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OVERSIGHT HEARING ON FACILITY CONSTRUCTION NEEDS IN PUERTO RICO

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HEARING BEFORE THE SUBCOMMITTEE ON POSTSECONDARY EDUCATION OF THE COMMITTEE ON EDUCATION AND LABOR HOUSE OF REPRESENTATIVES NINETY-FIFTH CONGRESS SECOND SESSION

HEARING HELD IN SAN JUAN, PUERTO RICO
MARCH 4, 1978

Printed for the use of the Committee on Education and Labor
CARL D. PERKINS, *Chairman*

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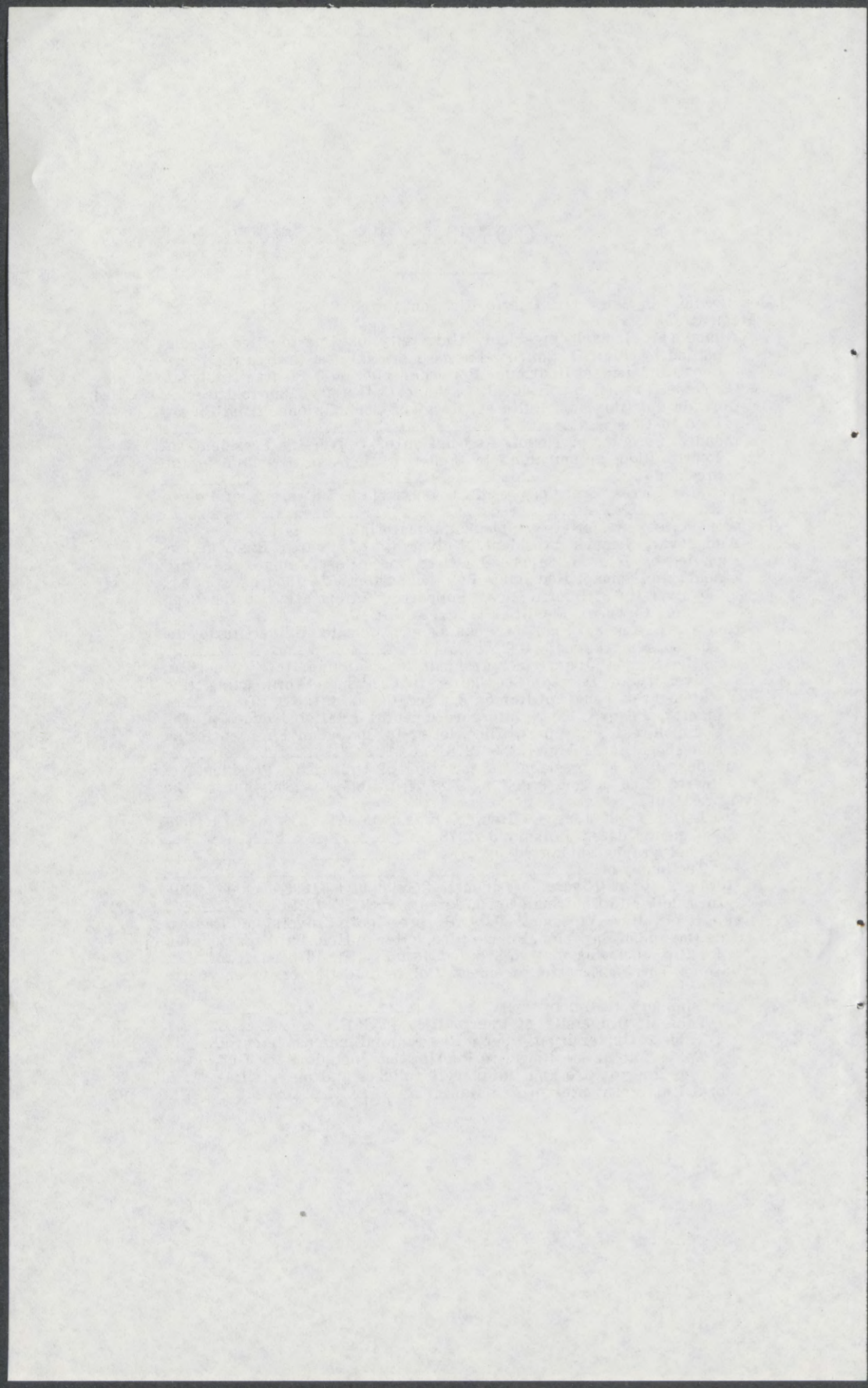
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OVERSIGHT HEARING ON FACILITY CONSTRUCTION NEEDS IN PUERTO RICO

SATURDAY, MARCH 4, 1978

HOUSE OF REPRESENTATIVES,
SUBCOMMITTEE ON POSTSECONDARY EDUCATION,
COMMITTEE ON EDUCATION AND LABOR,
San Juan, P.R.

The subcommittee met at 9:30 a.m. in the conference room, Capitol Building, Commonwealth of Puerto Rico, San Juan, P.R., Hon. William D. Ford (chairman) presiding.

Member present: Representative Ford.

Also present: Hon. Baltasar Corrada del Río, Resident Commissioner from Puerto Rico.

Staff present: Thomas R. Jolly, counsel and Patricia F. Rissler, legislative associate-clerk.

Mr. Ford. Good morning, ladies and gentlemen. The meeting will now come to order.

The Subcommittee on Postsecondary Education of the House of Representatives' Committee on Education and Labor is meeting here this morning in San Juan to hear testimony from representatives of colleges and universities on the need for construction and reconstruction funds for academic facilities in the Commonwealth of Puerto Rico. I might say at the outset that I hope you appreciate the great sacrifice we made in leaving the snows of Washington to come down here this weekend. [Laughter.]

I am disappointed only by the fact that we have to work on a beautiful morning like this, because I haven't seen anything like this since last summer.

At the outset, I want to commend the Resident Commissioner from Puerto Rico for his active interest in and concern for higher education, not only here in Puerto Rico but for his concern for what is happening in my State and in the rest of the country. He has been a very valuable ally to me as the chairman of this subcommittee of the Committee on Education and Labor, and I consider it a privilege to be able to respond to his request that we bring the committee here for the purpose of building this sort of a record on the need for construction of facilities. I have already been informed in the meetings that we have had since we arrived yesterday afternoon that the need is considerably different from what we have been hearing around the rest of the country during the past year. I think it is extremely important that these hearings develop a record that will make it possible to demonstrate that Puerto Rico is not replicating what is happening in general in the higher education population in the other parts of the United States.

There are a number of unique characteristics evidenced here that have been described to me informally and which I presume the hearings this morning are going to confirm with specifics and with information that we will be able to use. I commend Mr. Corrada for his persistence in pressing for us to come and be exposed firsthand to people who could talk to us as you have been and will be about the unique characteristics, the similarities, and the special needs of the Puerto Rican postsecondary education system.

When I talk of the postsecondary education system, of course, I am referring to that pluralistic system that is, here in Puerto Rico as it is throughout the United States, the backbone of higher education in our country, the combination of private nonprofit institutions and public institutions at the higher education level.

Almost immediately upon his arrival in Washington to represent the people of Puerto Rico, Mr. Corrada began aggressively seeking to have this subcommittee come here to learn firsthand from the people who will testify why Puerto Rico needs so urgently construction funds for higher education facilities. He later will have more to say about that, because very frankly he is the only member of the committee who has been talking to me about construction facilities, except for the rehabilitation of buildings for the handicapped, because this isn't the primary problem in most of the rest of the United States, and for that reason these hearings take on special importance.

I am pleased that we are finally able to call the hearing here and I am sorry that we have not been able to do it during this past year. But as many of you know, we have recently culminated many months of work by the committee and the staff of the committee on the recommendations recently made by President Carter when, in an unprecedented action, he went before the American people and committed himself to an additional \$1.2 billion in education funds at the higher education level. The legislation to accomplish that, and as you know, that's primarily student assistance, was introduced after President Carter asked us to do so a few weeks ago. Just this week we have passed the legislation out of the committee, although I am afraid that we have to break it to the President that it's going to cost more than \$1.2 billion. It's more likely to be around \$1.5 billion, creeping toward \$2 billion, before we finish with it. However, the House subcommittee passed that legislation asked for by President Carter on Tuesday of this week by a unanimous rollcall vote, with all of the Democrats and the Republicans voting for it. I think it's important for you to keep that in mind, because it's an indication that at least on our committee we have little partisan tension with respect to the needs of higher education. At least on that one issue we seemed to be able to agree. We have many other things to disagree about, and we do. As you well know, we have a reputation on the Education and Labor Committee of disagreeing frequently and loudly on major issues, because we deal frequently with very emotional issues and primarily with people issues.

I would now like to recognize my colleague and our good friend, Hon. Baltasar Corrada del Río, who is responsible for us being here. I want to assure him that we'll take your arguments back to Washington and do whatever we can to assist you, Baltasar, in making your case for Puerto Rico's special needs.

STATEMENT OF HON. BALTASAR CORRADA DEL RÍO, RESIDENT COMMISSIONER FROM PUERTO RICO IN CONGRESS

Mr. CORRADA. Thank you, Mr. Chairman, presidents of the various colleges and universities, distinguished guests, ladies and gentlemen.

It is indeed a pleasure for me to be here today in my capacity as Puerto Rico's Resident Commissioner in Congress and as a voting member of the House Education and Labor Committee. I am further gratified to have with us Bill Ford from Michigan, my friend and colleague on the committee, who chairs the Subcommittee on Post-secondary Education.

By the way, he didn't mention it, but of course in approving the bill in the Subcommittee on Postsecondary Education last Tuesday as he informed, which will come before the full committee sometime next week, the eligibility under the BEOG program is being raised from \$15,000 to \$25,000, and furthermore, even though the President wanted to increase the eligibility for the student loan assistance program from \$25,000 to \$45,000, Bill decided that we might as well knock out that cap, too, so that there is no limit in terms of who would be eligible for loans under the guaranteed loan program, which definitely, I believe, will be of great help, particularly to our middle class. Not only these programs will be benefiting, of course, the poor, as most of the BEOGs, SEOGs, et cetera, work-study programs do, but also under this reform that has been made and the proposals that later in a few weeks will be considered by the floor of the House, of course it will then go to the President, the middle class will certainly be receiving some vital assistance in terms of being able to provide the kind of university education, college education, that all of us want for our children.

Congressman Ford is a good friend of Puerto Rico and has graciously taken time from his busy congressional schedule, at my request, to get a firsthand look at the needs of institutions of higher education in Puerto Rico, specifically in the area of physical facilities.

One of the programs under the subcommittee's jurisdiction is title VII of the Higher Education Act, enacted in 1963, to provide grants and loans to institutions of higher education, both graduate and undergraduate, for construction, reconstruction, and renovation of academic facilities.

In 1976, the legislation was expanded to include reconstruction and renovation aimed at energy conservation, barrier free access, and safety. Although we have this legislation on the books, its effectiveness is severely limited by the fact that previous administrations in Washington have not stressed construction in Federal programs, and no funds have been appropriated since the year 1973. In Puerto Rico, the last title VII funds came out of the 1972 title VII appropriations, which were impounded, and later released. I understand that the Bayamón Central University will soon inaugurate a learning resource center funded by title VII.

But the main reason for a lack of support from the Appropriations Committee of Congress was the fact that on a national scale there had been a declining enrollment in the late sixties, and there were numerous instances of overconstruction and underutilization. Some buildings were literally unused, because the institutions of higher education did not have the personnel to fill them up.

Yet 1978 is another era. Enrollments in many institutions have substantially increased. In Puerto Rico alone, we have gone from 60,000 students 10 years ago to some 120,000 today. Construction costs have skyrocketed. Energy costs take an ever-increasing chunk of an institution's operational budget. There is a moral imperative to make facilities barrier free to accommodate our handicapped students. While President Carter stressed construction as a means of increasing employment, through the public works employment program, only public institutions could participate, and they would have to arduously compete with elementary and secondary education projects as well as thousands of other local government construction needs. Although it may have solved in a few places some of the most pressing construction problems in some public universities, there is still a tremendous need in this area.

President Carter has requested an appropriation of \$50 million for fiscal 1979 for title VII, but only for the removal of architectural barriers. This should be a starting point. It is imperative that Congress, however, becomes keenly aware of the existing need for reactivating title VII funds for the broader purposes of the law. I pledge to you that I will do everything, everything I can, to bring this matter to the attention of the Appropriations Committee, and I look forward to seeing higher education facilities constructed with the assistance provided by this program.

I wish to welcome the presidents of the various colleges and universities here this morning and welcome of course their valuable testimony, and again express my appreciation and gratitude to Congressman Bill Ford, chairman of this subcommittee for his interest in the problems of Puerto Rico. Thank you, Mr. Chairman.

Mr. FORD. Thank you. I would like to ask our host at the hearings, Mr. Corrada, if he would take the privilege of introducing each of the witnesses as they come up to testify.

Mr. CORRADA. Yes.

Mr. FORD. But before he does that, I am sure all of you who are deeply involved in education were as excited and pleased as we were when we saw the new budget in January that President Carter sent to us. You will recall that many of us, I say this as a devout lifelong Democrat, were very disappointed in January of 1977 when we saw the new President's education budget, because in the very short 3 weeks that he had available to him to prepare a new budget to offset the budget presented on January 20 by the outgoing President, he was unfortunately working with the same people and the same staff who had prepared the previous budgets. We were disappointed to discover that we saw a replay of the same mistakes, we believe, that had been made for a number of years in trying to underfund education programs.

We had gone through a period of some 8 years of outright hostility from the administrations with respect to our education program, because they generally are identified in peoples' minds as the initiatives that arose during the Kennedy administration and then subsequently the Johnson administration. They are referred to as Kennedy and Johnson programs that have not been universally popular with people of all political beliefs. But in any event, the Congress, during this past year, appropriated about \$1.2 billion more than the President

had asked for. But you did not hear a single threat of a veto or a complaint, because in each case the President became convinced that the Congress was going in the right direction with the additional funding for education. This year we were ready to declare a holiday when we saw the President's budget, because there are several ways to measure the contrast. The President's budget is almost \$4 billion above the last budget submitted by his predecessor for education, and is approximately \$3 billion, a little bit more than \$3 billion, above what he asked for a year ago. In this budget, for the first time since the early seventies we have a request for construction money in two phases, both of which are programs that Puerto Rico has been involved in and has received substantial support from.

In title VII construction, the annual interest grants, the President has asked for \$29 million this year. We know from the way in which that program works that that has a multiplier effect in that by simply subsidizing the interest for institutions to borrow resources for construction, it produces a tremendous amount of money beyond the expenditure by the Federal Government.

More importantly, for the first time in 5 years we have a request for money for outright construction grants. In that instance the President has asked for \$50 million. That's \$50 million more than zero. There will be a great many demands on this \$50 million throughout the country, particularly because of the changes made in the law in 1976 to accommodate the problems involved in urging our institutions to break down the barriers to the handicapped and to modernize to meet the problems of energy waste we have in all of our public buildings and private buildings as well.

I might say on a personal note that I've been carrying this piece of plaster around on my arm for several weeks in Washington and I have a whole list of barriers that I want to change in our own office. I realize, for example, one only needs a very small handicap to discover how much trouble a handicapped citizen has just getting through an ordinary day. I discovered that there isn't a single drinking fountain in the Rayburn Office Building, the most expensive per foot building we have in the Federal Government, that can be operated with your left hand. If you can't use your right hand, you can't get a drink of water. That is in the building occupied by the lawmakers of our country, and only when you have some difficulty with your right hand do you discover something like this. It brings your attention to what people have been trying to tell us for years about the insensitivity we've had in the past toward the simple little problem of maintaining oneself through a normal day. In an age when we believe that there should be no barriers since we've gone through two decades of fighting racial barriers, we continue to fight religious barriers, ethnic barriers and regional barriers to education. It's long past the time when we should be willing to tolerate something as simple as architectural failures by allowing barriers to continue with the new recognition of the obligation to provide resources for education not limited by the characteristics of an American citizen. When we said many years ago that, with respect particularly to public education, every citizen had the right of access to that education, we didn't mean that they had a right to that education unless it was inconvenient to provide that education. So across the country now we see people with

access to education on a daily basis under circumstances where they formerly were denied equal opportunity by something less than the infamous gentlemen's agreement that used to be involved in racial barriers.

We are very pleased to be able to consider an aspect of the need for this construction money that has been for the most part totally overlooked in recent years as student enrollments are reducing across the country. As a matter of fact we look at the figures for what is likely to happen in Puerto Rico, it's exactly the reverse of what is happening in my own State of Michigan, for example. What makes sense when you talk about your future here may not seem as imperative or urgent to people in higher education in my State. What you're doing replicates the kind of problems they faced when we were going through the large construction programs some few decades ago. For that reason it's important that you make the strongest case possible to permit the other Members of Congress to understand that we are not yet at the stage where we can look back and say Federal funds for construction are no longer needed.

Now, Mr. Corrada, if you will, introduce the first witness, please.

MR. CORRADA. Our leadoff witness, representing the public university system in Puerto Rico, will be Dr. Ismael Almodóvar, the president of the University of Puerto Rico. Dr. Almodóvar, we welcome you to these hearings and we are very pleased that you could appear before us today with your valuable testimony.

MR. FORD. Doctor, before you proceed, I would like to indicate that, without objection, the prepared text of your testimony together with the exhibits that you have submitted will be placed in full at this point in the record, and you may proceed to add to it, highlight it or supplement it, however you wish.

STATEMENT OF ISMAEL ALMODÓVAR, PRESIDENT, UNIVERSITY OF PUERTO RICO, ACCOMPANIED BY JUAN H. SANCHEZ-LASSISSE, SPECIAL ASSISTANT TO THE PRESIDENT; AND ISMAEL RODRÍGUEZ BOU, CHANCELLOR, RÍO PIEDRAS CAMPUS

DR. ALMODÓVAR. Mr. Chairman, Congressman Corrada, ladies and gentlemen:

My name is Ismael Almodóvar. I am president of the University of Puerto Rico.

First of all, I wish to welcome you and other committee members to our island. We are delighted with your visit and deeply appreciate this opportunity to discuss with you the importance to higher education in Puerto Rico of the title VII program, which is the subject of this hearing. I wish also to express our appreciation to our Congressman Baltasar Corrada del Río; as has already been expressed, his insistence was a key factor in the subcommittee's decision to hold this hearing in Puerto Rico.

I know you will not have time to see much of Puerto Rico or our institutions of higher learning. The University of Puerto Rico alone is a vast, complex, multicampus system with an enrollment of about 50,000 students. I will, therefore, use some slides in my presentation to take you through a fast tour of our university system. The infor-

mation on these slides also in tabular or diagramatic form is included as appendices of our statement for the record and, Mr. Chairman, I would appreciate my whole statement being inserted in the record. Thank you for already agreeing to that beforehand.

First of all, I will discuss the socioeconomic setting of Puerto Rico; second, our higher education system; third, our university—its make-up, its contribution to our development, its financial situation—and finally a brief statement of our needs for physical plant facilities which might be met, at least in part, with the aid of the program which is the subject of this meeting.

Puerto Rico is an island of 3,400 square miles, mostly mountains, inhabited by 3.3 million American citizens. They are concentrated in one great metropolitan area and along the coast around the entire island, as can be seen in this slide. When we consider that Puerto Rico's population density is greater than that of India or China and that there are no known conventional natural resources, one gets an important clue to our economic problems. Our only natural resource is people. An economy mainly built around people cannot flourish without a Government policy that gives a very high priority to education. This is one of the reasons why this hearing is vital to us and to our Government.

Another clue to our economic situation is the transitional character of the island's economy. Only three decades ago ours was basically an agricultural society and the personal income per capita was less than \$300. Today it is edging past the \$2,500 figure, which is still very low compared to the national average of \$6,400 or even with that for the State of Mississippi (\$4,500); the lowest in the continental United States.

Agriculture continues to be an important sector in the island's economy and we are trying to make it more so by diversification and modernization. Manufacturing and service industries constitute now the major sectors of the economy.

The transitional character of the economy means, on the one hand, that many low wage industries have moved away leaving workers with poor skills jobless. Unemployment is high, about 20 percent. On the other hand, thousands of men and women trained in new skills are now producing computers, scientific instruments and other goods of high quality and value or are engaged in sophisticated data processing and other well-paid positions in service industries.

On the positive side of the economic equation, the system of higher education can take some credit, particularly the University of Puerto Rico. It constitutes by far the largest single pool of scientific, engineering, technical and managerial expertise in the island. It is the principal source of trained faculty members for the private institutions of higher learning and of trained personnel for Government and the private sector. But altogether the colleges and universities are not yet able to meet the demands for highly trained individuals. The next slide, which shows help wanted advertisements in the San Juan Star of last Sunday, represents an idea of what I mean.

The University of Puerto Rico is stepping up its efforts to increase its output of trained personnel for industry. Shortly after taking office last November 15, I addressed the Puerto Rico Manufacturers

Association and proposed that we set up a joint mechanism to better match university output with industrial and governmental needs. The proposal was well received and we are going ahead with an action program coordinated through the appropriate office of the Economic Development Administration of the Commonwealth of Puerto Rico.

Furthermore, there is another key factor in this economic equation. That is energy. Our economy at the moment is totally dependent on high cost imported petroleum. The trend on imports illustrates that dependence dramatically. The sharp rise in the value of our imports shown in this next slide from foreign countries is almost entirely the result of the rise in the cost of oil. Fortunately, we have other unconventional natural resources in abundance—solar radiation—and, as a result, large amounts of energy stored in the ocean as part of its thermal gradient. As a matter of fact, Puerto Rico has one of the best sites in the world that could be exploited for the concept called thermal energy conversion. Government, hand-in-hand with the university, has started to deal with Puerto Rico's energy problems, but this takes time.

I have tried to show you in a nutshell our economic situation. Let me take you now to our system of higher education.

In this slide you can see it. Twenty-nine years ago the higher education system of the island was mainly the University of Puerto Rico. Today we have almost 120,000 people enrolled in accredited postsecondary institutions, or close to four percent of our population. Puerto Ricans have developed a passion for education.

We now have nine accredited institutions of higher learning: The University of Puerto Rico, the State-supported, multicampus system, and eight private colleges and universities, as you can see in the next slide. Six of these private institutions enroll more than 2,000 students each. One of them has close to 30,000 students.

I will now concentrate on the University of Puerto Rico.

Your visit is auspicious, because we are just beginning to celebrate our 75th anniversary. The University of Puerto Rico was founded in 1903 as a tiny center to train teachers for elementary schools. It expanded slowly but steadily in its first decades and in the last 20 years at a very fast rate. The next slide shows its organizational structure. The Council on Higher Education—our Board of Regents—is our policymaking body. The president is the chief executive officer. Our university is spread widely throughout the island.

It has three major campuses, as can be seen in the next slide, two in the San Juan metropolitan area and one in Mayaguez on the west coast. There are two 4-year colleges, one in Cayey in the central part of the island, and the other one in Humacao on our east coast. There is also a system of regional colleges, quite similar to your community colleges, which are located across the island in Bayamón, Carolina, Ponce, Arecibo and Aguadilla.

The major campuses are Río Piedras, the oldest and largest with close to 24,000 students, the medical sciences campus with about 3,000 students, and Mayaguez with close to 9,000 students.

Our university is unique in many ways. It is by far the leading institution for candidates for the professions—law, medicine, dentistry, pharmacy, nursing, architecture and engineering. The Mayaguez

campus has Puerto Rico's only accredited engineering school and our only school of agricultural sciences. It also operates the network of the agricultural experiment station and the agricultural extension service.

Río Piedras, Medical Sciences and Mayaguez are also by far the leading campuses for graduate studies here. Last year, in addition to 325 professional degrees, a total of 686 master's and 12 Ph. D.'s were awarded in 30 different disciplines.

We are also steadily advancing in research. Research funding this year, mainly for the agricultural experiment station, medical sciences, Río Piedras School of Natural Sciences, the Mayaguez campus, and the Center for Energy and Environmental Research exceeds \$12 million.

Speaking of research, I would like to mention that the School of Agricultural Sciences and the Agricultural Experiment Station have a long history of cooperation with the U.S. Department of Agriculture and universities in the mainland. They also work with the U.S. Agency for International Development, international agencies and other countries on research of mutual benefit. For example, this year they are engaged in cooperative research on tropical soils with Cornell University, the University of Hawaii and the University of North Carolina. They are also heavily engaged in the international soybeans and other legumes research program for the tropics and subtropics.

We have made fairly encouraging progress in upgrading faculty. The University of Puerto Rico has a longstanding policy of providing leave with pay to faculty members desiring to obtain advanced degrees. With the help of this policy, the number of professors holding master's and doctor's degrees has risen steadily. Twenty-five years ago we had fewer than 200 Ph. D.'s on our faculty. Today we have more than 1,000. Of the total faculty—close to 3,200 members—34 percent hold doctorates and almost 1,800—56 percent—hold master's degrees. Most of our younger faculty members are eager to gain doctorates. The private institutions are also interested in helping their faculty members to earn higher degrees. In order to insure high quality in their educational programs, private universities look to the University of Puerto Rico as a key training center for their teaching staff.

Our university has joined recently four institutions—the Catholic University, Interamerican University, the Puerto Rico Junior College and the University of the Sacred Heart in a consortia arrangement to establish a Minority Research Center for Science and Engineering through NSF sponsorship. If this project is approved, we will be able to pool resources and upgrade faculty and curricula in a cost-effective manner.

In two other respects, our university has tried to serve society well. It has long had a policy of encouraging the admission of students from low income families and of women. In fact, since 1969, women have outnumbered men in our student body. The same trend is observed in the university faculty.

This brings me to a brief analysis of our financial situation.

The university's main source of operating funds is provided by local legislation, on a formula basis that allots the University of Puerto Rico the equivalent of 9 percent of the Commonwealth tax revenues averaged over the last 2 years preceding each annual budget period.

In accordance with our policy of admitting students from low-income families, tuition fees are very low. The university's budget for the past 4 years, by sources of funding, is shown in the next slide.

The BEOG program for student assistance has been of tremendous help.

The President's new program increasing financial aid for middle-income families, which was presented by Chairman Ford and cosponsored by 26 other Congressmen including Congressman Corrada, will relieve the burden of those middle-income parents with children in institutions of higher learning in Puerto Rico. The proposed legislation will have a large impact in Puerto Rico where the average family income is lower than that of the continental United States.

Now, let me show you what has been happening to the University of Puerto Rico's operating budget.

The University of Puerto Rico's income rose from \$51.4 million, as can be seen in the next slide, 1970, to \$120.2 million in 1977, an apparent increase of 134 percent. This looks very healthy at first glance. But in terms of real purchasing power, the gain is only 50 percent. The inflation of recent years has had a powerful impact on operating and capital budgets. Faculty salaries, shown in the next slide, have risen somewhat, but not enough to counteract the rise in the cost of living.

Scientific equipment for research and teaching laboratories is much more costly. Construction costs have risen sharply, as can be seen in the next slide. Close to 70 percent during the last 10 years. I am sure that is not a trend only in Puerto Rico, this is a trend also in the continental United States, the mainland.

The rise in the cost of energy, despite strenuous efforts by all units of the system to conserve energy, has also been a serious drain on our fiscal resources, and as can be seen in the next slide where you can see how the cost of electricity for the facilities of the university system has increased. The last year when we started implementing energy conservation measures, this decreased somewhat, but with the addition of new facilities, we are really feeling the drain on our fiscal resources due to this very important factor.

In spite of this, we have not increased tuition for our students consistent with the expectations for a State-supported university. But all this means that during the last 4 years of economic recession, our construction program has been severely hampered, as shown in the next slide, construction in Puerto Rico decreased sharply both for the private and public sectors.

The financing of new physical plant comes from a variety of sources: short term bank loans which are eventually converted into long term debt by bond issues, allotments made from the general fund by decision of the Council on Higher Education, special appropriations by the Commonwealth legislature and Federal programs; namely, title VII of the Higher Education Act, titles VI and VII of the Public Health Service Act and parts A and B of the Federal Local Public Works Act of 1976.

We have received some help under the latter act from the Economic Development Administration of the U.S. Department of Commerce. The projects being developed with these funds are helping the situation somewhat, but there are many other high priority projects that need to be initiated soon for the benefit of the people.

The university should and must comply with the Federal regulation that deals with the handicapped. We support efforts to make our facilities barrier free. Yet as much as we emphasize our commitment, we are subjected to severe budgetary constraints. To this end, we have so far identified projects with an approximate cost of \$10 million. We must also attend the need for construction and renovation for energy conservation. This university will not approve any project that fails to support energy conservation measures.

As part of a long range, systemwide, integrated development plan on which we are now working, we have identified the need for 57 projects that will cost in all over \$97 million. I will mention just a few major ones.

The Cayey University College, shown in the next slide, at present is housed in former U.S. Army barracks, donated by the Federal Government to the university. It desperately needs, among other things, an academic and library building at an estimated cost of \$3,600,000.

The Carolina Regional College is housed in prefabricated temporary structures, as shown in the next slide, and needs a variety of permanent facilities that will cost an estimated \$12 million, on the basis of present cost.

High priority has been assigned also to the renovation of the Administration Building of the Medical Sciences Campus, next slide, in order to conserve energy. As you can see, this multistory structure operates on a central unit air-conditioning system. As present, the nature of the electrical air-conditioning system does not allow for the implementation of energy conservation methods, since only the whole building can be cooled. For example, if you want to use one of the many amphitheaters for 150 students, you have to set up the whole air-conditioning system for the building. That also applies for the library, and our economic situation is so that we have been forced to close this building at 4:30 in the afternoon, leaving researchers without the ability to do research as they should, and leaving the students in a library that does not conform to comfort required for the study process. Renovations are needed so that the amphitheater, the library and other single units can be cooled independently as necessary. This project will be carried out at a cost of \$1 million.

The proposed second phase of the Natural Sciences Building in the Río Piedras campus is needed to strengthen the academic program in mathematics and physics at the undergraduate level. The project cost is estimated at \$6 million.

The highest unemployment rate is found in the mountains of the west central part of our island. High priority has been assigned to the establishment of a regional college in this area. The necessary physical facilities would cost an estimated \$6 million.

I have outlined some of the projects that are included in detailed form in a written document that has been submitted for the hearing record.

I hope that this brief presentation will give you an idea of the extreme importance to us of the need for title VII funds. I understand that the House Appropriations Committee will shortly be consider-

ing the appropriations for fiscal year 1979, among these, moneys for the title VII. If there is one thought that I want to leave with you today, it is the following:

The higher education reality today is vastly different from that which existed 10 years ago. I realize that there were some abuses of this program in the past, but I think it is time for Congress to re-examine its policy with respect to title VII and reactivate its funding. If just our university is in need of over \$90 million, I am sure you will find numerous colleagues of mine here and in other State university systems who are also feeling the budgetary walls closing in and in need of similar help.

The academic and research efforts of our university have been highly determinant in the socioeconomic development of our island during the past decades. In the decades to come, Puerto Rico will require a considerably larger amount of appropriately trained personnel to continue its development pace.

We can assure you that we will make very good use of whatever resources might become available through this legislation. Again I want to express our appreciation and our satisfaction for your visit. We hope that your activities are most productive and that your stay in our island is a pleasant one.

Thank you very much.

[The attachments follow:]

UNIVERSITY OF PUERTO RICO

APPENDIX I

Supporting Information on the need for Physical Facilities

During the first part of the past decade, the University of Puerto Rico expanded its capital improvement program in order to meet pressing demands for physical facilities for academic and research purposes. But the energy crisis crippled such effort. The reduction in financial resources compelled the University to freeze its construction program in 1974-75.

With the enactment in 1976 of the Local Public Works and Capital Improvement Act (LPW-94-369), and the availability of funds under the Economic Development Administration of the Department of Commerce, the construction business showed some modest recovery. Some of the projects with the highest priorities have been initiated at various campuses, since then.

However, the needs are far above our present capabilities. The magnitude of the job that our University is called to perform is enormous. Of all higher learning institutions in Puerto Rico the state University is the only one with official responsibilities to serve the needs of an ever increasing population. In order to meet the challenge, the Institution has to search means and ways to provide, among other things, the large amount of urgently needed facilities to, at least, maintain the quality of our academic efforts.

We have placed the highest priority in the institutionalization of the planning process in order to guide the utilization of our limited resources. An Integrated Development Plan for the whole public university system should be completed in the next 18 months. That will be supported by an evaluation process called operational auditing, which have been initiated under the direct supervision of an extremely capable professional; a former director of the Puerto Rico Comptroller's Office. In addition, the Office of Information System is being revamped to provide policy makers at various levels with reliable data on which to base the decision making process.

By establishing an integrated planning process with the corresponding evaluation mechanism, we will be able to effectively monitor the institution in order to accelerate the rate of advance toward clearly defined goals. It is within this framework that the following projects have been classified in terms of new construction, remodeling and expansion of existing facilities:

RIO PIEDRAS CAMPUS

This is the largest campus of the University of Puerto Rico. It has a total enrollment of approximately 24,000 students. Some of the proposed physical facilities are needed to strengthen the academic programs at the graduate level of the Faculty of Natural Sciences and the School of Law. Also, an expansion of the Student Center should make possible the relocation of the Offices of the Dean of Students, presently in an extremely crowded space. The Museum needs additional space to accommodate its archeological and anthropological sections. Some of these projects were programmed over a decade ago and have been in the waiting list during all that time. The projects, with the approximate cost, are as follows:

New Construction

- | | |
|--|--------------|
| 1. Natural Sciences Building
Second Phase | \$ 6,200,000 |
| 2. Natural Sciences Building
Third Phase | 4,000,000 |

Remodeling of Existing Facilities

- | | |
|--|-----|
| 3. Modifications to facilitate access by the
physically handicapped | --- |
|--|-----|

Expansion of Existing Facilities

- | | |
|---|-----------|
| 4. Expansion of the Law School Building | 1,200,000 |
| 5. Expansion to the existing Museum | 1,000,000 |
| 6. Expansion to the existing Student Center | 1,083,486 |

MAYAGUEZ CAMPUS

This campus has an enrollment of approximately 9,000 students. The proposed physical facilities are important to maintain accreditation standards set by Engineering Council for Professional Development (ECPD). The engineering building, the Annex to Piñero Building, and the Computer Center, will help in the development of the science and technology programs which are particularly important. The degree of complexity of many industrial operations and the greater environmental demands for the preservation of our physical environment are some of the reasons for these particular needs. Other projects: the annex to the existing Student Center, the Parking Building, the improvement of existing Physical Education Facilities, construction of Administration Offices and reconstruction of Power Utilities are required as supporting facilities for the academic and research programs. The approximate cost of the projects is as follows:

New Construction Projects

7. Engineering Complex (11 Stage)	\$ 3,757,000
8. Engineering Complex (111 Stage)	2,987,000
9. Computer Center	2,052,000
10. Parking Building	3,000,000
11. Administration Offices	150,000

Remodeling of Existing Facilities

12. Improvement to the existing Physical Education facilities	1,350,000
13. Reconstruction of the Power Installation Primary System	200,000
14. Modifications to facilitate access by the physically handicapped	5,000,000

Expansion of Existing Facilities

15. Annex to Piñero Building	2,785,000
------------------------------	-----------

16. Annex to the existing Student Center

\$ 1,947,000

MEDICAL SCIENCES CAMPUS

Some programs at the Medical Sciences Campus are offered in a number of facilities scattered throughout the Medical Center Complex. Pedestrian and vehicle movement in the area is extremely hazardous and time consuming. A pedestrian circulation mall and passenger's terminal are urgently needed to provide physical cohesiveness, improve safety conditions for pedestrian and facilitate motor traffic movement. The main building of this campus also needs high priority work in order to provide space for the relocation of the School of Pharmacy, formerly in the Río Piedras Campus, as well as for the new chemical and dry laboratories and the carpentry and X-Rays shops.

The remodeling of the Nurses Dormitory to provide space for the school of Health Related Professions is also of paramount importance. The present conditions of the existing structures are inadequate, which might affect the accreditation of the Schools. The approximate costs are as follows:

New Construction Projects

- | | |
|---|-----------|
| 17. Pedestrian Circulation Mall
and Passenger Terminal | 1,883,250 |
| 18. Parking Building | 8,000,000 |

Remodeling of Existing Facilities

- | | |
|---|-----------|
| 19. Remodeling of the existing Main
Building to built laboratories
and provide energy conservation
installations | 1,300,000 |
| 20. Reconstruction of the nurses
dormitories to accommodate the
School of Health Related Professions | 700,000 |
| 21. Modifications to facilitate access
by the physically handicapped | --- |

CAYEY UNIVERSITY COLLEGE

This is one of our four-year colleges. It is located in the central range of the Island, in the former Henry Barracks Army Camp. Connected through Las Américas Freeway, it is within 40 minutes travel time from San Juan. This College generally serves the neighboring municipalities but could, if necessary, provide space for students from as far as San Juan, on the North, and the Guayama-Ponce southern central section.

The buildings at Cayey are mostly the old facilities of the army camp. The space for academic and administrative functions is very limited. The supporting services are also critically impaired. This campus is located in an area with a very high unemployment rate and should become an instrument for long range steady socioeconomic improvement. The approximate cost of the proposed projects is as follows:

New Construction Projects

22. Academic and Library Building	3,600,000
23. Multipurpose Physical Education Building	500,000
24. Audiovisual Academic Building	720,000

Remodeling of Existing Facilities

25. Remodeling of Maintenance Building	175,000
26. Remodeling of Administration Building	300,000
27. Modifications to facilitate access by the physically handicapped	100,000

HUMACAO UNIVERSITY COLLEGE

Located in the eastern part of our Island, this college is in the process of becoming a four-year institution. Construction of a Science Building and the expansion of the existing library, are both very important

for its development. Expansion of the Student Center, and restoration of the museum are also important as supporting facilities for the college, as well as the community in general. The approximate costs of the proposed projects are as follows:

New Construction Projects

28. Academic Building	1,200,000
29. Science Building	6,125,000

Remodeling of Existing Facilities

30. Restoration of the Regional Museum	250,000
31. Modifications to facilitate access by the physically handicapped	250,000

Expansion of Existing Facilities

32. Expansion of Library Building	1,300,000
33. Expansion of the Student Center	600,000

REGIONAL COLLEGES ADMINISTRATION

Carolina Regional College

This college is presently housed in temporary buildings at the eastern sector of the San Juan Metropolitan Area. A new site, approximately two miles away, is waiting for development. Construction of new facilities is urgently needed. The present conditions of the college are negatively affecting the quality of the academic environment. The approximate costs of the proposed facilities are:

34. Administration Building	1,524,245
35. Academic Building	5,000,000
36. Library Building	2,500,000
37. Student Center Building	2,430,000

38. Multipurpose Physical Education facilities	500,000
--	---------

Bayamón Regional College

This campus is located at the western sector of the San Juan Metropolitan Area, in one of the fastest growing urban sectors. Prevailing congestion of existing administrative offices and lack of adequate facilities to serve the student needs, makes the provision of additional space extremely urgent. Other supporting, equally important facilities for parking, maintenance and physical education are also on the waiting list. Projects and approximate costs at this site are:

New construction Projects

39. Academic Building	1,500,000
40. Multipurpose Physical Education facilities	500,000
41. Maintenance Building	100,000

Remodeling of Existing Facilities

42. Modifications to facilitate access by the physically handicapped	---
--	-----

Expansion of Existing Facilities

43. Administration Building	590,000
44. Student Service Building	1,500,000
45. Parking Areas	200,000

Arecibo Regional College

This college has a very extensive service area. It is housed in a physical plant of new construction. However, supporting multipurpose physical education facilities will help the institution in meeting the needs of its students, faculty and the community in general. The approximate cost of this project is as follows:

46. Multipurpose Physical Education \$ 1,800,000

Aguadilla Regional College

The Aguadilla Regional College is our last addition. The college is operating at the former Ramey Air Force Base located at the northwestern side of the Island. Remodeling of old buildings is important as well as reconstruction of the utility system within the college grounds.

47. Reconstruction of the Utility System 300,000

48. Reconstruction of Buildings 621 and 630 200,000

Ponce Regional College

Academic facilities for this college are now under construction with federal assistance under the Local Public Works and Capital Development Program. The supporting facilities, such as the Administration Building and Multipurpose Education facilities are necessary complements which will permit a substantial increase in enrollment. Projects and approximate costs are:

49. Administrative Building 1,700,000

50. Multipurpose Physical Building 1,800,000

Utuaado Regional College

This should be the next addition to the network of regional colleges. The proposed facility is located in the central mountain section of the Island. It is an area where the most acute unemployment rate is found. The Regional College should help in the sustained development of the area. The approximate cost of facilities to establish this center will be,

51. 3,000,000

Modifications to facilitate access by the physically handicapped at all the existing facilities in the regional colleges will cost approximately,

52. 3,000,000

Agricultural Experiment Station

The following facilities are needed to serve graduate programs from Mayaguez which use the Agricultural Experiment Station at the Municipality of Lajas and Isabela:

- | | |
|---|---------|
| 53. Dairy Complex for Research, Teaching and Extension Services, Lajas Substation | 350,000 |
| 54. Annex to Administration and Laboratories Building, Isabela Station | 100,000 |

Botanical Garden

During the last years the foundations have been laid for the development of 175 acres of land as a botanical garden. This facility will be used as formal and informal setting for educational and research purposes for students and scholars interested in botany and its related sciences. We already have a botanical collection of 200 families and 2,000 species of plants. The extensive herbarium will provide a necessary tool for advanced studies. Other important aspects of this project are related to the preservation of some disappearing species and to the enrichment of the flora of Puerto Rico and the Caribbean.

Other research facilities are also needed to expand promising projects related to programs in the Mayaguez Campus. Puerto Rico is endowed with an abundance of daylight which make it an ideal area for the study photosynthetic efficiency, thus opening new avenues for an increased production of food and fibers.

The approximate costs of the proposed facilities are as follows:

New Construction

- | | |
|--|-----------|
| 55. Laboratories, Library, Exhibition Hall and Offices | 3,900,000 |
|--|-----------|

Remodeling of Existing Facilities

56. Reconstruction of Utilities Power,
water, telephone

COUNCIL ON HIGHER EDUCATION AND UPR CENTRAL ADMINISTRATION

The Council on Higher Education is the policy making unit for public and private higher education. The Council shares office space with the Central Administration unit of the University System. Both institutional units are now in urgent need of additional space. An extension of the facilities to provide for present and projected needs will involve an approximate cost of,

57. 800,000

Total costs for the projects with estimates completed.

A. For new construction	70,778,495
B. For remodeling	13,125,000
C. For expansion	13,105,486
TOTAL-----	97,008,981

APPENDIX II

LIST OF FIGURES

1. The Caribbean Region
2. Puerto Rico's Urbanized Areas
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5. Gross Product by Sectors
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7. Composite of Newspaper Advertisements
8. U.P.R. Electricity Consumption by Year(1969-77)
9. Puerto Rico's External Trade
10. University and College Enrollment by Sectors
11. Enrollment in Accredited Institutions of Higher Learning
12. Organigram of the U.P.R. System
13. Location of Campuses in the U.P.R. System
14. U.P.R.'s General Operating Budget
15. U.P.R.'s Operational Budget in Current and Constant Prices
16. Salary Scale for an Associate Professor with a PhD.
17. Inflation Index for Construction Costs.
18. U.P.R.'s Energy Costs
19. Construction: Private vs. Public Sectors

THE CARIBBEAN REGION

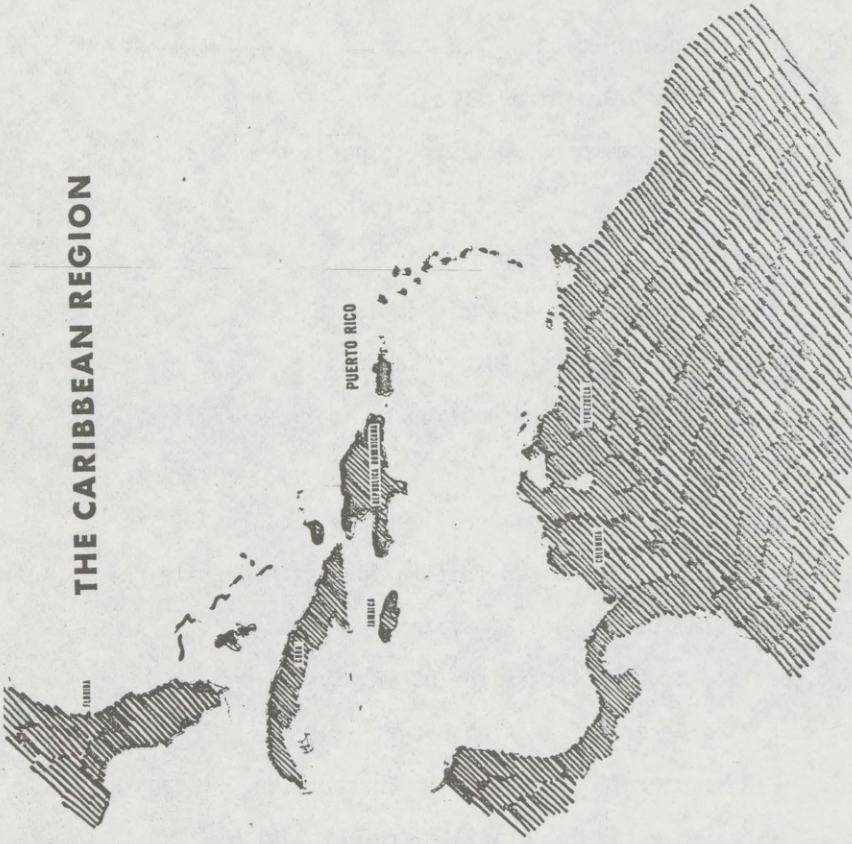


Figure 1

PUERTO RICO URBANIZED AREAS

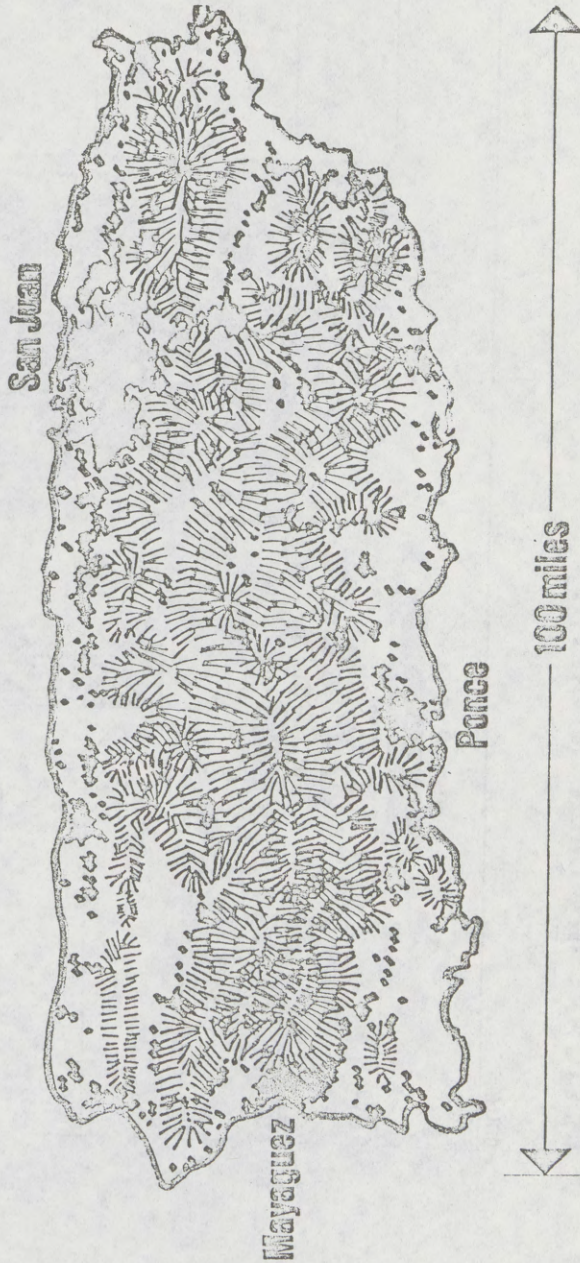


FIGURE 2

PERSONAL INCOME PER CAPITA

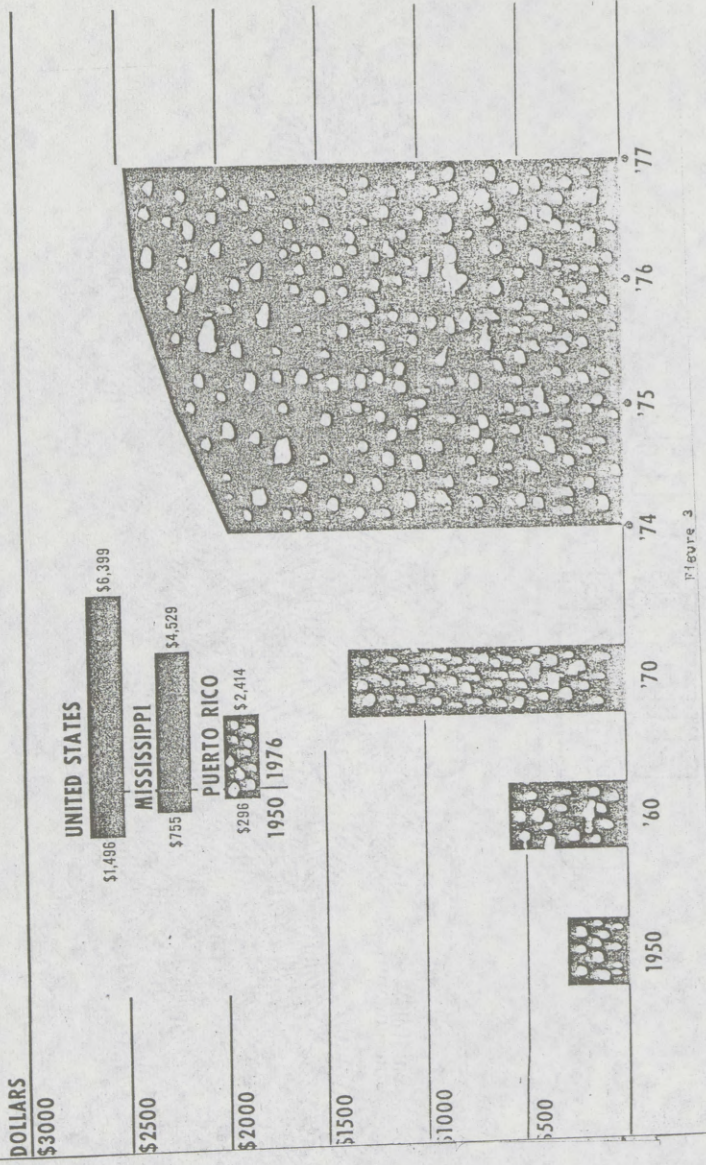


Figure 3

MANUFACTURING SURPASSES AGRICULTURE

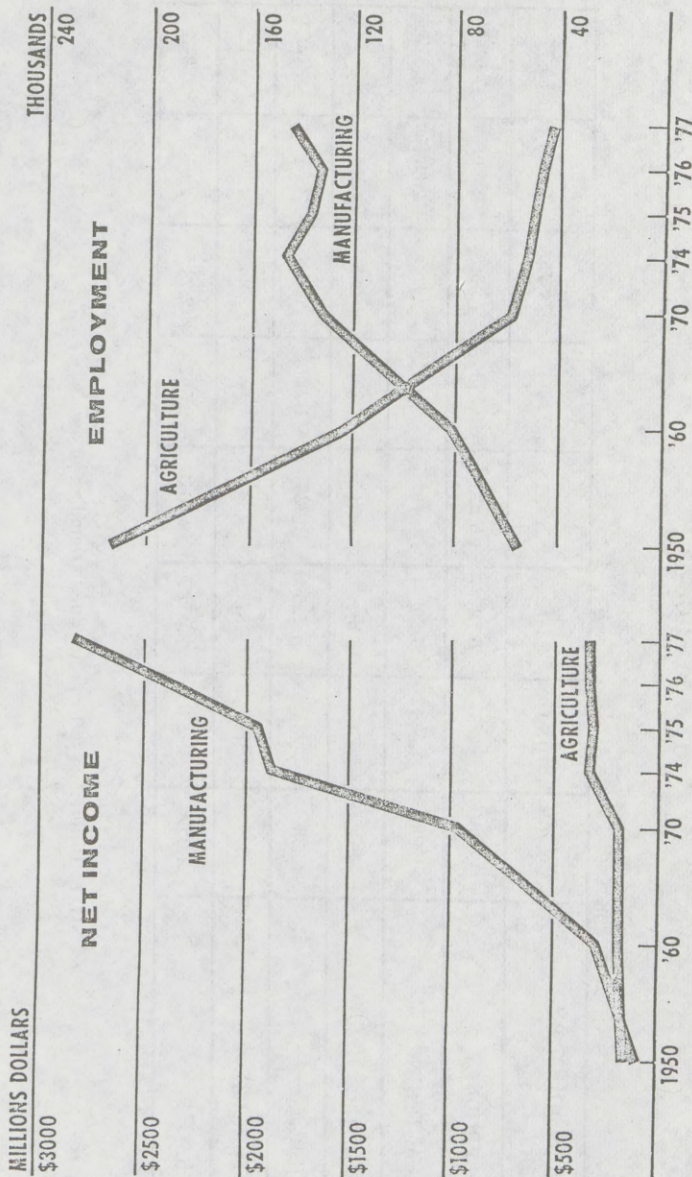


Figure 4

GROSS PRODUCT BY SECTORS
(IN MILLION OF DOLLARS)
1969-70 - 1976-77

GROSS PRODUCT BY SECTORS	69-70	70-71	71-72	72-73	73-74	74-75	75-76	76-77
GROSS PRODUCT	4,688	5,253	5,727	6,270	6,798	7,136	7,439	7,914
MANUFACTURING	1,190	1,335	1,598	1,879	2,199	2,310	2,882	3,347
AGRICULTURE	161	176	182	176	280	265	279	279
COMMERCE	898	987	1,125	1,226	1,221	1,350	1,511	1,650
CONSTRUCTION	379	485	487	485	506	465	396	334
OTHERS	2,059	2,270	2,334	2,504	2,592	2,747	2,370	2,304

NOTE: Differences in totals are due to rounding of numbers

Figure 5

LABOR FORCE EMPLOYMENT AND UNEMPLOYMENT

THOUSANDS
1000

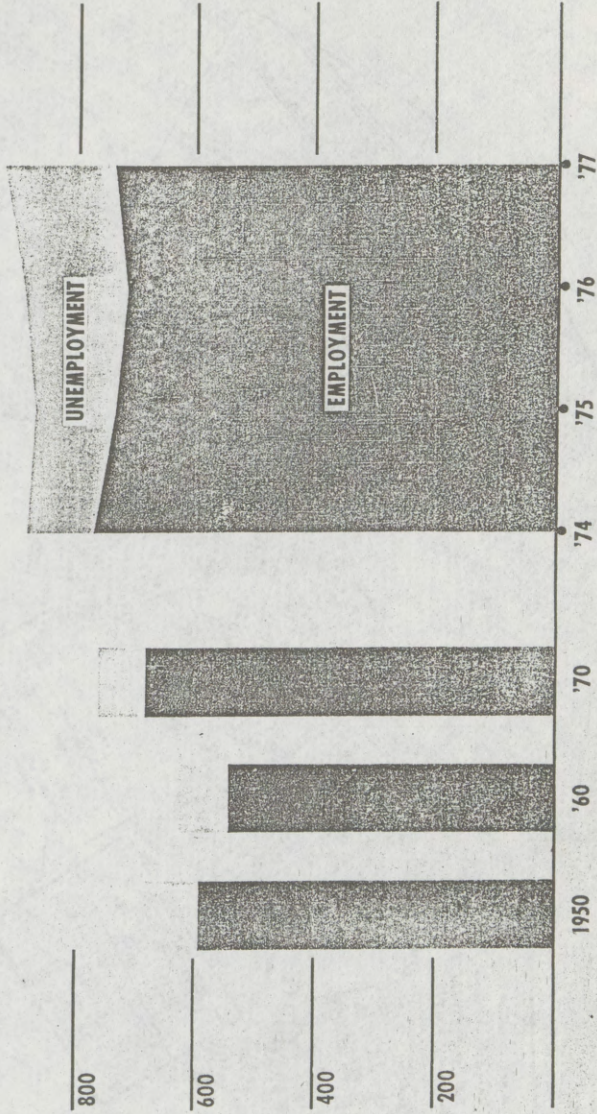


Figure 6

ELECTRIC ENERGY CONSUMPTION

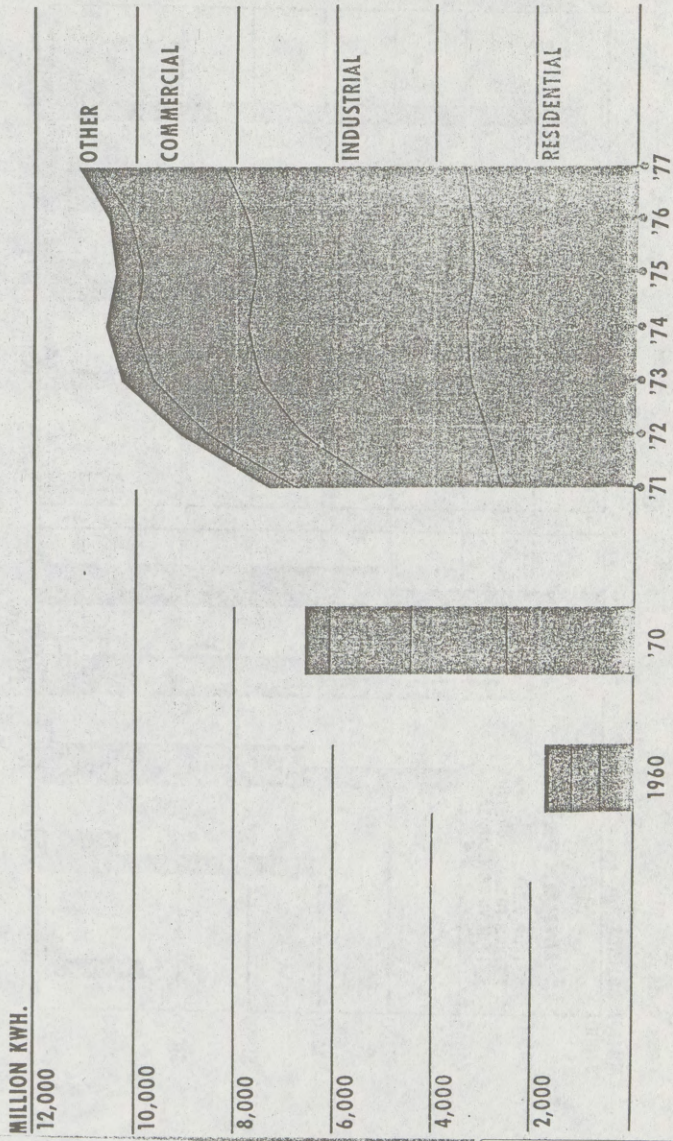
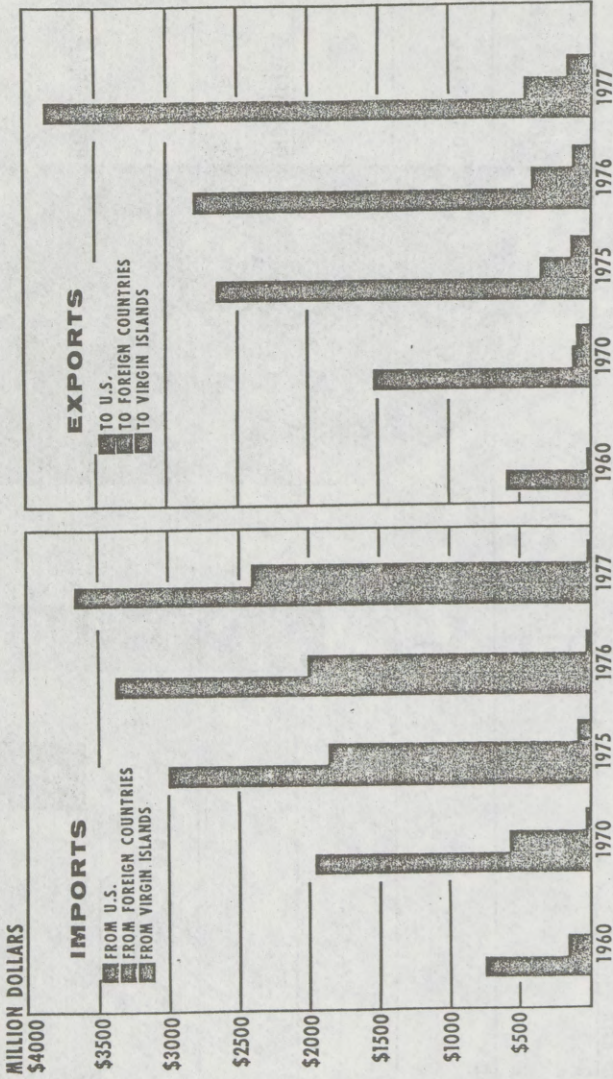


Figure 8

PUERTO RICO EXTERNAL TRADE

FISCAL YEARS



BALANCE OF TRADE

1960	-\$300
1970	-\$826
1975	-\$1,812
1976	-\$2,086
1977	-\$1,628

Figure 9

UNIVERSITY AND COLLEGE ENROLLMENT

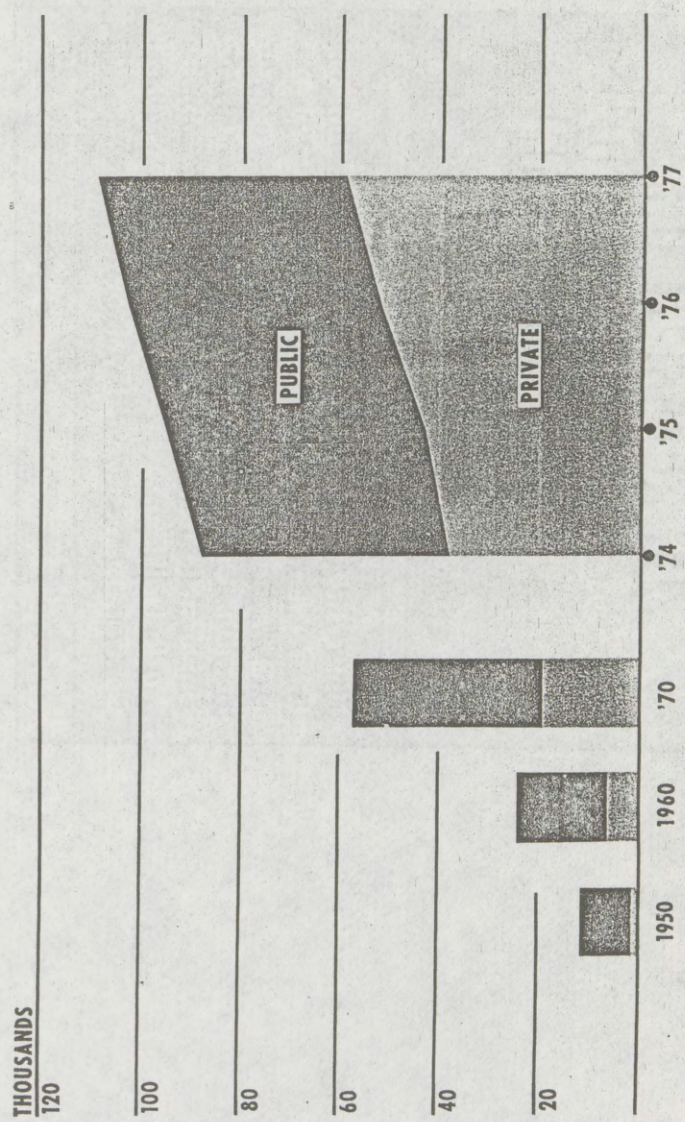


Figure 10

ENROLLMENT OF ACCREDITED INSTITUTIONS OF HIGHER EDUCATION 1977-78

University of Puerto Rico	50,492
InterAmerican University	28,420
A. G. Méndez Educational Foundation	12,245
Catholic University	11,762
University of the Sacred Heart	5,051
World University	4,831
Central University of Bayamón	2,651

FIGURE 11

THE UNIVERSITY OF PUERTO RICO SYSTEM

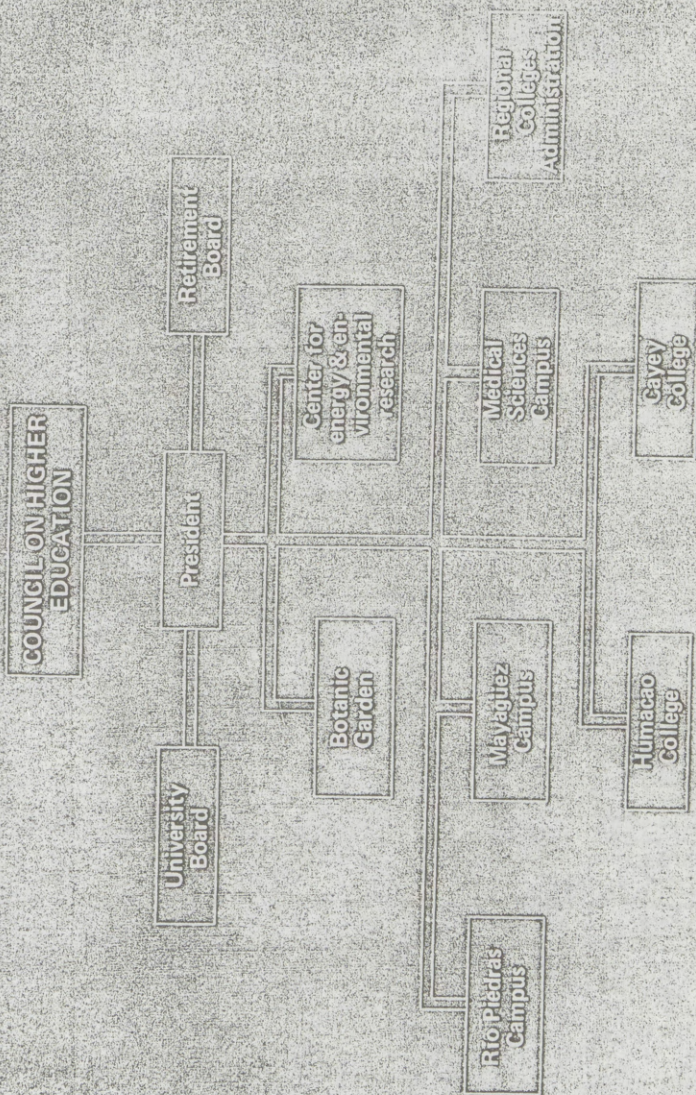


FIGURE 12

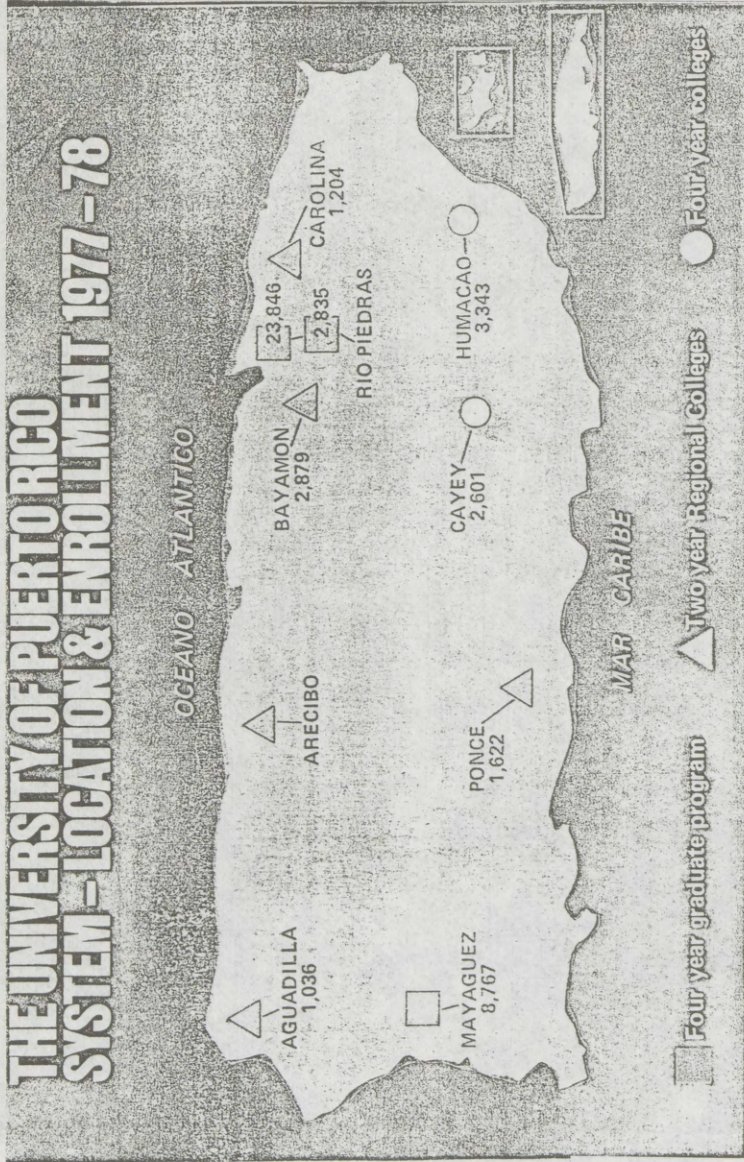


FIGURE 13

GENERAL FUND OF THE UNIVERSITY OF PUERTO RICO

COMPARISON OF GOVERNMENTAL FUNDS VS. INSTITUTIONAL FUNDS

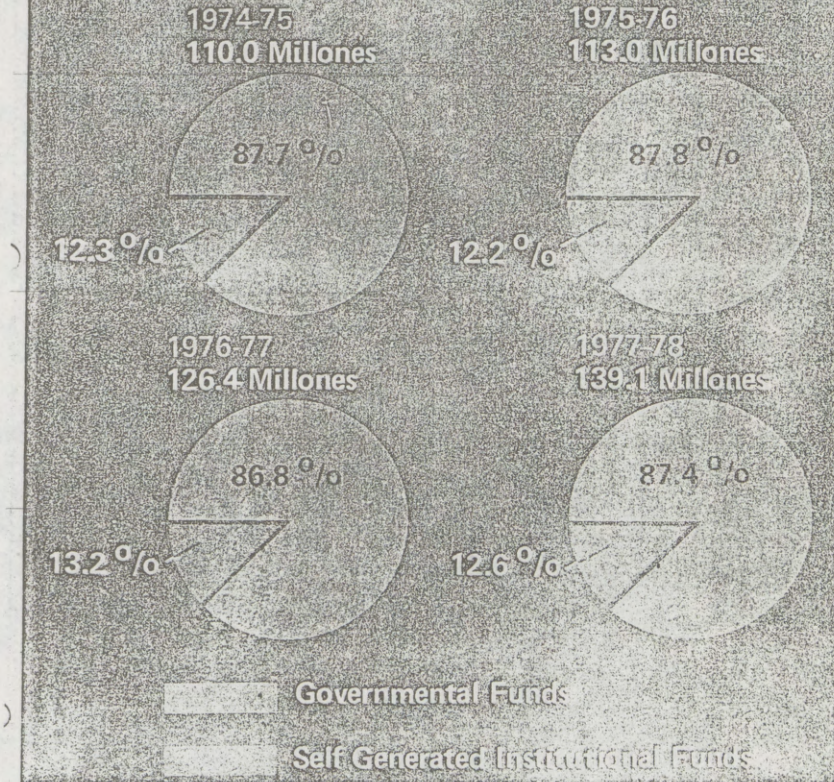


FIGURE 14

GENERAL FUND OF THE UNIVERSITY OF PUERTO RICO IN CURRENT AND CONSTANT PRICES

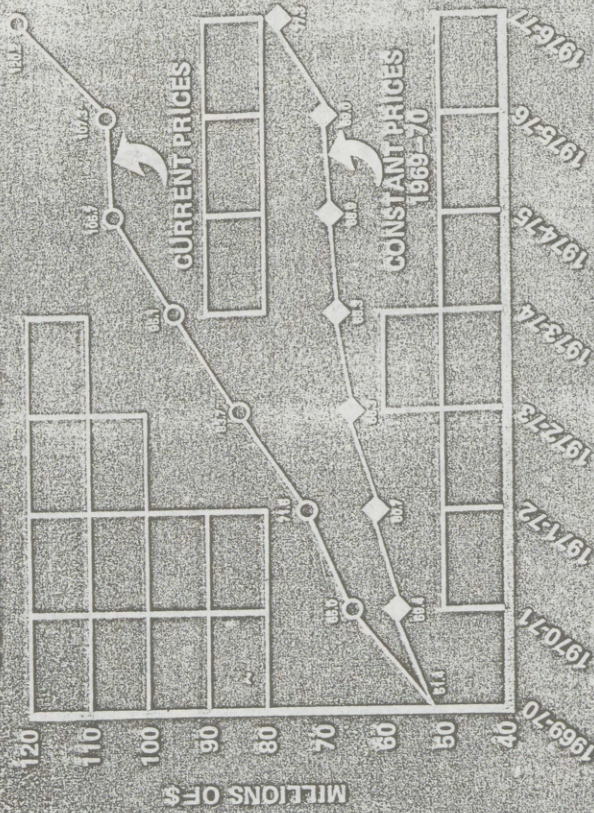


FIGURE 15

GENERAL BASIC SALARY SCALE FOR AN ASSOCIATE PROFESSOR WITH DOCTOR DEGREE 1967-68 1976-77

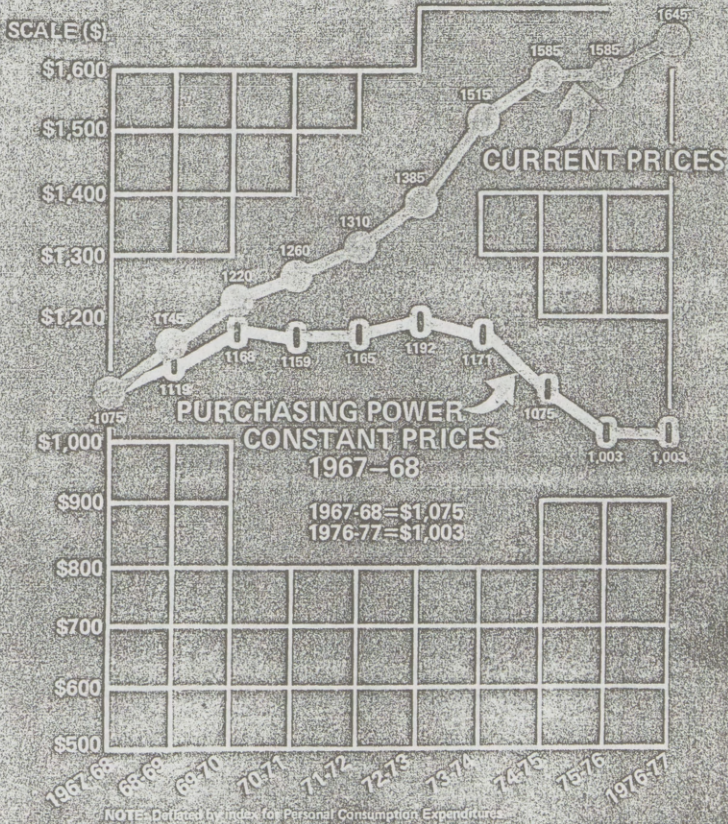


FIGURE 16

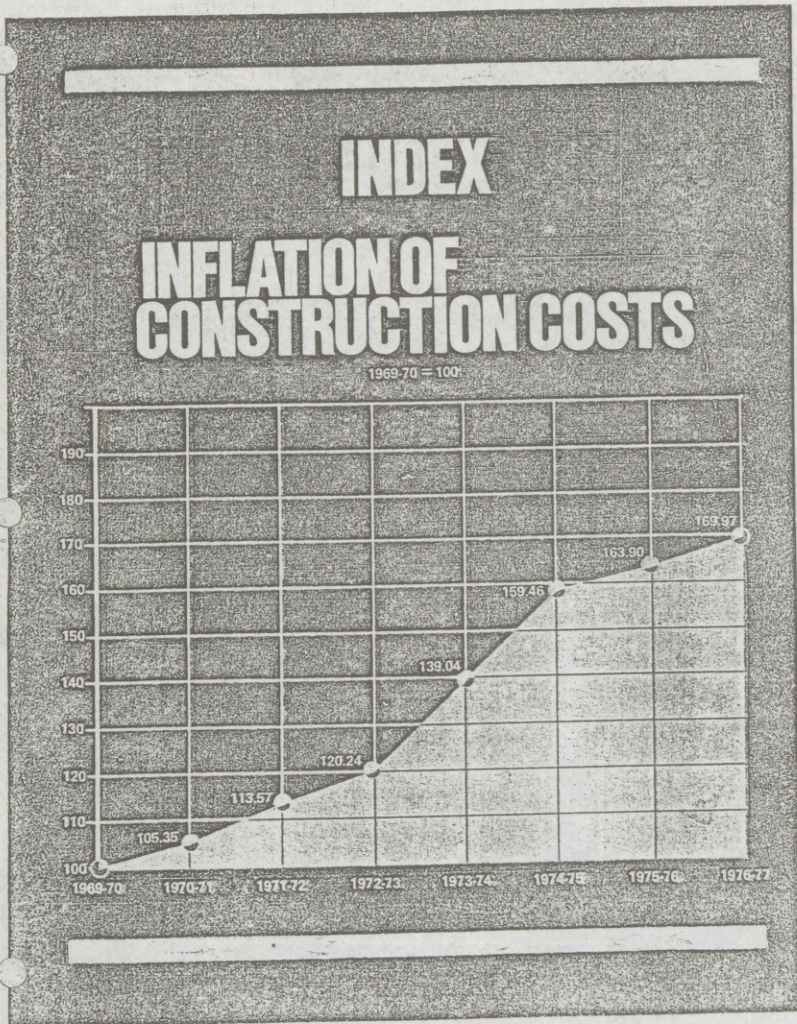


FIGURE 17

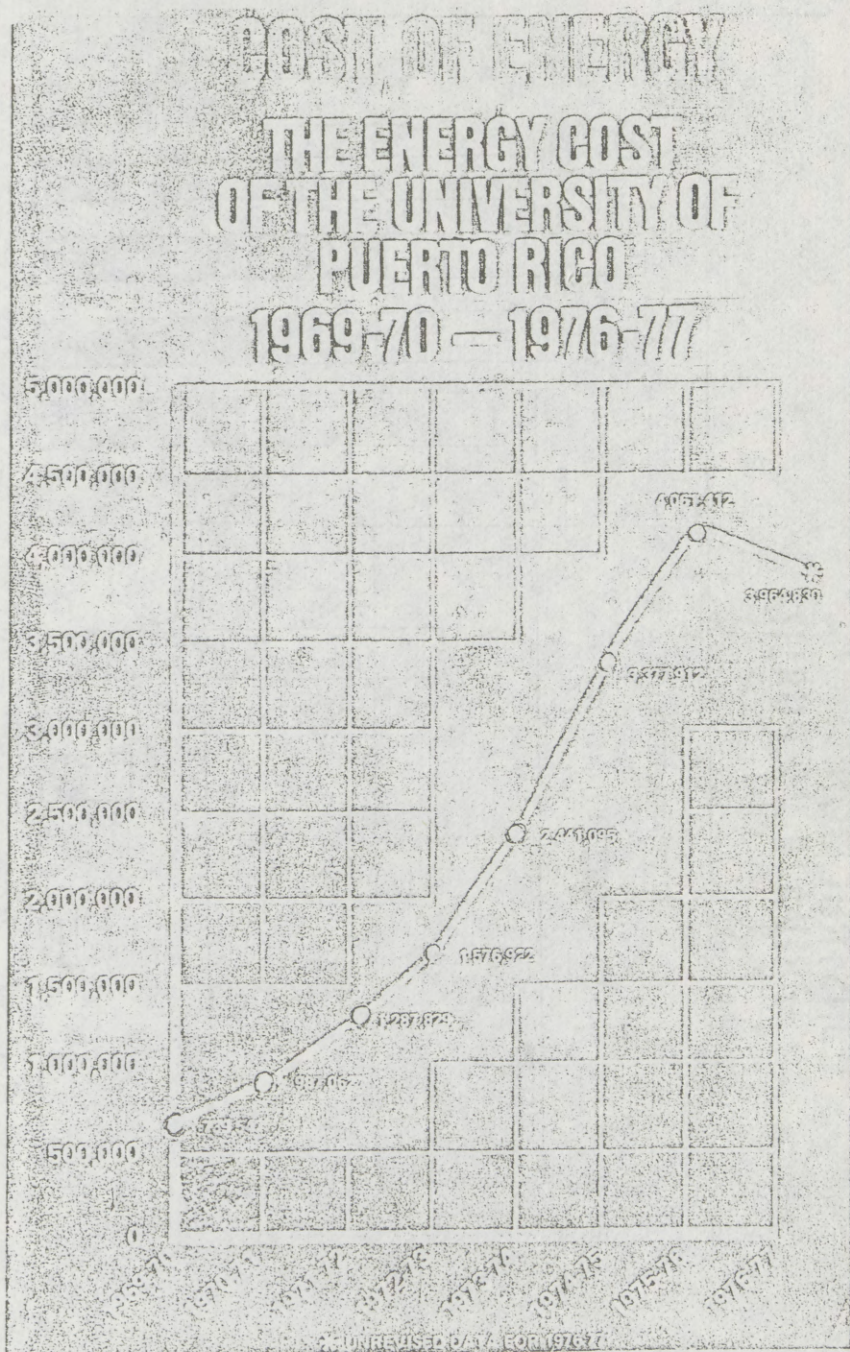


FIGURE 18

CONSTRUCTION: PRIVATE VS. PUBLIC

MILLION DOLLARS

Figure 19

□ PRIVATE SECTOR
■ PUBLIC SECTOR



Mr. FORD. Thank you very much, Doctor.

I am intrigued by the proportion of private versus public students. Is it necessary under present circumstances for you to refuse admission to students who seek admission to the university?

Dr. ALMODÓVAR. Yes, sir.

Mr. FORD. Assuming they're otherwise qualified.

Dr. ALMODÓVAR. Yes, sir, we receive on the average—this year we received over 30,000 applications to the university system, and we are able to accept only one-third of those, 66 percent are then turned back because the university doesn't have either the facilities or the budgetary resources to give high-quality education to this totality of students, so that out of over 30,000, we can admit only about 11,000. If we could get better facilities, I think definitely we could meet one of the main aims of title VII, which is to increase enrollments and provide education for more people.

Mr. FORD. I want to thank you for the example you gave in the administrative building and the medical sciences campus on energy conservation. It's been difficult for some of us to understand how the expenditure of anything except massive amounts of money was going to make very much difference. It would seem to me that the example you used here would show that for a relatively small investment the potential for saving is very great, and I hope that we can use that later this year. Counsel reminds me that some of the educational associations have been preparing for an attempt with the Appropriations Committee to increase the President's \$50 million initiative by seeking another \$100 million in a supplemental appropriation. I think that the energy conservation argument is one that has incurred the preoccupation of people in the United States, and it holds promise of public support.

Before calling on Mr. Corrada, I would ask you about something different. Perhaps you are not in a position to answer it at this point, but you could give us some idea later. In 1974 when we were working on the Elementary and Secondary Education Act, in the general education provisions we dealt with the problem of a shortage of teachers in bilingual education and a shortage of administrators who understood what the purpose of bilingual education should be and how to use the resources. Among other things, Senator Kennedy and I worked out a provision for 100 positions to be allocated by the Commissioner of Education to institutions that would provide for the education of teachers and administrators of bilingual education. Since Spanish is predominantly the language requested for bilingual programs throughout the United States, I would like to know whether or not the Office of Education has sent any of those fellowships down here and also whether they have availed themselves of the resources of your university in establishing workshops for inservice training.

Dr. ALMODÓVAR. Yes, sir.

Mr. FORD. I saw a very disturbing television clip this last weekend with a short film taken in a bilingual program in New York City, where interestingly enough the bilingual teacher couldn't speak English. So I don't know how much help she was giving the Spanish-speaking students in that class in terms of developing their bilingual skills. It turns out that that's not a unique situation, that it is unfortunately frequently found. It seems to me that you have a tremendous

opportunity here to provide the additional bilingual teachers that we need under circumstances where we would expect that they would have an opportunity to be proficient in both languages, which is in fact what a bilingual teacher ought to be able to do. If you would ask your people perhaps to respond to this, we would be interested in knowing whether or not the Office of Education is trying to cooperate with you in using your resources and perhaps helping Mr. Corrada to see that they do if they haven't been.

Dr. ALMODÓVAR. I think, Mr. Chairman, if you would allow the chancellor of the Río Piedras campus to give a short answer to that question . . .

Mr. FORD. Yes, by all means. Please.

Mr. CORRADA. For the purposes of the record, may I say, Mr. Chairman, that joining the panel now is Dr. Ismael Rodríguez Bou, the chancellor of the Río Piedras campus of the University of Puerto Rico, which of course as previously indicated by the president of the university is the largest within the university system.

Dr. RODRÍGUEZ. Thank you for this opportunity to welcome you here to this meeting. The Río Piedras campus has for some years now an institute of bilingual education. We are facing that problem. We have had this program that has spread now with the cooperation of the Department of Education. We have launched precisely this year a very strong program of training teachers throughout the island and one of the main subjects that is being attended to is the teaching of English to the development of more skills for the teachers of English in our island, also in Spanish, and we are dealing besides that with a very serious and new problem that we are facing. That is the incoming of Puerto Ricans born and trained in the States. We are conducting right now a study by Dr. Kavetsky, one of our persons most interested in bilingual education, to find out really how many of these newcomers to Puerto Rico, Puerto Ricans whose main language is English, how we can better deal with them in our schools. We have quite a number of them at the University of Puerto Rico, especially at the Río Piedras campus. We are using some of them, once they are trained in methodology and techniques of education, as teachers of English in our schools.

Right now the number that we have of those coming from New York is around 30,000 of these Puerto Ricans born in the States or trained in the States. We have the statistics from New York that we have about 75,000 that have dropped from the schools in New York. They are supposed to be coming back to Puerto Rico, but really we haven't been able to trace them, so this study that we are conducting is to find out better where these people are, how we may be able to train them better for better service here, and this may be a source of new teachers in Spanish for the school system in the States where bilingual education is badly needed.

These are some of the things that we are trying to do now.

Mr. CORRADA. If the chairman will yield, please? The problem that he is talking about presents a very serious case, because it means that there is now a need to provide bilingual education to these students by teaching them in English while they become proficient in Spanish and are able then to adjust to the educational system of the island. But,

Chancellor, I understand that there have been some efforts by some universities in the mainland to establish some sort of exchange program with the University of Puerto Rico. I myself have been visited by different people and particularly I recall some professors from the University of Connecticut that were interested in establishing an exchange program, so that while we could send from Puerto Rico some teachers to be trained at the University of Connecticut where they could gain a better understanding and command of the English language, they could send here professors from the University of Connecticut to be trained or students from the university to be trained in Spanish so that they could go back and then become bilingual teachers for bilingual programs.

Dr. RODRÍGUEZ. For many years we have had that program of exchange of teachers. We have teachers coming here from the States during the summer especially for special training, and more than that, so that they may be able to understand our culture, our differences, our purposes, and so forth, so that they can better understand the children that they have there in the school. For many years we have had that program and we have developed it, but we need to improve that type of program. We have also been able to allow some of our teachers from the university to go to the States, especially during their sabbatical leaves, or during the time that they are in training for their advanced degrees, to teach in the States, and some of their teachers come here to teach. We have recently sent one of our best professors to Princeton and they are sending one here. We have the same type of arrangement with Columbia University, and even we have one with the Sorbonne in France.

We are trying to stimulate these exchanges of professors so that we may reach—you know, it's needless to repeat it, we are an island and we need more contact of that type in different directions, and we are especially concerned with the increasing numbers of our own people coming back and we have concern with these newcomers that not only have an influence because they have developed some type of aggressiveness that probably lies in the States and they can be an example here especially for the small towns, and we are trying to get these people and not only reorient them and train them in language programs, but also in other types of programs that we would have to deal with, so it is a multiphase program that we are trying to cope with. I hope that this type of financial assistance may help us develop all these programs that we have initiated and we will have enough money and enough resources to do as much as we know we need to do.

Mr. FORD. We don't want to take too much of the time away from the stated purpose of the hearing. However, as you probably know, Mr. Corrada and I will be involved with the elementary and secondary education legislation. One of the programs that has a lot of attention from the President is the bilingual and combination bilingual programs that we have scattered all over the place. There is hope that we can string it all together, and we will have commitments for additional funds. I have been involved since the first bilingual language went into an elementary bill, and there is a very slow evolution of these programs since the concept found a place in the law.

To give you an idea of bilingualism, to illustrate what I say, it is particularly true that numerically the most sought after language is

Spanish in the bilingual programs throughout the United States and the most broadly dispersed. In the school system in the city of Detroit, in a survey made in 1974, it was discovered that children who were having learning problems—because English was not the primary language spoken in the home—spoke 41 different languages and dialects. We have in the bilingual program in Detroit seven dialects of Arabic that are used to write instructions for math tests, for example. In the city of Detroit we have people that speak an ancient language called Chaldean which is a language of the ancient Persians. It's kept alive by a culture of people living on Gibraltar, so for whatever the reason, Detroit ended up with a large concentration of immigrants from Gibraltar over a number of generations. So the school system must give math instructions in the lower grades in Chaldean, a language that most people have never even heard of.

The experience that comes to mind is the one that President Carter had in Poland. This could tell both sides of the story. State Department people who are otherwise experts and did not speak Polish themselves couldn't tell whether the interpreter assigned to the President spoke good Polish or relatively poor Polish. He spoke Polish and spoke Polish very well in Hamtramck, Mich., but not very well in Warsaw, because he spoke the Polish that he had learned from parents without much formal education from a part of Poland that is no longer Poland incidentally. Then they decided that they would have interpreters whose principal language was Polish, and the difficulty he had was trying to translate for President Carter who speaks just a little bit different English than I speak. So the American-born Polish interpreter was having difficulty translating the Polish known particularly by educated Poles, and the Polish-born interpreter was having difficulty translating southern U.S. English.

Now, I have the suspicion that we have a lot of Spanish-speaking bilingual teachers who are teaching "Spanglish" and that the school administrators who are not themselves Spanish-speaking people have no way to judge the proficiency, and that a program of sending these people down for the discipline that takes such as Mr. Corrada has been talking about would be very beneficial.

Mr. RODRÍGUEZ. I think it is important to let you know that at the Río Piedras campus we have a graduate program on translation. We are training people to translate from English to Spanish and Spanish to English, and I hope this also may be a sort of check on this type of problem that you have pointed out. Also we have an institute for New York City teachers, and they come here and for years we have been developing this program as in the extension service and continuing this program, so these are some of the things we are trying to do and to develop at the University of Puerto Rico.

Mr. FORD. Thank you very much.

Mr. CORRADA. We now welcome our next witness, representing the private university system which has been growing tremendously in our island during the past few years. Dr. José F. Méndez, president, Fundación Educativa Ana G. Méndez. Welcome, Mr. Méndez. By the way, Mr. Chairman, I would like to recognize that there are several of the presidents here of various universities; Dr. Francisco Carreras of Catholic University, Vincent Van Rooij of Universidad Central de

Bayamón, Dr. Stewart of Puerto Rico Junior College, and Dr. Ernesto Vázquez Torres, president of Polytechnic University, who will be testifying later.

Mr. FORD. Without objection, your prepared statement on behalf of the Association of University Presidents of Puerto Rico will be introduced in full at this point in the record, together with the attachments. You might add to it or highlight it as you wish.

[The prepared statement of José Méndez follows:]

TESTIMONY OF JOSÉ F. MÉNDEZ, PRESIDENT, ASSOCIATION OF UNIVERSITY PRESIDENTS OF PUERTO RICO

My name is José F. Méndez. As president of the Association of University Presidents, I represent the private sector of postsecondary education in Puerto Rico, which includes the Interamerican University with 28,500 students, Catholic University with 12,000, University of the Sacred Heart with 5,000, Bayamón Central University with 2,600 and the two colleges affiliated to the Ana G. Méndez Educational Foundation, which I preside, Puerto Rico Junior College and the Turabo University College, with 12,300 students. There are other private postsecondary educational institutions in Puerto Rico with a total enrollment of around 6,000 students, for a grand total of 66,400 students enrolled in private postsecondary educational institutions in Puerto Rico.

President Carter's commitment to expand higher education opportunities is evidenced by the measures his administration has proposed such as increasing student financial aid for middle income families with children in college. As educators committed to postsecondary education in Puerto Rico we strongly endorse and support President Carter in this endeavor.

However, if we are to make a significant contribution to the achievement of the President's goals for postsecondary education, we must make you aware of the most critical problem being faced by postsecondary education in Puerto Rico.

The Problem

The private sector of postsecondary education in Puerto Rico does not have the adequate physical facilities nor the necessary economic resources which would allow us

to build, remodel or expand our facilities in order to accomodate the evergrowing number of students demanding high quality education in Puerto Rico.

We have experienced in our island a dramatic increase in enrollment: from 64,593 students in 1970-71 to aproximately 117,596 in 1977-78. It should be noted that 56% of these 117,596 students are enrolled in private institutions, in contrast with mainland statistics which reveal a 78% in the public sector and 22% in the private. Undoubtedly this fact stresses the responsibility that the private colleges and universities must assume. It also evidences that the private sector has absorbed the greatest portion of the total postsecondary enrollment in Puerto Rico.

It is estimated that by 1985 the enrollment at college level will be around 154,000 students, and that by the year 2,000 the figures will be around 200,000. If this is so, the implications for the private sector are alarming. It would mean that we would have to start, as of now, planning and allocating funds for the expansion of our physical facilities. As I stated at the beginning of my presentation, the reality we must face is that the private universities do not have the economic resources to face this situation.

In estimating and projecting the total needs for the expansion of our physical facilities in the near future, there are numerous factors to be considered besides the above mentioned enrollment growth. Among them, the following can be singled out:

1. The Puerto Rico Department of Education is making efforts to improve the 36% retention rate of Puerto Rico's public school system. Ironically, if they accomplish this goal, higher education institutions in Puerto Rico will not be able to accomodate the increased number of high school graduates.

2. The enrollment in Extension and Continuing Education Divisions has increased dramatically in our Colleges and universities; in some cases it constitutes

one third (1/3) of their total enrollment. This represents a constant classroom occupancy from Monday through Saturday, thus deteriorating our facilities at a faster rate.

3. The need to comply with the rules and regulations of the Rehabilitation Act of 1973, Sec. 504 requires institutions of higher education to submit a 3 year plan to remodel their existing physical facilities, to provide more access to students who are physically handicapped, places another burden upon the schools budget.

4. The success we have had in increasing our enrollment yearly without being able to expand our physical facilities is undeniable. In many cases we have had to resort to renting space not built for educational purposes in order to absorb this increased enrollment. However, this quantitative success will be meaningless without a proportional qualitative improvement.

At the meeting of February 23, 1978 of the Commission on Higher Education of the Middle States Association of Colleges and Universities, the Honorable Carlos Romero Barcelo, Governor of Puerto Rico stated, and I quote:

"... we simply lack the resources to provide quality undergraduate education to everincreasing number of students". I have stated - the Governor continued saying - time and again through out my career in public life, it is precisely Puerto Rico's people who are the island's most abundant and precious resource: a resource which must be allowed to develop to the fullest, a resource whose development will always depend in large part on the maintenance of a strong and diverse system of colleges and universities.

If our colleges and universities continue to be thwarted by the lack of economic resources to grow quantitative and qualitatively, we cannot expect our post-secondary education system to be ~~neither~~ "strong" ~~nor~~ "diverse".

5. Many years ago our economic, social, educational, health and other public services were planned and projected considering the high migration of Puerto Ricans to the mainland. Today we are confronted with the phenomenon of reverse migration. These fellow Puerto Ricans are quantitatively overburdening our educational system since the majority of the migrants are college level youths.

6. The space requirements of modern educational technology cannot be met due to the obsolescence of many of our buildings. If we are to achieve our goals of providing the Puerto Rican community with the best education possible and if we are to revise or create new programs to cope with the technological demands of this era, we need new buildings and renovated facilities.

The lack of space is detrimental to the quality of instruction we pursue in our higher education institutions. The Federal Government has reduced the allocation of funds for construction purposes and the acquisition of equipment. The drastic reduction of funds in Title VII was justified in the mainland due to a gradual reduction in the enrollment throughout the nation. As evidenced by the facts I have mentioned, this is not so for Puerto Rico, where the opposite - an increase in student demands for higher education - is taking place. The economic recession on one side, and the reduction of funds on the other side have negatively combined to reduce to a minimum the academic facilities construction plans in Puerto Rico.

The situation which our higher education is presently facing will become more critical in the very near future. The time has come to think deeply, to give serious attention and consideration to our plight. In behalf of the Association of University Presidents of Puerto Rico and in behalf of Puerto Rico's private postsecondary

education, we respectfully submit to your consideration the following proposal:

PROPOSAL

The most urgent problem faced by higher education in Puerto Rico is the pressing need for the expansion and renovation of academic facilities and the absence of federal funds for construction. Private colleges and universities in Puerto Rico have to face increasing construction costs (\$35 - \$40 per square foot) in order to make their academic facilities more flexible, more adaptable to the new trends in modern education, and in order to remodel or build facilities which can provide access for the handicapped.

An informal study conducted to estimate the total construction needs for higher education institutions in Puerto Rico for the next five years, revealed that six of the largest private colleges and universities in Puerto Rico would need a total of \$68.6 millions (See Annex I). This total would probably increase if other smaller but accredited colleges in Puerto Rico are included in the estimate.

In view of this, we propose that funds be immediately released and made available in the form of loans and grants which will enable us to engage in construction, reconstruction and remodeling of existing academic facilities.

Your consideration to our proposal will definitely enhance higher education in Puerto Rico, and will constitute a significant contribution to the improvement of the quality of Puerto Rico's postsecondary education and to the improvement of Puerto Rico's economy and unemployment rate through the creation of construction related jobs.

Mr. Ford, we are grateful to your Subcommittee for your initiative in promoting this hearing and to our Resident Commissioner, Honorable Baltasar Corrada del Río

for giving us the opportunity to present to you the most urgent problem that post-secondary education confronts today in Puerto Rico. We trust your judgement and willingness to help your Puerto Rican fellowcitizens in the achievement of their educational goals.

Thank you very much for the opportunity of addressing you.

ASOCIACION PUERTORRIQUEÑA DE OFICIALES DE RECURSOS EXTERNOS

PUERTO RICAN ASSOCIATION OF GRANT COORDINATORS

RECIBIDO

P. O. Box 10061 CAPARRA HEIGHTS STATION, P. R. 00923

JAN 3 2 48 PM '78

FUNDACION EDUCATIVA
ANA R. MENDEZ
OFICINA DEL
PRESIDENTE

DECEMBER 23, 1977

MR. SANTIAGO RODRÍGUEZ-RAKY
DIRECTOR
INTERGOVERNMENTAL RELATIONS DIVISION
OFFICE OF THE COMMONWEALTH OF PUERTO RICO
1625 MASSACHUSETTS AVENUE, N. W.
WASHINGTON, D. C.
20036

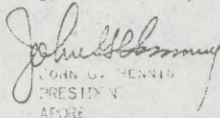
DEAR SANTIAGO:

AS A FOLLOW-UP TO MY LETTER OF LAST WEEK, I AM ENCLOSING A FORMAL LIST OF ESTIMATED CONSTRUCTION NEEDS OBTAINED BY TELEPHONE FOR THE MAJOR INSTITUTIONS OF HIGHER LEARNING IN PUERTO RICO. AS YOU CAN SEE, THE TOTAL APPROXIMATES 100 MILLION DOLLARS AND WILL PROBABLY EXCEED THAT, IF SMALLER ELIGIBLE INSTITUTIONS WERE ALSO INCLUDED.

THE SIGNIFICANCE OF THESE FIGURES IS THAT THEY IDENTIFY PUERTO RICO AS A POCKET OF NEED FOR CONSTRUCTION IN HIGHER EDUCATION WHICH RUNS CONTRARY TO THE GENERAL SITUATION IN THE MAINLAND. THIS IS DUE PRIMARILY TO THE FACT WHEN THE HIGHER EDUCATION ACT OF 1963 BECAME EFFECTIVE, THE NUMBER OF STUDENTS IN LOCAL HIGHER EDUCATION INSTITUTIONS TOTALLED ABOUT 30,000. WHEN FUNDS TERMINATED IN 1970, THE STUDENT POPULATION WAS ABOUT 50,000, AND TODAY, IT IS ABOUT 110,000. IN OTHER WORDS, IN THE 15 YEARS SINCE 1963, ENROLLMENT HAS MORE THAN TRIPLED WHILE FUNDS FOR CONSTRUCTION WERE AVAILABLE FOR ONLY THE FIRST 7 YEARS OF THAT PERIOD. THUS THE POSSIBILITY OF A SUPPLEMENTARY ALLOTMENT THIS YEAR AND A POTENTIAL MAJOR ALLOTMENT NEXT YEAR OF FUNDS FOR TITLE VII COULD BE OF MAJOR SIGNIFICANCE TO OUR INSTITUTIONS, PROVIDED A PORTION OF THOSE FUNDS WERE ALLOTTED FOR NEW CONSTRUCTION AND NOT JUST REMODELING FOR ENERGY AND HANDICAPPED PURPOSES.

I TRUST YOU WILL CONVEY THIS INFORMATION TO THE HEW TASKFORCE AND THE OFFICE OF EDUCATION SO THAT IT MAY BE INCLUDED IN THEIR REPORT. APORE APPRECIATES YOUR COOPERATION IN THIS MATTER.

SINCERELY YOURS,


JOHN G. HENNIG
PRESIDENT
APORE

JGH:DH

CC: MRS. LUISA CERAN
MR. LUIS GONZÁLEZ VALES
MR. JOSÉ MENDEZ

INVENTORY OF CONSTRUCTION NEEDS OF PUERTO RICAN INSTITUTIONS
OF HIGHER EDUCATION

THE ATTACHED LIST IS AN INFORMAL TELEPHONE SURVEY OF THE ESTIMATED CONSTRUCTION NEEDS OF THE ISLAND'S MAJOR INSTITUTIONS OF HIGHER EDUCATION OVER THE NEXT FIVE YEARS, UNLESS OTHERWISE INDICATED. THE LIST IS COMPILED SO AS TO PROVIDE INPUT TO THE H. E. W. TASKFORCE AND THE OFFICE OF EDUCATION, IN CONSIDERATION OF THE FACT THAT SUPPLEMENTARY APPROPRIATIONS MAY BE AVAILABLE THIS YEAR AND MORE SUBSTANTIAL FUNDS NEXT YEAR IN TITLE VII OF THE HIGHER EDUCATION ACT.

1.- CATHOLIC UNIVERSITY OF PUERTO RICO:

PONCE	-	\$ 3,100,000.
GUAYAMA	-	1,000,000.
ARECIBO	-	<u>1,000,000.</u>
<u>TOTAL:</u>		\$ 5,100,000.

2.- UNIVERSITY OF THE SACRED HEART:

TOTAL: \$ 5,000,000.

3.- BOYANON CENTRAL UNIVERSITY: (10 YEAR PROJECTION)

TOTAL: \$ 16,500,000.

4.- FUNDACION ANA G. MENDEZ:

PUERTO RICO JUNIOR COLLEGE	\$ 7,000,000 NOT AVAILABLE	\$ 8,400,000
UNIVERSIDAD DEL TORABO		\$ 4,000,000.
<u>TOTAL:</u>		\$ 11,000,000. 12,400,000. PLUS \$11,

5.- INTERAMERICAN UNIVERSITY:

SAN JUAN	-	\$ 9,000,000.
PONCE	-	3,000,000.
SAN GERMAN	-	3,000,000.
BAYAMON	-	2,000,000.
GUAYAMA	-	3,500,000.
ARECIBO	-	2,500,000.
AGUADILLA	-	1,000,000.
BARRANQUITAS	-	<u>1,000,000.</u>
<u>TOTAL:</u>		\$ 25,000,000.

6.- WORLD UNIVERSITY:

HATO REY	-	\$ 3,000,000.
PONCE	-	2,000,000.
BAYAMON	-	<u>1,000,000.</u>
<u>TOTAL:</u>		\$ 6,000,000.

7.- UNIVERSITY OF PUERTO RICO:

RIO PIEDRAS	-	\$ 6,897,426.
MAYAGUEZ	-	13,528,000.
MEDICAL SCIENCE	-	1,883,250.
CAYEY	-	1,803,306.
HUMACAO	-	975,000.
REGIONAL COLLEGE ADMINISTRATION	-	13,160,300.
AGRICULTURAL EXP. STATION	-	<u>1,097,334.</u>
<u>TOTAL:</u>		\$ 39,344,876.00

GRAND TOTAL: \$ 105,944,876.00

6,000,000.
 7 112,944,876.00

**STATEMENT OF JOSÉ F. MÉNDEZ, PRESIDENT, ASSOCIATION OF
UNIVERSITY PRESIDENTS OF PUERTO RICO, ACCOMPANIED BY
FEDERICO MODESTO, ASSISTANT TO THE PRESIDENT**

Mr. MÉNDEZ. Hon. William D. Ford, chairman of the House Subcommittee on Postsecondary Education, Hon. Baltasar Corrada del Río, Resident Commissioner, aware of the sacrifice that Congressman Ford has made in leaving Washington with its weather, we at the association decided to make a short but precise presentation so that you could, as well as your staff, enjoy our sun, beaches and hospitality.

With that we start our presentation.

My name is José F. Méndez. As president of the Association of University Presidents, I represent the private sector of postsecondary education in Puerto Rico, which includes the Interamerican University with 28,500 students. Catholic University with 12,000, University of the Sacred Heart with 5,000 students, Bayamón Central University with 2,600 students, and two colleges affiliated to the Ana G. Méndez Educational Foundation, which I preside, Puerto Rico Junior College and the Turabo University College, with 12,300 students. There are other private postsecondary educational institutions in Puerto Rico with a total enrollment of around 6,000 students, for a grand total of 66,400 students enrolled in private postsecondary educational institutions in Puerto Rico.

President Carter's commitment to expand higher education opportunities is evidenced by the measures his administration has proposed such as increasing student financial aid for middle-income families with children in college. As educators committed to postsecondary education in Puerto Rico we strongly endorse and support President Carter in this endeavor.

However, if we are to make a significant contribution to the achievement of the President's goals for postsecondary education, we must make you aware of the most critical problem being faced by postsecondary education in Puerto Rico.

The private sector of postsecondary education in Puerto Rico does not have the adequate physical facilities nor the necessary economic resources which would allow us to build, remodel or expand our facilities in order to accommodate the evergrowing number of students demanding higher quality education in Puerto Rico.

We have experienced in our island a dramatic increase in enrollment: From 64,593 students in 1970-71 to approximately 117,596 in 1977-78. It should be noted that 56 percent of these 117,596 students are enrolled in private institutions, in contrast with mainland statistics which reveal 78 percent in the public sector and 22 percent in the private sector. Undoubtedly, this fact stresses the responsibility that the private colleges and universities must assume. It also evidences that the private sector has absorbed the greatest portion of the total postsecondary enrollment in Puerto Rico.

It is estimated that by 1985 the enrollment at college level will be around 154,000 students and that by the year 2000 the figures will be around 200,000. If this is so, the implications for the private sector are alarming. It would mean that we would have to start, as of now, planning and allocating funds for the expansion of our physical fa-

cilities. As I stated at the beginning of my presentation, the reality we must face is that the private universities do not have the economic resources to face this situation.

In estimating and projecting the total needs for the expansion of our physical facilities in the near future, there are numerous factors to be considered besides the above-mentioned enrollment growth. Among them the following can be singled out:

1. The Puerto Rico Department of Education is making efforts to improve the 36 percent retention rate of Puerto Rico's public school system. Ironically, if they accomplish this goal, higher education institutions in Puerto Rico will not be able to accommodate the increased number of high school graduates.

2. The enrollment in extension and continuing education divisions has increased dramatically in our colleges and universities; in some cases it constitutes one-third of their total enrollment. This represents a constant classroom occupancy from Monday through Saturday, thus deteriorating our facilities at a faster rate.

3. The need to comply with the rules and regulations of the Rehabilitation Act of 1973, section 504 requires institutions of higher education to submit a 3-year plan to remodel their existing physical facilities, to provide more access to students who are physically handicapped, places another burden upon the school's budget.

4. The success we have had in increasing our enrollment yearly without being able to expand our physical facilities is undeniable. In many cases we have had to resort to renting space not built for educational purposes in order to absorb this increased enrollment. However, this quantitative success will be meaningless without a proportional qualitative improvement.

At the meeting of February 23, 1978 of the Commission on Higher Education of the Middle States Association of Colleges and Universities, Hon. Carlos Romero Barceló, Governor of Puerto Rico, stated, and I quote: "... we simply lack the resources to provide quality undergraduate education to an ever-increasing number of students." "I have stated," the Governor continued saying, "time and again throughout my career in public life, it is precisely Puerto Rico's people who are the island's most abundant and precious resource: A resource which must be allowed to develop to the fullest, a resource whose development will always depend in large part on the maintenance of a strong and diverse system of colleges and universities."

If our colleges and universities continue to be thwarted by lack of economic resources to grow quantitatively and qualitatively, we can expect our postsecondary education system to be neither "strong" nor "diverse."

5. Many years ago our economic, social, educational, health, and other public services were planned and projected considering the high migration of Puerto Ricans to the mainland. Today we are confronted with the phenomenon of reverse migration. These fellow Puerto Ricans are quantitatively overburdening our educational system since the majority of the migrants are college level youths.

6. The space requirements of modern educational technology cannot be met due to the obsolescence of many of our buildings. If we are to achieve our goals of providing the Puerto Rican community with the best education possible and if we are to revise or create new programs to cope with the technological demands of this era, we need new buildings and renovated facilities.

The lack of space is detrimental to the quality of instruction we pursue in our higher education facilities. The Federal Government has reduced the allocation of funds for construction purposes and the acquisition of equipment. The drastic reduction of funds in title VII was justified in the mainland due to a gradual reduction in the enrollment throughout the Nation. As evidenced by the facts I have mentioned, this is not so for Puerto Rico, where the opposite—an increase in student demands for higher education—is taking place. The economic recession on one side, and the reduction of funds on the other side, have negatively combined to reduce to a minimum the academic facilities construction plans in Puerto Rico.

The situation which our higher education is presently facing will become more critical in the very near future. The time has come to think deeply, to give serious attention and consideration to our plight. In behalf of Puerto Rico's private postsecondary education and in behalf of the Association of University Presidents of Puerto Rico, we respectfully submit to your consideration the following proposal:

The most urgent problem faced by higher education in Puerto Rico is the pressing need for the expansion and renovation of academic facilities and the absence of Federal funds for construction. Private colleges and universities in Puerto Rico have to face increasing construction costs—\$35 to \$40 per square foot—in order to make their academic facilities more flexible, more adaptable to the new trends in modern education, and in order to remodel or build facilities which can provide access for the handicapped.

An informal study conducted to estimate the total construction needs for higher education institutions in Puerto Rico for the next 5 years revealed that 6 of the largest private colleges and universities in Puerto Rico would need a total of \$68.6 million. This total would probably increase if other smaller but accredited colleges in Puerto Rico are included in the estimate.

In view of this, we propose that funds be immediately released and made available in the form of loans and grants which will enable us to engage in construction, reconstruction, and remodeling of existing academic facilities.

Your consideration to our proposal will definitely enhance higher education in Puerto Rico, and will constitute a significant contribution to the improvement of Puerto Rico's economy and unemployment rate through the creation of construction-related jobs.

Mr. Ford, we are grateful to your subcommittee for your initiative in promoting this hearing and to our Resident Commissioner, Honorable Baltasar Corrada del Río for giving us the opportunity to present to you the most urgent problem that postsecondary education confronts today in Puerto Rico. We trust your judgment and willingness to help your Puerto Rican fellow citizens in the achievement of their educational goals.

Thank you very much for the opportunity of addressing you.
[The attachments follow:]

[Copy of Letter from Asociación Puertorriqueña de Recursos Externos, Puerto Rican Association of Grant Coordinators, P.O. Box 10061, Caparra Heights Station, P.R. 00922—Received January 3, 2:48 P.M., 1978, Fundación Educativa Ana G. Méndez Oficina del Presidente]

Mr. SANTIAGO RODRÍGUEZ-RAKY,
Director, Intergovernmental Relations Division, Office of the Commonwealth of
Puerto Rico, 1625 Massachusetts Avenue NW., Washington, D.C.

DEAR SANTIAGO: As a followup to my letter of last week, I am enclosing a formal list of estimated construction needs obtained by telephone for the major institutions of higher learning in Puerto Rico. As you can see, the total approximates 100 million dollars and will probably exceed that, if smaller eligible institutions were also included.

The significance of these figures is that they identify Puerto Rico as a pocket of need for construction in higher education which runs contrary to the general situation in the mainland. This is due primarily to the fact when the Higher Education Act of 1963 became effective, the number of students in local higher education institutions totalled about 30,000. When funds terminated in 1970, the student population was about 55,000, and today it is about 110,000. In other words, in the 15 years since 1963, enrollment has more than tripled while funds for construction were available only the first 7 years of that period. Thus the possibility of a supplementary allotment this year and a potential major allotment next year of funds for Title VII could be of major significance to our institutions, provided a portion of those funds were allotted for new construction and not just remodeling for energy and handicapped purposes.

I trust you will convey this information to the HEW task force and the Office of Education so that it may be included in their report. APORE appreciates your cooperation in this matter.

Sincerely yours,

JOHN G. HENNIG,
President, APORE.

INVENTORY OF CONSTRUCTION NEEDS OF PUERTO RICAN INSTITUTIONS OF HIGHER EDUCATION

The attached list is an informal telephone survey of the estimated construction needs of the island's major institutions of higher education over the next five years, unless otherwise indicated. The list is compiled so as to provide input to the HEW taskforce and the Office of Education, in consideration of the fact that supplementary appropriations may be available this year and work substantial fund next year in Title VII of the Higher Education Act.

Jacket 27-122 Folio 29

1. Catholic University of Puerto Rico :	
Ponce -----	\$3, 100, 000
Guayama -----	1, 000, 000
Arecibo -----	1, 000, 000
Subtotal -----	5, 100, 000
2. University of the Sacred Heart-----	5, 000, 000
3. Bayamon Central University: (10 year protection)-----	16, 500, 000
4. Fundacion Ana G. Mendez :	
Puerto Rico Junior College-----	8, 400, 000
Universidad del Turabo-----	4, 000, 000
Subtotal -----	12, 000, 000
5. Interamerican University :	
San Juan -----	9, 000, 000
Ponce -----	3, 000, 000
San German -----	3, 000, 000
Bayamon -----	2, 000, 000
Guayama -----	3, 500, 000
Arecibo -----	2, 500, 000
Aguadilla -----	1, 000, 000
Barranquitas -----	1, 000, 000
Subtotal -----	25, 000, 000

6. World University:

Hato Rey -----	3,000,000
Ponce -----	2,000,000
Bayamon -----	3,000,000
Subtotal -----	6,000,000

7. University of Puerto Rico:

Rio Piedras -----	6,897,686
Mayaguez -----	13,528,000
Medical Science -----	1,883,250
Cayey -----	1,803,306
Humacao -----	975,000
Regional College Administration -----	13,160,300
Agricultural Experiment Station -----	1,097,334
Subtotal -----	39,344,876

Total -----	105,944,876
Plus -----	7,000,000
Grand total -----	112,944,876

Mr. FORD. Thank you very much. I think we can recognize that the obvious is not necessarily the obvious; we are dealing with the phenomenon of higher education in Puerto Rico. Would you care to comment further?

Mr. MÉNDEZ. Just recently, a few months ago, I would say, March 1977, where it—

Mr. FORD. Just a moment. Do you have the report?

Mr. MÉNDEZ. Yes; this is the final report concerning postsecondary education in Puerto Rico, realized by the Postsecondary Commission, State Postsecondary Commission.

Mr. FORD. Where is this report available?

Mr. MÉNDEZ. This report will be available at the Commission of Educational Reform or the Consejo de Educación Superior. We could also make it available for you.

Mr. FORD. That report was prepared for some State agency here?

Mr. MÉNDEZ. That report was prepared through moneys given by the local government to study postsecondary education in Puerto Rico. The report that I am looking at more is the statistical part of the report, not the recommendations that the report makes.

Mr. FORD. I'm just trying to make it clear for any one who is interested in what you're saying how to get that report.

Mr. MÉNDEZ. Yes, sir.

Mr. FORD. Just to follow up.

Mr. MÉNDEZ. This report, on page 184, is talking about cost, it says:

The costs in this table represent the average quantity of resources out of the General Fund that the universities invested in education of a student, full time equivalent.

The information here goes as follows. In 1974-75, it cost the University of Puerto Rico \$2,463 per student. Private institution cost was \$1,352. In 1975-76, the cost was, at the University of Puerto Rico, \$2,597, at private institutions, \$1,318. It clearly shows the difference in cost between private and public institutions.

Mr. FORD. What factors would reflect the proportion of the greater increase in the private sector?

Mr. MÉNDEZ. Well, I would say at the private sector, we have to survive with the resources we have. We depend almost exclusively on student tuition and we have to invest that money the best way we can, we have to utilize to a maximum the physical facilities for that purpose also. The utilization of space in the private sector is very, very high. I do not have figures for the public sector.

Mr. FORD. Are there any of your private schools that have substantial endowment support?

Mr. MÉNDEZ. No, sir, I would say that the endowment support that the private sector has, as an example, one institution has \$1.2 million in one case, a fact that I know, for other institutions I don't have figures, but we could get you those figures if you would like those. But I don't think that in Puerto Rico there are large endowment funds in any of the private institutions. The custom in Puerto Rico is perhaps not the same as it is in the States where people give out money when they die or leave land or buildings and things like that. At least we haven't seen that.

Mr. FORD. Mr. Corrada?

Mr. CORRADA. Thank you, Mr. Chairman. I understand that each of the different universities will be submitting a written statement for the record in terms of an assessment of their own needs. However, I would like to comment on the attachment to your testimony in which it would appear that present needs of Catholic University of Puerto Rico are estimated for construction grants and loans at \$5 million, it states a breakdown of \$3,100,000 at the Ponce campus, \$1 million at the Guayama campus and \$1 million for Arecibo; the University of Sacred Heart, \$5 million; Bavamón Central University, \$16 million, a 10-year projection; Fundación Ana G. Méndez shows \$8 million for Puerto Rico Junior College and \$4 million for Universidad del Turabo, for a total of \$12 million and the Interamerican University through its several campuses, \$25 million.

World University, \$6 million, that is the only university at present which depends exclusively on rented facilities; and a projection is shown for the University of Puerto Rico through its entire system of \$39 million plus, although we just heard previously Dr. Almodóvar state that they had identified needs on the basis of different projects for an amount of closer to \$97 million.

Of course, are these figures total needs as projected for the next few years, and if they are, what comments would you have in terms of how could part of these costs be financed from other sources in addition to funds under title VII of the Higher Education Act?

Mr. MÉNDEZ. Yes, sir. As an example, and following your idea, I was going to submit as evidence today, the pictures were taken by helicopter just a few days ago, where you can see the difference of investment of money in private institutions of Federal moneys and in the same area where we don't have any Federal moneys, and then I will give you examples of some institutions which acquired from HEW at one time money, and from HUD money.

In the case of one of the institutions, HEW gave a 26-year project, out of the project it came that the costs were \$2.7 million. There were grants given out of \$953,000, a loan for 26 years at 3 percent for \$808,000, institutional participation of its own money, \$761,000, and then that same institution had to go to the bank for a 5-year loan of \$250,000.

So that's an example of a case where Federal money was made available at long-term at a low interest, but it also required the institution to—it said, well, we're going to help you, but you should put up part of the money. That's one of the cases.

Another one was by HUD, a total loan. In that case the construction was for a library and dormitories. The loan was complete for \$732,000, the institution in that case didn't have to put up any money.

So those are two examples for the chairman and for Mr. Corrada that have actually happened. The results of those examples—this won't take too long, but I think if the chairman would permit, I would like to have this part also of our testimony. In the first photograph, this institution, the building in the back was constructed with Federal funds by HUD.

Mr. CORRADA. Which institution is this, Mr. Méndez? Where is this?

Mr. MÉNDEZ. This is in Cupey. This is the Puerto Rico Junior College. But the idea is not to put Puerto Rico Junior College in my presentation but as an example of a private institute. This institution has an enrollment of 2,792 students on four acres of land. In the second photograph, that's the building financed by HUD, which is being presently used to its full capacity. And in the third photograph, we have the minimal recreational facilities of students, which is almost nothing. That's the case of money being invested.

Mr. CORRADA. In other words, with respect to some proposals for grants and for loans, there will be some portion of the funds for the total construction project under consideration to be financed through internal financial resources of the institution itself, or let's say in the case of the public system, with some funds from the Commonwealth Government, and in other cases—in some cases there would be larger reliance on the Federal funds, but what I am saying is that there will be instances where the universities by themselves will be contributing financially to the projects that they have under consideration.

Mr. MÉNDEZ. Yes, sir. We are glad you asked that, because we feel that we have our responsibility also in participating in the project, not only the Federal Government.

Mr. CORRADA. I mentioned this because as you know, once these funds are appropriated, these are competitive grants. There will be many institutions applying for the funds, and indeed I would hope that when there is a local commitment to whatever extent possible from the applicant involving some resources of its own or obtained privately or otherwise from other sources than title VII funds, that these proposals for grants and/or loans would have or expect to have a better chance.

Mr. MÉNDEZ. Yes, sir. And also in these two examples that we gave to you, we had to prove to the Federal Government that there was a necessity because of increased enrollment in the future, and we got to those goals.

Mr. Chairman, if you would permit us, I would now like to present as evidence also in my presentation an institution that doesn't have any funds at all, and it has more than 4,300 students in less than one acre of land, that is the institution you will be visiting tomorrow afternoon. That's photograph No. 1. Photograph No. 2 is about the same, but then

in photograph No. 3 where you see some students walking, you will see the architectural barriers that we have to encounter because this space was not really made for this amount of students. And photograph No. 4, an example of a rented building. In our presentation, we have accommodated students there, but we don't have the flexibility in spaces that were probably used for offices or things like that. The institution is on the second, third, and fourth floors.

Mr. CORRADA. I would think so because—

Mr. MÉNDEZ. Yes, because downstairs is a supermarket.

Mr. CORRADA. And I suppose the cafetín—

Mr. MÉNDEZ. We don't own the cafetín.

Mr. CORRADA. I did not believe that that was the name of the university, although perhaps the people from San Sebastián would like to call one of our institutions of higher learning El Buen Pepiniano.

Mr. MÉNDEZ. And finally, Mr. Chairman, as evidence also I would like to submit to you another example of an institution in a rural area where we had to go to FHA to get money, not to EDA, FHA, and we qualified, luckily, because we were in the rural area. I had the president of a private institution tell me that he didn't qualify because of 2 miles distance where the lot in Arecibo was located and they are constructing now a \$3 million expansion of this institution with their own funds.

Mr. CORRADA. Which institution is that?

Mr. MÉNDEZ. Interamerican University. So we were thinking of how we could move the 2 miles around so we could help the Interamerican University.

Mr. Chairman, in this photograph you will see the difference when Federal money is invested for physical facilities, photograph No. 1, we have modern facilities, we have space. Photograph No. 2, in the same institution, you see the administrative building, a wooden house. Photograph No. 3, you see the whole project, you can clearly see where the Federal money went to, to the left.

Mr. CORRADA. This is the university of—

Mr. MÉNDEZ. Turabo. And also in photograph No. 4, you will see the barriers again in the temporary facilities which really have become permanent facilities, wooden facilities. Excuse me, Mr. Corrada, the part that you mentioned I think is very important, not only for the record, but it's a message from myself to the presidents, that if funds are allocated for the construction and renovation of facilities, they will be competitive funds, in other words I am not stressing my presentation singularly for any institution.

Mr. CORRADA. I know that. When I said competitive, I meant not only competitive among the institutions of higher learning in Puerto Rico, but competitive with other institutions of higher learning around the entire nation, but I trust that as a result of our different situation in terms of a substantial increase in the demand for higher learning educational offerings versus the experience that we have in the mainland, that certainly our proposals will fare well.

I have no further questions for this witness, Mr. Chairman.

Mr. FORD. Thank you very much and thank you especially for the extra effort you made with the exhibits. I don't know if technically we are able to reproduce the exhibits but we will keep them with the committee and try to describe them as you have described them.

Mr. MÉNDEZ. If necessary, Mr. Chairman, we have those made as transparencies, we could supply that.

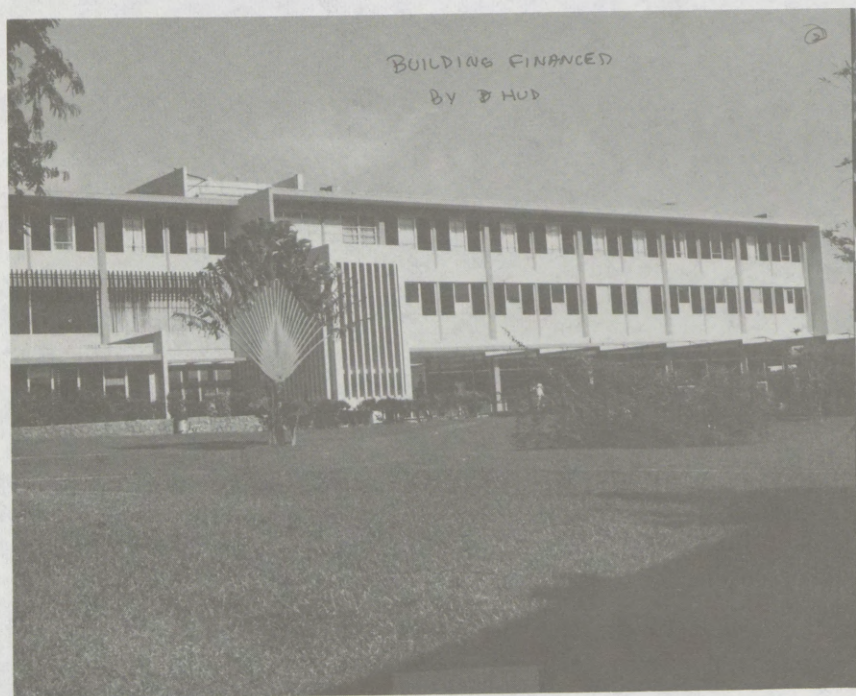
Mr. FORD. We'll see what they say back in Washington about reproducing them. We may be able to reproduce them there.

Mr. MÉNDEZ. Yes, sir.

Mr. CORRADA. Thank you very much.

Mr. FORD. Thank you.

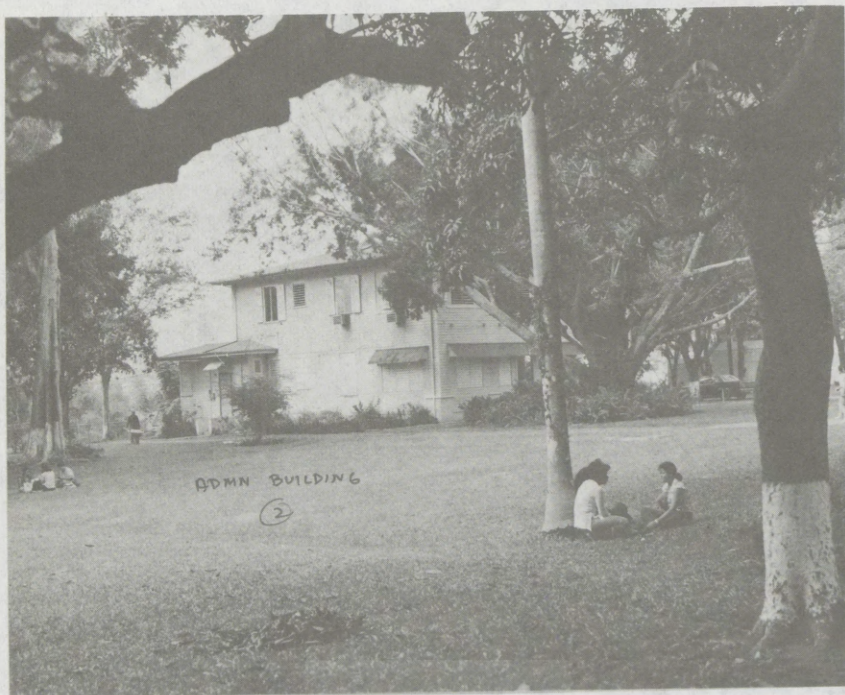
[The photographs referred to follow:]













Mr. CORRADA. The next witness on our list is Dr. Ernesto Vázquez Torres, president, Polytechnic University of Puerto Rico. Dr. Vázquez will be representing proprietary institutions.

Mr. FORD. Without objection, the prepared text of Dr. Vázquez' presentation will be inserted in the record in full at this point. You may proceed to add anything in the way of highlights as you wish.

[The prepared statement of Ernesto Vázquez Torres follows:]

SUMMARY OF THE TESTIMONY PRESENTED BY ERNESTO VÁZQUEZ-TORRES, PRESIDENT,
POLYTECHNIC UNIVERSITY OF PUERTO RICO

The demand for admission in colleges and universities in Puerto Rico has skyrocketed during the last twenty years. With its limited resources the public University of Puerto Rico has been unable to provide the necessary increase and improvement of its physical plant to meet this demand, something which has been a challenge to the private colleges and universities. The enrollment in this latter universities has been also on the increase, in spite of their similar limitations in floor space.

On the two types of colleges and universities, both public and private, the lack of physical facilities to meet the growing demand has been a real problem, considering that in over-crowded rooms and laboratories the teaching-learning process can't be developed on a high level of academic efficiency.

In order to meet effectively this growing demand for higher education and to properly train our continuously growing student body into useful participants in our changing society, the construction of new and more adequate physical facilities must have first priority.

It will be a blessing if our Puerto Rico Higher Education system is provided with the necessary funds. We Puerto Rican educators are willing to do our best in serving our community, providing our fellow-men with the best possible educational opportunities, if we are provided with the means to do it right.

As the honorable Secretary Joseph A. Califano Jr., clearly stated in the joint hearing before the Senate Committee on Human Resources and the House Committee on Education and Labor, on February 9, 1978, we Puerto Rican educators

also feel, as President Carter, the need of providing our youth with the best possible opportunities to attain these highest ideals in life, offering them the tools with which they can get a true education for life.

In the same way that President Carter sits in the White House caring deeply about the quality of education in America, we also in Puerto Rico care for the best possible education we may offer to our fellow-men in Puerto Rico, so that they turn to be useful citizens of our democratic way of living. We only need a helping hand.

We hereby respectfully request from the Honorable Members of this Congressional Committee to do their best to see that Congress approves the above mentioned sum of money requested by our Resident Commissioner in Washington, the Honorable Baltazar Corrada del Río. We shall certainly do wonders with it on behalf of the American citizens living in Puerto Rico.

STATEMENT OF ERNESTO VÁZQUEZ-TORRES, PRESIDENT, POLYTECHNIC UNIVERSITY, PUERTO RICO; ACCOMPANIED BY ROLAND R. De MARCO, CHAIRMAN, INTERNATIONAL HUMAN ASSISTANCE PROGRAMS, INC.

Dr. VÁZQUEZ. Honorable Congressmen, welcome to Puerto Rico. Thank you for coming to get a firsthand view of the needs for funds to construct university buildings in Puerto Rico in order to help the improvement of higher education in the island. We hope that you will feel this need and that your invaluable congressional efforts be successful in seeing that Congress appropriates the funds requested by our Resident Commissioner, the Honorable Baltazar Corrada del Río.

My name is Ernesto Vázquez Torres, founder and president of the Polytechnic University of Puerto Rico. It is my pleasure and my privilege to inform you in this very concise report the highlights of the extraordinary demand for college education in Puerto Rico and the problems facing our institutions, due to the serious shortage of the necessary physical plant to properly fulfill the demand.

After the Korean war and especially since the beginning of the population explosion of the years that followed, the universities of Puerto Rico, both public and private, have faced a terrific increase in the demands for admission. Due to lack of an adequate number of buildings, all of the available classrooms and laboratories were jammed by students willing to fulfill their life ideals with the profession of their choice. It was common to see that in classrooms and laboratories with capacities for, say, 30 students, 60 or more had to be allocated. This was against all academic norms, but it had to be done, with a serious menace to the teaching-learning proficiency. As a matter of fact, this situation has contributed to some deterioration of the teaching-learning process.

During the following years and up to the present time, the lack of sufficient physical plants created also a real problem affecting a large number of the qualifying students. The public University of Puerto Rico was compelled to reduce the number of students who requested admission. These frustrated applicants faced two alternatives: to emigrate to the United States in order to request admission in universities of the mainland, or else fatten the lines of unemployment or food coupons. For students of high ideals this situation was a tragedy. And this problem not only prevails at present, but the projections are to worsen during the coming years.

We Puerto Rican educators request a helping hand. We could take care of our student population if we had the means. If we have the

money to construct more and better adequate physical facilities, we will certainly solve the rest of the financial needs in the contracting of the necessary teaching and administrative staff, and the purchase of equipment and teaching resources.

The following tables show the increase in enrollment in the public and private institutions of higher learning in Puerto Rico during the last 10 years. This information was obtained from the reports of the division of statistics and campus registrars of the public University of Puerto Rico as well as from the Higher Council of Education of Puerto Rico:

[The tables referred to follow:]

TABLE 1.—UNIVERSITY OF PUERTO RICO

Year	Number of applications received	Number of students admitted	Number of students registered	Percentage	Number of students not registered
Total	280,010	115,959	75,139	26.8	204,861
1969-70	22,484	12,419	8,209	-----	14,275
1970-71	24,615	13,779	8,607	-----	16,008
1971-72	27,504	12,251	7,618	-----	19,886
1972-73	32,728	15,557	9,706	-----	23,022
1973-74	33,587	14,692	9,353	-----	23,234
1974-75	41,727	18,034	11,179	-----	30,548
1975-76	39,681	15,578	9,910	-----	29,771
1976-77	26,438	13,334	10,557	-----	15,881
1978-79	30,010	-----	-----	-----	-----

TABLE 2.—University of Puerto Rico—Annual increase in enrollment

Year:	Enrollment
1968-69	34,411
1969-70	37,839
1970-71	42,516
1971-72	43,609
1972-73	47,533
1973-74	50,439
1974-75	52,055
1975-76	51,061
1976-77	50,225
1977-78	50,492

TABLE 3.—TOTAL ENROLLMENT IN PUERTO RICO, INCLUDING THE UNIVERSITY OF PUERTO RICO AND THE PRIVATE COLLEGES AND UNIVERSITIES

Year	Total in Puerto Rico	University of Puerto Rico		Private institutions	
		Total	Percent of total	Total	Percent of total
1967-68	47,598	30,088	63.2	17,510	36.8
1968-69	53,090	34,411	64.8	18,679	35.2
1969-70	57,338	37,839	66.0	19,499	34.0
1970-71	64,449	42,516	66.0	21,933	34.0
1971-72	71,100	43,609	61.4	27,516	38.7
1972-73	80,840	47,533	58.8	33,307	41.2
1973-74	88,911	50,439	56.7	38,472	43.3
1974-75	96,314	52,055	54.0	44,259	46.0
1975-76	105,426	51,061	48.4	54,365	51.6
1976-77	11,311	50,225	45.1	61,086	54.9
1977-78	119,083	50,492	42.4	68,591	57.5

As it may be seen in table 3, for the first time and during the academic year 1975-76, the total enrollment in the private universities

surpassed that of the UPR; namely, UPR—51,061. Private universities—54,365. In the year 1977-78, the figures are still more significant. UPR—50,492. Private universities—68,591. These figures reveal the most pronounced needs of the private institutions.

Several years ago and due to the lack of sufficient physical plant, as well as financial limitations to construct additional buildings, the UPR was compelled to reduce drastically the admission of new students in its different campuses. Table shows that during the last 10 years from a total of 280,010 applicants, only 75,139 or 26.8 percent registered.

A very high percentage of the applicants not registered at the UPR presented a challenge to the private colleges and universities. These latter faced the need of expansion in order to meet the demand. It was a real challenge to the private universities, inasmuch as it was a must to fulfill this very important social need, that is, to offer the best possible educational opportunities to qualified students. But in accepting the challenge, some of these were also overcrowded. Interamerican University, for instance, which is the second in enrollment in Puerto Rico, was compelled some years ago also to reduce the admission of freshmen students.

In order to help meet this student explosion and to offer other educational alternatives, mainly in the technical fields so much needed to enhance the socio-economic growth of our island, the Polytechnic University was founded.

The Polytechnic University of Puerto Rico, a private, coeducational nonprofit technical institution started operations in 1965 under the name of Technological Lyceum, with an enrollment of 40 students. The present enrollment is about 600 students in engineering, surveying and mapping, and technical courses of short duration leading to degrees or certificates for gainful occupations.

The increase in enrollment was comparatively low due to the fact that it was not until December 1977, when the PUPR received the Candidacy for Accreditation status from the Middle States Association of Colleges and Schools, as well as the eligibility to participate in Federal financial aids from HEW.

The expected growth in enrollment during the next years and the projected floor space of classrooms and laboratories needed are shown in the following table.

[The table referred to follows:]

Years	Enrollment	Buildings used or needed	Square feet of floor space	
			Total	Per pupil
1978.....	600	(1)	18, 000	30
1979-81.....	2 1, 200	2 1-2	42, 000	35
1982-84.....	2 2, 400	2 2-4	84, 000	35
1985-87.....	2 4, 000	2 3-6	126, 000	31

¹ Part of 3 buildings.

² This has been the approximate rate of increase in enrollment in various universities, after receiving the candidacy for accreditation from the Middle States Association.

³ As an alternative the construction of high raise buildings is contemplated. Thus the number of buildings may be reduced in number.

As a practically new, developing institution, the Polytechnic University of Puerto Rico needs very urgently to expand and improve its

present physical facilities in order to receive full accreditation. A rapid enrollment increase is expected from now on due to the following reasons:

1. It is preparing the technicians and professionals for which there is a demand in the employment market. There are over 15,000 university graduates in Puerto Rico from the humanities, social sciences, education, et cetera, who are unemployed. The PUPR trains students for employment.

2. It is fulfilling an educational gap at the university level in the metropolitan area of San Juan, offering educational opportunities to adults, family heads whose only chance to achieve a technical career is by studying at this institution evenings and Saturdays, during hours not conflicting with their diurnal work.

3. It is the only institution in Puerto Rico offering a complete 4-year program leading to a bachelor's degree in land surveying and mapping duly approved by the board of examiners of engineers, architects and surveyors of Puerto Rico.

The University of Puerto Rico Mayaguez campus offers only a 2-year curriculum leading to an associate degree in this field.

4. It is the only one in the metropolitan area of San Juan offering a full 5-year program leading to a bachelor's degree in civil engineering and one in industrial engineering, as well as a 2-year associate degree program in civil, electrical and traffic engineering. The curriculum of this last program was approved by the U.S. Department of Transportation, which granted scholarships to some of the present students.

Due to insufficient floor space the PUPR has been unable to install adequate laboratories for various of its departments. So far the laboratory work has been conducted in private commercial-industrial laboratories lent to us free of charge to be used during Saturdays only, during hours not conflicting with their regular work. But on occasions the students have faced transportation difficulties, especially during rainy days and periods of bus strikes.

We hereby respectfully request from the honorable members of this congressional commission to do your best in helping the Puerto Rican universities to meet satisfactorily the skyrocketing increase in enrollment, backing our Resident Commissioner, the Honorable Baltasar Corrada del Río, in his request to Congress to appropriate the sum of \$100 million for the construction of university buildings in Puerto Rico. This will be your best contribution to help enhance higher education in this island.

Mr. Chairman, Mr. Corrada del Río, I wish to present my companion today, Dr. Roland De Marco. He is a member of our board of trustees. He used to be president of Finch College in New York for 27 years and, of course, he has been an advisor, not only advising university presidents but also advising Presidents of the United States. Dr. De Marco is a retired president of Finch College but he is active with us and is helping us with his expertise in developing our work at the polytechnic university.

I wish to present only a small summary of my report but, before, I wish to express our deep appreciation to Mr. Corrada del Río for his wonderful cooperation with us for a long time and also for the invitation received by us yesterday sent by Mr. Ford to attend this hearing.

In the summary of my presentation, I will not take too much time, but I can just go over and expose the highlights of Puerto Rico's situation as to education and also our needs for funds at Polytechnic University of Puerto Rico.

The demand for admission in colleges and universities in Puerto Rico has skyrocketed during the last 20 years. With its limited resources the public University of Puerto Rico has been unable to provide the necessary increase and improvement of its physical plant to meet this demand, something which has been a challenge to the private colleges and universities. The enrollment in these latter universities has also been on the increase, in spite of their similar limitations in floor space.

As a matter of fact, the increasing enrollment in Puerto Rico has been skyrocketing and up until 1975, I mean the academic year 1975-76, the overall enrollment in the public University of Puerto Rico was always higher than the enrollment overall in private universities in Puerto Rico. Nevertheless, since that year, the situation has changed. The enrollment in private universities is now much larger than that of the public University of Puerto Rico.

In 1978, for instance, the enrollment at the University of Puerto Rico is about 50,000 students. In the private schools of Puerto Rico, we are over 68,000 students.

In the two types of colleges and universities, both public and private, the lack of physical facilities to meet the growing demand has been a real problem, considering that in overcrowded rooms and laboratories the teaching-learning process cannot be developed on a high level of academic efficiency.

In order to meet effectively this growing demand for higher education and to properly train our continuously growing student body into useful participants in our changing society, the construction of new and more adequate physical facilities must have first priority.

It will be a blessing if our Puerto Rico higher education system is provided with the necessary funds. We Puerto Rican educators are willing to do our best in serving our community, providing our fellowmen with the best possible educational opportunities, if we are provided with the means to do it right.

As Hon. Secretary Joseph A. Califano, Jr., clearly stated in the joint hearing before the Senate Committee on Human Resources and the House Committee on Education and Labor, on February 9, 1978, we Puerto Rican educators feel also, as President Carter, the need of providing our youth with the best possible opportunities to attain these highest ideals in life, offering them the tools with which they can get a true education for life.

In the same way that President Carter sits in the White House caring deeply about the quality of education in America, we also in Puerto Rico are for the best possible education we may offer to our fellowmen in Puerto Rico, so that they turn out to be useful citizens of our democratic way of living. We only need a helping hand.

We hereby respectfully request from the Honorable Members of this congressional committee to do their best to see that Congress approves the above-mentioned sum of money requested by our Resident Commissioner in Washington, Hon. Baltasar Corrada del Río. We shall certainly do wonders with it on behalf of the American citizens living in Puerto Rico.

Now, I would like to give you some highlights on our university. Our university is possibly the newest, small, developing, technical, private, non profit university in the San Juan metropolitan area. We are facing, of course, financial problems, especially in the matter of physical plant. We are housed now with about 18,000 square feet of floor space and we have been unable, because of lack of adequate physical facilities, to install some of our laboratories. We have faced the need to use the laboratories of private industry which we are using ourselves and conducting experiments in those laboratories, only as a result of this.

Of course, these laboratories are not located close to the school, 6 to 10 miles away, but sometimes our students meet difficulties with transportation, especially during the rainy days and during bus strikes such as the one we are having now for the last 2 months. There are many bus strikes and rainy days here, so really, as a small developing university, we are needing the necessary funds. We wish to develop to the fullest our hopes, our philosophy, our objectives, and to give our fellowmen the best possible technical education, especially in the metropolitan area of San Juan.

We are fulfilling a very little bit here in this area. We offer engineering, surveying and mapping, and other curriculums, but the only university in Puerto Rico offering those subjects, those curriculums, is the University of Puerto Rico at the Mayaguez campus, as you know, which is located over 100 miles southwest of San Juan. We are serving a special type of student, mainly adults, family heads, who are forced to work during the day for a living, and the only opportunity they have to avail themselves with a technical career is by studying at our university during the evenings and Saturdays.

Really, to meet the needs of this special group of students, and to develop our potentialities in this field, we really need the helping hand, and that is the one of course that we are kindly requesting from you today, to consider our institution, our developing institution, if these funds are allotted.

I think that's all I should say.

Mr. FORD. Thank you very much. On page 7 of your testimony, you have the projections from 1978 through 1987, indicating the increase. Is this based on some sort of a survey or study that you've made about the probable demand for the types of students that you are training or is it based on a demand for the training? How do you relate the number—

Dr. VÁZQUEZ. Page 7?

Mr. FORD. Page 7. You indicate in 1985-87 you would expect to have 4,000 students.

Dr. VÁZQUEZ. That's right.

Mr. FORD. Is this based on some estimate of the number of people requiring the skills that your school provides that will be in demand in 1985 or 1987 or simply taking a present growth and projecting it out?

Dr. VÁZQUEZ. Yes, sir. This is a constant demand in the metropolitan area of San Juan for this type of instruction, engineering, civil, industrial engineering, electrical engineering. As you know, San Juan is the seat of government, and the seat of the most important private and public enterprises related to engineering and surveying, and there is

always a demand for fully trained personnel. As a matter of fact, our present study body is mainly composed of people who work in the areas of engineering and surveying during the day, and they are even paid by their patrons to study and to avail themselves with a career. So we anticipate that the demand in the metropolitan area of San Juan, and I would say Puerto Rico in general, will increase year after year.

Mr. FORD. Now, you indicate that you have a 4- and 5-year degree in civil engineering. Do you have a substantial number of students that fit into the category that you mentioned here of the 4-year college graduate, the undergraduate degree, seeking a specific job-related technical education? How many of your 600 students would already be college graduates before they come to you?

Dr. VÁZQUEZ. Well, we have so far about 150 graduates in land surveying and mapping. We are the only institution offering a bachelor's degree in this field.

Mr. FORD. Out of the 600 students, the ones you have now, how many of them have already graduated from another college before they come to you?

Dr. VÁZQUEZ. From other colleges, well, I would say that most of our student body now, out of those 600, I would say over 500 have been former students of the University of Puerto Rico Mayaguez campus, students who have been compelled to quit their studies because they are married, they cannot meet the expenses of going to Mayaguez and so forth, they live in San Juan, and most of them, as I say, are former engineering students.

Dr. DE MARCO. Very few would be college graduates, if that answers your question. I think the point that Dr. Vázquez made that may have been missed, to the effect that in order to study civil engineering at the present time in a public institution, people have to go to Mayaguez, a hundred miles away, so this in effect is the only private university which offers civil engineering, to cite just one case.

Mr. FORD. Thank you very much.

Mr. CORRADA. Thank you.

Dr. VÁZQUEZ. I may add also, Mr. Chairman, that out of our last graduating class in civil engineering, we had six graduate engineers, engineers in mechanical engineering, electrical engineering, industrial engineering, who wanted to become also civil engineers, because the work that they are performing requires a more elaborate base on civil engineering, so we are filling that gap.

Mr. CORRADA. Do you have any figures in terms of the projected cost of the facilities that in your mind your university would need in the immediate future?

Dr. VÁZQUEZ. Yes. Our projections are to construct either a high-rise or two or three buildings to a total of about 120,000 square feet. If we consider the actual cost of construction as Mr. Méndez said, from \$35 to \$40 per square foot, that means that we need at least \$5 million to have the adequate facilities to develop our programs.

Mr. CORRADA. Thank you. I have no further questions, Mr. Chairman.

Mr. FORD. Thank you very much for your testimony and for your assistance to the committee.

Dr. VÁZQUEZ. Thank you very much too.

Mr. FORD. I did meet your colleague this morning, who introduced me as a friend of Puerto Rico.

Dr. VÁZQUEZ. OK. Thank you.

Mr. FORD. And he's here because he loves Puerto Rico.

We have received statements for the record which the witnesses have been kind enough to submit. Without objection, they will be placed in the record in full. The first statement is by John G. Hennig, executive assistant to the president for External Resources at World University, Juan González, chancellor, Colegio Universitario del Turabo, and Ramón Cruz, president, Interamerican University.

Ladies and gentlemen, I would like to—

Mr. CORRADA. Mr. Chairman, we have here the president of Catholic University, and although of course they have submitted statements for the record, if the chairman would permit it, I would just like to invite him to say a few words, if he would care to.

Mr. FORD. By all means.

Mr. CORRADA. Francisco Carreras, the president of Catholic University.

Mr. FORD. Before you proceed, would you please describe that institution for the record? We have had a special description from some of your predecessors.

STATEMENT OF FRANCISCO CARRERAS, PRESIDENT, CATHOLIC UNIVERSITY, PUERTO RICO

Dr. CARRERAS. Catholic University was established in 1948 precisely to serve the southern part of Puerto Rico. That part had no higher education at all, so our purpose, at that time, was to serve it. Thanks to the establishment of Catholic University more than 65 percent of the teachers of elementary and secondary education come from Catholic University.

Also, Catholic University established a law school in 1961.

A nursing school was established with associate and bachelor of arts degrees. Last year a master degree program in nursing was also created.

When Catholic University was established, there were, as has so been stated here, very few students in private education in Puerto Rico. The university has grown very slowly to more than 11,000 students in order that quality of education is not affected by quantitative growth. I would simply like to add that in that endeavor, to serve Puerto Rico and its southern part, we have just established a medical school to which was granted provisional accreditation by the liaison committee on medical education. We have actually 26 students. Informal propositions from the State of New York have been received in order to prepare some native Latin American students in Puerto Rico that will serve as medical doctors in New York to Latin areas. The influence of our medical school is not only limited to Puerto Rico but also the United States. I would like to add to what was just said here, that we also need new physical facilities. For example, by the establishment of the medical school, we are forced to strengthen our science programs. We have therefore, built a new science building and remodeled some old laboratories for science, biology, physics, chemistry, biochemistry, microbiology, and so forth. I would like to stress the

need of these physical facilities because, as stated by Mr. José Méndez, president of the Association of Universities and College Presidents of Puerto Rico on behalf of all the presidents of private institutions, this is right now our main concern.

Thank you very much.

Mr. FORD. This is certainly not the place to make the pitch, but one of the reasons that the associations and individuals, Catholic universities among others, have been of so much cooperation in drafting the President's new proposal on student assistance, and in endorsing that approach instead of the tax credit alternative is the fact that our ability to reach you with facilities is based entirely on the provident fact that neither the State nor the Federal Government has ever attempted to lump elementary and secondary education programs together with higher education programs. The result is that any lawyer who takes the time to study the decisions on first amendment problems involved in providing resources to a religiously connected institution will discover that, with respect to higher education, the Supreme Court has constructed one wall of separation with respect to elementary and secondary and quite a different one for postsecondary education. One of the deep concerns that the Catholic universities and other church-related universities have with the generosity of tax credits for them is that for the first time we might be confronted in the Supreme Court with elementary and secondary students and college students involved in the same case. We don't know whether they have the agility on that Court to continue the different tests that they have applied.

We have never successfully been challenged on the basis of the Federal legislation, at least, that we have passed with respect to higher education. Clearly the past assistance we have given in the construction of facilities on property belonging to church-related institutions would be prohibited by the Supreme Court decisions if it were at the elementary and secondary level.

We hope very much to take advantage of the President's intention to revive the construction funds as a way to continually remind people at the State level across the country that you can, in fact, help church-related institutions in a constitutional way if you're just a little bit careful about how it is done.

I am pleased that we have always been able to keep in title VII a complete equality of participation for the church-related schools and the public schools. I hope that we are able to do that on into the future, but you can be sure that your type of institution has a very strong lobby in Washington and throughout the country and will not be left behind.

Mr. CORRADA. That's the meaning of supreme, of course.

Dr. CARRERAS. Thank you. I would like to add——

Mr. FORD. That's the extra that they give us as a little absolution for some of our other sins.

Dr. CARRERAS. I would like to add that at Catholic University, we offer eight credits on theology that have to be taken by all the students. Those credits are not taught as just a pure religious subject but as part of western history. We, even though Catholic, have a position for a Protestant chaplain. Students can be excused from taking theology if they prove it constitutes a moral conflict. I would dare say that even

as Catholics, we are very broadminded, but emphasizing that western history and western culture, has, as one of its fundamental bases, the concept of God, which we received through the Jews. We have to emphasize the ethical aspect of education, because it is not enough to prepare profound professionals, but also with a very clear concept of ethics in order to serve better in the field in which they are going to work.

Mr. FORD. Among the 13 members of this subcommittee, I suspect that we probably have in the vicinity of 30 college degrees represented, hardly anyone with less than 2, some with more than that. I suspect that more than half of them come from private institutions, so there's a mixture on the committee itself. My only experience was that I finally, after attending public institutions, received my law degree from a Methodist school. To the best of my knowledge the only time I ever attended a Methodist church was for a funeral or a wedding. It was not my religion and I never found that there was anything either intimidating or inhibiting about being in that kind of an environment.

I appreciate your taking the time to add your words, and purely from the heart without having an opportunity to prepare them, and I want to assure you that we will take them to heart.

Dr. CARRERAS. Thank you very much.

Mr. CORRADA. Mr. Chairman, there are two persons here in the audience whose presence I would like to acknowledge for the record. One is Dr. María Socorro Lacot, consultant to the president of the Senate of Puerto Rico, former Governor, don Luis Ferré. She is consultant to the president of the senate on educational matters. And also present with us is Hon. Víctor Rivera Morales, chairman of the House Committee on Education, the Arts and Culture, and Representative Rivera Morales has requested that he be allowed the opportunity of presenting to you, Mr. Chairman, an official copy of the report on educational reform that was previously referred to in the testimony of Mr. Méndez. So if the chairman would allow, Hon. Víctor Rivera Morales of the House of Representatives of the Commonwealth of Puerto Rico would like to submit that report to you.

Mr. FORD. We would be very pleased to have that mentioned in the record of this hearing.

If we insert a report that large in the record, we'll make it possible for the court reporter to retire early.

Thank you very much.

Mr. Corrada wanted me to remind you that starting at the extraordinary hour of 7, Monday morning, we are going on a very rapid tour that has been arranged by his staff and by many of the people in this room to actually see some of the facilities that have been described for us today. I am sure we will be seeing many of you during that trip prior to our departure Monday afternoon.

I would like to tell you also that it would be our intention to keep the record of this hearing today open for at least 2 weeks. If there is anyone here today or anyone with whom you are in contact that might like to make an additional contribution to the record, please submit them to us. They will be placed in the record contemporaneous with the testimony that was received and become a part of the record for the consideration of the committee in dealing with this legislation.

Let me say, and I say this not entirely in response to the very generous hospitality that has been shown to me and to my wife since we arrived, but one of the nicest things that I have heard was Dr. Méndez yesterday saying "Your wife speaks Spanish very well." He asked where she learned her Spanish and I said, "She learned it before she came to the United States a few years ago. She's a Peruvian." He said, "Well, that's wonderful, because she doesn't speak with a Peruvian accent."

My wife, until very recently, believed that it was other people who spoke their Spanish with an accent. But she is especially pleased to have an opportunity to be with me and meet the people we have had a chance to talk to. I have noticed that no one has passed up an opportunity to lobby her while she has been here.

I want to tell you that the testimony has been concise and right on the point of what this hearing was all about. It's certainly persuasive and it has been persuasive with me, but it's more important than that to me. It gives me the ability to discuss this with the other members of our committee as we consider the legislation and indicates that I am somewhat of an authority now, at least I know more about it than they do. That's always an advantage and you have armed us with this material that I can assure you will be used and will be very effective in making the case for the kind of assistance that very obviously is needed here and needed now.

There can be no question about the value to our country and to the world, for that matter, in investment in education. Since we have always fewer resources than our needs, it's a constant process on our part to try to identify the immediate needs in as timely a fashion as is possible, so that our resources are going in the right direction at the time that they are most needed. It becomes very apparent to me, just statistically, that there are genuine needs here that can be met today with much less money than the problems that will come to us if we don't meet them. We could very well consider additional resources, particularly in title VII of the Higher Education Act, for the circumstances extant here in Puerto Rico as a fine investment on behalf of the American people. I am always happy when I can go home and tell the people that I represent that I am spending their money in a way that's an investment in their future. Very clearly they are very directly affected as citizens of our country by the success that you are able to bring about and what appears to me to be one of the most exciting educational systems in our country when one looks down the road in the next two decades.

In my own State, I am constantly confronted with people who are saying "What are we going to do when we don't have enough students?" They're becoming much absorbed by and sometimes obsessed by what happens to the continuance of institutions in States like mine, because we just aren't going to have enough students to fill the system that we have developed during the post-World War II period.

Very clearly, the phenomenon that we have seen elsewhere is not apparent here. It will either succeed or fail on the basis of the people in this room and the people who have presented testimony to this committee and the willingness of the Federal Government to support your efforts.

I want to thank Congressman Corrada once again for all that he has done to make it possible for us to break away and come down here for this weekend. I might mention parenthetically that some of you have heard about the coal strike. It is also our committee that will have to meet immediately when we return. In the event that you hear on the news tonight that the agreement reached is not accepted by the miners, we will be expected to meet under the gun early in the week and present the President with the power to do the things that he may have to do if that is not settled.

So we can't always plan ahead and know that we're going to be able to do what we want to do with this committee. I am pleased that at least they stretched it through this weekend so we didn't have to cancel these hearings. I wouldn't want to sit for years with Baltasar and not have him talk to me again. I am sure that might have been one of the results. He's been very gentle and a gentleman about it but he's been very persistent, refusing to take no for an answer, and I am grateful that he pressed us to come here. The demands for the committee to look at the individual problems that are from time to time most important to each of the Members of the House and Senate are very great, as you might understand, and we consider it a privilege to respond to his request and be able to go back and say we did something worthwhile because we learned something worthwhile.

I have been actively involved now since 1965 in drafting legislation and holding hearings on how legislation works and I have never felt more comfortable than I do at the moment and the time we have spent is well worthwhile because the people we've talked to knew what they were talking about and said what was on their minds.

Please stay in contact with the committee if you will and continue to share with us your individual and collective wisdom on where our priorities should be and how we should set out to accomplish the purposes that you believe we should be accomplishing as an education committee.

With that, I would call on Mr. Corrada to close the hearing.

Mr. CORRADA. Just a statement of appreciation to the chairman of the committee for coming down here. Let me say this, that most of the time when Members of Congress come to Puerto Rico, they will find very little understanding, particularly in the districts, and some of them maybe in Washington, about the need to absent themselves from the mainland and coming down to Puerto Rico, because they think that coming to Puerto Rico means only the Sun, the beaches and some fun, but they do not realize that down here there are 3.2 million citizens of the United States; there is an ongoing society struggling to achieve economic growth and development, and as I have often stated, and I repeat it again now, we in Puerto Rico look to Congress and to the Government of the United States as a partner in our efforts, the efforts of the people of Puerto Rico to grow and develop, and while it is true that in Congress often I have to support programs related to welfare and other needs, I never have such a moral and spiritual reward than when I work with Congress and men like Bill Ford in trying to bring to Puerto Rico Federal funds for development—not dependency—human, social, and economic development.

I cannot think of Federal funds that are more effective in bringing this human, social, and economic development than Federal funds for education, primary, secondary, and vocational education, and of course, higher education.

As we strive in Puerto Rico to continue our progress we need to meet the demands of the youth of this island, in terms of being able to offer to them the kind of learning that they need to be able to become more productive, to be able to understand themselves as human beings and to understand the world around them and to be able to contribute to this society, and believe me, Mr. Chairman, I can tell you that there will never be Federal funds better spent in Puerto Rico than those that will help our people to educate themselves and improve their lot. As once Churchill said, give us the tools and we will finish the job.

Thank you.

Mr. FORD. Thank you very much. Then we will stand in recess.

[Whereupon, at 11:55 a.m., the committee adjourned, to meet at the call of the Chair.]

[Material submitted for inclusion in the record follows:]

REMARKS MADE BY JUAN M. GONZÁLEZ LAMELA, CHANCELLOR, COLEGIO
UNIVERSITARIO DEL TURABO

Gentlemen, my name is Juan M. González Lamela and I am the Chancellor of the Colegio Universitario del Turabo, a four-year, private, non-profit, co-educational institution of higher learning. I have come here today to explain to you the needs of the college I head.

Contrary to what has happened throughout the United States during the 1970's college enrollment in Puerto Rico has continued to increase at a fast pace. In 1970, there were 65,000 enrolled in the full-accredited colleges of Puerto Rico. Now there are 110,000 attending and, according to the Planning Board, there will be 112,000 enrolled by 1985. (See Appendix No. 1.)

The estimates made by the Council on Higher Education in 1973, the year in which all Federal Funds for construction under Title VII of the Law on Higher Education of 1965, as amended, were cut off, indicated that by 1985, all colleges and universities would need construction costing up to 663 million dollars. (See Appendix No. 2). Since then, student enrollment has increased at a pace that exceeds all previous estimates, but construction has been minimal due to the economic recession which is still with us (See Appendix No. 3), the limited financing possibilities, and the financial straits in which our centers of learning find themselves. (See Appendix No. 4).

In our particular case, the Colegio Universitario del Turabo is a new institution founded in 1972 to meet the educational needs of the east-central region of Puerto Rico. Its open admissions policy, the emphasis put on serving socially, economically and academically disadvantaged students, and its occupational orientation have helped it to increase its enrollment from 1,414 students in 1972 to 5,113 this year. (See Appendix No. 5).

The college serves a community of 12 municipalities which, according to official estimates, had as of 1975 a total population of 420,000 inhabitants. The majority of the people are rural and poor. During fiscal year 1975, this region, which covers 14.5 percent of the island and holds 13.5 percent of the island's population, produced only 8.2 percent of the adjusted domestic income of the island's total economic activity.

During this same period, the per capita income for each one of the municipalities in the area was below the general index for Puerto Rico, which was \$2,130 (See Appendix No. 6 to No. 11).

Our job in this region is, therefore, to serve underprivileged students. More than 90 percent of our students receive financial aid from the Federal Government through the Basic Educational Opportunity Grant (BEOG) program and from some local entities. One fourth of these students enters college with a High School Index below 2 (See Appendix No. 12). Yet, despite all this, our graduates

go on to become employable citizens. A study made by us this past December showed that only 5.9 percent of our May 1976 graduates were unemployed. This figure is particularly significant if we consider what the official figures on unemployment for November 1977 for persons between the ages of 20 and 24 is 33.6 percent, or that the overall rate of employment for January 1978 was 20 percent. (See Appendix No. 13).

This is what the college has accomplished despite the limitations of our students, but what about our resources? 96 percent of our working budget comes from tuition and other students fees, 3 percent from federal funds and 1 percent from other sources. Therefore, it should come as no surprise that the college can invest only \$1,100 a year for the education and development of each student, full-time equivalent, and this includes the indirect administrative services. Given these circumstances, our budget does not allow us sufficient reserves for the improvement and expansion of the buildings and other facilities.

The college facilities consist of 17 buildings with a total area of 113,839 square feet. Of these, 75,324 square feet are in five modern concrete structures, another 17,350 square feet are in five, semipermanent buildings constructed of metal paneling, and lastly 21,165 square feet are in 7 structures of wood and tin. (See Appendix No. 14).

The two main buildings of the college house the Learning Resources Center, classrooms, academic offices and other auxiliary services for education. They were finished in 1972 at a cost of \$2,772,358 and financed through a grant of \$953,266 and loan of \$808,000, both from federal funds under Title VII of the Law on Higher Education of 1965, as amended, plus a \$1,011,092 appropriation by the Ana G. Méndez Educational Foundation. This loan is being paid back on a 30 year term at an annual interest of 3 percent, which is \$44,700 annually.

Twenty percent of the total space available is not usable due to the type and condition of the buildings. The buildings made of wood and tin were constructed about fifty years ago and were used as dwellings until the College bought them and began to use them for administration and teaching and other student-related activities. These buildings, which supply 19 percent of the floor space available, are highly inadequate for any purpose.

Even if all of the available space were usable and suitable, it would still not be enough. The American Council on Education has recommended that institutions of higher learning in the United States provide 125 square feet of non-residential space for full-time equivalent student. In Puerto Rico the 125 square foot standard has always been considered unattainable and, for this reason, the Council on Higher Education recommended in 1973 the more modest standard of 100 square feet for universities, 85 square feet for four-year colleges, and 70 square feet for two-year colleges. This very modest standard was set as an ideal because very few institutions then were close to it. Even today, the facilities at CUT provide only 22.5 square feet of space per full-time equivalent student, which is only 26 percent of the goal recommended by the Council on Higher Education five years ago.

This state of events is the result of a whole series of circumstances in which institutions of learning find themselves. The increasing demand for space is shown most clearly in the intensified use of the facilities in a way which staggers the imagination.

At the beginning of this decade, it was considered normal to have laboratories and classrooms two-thirds full, in terms of the number of spaces available and a 44 hour week. Nowadays, the CUT operates with laboratories and classrooms 73 percent full and has a 76.5 hour week.

We have a pressing need for classrooms, laboratories, administrative offices, offices for the faculty, a student center, and sports and maintenance facilities. We would have to build 303,000 square feet of space in order to reach, during the next few years, the minimum recommended by the Council on Higher Education. This is presuming of course, that the student enrollment does not increase. The estimated cost, at \$37 per square foot for simple structures, would be \$11.2 million. As you can see, this figure is way beyond any reasonable possibility, considering the circumstances already described. The CUT simply does not have the revenue to pay for such construction and the students lack the economic resources necessary to assume the cost through tuition increases or other special fees. And please note that this investment of \$11.2 million does not include the cost of outdoor construction such as for sports and athletic activities, car parking, and maintenance facilities.

In order to give some idea of the impossibility of being able to pay the \$11.2 million needed for the indoor construction, I need only to point out that if credit were available at 5 percent interest for 40 years, we would still have to raise the tuition cost per credit by \$15 above the present rate of \$35.

Given this situation, what can the College do? Just 2 weeks ago, we learned that the Farmer's Home Administration had approved a 40-year loan of \$4.2 million at an annual interest rate of 5 percent. This money will be used to construct and equip 46,021 square feet of indoor space to be used as follows: classrooms and laboratories—29,825 square feet, or 65 percent of the total space; a Student Services and Development Center—8,684 square feet, or 19 percent of the total space; a building for faculty and administrative offices—4,080 square feet, or 9 percent of the total space; and a building for maintenance services—3,432 square feet, or 7 percent of the total space. In addition, 7.72 acres of outdoor space will be rehabilitated and equipped for athletic activities; 150,000 square feet for parking; and 6,420 square feet for maintenance services.

We will need an additional revenue of about \$739,200 annually which represents one-seventh of our present budget in order to pay for this. I might add that Colegio Universitario del Turabo has qualified for this loan only because it serves the rural area. Institutions of higher learning in the city are not eligible for this type of credit.

This effort will supply CUT with new facilities necessary for its growth as an institution, and with 46,021 of the 303,000 square feet needed according to estimates. This means, however, that there is still a need for 257,000 square feet of construction at an estimated cost of \$9.5 million. The only way to finance this urgently needed construction is to ask the Federal Government to lift the restrictions on funding for the construction of new facilities. To this end, we recommended that the appropriate action relative to the Law on Higher Education of 1965, as amended be taken. Thank you very much for having permitted me to appear before this congressional subcommittee.

I welcome any questions you may wish to ask me.

APPENDIX 1

COLEGIO UNIVERSITARIO DEL TURABO, GURABO, P.R.—GROWTH OF TOTAL ENROLLMENT IN ALL INSTITUTIONS OF HIGHER EDUCATION IN PUERTO RICO—FALL, 1969 TO 1977 AND PROJECTIONS TO 1985

Year	Enrollment	Percent increase over previous year
1969	57,338	
1970	64,449	12.4
1971	71,075	10.3
1972	80,840	13.7
1973	88,911	10.0
1974	94,369	6.1
1975	105,426	12.2
1976	111,311	5.6
1977	119,083	7.0
1980	125,441	
1985	124,115	

Sources: Council on Higher Education, Puerto Rico Planning Board (projections).

APPENDIX 2.—COLEGIO UNIVERSITARIO DEL TURABO, GURABO, PUERTO RICO

Estimated facility needs of colleges and universities in Puerto Rico—1973 through 1985

Years:	Cost (millions)
1973	\$37
1974-75	99
1976-80	200
1981-85	327
Total	663

Source: Commonwealth of Puerto Rico, Council on Higher Education, Higher Education Facilities Comprehensive Planning Study, 1973 Report, pp. 37-42.

APPENDIX 3

COLEGIO UNIVERSITARIO DEL TURABO, GURABO, P.R.—SELECTED ECONOMIC INDICATORS OF PUERTO RICO, FISCAL YEARS 1972 THROUGH 1976

[Millions of 1954 constant dollars]

Item	1972	1973	1974	1975	1976
Gross product.....	3,168.0	3,354.7	3,414.1	3,390.5	3,430.0
Gross fixed domestic investment.....	966.8	837.7	768.1	764.8	674.0
Construction.....	683.1	550.6	551.7	567.6	445.6
Disposable personal income (dollars per capita).....	1,070.0	1,111.0	1,068.0	1,042.0	1,053.0
Average family income (1954 constant dollars).....	4,644.0	4,759.0	4,509.0	4,302.0	4,356.0

Source: Puerto Rico Planning Board, Economic Report to the Governor, 1976.

APPENDIX 4.—COLEGIO UNIVERSITARIO DEL TURABO, GURABO, PUERTO RICO

THE ECONOMIC CONDITION OF HIGHER EDUCATION IN PUERTO RICO

The following paragraphs are quotations from: Task Force for Comprehensive Planning, Council on Higher Education, Guidelines for the Development of Higher Education in Puerto Rico, March, 1973. The Task Force was composed of high-ranking academic and administrative officers representing every college and university, both public and private.

"The economic situation of the institutions of higher education has arrived at its critical point . . . As shown by the economic situation of the university-level institutions, the Puerto Rican economy already nears the maximum effort it can make on behalf of higher education." (Page 1.)

"The financing of capital investment programs in the University of Puerto Rico as well as in the private universities has depended, to a large extent, on the availability of federal grant and loan funds. Current federal priority policies have noticeably reduced the funds available for the construction of university facilities. Therefore, the pace of construction has greatly diminished." (Page 7.)

(Translated from the Spanish at the Colegio Universitario del Turabo.)

APPENDIX 5

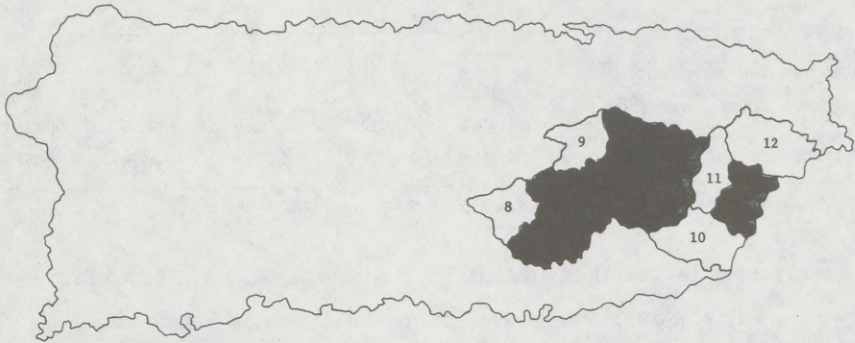
COLEGIO UNIVERSITARIO DEL TURABO, GURABO, P.R.—TOTAL ENROLLMENT OF THE COLEGIO UNIVERSITARIO DEL TURABO 1972-73 THROUGH 1977-78

Academic year	Enrollment	Percent increase
1972-73.....	1,414	-----
1973-74.....	2,096	48.2
1974-75.....	2,844	35.7
1975-76.....	3,917	37.7
1976-77.....	4,445	13.5
1977-78.....	5,113	15.0

Source: The Ana G. Mendez Educational Foundation, Statistical Report on the Colegio Universitario del Turabo,

APPENDIX 6

COLEGIO UNIVERSITARIO DEL TURABO
Area de Servicio - Service Area
1977



Primaria  Primary

Secundaria  Secondary

1. Cayey
2. Cidra
3. Caguas
4. Gurabo
5. San Lorenzo
6. Juncos
7. Humacao

8. Aibonito
9. Aguas Buenas
10. Yabucoa
11. Las Piedras
12. Naguabo

APPENDIX 7

COLEGIO UNIVERSITARIO DEL TURABO, GURABO, P.R.—URBAN, RURAL, AND TOTAL POPULATION IN THE COLLEGE'S SERVICE AREA AS COMPARED TO PUERTO RICO, 1970-1975-1985

Year	Puerto Rico	CUT service area	Percent of Puerto Rico
Population, 1970.....	2, 707, 033	366, 783	13. 5
Urban.....	1, 575, 491	156, 223	9. 9
Rural.....	1, 131, 542	210, 560	18. 6
Percent rural.....	41. 8	57. 4	
Population, 1975.....	3, 120, 900	419, 810	13. 5
Population, 1985.....	3, 453, 900	457, 088	13. 2
Urban.....	2, 207, 665	221, 860	10. 0
Rural.....	1, 246, 235	235, 228	18. 9
Percent rural.....	36. 1	51. 5	

Source: Puerto Rico Planning Board, Selected Socio-Economic Statistics (by Municipalities), December 1976.

APPENDIX 8

COLEGIO UNIVERSITARIO DEL TURABO, GURABO, P.R.—SOME ECONOMIC INDICATORS OF THE COLLEGE'S SERVICE AREA AS COMPARED TO PUERTO RICO

Item	Puerto Rico	Service area
Unemployment rates:		
1975-76.....	19.4	22.5
1976-77.....	20.1	22.4
July 1977.....	21.0	21.7
Adjusted domestic income:		
1974-75 (millions).....	\$6,319.7	\$516.0
Percent of Puerto Rico.....	100.0	8.2
Average hourly salary in manufacture:		
1975.....	\$2.59	\$2.40
1976.....	2.86	2.67

SOURCES

- (1) Department of Labor and Human Resources, Employment and Unemployment in Puerto Rico.
 (2) Department of Labor and Human Resources, Census of Manufacturing Industries in Puerto Rico, October 1976.
 (3) Puerto Rico Planning Board, Selected Socio-Economic Statistics (By Municipalities), December 1976.

APPENDIX 9.—COLEGIO UNIVERSITARIO DEL TURABO,
GURABO, PUERTO RICO*Annual family income of the college's new students, August 1977*

Annual income:	Percent of students
Less than 3,000.....	34.9
3,000 to 7,499.....	47.1
7,500 to 11,999.....	9.3
12,000 and over.....	6.8

Source: The Ana G. Méndez Educational Foundation, Characteristics and Attitudes of New Students, December 1977.

APPENDIX 10.—COLEGIO UNIVERSITARIO DEL TURABO,
GURABO, PUERTO RICO*Dimensions of the college's service area*

Municipality	Square kilometers
Primary Area:	
Caguas.....	150
Cayey.....	130
Cidra.....	93
San Lorenzo.....	137
Gurabo.....	73
Humacao.....	117
Juncos.....	67
Total.....	767
Secondary Area:	
Aguas Buenas.....	78
Yabucoa.....	142
Las Piedras.....	86
Naguabo.....	135
Aibonito.....	80
Total.....	521
Total, service area.....	1,288
Puerto Rico.....	8,860
Service area/Puerto Rico.....	.145

Source: Puerto Rico Planning Board, Selected Socio-Economic Statistics (by Municipalities), December 1976.

APPENDIX 11

COLEGIO UNIVERSITARIO DEL TURABO, GURABO, P. R.—ADJUSTED DOMESTIC INCOME OF THE COLLEGE'S SERVICE AREA, FISCAL YEAR 1974-75

Municipality	Income (millions)	Per capita
Primary area	\$394.8	(¹)
Caguas	193.6	\$1,693
Cayey	38.2	988
Cidra	16.5	661
San Lorenzo	24.2	864
Gurabo	25.9	1,385
Humacao	74.3	1,952
Juncos	22.0	958
Secondary area	121.3	(¹)
Aguas Buenas	16.9	834
Yabucoa	47.2	1,537
Las Piedras	21.2	1,109
Naguabo	18.7	885
Aibonito	17.2	830
Total, service area	516.1	(¹)
Puerto Rico	6,319.7	2,130
Service area/Puerto Rico	.082	(¹)

¹ Not available.

Source: Puerto Rico Planning Board, Selected Socio-Economic Statistics (by Municipalities), December 1976.

APPENDIX 12

COLEGIO UNIVERSITARIO DEL TURABO, GURABO, P.R.—SECONDARY SCHOOL GRADE INDEXES OF THE COLLEGE'S 1ST-TIME 1ST-YEAR STUDENTS, FALL, 1975 THROUGH 1977

[Percent distribution]

Index	1975	1976	1977
1.00 to 1.49	1.5	3.1	4.6
1.50 to 1.99	24.5	25.5	24.3
2.00 to 2.49	47.3	43.9	39.4
2.50 to 2.99	22.0	21.9	24.1
3.00 to 3.49	3.9	4.8	7.1
3.50 to 4.00	.8	.7	.5
TOTAL	100.00	100.00	100.00

Source: The Ana G. Mendez Educational Foundation, Statistical Report on the Colegio Universitario del Turabo.

APPENDIX 13

COLEGIO UNIVERSITARIO DEL TURABO, GURABO, P.R.—UNEMPLOYMENT INDEXES FOR THE COLLEGE'S 1976 AND 1977 BACCALAUREATE GRADUATES BY MAJOR SUBJECT OF THE GRADUATES, DECEMBER 1977

Major subject	1976 graduates	1977 graduates	Both groups
Elementary education	3.7	9.0	6.6
Secondary education	0	17.6	7.7
Business administration	5.3	13.6	11.1
Social sciences	17.4	30.0	23.3
Total	5.9	15.0	11.0

Source: Colegio Universitario del Turabo, Survey on the Employment Status of CUT's Graduates, December 1977.

APPENDIX 14

COLEGIO UNIVERSITARIO DEL TURABO, GURABO, P.R.—INVENTORY OF EXISTING FACILITIES, BY USE AND TYPE OF STRUCTURE, IN SQUARE FEET, JANUARY 1978

Use	Concrete (permanent)	Type of structure— metal panels (semi- permanent)	Wooden (inadequate)	Total	Percent
Classroom.....	7,816	10,512		18,328	16.1
Laboratory.....	5,549			5,549	4.9
Office.....	5,310		10,004	15,314	13.5
Study.....	27,796		488	28,284	24.8
Special.....	5,082			5,082	5.1
General.....	2,931	5,009	3,074	11,024	9.7
Supporting.....	773	590	1,575	2,938	2.6
Health care.....			435	435	0.4
Residential.....			3,420	3,420	3.0
Nonassignable.....	19,337	1,239	2,169	22,745	20.0
Total.....	75,324	17,350	21,165	113,839	100.0
Percent.....	66.2	15.2	18.6	100.0	

Source: Colegio Universitario del Turabo, Preliminary Report of the Subcommittee on Physical Facilities for the Institutional Master Plan, January, 1978.

Post Secondary Education Subcommittee Hearings on Title VII, San Juan,
Puerto Rico

MARCH 4, 1978.

Hon. William Ford, Chairman, we at World University, are most pleased to have this opportunity of presenting data relative to overall post secondary physical facilities needs in Puerto Rico, and in particular, our own institutional needs.

I. BACKGROUND

A. General

The Island Commonwealth of Puerto Rico, located some 1,800 miles South-Southeast of Washington, D.C., and 500 miles due North of Caracas, Venezuela, is roughly 3,300 square miles—100 by 33 miles or about the size of the state of Connecticut. Its 3.2 million, 1976 population is young, averaging in the late teens. Population density is 939 persons per sq. mile, making it one of the heaviest populated areas outside Southeast Asia. The Island has a high poverty level where close to 75 percent of all families receive food stamps and an unemployment rate (official) that averages 20 percent of those actively seeking work.

B. Educational

The number of students in the entire Puerto Rican educational system—elementary through college, has increased threefold in the last thirty some years, from 302,812 in 1940 to 914,215 in 1976. See Exhibit "A". This means that 29 percent of the entire population is attending formal classes. Yet at the same time, one-fourth of the high school age students or 110,000 are out of school. In 1976, the proportion of school enrollment was 79.2 percent of the total number of children of school age. The Island still has a high level of dropouts in its educational system and by 1976 only 37 students graduated from high school and 11 from college out of every 100 enrolled in the first grade. Illiteracy has decreased from 31.5 percent in 1940 to an estimated 10.8 in 1979. This is still a problem of great magnitude.

The above facts and figures were culled from the August 1977 "Agenda for A Socio-Economic Study of Puerto Rico", prepared for a Federal Interagency Study Group, at the request of President Carter in March of 1977. It is presented to provide a backdrop for the consideration of the Island's university needs.

II.—HISTORICAL BACKGROUND OF HIGHER EDUCATION IN PUERTO RICO¹

Notwithstanding the fact that Puerto Rico was under Spanish rule for more than 400 years and that universities were founded in Mexico, Peru and Santo Domingo in the Sixteenth Century, the establishment of universities in Puerto Rico did not begin until the Twentieth Century. The public University of Puerto Rico began as a Normal School in 1903 committed to the training of teachers to fill the needs of the newly-established public school system.

¹ Portions excerpted from the July 1970 P.R. Higher Education Planning Study.

Historically, university institutions in Puerto Rico had a distinctly different pattern of development than found elsewhere in the Western Hemisphere. Colleges and universities in most Western Hemisphere countries were either initially established by the Church or by private groups. The educational offerings were in the main restricted to the Liberal Arts, Law, Theology and Medicine. Public universities made their appearance long after the establishment of private universities.

When the University of Puerto Rico was founded, the United States Land Grant College concept was almost 40 years old. Its innovative orientation to a higher educational commitment patterned to the needs of a developing democratic society had a major influence on the development and nature of the University of Puerto Rico.

The local private sector of post-secondary education had its beginning after the First World War with the establishment of the Polytechnic Institute at San Germán, which developed into the present day Inter American University. The first bachelor's degree at the Inter American University was awarded in 1927. The college of the Sacred Heart, in Santurce, was founded in 1935; the Catholic University in Ponce started in 1949 as did Puerto Rico Junior College.

Inter American University, the Catholic University and the Puerto Rico Junior College experienced significant growth and development in the 1950's and 1960's at the same time that the University of Puerto Rico was going through its own accelerated growth and development. These institutional developments concurred with the socio-economic revolution taking place in Puerto Rico and the demand for post-secondary educational opportunities far outstripped the public resources available to provide an even more rapid growth of the University of Puerto Rico.

Antillian College in Mayaguez, was founded in 1961. World University, the Island's only non-traditional post-secondary institution was founded in 1965; Caribbean Junior College in 1969 and Bayamón Central University which began in 1961 as a center for Catholic University, became an independent institution in 1970.

The private institutions of higher education in Puerto Rico have no long-standing elite tradition and history corresponding to that of the private institutions in the Continental United States. They have no significant endowment resource nor a well established alumni resource. Private contributions to Puerto Rican higher education, which are minimal come mainly from the Corporate-Industrial sector, which has greatest need for its graduates. Although the Commonwealth Tax Law was changed in the late 60's to encourage philanthropic giving by permitting a doubling from 15 to 30 percent of individual charitable deductions, provided the last 15 percent went to higher education, little increase in actual donations resulted. Consequently, these institutions rely almost exclusively on tuition and fees for operational expenses—and physical facilities needs. Their tuition and fees are very low ranging between \$25 and \$40 a credit hour, in comparison to Mainland Institutional charges, which in most instances are double or more. These tuition charges are considerably above the local public university, which receives nearly 90 percent of its budget from Legislative appropriations.

III. PHYSICAL FACILITIES NEED OF LOCAL I.H.L.'S

A. Background

From 1969 to 1974, the Commonwealth of Puerto Rico Council on Higher Education acted in a planning capacity and yearly surveyed the needs of the post secondary community and in particular its physical facilities inventory. Attached as Exhibits "B", "C", and "D", are the last projections made in this regard for 1975, 1980, and 1985. Following this, an executive order of the Governor created the Puerto Rico Post Secondary Commission, which while charged with planning, did not maintain yearly physical plant inventories.

Exhibit "E" shows the enrollment growth of higher education yearly for the last two decades. It should be noted that total enrollment grew 250 percent in the last 10 years with the public sector increasing 176 percent and the private sector 377 percent. The chart also shows the public sector accounting for 75 percent of enrollment 20 years ago, and this declining to 44.6 percent this year with the private sector rising from 25.7 percent to the present predominant 55.4 percent. These figures show an almost static condition in public enrollment growth for the last five years contrasted with almost 100 percent increase in students in the private sector. This is probably attributable to the recession

which curtailed government income, and hence, Legislative appropriations to the public institutions. On the other hand, the advent of the B.E.O.G. Program opened the doors of the private institutions to previously economically deprived students. B.E.O.G. funds last year amounted to \$86 million in Puerto Rico, assisting 80,644 students.

Exhibit "F" is a delineation of Federal Institutional Assistance; Construction (old Titles I, II, III) new Title VII, and;—Academic: Title III Developing Institutions. The chart shows funds received for construction from 1965 through 1972, and its level and type of institution.

A comparison with Exhibits "G" and "H" taken from the 1971 Facilities Planning Study indicate that a substantial amount of these Title VII funds went to the public institution. Of the older private institutions, Catholic, Interamerican, Puerto Rico Junior College and Sacred Heart received funds for at least two projects apiece with the last award going to Bayamón Central.

Exhibit "F" also shows substantial Developing Institutions grants to the private institutions in Puerto Rico. The construction awards of the latter 60's helped greatly to pave the way for the flood of subsequent students, but now those numbers are so great as to eclipse the predictions shown in Charts "G" and "H", which indicated substantial gross area deficits. The needs for physical construction are staggering and the resources are practically nil. The public institution was fortunate to participate in \$16 million in Federal Economic Development Administration grants in 1976-77, which, of course, were needed but to a lesser degree than the private institutions when enrollment increases were considered. Private institutions on the other hand have benefited greatly from grants under the Strengthening Developing Institutions Program, which have helped them cope with the avalanche of new students.

B. Actual physical needs

If we add $\frac{1}{2}$ million gross sq. feet to the existing figures as they appear in the Comprehensive Planning Report of 1972-73, we would have a current estimated total of 6,543,267 gross sq. feet of physical facilities in all institutions. The American Council of Education recommends 125 sq. feet per student. Because of climate and type of institution, we in Puerto Rico could reduce our needs to only 100 sq. feet per student. Thus our current need would amount to 11,908,300 or a gross deficit of 5,365,033. In today's construction market of at least \$60 per sq. foot, this would amount to \$321,901,980 plus accumulated normal replacement costs of \$20,000,000. If we add to this energy saving devices plus mandated access to the handicapped, the total could easily approach the \$400 million mark on a collective basis. This is an awesome figure, which is almost impossible to deal with. But there are alternatives—and they amount to maximum use and shared use of existing and potentially new facilities.

IV. WORLD UNIVERSITY—BACKGROUND, EXPERIENCE AND NEEDS

A. Institutional background

World University is a non-profit, co-educational, bilingual, interdisciplinary transcultural and world centered institution of higher education, located in San Juan, Puerto Rico, with branches in Bayamón and Ponce, Puerto Rico. Opened in 1965, it has regional preaccreditation (Middle States) local accreditation (Puerto Rico Council of Higher Education), and has a remarkable ten year growth pattern:

Year	FTE enrollment	Graduates	Faculty	Educational and general expenditures
1965-----	376	-----	19	\$274, 954
1970-----	1, 092	54	72	619, 213
1973-----	2, 562	196	93	1, 725, 450
1976-----	3, 448	339	143	3, 915, 745

While the current trend in higher education seems to pit its components; students, faculty, administration and governing boards in adversary roles, World University since its creation has attempted to obviate this potential problem by maintaining a scene of community learning by such measures as; the absence of academic rank designations, a policy which requires administrators to teach one or more classes; an open office court environment for faculty, staff including president, permitting easy student accessibility and academic and administrative meetings open to students.

The University offers an individually oriented program of studies with world-centered emphasis and challenges both students and staff to a program of life long learning and self-realization in the service of mankind.

In April of 1977, the University was inducted into membership in the prestigious 34 member Union for Experimenting Colleges and Universities. As a member of the UECU Consortium, the University will establish a cluster Ph. D. Program for the Caribbean Area.

B. Experience and needs

World University began in 1965 with 376 students in Hato Rey with a 19 member faculty and an operating budget of a little more than one-fourth of a million. Today, it operates 3 Centers—Hato Rey, Ponce and Bayamón, with an enrollment of 4,813, a faculty of 280, and an operating budget approaching 7 million. It recently purchased the building which houses its Bayamón Center and currently leases its Hato Rey and Ponce space. The gross sq. footage of the three Centers is 66,484 or a per student average of 13.8 sq. feet. This is about 10 times less than the suggested average of 125 on the national level. To say the facilities are not crowded, would be, of course, an untruth. We need more space—but a sensible amount more.

The University exists to educate—and all of its energies and resources are channelled to this end. There are no auxiliary services or enterprises. The space that exists is at least 75 percent assignable for academic use. This is coupled with the fact that 2,015 or 42 percent of our current students are over 25 years old or adults who are employed and study after working hours. The University functions from 7:00 a.m. to 10:00 p.m. week days, and 8:00 a.m. to 5:00 p.m. Saturday for a total of 84 hours a week or more than double the regular 40 hour week. This is, of course, made possible and feasible by the mix of adult and regular students. Add to this, the tri semester plus Summer terms which operate a total of 48 weeks out of 52 in a year and you have close to maximum utilization of both time and space. We do not advocate this as an alternative for other institutions, but rather an explanation of our operation.

We know we are crowded and need more space, but this is expensive and difficult to locate. How much space? This must be determined somewhere between our present crowded condition and perhaps half of the accepted norm of 100 sq. feet in Puerto Rico, since we have more than double the normal weekly time use of existing space. If we took the figure of 35 sq. feet, our present need with a 4,813 current enrollment would be 171,955 sq. feet less our present 66,484 sq. feet would give us a gross area deficit of some 105,471 sq. feet, at a construction cost of \$60 a sq. ft. This would amount to \$6,328,260.00. While we have no replacement costs since our purchase of Bayamón was recent, we would have to purchase or build the equivalent of the present 62,132 sq. feet currently leased. This would amount to another \$3,727,920 or a total of \$10,056,180. These figures are, of course, minimal based on one-third of the nationally recommended space allocations and on the maximum time and space utilization our institution has been able to develop.

Because of its non-traditional stance and its strong belief in serving and integrating with the community, the University wishes to continue providing its educational services in an urban high rise setting easily accessible to the nearby 50 percent of its students who are adults and who combine both, work and study.

V. CONCLUSION

The testimony presented at this Hearing, may vary in degree of need, but one point must stand out clear. A critical physical facilities need exist in Puerto Rico to accommodate the 3.7 percent of its population presently enrolled in institutions of higher education. Island trends seem to be contrary to that of the Mainland. While private enrollment on the continent declines and public increases, the opposite is true here. While Mainland colleges are overbuilt with some closing and others merging, a clear need for more facilities exists on the Island. We hope that in addition to the national importance of energy conservation and access for the handicapped that the Congress will also recognize this and other "pockets of need" for post secondary construction.

Here in Puerto Rico we were barely two decades into our socio-economic revolution when the financial defense demands of Southeast Asia cut into an eventually eliminated a program which barely scratched the surface of physical facilities need in the area of higher education on the Island. Today we are performing miracles with limited resources which will be increasingly taxed for

at least the next six years. We earnestly request your serious support to make available at the earliest date possible additional funds in Title VII that could be earmarked not only for the national priority areas of conservation and the handicapped, but also those regional and minority areas which have demonstrated general construction needs which can not feasibly be met in any other manner.

Respectfully submitted,

JOHN G. HENNIG,
Executive Assistant to the President
for External Resources,
World University.

EXHIBIT A

TABLE NO. 3.—ENROLLMENT IN PUBLIC AND PRIVATE SCHOOLS, FISCAL YEARS 1940–76

Schools	1940	1950	1960	1970	1976
Total	302, 812	443, 357	651, 687	750, 406	914, 215
Public	286, 113	408, 128	573, 440	612, 299	709, 574
Private	11, 328	22, 595	53, 718	81, 080	99, 215
University of Puerto Rico	4, 987	11, 348	18, 223	37, 839	51, 061
Other schools of college level	384	1, 286	6, 306	19, 188	54, 365

Source: Puerto Rico Planning Board.

EXHIBIT B

COMMONWEALTH OF PUERTO RICO ESTIMATED FACILITIES NEEDS OF COLLEGES AND UNIVERSITIES, 1975

	Low ¹	Intermediate ²	High
Total enrollment (FTE)	82, 500	89, 300	94, 600
Required gross area (sq. ft.) ⁴	7, 186, 490	8, 104, 195	8, 486, 445
Existing gross area (sq. ft.) ⁵	6, 043, 267	6, 043, 267	6, 043, 267
Deficit gross area (sq. ft.)	1, 143, 223	2, 060, 928	2, 443, 178
Estimated construction cost ⁶	\$42, 867, 393	\$77, 278, 555	\$91, 587, 132
Accumulated normal replacement cost ⁷	22, 129, 656	22, 129, 656	22, 129, 656
Total cost	64, 997, 049	99, 408, 211	113, 716, 788

¹ Revised enrollment estimate arising from the projection correlated to the net income of Puerto Rico.

² Revised enrollment estimate arising from the linear projection of the participation rates.

³ Revised enrollment estimate arising from the parabolic projection of the participation rates.

⁴ On the basis of 200 gross sq. ft. per FTE student in medical sciences; 100 sq. ft. in university-level institutions; 85 sq. ft. in 4-year university colleges; 70 sq. ft. in 2-year regional colleges.

⁵ On the assumption that the facilities needs estimated for 1972–73 are totally met.

⁶ An annual increase of 5 percent in construction costs is assumed. So, an average cost of \$38 per gross foot is applied.

⁷ Replacement costs are calculated on the basis of 4 percent of the existing facilities per year.

EXHIBIT C

COMMONWEALTH OF PUERTO RICO ESTIMATED FACILITIES NEEDS OF COLLEGES AND UNIVERSITIES, 1980

	Low ¹	Inter- mediate ²	High
Total enrollment (FTE)	89, 300	111, 200	129, 700
Required gross area (sq. ft.) ⁴	8, 361, 890	9, 959, 880	12, 267, 980
Existing gross area (sq. ft.) ⁵	6, 043, 267	6, 043, 267	6, 043, 267
Deficit, gross area (sq. ft.)	2, 423, 473	4, 047, 163	6, 377, 013
Estimated construction cost ⁶	\$82, 592, 707	\$179, 733, 235	\$283, 201, 151
Accumulated normal replacement cost ⁷	20, 098, 879	20, 098, 879	20, 098, 879
Total cost	102, 691, 586	199, 832, 114	303, 300, 030

¹ Revised enrollment estimate arising from the projection correlated to the net income of Puerto Rico.

² Revised enrollment estimate arising from the linear projection of the participation rates.

³ Revised enrollment estimate arising from the parabolic projection of the participation rates.

⁴ On the basis of 200 gross sq. ft. per FTE student in medical sciences; 100 sq. ft. in university level institution; 85 sq. ft. in 4-year university colleges; 70 sq. ft. in 2-year regional colleges.

⁵ On the assumption that the facilities needs estimated for 1972–73 and for 1975 are totally met.

⁶ An annual increase of 5 percent in construction costs is assumed. So, an average cost of \$45 per gross square foot is applied.

⁷ Replacement costs are calculated on the basis of 4 percent of the existing facilities.

EXHIBIT D

COMMONWEALTH OF PUERTO RICO ESTIMATED FACILITIES NEEDS OF COLLEGES AND UNIVERSITIES, 1985

	Low ¹	Intermediate ²	High ³
Total enrollment (FTE)	98,500	133,100	165,000
Required gross area (sq. ft.) ⁴	8,698,410	11,498,960	14,571,060
Existing gross area (sq. ft.) ⁵	6,043,267	6,043,267	6,043,267
Deficit, gross area (sq. ft.)	2,655,143	5,455,693	8,527,793
Estimated construction cost ⁶	\$153,832,713	\$303,011,367	\$473,637,030
Accumulated normal replacement cost ⁷	24,090,800	24,090,800	24,090,800
Total cost	177,923,513	327,102,167	497,727,830

¹ Revised enrollment estimate arising from the projection correlated to the net income of Puerto Rico.

² Revised enrollment estimate arising from the linear projection of the participation rates.

³ Revised enrollment estimate arising from the parabolic projection of the participation rates.

⁴ On the basis of 200 gross sq. ft. per FTE student in medical sciences; 100 sq. ft. in university-level institutions; 85 sq. ft. in 4-year university colleges; 70 sq. ft. in 2-year regional colleges.

⁵ On the assumption that the facilities needs estimates for 1972-73, 1975, and 1980 are totally met.

⁶ An annual increase of 5 percent in construction costs is assumed. So, an average cost of \$56 per gross square foot is applied.

⁷ Replacement costs are calculated on the basis of 2 percent of the existing facilities.

EXHIBIT E

PRIVATE-PUBLIC ACCREDITED POSTSECONDARY ENROLLMENT—PUERTO RICAN INSTITUTIONS OF HIGHER EDUCATION

Year	Total accredited enrollment	Public enrollment	Public percent	Private enrollment	Private percent
1959-60	24,529	18,223	74.3	6,309	25.0
1960-61	26,409	18,893	71.5	7,516	28.8
1961-62	30,228	21,262	70.3	8,966	29.7
1962-63	30,344	21,892	72.1	8,452	27.5
1963-64	33,331	22,959	68.9	10,372	31.9
1964-65	36,834	24,809	67.4	12,025	32.9
1965-66	40,696	26,484	65.1	14,212	34.4
1966-67	44,365	28,194	63.6	16,171	36.7
1967-68	47,598	30,088	63.2	17,510	36.6
1968-69	52,048	34,411	66.1	17,632	33.9
1969-70	57,338	37,839	66.0	19,499	34.1
1970-71	64,449	42,516	66.0	21,933	34.0
1971-72	71,075	43,609	61.4	27,466	38.6
1972-73	80,840	47,533	58.8	33,307	41.2
1973-74	88,911	50,439	56.7	38,472	43.3
1974-75	94,369	52,055	55.2	42,314	44.8
1975-76	105,426	53,450	50.7	51,976	49.3
1976-77	111,311	52,686	47.3	58,625	52.7
1977-78	119,083	53,078	44.6	66,005	55.4

TABLE MAT. 7.—MATRÍCULA EN LAS INSTITUCIONES DE EDUCACIÓN POSTSECUNDARIA PÚBLICAS Y PRIVADAS ACREDITADAS POR EL CONSEJO DE EDUCACIÓN SUPERIOR, PRIMER SEMESTRE 1902-03 AL 1975-76

Años	Total	Pública	Privada
1902-03	154	154	-----
1904-05	137	137	-----
1909-10	376	376	-----
1914-15	872	872	-----
1919-20	744	744	-----
1924-25	921	921	-----
1929-30	1,466	1,466	-----
1934-35	3,691	3,691	-----
1939-40	5,426	4,987	439
1944-45	7,696	7,300	396
1949-50	12,497	11,348	1,149
1954-55	16,028	13,232	2,796
1959-60	24,529	18,223	6,309
1964-65	36,895	24,809	12,086
1969-70	57,338	37,839	19,499
1970-71	64,449	42,516	21,933
1971-72	71,075	43,609	27,466
1972-73	80,840	47,533	33,307
1973-74	88,911	50,439	38,472
1974-75	94,369	52,055	42,314
1975-76	105,426	53,450	51,976
1976-77	111,311	52,686	58,625
1977-78	119,083	53,078	66,005

EXHIBIT F

FEDERAL INSTITUTIONAL AID, GRANTS AND LOANS—PUERTO RICO

Year	Title VIIIA, undergraduate construction grants ¹		Old title 11, title VIIIB, graduate construction grants ¹	Old title 111, title VIIC, direct loans ¹	New title 111, strengthening developing institutions	Number of grant
	Old title 1, community colleges, sec. 103	Old title 1, 4-yr institutions, sec. 104				
1964-65	\$616,857	\$1,520,587		\$4,868,000		
1965-66	1,395,777	2,750,304	\$344,222			
1966-67	1,142,014	1,780,790		1,288,000		
1967-68	715,493	1,985,522		1,585,000	\$303,476	4
1968-69	1,106,037	941,163			356,425	3
1969-70	432,209	372,532			362,000	3
1070-71	337,750	346,624			400,000	4
1971-72	150,861	285,847			575,000	4
1972-73					777,500	5
1973-74					900,000	5
1974-75		471,657			1,255,000	6
1975-76	9				1,445,000	6
1976-77	(?)	(?)			1,285,000	7
1977-78					1,616,340	8
Total	5,897,003	10,459,926	344,222	7,751,000	9,275,241	
Undergraduate total	16,356,929			\$+13,505,000		

¹ Grants and loans assisted 11 institutions—and 31 projects: Total project cost, \$66,581,274; total building cost, \$36,981,463. These 31 projects provided: 2,238,482 gross square feet; 1,360,416 assignable square feet.

² \$16,000,000 EDA.

³ Loans subsidized by interest grants.

Note: HUD—College housing loans, 1964-72—Puerto Rico:

University of Puerto Rico	\$9,429,000
Interamerican University	1,857,000
Catholic University	1,000,000
Puerto Rico Junior College	650,000
Sacred Heart	754,000
Total	13,690,000

EXHIBIT G

CAPITAL IMPROVEMENT PROGRAM FOR THE UNIVERSITY OF PUERTO RICO—SUMMARY BY INSTITUTIONAL UNIT AND STATUS OF THE PROJECTS AS OF JUNE 1971

Institutional unit	Program approved by CHE until February 1971			Projects finished as of June 1971		
	Total cost	Federal appropriations	UPR funds	Total cost	Federal appropriations	UPR funds
Rio Piedras Campus	\$44,895,582	\$4,415,381	\$36,480,201	\$18,395,209	\$2,816,656	\$15,578,553
Mayaguez Campus	23,333,403	2,895,424	20,437,979	2,938,390	766,731	2,171,659
Medical Sciences Campus	22,329,251	7,125,748	15,203,503	599,339		599,339
Cayey University College	2,735,100	526,522	2,208,578	1,559,000	328,522	1,230,478
Administration of Regional Colleges	350,000		350,000			
Arecibo Regional College	6,810,242	2,358,000	4,452,242	237,000		237,000
Humacao Regional College	6,288,360	1,460,264	4,828,096	2,190,360	292,254	1,898,106
Ponce and Bayamon Regional Colleges	7,440,000	1,780,860	5,659,140	2,977,850		2,977,850
Central administration	797,233	236,000	561,233	258,974		258,974
Total	110,979,171	20,798,199	90,180,972	29,156,122	4,204,163	24,951,959

EXHIBIT H

Institutional unit	Projects in construction as of June 1971			Projects pending as of June 1971		
	Total cost	Federal appropriations	UPR funds	Total cost	Federal appropriations	UPR funds
Rio Piedras Campus	\$5,009,263		\$5,009,263	\$17,491,110	\$1,598,725	\$15,892,385
Mayaguez Campus	16,741,013	\$2,128,693	14,612,320	3,654,000		3,654,000
Medical Sciences Campus	21,480,262	7,125,748	14,354,514	249,650		249,650
Cayey University College	1,176,100	198,000	978,100			
Administration of Regional Colleges				350,000		350,000
Arecibo Regional College	6,573,242	2,358,000	4,215,242			
Humacao Regional College	3,848,000	1,168,010	2,679,990	250,000		250,000
Ponce and Bayamon Regional Colleges				4,462,150	1,780,860	2,681,290
Central administration	538,259	236,000	302,259			
Total	55,366,139	13,214,451	42,151,688	26,456,910	3,379,585	23,077,325

INTER AMERICAN UNIVERSITY OF PUERTO RICO,
San Juan, Puerto Rico, March 3, 1978.

HON. WILLIAM D. FORD,
Chairman, Post Secondary Education Subcommittee, House Education and Labor Committee, Washington, D.C.

DEAR CHAIRMAN FORD: On behalf of Dr. Ramón A. Cruz, President of Inter American University, I am pleased to welcome you to Puerto Rico. On his behalf I am also to thank you for your kind invitation for him to testify at this hearing. Unfortunately, he will not be able to participate in this event because of prior engagements for this same date, related with the ceremonies of his official installation as President of the University.

The Association of Presidents of Colleges and Universities of Puerto Rico, agreed that Mr. José F. Méndez, President of the Association, would present testimony related to the private institutions and the Dr. Ismael Almodóvar, President of the University of Puerto Rico, would testify for the public institutions. We will, therefore, not testify, but not submit a brief written document about our University and its physical plant conditions and needs.

We ask you to please excuse Dr. Cruz and, in his name, extend an invitation for you to visit with us again and be our guests.

Sincerely yours,

JUAN GONZALEZ-RAMOS, *Vice President for Planning.*

Enclosure.

INTER AMERICAN UNIVERSITY OF PUERTO RICO STATEMENT ON PHYSICAL PLANT AND
CORRESPONDING CAPITAL NEEDS

(Submitted at hearings held in San Juan, Puerto Rico, on March 4, 1978, called by the Honorable William D. Ford, Chairman, Subcommittee on Post Secondary Education and Labor of the Committee on Education and Labor, House of Representatives, Congress of the United States)

NATURE AND CHARACTERISTICS OF THE UNIVERSITY

The Inter American University of Puerto Rico is a private, non-profit, educational institution incorporated and duly authorized and admitted to operate under the laws of the Commonwealth of Puerto Rico. In 1944, it became the first institution of higher learning accredited by the Middle States Association outside the continental United States.

Until 1966, Inter American University was a small, selective, conventional liberal arts college, mostly residential. Since then, it has evolved into a well-integrated, academic university system.

The Inter American University now consists of four main instructional units which include ten (10) dispersely located instructional centers as follows: (1) the San Juan Campus; (2) the San Germán Campus; (3) the Regional Colleges Administration with seven Regional Colleges and (4) the School of Law, all under a Central Administration. (See Appendix I). Through its regional colleges, located at Aguadilla, Barranquitas, Bayamón, Fajardo, Guayama, and Ponce, the University has strived to bring higher education as close as possible to the people, especially to those who because of geographic and travel barriers would not attend college.

ENROLLMENT AND PROGRAM OFFERINGS

Enrollment in Inter American University has grown from 378 students in academic year 1940-41 to 28,350 in 1977-78. (See Appendix II). Traditionally, the demand for educational services has been very high in Puerto Rico. At post secondary levels, effective demand was enhanced by the economic expansion of the last three decades and, in the past recent years, dramatically expanded in response to the various federal programs of economic assistance to students.

The University offers undergraduate, graduate, professional and career programs. The programs leading to a Bachelor's degree, a Master's degree, or an Associate degree, are as follows:

Program	Under-graduate	Graduate	Career
1. Accounting.....	X		X
2. Art.....	X		
3. Audiovisual communications technology.....			X
4. Biology.....	X		
5. Business administration.....	X	X	
6. Chemical technology.....			X
7. Chemistry.....	X		
8. Economics.....	X	X	
9. Education, early childhood, elementary and secondary.....	X	X	X
10. Education technology.....			X
11. English.....	X		
12. Health, physical education, and recreation.....	X		
13. History.....	X		
14. Home economics education.....	X		
15. Insurance and risk management.....			X
16. Language and literature.....	X		
17. Law enforcement.....			X
18. Linguistics (English as a second language).....	X	X	
19. Marketing and sales.....			X
20. Mathematics.....	X		
21. Medical technology.....	X		
22. Music.....	X		
23. Nursing.....			X
24. Political science.....	X		
25. Psychology.....	X		
26. Public administration.....	X		
27. Sociology.....	X		
28. Social work.....	X		
29. Spanish.....	X		
30. Retail business management.....			X
31. Real estate.....			X
32. Architectural and building construction.....			X
33. Personnel and industrial relations.....			X

Professional programs leading to the Doctor of Jurisprudence degree are offered at the School of Law in San Juan. This School also conducts a special program under the Institute of Criminal Law, leading to the degree of Master of Arts in Criminal Justice.

There are also several special programs, some of which are supported by Federal grants, conducted at various units of the University. Short courses, seminars and institutes of varying length complete the educational pattern of the University. These include: Adult Education, Head Start Supplementary Training Program, Teachers Corps, and Upward Bound Programs.

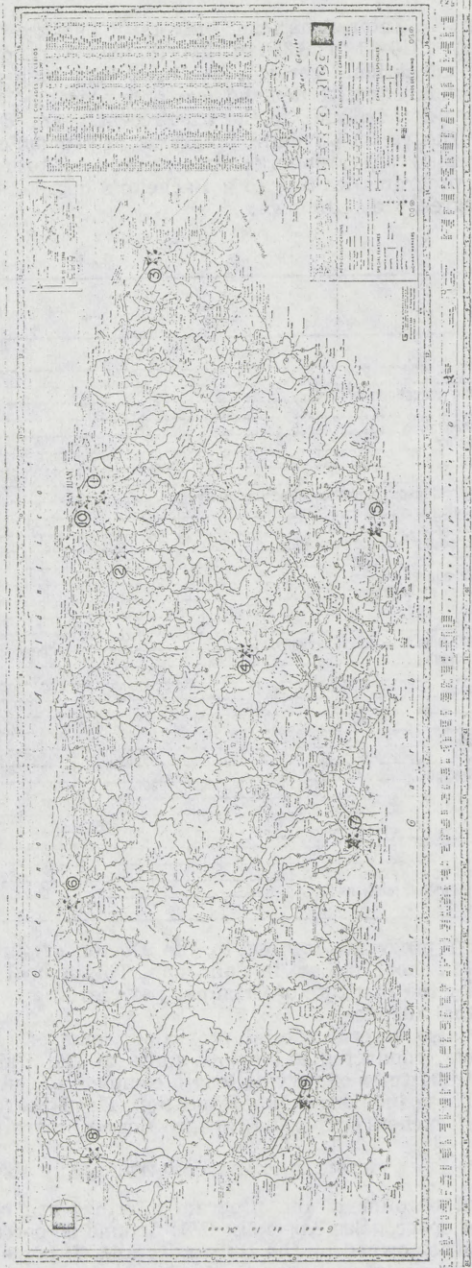
PHYSICAL PLANT CONDITIONS AND NEEDS

The present enrollment and program offerings are housed in 754,000 gross square feet of space. (See Appendix IV). Around 60 percent of this space is provided in facilities owned by the University and 40 percent in leased properties. Some of the University owned property needs reconstruction and/or remodelling, while all of the leased facilities need to be replaced by new plant.

Our present estimate of the capital needs for the improvement and/or substitution of these physical facilities amounts to \$25.0 million. This might appear extremely conservative to those experienced or familiar with the cost problems of academic plant construction, reconstruction and remodelling. However, our estimate is based on very modest, minimum architectural and academic standards adopted by the University for academic plant. The adoption of such standards reflects the University's awareness of the difficulties in securing capital for construction and of the problem posed by continually increasing costs of plant operation and maintenance.

APPENDIX-I

INTER AMERICAN UNIVERSITY
OF PUERTO RICO
INSTRUCTIONAL UNITS



APPENDIX II

INTER AMERICAN UNIVERSITY OF PUERTO RICO—TOTAL ENROLLMENT, FALL TERM ACADEMIC YEARS 1940-41 TO 1982-83

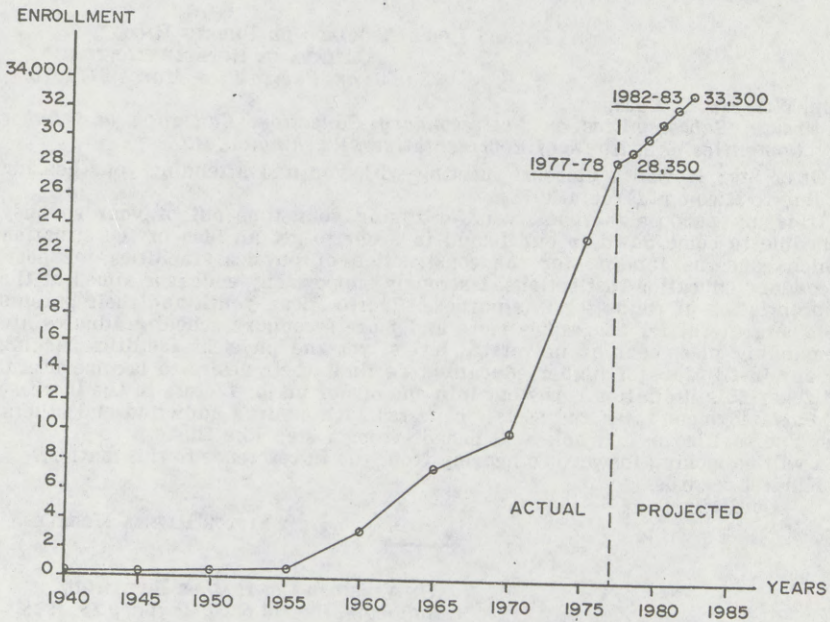
Year	Enrollment	Year	Enrollment
1940-41	378	1975-76	23,300
1945-46	340	1977-78	28,350
1950-51	537	¹ 1978-79	29,300
1955-56	738	¹ 1979-80	30,300
1960-61	3,248	¹ 1980-81	31,300
1965-66	7,771	¹ 1981-82	32,300
1970-71	10,000	¹ 1982-83	33,300

¹ Projected figures.

Source: Planning Office, March 1978.

APPENDIX III

INTER AMERICAN UNIVERSITY OF PUERTO RICO

Total Enrollment
Fall Term Academic Years 1940-41 to 1982-83SOURCE: OFFICE OF PLANNING I.A.U.
MARCH, 1978

APPENDIX IV
INTER AMERICAN UNIVERSITY OF PUERTO RICO—BUILDING SPACE, 1977-78

Instructional units	University owned (GSF)	Leased (GSF)	Total area (GSF)
San German campus.....	1 292, 929		1 292, 929
San Juan campus.....	36, 460	94, 851	131, 311
School of Law.....		48, 887	48, 887
Regional colleges.....	125, 300	138, 271	263, 571
(a) Aguadilla.....		37, 957	37, 957
(b) Arecibo.....		34, 432	34, 432
(c) Barranquitas.....	26, 999		26, 999
(d) Bayamón.....	60, 774		60, 774
(e) Fajardo.....	37, 527	2, 450	39, 977
(f) Guayama.....		22, 536	22, 536
(g) Ponce.....		40, 896	40, 896
Instructional, subtotal.....	434, 689	282, 009	716, 698
Administration:			
Central administration.....	13, 540	16, 023	29, 563
Regional colleges administration.....		7, 722	7, 722
Total.....	448, 229	305, 754	753, 983

¹ Students dormitories not included.

Note: Instructional unit space per student: 25 gross square feet per student.

Source: Planning Office, IAU, March 1978.

ESTADO LIBRE ASOCIADO DE PUERTO RICO,
CÁMARA DE REPRESENTANTES,
San Juan, Puerto Rico, March 27, 1978.

Hon. WILLIAM D. FORD,
*Chairman, Subcommittee on Postsecondary Education, Education and Labor
Committee, U.S. House of Representatives, Washington, D.C.*

DEAR SIR: It was a pleasure meeting with you and attending your hearing in Puerto Rico on March 4, 1978.

It is my purpose to thank you for taking your time out of your so busy schedule to come down to our Island in order to get an idea of the situation which concerns funding for the construction of physical facilities for post-secondary education institutions. I strongly support any endeavor aimed at the appropriation of funds for this purpose. Puerto Rican youth and their parents will be grateful for this, since more and more secondary school graduates are demanding placement at university levels, yet the physical facilities lacking in our institutions of higher education, do limit their desire to become useful citizens. This limitation turns out into one of our major factors in the increase of unemployment rates and social "cancers" such as drug addiction and others. So, Puerto Rico as a whole will benefit from a step like this.

I will be looking forward to hearing from you in reference to this matter.

Kindest regards.

Cordially,

VÍCTOR RIVERA MORALES.

UNIVERSIDAD CENTRAL DE BAYAMÓN,
Bayamón, Puerto Rico, January 13, 1978.

Hon. BALTASAR CORRADA DEL RÍO,
*Resident Commissioner for Puerto Rico,
House Office Building, Washington, D.C.*

DEAR HON. MR. CORRADA DEL RÍO: I am pleased to send you, attached, the report on priorities for Higher Education you requested from the Puerto Rican University Presidents.

This report covers Bayamón Central University's development plans for the next ten years and is based on the most realistic projections possible. It includes a one page summary, to facilitate reading, and a more detailed six page list.

I take this opportunity to thank you deeply for your interest and concern for Puerto Rican universities, especially the private ones. At the same time I want to acknowledge your kindness in delivering the graduation keynote address last August.

Cordially,

REV. VINCENT A.M. VAN ROOIJ, O.P.,
President.

Report of needs—Bayamon Central University—1978 to 1988

A. Need for personal services.....	\$7,300,000
B. Need for equipment and materials.....	3,000,000
C. Need for physical plant and buildings.....	16,500,000
D. Need for scholarships and other aid.....	85,000,000
E. Other needs (through 1993).....	10,810,000

Total projected need—B.C.U..... 122,610,000

F. Needs all Puerto Rican Universities share:

- (1) Per capita increase in Scholarships and other Economic Aid.
- (2) Trained Academic leaders.
- (3) Doctoral Programs in Puerto Rico.
- (4) Expanded Special Services Program.
- (5) Special Programs for "Neoricans".
- (6) Open University Programs.
- (7) An Office in Washington to Represent Private Puerto Rican Universities, for Federal funds and legislation.

Attachments: Report on Needs, Bayamón Central University, 1978 to 1983.

Photograph of the model for the Bayamón Central University Physical Plant and Buildings Master Plan, up to 1993.

REPORT ON NEEDS—BAYAMÓN CENTRAL UNIVERSITY

This report on needs at Bayamón Central University covers the next ten (10) years, up to 1988. It includes projections based on up-to-date development plans made by this institution's PLANNING COMMITTEE.

I. INSTITUTIONAL MISSION

The mission of this institution for the next 10 years is: to prepare university level professionals and para-professionals in the areas of ARTS & HUMANITIES, BUSINESS ADMINISTRATION, NATURAL SCIENCES, ELEMENTARY AND SECONDARY EDUCATION, ENGINEERING, NURSING, AND COMPREHENSIVE RELIGION, with a catholic Christian orientation, focusing especially on philosophic, theological, humanistic formation, to benefit all Puerto Rico.

In more concrete terms, by the 1987-88 academic year, we expect to have 10,000 students, distributed as follows:

<i>Bachelor's level</i>	<i>Students</i>
A. College of arts and humanities.....	2,500
B. College of business administration.....	2,500
C. College of elementary and secondary education.....	2,000
D. College of natural sciences.....	1,000
E. Engineering school.....	500
F. Nursing school.....	300
G. School of theology and philosophy.....	100
H. Graduate school:	

Master's level

Arts and humanities.....	250
Business administration.....	200
Elementary and secondary education.....	200
Natural sciences.....	100
Engineering.....	100
Nursing.....	50
Theology and philosophy.....	200

At present Bayamón Central University has 3,000 students and is growing at an average rate of 23 percent per year (average based on growth over the last five years).

II. TEN-YEAR INSTITUTIONAL NEEDS

In order to carry out the mission and the concrete programs of this Institution, based on overall calculations, the following assistance from the Federal Government, will be needed to supplement Institutional funds and those from other sources.

A. For personnel services

1. Under title III, HEA-65, distributed as follows:	
Curriculum improvement (27 percent)-----	\$1, 080, 000
Learning resource center improvement (27 percent)-----	1, 080, 000
Student services improvement (18 percent)-----	720, 000
Faculty and other personnel improvement (18 percent)-----	720, 000
Administrative improvement (18 percent)-----	400, 000
2. Under the special services program-----	1, 000, 000
3. Cooperative education program-----	300, 000
4. Continuing education program-----	500, 000
5. National Science Foundation-----	500, 000
6. Other programs-----	1, 000, 000
Total for personnel services-----	7, 300, 000

B. For equipment and supplies

7. Books and library materials-----	900, 000
8. Audiovisual equipment and materials-----	250, 000
9. Natural sciences laboratories-----	500, 000
10. Language and learning laboratories-----	250, 000
11. Television equipment and materials-----	300, 000
12. Radio and news equipment and materials-----	100, 000
13. Nursing laboratories-----	150, 000
14. Engineering laboratories-----	200, 000
15. Physical education equipment and materials-----	100, 000
16. Other equipment and materials-----	250, 000
Total for equipment and materials-----	3, 000, 000

C. For physical plant and buildings

17. Classrooms (fiscal year 1979)-----	400, 000
18. To purchase land (24 acres)-----	600, 000
19. Athletic facilities (fiscal year 1980)-----	850, 000
20. Landscaping-----	150, 000
21. Student center (fiscal year 1981)-----	3, 000, 000
22. Business Administration building (fiscal year 1982)-----	2, 000, 000
—(No new construction starts) (fiscal year 1983)-----	0
23. Natural Sciences Building (fiscal year 1984)-----	3, 000, 000
24. Education building (fiscal year 1985)-----	2, 000, 000
25. Arts and Humanities Building (fiscal year 1986)-----	2, 000, 000
26. Nursing building (fiscal year 1987)-----	1, 000, 000
27. Engineering building (fiscal year 1988)-----	1, 000, 000
28. Graduate school center-----	500, 000
Total for physical plant over the next 10 years-----	16, 500, 000

Summarizing the needs of Bayamón Central University over the next ten (10) years which can only be covered with assistance from the Federal Government, we reach the following conclusion:

A. For personnel services-----	\$7, 300, 000
B. For equipment and materials-----	3, 000, 000
C. For physical plant and buildings-----	16, 500, 000
Total needs (Federal aid) of the institution-----	26, 800, 000

III. NEEDS OF THE STUDENTS

Concerning scholarships and other student aid, based on the current situation at this institution, up to 1988, \$85,000,000 will be needed, including the Basic Opportunity Grant:

29. Scholarships and student aid-----	\$85, 000, 000
---------------------------------------	----------------

IV. ADDITIONAL NEEDS AT B.C.U.

This Institution has some special needs in addition to those mentioned above:

A. *Additional physical plant*

Fiscal year's 1979-88:

30. Model elementary school (fiscal year 1979)-----	\$110,000
31. Model high school (fiscal year 1980)-----	500,000
32. School of Theology and Philosophy (fiscal year 1980)-----	250,000
33. Additional landscaping-----	150,000
34. Infrastructure-----	500,000
35. Remodeling of Prefabricated Buildings-----	300,000

Fiscal year's 1989-93:

36. Building: faculty center (fiscal year 1989)-----	300,000
37. Theatre, conference hall (fiscal year 1989)-----	1,200,000
38. Administration building (fiscal year 1990)-----	2,500,000
39. Expansion, learning resource center (fiscal year 1991)-----	2,000,000
40. Science research center (fiscal year 1992)-----	1,500,000
41. Radio and television studio (fiscal year 1993)-----	1,500,000

Total additional physical plant----- 10,810,000

V. NEEDS SHARED AT PUERTO RICAN UNIVERSITIES

A number of problems affecting all universities in Puerto Rico are listed below:

(42) Scholarships and student financial aid will have to increase per capita. Costs are rising every day due to inflation, and given this and the high rate of unemployment, large families, and other factors students' parents are unable to increase their contribution proportionally.

(43) A program to train academic leaders is needed in Puerto Rico as there are scarcely any deans, for instance, with special preparation for their tasks.

(44) In the United States the required proportion of university faculty with doctorates is 65%; in Puerto Rico not even 20% of the faculty hold doctoral degrees. There are only three doctoral programs offered on the Island, and family and other responsibilities prohibit many from pursuing degrees in the States. Therefore it is urgent for a central agency to establish a Graduate Center for Doctoral Programs in Puerto Rico itself.

(45) The high school education our students are receiving is deteriorating every day, especially the preparation in basic skills in Spanish, English and Mathematics. Therefore, Special Services Programs must be expanded.

(46) Closely related to the preceding problem is the problem of the neoricans who often are not completely literate either in Spanish or English and who form a class apart in our institutions. At BCU there are now between 200 and 300 neoricans, and statistics show that this number is increasing at all Island institutions.

(47) It is becoming increasingly important to pay attention to new systems such as the Open University or Open College and the University at a Distance and others. The Turabo College has announced it is initiating a program of this type.

(48) In order for the private universities to compete with the Island's Public Institutions, "Chicano" and "Black" Colleges for external funding, it is necessary that an OFFICE REPRESENTING PUERTO RICAN PRIVATE UNIVERSITIES in Washington, D.C. be set up. Officials of the Federal Office of Education in Washington have pointed out this need on numerous occasions.

VI. FINAL OBSERVATIONS

The needs and projections above are an overview, based on plans made by our Institution's Planning Committee, with a membership representing all units of this University.

Attached is a photograph of the model for our MASTER PLAN to develop Physical Plant, prepared by our architects Héctor Bonilla Norat & Phillip Oliver Smith. To date only one of these buildings has been constructed, that is the LEARNING RESOURCE CENTER that will be inaugurated March 10,

1978. One third of the cost of this building was covered with federal funds under Title VII of the Higher Education Act of 1965. All other campus buildings are Durotex, Modulex, Panelfab and Wooden temporary structures.

This has been a broad description of the needs and plans at Bayamón Central University. If you wish, we will gladly submit a more detailed report.

BAYAMON CENTRAL UNIVERSITY, BAYAMON, PUERTO RICO

CONGRESSIONAL SITE VISIT—MONDAY, MARCH 6, 1978

Enclosure 1: Notes on Informational Enclosures.

Enclosure 2: Report on Needs, Bayamon Central University.

Each university in Puerto Rico has prepared a report of this nature at the request of our Resident Commissioner, the Hon. Baltasar Corrada del Rio.

Enclosure 3: Report of the Budget and Actual Construction and Equipment Costs of the New Library and Learning Resource Center.

Late in 1972, some additional funds under the Higher Education Act of 1965, Title VII "Construction of Educational Facilities" were released, under the Education Amendments of 1972, sec. 305. B.C.U. submitted a proposal to build a Learning Resource Center at a cost of \$2,083,000. On March 31, 1975 \$471,657 were awarded by the Department of Health, Education, and Welfare for this purpose. Bayamon Central University, as can be seen from enclosure 3, sought \$700,000 in financing, and through stringent economy measures and considerable sacrifice has committed \$428,343 in institutional funds to the project.

The DHEW grant was an important stimulus for carrying out the Learning Resource Center construction project. However, the loans and institutional penny pinching cannot be repeated for each of the additional buildings needed, as outlined in enclosure 1.

Enclosure 4: General Statistics on Bayamon and Surrounding Towns.

Most BCU students come from Bayamon and surrounding towns. This table indicates the economic poverty of this area. Ninety-seven percent of our student body receives B.E.O.G. or other student financial aid which enables them to go to school. Without such economic assistance, they would most likely join the ranks of unemployed youth in Puerto Rico (see table below):

UNEMPLOYMENT AMONG YOUTHS AND YOUNG ADULTS: PUERTO RICO, DECEMBER 1977

	Rate of employment		Total unemployed ¹
	Men	Women	
Age group:			
16-19.....	48.1	37.0	23,000
20-24.....	33.3	25.8	41,000
25-34.....	19.1	13.2	47,000
16-34 (average).....	33.5	25.3	111,000

¹ Actively seeking jobs. Not in school.

Source: Puerto Rico Department of Labor, Bureau of Statistics.

Enclosure 5: Comparison of General Statistics for Puerto Rico and the United States.

The differences between family and per capita income in Puerto Rico and the United States are an indication that special inputs may be required in seeking solutions to national problems shared (but felt even more acutely) by the Island.

Enclosure 6: Bayamón Central University; Five Year Growth Averages.

Puerto Rican young people have shown their interest in and support of B.C.U. programs, increasingly over the past five years. In order to continue offering quality academic programs and to meet this increasing demand, B.C.U. urgently needs corresponding expansion and improvements in its physical plant.

Enclosure 7: Photographs of Bayamón Central University Facilities and Grounds.

See identifying notes on back of each.

Enclosure 8: The Bayamón Central University Bulletin for 1976-79.

MARCHANY, PEREZ-NAZARIO & Co.,
San Juan, Puerto Rico, February 7, 1978.

Government Development Bank for Puerto Rico, San Juan, Puerto Rico:

We have made an examination of the accounts relating to the construction of a New Library and Learning Resources Center for Universidad Central de Bayamón, Inc., for the construction period ended December 31, 1977. Our examination was made for the purpose of determining the actual construction and equipment costs of, and sources of financing for the project. Our examination was made in accordance with generally accepted auditing standards, and accordingly included such tests of the accounting records and such other auditing procedures as we considered necessary in the circumstances.

In our opinion, the accompanying Report of Budget and Actual Construction Costs of the New Library and Learning Resources Center of Universidad Central de Bayamón, Inc. as of December 31, 1977 presents fairly the budget and actual construction and equipment costs incurred as of that date and the sources of financing for that construction project.

UNIVERSIDAD CENTRAL DE BAYAMÓN, INC.—REPORT OF THE BUDGET AND ACTUAL CONSTRUCTION AND EQUIPMENT COSTS OF THE NEW LIBRARY AND LEARNING RESOURCES CENTER

DECEMBER 31, 1977.

Construction Costs:

Estimated construction and equipment costs—budget (note A)---	\$1, 600, 000
Construction and equipment costs incurred—actual (note B)---	1, 514, 279

Unexpended budgetary balance (note B)-----	85, 721
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Sources of Funds (Note A) :

Federal title VII grant-----	471, 657
Interim financing loan from Banco Popular de Puerto Rico-----	700, 000
Institutional funds-----	428, 343

Total -----	1, 600, 000
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Note A: A new library and learning resources center was constructed and equipped at an approximate total cost of \$1,600,000. To finance the project, the University has a grant agreement dated March 31, 1975 with the United States Department of Health, Education, and Welfare for \$471,657, a partial financing commitment dated March 12, 1975, with Banco Popular de Puerto Rico for \$100,000, and another partial financing commitment dated December 27, 1974 with Government Development Bank for Puerto Rico for \$600,000. The Banco Popular loan is 10 percent interest bearing and payable in five years. The Government Development Bank loan is 10 percent interest bearing and payable in twenty years. The loans are guaranteed on a pro-rata basis by a first mortgage on the land lot acquired and the project to be constructed and a second mortgage on all other real estate properties. The balance of estimated total costs approximating \$428,000, is being financed with institutional funds.

Interim financing has been obtained from Banco Popular de Puerto Rico for \$700,000 at 2½ percent over the New York City First National City Bank prime interest rate, but never lower than 9½ percent. Advances from the bank under the interim financing agreement will not exceed 90 percent of the construction costs actually incurred, and are guaranteed by two 10 percent bearer mortgage notes totaling \$889,000, establishing a first lien on the balance of previously unencumbered real property in the amount of \$292,626 and a second lien on the balance of real property previously encumbered. The bank must be paid 1½ percent of all advances when made.

Note B: The project was substantially completed as of December 31, 1977. In addition to actual costs of \$1,514,279 represented above, there are change orders totaling approximately \$20,000 that will increase the cost of the project.

BAYAMON CENTRAL UNIVERSITY, BAYAMON, P. R.—GENERAL STATISTICS ON BAYAMON AND SURROUNDING TOWNS

Information available for 1975:

Puerto Rico population.....	3,120,900
Population per square mile (3,423 mi ²).....	912
Internally adjusted income per capita.....	\$2,130

Town	Preliminary statistics 1974-75		Statistics from 1970 census		
	Population	Per capita income	Number of families	Poverty Level Families	
				Number	Percent
Bayamon.....	204,106	\$1,589	34,378	13,691	0.39
Catano.....	27,663	2,045	5,254	3,652	.69
Comerio.....	18,510	577	3,556	2,953	.83
Corozal.....	26,976	825	4,641	3,418	.74
Dorado.....	19,644	2,685	3,500	2,306	.66
Toa Alta.....	23,417	748	3,827	2,795	.73
Toa Baja.....	63,087	930	9,910	5,091	.51
Vega Alta.....	24,327	928	4,620	3,124	.68
Vega Baja.....	41,212	1,160	7,416	5,020	.68
San Juan.....	514,532	5,313	103,068	44,521	.43
Island.....	3,120,900	2,130	564,751	336,622	.60

Source: Puerto Rico Planning Board, Human Resources Division, January 1978. Family income \$4,000 or less annually

BAYAMON CENTRAL UNIVERSITY, BAYAMON, P.R.—COMPARISON OF GENERAL STATISTICS, PUERTO RICO AND THE UNITED STATES, 1975

Parameter	Puerto Rico ¹	United States ²
Per capita income.....	\$2,130	\$5,834
Median family income.....	4,356	13,772
Families with income below \$4,000 per year.....	59.6	10.9
Students at BCU, from families with incomes below \$4,000.....	59.11	

¹ Puerto Rico Planning Board, Bureau of Social and Economic Development.² Statistical Abstract of the United States, 1976, U.S. Department of Commerce, Bureau of the Census.³ BCU Registrar, fall 1976.

BAYAMON CENTRAL UNIVERSITY, 5-YEAR GROWTH AVERAGES, 1972-73 TO 1976-77

	1972-73	1973-74	1974-75	1975-76	1976-77	Average over 5 years
Total undergraduates.....	882	1,024	1,215	1,534	2,052	-----
Increase over previous year.....		142	191	319	518	-----
Rate of increase.....		16	18.7	26.3	33.8	237.
Total seniors.....	95	145	149	306	340	-----
Increase over previous year.....		50	4	157	34	-----
Rate of increase.....		52.6	2.8	105.4	11.1	..
Total graduates.....	37	68	90	138	157	-----
Increase over previous year.....		31	22	48	19	-----
Rate of increase.....		84	32	53	14	4584
Percent seniors graduating.....	39	47	60	45	46	4734
Seniors as percent of total undergraduates.....	10.8	14.2	12.3	19.9	16.6	-----

UNIVERSITY OF THE SACRED HEART, SANTURCE, PUERTO RICO

List of Physical Facilities projects under consideration

1. Reconstruction of demolished East Wing of the Administration Building—will add 8 classrooms to our present facilities..... \$340,800
2. Remodeling of existing building as a university theater—includes all required equipment..... 253,800
3. Remodeling of physical facilities for an auto tutorial laboratory—includes laboratory equipment..... 265,000
4. Construction of an electrical substation of 38,000 watts to provide the needed capacity for our present and future electricity demand. In addition, it will make possible for the institution to change to lower electricity rates, thus reducing our electricity bills 175,000

5. Remodeling of facilities to provide additional space to the secretarial program of the business administration department.....	25,000
6. Remodelings to provide additional space to three academic departments (Humanities, Nursing and extension division) considering handicap barriers.....	30,000
7. Construction of an in-site classroom and exhibition area for the horticulture program.....	10,000
8. Improvements to physical education facilities (basketball courts, rate-track)	25,000
9. Major repair to library building—replacement of lateral glass framework to correct leakage of water.....	6,500
10. Remodeling to provide adequate facilities to the library of the elementary and secondary schools.....	35,000
11. Installation of an elevator at the junior college building for physically handicapped students.....	40,000
12. Construction of five hydrants to establish a fire prevention program (there are no fire hydrants in campus at present).....	55,000
13. Exterior and interior painting of the college and junior college buildings	36,000
14. Additional entrance to the junior college building to reduce jams at the present entrance.....	15,000
15. Construction of new sanitary facilities for handicapped students...	10,000
16. Raising height of all railings at the college and junior college buildings to comply with safety requirements.....	15,000
17. Drainage facilities around the campus to collect pluvial waters now flooding certain residential areas.....	25,000
18. Correction of roof leakages in various buildings.....	15,000
19. Improvement of sanitary facilities at the college and junior college buildings	20,000
20. Improvement of campus illumination.....	25,000
21. Landscaping work at various campus areas.....	4,500
22. Relocation of physical plant warehouse and repairs shop.....	8,500
23. Relocation of administration offices.....	24,000
24. Students union center.....	1,500,000
25. Other minor projects.....	8,500
26. Multiple physical education facilities building (gymnasium).....	1,300,000
27. Sanitary facilities for maintenance employee.....	7,000
28. New postal office facilities to include postal services for students...	6,000
29. Pavement of roads and additional parking facilities (elimination of potholes).....	5,000
30. Construction of additional story to San José building in order to accommodate admission, economic assistance and orientation offices	4,354,000
Total	75,000

OFFICE OF THE COMMONWEALTH OF PUERTO RICO,
Washington, D.C., March 29, 1978.

Hon. WILLIAM D. FORD,
U.S. Congressman,
Rayburn House Office Building,
Washington, D.C.

DEAR CONGRESSMAN FORD: Enclosed please find a fact sheet on the "Planning and Development for Technical Education in Puerto Rico" as prepared by the Department of Education of Puerto Rico.

I hope you find this information satisfactory. Please let me know if you require additional information.

I would appreciate it if you would let me know if can be of further assistance to you on this or any other matter regarding Puerto Rico.

Respectfully yours,

PEGGY HAGGERTY,
Officer, Intergovernmental Relations.

OFFICE OF THE COMMONWEALTH OF PUERTO RICO—PLANNING AND DEVELOPMENT
FOR TECHNICAL EDUCATION IN PUERTO RICO

HISTORY

The public responsibility for technical education in Puerto Rico vests with the State Department of Education and the two-year Regional College System of the State-Controlled University of Puerto Rico: A State Board of Vocational and Technical Education, located in the Department of Education, is appointed to expedite this responsibility.

Public Law 94-482 (Vocational Act of 1976) authorized the use of Federal Funds to develop and improve associate degree programs in various areas related to applied engineering. Puerto Rico has assigned the State Board of Vocational and Technical Education to the task of administering these funds. The policies defined by the State Board have resulted in the majority of the funds going to the Department of Education with a \$100,000 contracted set-aside for the Technical Education Program located in the University of Puerto Rico's Mayaguez Campus.

STATUS REPORT

The Department of Education presently offers associate degree programs in applied engineering in four separate geographic locations on the Island; San Juan, Ponce, Manatí, and Guayama. These centers cater to a total of 1,850 students (1977) of which 1,550 are day-students and 300 attend classes a night.

The San Juan Center (El Instituto Tecnológico de San Juan) has recently constructed new facilities and can now accommodate 1,200 students. However, the lack of adequate operating funds presently limits the actual enrollment.

El Instituto Tecnológico de Ponce (The Ponce Center) presently uses the facilities of the Government's Industrial Development Company (Compañía de Fomento Industrial). These facilities were not designed for educational purposes, and are completely inadequate for such use.

In the cases of the Guayama and Manatí Centers the facilities of vocational schools are used. Again these were not designed for teaching applied engineering and hence lack of a considerable number of the necessary amenities. San Juan is therefore the only Center operating with Public Law 94-482 funds that has adequate physical plant for its purposes.

DEVELOPMENT PLAN

The Department of Education's development plan for associate degree programs in applied engineering include the following construction projects in order of priority:

- (1) A complete, new facility in Ponce.
- (2) New facilities for the vocational school in Guayama.
- (3) New facilities for the vocational school in Manatí.
- (4) A complete, new center in Morovis to serve the mountain area.
- (5) A complete, new center to serve the Humacao region.

The development plans for these five projects are in various states of completion. In Ponce, for example, the land is available, Planning Board permission has been obtained, a needs assessment has been completed, and a cost estimate submitted (\$10,864,490 for construction, equipment, and land). However, the proposed Center in Morovis is presently only beginning a needs assessment study. The other centers fall between these two extremes. However, all five centers have been designated as priority projects by the State Board of Vocational and Technical Education and they also form part of the Department of Education's four year Development Plan.

