

**EXPANDING OPPORTUNITIES
FOR GRADUATE STUDY AT
HISPANIC SERVING INSTITU-
TIONS**

FIELD HEARING

BEFORE THE
SUBCOMMITTEE ON SELECT EDUCATION
OF THE
COMMITTEE ON EDUCATION
AND THE WORKFORCE
U.S. HOUSE OF REPRESENTATIVES
ONE HUNDRED NINTH CONGRESS
FIRST SESSION

May 2, 2005 in Edinburg, Texas

Serial No. 109-13

Printed for the use of the Committee on Education and the Workforce



Available via the World Wide Web: <http://www.access.gpo.gov/congress/house>
or
Committee address: <http://edworkforce.house.gov>

U.S. GOVERNMENT PRINTING OFFICE

20-913 PDF

WASHINGTON : 2005

For sale by the Superintendent of Documents, U.S. Government Printing Office
Internet: bookstore.gpo.gov Phone: toll free (866) 512-1800; DC area (202) 512-1800
Fax: (202) 512-2250 Mail: Stop SSOP, Washington, DC 20402-0001

COMMITTEE ON EDUCATION AND THE WORKFORCE

JOHN A. BOEHNER, Ohio, *Chairman*

Thomas E. Petri, Wisconsin, <i>Vice Chairman</i>	George Miller, California
Howard P. "Buck" McKeon, California	Dale E. Kildee, Michigan
Michael N. Castle, Delaware	Major R. Owens, New York
Sam Johnson, Texas	Donald M. Payne, New Jersey
Mark E. Souder, Indiana	Robert E. Andrews, New Jersey
Charlie Norwood, Georgia	Robert C. Scott, Virginia
Vernon J. Ehlers, Michigan	Lynn C. Woolsey, California
Judy Biggert, Illinois	Rubén Hinojosa, Texas
Todd Russell Platts, Pennsylvania	Carolyn McCarthy, New York
Patrick J. Tiberi, Ohio	John F. Tierney, Massachusetts
Ric Keller, Florida	Ron Kind, Wisconsin
Tom Osborne, Nebraska	Dennis J. Kucinich, Ohio
Joe Wilson, South Carolina	David Wu, Oregon
Jon C. Porter, Nevada	Rush D. Holt, New Jersey
John Kline, Minnesota	Susan A. Davis, California
Marilyn N. Musgrave, Colorado	Betty McCollum, Minnesota
Bob Inglis, South Carolina	Danny K. Davis, Illinois
Cathy McMorris, Washington	Raúl M. Grijalva, Arizona
Kenny Marchant, Texas	Chris Van Hollen, Maryland
Tom Price, Georgia	Tim Ryan, Ohio
Luis G. Fortuño, Puerto Rico	Timothy H. Bishop, New York
Bobby Jindal, Louisiana	John Barrow, Georgia
Charles W. Boustany, Jr., Louisiana	
Virginia Foxx, North Carolina	
Thelma D. Drake, Virginia	
John R. "Randy" Kuhl, Jr., New York	

Paula Nowakowski, *Staff Director*
John Lawrence, *Minority Staff Director*

SUBCOMMITTEE ON SELECT EDUCATION

PATRICK J. TIBERI, Ohio, *Chairman*

Cathy McMorris, Washington <i>Vice Chairman</i>	Rubén Hinojosa, Texas
Mark E. Souder, Indiana	Danny K. Davis, Illinois
Jon C. Porter, Nevada	Chris Van Hollen, Maryland
Bob Inglis, South Carolina	Tim Ryan, Ohio
Luis P. Fortuño, Puerto Rico	George Miller, California, <i>ex officio</i>
John A. Boehner, Ohio, <i>ex officio</i>	

C O N T E N T S

	Page
Hearing held on May 2, 2005	1
Statement of Members:	
Hinojosa, Hon. Ruben, Ranking Member, Subcommittee on Select Education, Committee on Education and the Workforce	3
Prepared statement of	4
Chart submitted for the record	36
Tiberi, Hon. Patrick J., Chairman, Subcommittee on Select Education, Committee on Education and the Workforce	1
Prepared statement of	2
Statement of Witnesses:	
Arciniega, Dr. Tomas, President Emeritus, California State University Bakersfield, Valley Center, CA	22
Prepared statement of	25
Cardenas, Dr. Blandina, President, The University of Texas-Pan American, Edinburg, TX	7
Prepared statement of	9
Chapa, Olga, Graduate Student, The University of Texas-Pan American, Edinburg, TX	10
Prepared statement of	12
Paredes, Dr. Raymund A., Commissioner, Texas Higher Education Coordinating Board, Austin, TX	14
Prepared statement of	16
Rivera, Dr. Jose Jaime, President, University of the Sacred Heart, San Juan, Puerto Rico	17
Prepared statement of	19
Additional materials supplied:	
McMillin, Sue, President & CEO, Texas Guaranteed Student Loan Corporation, Round Rock, TX, statement submitted for the record	32

EXPANDING OPPORTUNITIES FOR GRADUATE STUDY AT HISPANIC SERVING INSTITUTIONS

Monday, May 2, 2005

U.S. House of Representatives

Subcommittee on Select Education

Committee on Education and the Workforce

Edinburg, TX

The Subcommittee met, pursuant to call, at 2:30 p.m., in the International Room, International Trade and Technology Building, The University of Texas-Pan American, 1201 West University Drive, Edinburg, Texas, Hon. Patrick Tiberi [Chairman of the Subcommittee] Presiding.

Present: Representatives Tiberi and Hinojosa.

Staff Present: Alison Griffin, Professional Staff Member; Ricardo Martinez, Minority Legislative Assistant.

Chairman TIBERI. A quorum being present, the Subcommittee on Select Education of the Committee on Education and the Workforce will come to order.

STATEMENT OF HON. PATRICK J. TIBERI, CHAIRMAN, SUB- COMMITTEE ON SELECT EDUCATION, COMMITTEE ON EDU- CATION AND THE WORKFORCE

We are meeting today to hear testimony on expanding opportunities for graduate study at Hispanic Serving Institutions. My name is Pat Tiberi, Chairman of the Select Committee, Subcommittee on Education and the Workforce.

I'd like to thank the University of Texas-Pan American for hosting this hearing today. I also want to thank Brett Mann—Where's Brett? Brett? He's working—the executive director of the Office Center for Operations and Community Service, Division of External Affairs, with the University of Texas-Pan American, for picking me up at the airport. Thank you for sending an Ohioan, a former Ohioan, to pick me up.

It is my pleasure to be here today. I appreciate the hospitality shown thus far. I am eager to hear from our witnesses.

Before I begin, I ask for unanimous consent for the hearing record to remain open for 14 days to allow Members' statements and other extraneous material referenced during the hearing today to be submitted in the official hearing record.

Without objection, so ordered.

Welcome to our presenters here today. I'd like to especially thank my friend, my colleague, Congressman Hinojosa, for his work in organizing this field hearing, his staff as well. They've been terrific. I had the great pleasure of hosting Mr. Hinojosa at my alma mater, The Ohio State University, a few weeks back, and I'm honored to be here today in the 15th Congressional District of Texas that is so well represented, as all of you already know, by my friend and colleague. He is a wonderful member to work with, a dedicated Member of Congress, and I'm so pleased to be in his district.

I'd also like to recognize again the University of Texas-Pan American for hosting our field hearing today. It is truly a pleasure to be here at the university. Thank you very much.

I have prepared a formal opening statement that I will ask be submitted to the record, but let me begin by saying that I believe that expanding educational opportunities for all students and students at Hispanic Serving Institutions is an extremely important topic and a timely one, as well.

HSIs have improved access to higher education for Hispanics and disadvantaged students and are committed to providing academic excellence across our country.

As I said earlier in a press conference, education is the great equalizer in our country. It can bridge social, economic, racial, geographic divides, like no other force. It can be the difference between an open door and a dead end. Nowhere is this more true than in higher education.

In preparation for higher education reauthorization, we are here today to examine the programs and use of funds that are authorized under Title V, and to explore how we might increase opportunities at the graduate level. Minority serving institutions offer a unique contribution, not just to the students they serve, but to the communities and to the Nation as a whole.

The Federal investment in these institutions of higher learning is significant and producing significant benefits.

I'm pleased to have the opportunity today to learn more from our witnesses about how graduate studies at HSIs could further expand access to higher education for minority and low income students. This is an issue I look forward to examining as the Committee moves forward with reauthorization of the Higher Education Act.

I'd like to thank our the distinguished panel of witnesses for their participation today. I know your time is very important to you. I look forward to your testimony.

At this time I would like to yield to my colleague, the ranking member of the Subcommittee, Mr. Hinojosa, my distinguished colleague, for his comments and any other opening statements he might have.

[The prepared statement of Chairman Tiberi follows:]

Statement of Hon. Patrick J. Tiberi, Chairman, Subcommittee on Select Education, Committee on Education and the Workforce

Good afternoon. Welcome to all present for today's hearing, entitled "Expanding Opportunities for Graduate Study at Hispanic Serving Institutions." First, I would like to especially thank my friend and colleague, Congressman Hinojosa, for his work in organizing this field hearing, and his staff as well. I had the great pleasure of hosting Mr. Hinojosa at my alma mater, The Ohio State University, some time

ago, and I am honored to be here today in the 15th congressional district of Texas that is so well represented by a distinguished and dedicated Member of Congress.

I would also like to recognize the University of Texas–Pan American for hosting our field hearing today. It is truly a pleasure to be here.

Let me begin by saying that I believe expanding educational opportunities for students at Hispanic Serving Institutions is an extremely important and timely topic. There is no doubt that HSIs improve access to higher education for Hispanic and disadvantaged students, and are committed to providing academic excellence. HSIs enroll and graduate thousands of students each year, and enrollments at these institutions are climbing.

A college education has long been viewed as a ticket to prosperity and the gateway to the American dream. Today, higher education is playing a more vital role than ever in shaping our nation's competitiveness. Before our very eyes, the manufacturing economy of the 20th Century is being transformed into an economy in which a nation's fortunes may be more directly linked than ever to the knowledge and know-how of its workers. Parents, students and taxpayers are investing billions in higher education each year, and institutions must be accountable for ensuring that they're getting a quality return on that investment.

In preparation for reauthorization, we are here today to examine the programs and use of funds that are authorized under Title V, and to explore how we might increase opportunities at the graduate level. Minority Serving Institutions offer unique contributions not just to the students they serve, but to their communities and to this nation as a whole. The federal investment in these institutions of higher learning is significant, and it is producing significant benefits.

The reauthorization process offers Congress an opportunity to enact needed modifications to the programs under the Act and the rules that govern them, with the goal of building upon the programs that are working well. Continued federal support for HSIs reflects the great need for institutions of higher education to serve minority and low-income populations. Today's knowledge-based economy underscores the importance of higher education. Education is the great equalizer in this nation. It can bridge social, economic, racial, and geographic divides like no other force. It can mean the difference between an open door and a dead end. Nowhere is this more true than in higher education.

I'm pleased to have the opportunity today to learn more about how graduate studies at HSIs could further expand access to higher education for minority and low-income students. This is an issue I look forward to examining as the committee moves forward with reauthorization of the Higher Education Act.

I would like to thank our distinguished panel of witnesses for their participation today. I look forward to your testimony.

At this time I would like to yield to my colleague, Ranking Member of the subcommittee, Mr. Hinojosa, for any comments he may have.

**STATEMENT OF HON. RUBEN HINOJOSA, RANKING MEMBER,
SUBCOMMITTEE ON SELECT EDUCATION, COMMITTEE ON
EDUCATION AND THE WORKFORCE**

Mr. HINOJOSA. Thank you, Mr. Chairman. I am very pleased to host the Select Education Subcommittee in the 15th Congressional District of Texas. Thank you, Chairman Tiberi, for agreeing to hold this hearing on a topic of vital importance to my community and to our nation, expanding graduate opportunities at Hispanic Serving Institutions, which I will refer to as HSIs.

I would also like to thank the University of Texas–Pan American and its president, Dr. Blandina “Blandie” Cardenas, for hosting us. You represent the very best of our community and what it has to offer.

Major leaks in the pipeline have put Hispanic Americans at the bottom of the educational attainment ladder. We will not see overall sustained improvement if we just focus on discrete points at the front end of the pipeline. Our nation's HSIs are uniquely poised to address this great need. Between 1991 and 2000, the number of Hispanic students earning master's degrees at HSIs grew 136 percent. The number receiving doctor's degrees grew by 85 percent.

And the number earning first professional degrees grew by 47 percent.

Additionally, strengthening HSIs not only promotes access and degree attainment for Hispanics, but also builds the capacity and strengthens the economic development of the communities that are home to these institutions. It is time for a similar investment in graduate education at HSIs. As the 109th Congress considers the reauthorization of the Higher Education Act, the timing is perfect, as the Chairman said earlier this afternoon.

The timing is perfect to expand the Federal support for HSIs to post-baccalaureate programs. That is why I have introduced H.R. 761, the Next Generation Hispanic Serving Institutions Act, to establish a long overdue graduate program for these institutions. This legislation will establish a competitive grant program for HSIs that offer advanced degrees to increase graduate opportunities for Hispanics and to expand and enhance the post-baccalaureate offerings at HSIs.

In conclusion, Mr. Chairman, I want to say that grants will support graduate fellowships and support services for graduate students, facilities improvement, faculty development, technology and distance education, and collaborative arrangements with other institutions. This legislation has broad bipartisan support, with more than 113 cosponsors, both Democrats and Republicans, and yes, one independent.

A Federal focus on advanced degrees in the Hispanic community will help us attain the educational levels needed to meet our knowledge, economic—excuse me—to mete out knowledge, economy-based workforce needs. We must seize this opportunity. Our future depends on it.

I thank all the witnesses for joining us this afternoon, and I'm looking forward to your testimony.

With that, Mr. Chairman, I yield back the balance of my time.
[The prepared statement of Mr. Hinojosa follows:]

Statement of Hon. Ruben Hinojosa, Ranking Member, Subcommittee on Select Education, Committee on Education and the Workforce

I am very pleased to host the Select Education Subcommittee in the 15th Congressional district of Texas. Thank you, Mr. Chairman for holding this hearing on a topic of vital importance to my community and the nation: Expanding Graduate Opportunities at Hispanic-Serving Institutions.

I would also like to thank the University of Texas Pan American and its President Dr. Blandina "Bambi" Cardenas for hosting us. You represent the very best our community has to offer.

Major leaks in the pipeline have put Hispanic Americans at the bottom of the educational attainment ladder. Only 52 percent of Hispanic adults over the age of 25 have completed high school, compared to 80 percent nationally. Only 10 percent of Hispanic adults have attained a bachelor's degree, and less than four percent have achieved an advanced degree. In the general population over 24 percent of adults have bachelor's degrees and nearly 9 percent, advanced degrees. Not until the 1996-97 academic year did Hispanics break the 1,000 mark in doctorates awarded, of the 44,780 doctorate degrees awarded for the 1999-2000 academic year, only 1,291 went to Hispanics. We will not see overall, sustained improvement if we just focus on discrete points at the front end of the pipeline.

Our nation's Hispanic-Serving Institutions (HSIs) are uniquely poised to address this need. Between 1991 and 2000, the number of Hispanic students earning master's degrees at HSIs grew 136 percent, the number receiving doctor's degrees grew by 85 percent, and the number earning first-professional degrees grew by 47 percent.

HSIs, established in the 1992 amendments to the Higher Education Act, are those degree-granting, nonprofit institutions that serve a high proportion of needy students and have at least a 25 percent full-time equivalent enrollment of Hispanic students. Through a competitive grant program authorized under Title V of the Act, HSIs receive federal support to build capacity to better meet the needs of low-income and Hispanic students, primarily at the undergraduate level.

The federal investment in HSIs, which began with \$12 million in 1995 and has increased to nearly \$95 million for 2005, has clearly paid off. Between the years 1990- 1999, the growth in enrollment at these institutions was double that of all institutions nationally. During that same period the number of degrees awarded by HSIs grew by 36 percent, compared to 13 percent for all other institutions, with the number of Hispanic students receiving degrees increasing by 95 percent. Additionally, strengthening HSIs, not only promotes access and degree attainment for Hispanics, but also builds the capacity and strengthens the economic development of the communities that are home to these institutions.

It is time for a similar investment in graduate education at HSIs. As the 109th Congress considers the reauthorization of the Higher Education Act, the timing is perfect to expand the federal support for HSIs to post baccalaureate programs. That is why I have introduced H.R. 761, the Next Generation Hispanic-Serving Institutions Act to establish a long overdue graduate program for these institutions

This legislation will establish a competitive grant program for HSIs that offer advanced degrees to increase graduate opportunities for Hispanics and to expand and enhance the post-baccalaureate offerings at HSIs. Grants will support graduate fellowships and support services for graduate students, facilities improvement, faculty development, technology and distance education, and collaborative arrangements with other institutions. This legislation has broad, bipartisan support with 113 cosponsors—both Democrats and Republicans.

A federal focus on advanced degrees in the Hispanic community will help us attain the educational levels needed to meet our knowledge-economy based workforce needs. We must seize this opportunity. Our future depends on it.

I thank all of the witnesses for joining us this afternoon, and I am looking forward to your testimony.

Thank you, Mr. Chairman.

Chairman TIBERI. Thank you. There's—thank you, Mr. Hinojosa.

There's one particular witness that I'm going to recognize my colleague to introduce, but I must say that ever since we talked about having this hearing, he's been bragging about her, and I'd just like to thank her again for hosting us, before Mr. Hinojosa provides the formal introduction, but I've got to tell you, he's really built this up, so I'm really looking forward to it at this point.

With that, I yield to my friend from Texas for the first introduction.

Mr. HINOJOSA. When I was telling the Chairman a little bit about our hosting president, he says, "You're making her sound like she walks on water." I said, "She does."

It's my honor to introduce a woman whom I admire greatly, my friend, Dr. Blandina Cardenas.

Dr. Cardenas is the seventh president of the University of Texas-Pan American and the first woman to lead the institution in its 77-year history. Prior to coming to UTPA, Dr. Cardenas was the dean of the college of education and a professor of educational leadership at the University of Texas at San Antonio.

Dr. Cardenas has an impressive history of educational leadership and community service. She has served as the chairperson of the Board of Trustees of the Educational Testing Service, a founding member of the Board of the Fundacion Soledavidad Mexicana-Americana, as a member of the Board of the American Association of Higher Education, and is a leader of numerous state and local organizations.

A native Texan, Cardenas received her bachelor of journalism degree from the University of Texas at Austin, and her doctorate in education administration from the University of Massachusetts at Amherst.

We are thrilled to have Dr. Cardenas back in South Texas leading this great institution. I thank her for the warm Texas hospitality that she has—she and her staff have shown Chairman Tiberi, my staff, and me, and I am looking forward to her testimony.

Chairman TIBERI. Let me introduce the rest of the panel, and then we'll begin. Thank you, Mr. Hinojosa.

Our next witness today will be Ms. Olga Chapa.

And let me apologize in advance if I mispronounce anybody's name. I get mine mispronounced every day, as well, so—"Chapa." Thank you, thank you.

Ms. Chapa is a Ph.D. Candidate in business administration with a concentration in international business at the University of Texas-Pan American. Her current area of focus includes the intellectual property rights of American investors in China, cultural influence on consumer complaint behaviors among the U.S. Mexican border, and the effects of stress among emergency response personnel.

She was previously an intelligence analyst in the United States Army, and the director and owner of the Montessori Development Center.

Thank you for being here.

Ms. CHAPA. Thank you so much.

Chairman TIBERI. Next witness, Dr. Raymund—"Parades".

Dr. PAREDES. Parades.

Chairman TIBERI. "Parades." Thank you.

Dr. Parades is the Commissioner of Higher Education at the Texas Higher Education Coordinating Board. His past experiences include serving as Vice President for Programs in the Hispanic Scholarship Fund, Director of Creativity and Culture at the Rockefeller Foundation, Vice Chancellor for Academic Development at the University of California-Los Angeles.

Over the course of his career, Dr. Parades has been recognized numerous times for his expertise in multiethnic education, development of educational standards, and the impact of demographic changes on American culture and education.

Thank you for being with us today.

Dr. Jose Jaime Rivera; Dr. Rivera is the President of the University of Sacred Heart in San Juan, Puerto Rico. As a recognized leader in higher education, Dr. Rivera has served as a consultant in the United States and Puerto Rico and throughout Central and South America. In 2002 he was recognized as the Educator of the Year by the Third International Exchange of Education and Thought for his development of a distance education model for the Hispanic community and his initiative to provide expanded student exchange opportunities for Puerto Rican students.

Thank you for coming today.

And our final witness, Dr. Tomas Arciniega—pretty close.

Dr. ARCINIEGA. Close enough, thank you.

Chairman TIBERI. The doctor is President Emeritus of California State University-Bakersfield. He served as president of the institution for 21 years, from 1983 to 2004. He is a recognized leader in the fields of multicultural education and institutional development and change, and has been recognized for his achievements by numerous professional associations. He's also served on the boards of several institutions and foundations, and as a Presidential appointee to the National Coalition on Education Research.

Thank you for coming today.

Before the panel begins, I would like to ask each of our witnesses today to limit their statements to around 5 minutes. Your entire written testimony will be included in the official hearing report, which will be distributed to the members of the Committee, the full Subcommittee and staff.

With that, we will begin our testimony. After everyone's testimony is complete, then we will begin a round of questioning, and we'll have a couple of rounds of questioning, and, depending on what my colleague thinks, maybe even a third round of questioning.

But it is really, really great to be here again, and let's not waste any more time.

Dr. Cardenas.

**STATEMENT OF DR. BLANDINA CARDENAS, PRESIDENT, THE
UNIVERSITY OF TEXAS-PAN AMERICAN, EDINBURG, TX**

Dr. CARDENAS. Thank you, Mr. Chairman. Chairman Tiberi, Congressman Hinojosa, on behalf of the students, staff and faculty of the University of Texas-Pan American, I am pleased to extend a heartfelt South Texas welcome, bienvenidos, to our beautiful Valley and to this campus. Thank you for the opportunity to address this Committee on a matter which I consider to be of great national importance. I will submit my testimony for the record.

I speak to you not only from my perspective as president of this university, but I speak to you from a perspective of someone who spent the last 30 years focused on improving educational opportunities for Hispanic students and all students who do not have access to that educational opportunity.

I've always done it from two perspectives: One, because I think that the human capital, the human potential that is in every child, should be developed, but also because I firmly believe that our nation, and in particular our state, require the development of a critical mass of people who are trained, credentialed, and prepared to lead and to solve the very real problems that face our nation, as well as to build on the assets that are in all of our communities.

As I thought about this testimony, it occurred to me that it was important for you, Mr. Chairman, and Congressman Hinojosa, to understand the historical perspective; that is, what brings us to this point.

When Lyndon Johnson signed the Elementary and Secondary Education Act, he signed it in Cotulla, Texas, where he had taught in a one-room Mexican schoolhouse, segregated Mexican schoolhouse. When he signed the legislation in 1965, that one-room Mexican schoolhouse was still operating.

Hispanics in states like Texas and others did experience segregated education until the '60's, and we now have de facto segregated education in many parts, and particularly in our urban centers. We are characterized because of the demographics of this part of the state. Many of our students go to school exclusively with other Latino children.

That segregation diminished significantly, for other reasons that we'll talk about later, the high school completion of Hispanic students.

When it came to a university experience, Hispanics, at least in this part of the country, had very little access to higher education. You could count the numbers of students from any community who managed to go to college. It wasn't until the GI bill that those numbers began to expand after World War II, and then it wasn't until the major improvement in higher education legislation that we saw those numbers increase, with the Pell Grant and others.

But unlike other communities in our country, we did not have access to, if you would, national-origin based institutions of higher education. We didn't have access to mainstream institutions. We also didn't have access to segregated institutions in higher education. So our numbers, the numbers of college educated people that were produced, and in particular the numbers of people prepared to be faculty in institutions of higher education, was very, very low.

This began to change somewhat as resources were made available to Hispanic Serving Institutions as a result of the work of your Committee.

As these Hispanic Serving Institutions began to form their programs and advocate, through legal and other means, the urgency to create powerful graduate programs became very clear.

The problem that we face in Hispanic Serving Institutions by and large across this country is that our students are still coming from a predominantly low income base, so we have to keep tuition low. The University of Texas-Pan American and the University of Texas-Brownsville charge the lowest tuition of any institutions in the UT system by a substantial margin. We're trying to keep tuition low so that we can give more students access to a baccalaureate education, and that means that we have few resources available to invest both in fellowships and program development and other—and in research, for that matter, that would allow us to grow our graduate programs.

Moreover, it becomes difficult for us to recruit faculty. Young faculty coming out of our research run institutions want to go to schools where there's a doctoral program, where there's an abundance of research fellowships that they can do their research—with whom they can do their research. So we're caught in a bind.

The other impact of that bind is that because we don't have the graduate resources, we don't have the doctoral programs, it becomes harder for us to access the very substantial Federal funds that go to research universities to create the solutions, if you would, to problems in diabetes, in schooling, in whatever. So we're caught in a bind. Basically, we get less because we have access to less.

This legislation can make a marked difference in the lives of students and, more importantly, in the creative and problem-solving capacity of this nation.

Thank you.

[The prepared statement of Dr. Cardenas follows:]

Statement of Dr. Blandina Cardenas, President, The University of Texas-Pan American, Edinburg, TX

Mr. Chairman Tiberi, Congressman Hinojosa, (any other members of the Committee who are present), on behalf of the students, staff and faculty of The University of Texas Pan-American, I am pleased to extend a heartfelt South Texas welcome, Bienvenida, to our beautiful Valley and this campus. Thank you for the opportunity to address this committee on a matter of great national importance and for your leadership in engaging the significant national challenge of graduate education for Hispanics.

I speak to you not only from my perspective as President of this University that leads the nation in the graduation of Mexican-Americans in bilingual education and ranks fourth in the nation in master's degrees awarded to Hispanics, but also from the perspective of almost thirty-five years of engagement at the local, state and national level in efforts to educate the critical mass of Hispanic students so necessary to the long-term economic, civic and cultural well-being of our beloved nation.

Over the course of your examination of this issue, you will be presented with extensive data and analysis of the unacceptably low rates of Hispanic participation and success in graduate education. Among other statistics you will hear are that Hispanic graduate enrollment in the Biological Sciences is only 3 percent, in Engineering only 4 percent and 6 percent in the Health Sciences. While these rates appear to be improving, the rate of improvement is inadequate to meet this state's and the nation's requirements. Improving the rate of graduate enrollment and completion for any group is a slow and lengthy process. I believe it urgent that we intervene to accelerate that rate of participation and completion consistent with the accelerated demographic change that is occurring throughout the nation.

In a recent Supreme Court decision on diversity on college campuses, Justice Sandra Day O Connor established as a national expectation that we might reach, within 25 years, a time when extraordinary consideration for diversity might not be necessary. It is a goal whose achievement is deeply desired by those who, like me, advocate in favor of diversity strategies. But the goal will not be achieved unless we have both the push from the Pre K-12 system and the pull from higher education institutions in all disciplines and at the undergraduate, masters and doctoral levels.

For Hispanic Serving Institutions, like UTPA, the ability to pull is hampered by a lack of funds at the institutional level and at the student level. UTPA will grow more than any other institution in Texas if we keep college affordable and provide substantial financial aid. At UTPA, we serve 4,658 students who come from homes with a total family income less than \$20,000. Fifty percent of our students are Pell Grant eligible. Eighty-seven percent are eligible for financial aid. Our students come from the poorest families in the nation. Even with low tuition and financial aid, they work one or two jobs—and they have the lowest loan default rate in the State of Texas, (1.1) percent. By the same token, we project that any growth in student population will not come from students who are more affluent or more privileged, it will come from students who are less affluent, who will have greater needs.

Our graduates go to work rather than pursue expensive graduate and professional educations because they are driven by the noblest of family values. They choose to help their families and perhaps help fund younger brothers and sisters' undergraduate education.

UTPA finds itself in the same position as its students. We are faced with the choice of raising tuition and investing in graduate education or keeping tuition low and investing in undergraduate education so that we can have more of our young people receive bachelor's degrees.

Most HSI's lack the financial base to provide adequate institutional support for graduate education. The policy dilemma for the state and nation is that if you want to increase the number of Hispanics with masters and doctoral degrees, you will have to go to Hispanic Serving Institutions. As we say in Texas "if you want to fish, you must go where the fish are."

Increasing the number of Hispanics in graduate education is imperative to business, industry, medicine and education. Hispanics with master's degrees will be required to lead a diverse work force and create new products and product delivery systems for a diverse national market and for competitiveness in the global market.

Hispanics with doctoral degrees must be available in sufficient numbers to serve the teaching and research needs of our colleges and universities and research organizations in the private and public sector. I believe that Hispanics with post-baccalaureate preparation will bring significant added value to the creative and problem-solving enterprise—not in spite of the less privileged backgrounds, but because of it.

Academic institutions, in particular, have a high stake in the production of increased numbers of Hispanic doctorates. Academics are almost always produced through mentoring. Something or someone has to make the potential scholar believe that he or she too, can become a teacher and a researcher. When I received my doctorate in 1974, there were less than a dozen Mexican-American women with doctorates in other than Romance Languages. When I stopped counting some years ago, there were more than 150 Latina women who had worked for me, requested my mentorship, or told me that they had decided to pursue a doctorate because they connected to my achievement. Hispanic faculty can be a magnet for Hispanic student interest in a discipline. Particularly in fields not traditionally sought by young Hispanics, one dynamic Hispanic Assistant Professor can boost Hispanic majors in that field almost overnight. But the demand for Hispanic faculty is rising sharply as Hispanic college enrollments increase at the same time as the overall demand in most fields far outpaces the supply.

H.R. 761 holds much promise for fulfilling the national need to increase the number of Serving Institutions to build the master's program enrollments and support doctoral programs in areas of excellence. It will enable HSI's to collaborate on a more equal footing with institutions with greater graduate capacity. It will help to raise the aspirations of Title V students and the institutions that serve them. It represents a logical extension to the success and the promise of existing Title V provisions.

Chairman TIBERI. Thank you. Thank you very much.

Mr. HINOJOSA. Mr. Chairman, could we ask the presenters to bring the microphone a little closer to you, to be sure that everything at the back can hear.

Chairman TIBERI. Very good suggestion. I was mesmerized by the testimony and was listening. That was very good testimony, by the way.

Thank you for bringing it closer to you so everyone in the back can hear.

Ms. Chapa.

**STATEMENT OF OLGA CHAPA, GRADUATE STUDENT, THE
UNIVERSITY OF TEXAS-PAN AMERICAN, EDINBURG, TX**

Ms. CHAPA. Good afternoon, and thank you for allowing me to present this testimony to you today.

Chairman TIBERI. Thank you.

Ms. CHAPA. Thank you. My name is Olga Chapa and I'm presently enrolled at the college of business. I have attended the graduate program for 5 years now. I stand before you as a representative for both the master's and doctoral students of the college of business, and I can personally testify this day that the main factor that restrains our ability to begin and to finish our graduate students—studies, pardon me—is the lack of funding.

We're all familiar with the cost of obtaining an education. Many of us, myself included, earned our bachelor's degree attending the university part time because of financial restraints. It took me 9 years personally, and I am not alone.

Some of us returned to earn a graduate degree, and taking a course here or there, repeating the same pattern as we did when we earned our bachelor's. And one of the things I noticed was the small number of Hispanic students along with me, but that was not

a very big—since, like I said, scholarships, stipends, grants, are very, very limited, and we have to compete with what exists in most of these programs with undergraduate students, so of course there was no surprise.

It's not an unwillingness to work, either. Master students work 20 hours a week to earn their stipend, and we, as doctoral students, have to do the same. We're more than willing to give that part of us to our community and our university.

Graduate students require a large amount of time in order to read and also to conduct research, and therefore we cannot give more than 20 hours in order to meet our financial obligations. So we have to request today to please invest in us and give us other graduate means so that we may finish and accomplish this goal.

One thing I hear that's common today and one thing that concerns us very much is this gap that's being created. It is predicted that one in every four Americans will be of Hispanic decent by the year 2050. If the ratio continues as it is of our graduate accomplishments, then that means that one quarter of our nation will be under-educated, and this is very dangerous, as each and every one of you has stated thus far, because not only do we compete here in our nation, but we compete globally, so this is of great concern to us and we want to help you address this issue.

So how can we do that? Well, we certainly have the people. This institute has the people, and we have the commitment. You have our commitment and our willingness to work hard and do anything it takes to accomplish our goal to increase those numbers, not just for our community, but for our nation, as has been stated time and time again today.

The low Hispanic enrollment in the graduate students is not only due to the lack of funding. Many students want to attend but aren't, or are not qualified with the requirements necessary to be accepted into a graduate program, so we're in dire need of programs to address that issue, as well, to create a jump start program, if you will, for those within our communities and within our Nation that need that jump start in order to qualify for these graduate programs.

We desperately need you to invest in us. We're committed to you to make a difference, and we're committed to our country to help make a difference, especially in the bleak statistics of the Hispanic ethnic group, but we cannot do it alone any longer. We need your help. We have overcome great hurdles, but it is at a fork in our road that we are unable to continue at times, and that increases the number of what we call dropping out. We need increased funding opportunities. Anything you can do for us will be greatly appreciated and utilized.

Speaking of research, at the college of business we are encouraged to perform research, and we've come up with some groundbreaking ideas and new added theories to existing literature, and some of us have even had the honor of publishing, but we cannot do this without research funding, so there's always a constant block here, there, on and off, that we're not able to continue helping in—and create a more research-oriented facility, as is the strategy of Dr. Cardenas and this structure.

We're pleading with our government, do not leave any adult behind, either.

Thank you.

Chairman TIBERI. Thank you.

[The prepared statement of Ms. Chapa follows:]

Statement of Olga Chapa, Graduate Student, The University of Texas-Pan American, Edinburg, TX

My name is Olga Chapa. I am a 45-year-old Hispanic female from the Rio Grande Valley. My academic history as a student at the University of Texas-Pan American (UTPA) has peaked, and I am now a doctoral student. In the fall of 2005, I should present my doctoral comprehensive and oral exams. My graduate studies began in the fall of 2000. Personally, during my MBA program, the only resources available through student financial aid programs were student loans. I would not have been able to continue my education unless I obtained private financing. I worked and studied diligently to obtain acceptance in the doctoral program at UTPA, College of Business Administration, but the continuation of my studies, as well as other graduate students in the same position, is not certain due to the lack of funding.

The reason I stand before you is to act as a representative member of the Graduate Students at the UTPA to inform the Committee on Education and the Workforce of the struggle Graduate Students face to complete their education. As graduate students, most of us are of an older age group, therefore, have family and other responsibilities that hinder our ability to either begin graduate studies or complete the degree plans.

I have two examples to share with the committee today that confirm that the main obstacle we face is financial. First, I have been privileged to teach undergraduate level courses. I make it a point to emphasize the importance of the students' continued education. I believe these students will not only better their lives financially and intellectually, but improve our representation as Hispanics in the United States (US). Some students are not interested, but many of them state that they cannot afford to continue. Their families are financially struggling with them as they earn a Bachelors degree, and their graduation seems impossible. Second, within my experience as the director of the child care center for 21 years, I met approximately 2,000 sets of parents. Due to the demographics of the area, 98-99 percent of the parents we served were of Hispanic origin. Out of the 2,000 parents approximately one-half had some form of formal education. Only a handful of those parents continued with their post baccalaureate degrees. Their primary reason was the lack of financial recourses.

Our resources as doctoral students are extremely limited. During the fall and spring semesters, we work as research assistants providing 20 hours a week for a professor. Our stipend is \$15,000 a year without insurance coverage. Most other graduate programs are able to provide more funding and insurance. If there is funding, our stipend is extended throughout the summer sessions. The lack of funding creates dire financial difficulties, because we are unsure whether we will have funding to support our families during the summer months or need to find employment elsewhere. For example, graduate students scheduled to take exams during the fall 2005 period are uncertain of the probability of accomplishing this task. The summer term, in addition to acting as an assistant to a professor, should ideally be used to study for the comprehensive examinations. The exams are comprehensive in nature and cover material studied throughout a three-year period. Unfortunately, the funding that is available is on a first come, first serve basis and is limited due to budget restraints. Without sufficient funding, we may have to sacrifice our studies in order to support our families during the summer. We have met the class requirements and student loans and scholarships are not available. This will delay preparations for examinations. As you can witness, the lack of financial resources are what hinders our abilities to obtain a post baccalaureate degree and ultimately this will result in some graduate students faced with the probability of "dropping out".

Although, the University is available, the programs are in place, the professors and staff are qualified, and the Hispanic students are enrolled, our ability to complete our studies and achieve our graduate status is hindered. Hispanics make up approximately 89 percent of the UTPA population, which consists of 13,082 Hispanic undergraduate students and 2,242 graduate students. Currently, 1,731 Hispanic graduate students are enrolled in UTPA. Approximately 1,200 are female. If we consider the 13,082 undergraduate students as an example, only 13 percent of them would return to earn a graduate degree.

According to the U.S. Census, one in every four Americans will be of Hispanic origin by the year 2050. The National Center of Education Statistics reports that as of 1999, Hispanics earned only four percent of the master's degrees, and only three percent of the PhD degrees issued in the U.S. Ten percent of the college enrollment in the U.S. are Hispanic, yet only three percent are instructional faculty. We must increase our representation.

Our representation in the area of post baccalaureate degrees remains low. Why would this be important? It is extremely important because the Hispanic children and young adults are not exposed to role models that have accomplished the task of furthering their education. We can create a norm, common characteristics that Hispanic children and young adults can emulate to increase our representation.

In addition to increasing our representation, the growth of Hidalgo County requires qualified individuals in areas such as business, education, engineering, and so forth to meet the needs of expansion. Hidalgo County is part of a border area separating Mexico and the U.S. This region is rich with businesses. All types of organizations have expanded, including the retail and the maquila industries that are predicted to continue expanding. This type of growth requires individuals with skills and education to fulfill job openings. A Bachelors Degree, although commendable, is no longer enough to compete for the job openings that require higher levels of education and skills. For example, the local population could fill those postings. In addition to creating employment, the decrease in costs affiliated with expatriates, would benefit the organizations as well. The Hispanic graduate students that leave Hidalgo County are prepared to compete for positions all over the country and internationally. Those that wish to remain and contribute their skills and knowledge to the local community can so with confidence. I can only speak for the UTPA College of Business Administration, but I have been privileged to learn more than I ever thought imaginable. This area is a "goldmine" to conduct research in the business area, science, and technology fields. Our college emphasizes research and skills acquired at the graduate level are necessary to perform the research. If indeed Congress pledges to strengthen the role of research at Hispanic serving institutions. Please be advised that UTPA serves a large Hispanic population (88.5 percent). However, I feel that more needs to be done to recruit students from the Rio Grande Valley to benefit from the UTPA institution.

Personally, the odds of my achievement were stacked against me. My parents are immigrants from Mexico. My father and his family were laborers traveling the U.S. to find fieldwork in which to earn a living. We were very poor and lived in government housing until I was 14 years old. My father was permanently disabled when I was two years old. My mother was employed at a childcare center when I was 14 years old. She did everything from changing diapers to cooking for \$ 60.00 a week. Eventually, we were able to own a child care center in Edinburg, Texas. During those 21 years in the child care industry, I earned my Bachelors Degree in Business Administration from UTPA as a part time student. During that time, I also became the guardian of my father, which entailed supporting him as well. Eventually, the center was sold, and I returned to UTPA a graduate student. Although I could not obtain scholarships, I was able to raise private financing. This was the only way I could support my family. I was accepted into the doctoral program the same year I graduated as an MBA student extending my graduate program. I have been enrolled for five years. I am emphasizing that without private financing and due to the lack of financial resources available to the graduate students at UTPA, I would not have been able to continue my Master's and Ph.D. studies. I am proud to be a part of a growing number of Hispanics who believe we must make a difference in the numbers of post baccalaureate degrees. Having worked and observed small children for 21 years, I can personally testify that my experiences led me to validate prior studies and research about children and the importance of role-playing. Indeed, children live what they learn and see everyday. If more children witness their brothers, sisters, cousins, relatives, community members, church members, etc. achieve not only baccalaureate degrees, but graduate degrees; they will emulate this behavior. I see this in my niece's and my son's achievements. Throughout their childhood, they witnessed their grandmother, aunt, and mothers strive for a higher education. There was never a question of whether they would obtain a higher education degree. This was a "norm" to them; my niece graduated from Brown University and will earn her Master's degree in social work this spring from the UTPA. My son was accepted to the University of Texas, Austin campus and will graduate with Honors in the top 10 percent of his class. Therefore, I can testify that I have witnessed this behavior in children for 21 years and am witnessing the same within my family.

I want to continue beating the odds and achieve this goal so I may represent my people not only as a Hispanic but as a female. Sadly, I must report that although

I have overcome poverty and personal tragedies within my family, I cannot overcome the obstacle of financial resources. I have depleted my resources. I am one example and there are many students with similar situations. There is very limited funding for students who lack financial resources to continue their education. Although some scholarships are available, they are limited. Undergraduate and graduate students are eligible for the same scholarships in most occasions. Most scholarship opportunities are available to undergraduate students only. Student loans are available in limited amounts as well. The lack of resources creates a great obstacle for Hispanic graduate students who have to choose between supporting their family and spending their resources on their education. It is most difficult when the additional factors such as the costs of textbooks, transportation, and childcare are factored into the situation.

The structure to provide the graduate level degrees exists. It is larger and stronger than ever. The President of UTPA, Dr. Blandina Cardenas, provides the strategy to fulfill the educational needs and opportunities for the community with her leadership and guidance. UTPA ranks 2nd in the nation as a Hispanic serving institute. Moreover, UTPA has the largest number of Hispanic students among universities in Texas. We have the structure, the people, the opportunities, the desire, and the strategy. All we need now is the financial support to succeed in the goal of encouraging more and community members to increase the number of Hispanic graduate students. The rise in education helps everyone. The more educated our country is as a whole, the stronger it becomes. We must all yearn to seek the unknown for that is what innovation is all about. Our strength as a nation and Texas depends on our capabilities to adapt to the increasing global market and increasing competition with other nations whose population as a whole is more educated academically. If you leave the Hispanic group behind, that gap brings the entire nation and Texas down. Please persuade those who can help us. Invest in our community. I promise you will not regret it. The cycle of a poor education within our Hispanics has to end now. If you invest in us, you invest in our children and our community. They in turn influence others until one day, we, as a people, will advance. We will make our state and our nation proud.

Chairman TIBERI. Doctor.

**STATEMENT OF DR. RAYMUND A. PAREDES, COMMISSIONER,
TEXAS HIGHER EDUCATION COORDINATING BOARD, AUSTIN, TX**

Dr. PAREDES. Good afternoon, Mr. Chairman, and Congressman Hinojosa. As Texas Commissioner of Higher Education, I'm delighted to offer some comments today on the issue of expanding opportunities in graduate education at Hispanic Serving Institutions.

This topic is especially important to the Texas Higher Education Coordinating Board because it relates to the Texas higher education initiative called Closing the Gaps.

Closing the Gaps has various components, but the most relevant here is to increase the number of students enrolled in Texas higher education by 600,000 by year 2015. In order to achieve this goal we need to dramatically increase enrollments across the board in private as well as public institutions, in two as well as 4-year institutions, in graduates as well as baccalaureate programs.

And given the demographic trends in Texas, a large percentage of both the undergraduate and graduate enrollment growth we expect to create in Texas will be Hispanic. Put very simply, a failure to reach the participation goals in the Closing the Gaps initiative, with a special emphasis on dramatically higher Hispanic enrollments, will result in gloomy economic and quality of life outcomes for Texas.

Turning to the specific issue of Hispanic participation in higher education, everyone in this room recognizes that while we have made substantial gains, both here in Texas and around the country

in recent years, we still have a long way to go. Hispanics still lag well behind other groups in college-going rates, in retention and graduation rates, and, inevitably, participation in graduate education.

In 2003, 34 percent of whites over the age of 25 had completed four or more years of college in this country. But for African Americans the figure was 17.3 percent, and for Hispanics 11.4 percent.

In 2002, Hispanics received 4.2 percent of all master's degrees awarded in the United States, compared to 62.1 percent for whites, and 7.7 percent for African-Americans.

From 1992 to 2002, the percentage of Hispanics receiving master's degrees rose from 2.6 to 4.2 percent.

In 2002, the percentage of Hispanics receiving doctoral degrees was 3.1 percent compared to 57.3 percent for whites and 5.1 percent for African-Americans.

The share of doctoral degrees received by Hispanics in 1992 was 2 percent. This increase of 1 percent over 10 years is not impressive, and I should point out that these numbers have been relatively flat for about 30 years. The number of Hispanics receiving doctoral degrees in the United States has been in the 2 to 2.3, 3.4 range since the early 1970's.

Clearly, progress in educational attainment for Hispanics has been steady but slow, while the population growth has been dramatic. I often say that in relation to the Hispanic community, we keep coming up with arithmetic solutions to geometric challenges.

In Texas, where educational data for Hispanics generally reflect national patterns, we have 35 public and private Hispanic Serving Institutions, 16 of which offer advanced degrees. Especially at public institutions, the number of graduate programs in Texas HSIs has increased greatly over the past 15 years, largely in professional fields such as education. This growth has occurred in both master's and doctoral degree programs. A quick glance of degree-granting data from Texas HSIs shows clearly that they grant graduate degrees to Hispanics at much higher rates than non-HSIs.

At Sul Ross State University in Alpine, for example, of 102 master's degrees awarded in 2004, 42 went to Hispanics, or 39 percent. At another HSI, UT-Pan American, of 489 master's degrees awarded, 373 went to Hispanics, or 76 percent.

By comparison, at the University of North Texas, a non-HSI, of 1,512 master's degrees awarded, only 83 went to Hispanics, or 5.4 percent.

At the doctoral level, the HSIs that granted the most degrees were Texas A & M University-Kingsville and UT-El Paso.

Of 31 doctoral degrees granted at Kingsville in 2004, 13 went to Hispanics, 42 percent. And, at UTEP, 24 doctoral degrees were granted, of which 5 went to Hispanics,

21 percent.

By comparison, at UT-Austin, which is one of the largest doctorate-producing institutions in the country, 31 of 683 doctorates went to Hispanics, 4.5 percent; while at Texas A & M University, the other public flagship in Texas, only 15 of 151 doctorates went to Hispanics, 2.9 percent. The data for other Texas public universities reveal a similar pattern.

Several conclusions can be drawn from these data. First, it is clear that Hispanics participate at increasingly lower rates the higher the level of degree program, whether at HSIs or non-HSIs. Second, at both masters and doctoral levels, HSIs tend to produce a higher percentage of Hispanic graduates than non-HSIs. And the data from Texas show that HSIs tend to have a relatively small number of doctoral programs, with relatively small numbers of students.

In Texas, as around the country, there's a large gap between the academic resources of HSIs and large public non-HSIs, such as the University of Texas at Austin, Texas A & M University, and the University of North Texas.

Finally, despite the large Hispanic population across Texas, the numbers for Texas non-HSIs, in terms of doctorates awarded to Hispanics, resemble non-HSIs around the country more than they resemble HSIs in their own state. In other words, their participation rates for Latinos in graduate programs do not reflect the presence of a large Latino population in their regions.

The challenge for HSIs in Texas is to maintain and increase access while simultaneously improving quality, especially at the doctoral level. Given the condition of the state budget, it is doubtful whether Texas, or any other state, for that matter, can provide the support necessary for HSIs to achieve the proper balance between access and excellence.

Graduate education for Latinos does present distinctive academic challenges, and any targeted support to HSIs from the Federal Government, as represented by H.R. 761, is greatly needed. They will also help Texas move more closely toward the goals of Closing the Gaps in student participation in Texas Higher Education.

Thank you.

Chairman TIBERI. Thank you, Doctor.

[The prepared statement of Dr. Paredes follows:]

Statement of Dr. Raymund A. Paredes, Commissioner, Texas Higher Education Coordinating Board, Austin, TX

Good afternoon, Chairman Tiberi and other members of the Subcommittee on Select Education. I am Raymund Paredes, Commissioner of Higher Education in Texas. I am delighted to offer some comments today on the issue of Expanding Opportunities for Graduate Education at Hispanic Serving Institutions. This topic is especially important to the Texas Higher Education Coordinating Board because it relates to the Texas Higher Education initiative called Closing the Gaps.

Closing the Gaps has various components, but the most relevant here is to increase the number of students enrolled in Texas higher education by 600,000 by the year 2015. In order to achieve this goal, we need to dramatically increase enrollments across the board, in private as well as in public institutions, in two- as well as in four-year institutions, in graduate as well as in baccalaureate programs. And given the demographic trends in Texas, a large percentage of both the undergraduate and graduate enrollment growth we expect to create in Texas will be Hispanic. Put very simply, a failure to reach the participation goals of the Closing the Gaps initiative, with a special emphasis on dramatically higher Hispanic enrollments, will result in gloomy economic and quality-of-life outcomes for all the people of Texas.

Turning to the specific issue of Hispanic participation in higher education, everyone in this room recognizes that while we have made substantial gains both here in Texas and around the country in recent years, we still have a long way to go. Hispanics still lag well behind other groups in college-going rates, retention and graduation rates and participation in graduate education. In 2003, 34 percent of whites over the age of 25 had completed four or more years of college. But for African Americans, the figure was 17.3 percent; and for Hispanics, 11.4 percent. In

2002, Hispanics received 4.2 percent of all masters degrees awarded in the U.S., compared to 62.1 percent for whites and 7.7 percent for African Americans. From 1992 to 2002, the percentage of Hispanics receiving masters degrees rose from 2.6 percent to 4.2 percent. In 2002, the percentage of Hispanics receiving doctoral degrees was 3.1 percent, compared to 57.3 percent for whites and 5.1 percent for African Americans. The share of doctoral degrees received by Hispanics in 1992 was 2 percent.

Clearly, progress in educational attainment for Hispanics has been steady but slow, while the population growth has been dramatic. I often say that, in relation to the Hispanic community, we keep coming up with arithmetic solutions to geometric challenges.

In Texas, where educational data for Hispanics generally reflect national patterns, we have 35 public and private Hispanic-Serving Institutions (HSIs), 16 of which offer advanced degrees. Especially at public institutions, the number of graduate programs at Texas HSIs has increased greatly over the past 15 years, largely in professional fields such as education. This growth has occurred in both masters and doctoral degree programs. A quick glance at degree-granting data from Texas HSIs shows clearly that they grant graduate degrees to Hispanics at much higher rates than non-HSIs. At Sul Ross State University in Alpine, an HSI, of 102 masters degrees awarded in 2004, 42 went to Hispanic or 39 percent. At another HSI, UT Pan American, of 489 masters degrees awarded, 373 went to Hispanics, or 76 percent. At the University of North Texas, a non-HSI by contrast, of 1,512 masters degrees awarded, only 83 went to Hispanics, or 5.4 percent. At the doctoral level, the HSIs that granted the most degrees were Texas A&M University-Kingsville and UT El Paso. Of 31 doctoral degrees granted at Kingsville in 2004, 13 went to Hispanics (42 percent); UTEP granted 24 doctorates, of which 5 went to Hispanics (21 percent). At UT Austin, a non-HSI, 31 of 683 doctorates went to Hispanics (4.5 percent) while at Texas A&M University, the other public flagship, only 15 of 151 doctorates went to Hispanics (2.9 percent). The data for other Texas public universities reveal a similar pattern.

Several conclusions can be drawn from these data. First, it is clear that Hispanics participate at increasingly lower rates the higher the level of degree program whether at HSIs or non-HSIs. Second, at both masters and doctoral levels, HSIs tend to produce a higher percentage of Hispanic graduates than non-HSIs. And, finally, the data from Texas show that HSIs tend to have a relatively small number of doctoral programs with relatively small numbers of students. In Texas, as around the country, there is a large gap between the academic resources of HSIs and large public non-HSIs such as The University of Texas at Austin, Texas A&M University and the University of North Texas. Finally, despite the large Hispanic population across Texas, the numbers for Texas non-HSIs, in terms of doctorates awarded to Hispanics, resemble non-HSIs around the country more than they resemble HSIs in the same state.

The challenge for HSIs in Texas is to maintain and increase access while simultaneously improving quality, especially at the doctoral level. Given the condition of the state budget, it is doubtful whether Texas, or other states for that matter, can provide the support necessary for HSIs to achieve the proper balance between access and excellence. Graduate education for Latinos does present distinctive academic challenges and any targeted support to HSIs from the federal government, as represented by H.R. 761 is greatly needed. This will also help Texas move closer toward closing the gaps in student participation in higher education.

Thank you.

STATEMENT OF DR. JOSE JAIME RIVERA, PRESIDENT, UNIVERSITY OF THE SACRED HEART, SAN JUAN, PUERTO RICO

Dr. RIVERA. Chairman Tiberi, Congressman Hinojosa, colleagues and friends attending this hearing, my name is Jose Jaime Rivera, and during the last 12 years I've had the privilege of being the President of Universidad del Sagrado Corazon, University of the Sacred Heart, a private Catholic comprehensive nonprofit coeducational institution offering associate, baccalaureate, post-baccalaureate certificates and master's degrees.

It was established as a girls school in 1880, initiated collegiate level programs in 1935, and master's programs in 1985.

In order to meet the 5-minute requirement, I would like to submit my written testimony and concentrate on the following key issues and conclusions.

No. 1, Title V institutional and comparative grant programs have played a fundamental role in strengthening HSIs and in moving them closer to the mainstream of American higher education. Still, as shown in my written testimony, educational attainment of Hispanics still lags that of non-Hispanics, whites and blacks, even though Hispanics represent an increasingly sizable proportion of the new workforce for this century's national economy. Thus we must paraphrase the famous statement of a nation at risk and say that if our military enemies prevent this nation's investment in higher education of Hispanics, this would be as devastating as the bombing of our infrastructure.

No. 2, the Bureau of Labor Statistics has documented that a relationship between educational attainment and lifetime earnings are directly related, so that a person with less than high school will have a lifetime earning of a million dollars. Those with a bachelor's degree will earn 2.1 million. Those with a master's degree will earn 2.5 million, those with a Ph.D. will make 3.4 million, and those with professional degrees will make 4.1 million during their lifetime.

I believe that the rate of return of what is invested in supporting graduate higher education, especially for Hispanics, can be shown to be high. When this return is joined by the savings from means-tested social programs that will not be required by those achieving their educational aspirations, and the tax revenues that such higher incomes will pay, and are accounted for, there should be no hesitation as to the legislation that needs to be approved.

No. 3, given that HSIs provide a nurturing and supportive environment to Hispanic students, and given the income differentials through life that these students will receive by having a graduate education, it is important for Title V to add this new part to provide financial assistance in support of HSIs efforts to develop and strengthen graduate programs.

These funds will assist in developing academic support services, technological infrastructure, administrative support services, recruiting additional faculty, improving physical resources needed to offer these programs, among other uses.

Along the line of providing support for HSIs, there are two areas I would like to add, which may be better served through new programs. One refers to resources for physical construction and renovation, to provide physical facilities for new graduate programs. The second would call for special funds to establish institutional endowments for the long-term support of the graduate programs, to be matched through funds obtained by the HSIs in the format of the Challenge Grants.

No. 5, a similar need has been identified for the creation of a new section of the Title V for a technological enhancement program for HSIs. It is critical for HSIs to have a competitive technological infrastructure to make their students as competitive as those students attending mainstream well-endowed non-minority institutions.

No. 6, it is urgent to act now on the elimination of the 2-year wait-out period of HSIs between grant completion and new application cycles.

A significant number of institutions were affected this year by this absurd requirement, and they are not receiving support from Title V. An even larger number will end their Title V support this year, and if this is not eliminated now, there will be no time to call for a new proposal that can start in October 2005.

Before I finish, I must state my absolute rejection of the establishment of a single definition of a higher education institution. Such a single definition will result in a disservice to Hispanics and other minorities and will divert resources from those institutions that have a commitment and integrity to meet their community needs.

I will finish thanking the congressional members of the Committee and the members of their staff for working to make nation economically and socially viable by ensuring that it remains competitive and capable of living by its creeds.

Thank you.

Chairman TIBERI. Thank you.

[The prepared statement of Dr. Rivera follows:]

Statement of Dr. Jose Jaime Rivera, President, University of the Sacred Heart, San Juan, Puerto Rico

Honorable Members of the House Committee on Education and the Workforce, colleagues and friends attending this hearing: My name is Jose Jaime Rivera, and during the last twelve years I have had the privilege of being the President of Universidad del Sagrado Corazon, (University of the Sacred Heart), a private (Catholic), comprehensive, non-profit, coeducational institution offering associate, baccalaureate, post baccalaureate certificates and master's degrees. It was established as a girls school in 1880, initiated collegiate level programs in 1935 and Master's programs in 1985. The University has consortia, academic and cultural agreements with several institutions in Puerto Rico, United States and Europe. Study abroad and student exchange opportunities are available in Spain, Mexico, France, Belgium, and with over 150 universities in the United States through the National Student Exchange Program.

The University has been regionally accredited by the Middle States Association of Colleges and Schools since 1950 and it holds professional accreditations in nursing (NLN), medical technology (NAACLS) and social work (CSWE).

The University of the Sacred Heart has benefited significantly from the diversity of programs available as a result of the Higher Education Act of 1965 [as amended]. During the last eleven years USH was able to initiate a mayor academic development effort with the support of TITLE III [1994-99] and now, especially through TITLE V [2000-2005]. These programs allowed our University to establish the first digital graphic environment library on the Island in 1994 and latter on, with this powerful project as its foundation, a TITLE V grant allowed us to establish in 2000 a web-enhanced learning project which is impacting all our programs and benefiting over 3,000 students. This technological enrichment project is benefiting our students by allowing them to learn how to learn through web-supported activities that prepare them to enter the work force with very [first world] competitive skills.

Education programs, such as FIPSE have also assisted us in setting two unique curricular projects. The first is a community-based learning model centered on service/learning where all seniors in all majors participate in courses where they work as consulting teams to grass-root, community based organizations that present us with their capacity-building needs. These requests are assigned to corresponding courses where students will spend a semester working in small teams to solve the assigned problem. As a result, since its inception in 1998, over 150 organizations have been assisted by this methodology, developed with FIPSE support. FIPSE also supported the establishment in 2002 of a unique project to integrate language/communication skills in English and Spanish across the disciplines to address the expectations that the labor market has for competencies in oral and written communication. The University also benefits from the TRIO programs which have assisted

hundreds of low-income, first generation students to attend college and improve the persistence and graduation rates. Other federal programs have also contributed to our projects but, if you compare our institution with similar non-Hispanic institutions you will discover significant differences in the sources and scope of support. As stated by HACU: "Yet, HSIs on average continue to receive less than half the funding per student accorded to every other degree-granting institution. According to 2001-02 IPEDS statistics of the Department of Education, HSIs received \$8,596. per student on average from all revenue sources, compared to \$18,673 per student for all degree-granting institutions." (HACU, Legislative Agenda 2005, p.5).

Needless to say, the contribution of the Higher Education Act of 1965 and its re-authorizations have played a significant role in our capacity to meet community needs. The same can be said of our sister universities in Puerto Rico, both public and private, which, without the support provided by the Higher Education Act could not have impacted thousands of Hispanic students who are now successful professionals as a result of the resources the HEA has provided to us. As more initiatives have been created to specifically address the needs of HIS and Hispanic students, our colleges and universities have been more capable of meeting, at least partially, some equity and quality commitments we have made to our communities. But as the demographics evidence, we still are highly under funded and, because of the demographics and the changing economy, HSIs find ourselves increasingly distant from the capacity to meet the needs of our community

This is why the TITLE V of HEA is so critical not just to our HSIs future but to the future of this nation. TITLE V is a fundamental initiative who's strengthening and expansion we support and promote. Our first TITLE V grant, as described, assisted us in establishing a web-enhanced learning project which has supported training over 68% of our full-time faculty in the use of web-supported teaching strategies. As a result, 135 courses were revised with this methodology, impacting 85% of our General Education courses which make up 45% of the curriculum. In addition, over 75 courses in key majors have incorporated web-enhanced methods. This TITLE V grant also allowed for \$238,600.00 to be added to our small endowment, a fund that is slowly growing and should, in the long run, strengthen our financial stability.

Given the leadership role that our University plays in Puerto Rico, with the support of the TITLE V Cooperative Grant, we developed an alliance to establish a virtual library between USH, the Municipality of San Juan Community College, Polytechnic University and American University in Bayamon. Our goal was to create this consortium to help each other in strengthening our virtual collections and join forces in purchasing these collections as well as obtaining expert services to strengthen our web services and their security, provide training and development opportunities for the professional personnel that work in our libraries to better serve the students and community needs. As a result of this TITLE V grant we have achieved the following results:

- 18,000 Hispanic students are being provided access to 37,808 journal titles 22,240 of which are full-text and which they can access anywhere, anytime. None of these students or their faculty had they been able to access such a wide range of learning resources.
- They can also access over 13,000 books with their full text and a significant art collection of over 1,000,000 images, among other resources.
- Collectively, our participating institutions have been able to save over \$1,175,000. This represents what we have saved by buying together instead of individually if we had wanted to purchase such a magnificent collection.
- Hundreds of training and development hours have been provided which would not have been accessible to the individual institutions where it not for this fundamental collaborative project.

Why are these initiatives important to the Hispanic community? Why must they be not only maintained but expanded as a sound investment in the future of the United States economy and social well-being?

The answer rests on the demographic and economic changes taking place in the nation and the world.

As we all know, the future production possibilities and wealth of a country depend on the profile and composition of its workforce. But the profile of its workforce will, in turn depend on the educational choices made by the men and women of that society and the investments made to promote access and the quality of the educational experience.

The 2000 Census discovered or uncovered the fast growing presence of the Hispanic community in the USA. It became evident to all that new indicators had become critical for the profile of the new USA economy and for the emerging new makeup of our communities and society in general. As a result, it has become evi-

dent that the new USA workforce will be increasingly Hispanic. As the baby-boomers retire, there will be serious shortages of well-trained and educated individuals with the highest degrees that this new economy calls for to develop the wealth of the nation. The solution calls for significant investment in the new workforce which is being served and can be served by HSIs.

If Adam Smith, the father of Capitalism, was living in this era, he would recognize that in a knowledge-based economy, the profile of its labor force will be the major determinant of wealth. A labor force educated to its highest levels will be very productive, will foster innovations, will strengthen our tax-base, will contribute larger amounts to the Social Security System, will have little or no dependency on social programs and will promote a higher level of educational attainment in their children.

Let us look at some key economic facts identified by various US Census studies:

- As more and more people continue their schooling, this more highly-educated population pursues opportunities to enter into occupations yielding higher returns in earnings." (US Census Bureau, The Big Payoff: Educational Attainment and Synthetic Estimates of Work-Life earnings, July 2002, p.2 (P23-210))
- Over the past 25 years, earnings differences have grown among workers with different levels of educational attainment." (Ibid., p.3)
- The Hispanic population was less likely than other groups to have completed high school or college. In 2000, 57% of Hispanics aged 25 and older were high school graduates—a significant improvement over the 1989 share of 51%. However, the percentage of Hispanics that held a bachelor's degree or higher, 11%, was not significantly different than the percentage in 1989." (USCB, Population Profile of the US: 2000 (Internet release); 9-2)
- HACU represents more than 400 colleges and universities committed to Hispanic higher education success in the U.S., Puerto Rico, Latin America and Spain. Although HACU member institutions in the U. S. represent less than 7% of all higher education institutions nationwide, together they are home to more than two-thirds of all Hispanic college students." (www.hacu.net; HACU 101.)
- Our nation's economic and social success rests on the level of skills and knowledge attained by Hispanics, now the nation's largest minority population. Education, indisputably, is the key." (Ibid.)
- At a time when advanced skills are becoming a more important measure of future earnings, tax dollars and the nation's economic strength, only 20% of HSIs offer a master's degree. Less than 12% of HSIs offer a doctoral degree. Many under funded HSIs do not have the infrastructure to offer advanced degree programs." (HACU, 2005 Legislative Agenda, p. 9.)
- The proportion of the [Hispanic] population 25 years and over with a high school diploma increased from 53% in 1993 to 57% in 2003; the proportion who had some college increased from 26% to 30%; and the proportion with a bachelor's degree increased from 9% to 11%. Nonetheless, they remain lower than the levels for non-Hispanic Whites, Blacks and Asians." (2003 Current Population Survey report, Educational Attainment in the United States: 2003, p.5)
- With regard to post baccalaureate degrees, Statistical Abstracts from 2001 show only 3.3% of Hispanics have graduate degrees, compared to 8.8% of non-Hispanic whites." But, "According to Department of Labor, Bureau of Labor Statistics, Handbook of Labor Statistics for 2001, Hispanics comprise less than 5% of most fields requiring advanced degrees. Hispanics comprise only 4.7% of all employment in professional specialty fields, including only 4.7% of the country's physicians, 2.8% of natural scientists, 3.6% of mathematical and computer scientists, 5.4% of public school teachers, 3.5% of engineers and 3.2% of lawyers and judges." (HACU, 2005 Legislative Agenda, p. 9.)
- Although Hispanics make up over 12% of the US population, they currently earn only about 5% of master's degrees, 3% of doctoral degrees and 5% of first professional degrees." (Antonio Flores, HACU, The Voice, March 2005, p. 1).
- On average, a man with a high school education will earn about \$1.4 million from ages 25 to 64 years. This compares with about \$2.5 million for men completing a bachelor's degree and \$4.8 million for men with a professional degree." (www.womenscouncil.org/pdfs/educationalearnings.pdf)

All of these references, representing but a fraction of available data, support our basic proposition. Investing in HSIs for capacity building to allow them to establish solid graduate programs and professional schools will significantly increase the pool of Hispanics with advanced degrees. This is so because HSIs are better prepared to produce a nurturing and supportive environment for Hispanic students, assist them in the transition from high school to the bachelor's degree, and from the bachelor's to an advanced degree. It is an investment because the difference in life-long earnings between those with only a bachelor's degree and those with masters or pro-

fessional degrees is highly significant. In an economy more and more characterized by jobs in professional specialty fields, lacking the corresponding required educational level will imply living a life of low incomes, longer periods of unemployment, dependency on government transfer programs, raising children that will have a higher probability of low educational attainment, and other characteristics of the culture of poverty. Such results are more expensive than investing in HSIs development and in its graduate programs.

Thus, we are proposing the establishment of a new section under TITLE V of the HEA to be identified as Part B, Graduate Education, to assist HSIs efforts to build or strengthen existing capacity to provide advanced education to capable students with a bachelor's degree. Such a part should be properly funded with an initial assignment of \$125 million.

Besides, there are some critical issues to be addressed by the reauthorization of the HEA:

- The elimination of the two-year wait out period for HSIs between grant completion and new application cycles to be legislated in this first session of the 109th Congress.
- The elimination of the 50 percent low-income assurance requirement from the funding criteria of Title V, since this requirement is only applicable to HSIs among Minority Serving Institutions, and it crates an unfair, unnecessary and costly administrative burden.
- The creation of a new section under Title V, Part D, of the HEA for a Technology Enhancement Program for HSIs to support institutional efforts to improve technological infrastructure in order to provide the Hispanic and other populations served at HSIs with state-of-the-art digital technology to make them as competitive as those students attending mainstream, well endowed and non-minority institutions that provide their students with access to the most advanced technological resources.

Thus, I close by reaffirming the urgent need for an immediate repeal of the two-year wait out period imposed on HSIs to reapply for TITLE V support; the need to support and expand TITLE V due to the critical role it plays in increasing the quality of our educational initiatives; the fundamental need for new parts in TITLE V to support HSIs capacity to develop or strengthen graduate education and to establish community-responsible technological infrastructures in light of the competencies demanded from our workforce by the new economy. In the next round of hearings we would like to address other elements of the Higher Education Act that are also critical for the wellbeing of this nation and which should be considered by the Honorable Commission. Thank you again for the opportunity you have provided to us to present our perspectives on this crucial effort.

Chairman TIBERI. And, finally, last but not least.

STATEMENT OF DR. TOMAS ARCINIEGA, PRESIDENT EMERITUS, CALIFORNIA STATE UNIVERSITY BAKERSFIELD, VALLEY CENTER, CA

Dr. ARCINIEGA. Thank you. Good afternoon, Representatives Tiberi and Hinojosa.

It is an honor for me to appear here to testify before the Subcommittee on Select Education and the House Committee on Education in the Workforce regarding H.R. 761. I am here on behalf of the more than 242 Hispanic Serving Institutions and the, importantly, 80 HSIs that will be eligible to participate in the graduate program.

My name is Tomas Arciniega, professor emeritus at California State University at Bakersfield, an HSI, and currently I serve as special assistant to the chancellor of the California State University System.

I'm also a past chair and current governing board member of the Hispanic Association of Colleges and Universities.

HSIs are an important national resource for the education of Hispanics and other minority groups in this nation. Half of all Latino students engaged in higher education attend HSIs. In urban areas

across the country, HSIs also educate a significant percentage of African-American students.

In the institution I headed for over 21 years, 30 percent of the enrolled students were Latinos, who also represent 23 percent of all graduate students. African-Americans, native-Americans, and Asian and Pacific Islanders make up another 15 percent of that student population. Therefore, any programs that assisted HSIs also benefited other minority group members attending such institutions.

Today, as you've heard, the Latino population is the largest minority group in the U.S. The Hispanic population of the United States, according to the latest report from the census, as of July 1, 2003, numbers 43.8 million, 13.7 percent of the U.S. Population, with 39.9 million in the mainland U.S. and 3.9 million in Puerto Rico.

By July 2050, according to the U.S. Census projections, Hispanic Americans will number 102.6 million, or one fourth of the nation's total population. The number of Hispanics will nearly triple between 2000 and 2050. These numbers reflect the dramatic growth in the Hispanic population in recent years, a growth that's expected to continue, obviously, in the decades ahead.

Already an—quotes, unquotes—“emerging majority” in several regions of the country, Hispanics are also the fastest growing school age population, with U.S. Census Bureau projections anticipating a 60 percent increase in the Hispanic school age population over the next 20 years.

Current U.S. Department of Labor studies show that Hispanics, who currently represent about 13 percent of the U.S. workforce and make up one of every three new workers, are projected to provide one of every two new workers by 2025.

The expanding Latino population has resulted in a growing number of Hispanic Serving Institutions, a number which is projected to continue to grow over the next five to 10 years. According to NCES data, 2003, there are now over 90 colleges and universities which have Latino enrollments between 18 and 24 percent, and which are expected to become HSIs in the near future.

With a median age of 26.7, according to the U.S. Census Bureau, Hispanics are more than a decade younger than non-Hispanic whites. Our nation and economy will demand an expanded and educated workforce to replace the large number of retiring baby boomers who will vacate jobs crucial for this nation to maintain its preeminence in research, technology, science and engineering.

Latinos and other minorities must be encouraged and assisted to pursue advanced education beyond the baccalaureate level in areas essential for business, for industry and for government, the public sector and the post-secondary education systems of this country as faculty, administrators, and yes, presidents.

These new graduates will provide the professional workforce necessary for this nation in the coming decades. Advanced technical and scientific skills are becoming essential to future earnings and career achievement in areas necessary to the nation's economic strength, security, and position within the world economy. However, only 20 percent of HSIs today offer a master's degree; less than 15 percent of HSIs offer a doctoral or first professional degree.

Many underfunded HSIs do not have the infrastructure to offer advanced degrees. Funding to support the growth of graduate programs in HSIs, as proposed in H.R. 761, would contribute to reversing that persistent underrepresentation of Hispanics in research, in teaching, in science, technology, and professional ranks, and will add to the nation's professional workforce for the immediate and long range future.

A chronic shortage of Hispanic professionals with advanced degrees, especially in science, technology, engineering, mathematics, biomedicine and professional careers, results, as we all know, in a workforce in the scientific and professional community that simply is not reflective of the nation's diverse population.

Advanced degrees translate into higher salaries, that's obvious, with a concomitant higher taxable income, which helps alleviate Federal and state budget deficits.

Without the infusion of new professionals with advanced degrees and the specialized knowledge, the U.S. will be unable to keep its competitive edge in the global economy.

At the same time, challenges to affirmative action from Proposition 209 in California and the Hopwood Court decision in Texas, to more recent affirmative action battles in Michigan and other states, have reduced dramatically minority enrollments in some graduate and professional schools across this country.

The U.S. Supreme Court in *Gratz v. Bollinger* and *Grutter v. Bollinger* in June 2003 issued a split decision, ruling in favor of affirmative action in the admissions policies at the School of Law of the University of Michigan, but against criteria for admissions policies for undergraduate students. Meanwhile, current diversity efforts have been inadequate to offset the effects of Hopwood and other similar court rulings.

The proposed bill, H.R. 761, as written, would provide HSIs with important and urgently needed resources to expand advanced educational opportunities to Latinos and other minorities, but because so many of these students are already enrolled in HSIs, their access to graduate degree programs at these institutions would bypass much of the affirmative action debate that rages all too often at so many more selective institutions.

At 6.4 percent, Hispanics remain the only underrepresented group in the Federal workforce. This inadequate representation occurs in all agencies, but especially at NASA, the National Institutes of Health, the Food and Drug Administration, and other agencies requiring advanced degrees for employment in an increasing number of such positions.

The underrepresentation of Hispanics in higher education is even more daunting. The National Center For Education Statistics reports that only 3.1 percent of all the executive administrative positions were held by Hispanics, and a mere 3 percent of all faculty positions. For the Federal workforce to reach parity with the general civilian workforce, the government would need to double the number of Hispanics in Federal jobs. For higher education to reach parity, the number of Hispanics employed there would have to more than quadruple.

HR 761 would support capacity building opportunities for HSIs to develop and enhance doctoral and professional programs, which

would increase dramatically the pool of qualified Hispanic faculty and administrators, including chief academic officers and presidents at HSIs, as well as highly educated professionals in many other areas.

Addressing the underrepresentation of Hispanics in key areas of the workforce takes an even greater in light of NCES Digest of Education statistics, which show that Hispanics in 2002 earned 4.6 percent of all master's degrees compared to 68 percent for non-Hispanic whites and 13.2 percent for nonresident aliens. In 2002, Hispanics earned only 3.2 percent of all doctoral degrees.

Title V of the HEA remains the chief vehicle for targeting Federal funds to HSIs. H.R. 761 and S 357 have been introduced to authorize a first-time 125 million dollar level of spending for graduate education grants to HSIs to expand and enhance post-baccalaureate opportunities at HSIs. The bill would establish a competitive grants program that would allow eligible HSIs to support graduate fellowships, key support services for graduate students, key infrastructure improvements, faculty development—

Chairman TIBERI. Can you wrap it up?

Dr. ARCINIEGA.—et cetera.

Chairman TIBERI. Can you wrap up your testimony, Doctor?

Dr. ARCINIEGA. Yes.

I don't have to pinpoint, especially for you, the key issues: Increase current support for 2-year and 4-year undergraduate efforts, in terms of the infrastructure; reduce the regulatory burdens for HSIs participating in the existing undergraduate Title V program; remove the 50 percent low income assurance requirement from the Federal definition of HSIs; and, finally, add a new use for Title V undergraduate grants by allowing the funding of articulation agreements and student support programs to facilitate the transfer of students from 2-year to 4-year institutions.

Mr. Chairman and Ranking Member Hinojosa, thank you very much for allowing me to—the privilege of testifying before your Committee.

Chairman TIBERI. Thank you, Dr. Arciniega.

[The prepared statement of Dr. Arciniega follows:]

Statement of Dr. Tomas Arciniega, President Emeritus, California State University Bakersfield, Valley Center, CA

Good afternoon, Representatives Tiberi and Hinojosa. It is an honor for me to appear here to testify before the Subcommittee on Select Education of the House Committee on Education and the Workforce on HR 761. I am here on behalf of the more than 242 Hispanic Serving Institutions (HSIs) and the 80 HSIs that will be eligible to participate in the graduate program delineated in the proposed legislation as a part of the Reauthorization of the Higher Education Act of 1964.

My name is Tomas Arciniega, President Emeritus of California State University at Bakersfield, an HSI, and currently I serve as Special Assistant to the Chancellor of the California State University System. I am also a past Chair and current Governing Board member of the Hispanic Association of Colleges and Universities (HACU).

HSIs are an important national resource for the education of Hispanics and other minority groups in the nation. Half of all Latino students engaged in higher education attend HSIs. In urban areas across the country, HSIs also educate a significant percentage of African-American students. In the institution I headed for over 21 years, 30% percent of the enrolled students are Latinos, who also represent 23% of all graduate students. African-Americans, Native Americans and Asian Pacific Islanders make up another 15% of the student population. Therefore, any programs

that assist HSIs also benefit other minority group members attending such institutions.

Today, the Latino population is the largest minority group in the United States. The Hispanic population of the United States, according to the latest report from the U.S. Census Bureau as of July 1, 2003, numbers 43.8 million, 13.7% of the U.S. population, with 39.9 million in the mainland United States and 3.9 million in Puerto Rico. By July 1, 2050, according to U.S. Census Bureau projections, Hispanic Americans will number 102.6 million or one-fourth of the nation's total population. The number of Hispanics will nearly triple between 2000 and 2050. These numbers reflect the dramatic growth in the Hispanic population in recent years, a growth that is expected to continue in the decades ahead.

Already an "emerging majority" in several regions of the country, Hispanics are also the fastest-growing school-age population, with U.S. Census Bureau projections anticipating a 60 percent increase in the Hispanic school-age population over the next 20 years. Current U.S. Department of Labor studies show that Hispanics, who currently represent about 13 percent of the U.S. work force and make up one of every three new workers, are projected to provide one of every two new workers by 2025.

The expanding Latino population has resulted in a growing number of Hispanic Serving Institutions, a number which is projected to continue to grow over the next five to ten years. According to the NCES 2003 data, there are now over 90 colleges and universities which have Latino enrollments between 18–24% and which are expected to become HSIs in the near future.

With a median age of 26.7, according to the U.S. Census Bureau (Statistical Abstract: 2004), Hispanics are more than a decade younger than non-Hispanic whites with a median age of 39.6. Our nation and economy will demand an expanded and educated workforce to replace the large number of retiring "baby boomers" who will vacate jobs crucial for the nation to maintain its preeminence in research, technology, science, and engineering. Latinos and other minorities must be encouraged and assisted to pursue advanced education beyond the baccalaureate level in areas essential for business, industry, government, the public sector, and the post secondary education system as faculty, administrators and presidents. These new graduates will provide the professional workforce necessary for the nation in the coming decades.

Advanced technical and scientific skills are becoming essential to future earnings and career achievement in areas necessary to the nation's economic strength, security and position within the world economy. However, only 20 percent of HSIs offer a master's degree. Less than 15 percent of HSIs offer a doctoral or first professional degree. Many under-funded HSIs do not have the infrastructure to offer advanced degrees. Funding to support the growth of graduate programs at HSIs, as proposed in HR 761, would contribute to reversing the persistent under-representation of Hispanics in research, teaching, science, technology and professional ranks and add to the nation's professional work force for the immediate and long range future.

The chronic shortage of Hispanic professionals with advanced degrees, especially in science, technology, engineering, mathematics, biomedicine and professional careers, results in a work force in the scientific and professional communities that is not reflective of the nation's diverse population. Advanced degrees translate into higher salaries with a concomitant higher taxable income, which can help alleviate federal and state budget deficits. Without the infusion of new professionals with advanced degrees and specialized knowledge, the U.S. will be unable to keep its competitive edge in the global economy.

At the same time, challenges to affirmative action, from Proposition 209 in California and the Hopwood court decision in Texas to more recent affirmative action court battles in Michigan and other states, have reduced minority enrollment in some graduate and professional schools. The U.S. Supreme Court, in *Gratz v. Bollinger* and *Grutter v. Bollinger* in June 2003, issued a split decision, ruling in favor of affirmative action in admissions policies at the School of Law of the University of Michigan, but against certain criteria for admissions policies for undergraduate students. The effects of these rulings likely will not be felt for some time. Meanwhile, current diversity efforts have been inadequate to offset the effects of Hopwood and other earlier court rulings.

The proposed Bill HR 761, as written, would provide HSIs with important and urgently needed resources to expand advanced education opportunities to Latinos and other minorities. Because so many of these students are already enrolled in HSIs, their access to graduate degree programs at their home institutions would bypass much of the affirmative action debate that rages at more selective institutions.

At 6.4%, Hispanics remain the only under-represented group in the federal work force. This inadequate representation occurs in all agencies, but especially at NASA,

the National Institutes of Health, the Food and Drug Administration, and other agencies requiring advanced degrees for employment in an increasing number of positions.

The under-representation of Hispanics in higher education is even more daunting. The National Center for Education Statistics, "Fall Staff Survey (1999)," reports that only 3.1 percent of all the "executive/administrative/managerial" positions were held by Hispanics and a mere 3.0 percent of all faculty positions. For the federal work force to reach parity with the general civilian workforce, the government would need to double the number of Hispanics in federal jobs. For higher education to reach parity in faculty and administration ranks, the number of Hispanics employed there would have to more than quadruple.

HR 761 would support capacity building opportunities for HSIs to develop and enhance doctoral and professional programs which would increase the pool of qualified Hispanic faculty and administrators, including chief academic officers and presidents at HSIs, as well as highly educated professionals in many other areas.

Addressing the under-representation of Hispanics in key areas of the workforce takes on even greater urgency in light of NCES Digest of Education Statistics which show that Hispanics in 2002 earned 4.6 percent of all master's degrees, compared to 68 percent for non-Hispanic whites (and 13.2 percent for nonresident aliens). In 2002, Hispanics earned only 3.2 percent of all doctoral degrees.

Title V of the HEA remains the chief vehicle for targeting federal funds to HSIs. HR 761 and S. 357 have been introduced to authorize a first-time \$125 million level of spending for graduate education grants to HSIs to expand and enhance post-baccalaureate opportunities at Hispanic Serving Institutions. The bill would establish a competitive grants program that would allow eligible HSIs to support graduate fellowships and support services for graduate students, infrastructure improvements, faculty development, technology and distance education and collaborative arrangements with other institutions.

In addition HR 761 will:

- Increase current support for two-year and four-year undergraduate efforts under Title V by increasing the authorization level to \$175 million beginning in fiscal year 2006. This increase in funding is needed in view of everything I have mentioned: the dramatic growth of the Hispanic population, their importance in the 21st century U.S. workforce, their under-representation in higher education and in professional, scientific and technical jobs which require college education, the key role played by HSIs, and the corresponding growth in the number of HSIs. Add to these issues the fact that HSIs on average receive less than half the funding per student accorded to all degree-granting institutions and the wisdom of increasing the Title V authorization level becomes self-evident.
- Reduce regulatory burdens for HSIs participating in the existing undergraduate Title V program by eliminating the two-year wait-out period between applications for grants. Currently the two-year wait-out now required between applications by eligible HSIs for Title V grants impedes the effort to implement long-range solutions to Hispanic higher education challenges. Clearly, eliminating the two-year wait-out period will be of immense importance in equipping HSIs with continuous funding needed to best answer these complex challenges.
- Remove the "50 percent" low-income assurance requirement from the federal definition of HSIs which will erase another inequitable component of the Title V definition of HSIs. Current law requires that at least 25 percent of the full-time equivalent student enrollment must be Hispanic. In addition, 50 percent of those students must also fit federal low-income definitions. This additional regulatory burden, requiring time-consuming documentation of information not normally gathered, is not required of other Minority-Serving Institutions and should be eliminated.
- Add a new use for Title V undergraduate grants by allowing the funding of articulation agreements and student support programs to facilitate the transfer of students from two-year to four-year institutions. More than 50 percent of Hispanic higher education students attend two-year community colleges, often because they are the closest, most affordable entry into higher education. Expanding the allowable use of Title V funding to develop articulation agreements and student support programs will provide HSIs the means to increase the numbers of Hispanic Americans with four-year degrees.

On behalf of the HSIs HACU represents and the Hispanic students they educate, I want to reiterate that HR 761 adds a powerful new dimension to Title V of the Higher Education Act. HR 761 will not only expand and enhance post-baccalaureate opportunities at Hispanic-Serving Institutions but prepare the future professional workforce for the nation.

Mr. Chairman and Ranking Member Hinojosa, I appreciate the opportunity to testify before your Subcommittee and your Subcommittee's long-standing support of HSIs. I would be pleased to answer any questions that you may have.

Chairman TIBERI. Thank you all for your very good testimony today and your written testimony, which has been submitted for the record.

I'll begin with a few questions, and then yield to my good friend, Mr. Hinojosa.

Dr. Rivera, you mentioned the 2-year wait-out period.

Dr. RIVERA. Yes.

Chairman TIBERI. I want to tell you that the initial draft of the higher reauthorization by Chairman Boehner eliminates that 2-year requirement, which is a good thing. The bill, or at least the markup going out of the Committee, is probably going to occur this fall, and we hope to have a bipartisan bill.

There's a number of other things going on in this hearing that, as Mr. Hinojosa said, is part of the formulation leading up to reauthorization of the Higher Education Act, but there is bipartisan consensus to do something good with what you talked about, and we hope to have that as part of the final reauthorization.

Dr. RIVERA. May I comment on that.

Chairman TIBERI. You bet.

Dr. RIVERA. Again, I appreciate a lot the effort that is being made. The only sad thing about it is that those institutions—I mean, if we wait for that process to complete rather than introducing that piece of legislation right now, many HSIs will go now into their second year of getting no access to Title V, and a significant, even larger, number of institutions will just have 1 year without this support, and, let me tell you, it makes a big difference having access to those resources to strengthen our institutions.

And the consequences of that, 2 years waiting out, de facto, applied already for the previous group of institutions, and a 1-year wait out for the big majority of HSIs has seriously a significant, a very severe effect.

Chairman TIBERI. Thank you. Can I ask you a question.

Dr. RIVERA. Yes.

Chairman TIBERI. In your written testimony, you mentioned several initiatives that have been developed as a result of your institution's Title V grant. What impact have those programs had specifically on student achievement at your institution? Can you just share that with us.

Dr. RIVERA. Well, yes, significant. I would say the first grant allowed us to develop a whole infrastructure for our library services, and a virtual, you know, system of resources for developing our capacity in our students and our faculty.

With that grant we were able to provide laptops to all our full-time faculty members, and it was the first one in Puerto Rico and, I understand, in the whole U.S. That jump started a whole change in teaching methodologies by the faculty that has been very, very powerful on our students.

And another initiative is the cooperative project we created with a municipal 2-year college in San Juan and two other private, small-sized institutions. By the cooperative program, we were able

to join forces and have multiplied by many factors access to periodicals, books, and all that, for institutions that would have never had the money for access to those resources.

Over 17,000 students are being impacted just because we're buying together and we were able to create this cooperative project. Now three more institutions want to join us, and the impact of that is tremendous.

So, again, the benefit for the students is enormous. For the faculty, it's very stimulating, and it gives a lot of hope to the students that they can really achieve a first-rate education in our type of institution.

Chairman TIBERI. Thank you. Thank you very much.

Dr. Parades, the four goals driving the Closing the Gaps initiative by 2015, can you expand on those four goals and how you're working in Texas to implement them.

Dr. PAREDES. Yes. The four goals relate, first of all, to increasing the amount of Federal research support that Texas institutions receive. Texas is the second largest state, and yet Texas has been languishing well behind the other states in terms of overall Federal research support.

So our goal is to double the amount of Federal research support that Texas institutions receive by the year 2015. I'm pleased to say we've already achieved that goal, so we're going to recalibrate and set our goals even higher.

The second goal had to do with increasing the academic quality of Texas institutions. That means creating more Tier 1 research universities; it means creating institutions that are renowned for their excellence at the undergraduate level, institutions that have a commitment to community-based research and so forth.

We're developing a set of criteria that allow all institutions, those institutions that place an emphasis on undergraduate education, as well as those institutions that primarily provide doctoral education in the state, to achieve a certain level of academic distinction.

The third goal relates to the academic success of our undergraduates. We wanted to dramatically increase graduation rates in Texas, which are right at the average of about—six-year graduation rates in Texas—of about 50 percent. Although that is the national average, I think that nobody is pleased with that. We want to increase both graduation rates and accelerate time to degree.

We want to improve the number of students that transfer from 2-year institutions to 4-year, and also increase the number of AA degrees, certificates and vocational licenses provided by 2-year institutions.

And then the fourth goal is the one that I referred to, and that is to increase the number of students that go on to college in Texas by 600,000 by the year 2015. That number is the figure that would put us at parity with the national average. Nationally, approximately 67 percent of all students who graduate from high school proceed to college within a year of completing high school. In Texas, the figure is about 45 percent.

Chairman TIBERI. Are those students that are going to college somewhere or just going to college in Texas.

Dr. PAREDES. They're going to college in Texas, yes.

Chairman TIBERI. OK. So that doesn't include students who are graduating high school and maybe leaving the state.

Dr. PAREDES. Yeah, except that those numbers aren't terribly large.

Chairman TIBERI. They're not very large? OK.

Dr. PAREDES. We don't transfer into other schools a lot.

Chairman TIBERI. There's a few at Ohio State (laughing).

Dr. PAREDES. A few (laughing). There will be a few more out at your campus in early September.

Chairman TIBERI. That's right; that's right. Thank you.

Thank you very much.

Ms. Chapa—

Ms. CHAPA. Yes, sir.

Chairman TIBERI.—very good testimony. Can you talk a little bit more about your personal experience? You mentioned, your word, the gap that's been created out there. How difficult was it for you to make the jump from the bachelor's degree into the next phase of your college degree, and how—what are some of the things that you see, from where you sit, that we can do to make it—to make that challenge less so, so more of your peers will take the leap that you took.

Ms. CHAPA. Well, to be quite honest with you, if it had not been for private financing, I would not have been able to have taken the leap. Unfortunately, the scholarships and grants are very limited and highly competitive. It's no one's particular fault, it just so happens that that's the way the agencies have funded it. So therefore what you do in the private sector is you go time and time again and try to refinance that same piece of land over and over and over again. And that's how I was able to come full-time and achieve my master's degree, and by the grace of God was accepted into the graduate program.

Now, having remembered that it took me 9 years to reach that goal, by this time, of course, your funding resources begin to become very depleted, so now at the doctoral level what we witness is that we can barely survive, and there are not that many funding resources that we can apply for, especially at the doctoral level. And that is key, because although we have a low number of master's degrees obtained in our ethnic group, it is even more serious, the jump from the master's to the doctoral program. And, again, it's the lack of resources.

We're at an age bracket, most of us, who have families, and what we've done all along is ask them to struggle with us. And so we do the—you know, I did the 9 years and had my family struggle with me, and then I said, you know, "Wait just a little bit longer. Let me do this other one." OK. And then it's like "OK, can you wait just a little bit longer?" And it eventually takes its toll, of course, after so many years.

So I would highly suggest that there be programs funneled—catered to the student who is not just leaving the bachelor's world and going into the master's degree level, but also from the master's degree into the Ph.D. level, especially the Ph.D. level that requires a great deal of our time. As I said, our class work is much more extensive than when we earned our bachelor's. Our research time that we have to invest per class is also—it restrains us so that

we're not able to go out and try and find additional sources of funding so that we can complete our studies. It's a long-term commitment.

Chairman TIBERI. I don't want to put words in your mouth, but if you didn't have this opportunity here, could you foresee the ability to go to Texas A & M or UT Austin to pursue your Ph.D.

Ms. CHAPMAN. No, sir. No, sir, absolutely not. In fact, I have come to school straight right here because it's available to us. And because of the financial obligations and lack of resources, we're not able to leave our community. So by the grace of God we have this incredible structure that has been able to ride along with us in our journey, and so I was able to do it. Otherwise, absolutely not, no, sir.

Chairman TIBERI. Speaking of incredible structures, Dr. Cardenas, you talked about the socioeconomics of the students that you serve, and you and I agree on a basic philosophy about education.

Is there anything that you can point to to share with the Subcommittee that the investment pays off, meaning that the ability for your role as an institution serving primarily first-generation college students pays off for not only the immediate community but the state and the nation? Can you share with us your thoughts on that?

Dr. CARDENAS. Let me start with—

Chairman TIBERI. Can you pull the microphone just a little bit closer.

Dr. CARDENAS. There it goes.

Let me start with an anecdote. At my former Hispanic Serving Institution, the University of Texas-San Antonio, the physics department had 17 majors. We hired one young Hispanic assistant professor, and by the end of the academic year there were something like 70 physics majors. The students connected to this young, bright, recent Ph.D. Hispanic in physics.

I think that it is particularly—here at the University of Texas-Pan American, we have a 42-year-old Hispanic female who graduated from Rice with a doctorate in engineering. We have a lot of other wonderful engineering faculty, but this young woman is—she is a rare commodity in engineering. Her field is nanotechnology. And we now have a wonderful group of young Hispanic female master—undergraduate and master's degrees in the field of engineering, who last semester won first place in senior design at the American Council on Mechanical Engineering.

In my field, which is education, we have a greater critical mass of Ph.D.s, but in the sciences, both the social sciences and the hard sciences, investment in producing that faculty that can inspire and connect to those 600,000 students that Dr. Parades was talking about, and the about 1.6 million additional ones across this country, will create a dramatic impact in those critical areas where we need—we need a reinvention, if you would, of the way we do things, whether it's in engineering or treating diabetes or whatever.

So I think that investment in creating that critical mass of master's and doctoral, particularly academics, out of the Hispanic community will make—will have a tremendous impact, because it real-

ly is—we really are going to need that faculty, No. 1. No. 2, it really is when one faculty member inspires another young student to enter the academy that we create the change.

I'm going to end just really quickly with this. My son is 25 years old, top student in a doctoral program at Berkley. He's going to make a great contribution to this country, but I believe fundamentally—and he's gone to all the best schools. I mean, I don't apologize for it. But I believe fundamentally that the kids here at UT-Pan American have an understanding of the world and of the problems and of the assets in this community that my son will never have, because they've lived it in a very unique way.

So when we think about the demographics of this country, we need to be pulling those Ph.D. and those master's degree students out of these communities, because their perspective will be important whether they become a congressman, the CEO of Ford Motor Company, or a research scientist at NASA. And if you want to reach those students, in Texas we say, "If you want to fish, you've got to go where the fish are," and the fish are at Hispanic Serving Institutions.

Chairman TIBERI. Well, now I know what Ruben was talking about.

Dr. CARDENAS. I get a little passionate, Mr. Chairman.

Chairman TIBERI. Well, with that, let me turn it over for questioning to our host, Mr. Hinojosa.

Mr. HINOJOSA. Thank you, Mr. Chairman.

I wish to raise a point of personal privilege before I begin my questioning. I request unanimous consent to submit two important documents for the record of this field hearing. They include, No. 1, a document that is written testimony from the Texas Guaranteed Student Loan Corporation, regarding graduate student financing at HSIs and non-HSIs.

Chairman TIBERI. Without objection.

[The information referred to follows:]

Statement of Sue McMillin, President & CEO, Texas Guaranteed Student Loan Corporation, Round Rock, TX

Chairman Tiberi, Ranking Member Hinojosa, and members of the Subcommittee, I am Sue McMillin, President & CEO of Texas Guaranteed Student Loan Corporation (TG). On behalf of our board of directors and our management team, I am pleased to submit to you brief remarks and relevant data, which hopefully lend some context to today's discussions before the subcommittee, and specifically on the critical issue of graduate education opportunities at Hispanic-Serving Institutions (HSIs).

TG is a public non-profit organization established by the Texas Legislature in 1979 to serve as the designated state guarantor for Texas for purposes of the Federal Family Education Loan Program (FFELP). We serve as one of 35 guaranty agencies in the country, which provide the necessary loan guarantee that ensures that all eligible students, regardless of economic status or racial background, receive the federal student loans they need to help them pay for a postsecondary education. We operate under an agreement with the U.S. Department of Education.

The issue before the subcommittee today is relevant not only to Hispanic Americans who wish to pursue graduate studies at Hispanic-Serving Institutions, but arguably also to the viability of graduate education opportunities for all Americans who are enrolled at these institutions. We appreciate the important role that HSIs have in higher education and in addressing the postsecondary education needs of Hispanics. TG commends the subcommittee for its leadership and foresight in addressing this area. We support the intent and objectives of H.R. 761, the Next Generation Hispanic-Serving Institutions Act.

Any discussion involving expanding graduate study opportunities should include a review of how graduate students finance their post-baccalaureate studies. Towards that end, we are pleased to provide the following overview of data relevant to students' financing of graduate studies, with a focus on Federal Education Loan borrowers.

The central question is how do graduate students finance their educations? The answer is rather different than for undergraduates. The cornerstone for financing undergraduate education is the Pell Grant. A large, needs-tested federal grant program does not exist for graduate students. The questions for graduate students are whether or not to work and how much, whether or not to borrow and how much, and whether or not a graduate assistantship is available and for how much.

The National Picture

The major factors that influence the answers to these three questions are the student's degree level, the student's institution (public or private), and the student's major program.

Master's students are very often part-time students who work. Graduate students in education and Master of Business Administration (MBA) programs often work full-time. Furthermore, MBA and education master's students comprise 48% of all students seeking master's degrees. Graduate assistantships are also not as readily available to master's students (Choy & Geis, 2002). These students are very often financing their educations through a combination of work and loans.

A majority of doctoral students are full-time; 58% according to Choy and Geis (2002), and they secure the lion's share of assistantships. Most assistantships are for full-time, doctoral students. Additionally, doctoral students in the mathematical and natural sciences secure the largest percentage of these assistantships. Funding levels are best for all doctoral students at Doctoral/Research Universities—Extensive (D Amico, 2000). Doctoral students with relatively high paying assistantships are the least likely to borrow large amounts to finance their educations (Choy & Geis, 2002).

Those students seeking a first-professional degree; (e.g., M.D., D.O., J.D., D.D.S., M. Div., etc.) are the most likely to attend full-time, the least likely to work, and the most likely to borrow large amounts of money to finance their educations. Additionally, there are very few opportunities for assistantships compared to other groups of graduate students. In recognition of this, certain first-professional degree students in the medical professions are allowed to borrow higher amounts of federal student loans than any other group of students.

In the current climate, some have asked whether or not the high debt loads many new graduates carry forward from their undergraduate educations might deter many students from entering graduate education. The answers of two, national studies seem to be that it is not a significant factor (Heller, 2001 and Eyerman & Kim, 2000). Using different data sets, the studies agreed on this fact, but found slightly different correlations. Eyerman and Kim (2000) found that there was a slight positive correlation between higher borrowing and graduate school aspirations and attendance; whereas, Heller (2001) found a slight negative correlation between high amounts of borrowing and the likelihood of graduate school enrollment.

Graduate Education in Texas

Texas graduate students, at least doctoral students, are similar to those nationally. According to the Texas Higher Education Coordinating Board (THECB), Texas and the nation peaked in doctoral degrees awarded in the late 1990s and the number is now rising again. U.S. and Texas institutions awarded more doctorates in science and math than other broad disciplines in 2001—approximately 25 percent. Doctoral degrees awarded to women have increased and more women than men receive doctorates in education. However, despite the fact that Hispanics make up 34 percent of the Texas population compared to 13 percent nationally, Hispanics in Texas only received seven percent of the doctoral degrees awarded in 2001 compared to four percent for the U.S. (Texas Higher Education Coordinating Board, 2004). Also, according to THECB (2004), more than one-half of the doctorates awarded were from two non-HSIs, Texas A&M or the University of Texas—Austin.

Financing Graduate Education

Graduate students generally have fewer options for financial aid than do undergraduates. Therefore, a high percentage of them borrow large amounts of money. According to Choy and Geis (2002), nationally in 2000, 53 percent of all graduate students borrowed an average of \$16,728. The amount and likelihood of borrowing were partly due to the type of degree sought and type of institution attended. Students at private institutions borrowed more and more frequently than those at public institutions. Furthermore, students seeking a first-professional degree were most

likely to borrow and to borrow more, followed by master's students and doctoral students respectively. Eighty percent of first-professional degree students borrowed an average of \$22,961 at private institutions compared to 26 percent of doctoral students who borrowed an average of \$10,628 at public institutions (Choy & Geis, 2002).

Graduate students in Texas also borrow at high levels. In general, Texas students borrow more as they take more hours per term—and as they persist in their programs toward graduation. So, at the end of 2001, students who were then listed as less-than-half-time had a median borrower indebtedness (MBI) of \$21,594. Students characterized as half-time had an MBI of \$24,594. Students who were characterized as full-time had an MBI of \$25,648. Students who had graduated by the end of 2001 had an MBI of \$34,471. By the end of 2004, the MBI for graduates and full-time students had changed very little, but for half-time students, it had exceeded that of full-time and graduated students. The MBI for less-than-half-time students had also risen by over \$2,000. This data suggests several things. First, graduate students change status between part-time and full-time over their academic careers. The data also suggests that full-time graduate students are not having to borrow the increased amounts that part-time students are. Both of these findings are consistent with the national data.

Graduate students at Hispanic Serving Institutions (HSIs) have a somewhat different profile than those at other Texas institutions. According to THECB (Paredes 2005) HSIs produce far higher percentages of Hispanic graduate degrees than non-HSI institutions. Students at HSIs also borrow differently than their non-HSI colleagues. Graduate degrees awarded to Hispanics at HSIs range from 76 percent at UT–Pan American to 21 percent at UT–El Paso. This compares favorably to the two largest producers of graduate degrees, UT–Austin and Texas A&M, who awarded 4.5 percent and 2.9 percent of their graduate degrees, respectively, to Hispanics.

Graduate student borrowing at HSIs also differs from graduate student borrowing at other institutions. In 2001, the MBI at non-HSIs was generally higher than at HSIs. However, at non-HSIs in Texas, students who graduated in 2004 had an MBI only about \$200 higher than in 2001, and students who graduated from HSIs in 2004 had an MBI nearly \$4,000 higher than in 2001 (\$30,004 compared to \$26,623.) There were proportional increases in borrowing by every attendance category for HSI graduate students as well. This is distinct from non-HSI borrowers where the MBI decreased over \$1,000 between 2001 and 2004 for full-time students. In only three years, MBI at HSIs reached and surpassed the level for non-HSI students by every attendance type except those who graduated that year. If this trend continues, there is no doubt that graduate students at HSIs will have higher MBIs than non-HSI graduate students in the very near future.

Graduate students are handling repayment of their loans in an excellent fashion. There are no statistically significant differences in how Texas graduate students progress through student loan repayment. Former graduate students from all parts of the state—and from HSIs and non-HSIs—default at a rate between one percent and two percent based on the most recent available data. These rates were measured using TG estimates of the 2003 cohort default rate. This rate compares favorably to the overall cohort default rate for loans guaranteed by TG, which is 6.7 percent. This should not be a surprise. Despite the fact that graduate student MBI was considerably higher than undergraduate MBI, graduate students have already achieved success by receiving their bachelor's degrees. In fiscal year 2004, 71 percent of defaults were by students characterized as freshmen at the time of default. However, only three percent of defaults were by students characterized as graduates of bachelor's degree programs (McMillion, Ramirez, & Webster, 2004).

Conclusions

The facts suggest that to meet the goals of Closing the Gaps, as Commissioner Paredes has suggested, Texas must increase graduate enrollment and graduation at HSIs. To accomplish this we must investigate whether there is sufficient aid and sufficient support for assistantships and fellowships at HSIs. Borrowing patterns at HSIs for graduate students compared to other institutions suggest a funding gap that is increasing, and national studies suggest that graduate students at public institutions borrow less when there are significant other sources of aid available. Those sources of aid tend to be clustered at doctoral extensive institutions, and no Texas HSI is classified as a doctoral extensive institution.

Recent studies indicate that undergraduate borrowing is not a significant factor in determining whether or not students aspire to and enroll in graduate school. Given the increases in undergraduate median borrower indebtedness, and the fact that no study has been made of this issue with a cohort who borrowed after 1998,

researchers should begin examining cohorts of potential graduate students who borrowed after 2001.

References

- Choy, Susan & Geis, Sonya. 2002. Student Financing of Graduate and First-Professional Education, 1999-2000, Profiles of Students in Selected Degree Programs and Their Use of Assistantships, NCES 2002-166. U.S. Department of Education. National Center for Education Statistics. Project Officer: Andrew G. Malizio. Washington, DC
- Eyerman, Therese & Kim, Dongbin. 2000. Comparisons of Undergraduate Borrowing and Its Effects on Graduate School Aspirations and Graduate School Attendance. ERIC document ED 449 745.
- Heller, Donald. 2001. Debts and Decisions: Student Loans and Their Relationship to Graduate School and Career Choice, New Agenda Series [TM], vol. 3, 4. Lumina Foundation for Education. Indianapolis, Indiana.
- Kojaku, Lawrence. 2000. Financial Aid Profile of Graduate Students in Science and Engineering, Working Paper No. 2000-11. U.S. Department of Education. National Center for Education Statistics. Project Officer, Dennis Carroll. Washington, DC.
- McMillion, Robin., Ramirez, Jason., & Webster, Jeff. 2005. State of Student Aid and Higher Education in Texas. Texas Guaranteed Student Loan Corporation. Round Rock, Texas.
- Paredes, Raymund. 2005. Written Testimony of Raymund A. Paredes, Texas Commissioner of Higher Education For the Subcommittee on Select Education of the Committee on Education and the Workforce of the Congress of the United States. Edinburg, Texas.
- Texas Higher Education Coordinating Board. 2004. Doctoral Education In Texas, Part 1: Past Trends And Critical Issues. Austin, Texas. (<http://www.theceb.state.tx.us/UHRI>)

Mr. HINOJOSA. The second is a list of HSIs identified by the College Board and the Hispanic Association of Colleges and Universities that offer postgraduate and first professional degrees.

Chairman TIBERI. Without objection. Thank you.
[The information referred to follows:]

**HSI's with Graduate Programs
(Masters, Doctorates and First Professional Degrees)
2003**

Unit ID	Institution	City	State	ID	Masters Deg. Offered	Doctoral Deg. Offered	First Prof. Deg. Offered
110486	CALIFORNIA STATE UNIVERSITY-BAKERSFIELD	BAKERSFIELD	California	368	1	0	0
110547	CALIFORNIA STATE UNIVERSITY-DOMINGUEZ HILLS	CARSON	California	363	1	0	0
110556	CALIFORNIA STATE UNIVERSITY-FRESNO	FRESNO	California	1935	1	1	0
110565	CALIFORNIA STATE UNIVERSITY-FULLERTON	FULLERTON	California	2059	1	0	0
110592	CALIFORNIA STATE UNIVERSITY-LOS ANGELES	LOS ANGELES	California	976	1	1	0
409698	CALIFORNIA STATE UNIVERSITY-MONTEREY BAY	SEASIDE	California	348	1	0	0
110608	CALIFORNIA STATE UNIVERSITY-NORTHRIDGE	NORTHRIDGE	California	2030	1	0	0
110510	CALIFORNIA STATE UNIVERSITY-SAN BERNARDINO	SAN BERNARDINO	California	364	1	0	0
110495	CALIFORNIA STATE UNIVERSITY-STANISLAUS	TURLOCK	California	2032	1	0	0
115773	HUMPHREYS COLLEGE-STOCKTON	STOCKTON	California	370	0	0	1
119173	MOUNT ST MARY'S COLLEGE	LOS ANGELES	California	1838	1	1	0
120769	PACIFIC OAKS COLLEGE	PASADENA	California	1084	1	0	0
117140	UNIVERSITY OF LA VERNE	LA VERNE	California	879	1	1	1
125763	WHITTIER COLLEGE	WHITTIER	California	901	1	0	1
125897	WOODBURY UNIVERSITY	BURBANK	California	1002	1	0	0
126182	ADAMS STATE COLLEGE	ALAMOSA	Colorado	1855	1	0	0
128106	COLORADO STATE UNIVERSITY-PUEBLO	PUEBLO	Colorado	13	1	0	0
132471	BARRY UNIVERSITY	MIAMI	Florida	421	1	1	1
132842	CARLOS ALBIZU UNIVERSITY-MIAMI CAMPUS	Miami	Florida	1877	1	1	0
133951	FLORIDA INTERNATIONAL UNIVERSITY	MIAMI	Florida	2234	1	1	1
137476	SAINT THOMAS UNIVERSITY	MIAMI	Florida	619	1	0	1
135728	UNIVERSITY OF MIAMI	CORAL GABLES	Florida	922	1	1	1
147776	NORTHEASTERN ILLINOIS UNIVERSITY	CHICAGO	Illinois	1540	1	0	0
185129	NEW JERSEY CITY UNIVERSITY	JERSEY CITY	New Jersey	1869	1	0	0
186432	SAINT PETERS COLLEGE	JERSEY CITY	New Jersey	2068	1	0	0
188146	COLLEGE OF SANTA FE	SANTA FE	New Mexico	2169	1	0	0
188182	COLLEGE OF THE SOUTHWEST	HOBBS	New Mexico	492	1	0	0
187648	EASTERN NEW MEXICO UNIVERSITY-MAIN CAMPUS	PORTALES	New Mexico	1849	1	0	0
187897	NEW MEXICO HIGHLANDS UNIVERSITY	LAS VEGAS	New Mexico	1916	1	0	0
188030	NEW MEXICO STATE UNIVERSITY-MAIN CAMPUS	LAS CRUCES	New Mexico	1915	1	1	0
187985	UNIVERSITY OF NEW MEXICO-MAIN CAMPUS	ALBUQUERQUE	New Mexico	888	1	1	1
188304	WESTERN NEW MEXICO UNIVERSITY	SILVER CITY	New Mexico	1918	1	0	0
189413	BORICUA COLLEGE	NEW YORK	New York	1795	1	0	0
193399	COLLEGE OF MOUNT SAINT VINCENT	BRONX	New York	1712	1	0	0
190557	CUNY CITY COLLEGE	NEW YORK	New York	1707	1	1	0
190600	CUNY JOHN JAY COLLEGE CRIMINAL JUSTICE	NEW YORK	New York	1974	1	0	0
190637	CUNY LEHMAN COLLEGE	BRONX	New York	545	1	0	0
193016	MERCY COLLEGE-MAIN CAMPUS	DOBBS FERRY	New York	582	1	0	0
209241	MOUNT ANGEL SEMINARY	ST BENEDICT	Oregon	1837	1	0	1
241216	ATLANTIC COLLEGE	GUAYNABO	Puerto Rico	2250	1	0	0
241225	BAYAMON CENTRAL UNIVERSITY	BAYAMON	Puerto Rico	1767	1	0	0
241377	CARIBBEAN UNIVERSITY-BAYAMON	BAYAMON	Puerto Rico	663	1	0	0
242635	INTER AMERICAN UNIV OF PUERTO RICO-ARECIBO	ARECIBO	Puerto Rico	831	1	0	0
242699	INTER AMERICAN UNIV OF PUERTO RICO-GUAYAMA	GUAYAMA	Puerto Rico	244	1	0	0
242653	INTER AMERICAN UNIV OF PUERTO RICO-METRO	SAN JUAN	Puerto Rico	1769	1	1	0
242617	INTER AMERICAN UNIV OF PUERTO RICO-SAN GERMAN	SAN GERMAN	Puerto Rico	1391	1	1	0
241410	PONTIFICAL CATHOLIC UNIV OF PUERTO RICO-PONCE	PONCE	Puerto Rico	1387	1	1	1
241191	UNIVERSIDAD ADVENTISTA DE LAS ANTILLAS	MAYAGUEZ	Puerto Rico	798	1	0	0
243346	UNIVERSIDAD DEL ESTE	CAROLINA	Puerto Rico	1771	1	0	0
243601	UNIVERSIDAD DEL TURABO	GURABO	Puerto Rico	664	1	0	0
241739	UNIVERSIDAD METROPOLITANA	CUPEY	Puerto Rico	912	1	0	0
243577	UNIVERSIDAD POLITECNICA DE PUERTO RICO	HATO REY	Puerto Rico	665	1	0	0
243197	UNIVERSITY OF PUERTO RICO-MAYAGUEZ	MAYAGUEZ	Puerto Rico	1388	1	1	0
243203	UNIVER OF PUERTO RICO-MEDICAL SCIENCES CAMPUS	SAN JUAN	Puerto Rico	1393	1	1	1
243221	UNIVERSITY OF PUERTO RICO-RIO PIEDRAS CAMPUS	RIO PIEDRAS	Puerto Rico	1397	1	1	1
243443	UNIVERSITY OF SACRED HEART	SANTURCE	Puerto Rico	1389	1	0	0
227331	OUR LADY OF THE LAKE UNIVERSITY-SAN ANTONIO	SAN ANTONIO	Texas	978	1	1	0
227845	SAINT EDWARD'S UNIVERSITY	AUSTIN	Texas	2022	1	0	0
228149	ST MARYS UNIVERSITY	SAN ANTONIO	Texas	2028	1	1	1
228501	SUL ROSS STATE UNIVERSITY	ALPINE	Texas	1314	1	0	0
226152	TEXAS A & M INTERNATIONAL UNIVERSITY	LAREDO	Texas	2154	1	0	0
224147	TEXAS A & M UNIVERSITY-CORPUS CHRISTI	Corpus Christi	Texas	2155	1	1	0
228705	TEXAS A & M UNIVERSITY-KINGSVILLE	KINGSVILLE	Texas	995	1	1	0
227377	THE UNIVERSITY OF TEXAS AT BROWNSVILLE	BROWNSVILLE	Texas	258	1	0	0
228796	THE UNIVERSITY OF TEXAS AT EL PASO	EL PASO	Texas	2001	1	1	0
228027	THE UNIVERSITY OF TEXAS AT SAN ANTONIO	SAN ANTONIO	Texas	572	1	1	0
228944	THE UNIVERSITY OF TEXAS HEALTH SCIENCE-SAN ANTONIO	SAN ANTONIO	Texas	1042	1	1	1
229018	THE UNIVERSITY OF TEXAS OF THE PERMAN BASIN	Odessa	Texas	569	1	0	0
227368	THE UNIVERSITY OF TEXAS-PAN AMERICAN	EDINBURG	Texas	982	1	1	0
225432	UNIVERSITY OF HOUSTON-DOWNTOWN	HOUSTON	Texas	573	1	0	0
227863	UNIVERSITY OF ST THOMAS	HOUSTON	Texas	703	1	1	1
225627	UNIVERSITY OF THE INCARNATE WORD	SAN ANTONIO	Texas	1045	1	1	0
235422	HERITAGE COLLEGE	TOPPENISH	Washington	369	1	0	1
237118	ALDERSON BROADDUS COLLEGE	PHILIPPI	West Virginia	1959	1	0	0

Total HSI's: 74

Source: HACU Analysis of The College Board 2003 Annual Survey of Colleges

Mr. HINOJOSA. I'd like to ask my—first make a statement and then ask a question of Dr. Tomas Arciniega.

Dr. Arciniega, I know that you have been involved with the California higher education system for many years now. Briefly would you please give us a brief overview of how the fiscal and policy support has evolved in your state since you started—

Mr. HINOJOSA. Sorry. I turned this one off, but I forgot this other one. Let me start my question again.

Would you please give us a brief overview of how the fiscal and policy support has evolved in your state since you started, the changes that have occurred, and your current assessment of progress for HSIs in the California state system.

Dr. ARCINIEGA. Thank you very much for the question. Giving you a complete answer to that would take us till about the middle of next week, but let me respond this way. I think that California, along with all of the Southwestern states that I know of, has been plagued by the ups and downs, mostly downs in the last decade, in the available funding compared to the growing need in higher education, and specifically in 4-year undergraduate as well as graduate and in the community college educational ranks of students.

The reality is that the needs have just quadrupled and expanded so dramatically that there was no way that the diminishing resources, with the problems of state funding and budgeting issues, was going to keep pace with the demand.

In a nutshell, what has happened is that—you know, California has had a very proud history. It was—you know, one of the main reasons I moved to California from Texas was basically the California master plan for higher education. It was, at the time, way ahead of its time in guaranteeing a college education to every eligible student, regardless of background or geographical location, et cetera. And that proud history continued until we got into the major budget crunches that we've been into for particularly the last 2 years.

And the net effect has been that for the first time California has had to go back on its promise to every student that made good on the commitment to prepare themselves and make themselves eligible to attend the state universities in the University of California system and the community colleges in California. For the first time, we've had to turn away students simply because of the lack of adequate funding.

Mr. HINOJOSA. If you will yield—

Dr. ARCINIEGA. So basically that's the most significant problem situation, and it has affected and will be a major issue that will continue to snowball as we move into the next decade.

Mr. HINOJOSA. That response justifies the reason that I used 125 million in the reauthorization level to get started. And probably by the next reauthorization I will be asking for 250,000 new reauthorization level, simply because there are so many students all over the—all over the country, but particularly in states such as California, Texas, Florida, and others.

So I thank you for that explanation, and I will come back in the second round and ask you another question.

Dr. Rivera from Puerto Rico, your initial Title V HSI grant really helped you develop curricular offerings at the undergraduate level. Do you anticipate similar effects for your graduate program should my legislative proposal be adopted by Congress.

Dr. RIVERA. Definitely, because, first of all, the foundation has been laid. Those students—as a result of these projects, we have added undergraduate research as a requirement for every major at the university, and we've added now a requirement of statistics, ap-

plied statistics, in every major in every school in the university. Again, we're focusing on preparing our students for graduate education and we're making that a motto; you know, a statement that we make in every speech. Every time we meet with the students, we tell them, "You're going to go to graduate school. That's why we're forcing you to take statistics and undergraduate research courses."

So definitely what we have received from Title V has laid that foundation. So the process of now developing new master's degree programs and professional degree programs, and at some point in time doctoral programs, is also going to be the essence of the use of those resources.

Mr. HINOJOSA. Well, I agree with you, but you pointed out toward the end of your presentation that you were also concerned about the gap that would occur if we don't hurry up and pass this reauthorization this year, because there is a one or 2-year gap that wouldn't be filled if you break the work in the service that had been done.

I would like to ask the Chairman, can you think of some way in which we can give those HSIs that are facing this gap—if we wait until 2006 to finish the reauthorization, what relief can we give them.

Chairman TIBERI. Well, my immediate thought is maybe talking to Chairman Ralph Regula of the Education Appropriations Subcommittee, and talking to Chairman Boehner if there's any other vehicles that are moving the language in, but that's something that we should definitely pursue this week with both of those individuals.

Mr. HINOJOSA. Well, I appreciate that you've come up with that suggestion that you and I meet with Chairman Regula, but I think that I would like to ask the staff to highlight that concern that was expressed, because we don't want to leave—I don't know how many colleges or HSIs are in that situation, but we've got to address it as soon as we get back.

Dr. RIVERA. I would say probably about 200, close to 200 institutions.

Mr. HINOJOSA. Well, that's what we have, but not all of them will have the end of their four or 5-year period that they have that designation.

Dr. RIVERA. It will be a very large number, because this is the year when the cycle started the second time, which was the peak of that.

Mr. HINOJOSA. I see.

Dr. RIVERA. Again, you know, we're not talking about authorizing more money—

Chairman TIBERI. Right. The challenge is to find—

Dr. RIVERA.—but just allowing the institutions to participate and also be competitive—

Chairman TIBERI. Right. Now—

Mr. HINOJOSA. It's just like when we have a concurrent resolution to keep government funding to keep working. So thank you for bringing that up to our attention.

Chairman TIBERI. Great intention. The key is to find something that will actually move past the House and past the Senate to the

President's desk, and that's why I was thinking an appropriations bill, because that would definitely—that has to get to the President's desk. It's something that we'll work with.

Mr. HINOJOSA. We'll work with you and Dr. Flores and see if we can give you-all some relief.

Dr. Rivera. Thank you.

Mr. HINOJOSA. I'd like to move on quickly to the next presenter, Dr. Parades.

And I want to say thank you for your very clear presentation regarding Hispanics at the graduate level. I listened attentively to every one of the presenters, and I had just one word after the last one, in saying that, wow, what powerful presentations each and every one of you made this afternoon.

I can tell you that last Congress we heard from your board that, while you had laudable goals, Hispanic enrollment at the undergraduate level was way behind. And that concerns me, because here we are trying to move us to the next step, master's and Ph.D.s, when we have so many that have not earned their bachelor's. And so we have a very difficult—a very difficult hurdle to get over, and that is to continue graduating more with bachelors, and still address this acute shortage of master's and Ph.D.s.

Now the postgraduate picture appears just as troublesome. My Federal legislation will alleviate some of the problem, but how will the State of Texas seriously implement plans to overcome the obstacles and close the gap that you pointed out to us.

Dr. PAREDES. Well, there's several ways that the State is trying to deal with these issues. First of all, we just adopted an accountability system in Texas for higher education. Governor Perry required the Texas Higher Education Coordinating Board to develop an accountability system during the past calendar year, 2004. With the strong cooperation of representatives of different campuses, we did actually put an accountability system in place.

We'll now be able to monitor very closely graduation rates at every institution. We'll be able to monitor data such as the number of students that go from undergraduate programs to graduate programs, and we'll be able to monitor the ethnic composition of student performance, or take ethnic composition into consideration in monitoring student performance.

So we'll have much clearer data on the way higher education institutions are performing, and that will allow us to develop interventions as appropriate.

We are now in the process of trying to call more attention to developmental education. We know that students and high school graduates in Texas are often not well prepared to do rigorous college work, so we're working with the K through 12 sector to improve that situation. We're encouraging institutions of higher education to work more closely with K through 12 in vertical teams to deal with this issue.

We've been placing a lot of attention on graduation rates. President Cardenas and President Garcia know that we've been talking a lot about this at the Coordinating Board.

So we're trying to get more students to graduate with baccalaureate degrees. And we're not only trying to get more students to graduate, but we're trying to improve the quality of academic

performance that they have when they graduate so that they will be well prepared to undertake rigorous graduate programs in either the master's, the doctoral, or the professional degree levels.

Mr. HINOJOSA. Dr. Paredes, with all due respect to you and your position, your title, what I'm going to say, take it from someone who is doing it very respectfully. The figures that you gave are shameful, for the State of Texas to have a 4-1/2 percent versus 68 percent of non-Hispanics getting postgraduate degrees. 4-1/2 to 68 doesn't require any more study of accountability. There's a humongous gap that has to be filled, and it can be done with resources.

And the state legislature, the Board of Regents, the board of—the Coordinating Board, everybody, like you and me, who are in positions to make a difference, are just going to have to speak up and say that we are sick and tired of waiting and studying the problem when we know it's 4-1/2 versus 68.

All it takes is what they did here in the Rio Grande Valley the last 8 years; increase the funding from the Federal Government and the state government to be able to bring the unemployment from 21 percent down to 8-1/2 percent, increase the investment in human capital for job training 218 percent, increase the amount of money for our public schools in the GEAR-UP program, as we did the last 5 years.

It doesn't require a scientist to figure it out and stop studying, because all that does is take more time and more time and keep us in the same huge gap.

I think that folks like you and I are going to have to simply speak up and say, "Enough is enough, and let's invest Federal funds and state funds." You do yours and I'll do mine, because the Chairman is hearing it from the pros. California has 90 some HSI—80 HSIs, twice more than the State of Texas.

No question about it, shameful that we have these statistics to put into the record. And I just hope that every one of my Congressmen colleagues will read these reports so that they will pay attention to the Chairman and to me, that we need to just get those appropriations built up again, instead of accepting the 2006 proposals for the budget.

With that, Mr. Chairman, I'm going to yield and wait for the second round, because I think I could keep talking, and I don't want to be disrespectful.

Chairman TIBERI. Dr. Cardenas, what, in your mind, from your expertise, what disciplines do you see show the highest needs for Hispanic Americans with respect to graduate studies.

Dr. CARDENAS. It's very difficult to—we need them across the board. Education faculty can really impact the preparation of teachers, which gets at that K-12 need that Commissioner Parades was talking about.

There are fields in which we have very marked scarcities, and most of those happen to be in the hard sciences, although we have scarcities really—there's no discipline in which we cannot point to a scarcity.

We know that problem-solving, research, the development of knowledge, the generation of new ways of doing things, will come out of interdisciplinary work. That is: the psychologists working

with the computer scientist, working with the engineer, to attack a biochemical problem. I mean, that we know.

So it's—as I said, the scarcities are across the board, but if we are going to inspire those young Hispanic students to go into those fields, I would say that a major investment in the hard sciences would be very much in order.

Chairman TIBERI. Thank you; thank you.

Ms. Chapa.

Ms. CHAPA. Yes, sir.

Chairman TIBERI. What percentage of your peers that you have gone to school with at the undergraduate level and the graduate level would you say work and attend college.

Ms. CHAPA. Everyone that I know works, sir.

Chairman TIBERI. All of them.

Ms. CHAPA. Yes, sir.

Chairman TIBERI. I figured that.

Ms. CHAPA. All throughout, yes, sir.

Chairman TIBERI. Me, too. It's been awhile since I went to college, but when I was in college—and I worked through college and paid my way through college—one of the things that was happening on the campus, and maybe it was just the time, at that time, students, both working-class—students from working-class backgrounds and students from nonworking-class backgrounds—what I mean by that is their parents paid their way—and less so them, but there were some of them, as well, at least at Ohio State, and maybe this was just a phenomenon in Ohio at the time, but one of the things that I'm trying to ask you, if this makes any sense, is there any talk among students, at least when you've been in school at the undergraduate and graduate level, as to why is it so expensive, why college tuition is so expensive; you know, why maybe it's more at one institution than another institution? Do those discussions take place anymore.

Ms. CHAPA. They do. They do, and as Dr. Cardenas has pointed out, this is one of the—how should I put it?—lower-priced universities.

The biggest problem is our geographical area. This is an area where low wages are very, very common. So during your bachelor's degree plan, most of us worked minimum wage jobs, and so you add—you factor that in, and that makes that very difficult.

And of course at the MBA level it's the same, and at the doctoral level, well, of course it gets worse. But definitely it's the demographics. And we're all aware of that, and yet we still—you know, every time we get the bill, it's like, "Oh, my God, this is so much." But we realize that it's really not, in comparison to other places.

Chairman TIBERI. Thank you.

Ms. CHAPA. You're welcome, sir.

Chairman TIBERI. Dr. Parades, one of the issues that came up during debate last year in the Higher Ed Subcommittee, Chairman McKeon Chaired—and continues to Chair, Buck McKeon from California—is the relationships, the relationship between the cost of higher education today versus 20 years ago, and how, at least through testimony, the cost has increased higher than the rate of inflation.

From where you sit, particularly for students who are economically disadvantaged, the first in their family to have an opportunity to go to college, what do you say to them in terms, more of the global perspective, of how we try to balance the cost of educating a student versus allowing that student who's sitting to the right of you to try to get a quality education? Do you struggle with that.

Dr. PAREDES. Well, we struggle with it all the time, Congressman. First of all, we tell students that we're doing all we can to increase student financial support in Texas through state means.

The legislature right now is in session, and it is struggling with how it can increase student financial aid in a tight budget situation. I haven't encountered any member of the state legislature who isn't committed to try to find ways to do that. That means increasing outright to grant money, it means increasing loans, including the zero interest forgivable loans. It means increasing the student work study support.

I also tell students that even if you have to take out a student loan—for example, here in Texas we have something called a Beyond Time loan program that is a forgivable loan under certain conditions, but in the worst possible scenario it's a zero interest loan. And I tell students that even if they have to take out loans, that the benefits down the road in terms of their ability to earn over the life of their careers makes it worthwhile.

I think clearly one of the things we have to do in Texas is we have to help student do the best job possible with financial planning. We know, for example, here in Texas, and this is the case around the country, that students sometimes drop out of college in order to earn income when in fact it would be in their best financial interest to take out a loan and stay in school, because of a lot of different considerations. And by the way you're nodding your head I can tell you understand what I'm saying.

So we have to encourage students to stay in school and get finished as quickly as possible.

We are constantly talking to leaders around the state about the urgent need to increase the number of college graduates. We call particular attention to the issue we're addressing today, the role of Hispanics in higher education, not only in Texas but around the country, and point out that if we don't increase these numbers significantly that the consequences, the dire consequences, will apply to everybody, not just Hispanics, that everybody in Texas will suffer a loss of economic well-being, everybody in Texas will suffer in terms of quality of life issues.

And so we're making it very clear all over the state that it's in everybody's self-interest to promote educational achievement broadly, and Latino education achievement in particular.

Chairman TIBERI. Thank you.

Dr. Rivera, in your written testimony you talk about academic and cultural agreements that you have signed with other institutions, both in the United States and Europe.

Dr. RIVERA. Yes.

Chairman TIBERI. Can you talk about how that benefits the graduate students at your institution.

Dr. RIVERA. Well, right now for example we have made a special agreement with the University of Navarra and Coro Europeo,

which is a European project for graduate students in business, so that our students will be able to go over there and experience one of the most exciting events in this century by the fact that all of those countries that were killing each other just 50 years ago now have a common currency and common constitution and more and more commonalities, but still hold onto their diversity and cultures and languages and many things.

So one of the things we want our students to do is to be able to spend time taking some courses there and studying that whole interaction; the same thing we're doing with a program in Valencia with script writers. Again, communications for Hispanics is very important, and we have one of the few programs, as a Hispanic Serving Institution, I think perhaps one of the few that has just created a master's in script writing. If you don't have a script, you don't have a film, you don't have a documentary, you don't have an educational product. So they have one of the strongest in all of Europe and we've partnered with them to bring some of their resources to Puerto Rico, with the help of a state agency.

But, again, that is a minute program, because most of our students cannot afford to take those opportunities unless they have some sort of support.

Chairman TIBERI. Do you have any agreements with Ohio State yet.

Dr. RIVERA. We haven't, but we would be happy to do one.

Chairman TIBERI. Let's talk afterwards (laughter).

Dr. Arciniega, you mentioned in your written testimony that HSIs frequently lack infrastructure necessary to develop graduate programs.

Other than dollars, in Mr. Hinojosa's bill, what else is there in terms of the obstacles that you see.

Dr. ARCINIEGA. Well, I summarized them. One, for example, is removing the 50 percent low income assurance requirement from the Federal definition of HSIs. That would erase another inequitable component of that Title V definition of HSIs.

The current law requires that at least 25 percent of the full-time equivalent student enrollments must be Hispanic, and 50 percent of those students must also fit Federal low income definitions. This is an additional regulatory burden requiring time-consuming documentation that's not normally gathered, and it's not required of other minority serving institutions, and it really flatly needs to be eliminated. That's a major issue.

And then you've already heard from my colleague here the importance of eliminating the 2-year wait-out period between application for grants. That's critical.

Then there's a request from—that you've had documented a number of different ways to add a new use for Title V of undergraduate grants by allowing the funding of articulation agreements and student support programs to facilitate the transfer of students from 2-year to the 4-year institutions. That's critical, and that's in the request that we've made.

Mr. HINOJOSA. Would the gentleman yield? Mr. Chairman, as a point of clarification, I wish to say that my bill eliminates those hurdles, including the 2-year wait-out period, and much of the leadership on both sides of the aisle have agreed to eliminating

them, because there is no other group, either in historically black colleges and universities, or any other, that has those kinds of requirements as they placed on HSIs. So I do want to clarify that.

Dr. ARCINIEGA. Yes.

Mr. HINOJOSA. The problem is that the 2-year wait-out period is one that Dr. Rivera brought out, and I think I want to go with the recommendation of the Chairman that he and I go visit with the Appropriations Subcommittee Chairman, Regula, and see if we can give you-all some support.

Chairman TIBERI. Yeah. Just to add a bit, there was an attempted remedy at the—the data that you talked about, reducing that, so I don't think that fight is over yet, but it's something that the Committee has tried to work on and I think you'll see us continue to make an effort to omit it, or at least reduce it.

Mr. Hinojosa.

Mr. HINOJOSA. Thank you, Mr. Chairman. I want to say that it's a pleasure to work with you and to see that you understand very clearly the points that these individuals, these presenters, have stated today, and so in an effort to move it and bring it to a close soon, I want to ask Dr. Cardenas a question.

Dr. Cardenas, you've served as a personal mentor for many individuals, and you speak of it as a natural occurrence. However, the hiring of Hispanics throughout the Nation in higher education institutions is extremely low if you factor out HSIs. What can be done to accelerate this hiring nationally, both within HSI institutions of higher learning and non-HSI institutions of higher learning.

Dr. CARDENAS. Well, we're going to have to get them down to South Texas and show them it doesn't hurt.

(Laughter)

The fact of the matter is that, one, we need to increase the numbers. We are—it is a competitive market for high quality Latino faculty. In some fields it is very competitive.

I came to this position in August after serving as dean, and as dean I did the hiring, and it was a tough negotiation. More prestigious and more financially able institutions can logically compete more for those faculty. They may not always want to, but they can.

I want to make one point about the relationship between the current provisions of your bill and that issue. In Texas, all institutions are funded under the same formula. The University of Texas at Austin is funded under the same formula as we are.

Why do they have so much more money than we do? They have much more money than we do because the formula allocates a certain amount per credit hour based on the discipline. So if I get a dollar for a history freshman credit hour, I get nine dollars for a biology freshman credit hour, but I might get three dollars—and I don't remember what the numbers are; Dr. Parades does—but I might get three dollars for a junior level history class.

Chairman TIBERI. This is like Medicare reimbursement.

Dr. CARDENAS. Yeah, it is.

Dr. PAREDES. Worse.

Dr. CARDENAS. But the point is this: we have only two full-fledged doctoral programs. Now, the reimbursement on a doctoral

program in education is about—what is it? Well, let me put it this way.

Dr. PAREDES. 16.

Dr. CARDENAS. It's 16 dollars, OK. Reimbursement on a biology Ph.D. is 27. The University of Texas at Austin has over 200 Ph.D. programs.

Ray, is it over 200?

Dr. PAREDES. No, I don't think it's that many. It's—

Dr. CARDENAS. 150. I'll give them that much. So the money that's coming in from the State is substantially higher, because their emphasis is that the junior—at the graduate level.

Because we're still struggling at the undergraduate level, we're still struggling with retention from freshman to sophomore year, our margin of return from the formula is always significantly lower than other institutions. And most HSIs are in a similar situation. So we don't have the wherewithal to invest in the graduate programs, we don't have the wherewithal to compete for those faculty, and we don't have the wherewithal to build the new programs that would allow us then to compete for that money.

And we also find it much more difficult to compete for the other Federal money that comes into an institution that is the research dollars.

So the answer, Congressman Hinojosa, that you have proposed in terms of providing institutional support as well as individual support is very powerful. We will be able to significantly advance the development of infrastructure to prepare those faculty and to prepare those master students through this bill, if you get enough money authorized, but I don't think you ought to tell them what you're going to ask them for the second time.

Mr. HINOJOSA. You're right about the second time. But on the first one, I think that we're on the right track, because there are four senators who have already pledged their support for that number, because they realize that the number of HSI institutions, the number of students and the potential is so great that it wouldn't be reasonable to just give us some crumbs of 25 or 50 million for an authorization level just to get this law in the books and to become a national policy. We really need to address it full force, and really then go to the appropriators and get the money that is necessary.

Yes.

Dr. ARCINIEGA. In that connection, let me make a special plea for one very important piece of this. I say this as a long time president in the state university ranks. It's the pipeline issue, and Blandie mentioned it. One of the—if I were to, you know, hone in on first things first, as we look to the future, one of the most dramatically obvious issues to us that are working in these vineyards is, you know, the lack of ethnic minority faculties, specifically Hispanic faculty, that—and what a difference it makes when you do, you know, when you are able to identify and bring into the ranks at your institution, and the immediate impact it has with the students that you have coming to your institution.

And if I were to—if I were asked the question, "What would be the top priorities in that arena," I would say math, science, engineering, teacher education.

How do we dramatically increase in geometric proportions the number of Latino faculty, faculties, in those key disciplines? It would make just an incredible difference almost in one decade.

Chairman TIBERI. Isn't the challenge, though, across the country.

Dr. ARCINIEGA. Yes.

Chairman TIBERI. Not just for Latinos—

Dr. ARCINIEGA. Absolutely.

Chairman TIBERI.—but just for any Americans to go into the math and science discipline.

Dr. CARDENAS. Yes.

Chairman TIBERI. Because at Ohio State I know they have struggled with getting professors who speak English who aren't from either India or China. How do we get there.

Dr. ARCINIEGA. The answer to your question is "Yes, but. . ." And the triple underscored "but" has to do with the magnitude of the tremendous difference.

You can point to, yeah, the problems that we have in getting, you know, faculties, period, in those areas, yes.

But when you take a look at that in relation to the problems of HSI—

Chairman TIBERI. So how do you get there?

Dr. ARCINIEGA. How do you get there? There are a number of model programs out there. You've got to fund them.

They've got to be identified. You've got to focus spotlight attention on them, and you've got to support that, and it has to be a combination of state, Federal, and I would say private sector support.

One of the most obvious successful models that we have in the country in that regard that starts at the first part of the pipeline at the undergraduate level is the math, engineering, and science achievement, known as the MESA programs across the country. You now have them in, I think, three or four of the southwestern states, and that's—you know, the success of that program has been proven. But you have to build from there to the pipeline issue at the undergraduate and then at the faculty ranks.

Mr. HINOJOSA. Excuse me, reclaiming my time, I want to say that a month ago the Chairman of the Higher Education Subcommittee, Buck McKeon, was asking that question, "How do we get there?" And he invited five other Members of Congress on that Committee to go visit seven universities in China, and we visited in Beijing and in Shanghai, and the answer to that question was that they had these incubators, like I had never seen before. I mean, they're talking about—the one in Shanghai was 180 million dollar investment, where they had 150 corporations in and around that industrial park, and they were the biggest contributor to the collaborative effort that was being made so that they could produce the engineers and the results that they want to be competitive globally.

And what was also interesting was that a big part of that was research; that all these companies were putting into the till to be sure that there was enough money to be able to bring in somebody, with the idea that instead of having 12 major components to build an automobile, that they could do it with only four components, much faster and more effectively and so forth. It was all re-

searched. And what's interesting was that they had Chinese, Taiwanese and other groups of the Pacific Rim countries.

All of this to say that corporate America is not investing either in the K-12 programs, nor in the higher institutions of what we're talking about here, in the sufficient amount that they could. And just think about the trillions of dollars that they're getting in tax cuts here under this last President Bush's Administration.

And so I think that we need to be thinking about how they open up the faucets and put them into this type of work that you're talking—all of you are talking about.

Dr. PAREDES. I agree.

Mr. HINOJOSA. Chairman, I'm sorry that I took a little bit longer, but I wanted to share that with you because we are facing a giant competitor in China, but they are investing in what we're talking about here, higher education.

Dr. RIVERA. May—

Chairman TIBERI. It's his time.

Mr. HINOJOSA. I'm going to give you just 30 seconds to respond, Dr. Rivera.

Dr. RIVERA. Then I'm just going to say three letters, NSF. Non-Hispanics set aside no particular efforts to award research in our types of institutions.

You've mentioned it ten times: Research, research, research, research. That's what graduate education is all about. We get crumbs.

Mr. HINOJOSA. I think that could be turned around if several of us in the Committee were to recommend that a couple of presidents of HSIs could be named to the board of directors of the National Science Foundation.

Chairman TIBERI. I think you have one in mind in particular.

Mr. HINOJOSA. I do, and I'll bet you have the other one.

We definitely are shy, not only on that board but on corporate boards so that those individuals could tell their boards of directors that they have to invest in higher education and research so that we can compete with the other global competitors.

So with that, Mr. Chairman, I yield back the balance of my time.

Chairman TIBERI. Thank you.

In closing, let me just share with the three of you panelists from Texas, about a year ago the Ohio delegation of Democrats and Republicans were brought together by the higher education community and we were told that we weren't doing as good a job as the Texas delegation was in getting research dollars back to their home state.

So you may not be doing as well as you think, but you're doing better than many others are doing. So my hat's off to you.

This is an ongoing process. I can't tell you how much I've learned today. I'd like to thank the staff, both my staff, the Committee staff, Mr. Hinojosa's staff, for coming today. Dr. Cardenas—

Mr. HINOJOSA. Cardenas.

Chairman TIBERI. Cardenas, thank you. Thank you for your hospitality, your time, your staff's time, this facility, all the witnesses. It has been fabulous. It really has been fabulous.

Final thoughts.

Mr. HINOJOSA. I repeat everything that you said. I agree with it. The hospitality has been wonderful, the attendance has been very good, and I have learned a great deal more today by just listening to everything that you-all have said, and pointing out the concerns and giving us recommendations that we can take back to the Committee, the whole of which, as you know, is made up of 55 Members of Congress representing different regions of the country with different makeup of constituents, and everyone trying, of course, to represent them as best as they can.

But thank goodness that they have—that they have listened to some of the recommendations that I have brought from South Texas, and with the help now of our Chairman, I think that it's going to raise this to a higher level and that we will be successful in getting this legislation passed.

And last, Mr. Chairman, the issue that you had in the field hearing in Ohio State University of international studies is one that is of great interest to us in the Latino community, and I bring that up because I learned that Ohio State University produces many, many graduates that go on to serve in the Federal Government in the State Department all over the world. They went and brought from the University of Texas in Austin a professor, a Hispanic professor, to help them on this program, and they have one of the most successful Latino—schools of Latino studies, international studies, in that university, with 60,000 total student enrollment, and that one department is getting about 10 million from Title IV funding available for international studies.

And if I were to ask Dr. Cardenas how much we're getting from Title IV, I think it would be quite low compared to Ohio State. So we're going to invite Ohio State to become partners with us and other HSIs in Texas so that we can introduce that career path and opportunity to our bilingual students who already have command of two languages. And that's what is required in that particular program, except that they go beyond that. Most of them have three to five languages that they master.

Dr. CARDENAS. We would be delighted to partner and to welcome both of you back when we receive our first two million in about 2 years.

Mr. HINOJOSA. Good. Thank you, Mr. Chairman.

Chairman TIBERI. Thank you, Mr. Hinojosa. Thank you very much for inviting me down to your district. I really have learned a lot from all of you, and I really appreciate your willingness to help educate me. He doesn't need as much education. He's educating us every day in Washington, but thank you so much.

If there is no further business before the Subcommittee, the Subcommittee stands adjourned.

[Whereupon, the Subcommittee was adjourned.]