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DRAFT

Executive Summary

Puerto Rico has enormous potential for economic growth. Yet, no one could deny that Puerto Rico confronts both a fiscal crisis and ongoing economic stagnation. Compared to, for example Mississippi, South Carolina, Taiwan and Ireland, the potential has been unrealized. Clearly, Puerto Rico needs an action agenda that specifies concrete steps for achieving solid private sector growth.

In October 2003, Senators Grassley and Baucus requested studies from the Joint Committee on Taxation of the U.S. Congress and the General Accounting Office to shed light on this situation and provide the data and analysis to guide action. Building on those valuable studies, this document presents an action agenda for generating economic growth in Puerto Rico. Recommendations fall into the following categories: tax reform, government reform, education and training, disaster preparation and response, natural environment, and research and development.

This document presents concrete recommendations, the bases for actions that will have a real impact. It requires the participation of local and federal leaders with the knowledge and expertise to tailor the recommendations into policies, laws and regulations that most effectively and appropriately put them into action. Required participation must not be used as an excuse for further inaction.

The document does not address all the obstacles to, and opportunities, for economic growth, but each journey begins with a step, and this document itemizes key steps that need to be taken now.

The table below categorizes the recommendations on an impact time horizon.

Table 1. Specific Impact Recommendations for Generating Growth in Puerto Rico

	Short-term impact recommendations:	Responsibility	Page #'s
Tax reform	Equalize treatment and reduce tax of manufacturers under domestic activities deduction.	Federal government	4; 13
	Introduce a consumption tax to mobilize revenues to replace the ineffective excise tax. Ensure fairness by providing a rebate for low-income workers. Reduce regressive local income tax rates and up the amount at which taxpayers start paying taxes to \$17,000.	Local government	4; 14-15
	Make U.S. citizens of Puerto Rico eligible for the federal earned income tax credit and child tax credit, reducing the unfair impact of the payroll taxes on low-income families, giving each working family an average of \$1,155 of tax relief and delivering \$1.1 billion in annual stimulus direct to the Puerto Rican economy.	Federal government	5; 15-17
	Designate Puerto Rico as a "national enterprise zone" along with other high poverty areas in a renewed national enterprise zone program.	Federal government	5; 17
Government	Reduce the size of government through a hiring freeze while ensuring that needed services, particularly education, are provided.	Local government	5; 19
reform	Streamline the permitting process to stimulate domestic entrepreneurial activity, facilitate investment, and generate jobs.	Local government; Private sector	5; 18-19
Research & development	Build on existing relationships to develop local R&D particularly in manufacturing and clinical trials.	Local government; Private sector; Academia; Federal government	8; 36-37
Disaster response	Create disaster preparedness plan to save lives and protect the economy, to minimize the damage and suffering in the event of a Katrina-level disaster as well as the devastation from regularly occurring hurricanes.	Local government; Federal government	6-7; 27- 29
	Medium and long-term impact recommendations:		
Education and training	Create choice for parents within public schools, including a choice for bilingual schools.	Local government	6; 20-21
	Develop a "training for investment" program to prepare Puerto Ricans for 21 st century jobs and to attract and retain investment.	Local government; NGO's	6; 22
	Support lifelong learning through training and education.	Local government; Private sector; NGO's; Federal government	6; 22

		Responsibility	Page #'s
Natural environment	Reduce the social conflicts that arise and pit economic development against environmental concerns.	Local government; Federal government	7; 30
	Provide market sensitive incentives to the private sector to engage in behavior responsible to the environment, and carefully monitor this initiative.	Local government	7; 31
	Include ecotourism as a meaningful component in the overall tourism growth strategy.	Local government; Private sector	7; 31
Research & Development	Sharply reduce the corporate income tax on earnings from intangible property such as patents to between 2 and 5%, with the condition that some of the R&D be conducted in Puerto Rico.	Local government	8; 34
	Develop capacity for world-class university research leading not only to the creation of knowledge but also to innovation and global competitiveness.	Local government; Academia; Private sector.	8; 35
	Fund excellence in basic research in strategic fields, recognizing the need for long-term commitment.	Local government; Academia; Private sector; Non-governmental organizations	8; 36
	Catalyze university and industry partnerships to ensure that good ideas can hit the bottom line as well as drive employment.	Local government; Private sector; Academia	8; 36
Infrastructure	Bring Puerto Rico to levels of global competitiveness.	Local government; Federal government; Private sector	9; 39-40

Tax reform

- > TR1. Remedy the unequal treatment and reduce the higher taxation of manufacturers in Puerto Rico under the domestic activities deduction. Including Puerto Rico under Section 199 of the Internal Revenue Code would put manufacturers on a level playing field with the rest of the U.S. Without such legislation, Puerto Rican manufacturers now pay 1% more and will face 3% higher federal tax rates in 2010.
- > TR2. Puerto Rico should introduce a consumption tax (not a value-added tax) to replace the inefficient excise tax. Difficult to administer and easy to avoid, the excise tax has proven ineffective in raising needed revenue. Combined with targeted rebates and income tax relief for low-income families, a sales tax would be fair and not regressive. It would improve revenue collection by reducing tax evasion and tapping into the vast underground economy. Increased sales tax revenues should first be used to cut income tax rates and raise the tax floor so no one making less than \$17,000 pays any income tax and then to cut the budget deficit not to fuel further excessive government growth.
- > TR3. U.S. citizens in Puerto Rico should be made eligible for the federal Earned Income Tax Credit (EITC) and Child Tax Credit (CTC). By paying payroll taxes for Social

Security and Medicare without receiving the earned income tax credit, working families in Puerto Rico face a heavily regressive tax burden. To illustrate, a Puerto Rican on the island who files as a head of household with two children and \$20,000 of income has a total Federal tax liability of \$792. Yet that filer's brother in New York with the same income and family circumstances would receive a tax refund of \$3,708. Simply making Puerto Ricans eligible for the EITC would provide an annual fiscal stimulus of \$1.1 billion directly to the local economy and reduce tax burdens on over 90% of taxpayers (about 950,000 taxpayers). Making families eligible for the child tax credit, now applicable only to families of 3 or more, would further reduce taxes for another 32% of all tax filers or about 560,000 taxpayers. Analysis shows that these targeted tax credits would be up to 40% more effective in stimulating the economy than normal federal transfers.

> TR4. Designate Puerto Rico as a "national enterprise zone" along with other high poverty areas in a renewed national enterprise zone program. Enterprise zone status would help to attract and retain mainland investors with reduced tax rates favorable to current levels under controlled foreign corporation (CFC) status. Enterprise zone legislation would attract investment to the high poverty areas across the United States, including, Puerto Rico, that most need it.

Government reform

- ➤ GR1. The size of government must be reduced. A hiring freeze should be imposed on government employment; school-level employment in the public school system should be exempt from the freeze. With a hiring freeze in place, government employment would decline 6% over 3 years through attrition alone. Mechanisms should be put in place to allow hiring in government units where attrition is disproportionately large or where the maintenance of vital services demands new personnel. With annual attrition due to retirement and resignation at approximately 3 percent and allowing for some hiring as indicated, it should be possible to reduce government employment and the government payroll by 6 percent over a three-year period.
- ➤ GR2. Starting in June 2007, agencies reviewing permits for new construction and expanding facilities must give a decision or automatically approve a project within 3 months, and within 2 months by December 31, 2007. Numerous efforts at reform have come up short, so such a "shock" must be mandated. Each agency involved¹ must provide a written plan by September 2006 to the Governor, the Comptroller General, and the Resident Commissioner to show how it will streamline the processing of permits, ensure the protection of the environment and include and consider community opinion.

Primarily, the Regulations & Permits Administration, the Department of Natural & Environmental Resources, the Planning Board, and the Environmental Quality Board.

Education and Training

- ➤ E&T1. Puerto Rico must give parents more choice within the public schools. Parents deserve the opportunity to choose the best school for their children. Parents should be able to select the right school from a choice of public schools, and have the option of sending their children to an innovative "charter" public school. Charter schools are public schools that operate free from some conventional school regulations and offer innovative new programs to serve student needs, while meeting basic academic standards. Requiring no new taxes, charter schools have been hugely popular with parents and have experienced phenomenal growth, now enrolling over one million students in 41 states. Parents in Puerto Rico deserve the same choice and opportunity.
- ➤ E&T2. Parents must have the choice to select Spanish-English bilingual schools for their children. Proficiency in one's native language and English is a must to operate successfully in the global economy. Polls indicate that 90% of island residents desire fluency in English. Bilingualism in Puerto Rico is rewarded with higher incomes 25 to 30 percent higher and better career opportunities.
- E&T3. Puerto Rico must establish a training-for-investment program and a flexible training infrastructure to continually prepare its people for the jobs of the 21st century. As an incentive for new investments, the Puerto Rican government would train workers or pay for the training of workers to meet the specific needs of firms establishing new operations. Such a program has numerous advantages over other forms of investment incentives (e.g., tax holidays) and it develops the skilled and productive employees critical to attracting and retaining investors in the 21st century.
- ➤ E&T4. All Puerto Ricans should have the opportunities to improve their skills through life-long learning. The rapidly changing skill-demands of business require that people beyond school age are able to continually upgrade their skills. With information technology, for example, the need for skill-development is particularly acute; and in the growing tourist industry, retraining with an emphasis on English skills is especially needed. The government can support life-long learning through a combination of directly sponsoring adult education programs and providing tax incentives to individuals who must finance their own retraining. Life-long learning opportunities will give island retirees and those returning to Puerto Rico the opportunity to enrich their lives.

Disaster preparedness

➤ DP1. Puerto Rico must have a disaster preparedness plan that meets and even exceeds the high standards of Florida to save lives and protect the economy in the event of a Katrina-level disaster and more effectively handle the" typical" hurricane devastation. Hurricane Katrina illustrated the dangers of not being prepared for a major disaster. Puerto Rico lies in the path of hurricanes and tropical storms; 39 have struck the island in the past 150 years, including two category 5 storms. Puerto Rico is also at risk of a tsunami like the one that recently struck Asia. Puerto Rico must have in place a

preparedness plan that will not only ensure effective response to the ongoing hurricanes that strike each year, but will save lives and protect the economy in the event of a Katrina-sized disaster. Investments in preparedness will pay off in lives saved, but also in infrastructure safeguarded, an economy protected, and reduced relief costs for the federal and local government. The preparedness plan should be ready for review and implementation by May 2006, before the next hurricane season.

Preservation and repair of the natural environment

- ➤ E1. The social conflicts that arise and pit economic development against environmental concerns must be reduced. On the one hand, as with other regulation of business in Puerto Rico (see Proposal GR1), delays in permitting should be reduced. An appropriate time limit should be set for granting or denying with reason an environment-related permit; if it is not formally granted or denied within that time limit, it will be deemed as automatically granted. On the other hand, improved procedures should be established for community and expert input on environmental impact studies and on decisions affecting environment-related regulation. These procedures must have clear rules and time limits. In order to avoid excessive strains on the courts and excessive legal costs for the parties involved, a mediation program should be established to handle disputes.
- ➤ E2. Market mechanisms should be used to reduce demands on natural resources, to provide incentives to the private sector to engage in behaviors less damaging to the environment, and to raise funds for public investment to preserve and repair the natural environment. Examples of specific steps that should be taken include: development impact fees and higher charges to finance water quality infrastructure; performance bonds to ensure compliance with permit conditions; environmental taxes on agricultural chemicals to promote organic agriculture; atmospheric emissions fees extended to carbon emissions; pay-by-the-bag direct charges for solid waste collection; deposit-refund systems for solid and hazardous waste items. All of these programs provide a 'double dividend,' helping to solve environmental problems while reducing distorting taxes on incomes and investments.
- ➤ E3. The Puerto Rican government should support the development of ecotourism through various programs including: training-for-investment (as proposed more generally elsewhere in this document), emphasis in advertising campaigns, priority provision of appropriate infrastructure, and tax incentives. Ecotourism plays the dual role of promoting the tourism sector of the economy and creating vested interests in the preservation of the island's unique natural environment. Moreover, ecotourism raises the general level of environmental awareness in the population. El Yunque provides one starting point for such programs, but there are extensive additional opportunities.

Research and development

- ➤ R&D1. Sharply reduce the corporate income tax on earnings from intangible property such as patents to between 2 and 5%, with the condition that some of the R&D be conducted in Puerto Rico. Puerto Rico is falling behind the rest of the U.S. and aggressive competitors such as Ireland and Singapore in attracting R&D investment. Reduced tax rates would motivate the pharmaceutical companies now manufacturing in Puerto Rico to direct some of the \$26.5 billion they spend annually on clinical trials to Puerto Rico. By conducting some of their R&D in Puerto Rico, U.S. corporations would retain intellectual property in Puerto Rico, reduce the difficulties associated with transfer pricing, and benefit from lower taxes.
- ➤ R&D2. Develop world-class R&D with a long-term impact on the economy. Puerto Rico has attracted global leaders in life sciences and electronics to manufacture locally. To compete and create high quality, well-paying jobs in the 21st century, Puerto Rico must commit to developing a world-class research and development capacity.
 - Fund basic research Puerto Rico must directly support world-class, local research in areas of strategic importance, including the life sciences and information technology, recognizing that success will required continued focus, long-term commitment, and real funding.
 - Develop capacity Puerto Rico must invest in the infrastructure, institutes, training, and resources critical to enabling and nurturing R&D capacity. In particular, Puerto Rico must attract and develop locally the people needed to conduct world-class research. Worthy existing efforts, like the NSF-funded Experimental Program to Stimulate Competitive Research, must be supported and expanded.
 - Support partnerships World-class research cannot succeed in isolation, and will
 not generate economic spin-offs without strong connections to industry.
 Partnerships and collaborations must be supported and funding from industry and
 other sources leveraged to maximize the economic impact.
- ➤ R&D3. Target development of local R&D in manufacturing processes and clinical trials. Shipping products valued at over \$31 billion in 2003, Puerto Rico is one of the largest manufacturers of drugs worldwide. 16 of the top 20 selling drugs in the U.S. are made in Puerto Rico. This is an immediate opportunity to develop R&D where Puerto Rico has real competitive advantages. Local government must mobilize partnerships across the private, not-for-profit and public sectors to ensure success.

Creating a world-class research capacity is a daunting proposition. Success will require continued focus, long-term commitment, and real funding. Many U.S. states, Ireland and

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Projected U.S.-based clinical trial spending for 2007. Business Communications Company (2003).

Singapore, even Chile, already have a big head start and continue to invest heavily and effectively. It has to be done, however, recognizing that the race will be long and arduous, and progress must be measured in small steps.

➤ II. Bring Puerto Rico's infrastructure to levels of global competitiveness. Infrastructure is a critical component of the environment in which businesses operate, and either thrive or struggle. Ports, roads, public transportation, water, power, and IT infrastructure must be upgraded and better managed to ensure that Puerto Rico can attract investment and create good jobs in the competitive global economy. Investment must be guided by a strategic plan of priority infrastructure upgrades. To reduce cost and improve services, private sector solutions must be evaluated and pursued wherever possible. For greatest impact on economic growth, infrastructure is the most effective investment for federal funds.

I. Context and Guiding Principles for Action

Puerto Rico is poised for significant growth. Its dynamic and hard-working people have performed at the top of every imaginable field - business, law, science, medicine, engineering, and entertainment. Most, though, have chosen to realize their potential on the mainland. Why?

Unquestionably, Puerto Rico needs the right environment so that all of its people can fulfill their promise. The Commonwealth of Puerto Rico simply cannot afford to continue business as usual and more of the same. The spectrum for action ranges from creating the conditions to drive growth at one end to experiencing the same sorry social and economic situation at the other end.

The letter from Senators Grassley and Baucus (attached to this document) illustrates impatience with the status quo in Washington as well as San Juan, and a demand for clear analysis to guide future policy.

The recent General Accounting Office report provides an unflinching and blunt appraisal of the Puerto Rican economy. It portrays the chronic failure of the economy to create jobs and opportunity for the people of Puerto Rico. A shocking third of workers cannot find jobs in the formal sector and more than half of all families live in poverty. Real progress has been stalled for a generation. In effect, the American dream of opportunity and a better life for most people on the island has been distorted into a virtual mirage.

The right conditions and policies are not in place. The ingenuity and energy of the Puerto Rican people are not being channeled and engaged. Local and federal policies have not supported the growth of the private sector. No meaningful progress is possible without jettisoning the antiquated government-dominated development model that has misguided policy and blinded Puerto Rico to the lessons of the 20th century, as well as the opportunities of the 21st century.

This document presents the framework for a new economic policy grounded in reality, guided by principles of competition, equal opportunity, and free markets, and redirected to the challenges and opportunities of the 21st century. It articulates an action agenda of concrete recommendations that should generate results and create the conditions for a sustained economic resurgence.

Relative stagnation

Puerto Rico is fully integrated into the most dynamic and powerful economy on the globe. Yet, even though politicians and policy makers on the whole deny it, the economy has remained immune to the factors that have changed how business is done, and indeed, what business is done. Currently \$12,900, GNP per capita has been stuck at less than a third of the mainland U.S. level for over a generation. Unemployment, now at 10.7%, has long been more than double the mainland rate. Unemployment rates even understate

how poorly the economy creates jobs for the people of Puerto Rico. The labor participation rate is only 48%, far below mainland levels of 66%. In effect, almost a third of the workforce appears to be unemployed.

Excessive Reliance on Government for Development

To a great extent, Operation Bootstrap was a success. By analyzing Puerto Rico's comparative advantage and with the help of substantial federal transfers it provided a bridge to an industrial economy. More than half a century has passed, so it should hardly be surprising that Operation Bootstrap will not succeed today. In fact, the industrial planning approach became ineffective by the 1970's. Puerto Rico faces a different, harsh global reality and it is ill prepared. Competitiveness and success flow from an effective, flexible education and training system, a fertile environment for entrepreneurs and innovation, and the infrastructure to support them. It is sad to say, but these foundations for success are largely absent in Puerto Rico today.

The people of Puerto Rico hold great reservoirs of potential, which have been largely untapped mainly because economic policies clung to the Operation Bootstrap myth. The lack of economic opportunities has meant that only 1 in 4 of those who earned Ph.D.'s in Puerto Rico have stayed. The University of Puerto Rico graduates more Hispanic engineers than any university in the U.S., but many, like Pedro Rodriguez, the director of the Space Launch Initiative at NASA, leave the island each year for opportunities on the mainland. How does Puerto Rico solve this opportunity quandary?

In the global economy of the 21^{st} century, the opportunities for Puerto Rico are great, but the consequences for failure will be far greater. States and nations compete for investment more aggressively and more directly than ever. Thus, having the right policies to meet the challenges of the 21^{st} century matters now more than ever. Failing to redirect the Puerto Rican economy to the realities of the 21^{st} century will have far more extreme negative consequences than in the more forgiving past.

Principles for change

This document presents a brief agenda for generating the private sector growth needed to drive job creation and improve living standards for Puerto Ricans. It is only a start. The challenge requires a broader, more extensive effort at reform. To succeed, economic policy must follow several guiding principles:

Only the private sector can generate enduring growth. No government can fuel sustainable growth, and no government can successfully plan such growth. Puerto Rico would do well to act on the principles of limited government and free enterprise that have built the world's most competitive economy on the mainland.

Government must be reduced, simplified, and streamlined to allow the private sector to function. The current fiscal crisis is the reckoning long overdue. Since 1980, government has grown faster and created more jobs than the private sector. Government

now employs one in three workers, more than double the average among the states. Government must provide services well and not stand in the way of private initiative.

Puerto Rico must create the environment to retain local entrepreneurs and their investments. Small business is the backbone of the powerhouse U.S. economy, creating more than two-thirds of all new jobs. In Puerto Rico, bureaucracy, red tape and taxes conspire against the entrepreneur committed to starting and growing a small business. Investors can also choose South Carolina or New York, Ireland or Chile. Why choose Puerto Rico? In fact, most have not and instead leave for what they perceive as better opportunities on the mainland and Latin America, taking their investment to create jobs and to pay taxes elsewhere. Puerto Rico must become the location of choice to attract global entrepreneurs and retain its own people.

Taxes must be fair, effective and low. Heavy tax burdens on working families in Puerto Rico are not only unfair but they discourage work. Perversely, without the federal income tax, the majority of working families in Puerto Rico face a higher federal tax burden than they would anywhere in the U.S. Further, unlike in any state, local income taxes apply to even the lowest income families.

Consumers and families must have greater choice, particularly in selecting the schools for their children. An extraordinary 1 in 4 parents pays to send their children to private school in Puerto Rico. While choice is a cornerstone of American society, parents in Puerto Rico have almost no choice in selecting their children's school, not even to choose from a selection of public schools. Millions of parents in the mainland are choosing new charter schools for their children, innovative public schools with some freedom from school rules. Available in 41 states and growing explosively, charter schools aren't allowed in Puerto Rico.

Turning principles into action

This document represents a beginning. It outlines a set of concrete recommendations that should be acted upon now, not an exhaustive set of policies that address all the obstacles to growth. It sets out specific proposals, but requires the participation of local and federal leaders and experts to develop the specific implementation policies, laws and administrative regulations. Redirecting Puerto Rico to thrive and realize its potential in the 21st century will require comprehensive and ongoing reform. Experience cautions that measurable progress comes from focused and limited action steps, however daunting the challenge. These limited recommendations are in the categories of tax reform, government reform, education and training, natural environment, disaster response, research and development, and infrastructure development.

II. Tax Reform

Puerto Rico needs a tax system worthy of its people, one which efficiently collects revenues, does not unfairly burden low and middle-income families, motivates entrepreneurs, and encourages investment and job creation. The current tax system falls far short. Few things in the realm of economic policy are more difficult than tax reform, but the proposal now under consideration is far off base. The basic reforms outlined in this document should first be implemented. Then, a radical overhaul should follow these simple principles:

- ➤ Make the system more fair Working families pay more than their fair share of taxes in Puerto Rico. Honest taxpayers who play by the rules pay higher taxes each year to support those who avoid taxes in the huge underground economy.
- ➤ Protect Puerto Rico's fiscal integrity and preserve needed government services Taxes must fairly **and** effectively mobilize needed revenues. Unless the budget is balanced, the ability of the Puerto Rico government to provide critical health, safety and education services will be compromised. Spending must be reduced.
- ➤ Make Puerto Rico more competitive and create jobs Puerto Rico must operate, at the very least, on a level playing field with the rest of the U.S., and must be competitive with alternative investment locations.
- Ensure that the tax code encourages local entrepreneurs and rewards investment in Puerto Rico.

The following recommendations embody these principles into concrete action steps. Real reform will require the articulation of a more detailed road map and the commitment to following it.

Recommendations and Rationale

> TR1. Remedy the unequal treatment and reduce the higher taxation of U.S. manufacturers in Puerto Rico under the domestic activities deduction.

Companies in Puerto Rico at least deserve to operate on the same playing field as the rest of the U.S. U.S. corporations in Puerto Rico are now at a competitive disadvantage because they are excluded from the deduction for domestic production activities. As a result, they now pay a 1% higher corporate income tax, a difference that will rise to 3% by 2010. U.S. corporations operating in Puerto Rico must be allowed to take the domestic activities deduction like any corporation in the rest of the U.S.

Mainland U.S. corporations provide valuable investment and generate needed jobs in Puerto Rico. U.S. corporations generate \$34 billion in economic activity and support about 150,000 jobs. Continued exclusion from this deduction received by all mainland-manufacturing firms puts their Puerto Rico operations at an unfair disadvantage and local jobs at risk.

> TR2. Introduce a consumption tax to mobilize revenues to replace the ineffective excise tax. Ensure fairness by providing a rebate for low-income workers. Reduce regressive local income tax rates and up the amount at which taxpayers start paying taxes to \$17,000.

A direct 7% sales tax (not a value-added tax) should be introduced to replace the existing inefficient excise tax. Difficult to administer and easy to avoid, the excise tax has proven ineffective in raising needed revenue. Combined with targeted rebates and income tax relief for low-income families, a sales tax would be fair and not regressive. It would help improve revenue collection by reducing evasion and tapping into the vast underground economy. Increased sales tax revenues must first be used to cut individual income taxes and then to cut the budget deficit - not to fuel further excessive government growth.

The 7% sales tax would immediately generate an estimated \$1.78 billion in additional revenues. See table 2 below. New sales tax revenues of \$2.50 billion added to existing excise tax revenues on alcohol, tobacco, and cars of \$992 million would have brought in \$3.50 billion in 2004, or \$1.78 billion more than the current \$1.72 billion generated by all existing excise taxes.

Table 2. Projected sales tax revenues

	Current general excise tax revenue	Other excise	Total current excise revenue	revenue	•	New total revenue	Increased revenue	Rebate to low income families	Increase over curre revenues net of reba
5%	\$535	\$1,182	\$1,717	\$1,788	\$992	\$2,780	\$1,063	\$638	\$425
6%	\$535	\$1,182	\$1,717	\$2,145	\$992	\$3,137	\$1,420	\$765	\$655
7%	\$535	\$1,182	\$1,717	\$2,503	\$992	\$3,495	\$1,778	\$893	\$885
8%	\$535	\$1,182	\$1,717	\$2,861	\$992	\$3,853	\$2,136	\$1,020	\$1,116
9%	\$535	\$1,182	\$1,717	\$3,218	\$992	\$4,210	\$2,493	\$1,148	\$1,346
10%	\$535	\$1,182	\$1,717	\$3,576	\$992	\$4,568	\$2,851	\$1,275	\$1,576

After tax rebates to low-income families of \$893 billion, the 7% sales tax would bring in an extra \$885 million. Monthly rebates would make a simple, broad-based sales tax more equitable and increase the retail tax base. Thus, a sales tax of 7% could generate over \$885 million in additional revenue, provide a rebate to protect low-income households, and create savings enough to eliminate all income taxes for low-income workers and reduce the income tax rate for high earners.

Increased sales tax revenues would come from expanding the base of taxable goods and services, simplifying collection, and changing the tax rate. Roughly 41% of the additional \$2.50 billion in revenues from extending a 7% sales tax are accounted for by

the existing coverage of the general excise tax.³ The remaining 59% of the new revenues are accounted for by the wider coverage of the sales tax, as the tax is applied to a larger spending base.

Eliminating individual income tax on income below \$17,000 and reducing the top tax bracket from 33% to 28% would put an additional \$1 billion in the pockets of Puerto Rico's consumers. Eliminating the 6% tax rate on the first \$2,000 of taxable income and the 9% tax rate on the next \$15,000 would reduce revenues by about \$870 million. Reducing the tax rate on taxable income over \$50,000 to 28% would cost about \$161 million, reducing the \$1.78 billion increased revenue from the sales tax by roughly \$1 billion.

The \$17,000 floor and the 28% maximum rates should only mark the beginning. Practicing fiscal conservatism, the floor should be raised by \$1,000 and the maximum rate reduced by 1% annually, so that in 5 years time one will have to earn over \$22,000 to pay any income taxes while the maximum rate will drop to 23%.

> TR3. U.S. citizens in Puerto Rico should be made eligible for the federal Earned Income Tax Credit (EITC) and Child Tax Credit (CTC).

Earned income tax credit. Making U.S. citizens in Puerto Rico eligible would immediately reduce the tax burden on working families. It would also create a direct annual fiscal stimulus of \$1.1 billion to the Puerto Rico economy and put money in the pockets of families who need it and will spend it. The average refund would have been \$1,155 for 2005. To help stimulate the economy, it would be far more effective than ordinary federal programs. Unlike corporate welfare that mostly benefits a few large corporations, the EITC would directly benefit almost all of Puerto Rico's taxpayers (about 950,000) and their families. Unlike some other government programs, the EITC only gives tax relief to working families.

It is both shocking and practically unknown that low-income workers in Puerto Rico pay higher federal taxes than they would anywhere else in the United States. This regressive discrimination is the perverse effect of local U.S. citizens paying payroll taxes for Social Security and Medicare, but not federal income taxes, which include the refundable earned income tax credit (EITC) for low-income workers. On an island where a majority of families struggle to make ends meet below the poverty line, payroll taxes make a real difference. Each year, workers in Puerto Rico pay over \$3 billion in Social Security and Medicare taxes.⁴

This stark example of the difference illustrates the situation. A Puerto Rican on the island who files as a head of household with two children and earns \$20,000 in income

State Statistics for December 2003, Puerto Rico. Social Security Administration. www.socialsecurity.gov/policy. This 2002 figure includes both employer and employee contributions.

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General excise tax revenues of \$535 million plus other excise taxes also not retained, including \$189.3 in other special excise taxes, (applied at different rates) for a total of \$725 million.

has a total Federal tax liability of \$792. Yet that filer's brother in New York with the same income and family circumstances would receive a tax refund of \$3,708.

The impact of eligibility for these credits would be dramatic. After generations of stalled economic growth, incomes and wages are low for most families. Extending the EITC would benefit about 9 out of 10 taxpayers or 955,000 working families and provide an average payment of \$1,155. Almost all working families now earning less than \$30,000 would receive some payment under the EITC to help offset their payroll taxes.

The EITC would deliver \$1.1 billion in annual tax relief. Unlike the historic corporate welfare, which benefited Fortune 500 companies and their shareholders, refunds under the earned income tax credit go directly to working families who most need tax relief. Again, all of the tax relief would benefit families making less than \$30,000, who would otherwise pay more in taxes than they would elsewhere in the U.S. Sixty-eight percent of payments would go to families making less than \$15,000 and almost all (94%) payments would go to families making less than \$25,000.

Table 3 below illustrates the projected number of taxpayers eligible for the EITC in Puerto Rico and the maximum credit available for each income class.

Table 3. Earned Income Tax Credit by Income

Income	Estimated U.S.		Maximum EIC		
	Returns Filed By				
	Puerto Ricans Single and Head Married		Single and Head Married		
	of Household	1,1011100	of Household	11200111001	
Less than \$5,000	332,829	202,541	\$503	\$670	
\$5,000 to \$10,000	93,201	69,770	\$782	\$1,908	
\$10,000 to \$15,000	38,117	59,047	\$2,429	\$3,206	
\$15,000 to \$20,000	14,014	38,034	\$2,781	\$3,129	
\$20,000 to \$25,000	10,359	34,931	\$1,881	\$2,190	
\$25,000 to \$30,000	4,515	26,252	\$1,001	\$1,263	
\$30,000 to \$35,000	2,621	20,866	\$363	\$576	
Total	495,657	451,441	_	_	

As an economic stimulus to Puerto Rico, the EITC would be far more efficient and targeted than ordinary federal programs. Models of the Puerto Rican economy find that the EITC would have a 30-40% greater impact on GNP, the measure of economic growth that reflects benefits to local workers and business owners.

The EITC rewards work and increases labor participation, particularly for single parents supporting children. The EITC was accountable for at least half of the substantial increase in employment of single mothers in the 50 states and the District of Columbia from 1984 to 1996. By encouraging work and reducing tax burdens, the EITC is one of the most effective tools in reducing poverty. In 2003, the EITC helped lift 4.4 million people out of poverty, including 2.4 million children. By promoting work, the EITC also discourages welfare. Analysis found that expansions in the EITC from 1993 to 1996 helped over a half million families move off welfare. This powerful and effective tool for encouraging work and reducing poverty must be available in Puerto Rico as it is throughout the United States.

Child tax credit. In Puerto Rico, only families with three or more children are now eligible for the child tax credit (CTC), which provides a federal tax credit of \$1,000 per child. The credit is refundable to the extent that taxpayers' payroll taxes exceed their refunded earned income tax credit. Families with one or two dependent children who would be eligible for tax relief in the rest of the U.S. are excluded from benefiting from the credit in Puerto Rico.

What would be the impact? Eligibility under the CTC in addition to the EITC would expand the child credit to all eligible families and provide additional tax relief from payroll taxes. About 32% of taxpayers would get tax relief if the CTC were expanded to include the 500,000 working families with one or two children in Puerto Rico.

> TR4. Designate Puerto Rico as a "national enterprise zone" along with other high poverty areas in a renewed national enterprise zone program.

As an enterprise zone, Puerto Rico would attract and retain mainland investors with reduced tax rates favorable to current levels available under controlled foreign corporation (CFC) status. Legislation should ensure that reduced tax treatment only applies to the active conduct of business which helps develop the Puerto Rican economy. National enterprise zones would help attract investment and generate jobs in high poverty areas across the country. Eligibility for zone status should be a poverty rate at least twice the national average, a median household income less than 60 percent of the national median, and an unemployment rate two and a half times the national average.

III. Government Reform

Government has a valued role in delivering needed public services in Puerto Rico. Many dedicated civil servants teach children, ensure public safety, and protect public health, yet there is a need for reform. Why? Reform must ensure that excellence and efficiency in public service are recognized and rewarded, and that the people of Puerto Rico receive the services they deserve. Reform is needed to contend with an uncontestable reality: government spending is now so excessive as to be unaffordable and unproductive. Ineffective tax policies, out of control spending, and a massive budget deficit have put critical public services and government borrowing for needed investments at risk. In terms of employment, the Commonwealth government is twice the size of the average state. Despite a dedicated civil service, the excessively large government now inhibits private sector growth and stymies job creation.

Disciplined action is needed that will:

- ➤ Make government more accountable, efficient, and responsive to the people of Puerto Rico;
- ➤ Preserve the delivery of needed services by limiting government to a size the people of Puerto Rico can afford;
- Ensure that government does not stand in the way of private sector growth and job creation.

A fiscal crisis and economic stagnation are the unfortunate legacy facing Puerto Rico. The future will judge its leaders on how they respond. Fortunately, the imperative could not be clearer: reduce and redirect government to support and create room for the private sector and shore up essential social infrastructure such as public education and health care. While the challenge is immense, the opportunity is larger. Action will help create the conditions in which the private sector can create more and better jobs for the people of Puerto Rico and ensure the delivery of critical public services.

This document presents two immediate action steps for reducing and redirecting government, which must be implemented in tandem with a tax overhaul and larger economic reform. Savings must be directed to investments in the future.

Recommendations and Rationale

> GR1. Agencies reviewing permits for new construction and expanding facilities must give a decision or automatically approve a project within 3 months.

Any entrepreneur trying to start or expand a business in Puerto Rico knows that permits can readily be held up for 6 to 12 months. The same process would typically take a few days in Singapore and Ireland. Businesses get mired in a maze of bureaucracy with multiple government agencies. Numerous little regulations accumulate to seriously delay

projects. For example, the Health Department must examine the bathrooms in any facility receiving state funding, but lack of inspectors means that final use permits can be held up for months.

The effect is clear and detrimental. Businesses are delayed in opening, expanding and hiring new workers. Persistent impediments to the review of permits for new construction and expansion projects not only hold up projects, but also discourage businesses from investing at all. In a global economy of many investment options and rapidly changing market conditions, slow permitting puts Puerto Rico at a very substantial competitive disadvantage.

Few commentators would disagree that permitting has been a serious obstacle to growth. Previous efforts at reform have come up short.

➤ GR2. Reduce the size of government through a hiring freeze while ensuring that needed services, particularly education, are provided.

Present government spending and employment are simply unaffordable for taxpayers and inimical to private sector job creation. Government should be reduced through an immediate hiring freeze and natural attrition that would reduce employment by at least 6% over 3 years.

Certain narrow exemptions must clearly be allowed to ensure delivery of critical services and protect public health, safety and welfare. For example, teachers and professionals providing direct instructional services must not be affected. A process should be established through which such exemptions would be approved, while ensuring the cost savings and reductions necessary to balance the budget and make government affordable to the taxpayers of Puerto Rico.

IV. Education and Training

Puerto Rico has a highly educated population. By comparison with many states, which have substantially higher per capita income, Puerto Rico measures up fairly well in terms of years of schooling of the population. When judged within the context of Latin America and the Caribbean, Puerto Rico's accomplishments in education are especially impressive.

It is widely recognized, however, that there are serious quality problems in the Puerto Rican public schools; drop out rates are high and, in general, on standardized tests Puerto Rican students do not compare well with students in the states. In response to the problems in the public schools, an extremely large share of the population has opted out of the public school system. More than 25% of Puerto Rican K-12 students are in private schools, a far greater percentage than in any of the states. Not only does this high rate of private school attendance indicate parents' negative judgment about the quality of Puerto Rico's public schools; it also places a severe financial burden on many families.

The quality of schools is important in preparing people for fulfilling and productive lives and for establishing the bases for an effective democracy. The quality of the schools is also important for the health of the economy. If Puerto Rico is to maintain itself in the increasingly competitive global economy, major and continual improvements in education and training will be necessary.

There are numerous steps that should be taken to improve the education of Puerto Rican children, particular programs ranging from the extension of early childhood education to the introduction of peer tutoring projects in the high schools. Some of these will be noted below. However, the proposals offered here, while concrete, are designed to provide a general foundation for improvement of the schools.

Recommendations and Rationale

➤ *E&T1*. Puerto Rico must give parents more choice within the public schools.

The first, broadest and most dramatic of these proposals is for the introduction of choice in the public schools. The arguments for providing parents with a choice as to which schools their children will attend are well established. Choice, in itself, is a basic value of the American polity, and, in the same way that it serves us well in the political and economic realms, it will serve well in the educational realm as well. Choice allows parents to remove their children from schools were they are not learning – and, indeed, in the worst cases, where they are even in physical danger – and place them in schools with a more positive educational environment. As the schools that parents judge to be of high-quality gain enrollment, others will be forced to follow their methods. Poor-quality schools will be forced to either improve or be shut down. Analogous to the way that choice works in the marketplace to improve the goods and services we buy, choice can improve the education that our children receive.

In addition, one of the great advantages of a choice system is that it creates a strong incentive for parents to become more knowledgeable about and engaged in their children's schools. It is widely recognized that parental involvement is one of the keys to school improvement.

Choice in the schools is, however, a controversial issue. Opponents often argue, for example, that a choice program that includes the private school option fails to address insufficient funding of the public system and to attack directly the shortcomings of the public schools. The greatest controversy in the states surrounding the issue of school choice has been with regard to using public funds to pay for students to attend private schools. In Puerto Rico, in fact, the courts have ruled that choice systems that would involve private schools and that would therefore channel public funds to private schools are not permissible.

The court rulings and the various arguments against a school choice system that would involve private schools, however, should not prevent the adoption of a choice system within the public schools. Charter schools are one means, widely implemented in the states, for the creation of choice within the public schools. Also, other programs of choice within the public schools have been developed in various states. These other programs involve the creation of magnet schools, pilot schools, and open enrollment within a school district. Public school choice has generally been implemented with minimal controversy, and can often engage the teachers unions as positive participants.

E&T2. Parents should have the choice to select Spanish-English bilingual schools for their children.

The second proposal offered here is part of the creation of a general choice system in the public schools. It calls for the creation of bilingual Spanish-English schools to which parents could choose to send their children. The importance of linguistic ability, and knowledge of English in particular, has become increasingly important in economic life. Within Puerto Rico, individuals who are fluent in English as well as in Spanish can earn incomes 25 to 30 percent higher than those who speak only Spanish. Beyond individual gains, a workforce with knowledge of English as well as Spanish is essential for Puerto Rico's economic well being: as a basis for the island to serve as a business-bridge between the states and Latin America; in order to make the island an attractive tourist destination for especially U.S. but also European residents; and to engage Puerto Rico with the advances in information technology and biotechnology.

At the same time, Puerto Ricans care about their cultural heritage, and the Spanish language is at the core of that heritage. There has, understandably, been strong resistance to past efforts to make English the medium of instruction in the island's schools. The establishment of bilingual public schools that parents can choose for their children creates the opportunity both for individuals and for the population as a whole to develop English capability. Yet it does not impose English, and it does not undermine the maintenance of the Puerto Rico's cultural heritage.

E&T3. Puerto Rico must establish a training-for-investment program and support a flexible training infrastructure to help prepare its people for the jobs of the 21st century.

In addition to these proposals for introducing choice in the public K through 12 schools – both general choice and choice of bilingual schools, two additional proposals are offered here that have direct relevance to the training and education of adults. The first of these proposals calls for the establishment of a training-for-investment program. The Puerto Rican government would pay for the training of workers to meet the specific needs of new businesses, thus providing an incentive for the establishment of those businesses. Such programs, which have existed in several states (the Georgia "Quick Start" program, for example), have advantages over other forms of investment incentives such as tax holidays. They are directly focused on job creation, and, even if the firm leaves Puerto Rico or goes out of business, workers still have the skills in which they were trained.

E&T4. All Puerto Ricans should have the opportunities to improve their skills through life-long learning.

The rapidly changing nature of technology and of jobs in today's economy makes it necessary that people be able to continually upgrade their skills throughout their lives. Thus the final proposal offered here is that opportunities be created for Puerto Ricans to improve their skills through life-long learning. Information technology provides an obvious example where adults, who went through schools before computers were taken for granted, must be trained in new techniques. However, the need for adult education is much broader. For example, the expansion of the tourism industry will require workers who have specific knowledge of the island's history, geography and culture, *and* who are fluent in English. The government can support life-long learning through a combination of directly sponsoring adult education programs and providing tax incentives to individuals who must finance their own retraining.

Further Discussion

The problems with Puerto Rico's public schools, as we have noted, are widely recognized. Unfortunately, however, there is a lack of direct measures of the achievements of students in the Puerto Rican schools that would facilitate an appraisal of the schools. While the results of standardized tests are an incomplete indication of the educational accomplishments of students and of the schools, they provide a starting point. Yet there is very limited systematic testing of Puerto Rican students that would allow comparison of their achievements with the achievements of students in the states. There was an initial administration in Puerto Rico of the National Assessment of Educational Performance (NAEP) tests in 2003, but only the mathematics part of the test was used; in any case, the results were never made available. The NAEP was administered again in Puerto Rico in 2005, but results have not yet been made available.

Regular assessment of students and of the schools is an essential component in any efforts to improve the schools. The lack of regular testing in a way that would allow comparisons over time and comparisons with the states is a serious deficiency and needs to be addressed by the Puerto Rican Department of Education.

Yet there are indirect means by which to assess the Puerto Rican public schools. The extent to which Puerto Rican parents choose private schools for their children, in spite of the expense involved, has already been noted. Not only is the rate of private school attendance very high, but it has also been increasing in recent decades. In 1980, only about 12 percent of Puerto Rican children attended private schools, a figure in line with the average for the United States. By 1990, the figure had risen to 18.3 percent, then to 24.4 percent in 2000 and to 26.9 percent in 2004. (Overall pre-college school enrollment during this period has remained stable at about 800 thousand.)⁵

Also, the condition of the Puerto Rican public schools is indicated by the high dropout rate. Available data have many problems, but it is clear that Puerto Rico has a serious dropout problem. Moreover, unlike in the states, a high number of Puerto Rican children leave the public schools even before high school. Somewhere between 25 and 35 percent of public school sixth graders in Puerto Rico drop out before completing high school. Although dropout rates have declined in recent years and some individual states have dropout records as poor as that of Puerto Rico, the figures reflect very poorly on the situation in Puerto Rico. The high dropout rate shows, quite simply, that things are not working.

There is no single answer to the question of why things are not working in the Puerto Rican public schools. Some critics have suggested that the quality of teachers is a problem and that the salaries in the public schools are too low to attract and retain high quality teachers and high quality administrators. In the states, teachers' salaries are about 130 percent of the average person's salary, but in Puerto Rico teachers' salaries are only about 112 percent of the average. For school administrators the difference is more dramatic: school administrators' salaries in the states are over 200 percent of the average salary, while in Puerto Rico they are less than 150 percent of the average. By this measure, school salaries in Puerto Rico are low within the Puerto Rican context. Yet the schools do not operate simply with "the Puerto Rican context." The Puerto Rican labor market is interconnected with the larger U.S. labor market. Reports of Puerto Rican teachers being hired by schools systems in the states – for example, in New York – underscore the problem.

Questions about the bureaucratic organization of Puerto Rico's public schools system have also been raised as part of the explanation of quality problems. All of Puerto Rico's public schools are organized in one district; among the states, only Hawaii, with a population about one-third of Puerto Rico's, organizes its public schools in a single district. Only the New York City school district and the Los Angeles Unified school district have more students under their jurisdiction than does the Puerto Rican Department of Education. Large school districts have inherent difficulties and are often

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⁵ The data are from Statistical Abstract of the United States 2006, Table 1302, page 846.

run in a bureaucratic manner that makes it difficult to deal with problems in individual schools. Large systems can be slow to adjust and can have difficulty with the experimentation necessary to find effective methods of improvement. Also, large school districts (and large schools) are not conducive to parent participation.

Puerto Rico has made efforts to deal with the problems that arise in such a large school district. Earlier school reforms have introduced "community schools" as a means to establish "local control," to engage both parents and other members of local community in the operation of the schools. These reforms, however, appear to have been neither extensive nor substantively meaningful.

Concerns about the quality of teachers and the level of their salaries and about bureaucracy and the need for local control are well founded. These are real issues in Puerto Rico. There is, however, no automatic link between more money for the schools – whether directed towards salaries or other uses – and school improvements. Likewise, redesigning the organizational charts of the school system and formally placing more control at the local level does not automatically curtail bureaucracy or necessarily lead to improved performance. Systems of accountability are needed.

A system of choice can be the foundation for accountability and improvement. Choice, allowing families to opt out of schools that are not meeting their needs, provides the most direct means to identify well performing and badly performing schools. Moreover, choice creates the pressure for schools to improve because they no longer have a captive clientele.

Choice provides a foundation for more specific improvements in the schools. It can lead, for example, to the development of schools that focus on science and technology, and through such focused programs it can contribute to the economic progress and personal well-being. While such specific developments are outside the scope of the proposals presented here, there is one area in which we recommend focused action – namely in the development of bilingual programs where students can study in both Spanish and English. The proposal offered here of providing bilingual schools in the context of public schools choice is designed to both provide opportunities and avoid controversy.

There is no doubt about the material advantages that come to those Puerto Ricans who are fluent in both Spanish and English. Indeed, the advantage of English fluency in today's world is well recognized elsewhere in Latin America, Europe and other parts of the world, among peoples who have a much looser connection than do Puerto Ricans to the U.S. economy. Puerto Ricans themselves of course recognize the gains that come with English fluency. Yet the public schools now do not provide adequate instruction in English. This, no doubt, is one of the reasons that so many families send their children to private schools. It is imperative that effective learning of English be an option for all Puerto Ricans.

By creating this option through a choice of bilingual schools, however, the proposal offered here does not do more than create an opportunity for those who want it. It does

not impose English. Moreover, bilingual schools do not abandon Spanish. The problems and controversy over English in the schools should not arise.

While the public schools – teaching the standard curriculum, offering bilingual programs, or offering emphases, such as science and technology – lay the ground work for economic and social progress, much more is needed. On the one hand, it is increasingly recognized that the schools can only do their job effectively when children enter school ready to learn. Thus many educators are increasingly advocating the development of universal pre-kindergarten programs. On the other hand, work in the modern economy requires the more extensive schooling and greater specialization that become available at the university level. Also, within the schools there are many programs that should be adopted to improve the quality of education. Peer tutoring programs, for example, appear to be an especially cost-effective method of improving student performance. In addition, there are extensive needs for continued training for teachers, so they can keep up with the rapid changes that affect their pedagogy. As indicated above, however, the purpose here is not to provide a universal set of proposals, either about education or the economy. Much more needs to be done.

The proposals offered here, however, do focus on one additional issue, that of training. While the formal education of schools creates a foundation, actual work requires many specific skills that are not developed in the schools. Furthermore, many adult Puerto Ricans have not had all the opportunities that exist in today's schools, and they can make good use of general as well as specific training.

And the availability of well-trained workers provides incentives for firms to invest. Puerto Rico has a well-established history of providing special incentives to encourage entrepreneurs to establish their businesses and expand the economy. General tax incentives have been extensive, and these were effective in certain stages of Puerto Rico's economic development. Today, however, more focused incentives are needed if Puerto Rico is to compete effectively in the highly competitive global economy. Elsewhere in this document, focused incentives are put forward to encourage the expansion of research and development. Here the emphasis is on the incentive provided by a more extensively trained workforce.

It is useful that the training incentive be both specific and general. A training-for-jobs program would provide the specific incentive. Virtually all of the states have some programs that provide specific training for firms investing in their states. The basic idea is simple: state agencies work with prospective investing firms to determine the way to meet their workforce needs, then the agency either finances the needed training or directly provides the training, often through community colleges or technical schools. Such programs reduce firms' costs in the same way that a tax incentive reduces their costs. However, a training-for-jobs program has the great advantage that it is directly tied to expansion of jobs. Moreover, it is directly tied to expansion of relatively skilled jobs —

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⁶ A 2001 summary of such programs is available at http://www.georgiaquickstart.org/quickstart/workforce/workforcechart.html

thus the need for the training. Furthermore, while the investing firms gain the workforce they need, Puerto Rican workers also gain. They gain skills and the higher pay that goes with those skills. Also, few skills that require significant training are so specific that they limit the work to one very specific job, and even the training for very specific skills enhances workers' general skill of learning how to learn. Consequently, many of the gains from a training-for-investment program are not dependent on a particular firm, because the skills remain embodied in the Puerto Rican worker.⁷

The general incentive for training proposed here is a combination of government sponsored adult education programs and tax incentives that would aid individuals in financing their own training. Individuals should have the opportunity to acquire the skills to participate in the 21st century marketplace. The potential for abuse within such programs must be recognized and must be minimized through strict monitoring. However, the threat of abuse should not stand in the way of the immediate implementation market-oriented self-improvement programs.

For Puerto Rico the improvement in the education system could be ranked as the infrastructure investment deserving the highest priority. Bureaucracy and institutional rigidity impede growth in all sectors, including, of course, the private sector. In education it would appear possible in the short term to leapfrog over many of the problems that currently prevail.

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⁷ While training-for-investment programs or, as they are sometimes called, training-for-jobs programs have been implemented in several states, in one case – Texas' "Smart Jobs" – the program collapsed due to an accounting scandal. While the Texas experience does not contradict the positive potential of such programs, it does serve as a reminder of the problems that can arise with any government project, a reminder of the need for safeguards against corruption and against over-reliance on government programs.

V. Disaster Preparedness

Hurricane Katrina's impact on the U.S. Gulf Coast clearly demonstrated the consequences of inadequate preparedness for large-scale natural disaster. As a Caribbean island in the path of hurricanes and tropical storms, Puerto Rico is particularly exposed and vulnerable. A Katrina-level storm would be devastating. No economic strategy would be complete without ensuring that there is a coherent and world-class plan in place to protect the people and economy of Puerto Rico from natural disaster. A thorough review and revision of Puerto Rico's disaster preparedness plan must be conducted before the start of the next hurricane season.

Recommendations and Rationale

In the annual hurricane season, tropical storms and hurricanes inflict regular damage in Puerto Rico. Over 39 hurricanes have passed within several miles of the island in the past 150 years. Category 1 and 2 storms strike with regularity. The last category 4 or 5 storm struck in 1928, when Puerto Rico was far less populous and developed. Puerto Rico is now more densely populated than any state but New Jersey. Scientists also warn that Puerto Rico is at risk of a massive tsunami caused by an earthquake along the Caribbean tectonic plate boundary. Six tsunamis have struck the Caribbean since historical records began with the arrival of Columbus.

Today, a Katrina-scale natural disaster could lead to catastrophic loss of life and lasting economic devastation in Puerto Rico. An unmitigated natural disaster would also damage the U.S. economy and burden U.S. taxpayers. As a highly integrated part of the U.S. economy, Puerto Rico purchases over \$16 billion of U.S. mainland goods and services and supports over 274,000 mainland jobs. U.S. corporations have billions invested in over 2,400 manufacturing facilities. Pharmaceutical firms alone invested \$2.5 billion from 1987 to 2002. The U.S. health system relies on Puerto Rico production facilities for more than 75% of its drugs. Puerto Rico serves as a strategic transportation and commerce center between the mainland and Latin America and the Caribbean. As disaster relief falls jointly on the local and federal governments, the costs of a natural disaster would also burden both levels of government. Effective preparedness will save both governments money and reduce the harm to the mainland economy.

DP1. Puerto Rico must have a disaster preparedness plan that meets and even exceeds the high standards of Florida, to save lives and protect the economy in the event of a Katrina-level disaster and to handle more effectively the" typical" hurricane devastation.

With people and assets uniquely vulnerable to disaster, Puerto Rico must engage in a comprehensive review of its disaster prevention and preparedness plan to ensure that it meets and exceeds standards set by leading states like Florida and more vulnerable

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A category 5 storm delivers sustained winds of over 155 miles per hour. Hurricane Hugo was briefly a category 5 storm after hitting Puerto Rico in 1989, although a category 3 – 4 storm when it hit the eastern part of the island.

international locations. As Katrina fades out of public memory, its powerful lessons must not be lost on Puerto Rico.

Katrina provides the opportunity and creates the imperative for a full review to discover holes in the current plan, identify critical needed investments, and mobilize local and federal funding. Local experts have already upgraded and improved Puerto Rico's emergency response procedures in response to Hurricane Georges. That said, local experts must engage with global experts versed in coordinated disaster mitigation and response as the new plan is developed.

The updated plan must address critical areas where Puerto Rico may be at risk and could do more to mitigate the effects of disaster or better prepare to respond in the event of disaster. Not intended to be exhaustive, these recommendations merely identify areas of concern that local and federal officials should address. Minimizing the loss of life and economic impact of a major storm will require systematic and cost-effective efforts to mitigate the impact of a major storm and ensure preparedness.

- ➤ Ensure reliable communications for first-responders Katrina illustrated that a major storm can destroy communications capabilities critical for emergency first-responders. Puerto Rico's police, firefighters, civil defense and other professionals must have a reliable communications system.
- ➤ Environmental shoreline protections The destruction of coastal marshland and removal of sand made the impact of Katrina more severe. Protecting coastline will help mitigate the impact of hurricanes and minimize the storm surge on low-lying areas.
- ➤ Protect critical infrastructure Hurricane Georges in 1998 knocked out power for 96% of the island. Even Tropical Storm Jeanne reduced power output to 13% of capacity. Are power generation and the distribution network adequately protected from a Katrina-sized hurricane? Are sufficient alternative power sources available? PREPA has been upgrading the infrastructure, but more clearly needs to be done. The concentration of power facilities in southern Puerto Rico requires lengthy and vulnerable power lines across the island to the more populous north. Greater dispersion of power generation across the island to more hurricane-safe locations will help limit this vulnerability.
- ➤ Ensure availability of safe, sanitary and accessible temporary housing After Hurricane Hugo, many schools served as temporary housing so long as to keep students from learning. An effective plan needs to ensure that people have safe housing, and the lives of students and their families are not disrupted. States like Florida have been preparing special needs facilities to shelter and protect the frail, elderly and sick. Has Puerto Rico adequately prepared to protect its most vulnerable citizens?

Given the danger that each new hurricane season brings, delay could be truly disastrous. It is critical that a full review of the existing disaster preparedness plan be conducted before any limitations can harm the people and economy of Puerto Rico.

VI. Natural Environment

The natural environment – the air, water, and soil, the flora and the fauna that surround us – is the basis on which people thrive, in Puerto Rico and everywhere else. Puerto Rico must pursue economic development and it must do so in a way that is environmentally sustainable. The island has a population density greater than forty-nine states (every one except New Jersey), and suffers from problems of water quality, air quality, urban congestion, and waste disposal. With a semi-tropical and fragile ecosystem, Puerto Rico's environmental problems can take on an especially severe character.

Moreover, Puerto Rico's environment is one of its greatest economic assets. The climate, scenery and beaches make the island an especially attractive place to both live and vacation. This reality underscores the interdependence between economic development and environmental well-being.

The danger of environmental problems, however, is not a justification for blocking economic progress. There is, in particular, no need for excessively bureaucratic regulations that, in the name of environmental protection, stymie economic growth. Environmentally sustainable economic development is not only possible but essential, and the proposals offered serve that goal.

Recommendations and Rationale

➤ E1. The social conflicts that arise and pit economic development against environmental concerns must be reduced.

The proposals are intended, first, to reduce the harmful social disputes that place economic development in conflict with environmental preservation and, in reality, provide neither economic nor environmental well-being for the people of Puerto Rico.

- The reduction of delays in environment-related permitting, through establishing time limits for granting or denying with reason the relevant permits; when a permit is not granted or denied within the time limit, it will be automatically granted.
- The establishment of improved procedures for community and expert input on environmental impact studies and on decisions affecting environment-related regulations. The procedures must have clear rules and time limits.
- The implementation of a mediation program to handle disputes, reducing strains on the court system, lowering the excessive legal costs for the parties involved, and speeding up the resolution of disputes.

➤ E2. Market mechanisms should be used to reduce demands on natural resources, to provide incentives to the private sector to engage in behaviors less damaging to the environment, and to raise funds for public investment to preserve and repair the natural environment.

Second, the proposals provide for a market approach to many environmental issues, using market mechanisms to reduce demands on natural resources, to provide incentives to the private sector to engage in behaviors less damaging to the environment, and to raise funds for public investment to preserve and repair the natural environment.

➤ E3. The Puerto Rican government should support the development of ecotourism

Third, the proposals urge the government to provide specific support for ecotourism, a means to tie together the advancement of economic and environmental well-being.

Puerto Rico already faces severe environmental pressures. With only 3,435 square miles of territory, the island's population density is more than 1,100 people per square mile, far greater than the average state and greater than any individual state except New Jersey. As a result, Puerto Rico must contend with all the environmental manifestations of an urbanized industrial society: severe problems in treating and disposing of large quantities of liquid and solid wastes, threatening both fresh water supplies and the quality of beaches; a high level of energy use and high energy-related emissions per square mile; a high density of motor vehicles, traffic congestion, and vehicular emissions; heavy demands of fresh water supplies; and strong developmental pressures on remaining natural ecosystems in what was originally a highly species-rich tropical island. (Illustrating the impact of population density and economic change on the environment, for the United States as a whole there is less than one endangered species per square mile, but in Puerto Rico there are 21 endangered species per square mile.)

One of Puerto Rico's most severe environmental problems, threatening long-run economic development as well as the immediate well being of the population, is water quality. Considering only those portions of streams that are sufficiently monitored to permit an assessment of their status, 77.6%, more than three-quarters, are impaired. This is almost twice the level in the mainland states. By far the most prevalent pollutant problem is an unacceptably high concentration of fecal coliform bacteria. The source of the fecal coliform pollution in rivers and streams is human and animal wastes, due to inadequate collection and treatment. This pollution of the island's streams also threatens the attractiveness of the beaches, as the streams dump their polluted waters into the surrounding ocean.

The problems presented by Puerto Rico's water quality are good examples of what can be accomplished by the proposals presented in this document. To begin with, the problem itself represents a failure of the permitting process. While environmentalists and developers battle over the issuing of permits for new construction, unplanned and unregulated housing construction probably accounts for more than half of new building.

On the one hand, the current situation demands that all housing – not just that undertaken by large developers – be regulated for its environmental impacts. On the other hand, the situation requires that the permitting process be reasonable and rapid so that legitimate development can take place, relieving the pressure for avoidance of the regulations. The first proposal offered here is intended to reform the permitting process in a way that will address these issues.

Reform of the permitting process alone, however, is insufficient to deal with the water quality problems generated by population growth and economic development on the island. Adequate public sewage and water facilities are also part of the solution, and adequate facilities are expensive. Market-based steps – the second proposal presented here – offer an option. A substantial increase in water and sewerage charges could be implemented, with the resulting increased revenues pledged to service revenue bonds that the Puerto Rico Aqueduct and Sewer Authority (PRASA) could issue to finance an investment program. Higher fees would, first, provide incentives to conserve on water usage and, second, would provide the funds to repair existing deficiencies and prevent future problems. Moreover, creating a larger investment capacity in this way would ensure that PRASA would have the matching funds to make full use of potentially available federal resources through the State Revolving Loan Fund Program.

Similar market-based opportunities exist for formulating approaches to other aspects of Puerto Rico's environmental problems. Air pollution in central San Juan, for example, can be dealt with in part by higher parking fees, with revenues devoted to improvements in public transportation and traffic flow controls. Also, several cities (e.g., London and Oslo) have adopted systems requiring vehicles to pay a fee to enter the inner city, using in-vehicle transponders and in-road readers like those widely used in automatic tollgates. Since Old San Juan has only a handful of entry roads, it is a good candidate for such a system.

Ultimately, air quality issues will depend in part on the development of a more extensive and effective public transport system. While such mechanisms as the higher parking fees mentioned above can contribute to the cost of public transport, greater investment of public funds will also be necessary. The externalities (spill-over effects) of public transport make it a category of economic activity that cannot be handled simply within a market framework. Moreover, the development of public transport requires a long gestation period. It is an area that will require special attention.

The third proposal offered here not only offers protection for Puerto Rico's natural environment, but also emphasizes that the environment should be treated as an asset in the island's economic development. The options for tourism in general are extensive. With the island's climate and beaches providing a marvelous attraction and with the Puerto Rican government providing necessary infrastructure and programs for development of the workforce, traditional tourism in Puerto Rico can be an engine of economic growth. As a territory of the United States, Puerto Rico has a natural advantage over competing tourist sites in the Caribbean, and steps should already be underway to exploit this advantage.

The specifics of the proposal offered here, however, focus on ecotourism. Numerous sites offer opportunities for ecotourism – not only El Yunque but also, for example, the numerous state forests (e.g., Boqueron, Maricao, Guaniquilla), the caves, reefs and small islands (Mona, in particular), all offer opportunities. (The Sierra Club already offers ecotourism trips to Puerto Rico, the proximate one planned for March of this year.) For entrepreneurs to take full advantage of Puerto Rico's tourism potential, however, government action is required. Foremost, the government must ensure the quality of the island's natural environment, the foundation for tourism's success. For tourism, a good business environment is based on a good natural environment. In addition, the Puerto Rican government needs to invest in the infrastructure for tourism (such as the visitors' center at El Yunque). Following other proposals offered here for supporting local business generally, the government should focus on training-for-investment and on reform of the permitting process for the development of the tourism industry.

VII. Research and development

Puerto Rico's woeful underinvestment in research and development (R&D) – by industry and universities – is a root cause of its economic underperformance and a dangerous disadvantage in the 21st century. In today's knowledge-based economy, businesses depend upon continuous innovation to compete and grow. R&D has become vital for economic development.

The challenge is monumental: Puerto Rico is far behind and must effectively invest \$1.7 billion more in R&D each year to keep up with the rest of the U.S. At 0.14% of GNP, R&D spending is just a fraction of the rest of the U.S. (2.7%), and even lags behind Latin America (0.62%). Competitors like Singapore and Ireland invest about 10 times as much in relation to GNP. Their investments are paying off in innovations: Singapore's scientists and engineers filed 242 patents in 2001 or about 73 per million residents. Puerto Rico scientists only created 32 patents in 2001 - 3 per million residents, about 25 times less than Singapore.

In a global reality in which knowledge and innovation drive growth and define competitiveness, Puerto Rico's retrograde "industrial" policy and paltry R&D spending are inimical to economic competitiveness and inconsistent with aspirations to better, mainland living standards. The good news is that Puerto Rico has a strong foundation and real assets on which to build. Puerto Rico can take steps to mobilize higher investment in research and development (R&D) and engage the talents of its people to drive long-term economic development.

Recommendations and Rationale

➤ R&D1. Sharply reduce the corporate income tax on earnings from intangible property such as patents to between 2 and 5%, with the condition that some of the R&D be conducted in Puerto Rico.

Reduced tax rates would motivate the pharmaceutical companies now manufacturing in Puerto Rico to invest some of the \$26.5 billion they spend annually on clinical trials on the island. By conducting some of their R&D on the island, U.S. corporations would retain intellectual property in Puerto Rico, avoid the difficulties associated with transfer pricing, and benefit from lower taxes.

Projected U.S.-based clinical trial spending for 2007. Business Communications Company (2003).

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\triangleright R&D2. Develop world-class R&D with a long-term impact on the economy.

Puerto Rico has attracted global leaders in the life sciences and electronics to manufacture locally. To compete and create high quality, well-paying jobs in the 21st century, Puerto Rico must commit to developing a world-class local research and development capability that will drive sustained competitiveness and create a lasting economic impact. Strategically, Puerto Rico should pursue this critical goal by funding basic research, creating capacity and developing human capital, and supporting strong and effective partnerships, all focused on driving sustainable competitive advantage and long-term economic impact.

Puerto Rico has advantages far beyond tax gimmicks. It is the responsibility of government, academia, and the private sector together to nurture and build upon these competitive advantages, which will not remain advantages forever. Opportunities must be leveraged to develop R&D in manufacturing and further drug development, particularly in clinical trials. Clinical trials can lead to patents and by creating intellectual property locally with their production facilities, pharmaceutical firms will escape IRS scrutiny of transfer pricing.

o Fund basic research

Puerto Rico must act to support world-class local research in areas of strategic importance, including the life sciences and information technology, recognizing the need for continued focus, long-term commitment, and real funding to achieve any success. At the current pace and relying on federal funds, the necessary critical mass of local R&D will not develop.

The National Science Foundation (NSF)-funded Experimental Program to Stimulate Competitive Research (EPSCOR) program at University of Puerto Rico has made substantial progress in helping develop the competitive research capacity to win NSF and other grant awards. However, federal grants, won sporadically and limited in duration, will not provide the consistent, core funding over time necessary to develop competitive, world-class programs. Federal funding of R&D has also steadily dropped, from 1.25% of GNP in 1985 to 0.75% in 2002.¹⁰

Recognizing that R&D is critical for their competitiveness and long-term economic growth, states have stepped up to fund basic research. Over 40% of total funding of nanotechnology now comes from states. 11 Many states have recently announced major funding of R&D: Ohio committed \$1.1 billion to supporting innovation in-state 12 and Florida recently devoted over \$1 billion to biomedical sciences. Countries competing for investment are making major commitments to R&D: Ireland (with a population similar to Puerto Rico's) committed \$2.9 billion from 2000-2006.

¹⁰ National Science Foundation (2004).

¹¹ Scheppach (2005).

¹² The Ohio Third Frontier Project http://www.thirdfrontier.com/overview.asp.

o Develop capacity and human capital

Puerto Rico must invest in the infrastructure, institutes, training, and resources critical to enabling and nurturing R&D capacity. In particular, Puerto Rico must attract, develop and retain the scientists and engineers needed to conduct world-class research. Worthy existing efforts, like the NSF-funded EPSCOR, must be supported and expanded. Puerto Rico must attract the best scientific talent and build the pipeline necessary to develop the talented scientists and engineers locally, from grade school through graduate school.

o Support strong and effective partnerships

World-class research cannot flourish in isolation and will not generate economic spin-offs without strong connections to industry. To compete with better-funded investment locations, Puerto Rico must create alliances to leverage all possible resources. Strong and effective partnerships across academia, the private sector and government will be critical to developing R&D and leveraging its impact on the economy. Promising partnerships like the Hewlett Packard University of Puerto Rico – Mayaguez initiative in Aguadilla must become the rule and not the exception. Such connections and collaborations generate results. As a source of competitive advantage, they must be nurtured and developed.

Traditional walls separating sectors and replicated in education programs must be broken down. For example, colleges and universities must provide engineers and scientists the opportunity to learn business administration.

➤ R&D3. Target development of local R&D in manufacturing processes and clinical trials.

Developing world-class R&D capacity will take time. But Puerto Rico's existing base of the world's leading pharmaceutical, biotechnology, and medical instruments companies present an immediate opportunity. PRIDCO must reach out to these corporations and promote the return on investment from vertical integration in Puerto Rico, particularly into R&D. Immediate prospects for resident multinationals to generate returns on investment locally include R&D on manufacturing processes and clinical trials for pharmaceutical corporations. In light of aggressive global competition and the business synergies from integration, continued complacency risks not just Puerto Rico's long-term competitiveness, but the manufacturing base as well.

Manufacturing production must remain strong and expand, but it cannot support sustained growth in the 21st century economy alone nor can it generate sufficient jobs. Puerto Rico's economic strategy must reflect the realities of the 21st century. To succeed, the R&D outreach must be coordinated, focused and carried out by top leaders, including the Resident Commissioner and the Governor.

A few success stories illustrate the potential if opportunities were promoted and pursued in a coordinated and comprehensive manner. Hewlett Packard was one of the first major corporations to expand into R&D in Puerto Rico. Its R&D centers in Aguadilla have already generated dozens of patents. Infotech Aerospace Services now employs over one hundred people in Isabela providing engineering design and software development for airplane engines.

Clinical trials - Puerto Rico's pharmaceutical manufacturing base is unparalleled. As the leading manufacturer of drugs worldwide, Puerto Rico accounted for a quarter of global sales and shipped drugs that generated \$102 billion in 2004. Of the top 20 selling drugs in the U.S., 16 are made in Puerto Rico.

Clinical trials present a growth opportunity for Puerto Rico and a market opportunity for the pharmaceutical companies. Puerto Rico needs to upgrade its innovative capacity, create high paying jobs, and increase the competitiveness of its pharmaceutical manufacturing assets. Pharmaceutical companies spend over \$26.5 billion annually on clinical trials, face spiraling costs, and struggle to recruit patients. They already have an installed local base of manufacturing facilities.

Puerto Rico offers significant attractions for pharmaceuticals and medical devices companies who need to conduct clinical trials: health care labor costs of about half the mainland U.S. rate, a large concentrated patient population, trained bilingual clinical investigators, and a history of rapid on-time patient recruitment. The new health Smart Card will provide valuable patient data and help speed patient recruitment, one of the most costly challenges to drug companies. Puerto Rico offers the significant regulatory protections of the Food and Drug Administration not available outside the U.S.

Manufacturing processes - The manufacturing of pharmaceuticals as well as biotechnology, medical equipment, electronics equipment and other products annually generates \$31 billion in economic activity, contributes 42% of GDP, and supports 11% of employment. Investments in R&D focused on manufacturing processes promise significant returns on investment through increased efficiency and improved regulatory compliance at over 2,300 plants across the island.

VIII. Infrastructure

If Puerto Rico is to attract, retain and grow businesses in the competitive global economy, its infrastructure - in particular, water, power, transportation, and IT - must be upgraded and maintained to global standards. The inadequate, outdated and mismanaged infrastructure now burdening Puerto Rico creates a double whammy: it inconveniences the people and it stymies the development of a competitive economy capable of generating growth and new jobs.

Moving forward requires first acknowledging that the infrastructure needs of the 21st century have changed. Broadband Internet connectivity has quickly become a prerequisite for high tech businesses, and technology is becoming more pervasive through all sectors. Rapid change and increasing technical requirements have made education - effective schools, high quality colleges, and flexible training – a critical component of infrastructure as important as power or roads. Puerto Rico's infrastructure must meet the needs of new industries facing new challenges. To host significant R&D will require more reliable power, more effective wastewater treatment, and better IT infrastructure.

Specific top-down dictates are not appropriate for guiding infrastructure investment. Puerto Rico needs a flexible infrastructure strategy that follows basic principles that will allow effective response to the needs of the 21st century, prioritize needed upgrades and mobilize the most effective solutions. When effectively guided by an informed strategy, federal (and local) funds invested in infrastructure will have the greatest leverage on Puerto Rico's long-term economic prospects.

- Flexibility One size does not fit all infrastructure needs. Critical upgrades must be developed, financed and maintained in different ways to meet different needs.
- ➤ Innovation Government must leave room for private sector solutions that will get the job done more rapidly and cost-effectively. Puerto Rico cannot afford to continue imposing top-down solutions that limit competition and discourage innovation, whether in power, wastewater or education.
- ➤ Modular Over reliance on large, long-term investments creates the risk that nothing will be accomplished. A modular approach must be pursued that allows for the rapid pursuit and completion of numerous projects rather than holding up critical priorities because of the burdens, primarily financial, of a single mega-project.
- ➤ Sustainable The crumbling water system illustrates that adequate maintenance must be planned and financed. Cost-effective ongoing maintenance must be part of the plan.

Recommendations and Rationale

Businesses and families now feel the effects of inadequate, costly infrastructure. The escalating cost of doing business in Puerto Rico translates directly into less growth and fewer new jobs. Utility costs have helped drive a skyrocketing cost of living that has squeezed the middle class and pushed more working families into poverty. Instead of pursuing discredited tax gimmicks, the federal and local governments can reduce the cost of doing business and cost of living for families, remove obstacles to competitiveness, and create the conditions in which the private sector can flourish – by upgrading Puerto Rico's infrastructure. Federal funds effectively invested in infrastructure will have the greatest leverage in driving long-term economic growth.

Long masked by subsidies, mismanagement and inefficiency are now painfully evident to businesses and households in high prices and unreliable service for power, water and wastewater, and other utilities. Worsening congestion has clogged Puerto Rico's roads, delayed deliveries, and lengthened travel times. Puerto Rico's strategic location has not been leveraged to the best benefit of its economy and people. Its ports remain too costly and unproductive, and needed upgrades have been insufficient and slow. Despite recent investments, the island's infrastructure remains too vulnerable to damage and service outages from natural disasters.

➤ 11. Bring Puerto Rico infrastructure to global levels of competitiveness.

Puerto Rico must bring its infrastructure – the environment in which business grows and creates jobs – up to global standards. It must address the high and escalating cost of doing business in Puerto Rico, in part the result of extremely high utility prices that directly hit the bottom line. Costs are passed along to consumers who experienced a whopping 14% increase in prices last year, and 11% the year before. While further analysis is needed to articulate more specific recommendations, the following infrastructure areas are now clearly sources of competitive disadvantage and opportunities for improvement.

Water and waste treatment. Water shortages and brown-outs regularly inconvenience the people of Puerto Rico. Despite recent investments, Puerto Rico's water system still has high distribution losses, low productivity and unreliable service in many areas. Particularly with the recent rate hikes, high water costs harm business and burden consumers. Industrial water rates now often exceed \$3 per cubic foot, more than twice as much as in Singapore. In 2003, almost half of all water distributed was unaccounted for, a high percentage even for the developing world. Puerto Rico's wastewater treatment plans serve far fewer people than the U.S. average and employ more workers. Without historic government subsidies, business and households now pay for these inefficiencies directly in higher prices. Consumers pay up to four times the U.S. average per gallon.

Further, disaster preparation plans must ensure that water supplies and the distribution network are better protected. During Hurricane Georges, over 75% of customers lost

water. A poor waste treatment infrastructure is a competitive disadvantage as Puerto Rico seeks to attract more investment from pharmaceuticals and manufacturing firms who create hazardous waste byproducts. More effective management, targeted investments and better disaster preparedness are needed.

Transportation. Rapid, cost-effective and convenient transportation is critical to the competitiveness of local businesses and to the quality of life for the people of Puerto Rico.

Ports - Squandering jobs and economic opportunity, Puerto Rico has failed to capitalize on its potential as a transshipment location and transportation hub. While San Juan is already the largest port for container traffic in the Caribbean, the island's ports are more expensive and less productive than the competition. To create jobs and boost economic output, further infrastructure investments and better management are needed that will keep ports competitive with other locations.

Roads and public transportation - High traffic density and heavy congestion add to delivery and travel times for business, and lower the quality of life for residents. San Juan suffers from some of the worst congestion in the western hemisphere, let alone the U.S. With the highest vehicle density in the world, Puerto Rico needs a coherent, islandwide mass transit system. Despite recent investments, few public transportation options exist for most Puerto Ricans. Only 5% of San Juan commuters use public transport compared with 11% in Miami, 12% in Los Angeles, and 55% in New York City. Transportation spending is notoriously inefficient. Better, closer management of transportation investments and ongoing maintenance could help stem the rise in tolls and protect consumers.

Power - High power costs and low power reliability hamper Puerto Rico's competitiveness, increase the cost of doing business, and make it more difficult to attract investment, particularly from high tech and R&D firms. Electricity costs more than almost anywhere else in the Americas, ¹³ 73% more than in the rest of the OECD, and about double the U.S. average. Unreliable service harms all businesses, particularly high tech companies and existing manufacturing operations. The power system is also at risk from regular tropical storms and hurricanes. Mitigation efforts will help prevent future damage to the power infrastructure and limit service outages for businesses and households.

Communications - Internet connectivity in Puerto Rico is comparable to that in Chile, not the rest of the United States. High speed Internet access has become a necessity – like water – for high technology firms. Broadband drives faster growth for regions that provide it, and many companies expect high-speed Internet access as a matter of course. Broadband – like good roads, high quality schools, and flexible training programs – is a critical part of a larger environment that will promote economic growth and create jobs. Broadband access must be provided, and options explored to offer wireless connectivity island wide. While Puerto Rico is behind, it also has the opportunity to leapfrog forward

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Electricity in the U.S. averaged 8.2 cents per kilowatt hour in October 2005.

with the right implementation of connectivity.

IX. Conclusion

This agenda for action focuses on driving economic growth, but its impact would be far more wide-ranging. A competitive economy will bring growing incomes and better jobs, which will give the U.S. citizens of Puerto Rico the freedom to buy better homes, spend more time with their families, and invest in first class education and a better future for their children.

The conditions and policies necessary for a competitive economy are not currently in place. Without concrete steps that move beyond empty rhetoric, the situation will not change. Government must be fundamentally redirected to support a vibrant private sector.

Puerto Rico must create an investment-friendly climate that generates jobs and increases economic growth. Such a climate requires a tax system that is fair to working families, stimulates entrepreneurial activity, rewards investment, and encourages the formation and expansion of businesses. Government employment must be reduced and spending focused on investments in the future, such as in education and transportation. Permitting must be more predictable and radically streamlined. The public schools must prepare the children of Puerto Rico to excel and embrace the challenges of the 21st century. Flexible and affordable training must be in place to help workers upgrade their skills and businesses stay competitive. Sustainable growth can only be driven by a robust private sector and must capitalize on the tremendous potential of the people and environment of Puerto Rico.

A robust economy generates greater tax revenues, making it possible for government to invest more in the future (not in more government), better protect the environment, improve public safety, and create better opportunities so that the youth of Puerto Rico will themselves choose to remain and invest in Puerto Rico. Tax revenues invested wisely build the foundation for a dynamic private sector, further growth, and enable a virtuous cycle of growth and investment.

Quite simply, without a vibrant economy, better jobs and growing incomes are impossible and further investments are unaffordable. Like all states Puerto Rico will need federal government support, but the requests for that support must be carefully directed to create the pillars for a vibrant economy. And Puerto Rico will not get a vibrant economy or realize its economic potential without serious change, and serious change requires political courage.

The rhetoric and the mediocre results have been the same for more than a generation. The GAO report well details the persistent unemployment and continued poverty endemic to a lackluster economy. Einstein defined insanity as doing the same thing over and over and expecting different results.

This document presents an action agenda for change. It offers focused recommendations that will generate economic growth when implemented. While not a comprehensive economic reform package, it presents concrete steps that will help build the foundation for growth and competitiveness.

The impetus for action has been overwhelming and roadmap is now clear. Local and federal leaders must adopt these proposals and put them into effect by creating appropriate specific policies, laws, and regulations. Further inaction and counterproductive finger-pointing are inexcusable. Clear action steps must be taken so that the U.S. citizens of Puerto Rico can begin to realize their immense potential at home in Puerto Rico.