition period of perhaps 15-20 years. On average, the new credit together with other aspects of the proposed reform program, would result in lower tax liability for pensioners with less than $75,000 of income.

Table 2 presents the most important policy recommendations with specific reference to the provisions of current income tax law for which changes are proposed. The table is organized according to the following categories – exclusions from gross income, interest income and expense, dividends and capital gains, deductions, pension and retirement saving, business-related provisions, and rates brackets and credits discussed above. The table also displays the changes proposed in the treatment of corporations and partnerships. The major changes (with corresponding reference to Table 2) would be the following:

- **Exclusions from gross income**. The primary change is to include unemployment compensation in gross income (item I-2). The recommendation with regard to the gain on sale of the principle residence is to simplify overly complex provisions of current law (item I-1).

- **Interest income and expense.** The primary changes are to include more interest income in the tax base (70% of such income as shown in items II-1 and 2) and to limit or eliminate the deduction of interest expense for personal or non-business borrowing (items II-3, 4 and 5). In cases where interest deductions are still permitted, such deductions are not allowed to exceed interest income (item II-6).
- **Dividends and capital gains.** The primary change is to include 70 percent of such income in the tax base (items III-1 and 2).
- **Deductions.** The proposed changes eliminate various deductions that benefit a limited group of taxpayers or that are an inefficient way to accomplish the intended purpose (items IV-1, 2, 3, 4, 5, 8, 12, and 13). In other cases, the deduction has been rationalized, such as consolidating casualty loss deductions (item IV-6), combining the deduction for orthopaedic devices with other medical deductions and allowing a combined deduction only for expenses in excess of 7.5 percent of AGI (items IV-7) and treating all charitable deductions uniformly (item IV-9). In two cases, the deduction has been replaced with fairer and more effective credits (items IV-10 and 11 as well as IV-12). Finally, the deduction for when both spouses work has been replaced both by the new wage credit and by the structure of tax rates that deals more effectively with the marriage penalty (item IV-14).
- **Pension and retirement savings.** These proposed changes range from more technical provisions (items V-1 and 2) to treating all current or future retirees more uniformly and encouraging the use of employer-sponsored plans (items V-3 and 6) to limiting overly generous tax treatment of tax-preferred contributions or benefits (items V-4 and 5). In the latter case, the repeal of the pension exclusion is replaced with a new pension credit.
- **Business-related provisions.** The changes here are primarily technical in nature although they have real effects. They are designed to prevent business losses from offsetting other income (VI-1), to eliminate overly generous credits for agricultural activities (which are largely tax-exempt in any case) and for manufacturing (items VI-2) and to include otherwise tax-sheltered income in the tax base (items VI-3 and 4).
- **Rates, brackets and credits.** These changes have been discussed above.
- **Taxable corporations and partnerships.** These changes largely conform the tax treatment of taxable corporations and partnerships to the changes discussed above for individual taxpayers (items I-1, 2, 4 and 5). Other changes relate to the treatment of exports and to the new structure or corporate tax rates (with a single surtax exemption of $25,000 and top rate of 37 percent (items I-3 and 6).

It should be emphasized that the program cannot be evaluated in terms of the goals of tax reform by focusing on each individual recommendation, taken by itself. Rather, any evaluation must consider the combined effect of all provisions taken together. As the most obvious example, part of the revenue for reducing marginal tax rates comes from the substantial broadening of the tax base. Thus, the gains in simplicity and fairness result from the combined effect of a broad tax base and lower tax rates.

Similarly, some proposed changes that would seem to effect primarily low-income families, such as repealing the exclusion for unemployment compensation, do not, in fact, have this effect because other elements of the reform program, especially the new personal credits, effectively shield low-income taxpayers from tax. The net result is that only higher-income families, who also happen to receive unemployment compensation in a particular year, are affected by this change. The complete distributional results of the reform program depend not only on the income tax reforms described above but also on the new consumption tax and the effects of an expenditure program to offset the adverse consequences of the consumption tax on lower-income groups. We consider each of these issues in turn.

Table 2. Principal Provisions of Income Tax Program

INDIVIDUALS		
	CURRENT LAW TAX LIABILITY	
I	**Exclusions from Gross Income**	
	1 1022(b)(31)	Gain on principal residence: replace age w/ holding period; remove one time and roll-over
	2 1022(b)(42)	Repeal exclusion of unemployment compensation
II	**Interest Income and Expenses**	
	1 1022(b)(4) less A&B	Repeal bond exemptions except A&B; include 70% in income, tax at ordinary rates
	2 1022(b)(4)L	Include 70% of financial institutions interest in income, tax at ordinary rates
	3 1023(aa)(2)(B)	Limit mortgage interest to loans of up to $500,000 for primary or secondary residence
	4 1023(bb)(5)	Repeal deduction of interest on auto loans
	5 1023(aa)(2)(Q)	Repeal deduction for interest paid on student loans
	6 1024(a)5,10,11	Deny all other deduction of interest expense up to tax-exempt interest income
III	**Dividends and Capital Gains**	
	1 1014(a), (b), (c)	Include 70% of capital gains in income and tax at ordinary rates
	2 1012, 1022 (b)(7),(23),(27),(36)	Include 70% of dividends in income
IV	**Deductions**	
	1 1023(v),aa(2)H,I	Eliminate deductions for solar equipment and windmills
	2 1023(aa)(2)(A)	Eliminate education expense portion of child care
	3 1023(aa)(2)(D)	Eliminate deduction for motor vehicle license fees
	4 1023(aa)(2)C	Eliminate deduction for taxes paid on residences
	5 1023(aa)(2)(F)	Eliminate deduction for rent paid
	6 1023(aa)(2)E,G	Consolidate casualty losses deductions: residences & personal property
	7 1023(aa)J,P	Combine orthoped. w/ med. deductions, add prescript., full ded'n over 7 1/2% AGI
	8 1023(aa)(2)K/BB,8	Repeal education deduction; pre-university and education savings
	9 1023(aa)(2)N,O	Repeal unlimited charitable deductions and selected other
	10 1023(bb)3,1040B,G	Replace current wage credits with phased credit, no employee business expense
	11 1023(bb)(4)	Repeal deduction for veterans; replace with $100 credit
	12 1023(aa)2,(b)7	Repeal deductions for young people who work
	13 1023(bb)(9)	Repeal deduction for computer acquisition
	14 1023(bb)(6)	Repeal deduction for when both spouses work
V	**Pension and Retirement Savings**	
	1 1022(b)(2)	Change annuity rule: tax annuity payment received less basis recovery
	2 1165(b)(1)	Eliminate capital gains on lump-sum distributions; permit rollover
	3 1169	Require that IRA not be used by workers covered under qualified plan
	4 1023(BB)(2)	Limit IRA contributions to $3,000 or earned income
	5 1022(b)(4)	Repeal exclusion of $11,000 or $8,000 of pension income; replace with new credit
	6 1169(d)	Remove special rates on IRA distributions
VI.	**Business-Related Provisions**	
	1 1023(A)(3)&(5)	No offset to other income from losses from Special Partnerships
	2 1040C,D,E,F	Eliminate agricultural and manufacturing credits
	3 1117C,1118G	Recapture depreciation as ordinary income up to original basis
	4 1022(b)(26),1022B8F,D	Tax rental income in full
VII.	**Rates, Brackets, Credits**	
	1 1011	New rate/bracket schedule
	2 1025	Replace exemption with personal credit of $500
	3 1040B,G	New wage credit
	4 1023(aa)	Change standard deduction
	5 1032(b)(4)	Pension credit
TAXABLE CORPORATIONS AND PARTNERSHIPS		
I.	**Business Income**	
	1 1040C,D,E,F	Eliminate agricultural and manufacturing credits
	2 1117C,1118G	Recapture depreciation as ordinary income up to original basis
	3 1022(b),(27)	Eliminate exclusion from gross income from exports
	4 1014(a), (b), (c)	Include 70% of capital gains in income and tax at ordinary rates
	5 1022(b)(26),1022B8F,D	Tax rental income in full
	6 1016	Impose a single surtax of 17% beyond the $25,000 surtax exemption (top corporate rate of 36%)

Consumption Tax

We recommend the replacement of the *Arbitrio General* with a VAT-like, invoice-credit General Consumption Tax (GCT) for Puerto Rico. The specific features of the proposed GCT are the following:

- **Comprehensive Tax Base.** The GCT would apply to purchases of goods and services, including imports, except for the few exemptions detailed below.

- **Exemptions.** The GCT would not apply to the following goods and services: medical services, education services, non-fee based financial services, public transportation, water and power utilities and basic telephone services, construction, and real estate transactions involving long-term residential rentals and sales of commercial and residential property.
- **Single Tax Rate.** The proposed rate for the GCT is 8 percent for all taxable goods and services.
- **Exemptions for smaller enterprises.** In order to simplify the administration of the new GCT and to minimize the recordkeeping requirements on smaller businesses, only businesses with annual sales of over $500,000 will be required to register for the new GCT and charge the tax on their sales.
- **Invoice-Credit Mechanism.** Registered businesses would collect the GCT on their sales of goods and services, claim a credit against the GCT paid on their inputs, and remit to Hacienda the excess of the amount collected on sales over the amount paid on purchase of inputs.
- **Treatment of Exports.** Exporters would be entitled to receive a credit on the tax paid on their inputs.
- **Special Rules for Exporters.** In order to simplify administration, businesses that export the majority of their output, will not have to pay GCT on the imported inputs (the tax on imported inputs would be suspended) in order to avoid the administrative burden of collecting tax on inputs only to refund the tax upon export. This measure would be particularly important for businesses in certain industries, like the pharmaceutical industry, that import large amounts of intermediate inputs for production in Puerto Rico of goods for export.

In addition to the elimination of the *Arbitrio General,* we also propose the following reforms to the other types of *arbitrios*:

- Retain *arbitrios* on alcohol, tobacco, fuel and vehicles; all become subject to the GCT at the *arbitrio*-inclusive price;
- Restructure and reduce the *arbitrio* on vehicles so that the combined tax of the *arbitrio* and the GCT would on average be the same as under current law;
- Eliminate other *arbitrios* except for the tax on wagering which would remain as a substitute for the income tax.

Expenditure Program

As explained below in our discussion of the distributional effects of the reform program, the consumption tax burden (the share of tax paid as a proportion of income) tends to be inversely related to income (that is, the burden is higher for lower income groups) because higher income groups consume a lower proportion of their total income. In other words, since savings are not taxed under the GCT and high-income groups save a higher percentage of their income, the burden of the GCT is higher for lower income groups. In order to offset this distributional effect, we recommend that the Government use some of the proceeds of the new GCT as a direct transfer to low-income groups through the PAN Program. The distributional analysis presented in the remainder of this section assumes that such an expenditure program would be provided to individuals with income below $20,000 and to families with income up to $40,000 to offset the distributional effects of the GCT.

Revenue Analysis

Table 3 presents the change in tax liability for the recommended tax reform program compared to current law for calendar year 2004. As shown in the table, the effect of the Basic Program would be to increase overall tax liability (net of transfers for low-income families) by $550 million.

- **Individual Income Tax.** The significant reductions in tax rates combined with the personal, wage and pension credits more than offset the base broadening from the repeal of additional and itemized deductions. The net effect is a reduction in tax liability of $593 million.
- **Business Income Tax.** The key provisions in the proposed changes to business taxation are a modest broadening of the tax base offset by a reduction in the top tax rate for corporations and partnerships from 39 percent to 37 percent for a reduction in tax liability of $3 million.

Table 3. Basic Tax Reform Program

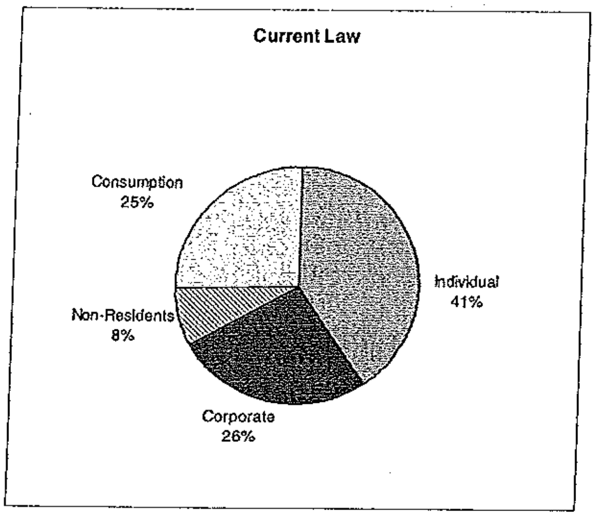
	CY 2004		
	Current Law	Change from Current Law	Proposed Law
	$ Millions		
Personal Income Tax	2,370	(593)	1,777
All Corporations	1,980	(3)	1,977
Excise Taxes [1/]			
Petroleum	*409*		*409*
Tobacco	*126*		*126*
Beer	*201*		*201*
Other Alcohol	*72*		*72*
Motor vehicles	*453*	*(181)*	*272*
Services	*227*	*(51)*	*177*
All other	*556*	*(556)*	-
Total Excise	2,044	(788)	1,256
Consumption Tax		2,559	2,559
Excises and Consumption Combined	2,044	1,771	3,815
Withholding on Non-residents	697		697
Offset for Expenditure Program		(625)	(625)
Total	7,091	550	7,641

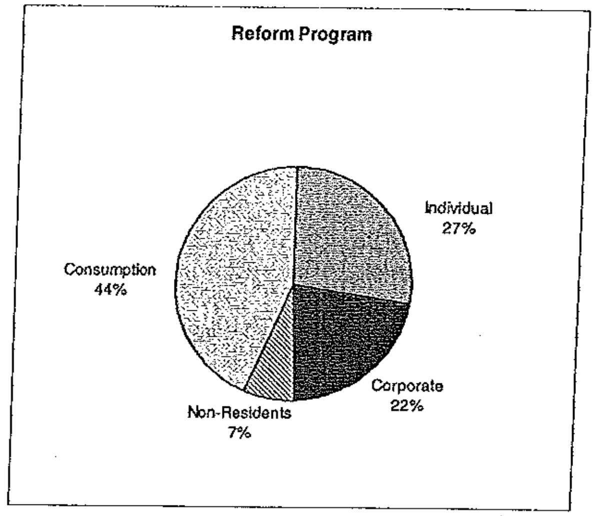
[1/] Includes On-Budget and Off-budget Funds.

- **Consumption Tax.** As described above the reform in consumption taxes is composed of two main changes: (1) several changes in the arbitrio structure including elimination of the Arbitrio General, the retention of the major specific arbitrios, and the reduction in the vehicle arbitrio (so that the combined taxes from this arbitrio and the tax remain at the same levels as the current vehicle arbitrio); and (2) the introduction of a broad-based consumption tax. The reform of the arbitrios would reduce tax liability by $788 million and the introduction of the consumption tax would increase liability by $2,559 (for a net increase in consumption taxes of $1,771).
- **Offset for Expenditure Program.** The outlay necessary to offset the effect of the GCT on the lowest income groups (below $20,000 for individuals and $40,000 for families) is $625 million.

Figure 4 shows the change in the revenue structure resulting from this tax reform program. As this figure indicates, Puerto Rico's revenue system would become much more diversified with the share of combined individual and corporate income taxes falling from about two-thirds of total revenue to slightly less than half (49 percent) and consumption taxes increasing from about one quarter to 44 percent of total revenue.

Figure 4. Tax Structure





Distributional Analysis

Table 5 presents the distribution of income tax liability for Puerto Rican families under the income tax reform program. It should be emphasized here that the measure of income used to classify families (as well as for measuring tax burdens in subsequent tables) is Modified Adjusted Gross Income (MAGI). MAGI is a much more comprehensive measure of income than AGI and includes sources of income that are only partially included or completely excluded from AGI. Among the more important items not included in AGI are transfer payments such as Social Security, Unemployment Compensation and Public Assistance Payments. Also, interest and dividends under current law are partially included in AGI and partially excluded. Moreover, since AGI is an income concept based strictly on the tax law and calculated only on tax returns, individuals who do not file tax returns because their income is below the tax-filing threshold do not, strictly speaking, have AGI.

For this project, we wish to examine the income and the taxes paid by the entire population of Puerto Rico, encompassing non-filers as well as filers of income tax returns. Accordingly, MAGI includes all income of non-filers in addition to the income of tax filers; and further, for those filing tax returns, items such as capital gains as well as interest and dividends that are not included in full in AGI are so included in MAGI.

As shown in Table 5, the proposed income tax reform would increase the progressivity of the tax system in Puerto Rico. Families with gross income in excess of $150,000 would pay 41.4 percent of the total individual income tax under the reformed system compared to 31.2 percent under current law. On the other hand, families with income below $30,000 would pay only 2.7 percent of the income tax, compared to 13.0 percent under current law. Consistent with this result, the percentage change in tax is also much greater at the lower end of the income scale.

Table 5. Distribution of Tax Liability for Families Under the Income Tax Reform

			Current Law		Income Tax Reform				
			Tax	Distribution of tax	Tax	Distribution of tax	Change in tax	% Change	Average tax change
Modified AGI	Families	Population	(Million $)	(%)	(Million $)	(%)	(Million $)	(%)	($)
0 < 10,000	358,420	644,877	0.99	0.0%	0.02	0.0%	-0.97	-98.0%	-3
10,000 < 20,000	585,123	1,345,529	66.43	2.8%	2.40	0.1%	-64.03	-96.4%	-109
20,000 < 30,000	359,610	878,486	241.52	10.2%	45.82	2.6%	-195.70	-81.0%	-544
30,000 < 50,000	221,774	581,747	371.60	15.7%	187.57	10.6%	-184.03	-49.5%	-830
50,000 < 75,000	88,450	246,063	381.54	16.1%	289.94	16.3%	-91.60	-24.0%	-1,036
75,000 < 100,000	32,020	91,749	268.99	11.4%	237.25	13.4%	-31.74	-11.8%	-991
100,000 < 150,000	19,069	73,248	299.61	12.6%	278.75	15.7%	-20.86	-7.0%	-1,094
150,000+	11,080	16,760	739.10	31.2%	735.19	41.4%	-3.91	-0.5%	-353
TOTALS[1]:	1,681,360	3,890,372	2,369.79	100.0%	1,776.93	100.0%	-592.86	-25.0%	-353

[1] Totals also include less than zero class.

The impact of the recommended income tax reform on Puerto Rico families can also be shown in terms of the tax-free levels of income or the level of income earned before tax is due. Table 6 shows the tax-free levels of income for wage earners under current income tax law and the proposed reforms. Wage earners under both current and proposed law would benefit from the credits allowed in each case in addition to the standard deduction and either personal exemptions or credits depending on the law. As Table 6 shows, the level of income that wage earners can receive before tax is due would increase dramatically under the proposed reforms compared to current law. A single person would be able to earn $16,575 tax-free and a married couple with four children would be able to earn $42,010 without paying income tax. The difference from current law ranges from $6,575 for single individuals to over $27,000 for a married couple with four children. The income tax program is designed to ensure that lower-income families, depending on family size, are not obliged to pay income tax. The proposed program would result in about 580,000 families or individuals not paying any tax, an increase of about 400,000 over current law.

Table 6. Tax-Free Levels for Wage Earners

	Single	Married Filing Jointly Number of Children			
		0	1	2	4
Current Law	10,000	10,000	11,015	12,315	14,915
Proposed Law	16,575	25,340	29,510	33,675	42,010
Change in Tax-Free Income	6,575	15,340	18,495	21,360	27,695

We now consider the combined impact on Puerto Rico taxpayers of the entire tax reform program – the income tax changes, the new consumption tax and the $625 million expenditure program to reduce or eliminate the tax burden on lower-income families. Table 7 displays the distribution of tax liability for the entire tax reform program for 2004 in the same format as that used for the income tax in Table 5. Note that while the overall program results in an increase of $550 million, the total change in tax under the reform program (including its expenditure component) for families living in Puerto Rico is $44 million, as shown in Table 7. The difference is attributable to the fact that not all the net increase in indirect taxation (revenue from the new consumption tax minus the reduction in the arbitrios; presented in

Table 3) falls directly on Puerto Rico families. In fact, $509 million of the increase in indirect taxes (out of the total increase of $1,770 million) falls on three other groups: (1) tourists or other visitors to the Commonwealth who purchase goods and services in Puerto Rico; (2) owners of corporations due to the fact that a portion of the tax falls on corporate capital and is assumed not to be passed forward to consumers; and (3) the government of Puerto Rico on its purchases of goods and services.

The primary message illustrated in Table 7 is that despite the very large increase in indirect taxation, which tends to be borne disproportionately by lower-income families, the program as a whole, once account is taken of the structure of the income tax reduction and the new expenditure program, is slightly progressive. The share of net taxes paid by the highest income families (those with incomes of $75,000 or more or the top 3.7 percent of families) would increase from 39.4 percent under current law to 40.7 percent under the proposed reform. In contrast, the share of taxes paid by those with incomes of below $30,000 would decline from 30.0 percent to 28.5 percent. Those with incomes between $30,000 and $75,000 would experience a small change in their share of taxes paid.

The table also shows the distribution of the net tax increase. Those at the bottom (through family income of $30,000) actually receive a net benefit as a result of the expenditure component; progressively larger tax increases in percentage terms (from 0.8 percent to 6.1 percent) are incurred through the income class of $75,000 to $100,000; and tax increases of 5.3 percent and 3.4 percent are incurred by the top two income classes. In absolute dollar terms, families in the top two income classes would experience the highest average tax increase per family -- over $935 for families with incomes of $100,000 to $150,000 and over $2,300 for those with family income over $150,000.

Table 7. Distribution of Tax Liability for Complete Tax Reform Program

Tax Year 2004									
Individuals			Current Law		Complete Tax Reform Proposal				
Modified AGI	Families	Population	Tax	Distribution	Tax + Expendutire Program	Distribution	Change	% Change	Average Change
($)	Number	Number	(Million $)	(%)	(Million $)	(%)	(Million $)	(%)	($)
0 < 10,000	358,420	644,877	92.51	2.6%	86.04	2.3%	-6.47	-7.0%	-18.06
10,000 < 20,000	585,123	1,345,529	448.41	12.4%	425.97	11.6%	-22.44	-5.0%	-38.35
20,000 < 30,000	359,610	878,486	546.28	15.1%	534.86	14.6%	-11.42	-2.1%	-31.75
30,000 < 50,000	221,774	581,747	605.16	16.7%	610.21	16.6%	5.05	0.8%	22.76
50,000 < 75,000	88,450	246,063	506.01	13.9%	521.39	14.2%	15.38	3.0%	173.93
75,000 < 100,000	32,020	91,749	326.22	9.0%	346.08	9.4%	19.86	6.1%	620.18
100,000 < 150,000	19,069	73,248	340.11	9.4%	357.99	9.8%	17.88	5.3%	937.65
150,000+	11,080	16,760	762.66	21.0%	788.39	21.5%	25.73	3.4%	2,322.20
TOTALS[1]	1,681,360	3,878,459	3,627.37	100.0%	3,670.93	100.0%	43.56	1.2%	25.91

[1] Totals also include less than zero class.

Table 8 shows the tax burden of each component of the program on all families and single individuals in Puerto Rico. The tax burdens presented are measured as tax liabilities as a percentage of income (Modified Adjusted Gross Income) and are shown for the income tax, the consumption tax, both taxes combined, and combined tax burdens after the expenditure program. In each case, the proposed program is compared to current law. The three columns under the heading of "Individual Income Tax" in Table 8 show that tax burdens are reduced in all income classes from the income tax component of the program. In the aggregate, tax burdens are reduced by 25 percent with substantially larger percentage reductions at the bottom than at the top of the income distribution. Thus, as noted earlier, the income tax reform is progressive in its impacts.

Table 8. Tax Burdens – All Families

			Individual Income Tax			Consumption Tax			Combined Tax Burdens			Combined Tax Burdens (including Expenditure Program)		
Modified AGI	Families	Population	Current Law (%)	Proposed Program (%)	Change (%)	Current Law (%)	Proposed Program (%)	Change (%)	Current Law (%)	Proposed Program (%)	Change (%)	Current Law (%)	Proposed Program (%)	Change (%)
0 < 10,000	358,420	644,877	0.1%	0.0%	-98.0%	4.8%	10.2%	114.4%	4.8%	10.2%	112.2%	4.8%	4.5%	-7.0%
10,000 < 20,000	585,123	1,345,529	0.8%	0.0%	-96.4%	4.4%	9.2%	110.6%	5.1%	9.2%	80.0%	5.1%	4.9%	-5.0%
20,000 < 30,000	359,610	878,486	2.7%	0.5%	-81.0%	3.5%	6.8%	96.6%	6.2%	7.3%	18.0%	6.2%	6.1%	-2.1%
30,000 < 50,000	221,774	581,747	4.4%	2.2%	-49.5%	2.8%	5.3%	91.0%	7.2%	7.5%	4.7%	7.2%	7.2%	0.8%
50,000 < 75,000	88,450	246,063	7.2%	5.5%	-24.0%	2.3%	4.4%	86.0%	9.5%	9.8%	3.0%	9.5%	9.8%	3.0%
75,000 < 100,000	32,020	91,749	9.8%	8.6%	-11.8%	2.1%	4.0%	90.2%	11.9%	12.6%	6.1%	11.9%	12.6%	6.1%
100,000 < 150,000	19,069	73,248	13.2%	12.3%	-7.0%	1.8%	3.5%	95.7%	15.0%	15.8%	5.3%	15.0%	15.8%	5.3%
150,000+	11,080	16,760	19.4%	19.3%	-0.5%	0.6%	1.4%	125.8%	20.0%	20.7%	3.4%	20.0%	20.7%	3.4%
TOTALS[1]	1,681,360	3,890,372	5.6%	4.2%	-25.0%	3.0%	6.0%	100.3%	8.6%	10.2%	18.4%	8.6%	8.7%	1.2%

[1] Totals also include less than zero class.

The consumption tax reform, shown in the next three columns in Table 8 has the opposite effect. Overall, the replacement of the current *arbitrio* system with a revised structure of *arbitrios* and a new general consumption tax doubles the burden of consumption taxation on Puerto Rico families from 3 percent of income to 6 percent of income. This underlying pattern reflects the fact that consumption does not increase proportionately with income (that is, the ration of taxable consumption to income declines as income rises). Accordingly, the burden at the top of the income scale (for families earning $150,000 or more) is about 8 times higher than at the bottom (somewhat less under the proposed program). The increase in tax burdens, essentially a doubling, is more or less proportional across income classes, but the burden slightly more than doubles at the bottom and the top and less than doubles in the middle of the income distribution.

Combined income and consumption tax burdens reflect the two separate influences of the reform program. Aggregate tax burdens would increase by somewhat less than 20 percent as the higher consumption taxes outweigh the reduction in income taxes. The overall reform program would be quite regressive if no separate measures were introduced to deal with the burdens on low-income taxpayers, particularly families earning less than $30,000 per year. The new transfer program is specifically designed for this purpose. As noted above, $625 million of the revenue raised under the program has been specifically allocated to low-income relief.

The last three columns of Table 8 show the results of the entire program, including the transfer component. For the three lowest income groups (income of $10,000 and below, from $10,000 to $20,000, and from $20,000 to $30,000), the expenditure program not only eliminates the burden of the consumption and remaining income tax but actually provides a benefit in excess of the tax burden so that the net burden becomes negative. For the next income class ($30,000 to $50,000), the tax burden is reduced substantially. The result of the entire program is a tax program that increases tax burdens by a modest 1.2 percent overall and does so in essentially a progressive fashion except at the top where the burden increase, although almost three times higher than the average, is less than for preceding income classes. On balance, given the comprehensive nature of the program -- with aggregate revenue to increase by $550 million and both the income tax and the *arbitrio* system to be thoroughly restructured -- the net results have moderate net distributional impacts except for the lowest income classes who are made substantially better off.

Table 9 shows the same calculation of tax burdens but for families whose income consists primarily of wages (where wage income is 90 percent or more of MAGI). Such families constitute 36 percent of the total number of families in Puerto Rico. The combined tax burdens for wage earners shown in the last three columns of the table show a similar pattern to the results in Table 8. The major difference is that wage earners overall enjoy a net tax decrease, consistent with a primary objective of the reform program, and that lower-income wage-earning families generally enjoy larger negative combined burdens than all families. Only two income classes show an increase in tax burdens -- $50,000 to $75,000 and $75,000 to $100,000 -- with a very small increase in the first of these classes. The top income class shows a net tax decrease reflecting the influence of the lower tax rates at the top but only a small number of families are so benefited (about 0.6 percent of the population).

Table 9. Tax Burdens – Wage Earners

		Individual Income Tax			Consumption Tax			Combined Tax Burdens			Combined Tax Burdens (including Expenditure Program)		
Modified AGI	Families	Current Law (%)	Proposed Program (%)	Change (%)	Current Law (%)	Proposed Program (%)	Change (%)	Current Law (%)	Proposed Program (%)	Change (%)	Current Law (%)	Proposed Program (%)	Change (%)
0 < 10,000	61,987	0.0%	0.0%	0.0%	4.8%	10.2%	114.4%	4.8%	10.2%	114.4%	4.8%	4.5%	-6.0%
10,000 < 20,000	168,910	1.7%	0.0%	-99.1%	4.4%	9.2%	110.6%	6.1%	9.2%	51.8%	6.1%	4.9%	-20.0%
20,000 < 30,000	190,834	3.9%	0.7%	-81.3%	3.5%	6.8%	96.6%	7.3%	7.5%	2.8%	7.3%	6.3%	-14.3%
30,000 < 50,000	115,024	5.8%	3.2%	-45.4%	2.8%	5.3%	91.0%	8.6%	8.5%	-1.3%	8.6%	8.2%	-4.5%
50,000 < 75,000	44,290	9.1%	7.1%	-21.7%	2.3%	4.4%	86.0%	11.5%	11.5%	0.3%	11.5%	11.5%	0.3%
75,000 < 100,000	13,984	12.8%	11.3%	-11.5%	2.1%	4.0%	90.2%	14.9%	15.3%	2.7%	14.9%	15.3%	2.7%
100,000+	10,427	19.4%	16.9%	-13.0%	1.3%	2.7%	101.3%	20.8%	19.6%	-5.6%	20.8%	19.6%	-5.6%
TOTALS[1]:	605,456	6.7%	4.3%	-35.4%	3.0%	5.9%	97.7%	9.7%	10.3%	5.7%	9.7%	9.1%	-6.6%

[1] Totals also include less than zero class.

Table 10 displays the tax burden results for pensioners, again defining such families as those for whom pension income amounts to 90 percent or more of MAGI. This group of families is less than 2 percent of all families and the top income class, as a result, is restricted to those earning $50,000 or more of pension income. Except for this top group (for which lower tax rates do not offset the loss of tax-exempt treatment of pensions under current law), all other pensioners, over 90 percent of the pensioners displayed in Table 10, fare quite well under the reform program with reductions in their net tax burdens as a result of both the expenditure program and the new pension credit.

Table 10. Tax Burdens – Pensioners

		Individual Income Tax			Consumption Tax			Combined Tax Burdens			Combined Tax Burdens (including Expenditure Program)		
Modified AGI	Families	Current Law (%)	Proposed Program (%)	Change (%)	Current Law (%)	Proposed Program (%)	Change (%)	Current Law (%)	Proposed Program (%)	Change (%)	Current Law (%)	Proposed Program (%)	Change (%)
0 < 10,000	4,824	0.0%	-0.3%	-100.0%	4.8%	10.2%	114.4%	4.8%	10.0%	109.1%	4.8%	4.2%	-11.3%
10,000 < 20,000	8,700	0.0%	-0.6%	-100.0%	4.4%	9.2%	110.6%	4.4%	8.6%	96.3%	4.4%	4.2%	-3.4%
20,000 < 30,000	9,348	0.1%	-2.4%	-3806.7%	3.5%	6.8%	96.6%	3.5%	4.4%	24.9%	3.5%	3.2%	-10.5%
30,000 < 50,000	7,342	0.5%	-2.2%	-553.4%	2.8%	5.3%	91.0%	3.2%	3.1%	-3.5%	3.2%	2.9%	-12.0%
50,000+	2,728	2.2%	1.0%	-54.4%	2.2%	4.1%	90.2%	4.4%	5.1%	17.2%	4.4%	5.1%	17.2%
TOTALS[1]:	32,943	0.7%	-1.2%	-287.3%	3.1%	6.2%	97.9%	3.8%	5.0%	30.9%	3.8%	3.7%	-2.7%

[1] Totals also include less than zero class.

Modeling

In developing tax policy alternatives and addressing the inevitable trade-offs among them, we evaluated alternatives against the set of well-established norms that years of experience have demonstrated as appropriate to a tax system operating in a modern market economy. We also evaluated policies based on a series of quantitative models that show the potential impact of policies on individuals and the economy. These models allow policymakers to make better-informed decisions based on data that are grounded in the Puerto Rico economy and reflect the behavior of individuals and institutions in Puerto Rico.

The *Tax Incidence and Economic Development Modeling System* created by the Project Team consists of three models: the Individual Tax Model, the Business Tax Model and the Consumption Tax Model. These models use tax returns and other records of transactions for individuals and firms as the primary units for analysis, thereby allowing for the greatest level of detail and precision when measuring the redistributive and incentive impacts of tax policies on businesses and individuals. The models also allow for the actual representation of tax laws on the taxable unit and offer the best way for identifying and accounting for the (potential) interaction of tax provisions on a return-by-return basis. The completed models have been provided to Hacienda to enhance the ability of its staff to analyze in detail the impact of alternative tax policies on individuals, on business and industry and on specific activities within the economy. Each model's functionality, structure and database are described below. Common to the three models are large micro-level databases provided by Hacienda and the Planning Board, and software designed to give maximum flexibility to the user to peruse the databases, analyze alternative tax policies and produce detailed diagnostic and distributional tables.

Individual Tax Model. The Individual Tax Model (ITM) is a micro-simulation model designed to analyze the impacts of various tax policy options on individuals and families. The ITM is used to measure the combined incidence of income and consumption-based taxes of the Puerto Rican tax system on individuals and families, both in the aggregate and by various income classes. This is implemented through four modules: (a) a simulation module used to create or change tax law parameters and to compute tax liability and burden results, (b) a forecast module used to extrapolate and target ITM variables, (c) an output module used to produce output tables with results and diagnostic tools, and (d) the user interface through which policy simulations are generated and the income, consumption and other taxes are distributed to returns on the file.

Simulations with the ITM can cover the full range of changes in tax laws, including changing the dollar values associated with the personal exemption, standard deduction or special deductions, eliminating special deductions, modifying existing tax credits, changing tax rates and/or the number of tax brackets and adjusting reported income or deduction items by exogenously determined amounts (either by dollar amounts or percents). Although primarily designed for policy analysis, the ITM can also be used to provide information useful for operations and administration practices.

Structure: The ITM's basic building blocks are micro-data records representative of each individual taxpayer resident in Puerto Rico. Each micro-record has an extensive listing of income by type, consumption by major category, key assets, the components of taxable income, taxes paid by type of tax and an indicator of family/tax filing status. These records were created by merging data sets from Hacienda's income tax files, the Census Bureau's demographic file and the Department of Labor's Income and Expenditure Survey, all for fiscal year 2001 and statistically controlled and extrapolated to generate a single model representing the baseline year 2004. The tax declaration data allows the ITM to best model the current and alternative individual income tax systems and the Census and Labor demographic, income and expenditure data provide the characteristics necessary for tax burden analysis. Aggregated and extrapolated, the various fields represent estimates of the total for each item for the year

2004. The model also includes independently derived targets for key variables for projection years where the model's database is statistically adjusted to achieve these out-year targets.

The ITM database consists of information extracted from three datasets - Income Tax Returns for 2001, the 2000 Census and the 2001 Income and Expenditure Survey - and combined to create a file covering all persons resident in Puerto Rico. The tax declaration returns, representing all tax returns files, processed and available in electronic format for 2001, were extracted from various files provided by Hacienda (after being cleansed of all taxpayer identification information), matched by each return's serial number to create a single return per taxpayer and formatted in a common record layout so that records for both long-form filers and short-form filers have the same fields. The final tax return declaration database contains 924,094 taxpayer records and most of the data reported on the short and long form and supporting schedules for 2001 (939,670 records for 2004).

Business Tax Model. The Business Tax Model (BTM) is a micro-simulation model used to estimate the impact of changes in corporate tax law on taxable income, tax liability and tax payments. This model is implemented through four modules: (a) a simulation module used to create or change tax law parameters and to compute tax liability, (b) a forecast module used to extrapolate and target BTM variables, (c) an output module used to produce output tables with results and diagnostic tools, and (d) the user interface through which policy simulations are generated.

Due to the different treatment of regular corporations and incentive corporations and the very different tax returns that are filed by each, the BTM is composed of two sub-models, one for each type of corporation. Returns for the approximately 75 Domestic and Foreign Life Insurance Companies were not available and were not included in the model. The database and tax law computations cover 2001. The extrapolation module includes targets for 2003 tax receipts and after-tax income. This targeting is accomplished by increasing the dollar values on the returns.

Structure. The BTM's basic building blocks are micro-files consisting of tax return information drawn from filed returns (excluding any taxpayer identification fields). Each record on the file has an extensive listing of assets, liabilities, income and deductions by type, statutory adjustments allowed in deriving taxable income, tax liability and taxes paid by type of payment. The file format is the same as that found on the filed tax return. The model is composed of two parts, (i) the database and (ii) the software used to manipulate each record in the databases to produce user-defined tabulations.

The database for the two types of corporations was drawn from Hacienda's computerized tax return files. For regular corporations, the database includes all domestic or foreign corporations or partnerships engaged in trade or business in Puerto Rico other than entities covered by the Incentives Acts or the Tourism Acts, entities with partially exempt income under the Agricultural Tax Incentives Act or other special acts, certain nonprofit organizations, foreign or domestic life insurance companies, Corporations of individuals (taxed to shareholders), special partnerships; or employee owned special corporations. The incentive corporation database contains data from the 2001 incentive tax returns of corporations and partnerships filing in Puerto Rico deriving fully or partially exempt income under the various industrial, hospital, tax, tourism and agricultural Incentive Acts in effect during 2001 or eligible under the Special Acts for Rehabilitation and Development of selected regions

The final regular corporation database contains 22,147 taxpayer records and includes all data from Forms 480.20 and 480.10 and most of the information on the supporting schedules. Similarly, the final incentive corporation database contains 1,178 taxpayer records and includes data from Form 480.30 and most of the information on the supporting schedules.

Consumption Tax Model. The Consumption Tax Model (CTM) provides a detailed framework for analyzing revenue and distributional impacts of current and proposed indirect tax policies. The model is used to create or change consumption tax law parameters and to compute resulting tax liability and price effects. Two model outputs, effective tax rates on consumer goods and sectoral price effects, are transferred to the individual income tax model (described above), which is then used to generate tax burdens and distributional effects of the tax system on different types of households. For each simulation the model calculates revenue and economic affects for current law and then for an alternative policy proposal and produces outputs tables showing indirect tax revenue by type of tax, tax incidence tables, macro results and sectoral tax burden rates and bases.

Although the CTM is designed primarily for analyzing the effect of introducing a Consumption Tax in place of current law Arbitrios, it is flexible enough to allow the user to easily specify alternative tax policies for most indirect taxes. The parameter files allow the user to change these tax policy parameters for detailed industries and imported goods and services. The user can change such parameters as tax rates, the stage at which taxes are levied, coverage rates, registration thresholds, evasion rates, cascading levels and exogenous changes in the level of income taxes and household transfers. The effect of changes in indirect taxes can be simulated for 92 different sectors of the Puerto Rican economy. The CTM software contains the following modules: (i) a simulation module used to calculate taxes and prices under alternative scenarios, (ii) a forecast module employing the RAS methodology to ensure that the extrapolated sectoral database sums to desired macroeconomic totals, and (iii) an output module used to generate output files and tables showing the results of each simulation.

<u>Structure</u>. The CTM software utilizes a general equilibrium framework and has as its basic building block a Social Accounting Matrix (SAM) for Puerto Rico. The latter is an extended input-output table encompassing not only transactions between industries, but also containing a highly disaggregated description of the flows of goods, services and incomes between all relevant economic agents, industries, final consumers, Government and the Rest of the World. The model proper is made up of a system of 107 types of equations (encompassing approximately 40,000 actual equations) describing the important economic relationships within the Puerto Rican economy. The model solves this system of simultaneous equations, tracing the effects of tax changes throughout the entire economy and capturing the direct and the indirect effects on prices. Transactions involving goods and services are differentiated by end use, such as private consumption, government consumption, intermediate use, investment, exports and imports. The model uses detailed information on inter-industry flows and multi-sectoral detail on supply and demand to capture the effects of alternative consumption tax policies on different sectors of the economy

3. Legislation

Tax policy concepts, views and positions must be translated into formal legislative language to have operational significance for any tax system. The tax law, as any legal framework, should adhere to high standards of clarity of language and consistency across provisions and should also reflect the principles of a sound tax system as discussed earlier. Departure from these standards will inevitably lead to taxpayer confusion as well as poor or non-uniform tax administration, particularly when the interpretation of the law is ambiguous. Accordingly, both the overall legal framework for the tax system in Puerto Rico and specific provisions of law have been analyzed in detail.

First, the Project Team identified and assembled the relevant tax laws, regulations, and significant rulings as a basis for gaining a full understanding of the current legal structure of the Puerto Rico tax system. Then, we conducted a comprehensive review of the tax legislation, identifying specific provisions of the law that require change in order to (1) clarify the meaning or application of the law, (2) close unintended loopholes in the system, (3) correct for inconsistencies among various provisions, or (4) provide an appropriate balance between the enforcement powers of the tax administration and the rights of taxpayers. The Team also identified sections of the tax laws and regulations that will need to be replaced or amended in order to implement the General Consumption Tax proposed as part of the recommended tax strategy for Puerto Rico. Based on this review, we prepared an article-by-article commentary on the provisions of current law requiring change.

4. Tax Compliance/Organization

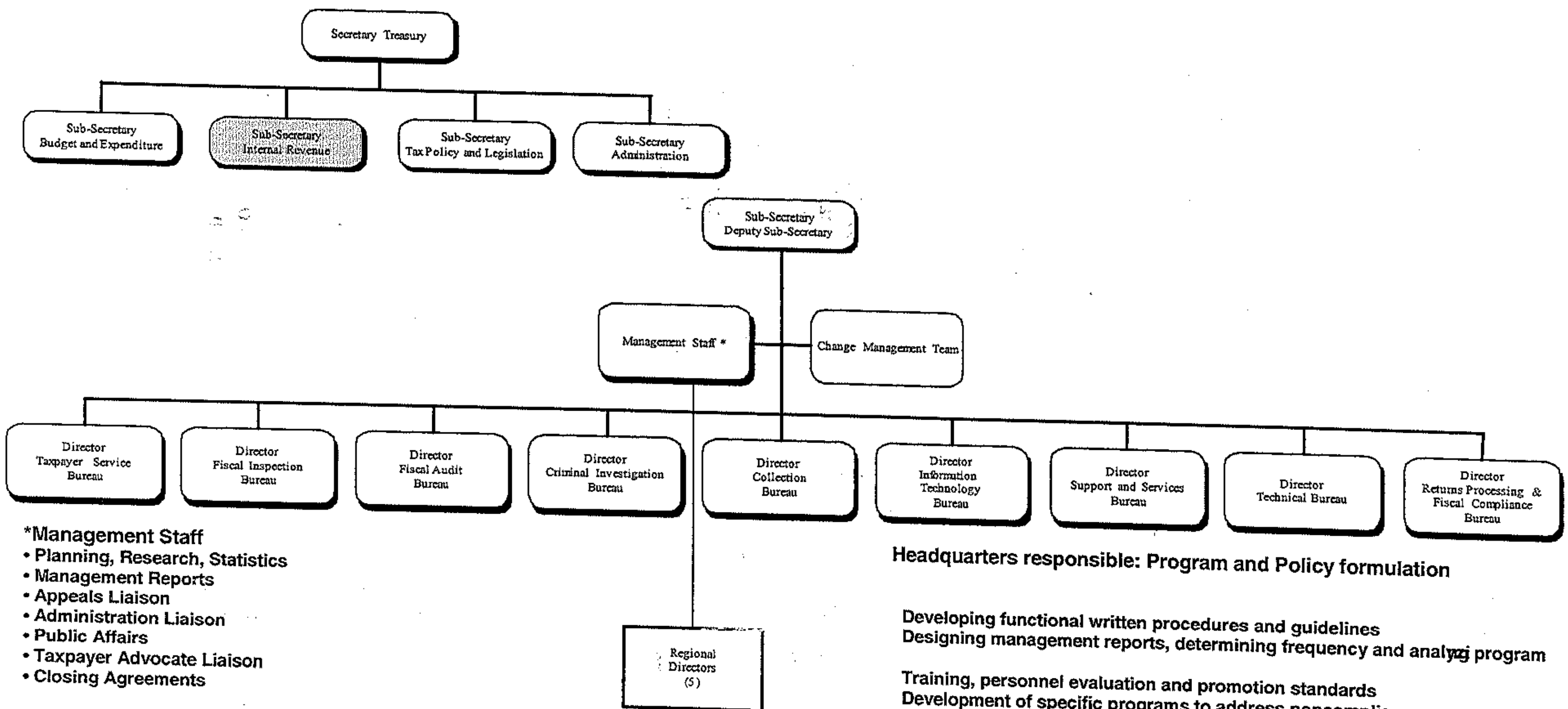
A key factor in the successful implementation of any tax reform is the ability of the tax compliance organization to successfully administer the tax. Therefore a critical area of this study focused on the organization, procedures, technology and human resource requirements for the reform. Our focus emphasized both improving compliance with the current tax system through enhancing the efficiency and effectiveness of the tax administration, as well as identifying the requirements for ensuring a high degree of compliance with the new tax system. In undertaking this activity, we concentrated initially on thoroughly analyzing current tax administration structures, procedures and systems. This analysis has been designed to provide the necessary detail and information to serve as the basis for recommendations to restructure the organization, develop new procedures and new systems to implement successfully the new tax regime with a high level of taxpayer compliance.

Organizational Reform

Puerto Rico's Internal Revenue is generally organized on a functional basis, like most successful Tax Administrations around the world. However, there are numerous aspects of the Internal Revenue's functional organization and operations that do not conform to international best standards, practices and experiences. Recommendations presented in this report regarding organizational reform include many major changes that, if implemented, will result in significant improvements to tax administration in Puerto Rico. The new proposed organizational structure is presented in Figure 11 The main recommendations for organizational reform in Internal Revenue are summarized below:

1. Elevate the Assistant Secretary of Internal Revenue (hereafter in this report "Sub Secretary of Internal Revenue") to Sub Secretary level of the Treasury Department - and give the Sub-Secretary an annual budget and corresponding authority to operate Internal Revenue.
2. Implement in the Office of the Sub Secretary of Internal Revenue requirements and formal expectations for managers of all Bureaus and Regional Offices to perform all their responsibilities in accordance with modern management practices and systems, including implementation of modern Management Information Systems;
3. Require Bureau Directors at the Central Office to perform normative roles – developing policies, standards, guidance, and planning;
4. Provide Bureau Directors at the Central Office with exclusive authority for developing policy, standards, guidance and planning;
5. For front-line operations with taxpayers, establish five Regional Offices, with Regional Directors reporting directly to the Sub Secretary of Internal Revenue (not to Bureau Directors).
6. Maintain an equal rank in the hierarchy for Bureau Directors of the Central Office and for Regional Directors of Regional Offices, or possibly at "a step" higher for Central Office Bureau Directors;
7. As part of the implementation of a new consumption tax, establish a Fiscal Inspection function at the Central Office and in Regional Offices to administer the consumption tax on imports and the functions of the current Bureau of Alcoholic Beverages and Licenses;

Figure 11. : Proposed Organizational Structure



*Management Staff
- Planning, Research, Statistics
- Management Reports
- Appeals Liaison
- Administration Liaison
- Public Affairs
- Taxpayer Advocate Liaison
- Closing Agreements

** Change Management Team
Assist Sub
Directors in managing and integrating all organizational, processes and tax policy changes

Headquarters responsible: Program and Policy formulation

Developing functional written procedures and guidelines
Designing management reports, determining frequency and analyzing program

Training, personnel evaluation and promotion standards
Development of specific programs to address noncompliance

Developing case selection criteria and standards

Identify best practices in the regions and implement throughout the organization
Private rulings, regulations and draft legislation
Developing and implement information technology solutions to operational programs
- Budget formulation, allocation and monitoring budget execution

8. With respect to the new consumption tax, establish a new Taxpayer Registration function as part of the Taxpayer Service Bureau to provide information and services to assist taxpayers in complying with registration requirements. However, the Taxpayer Registration database should be centralized and maintained by the Returns Processing Bureau as part of the taxpayer Master File.

9. Restore the functions and organizational units of the current Area of Tax Evasion to Internal Revenue as the Bureau of Criminal Investigations;

10. Phase-in the requirement that all tax payments by taxpayers be made through commercial banks rather than at Colecturías. Gradually close some Colecturías and convert other Colecturia sites to Taxpayer Service Centers.

11. Require centralized assessment of all tax debits and posting of all tax credits of taxpayers in the Returns Processing Bureau as the means to establish an accurate and reliable revenue accounting system; a taxpayer current account; and a taxpayer Master File;

12. Establish a Fiscal Compliance Division in the Returns Processing Bureau at the Central Office to process - by computer technology; by correspondence; and by telephone - simple non-compliance cases involving non-filers, stop-filers, under-reporters and underpayments. Transmit for handling to Regional Offices only those cases not resolved through automated, less-expensive methods.

13. The Returns Processing Bureau should be relocated as soon as possible to operate in contiguous space, since its current operations are very fragmented and do not conform with international best practices;

14. Establish two new Bureaus – one for Support and Services (Human Resources, Training, Budget, and Facilities); and the second for Information Technology, which are critically necessary to support the activities and operations of Internal Revenue;

Regarding the recommendation to establish five Regional Offices, we are aware that Hacienda attempted to establish Regional Administration Offices in the 1990s but decided to eliminate them in 2001 because the reorganization was not effective. We have reviewed Hacienda's analysis of the failed attempt to establish Regional Offices and have concluded that the administrative reform was not successful because its implementation was flawed. The key implementation errors were the following:

- Appointment of Regional Administrators not familiar with the technical work of the organizational units within their jurisdictions;
- Appointment of Regional Administrators without delegated authority over the managers within their jurisdictions, rather than appointment of Regional Directors, with line and budget responsibility and authority;
- Assignment of numerous normative roles to Regional Administrators rather than operations roles; and
- Continued execution of direct operations by Bureau Directors at the Central Office during the entire term of the "experiment", bypassing Regional Administrators.

An organizational structure with Regional Offices responsible for operations of the key tax administration functions is necessary to improve the effectiveness of tax administration in Puerto Rico.

Business Processes

As part of our operational assessment of Internal Revenue we identified eleven key macro processes that needed significant modification to improve the efficiency of tax administration. These processes are the following:

1. Taxpayer registration
2. Taxpayer deregistration
3. Tax return processing
4. E-filing – tax returns and payments
5. Tax payments
6. Centralized fiscal compliance operation
7. Office collection and field collection
8. Fiscal audits
9. Fiscal inspections
10. Criminal investigations
11. Office of Taxpayer advocate

The modified business processes are presented in our report in three ways:

1. A narrative description presented in the body of the report of each new/modified business processes. For modified business processes, a brief explanation of the changes from current processes is provided;
2. A flowchart describing the workflow of each of the new/modified processes at the macro level.
3. A summary description of each new/modified business process in the following format:
   a. Title of the business process;
   b. Staff affected;
   c. Pre-requisites, or prior processes;
   d. Input data sources and outputs/results expected;
   e. Frequency of the process; and
   f. Requirements for implementation.

Information Technology

Hacienda has undertaken significant information technology projects supporting tax administration over the past ten years, beginning with the implementation of the Puerto Rican Integrated Tax System (PRITAS) in 1995. Although Hacienda has encountered significant problems associated with the procurement and implementation of PRITAS, many U.S. states have also struggled with the implementation of integrated tax systems over recent decades. So-called "Reusable" solutions may have been the only viable solutions available at the time of procurement of PRITAS. This situation has now changed. The evolution of methodologies has resulted in Commercial-Off-The-Shelf (COTS) solutions finally being available for implementing an integrated tax system. These solutions can be put in place at a lower cost and with a shorter implementation schedule. There are a number of state agencies in the United States that have successfully implemented such solutions within the past two or three years.

Based on our research on recent experience with integrated tax systems, we recommend a COTS solution implemented in client/server architecture for Hacienda. The justification for this recommendation is as follows:

- Risk is reduced

- The time frame for implementation can be greatly accelerated because
  - 60%+ of the effort is configuration rather than development (programming)
  - Hacienda can focus on business rules
- Costs are lower for both hardware and software including
  - Initial software solution implementation costs
  - Initial hardware procurement costs
  - On-going software costs
  - On-going hardware maintenance costs
- A COTS approach can be the basis for a long-term solution
- On-going maintenance is available and upgrades will allow Hacienda to take advantage of the latest technology advancements
- It is easier to find IT staff with knowledge of client/server environments than with knowledge of mainframes

We further recommend that only proven COTS solutions should be considered. Hacienda should make site visits to other jurisdictions or agencies to observe a given proposed solution in operation in a production environment. We also recommend that the initial tax to be automated should be the new consumption tax. The integrated tax system can then be implemented without having to deal with problems of converting historical data. As a result, the implementation time will be significantly reduced, a critical factor in order to meet the planned effective date for this new tax.

Based on experience of other agencies that have successfully implemented COTS solutions, the following are the cost estimates for a implementing a COTS solution to initially provide full functionality and support for the new consumption tax:

- COTS software solution implementation for the consumption tax: $6M
- Client/Server n-tiered architecture hardware: $1M
- New Desktop and Desktop Replacement <$2K each

The timeframe for implementation is estimated to be 9 months from the date of contract signing. Additional taxes can be "converted" to the new COTS integrated tax solution in phases of six months over a 24 to 30 month period. Total cost for implementation of the consumption tax and other taxes is estimated to be $16M not including hardware and system software costs. These estimates are the <u>lowest</u> cost possible for implementing a new integrated tax system to initially support the new consumption tax and subsequently serve as the basis for the integrated tax system for all taxes.

Human Resources

Our analysis of Human Resources addressed the following areas: (1) specific staffing and personnel issues; (2) training issues; (3) recommended staffing levels by functional area; (4) human resource implementation issues; and (5) personnel profiles and skill requirements for new key positions. Some of the most important human resource issues facing the Internal Revenue include the following:

- Of the more than 3,500 authorized permanent positions for the Areas of Internal Revenue and Tax Evasion, a high percentage is continually vacant. Currently, almost 1,300 permanent positions, or 37 percent of total authorized staffing, are vacant;

- Fiscal audits are being carried out by only 267 out of a total of almost 500 employees in the Fiscal Audit Bureau, or just over 50 percent of the employees. These 267 employees represent only about 8 percent of the total Internal Revenue employees. In many tax administrations around the world, audit staffing ranges from 20 percent to 35 percent of total tax administration staff;
- There has been no hiring of permanent auditors for several years. As a consequence, the number of experienced auditors has been declining steadily.
- Hacienda has historically filled mid-level management and many technical support positions with outside consultants or short-term employees. The constant high turnover of these professionals has created a knowledge void and staffing problem within the ranks of Internal Revenue;
- There are over 600 employees in Internal Revenue classified as temporary employees. The majority of these employees are in the Returns Processing and the Collection Bureaus. The use of temporary employees to minimize the overall payroll cost of human resources to the exclusion of other factors has long been a practice in Internal Revenue and is an inappropriate one. Excessive use of temporary employees imposes a high cost on basic functions in terms of lost productivity, increased training costs, and operational inefficiencies.
- Internal Revenue is approaching a critical stage regarding the loss of technical expertise in many core business processes of the organization. For example, in Fiscal Audit 37 percent of the senior auditors can retire within the next five years. The majority of these are in the highest pay levels and many perform the most complicated and difficult audits. The same retirement-eligible situation is true in Collection. About 35 percent of Collection employees are at the highest pay levels and can retire within five years. The large number of potential retirements will adversely affect the pool from which supervisors and mangers can be selected and will result in serious shortages of technical staff.

Staffing Recommendations. It has been difficult to secure reliable figures on current staffing for Internal Revenue. During the past five months, we obtained different staffing (and salary) figures from the Area of Human Resources and from several Bureau Directors. Nevertheless, we feel that the staffing levels presented in Tables 12-14 accurately reflect current authorized staffing in Internal Revenue and Tax Evasion. The total staff of 3,434 positions for Internal Revenue includes 245 positions for the Technical and Taxpayer Service Bureau, which in February 2004 was divided in two. For our estimates, we included the Taxpayer Service Bureau but not the Technical Bureau. As reflected in Table 14, 1,274 position or 36.1 percent of all authorized positions remain vacant.

Table 12. Current Staffing: Areas of Internal Revenue and Tax Evasion – Internal Revenue Area

	TOTAL	VACANCIES	OCCUPIED
Internal Revenue Assistant Secretary	27	12	15
Fiscal Audit Bureau	789	292	497
Returns Processing Bureau	379	97	282
Technical and Taxpayer Service Bureau	245	87	158
Alcoholic Beverages and Licenses Bureau	272	94	178
Excise Tax Bureau	485	132	353
Collection Bureau	1237	493	744
Total Internal Revenue	**3,434**	**1,207**	**2,227**

Table 13. Current Staffing: Areas of Internal Revenue and Tax Evasion – Tax Evasion Area

	TOTAL	VACANCIES	OCCUPIED
Tax Evasion Assistant Secretary	15	10	5
Intelligence and Informant's Report Bureau	26	20	6
Income Tax Evasion Bureau	26	17	9
Excise, Alcoholic Beverages and License Evasion Bureau	26	20	6
Total Tax Evasion Area	**93**	**67**	**26**

Table 14. Current Staffing Areas of Internal Revenue and Tax Evasion – Combined Internal Revenue and Tax Evasion Areas

	TOTAL	VACANCIES	OCCUPIED
Internal Revenue	3,434	1,207	2,227
Tax Evasion Area	93	67	26
TOTAL	**3,527**	**1,274**	**2,253**

Proposed Staffing. Tables 15-17 present the proposed staffing levels for the Central Office and the Regional Offices by Bureau and Divisions. Table 17 presents staffing, by technical area, for the two key compliance functions, Fiscal Audit and Collection. The key features of the proposed staffing structure are the following:

- Total permanent staffing proposed for Internal Revenue is 2,895 (includes Criminal Investigation);
- Regional offices would have the majority of staff (2,079 or 72 percent) compared to the Central Office (802 or 28 percent). These allocations conform to international best practices and to our organizational recommendations, which emphasize that operations must be performed in regional offices. In fact, the 28 percent recommended for the Central Office could be reduced considerably and reallocated to field operations in a few years, after the substantial front-end normative work of designing procedures, handbooks, procedures manuals, etc. is completed by Bureau Directors at the Central Office;
- Proposed technical positions for all Regional Offices are 1,689 out of 2,079 total positions, for a mix of 81 percent technical vs. 19 percent administrative support and management. This composition of technical staff would improve on the current structure. For example, in Fiscal Audit only about 50 percent of the employees actually perform audits, while the rest represent different types of support staff;
- The 576 technical positions recommended for Fiscal Audit in the five Regional Offices represent 20 percent of total Internal Revenue staff. This mix is in conformance with international best practices of 20-25 percent staffing for Fiscal Audit.

Table 15. Proposed Total Staffing – Central and Regional Offices Combined

	Proposed Total Staffing				
Central and Regional Offices	**Office Directors**	**Mgmt. Staff**	**Technical Staff**	**Admin Support Staff**	**TOTAL**
Regional Offices	35	147	1,701	210	2,093
Central Office	29	17	686	70	802
TOTALS:	**64**	**164**	**2,387**	**280**	**2,895**

Table 16. Proposed Staffing – Central Office

	Proposed Staffing				
Central Office	**Bureau Director Office**	**Mgmt. Staff**	**Technical Staff**	**Admin Support Staff**	**TOTAL**
1.Sub Secretary	1			2	3
a. Deputy	1			1	2
b. Management Staff		5			5
c. Change Mgmt. Team		6			6
2. Taxpayer Service Bureau	1			1	2
a. Operations Review Staff			2		2
b. Policy & Procedures Div.	1		10	4	15
3. Fiscal Inspection Bureau	1			1	2
a. Operations Review Staff			2		2
b. Policy & Procedures Div.	1		9	3	13
c. Inspection Division	1		11	5	17
4. Fiscal Audit Bureau	1			1	2
a. Operations Review Staff			2		2
b. Policy & Procedures Div.	1		10	5	16
c. Audit Division	1		14	3	18
d. Large Case Audit Division	1		12	3	16
5. Criminal Inv. Bureau	1			1	2
a. Operations & Quality Rev.			3		3
b. Policy & Procedures Div.	1		5	1	7
c. Intelligence Division	1		5	3	9
d. Investigation Division	1		5	1	7
6. Collection Bureau	1			1	2
a. Operations Review Staff			2		2
b. Policy & Procedures Div.	1		6	3	10
c. Office Collection Division	1		8	1	10
d. Field Collection Division	1		7	1	9
e. Cashier Division	1		3	1	5
f. Bankruptcy & Insolv Div.	1		4	1	6
7. Information Tech Bureau	1		12	4	17
8. Support & Services Bureau	1		1	1	3
a. Facilities Division	1		6	1	8
b. HR & Training Division	1		7	3	11
c. Budget Division	1		5	1	7
9. Returns Processing Bureau	1	6		2	9
a. Returns Processing Division	1		400	8	409
b. Fiscal Compliance Division	1		135	7	143
TOTALS:	**29**	**17**	**686**	**70**	**802**

Table 17. Proposed Staffing – Regional Offices

Proposed Regional Offices	Head of Office	Managers	Technical Staff	Admin Support Staff	TOTAL
	Proposed Staffing				
1.Metro Regional Office	1			1	2
a. Operation Review Staff			5	1	6
b. Taxpayer Advocate	1		5	1	7
2 Taxpayer Service Division	1	8	80	11	100
3. Fiscal Audit Division*	1	24	222	40	287
4. Collection Division*	1	18	230	19	268
5. Criminal Inv. Division	1	2	30	3	36
6. Fiscal Inspection Division	1	17	225	18	261
2. Bayamón Regional Office	1			1	2
a. Operation Review Staff			3	1	4
b. Taxpayer Advocate	1		3	1	5
2 Taxpayer Service Division	1		10	2	13
3. Fiscal Audit Division*	1	10	140	12	163
4. Collection Division*	1	15	190	16	222
5. Criminal Inv. Division	1	1	10	2	14
6. Fiscal Inspection Division	1	2	20	3	26
3. Ponce Regional Office	1			1	2
a. Operation Review Staff			3	1	4
b. Taxpayer Advocate	1		3	1	5
2 Taxpayer Service Division	1	1	16	2	20
3. Fiscal Audit Division*	1	6	60	7	74
4. Collection Division*	1	6	45	7	59
5. Criminal Inv. Division	1	1	10	2	14
6. Fiscal Inspection Division	1	2	20	3	26
4. Caguas Regional Office	1			1	2
a. Operation Review Staff			3	1	4
b. Taxpayer Advocate	1		3	1	5
2 Taxpayer Service Division	1		10	2	13
3. Fiscal Audit Division*	1	10	104	13	128
4. Collection Division*	1	8	85	9	103
5. Criminal Inv. Division	1	1	10	2	14
6. Fiscal Inspection Division	1	2	20	3	26
5.Mayagüez Regional Office	1			1	2
a. Operation Review Staff			3	1	4
b. Taxpayer Advocate	1		3	1	5
2 Taxpayer Service Division	1		10	2	13
3. Fiscal Audit Division*	1	5	50	6	62
4. Collection Division*	1	5	40	6	52
5. Criminal Inv. Division	1	1	10	2	14
6. Fiscal Inspection Division	1	2	20	3	26
TOTALS:	**35**	**147**	**1701**	**210**	**2093**

Table 18. Fiscal Audit and Collections Functions – Regional Offices; Proposed Technical Staffing

	Fiscal Audit					Collection				
	Large Case	Field Audit	Office Audit	Qual. Rev.	Total Audit	Field Coll	Office Coll	Cashier	Gov WH	Total Coll
Metro	115	65	30	12	222	120	90	10	10	230
Bayamon		90	40	10	140	105	75	10		190
Ponce		39	17	4	60	20	15	10		45
Caguas		68	27	9	104	45	30	10		85
Mayaguez		35	12	3	50	20	10	10		40
Total	115	297	126	38	576	310	220	50	10	590

5. Implementation

A successful tax reform program must include a well-structured and detailed implementation plan. Our suggested plan describes the main activities, phases and milestones necessary to effectively implement the new General Consumption Tax (GCT) and to amend other existing taxes. We have developed our plan based on a phased approach, which is essential to understanding and addressing the interdependencies among the various activities and milestones. As currently envisioned, the Tax Reform Implementation Plan will proceed along several tracks, with the exact stages of the implementation dependent upon the extent to which the reforms affect policy and legislation, organization and management, systems and procedures, or communication and taxpayer education.

The policy reforms will likely be introduced over time as new legislation and regulations need to be drafted, approved and enacted into law to include the General Consumption Tax. Furthermore, current laws will have to be amended to reflect the proposed reforms. The implementation of the organizational and procedural reforms and the introduction of new IT systems should occur simultaneously; specifically, coordinating the implementation of the new IT systems with organizational and staffing changes and the implementation of new processes and procedures. In the IT area, the first release of a new system must include the software solution and hardware necessary to support and implement the GCT. Over the subsequent phases, the new IT system will need to be monitored, configured, and customized to successfully implement the GCT in headquarters, the returns processing center and the regional offices. It is also important that the communication, taxpayer education and public outreach activities be well planned as the new tax reform will introduce extensive changes.

The implementation program will consist of activities in the following principal areas:

- **Project Implementation and Oversight.** This area includes the appointment of a Steering Committee and an Implementation Team, budget allocation, selection of a contractor to guide the implementation, finalization of the project plan and project reporting.
- **Policy and Legislation.** Key activities in this area include reviewing and revising tax reform proposals, preparing a White Paper on Tax Reform, drafting legislation, amending existing laws and drafting implementing procedures.
- **Organization and Management.** This area includes review and revision of proposed organizational changes, issuance of an administrative order for implementation, realignment of Headquarter units, the establishment of regional offices and the gradual elimination of the Colecturias.
- **Procedures and Administration.** The main activities in this area include negotiation of bank contracts, software definition and development, and development of procedures for the GCT. The development of new procedures will include a registration guide and forms, registration of GCT taxpayers, a guide for taxpayer reporting and filing, detailed procedures for fiscal inspection and detailed procedures/manuals for major functions.
- **Tools and Technology.** This area includes securing necessary funding and procuring software and hardware, reviewing the functional requirements and gap analysis, tailoring of the IT solution, training, and installation and testing. It also includes the system implementation for other taxes and rollout to regional offices.
- **Human Resources, Staffing and Training.** Key activities in this area include reviewing and refining staffing requirements by function and level, assessing individual staff backgrounds and skill sets, obtaining necessary approval of new positions from the Central Government of Human Resources and from labor unions, reassigning existing staff to the new headquarters unit and

throughout the regional offices, conducting a training needs assessment, developing a comprehensive training program, including a separate training program on the GCT, and recruiting and hiring new staff.

- **Internal Communication.** This area includes appointing a dedicated change management team, identifying and meeting with key stakeholders, preparing internal newsletters and creating a website, and holding meetings regarding the ongoing reform.
- **Taxpayer Education and Public Outreach.** The main activities in this area include reviewing and revising the communications plan, selecting a public relations firm to support the reform effort, and preparing extensive communication materials for public distribution through various vehicles.

Many of the key milestones are aggressive, but they are necessary in order to complete all the activities in order to ensure successful implementation of the tax reform program by the target date. Therefore, it is imperative that initial activities start immediately, especially in the project management, policy reform and information technology procurement. The proposed timeframe for the entire implementation plan is three and a half years, as it involves activities, such as organizational reforms, staffing changes and new IT systems, that will extend beyond the effective date of the new laws.

Conceptually, the implementation plan can be divided into four phases. The first, lasting from months 1-9, focuses on policy and planning; the second, from months 7-12, centers on the development of organizational and procedural reforms; the third, from months 13-27, addresses the implementation of the GCT; and the final phase, from months 13-36, emphasizes the implementation of new field operations.

Impact on Government Operations. The total estimated direct outlay cost of the Tax Reform Program is $67.2 million through the end of fiscal year 2008. An estimated $47.6 million of the total amount is for the purchase of IT and non-IT equipment and furnishings and for implementation-specific functions (e.g. the Project Management Office or PMO), which are considered upfront "one-time" costs, whereas the remaining amount is estimated for recurring costs such as salaries, maintenance, etc. Table 19 below provides a summary of these costs. The costs of implementing the proposed reform program can be grouped under six key areas (numbered to match the items in Table 19:

1. Capital expenditures for accommodation needs, which includes the cost of space and refurbishing needed for the 5 regional offices, for the returns processing and fiscal compliance division, and for a training center, offset by savings from closing down District offices and Colecturias. The estimated cost of capital expenditures over the next 4 fiscal years is a net savings of about $1.4 million, as a result of closing down 80% of Colecturias and district offices.
2. Capital expenditures for non-IT equipment and furnishings (for the new regional offices, the returns processing and fiscal compliance division, and the training center), which includes the cost of desks, chairs, filing cabinets, tables, telephones, fax machines, projectors, photocopying machines, library furnishings, and training furniture, equipment and materials. The estimated cost of non-IT equipment and furnishings is about $5.8 million.
3. Capital and operating expenditures for IT, which includes the initial costs of IT equipment and IT systems development, including testing and training; the costs of operating and maintaining the new proposed system; and the savings from abolishing the current costly mainframe system. The estimated net cost of IT expenditures over the next 4 fiscal years is about $19.6 million.

*Table 19. Summary of Costs Over the Next 4 Years**
(By Fiscal Year, in Thousands of Dollars)

Cost Area	2005	2006	2007	2008	TOTAL
1. Office Space & Refurbishing	**1,799**	**3,161**	**(1,450)**	**(4,936)**	**(1,426)**
2. Non-IT furnishings and equipment	**1,254**	**3,556**	**998**		**5,808**
3. IT Capital and Operating Costs	**7,750**	**4,860**	**4,500**	**2,510**	**19,620**
4. Other Operating Costs:					
PMO	**456**	**856**	**881**	**459**	**2,652**
Change in Staffing		**4,516**	**11,628**	**11,977**	**28,122**
Training		**1,158**	**1,158**	**579**	**2,895**
5. Communication and Public Education	**700**	**3,500**			**4,200**
6. External Consultancy	**2,460**	**5,740**	**1,640**		**9,840**
TOTAL	**14,419**	**27,347**	**19,356**	**10,589**	**71,711**

* Assumes no annual escalation in office space cost, 3% escalation in staff compensation, 80% of district offices and Colecturias will be closed down by the end of FY 2008, only about 40% of staffing changes occur in 2006, training requirements are expected to go down after implementation is complete, and no annual escalation in training costs.

4. Operating expenditure for project management and implementation support, which includes:
   - Setting up the project management office, including staffing costs as well as office space and IT and non-IT furnishings. The annual cost of the PMO is about $830,000 with an upfront cost for furnishings and equipment of about $40,000.
   - Costs of staffing, including salaries and fringe benefits. The estimated annual cost of staffing is about $9.2 million.
   - Cost of training on new taxes, forms, procedures, customer assistance, auditing techniques, enforcement, criminal investigation, etc. The preliminary estimate for training cost is about $1.2 million per year for the first two fiscal years.
5. Communication and public education, which includes the costs of the public relations firm as well as costs of advertisements, newsletters, websites, seminars, etc. The estimated cost of communication and public education is about $4.2 million for one year.
6. External consultancy, which includes the costs of domestic and international consultants needed to supplement the Hacienda's internal resources to ensure successful and timely implementation of the reform program.

Implementation Plan. Tables 20 and 21 present the Tax Reform Implementation Plan, first in terms of the four phases for implementation and second for specific activities and milestones.

Table 20. Tax Reform Implementation Plan: Phases

	2004		2005				2006				2007			
PHASES	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
POLICY AND PLANNING														
DEVELOPMENT OF ORGANIZATIONAL AND PROCEDURAL REFORMS														
IMPLEMENTATION OF GCT														
IMPLEMENTATION OF NEW FIELD OPERATIONS														

Table 21. Tax Reform Implementation Plan: Activities and Milestones