HB 1640

Establishing a pharmacy school at Texas A&M University-Kingsville

Carnegie Classification Institutions of Higher Education

- *Doctoral/Research Extensive*
- *Doctoral/Research Intensive*
- *Master's Comprehensive I*
- *Master's Comprehensive II*
- *Baccalaureate - Liberal Arts*
- *Baccalaureate - General*

Carnegie Classification

South Texas Institutions of Higher Education

Classification	Institution
Doctoral/Research Extensive	None
Doctoral/Research Intensive	Texas A&M University-Kingsville
Master's Comprehensive I	TAMIU, TAMU-CC, UTB, UTPA, UTSA, St. Mary's, UIW
Master's Comprehensive II	None

Do we need a new pharmacy school in South Texas?

- TWC projects 430 job openings for pharmacists per year until 2008
- Four state pharmacy schools are producing 315 pharmacists per year
- State Ratio-79.6 per 100,000
- South Texas Ratio-55.8 per 100,000
- "Pharmacist can write their own ticket" , USA Today, March 15, 2001

Will a new pharmacy school address this shortage?

- South Texas community colleges & universities have approximately 200 students in the pre-pharmacy pipeline

- Studies show that students will practice their chosen profession in the geographic region where they completed their academic studies

- Geographic accessibility will enable South Texas students to consider the pharmacy profession

Does TAMU-Kingsville have the foundation to support a pharmacy school?

- TAMU-Kingsville can, at present, provide 5 semesters of the 12 semester PharmD curriculum with our current course offerings

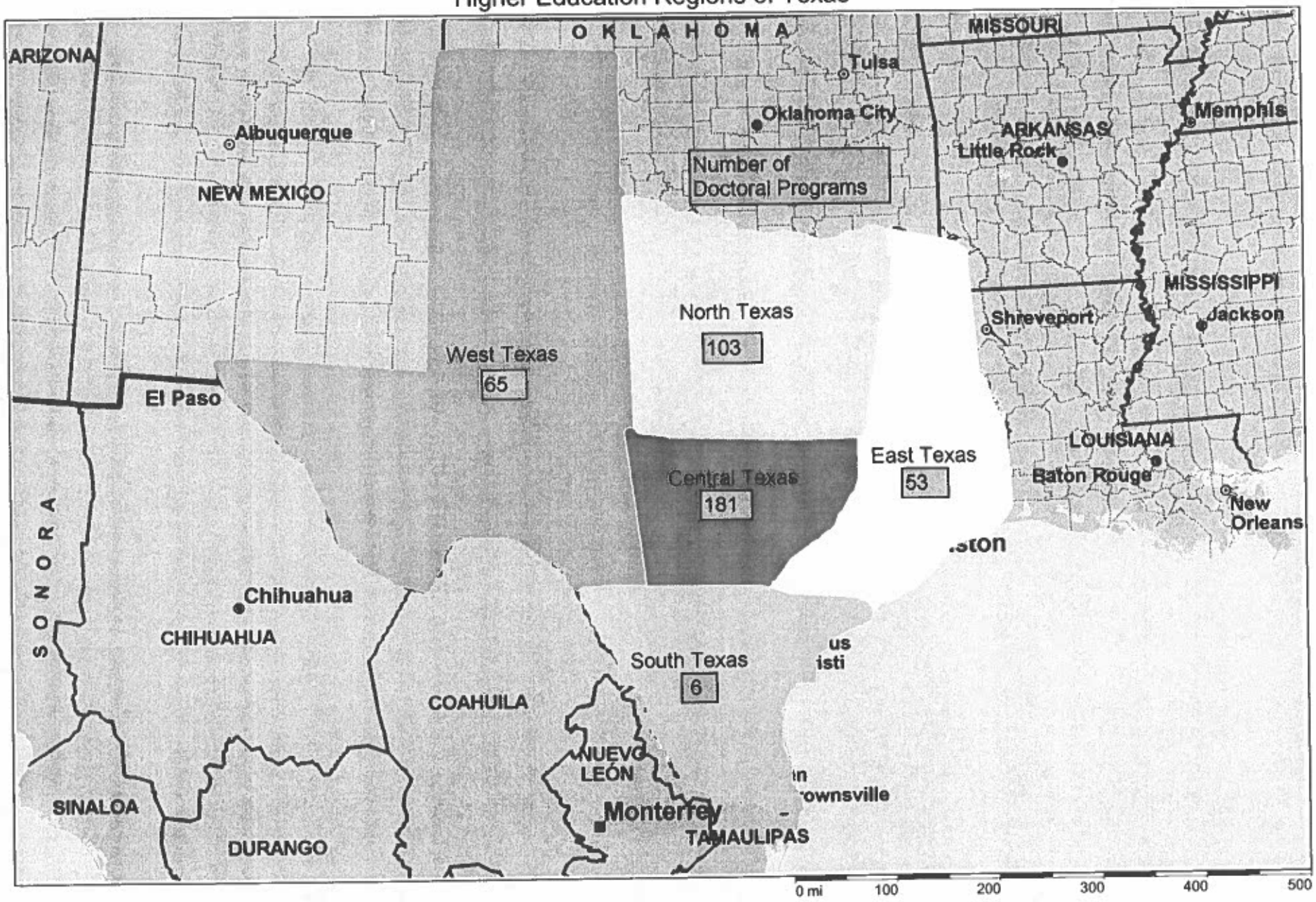
- TAMU-Kingsville has strong programs in Chemistry(ACS approved program) and Biology with over 500 undergraduate majors

- TAMU-Kingsville has established research partnerships with the pharmaceutical industry

Faculty Recruitment

- Over the past two years, new faculty have been brought in at competitive, market-driven salaries

Higher Education Regions of Texas



REGIONAL COMPARISION
FACULTY SALARIES
FY 2000

INSTITUTIONS	DOCTORAL PROGRAMS	NUMBER OF FACULTY*	AVERAGE SALARIES
WEST			
West Texas A&M University		150	$47,569
Texas Tech University	56	801	$61,888
Angelo State University		153	$50,433
Sul Ross State University		71	$53,174
Sul Ross State University Rio Grande College		21	$47,429
The University of Texas at El Paso	9	386	$52,944
The University of Texas of the Permian Basinin		70	$49,164
REGIONAL	65	1,652	$56,340
NORTH			
The University of Texas at Dallas	12	250	$72,420
The University of Texas at Arlington	20	499	$58,851
Tarleton State University	1	146	$48,809
Texas A&M University-Commerce	9	167	$52,578
Midwestern State University		133	$53,187
University of North Texas	44	647	$58,725
Texas Woman's University	20	284	$50,288
REGIONAL	106	2,126	$57,728
EAST			
The University of Texas at Tyler		121	$50,654
Texas A&M University at Galveston		36	$55,674
Prairie View A&M University		161	$46,230
Texas A&M University-Texarkana		25	$56,009
University of Houston	38	818	$66,751
University of Houston-Clear Lake		166	$60,546
University of Houston-Downtown		155	$48,676
University of Houston-Victoria		32	$52,732
Stephen F. Austin State University	2	352	$48,425
Texas Southern University	4	213	$48,965
Lamar University-Beaumont	6	231	$49,996
Sam Houston State University	3	317	$51,961
REGIONAL	53	2,627	$55,713
CENTRAL			
The University of Texas at Austin	90	1,616	$74,150
Southwest Texas State University	2	514	$53,187
The University of Texas at San Antonio	3	372	$55,942
Texas A&M University	86	1,554	$70,192
REGIONAL	181	4,056	$68,307
SOUTH			
The University of Texas-Pan American	2	275	$52,819
The University of Texas at Brownsville		104	$48,582
Texas A&M University-Corpus Christi	1	191	$51,033
Texas A&M University-Kingsville	3	214	$48,536
Texas A&M International University		104	$50,629
REGIONAL	6	888	$50,650
STATE			
STATE	**411**	**11,349**	**$60,286**

*Faculty numbers and average salaries for top three Ranks

Data from: **Average Faculty Salary Reported on CBM008, Universities FY2000**
http://www.thecb.state.tx.us/divisions/finance/finance.htm

SUBJECT: Establishing a pharmacy school at Texas A&M University-Kingsville

COMMITTEE: Higher Education — committee substitute recommended

VOTE: 7 ayes — Rangel, F. Brown, Farabee, Goolsby, J. Jones, Uher, West

0 nays

2 absent — Morrison, E. Reyna

WITNESSES: For — None

Against — None

On — Dr. Don W. Brown, Texas Higher Education Coordinating Board; Dr. Mauro E. Castro and Marc Cisneros, Texas A&M University-Kingsville

DIGEST: CSHB 1640 would allow the board of regents of the Texas A&M University System to establish a school of pharmacy at Texas A&M University-Kingsville (TAMU-K). The board would be permitted to prescribe courses leading to degrees offered by other leading American pharmacy schools and award those degrees.

The Texas Higher Education Coordinating Board (THECB) would have to prepare an impact statement examining the initial implementation. The statement would be delivered to the board of regents and to the chair of the standing committee of each house of the Legislature with primary jurisdiction over higher education.

The bill would take effect September 1, 2001.

SUPPORTERS SAY: Texas has a shortage of pharmacists that is even more acute in the border region. CSHB 1640 would help alleviate the Texas pharmacist shortage. A 2000 joint report by the Texas Department of Health and THECB, *Texas-Mexico Border Health Education Needs: A Report to the 77th Legislature*,

indicated that the border region has a population-to-pharmacist ratio of 1,770:1, which is 32 percent higher than the statewide ratio. In May 2000, Texas pharmacy schools reported 315 Doctor of Pharmacy ("Pharm. D") graduates. Projected increases in the number of graduates are not expected to meet the state's demand for pharmacists, anticipated by the Texas Workforce Commission to be 430 job openings per year through 2008.

The difficulty in recruiting and retaining pharmacists and a decrease in the number of pharmacy school graduates in Texas contribute to the pharmacist shortage. Texas has only four pharmacy schools offering the six-year Pharm. D degree required to obtain a license and practice pharmacy: University of Texas at Austin, Texas Southern University, University of Houston, and Texas Tech University Health Sciences Center at Amarillo.

The shortage of pharmacists is particularly acute in the border region, where continued rapid population growth is anticipated. However, there currently are no public pharmacy schools in the border region, though several schools offer a pre-pharmacy program to prepare students for pharmacy school. A school offering the Pharm. D degree would allow students in the border region to attend pharmacy school closer to home. The pharmacy school would be the first professional school in the border region.

TAMU-K would be able to fill a Pharm. D class. In addition to the students enrolled in pre-pharmacy programs, the border region has numerous students pursuing an education in chemistry, biology, or another science field who have been identified as likely candidates for pharmacy school. This is similar to future medical school students, some of whom pursue a pre-med degree, and some of whom pursue other studies prior to entering medical school. A pharmacy school at TAMU-K would draw students from inside and outside of the border region, just as the other Texas pharmacy schools currently do.

TAMU-K has the experience necessary to create a quality pharmacy school. The university has been in operation since the 1920s. It currently offers a range of graduate programs, including an engineering school. While the average faculty salary is comparatively low, TAMU-K realizes that it would

need to pay higher salaries to attract top pharmacy faculty. The chemistry and biology departments have strong faculty and recently have recruited three new faculty members. TAMU-K currently has a well developed pre-pharmacy curriculum, offering the two years of pre-pharmacy courses required for a Pharm. D. The next three years of pharmacy education focus on didactic education, including basic biomedical sciences, basic pharmaceutical sciences, preclinical pharmacy sciences, and advanced general education courses. TAMU-K's current course offerings easily could be tailored to address these needs, as they are focused in biomedical sciences.

TAMU-K would be able to arrange a sufficient number of final year precepts, which are clinical placements that expose students to aspects of pharmacy practice. Students generally spend three months in a retail setting, three months in a hospital, and three months in a specialized placement. Each placement must be supervised by a pharmacist who is also licensed to be a preceptor. TAMU-K has received more than 20 commitments from pharmacists licensed as preceptors who would be willing to obtain a license to serve as a preceptor for TAMU-K. Many of these commitments are from border region pharmacies, hospitals, and medical offices, which would enable TAMU-K students to remain close to TAMU-K while in their precept year.

Local placements would assist many students financially, could help students to find employment after they receive the Pharm. D. degree, and would help students to develop a professional network in the border region. This also could benefit the border region, because current pharmacists note that pharmacy students often remain in the area near their pharmacy school or precept after graduation.

OPPONENTS SAY:

CSHB 1640 would establish an expensive new pharmacy school at TAMU-K even though there may not be enough pharmacy-oriented students currently at TAMU-K to support such a school. Also, the average faculty salary at TAMU-K is relatively low, so the state would need to appropriate sufficient salary funds to attract high quality faculty. Finally, TAMU-K may have

difficulty establishing a sufficient number and variety of clinical sites for precepts for pharmacy students.

NOTES:

The committee substitute would authorize the board to establish a pharmacy school. The bill as filed would have required the board to establish a pharmacy school. The substitute also removed a provision from the bill as

filed that would have made establishment of the pharmacy school contingent on legislative appropriation of money for that purpose.

According to the fiscal note, establishing a pharmacy school at TAMU-K would cost $4,960,558 in fiscal 2003-04, with costs in fiscal 2004 of $,4,305,279, $4,555,279 in fiscal 2005, and $6,961,349 in fiscal 2006.

The Art. 11 "wish list" in the Senate-passed version of SB 1 by Ellis, the general appropriations bill for fiscal 2002-03, includes $350,000 for start-up funding to begin curriculum design and the accreditation process for a school of pharmacy at TAMU-K, contingent on enactment of legislation establishing the school.

- ❑ Population to Provider Ratio:
  - Texas - there are 1,339 persons for each pharmacists
  - South Texas - there are 1,770
  - Some South Texas counties are as high as 7,715 persons to each pharmacists (Starr County in Rep. Rangel's district)

- ❑ The states' other pharmacy schools do not get their students from just their universities, but rather rely on a pool of students from surrounding areas. TAMUK identified over 200 students who were registered as pre-pharmacy majors from students south of Bexar county. The students identified are currently attending UT Pan Am, TAMUK, Del Mar College, Palo Alto College, St. Phillips College and UT Brownsville to name just a few. Again, these are students who have been identified as Pharmacy majors and does not even include biology or chemistry majors that tend to seek a pharmacy degree so the pool of students is expected to be much higher; and

- ❑ Licensed preceptors are critical to ensure that TAMUK pharmacy students have a well rounded training experience and are exposed to different specialties. There are currently 257 licensed preceptors in the south Texas counties including Bexar (source: Tx State Bd. of Pharmacy). To date, TAMUK has received approximately 30 written commitment from pharmacists in Corpus Christi, Kingsville, Alice, Robstown and Port Arthur who are willing to become licensed preceptors to assist the university in making sure the students have various training in different areas such as retail, nursing pediatrics and hospitals.

South Texas Pre-Pharmacy Students from:

Pan American
Texas A&M University – Kingsville
Del Mar College
Palo Alto
St. Phillips College
Northwest Vista

Interesting article.

New York Times August 26, 2001

Unfilled Jobs in Pharmacies Raise Fears of Drug Errors

By THE NEW YORK TIMES

WASHINGTON, Aug. 25 — As demand for prescription drugs rises, pharmacies in the United States face a shortage of trained professionals, increasing the risk of improper medication, pharmacists and health care experts say.

About 6,500, or 6 percent, of the pharmacist jobs at chain pharmacies are unfilled, says Phillip L. Schneider, a vice president at the National Association of Chain Drug Stores. That is an increase of almost 4,000 since February 1998. In hospitals, about 21 percent, or 12,600, of the pharmacist jobs are unfilled, according to a survey in June by the American Hospital Association.

To fill the vacancies, pharmacies are offering higher salaries. From March to September last year, the average starting salary for a hospital pharmacist with little or no experience jumped to $60,740 from $56,000, an increase of 8.5 percent, according to the Department of Health and Human Services.

Despite the rising salaries, pharmacists say they expect the shortage to get worse in the next few years. The main concern is that errors will increase as pharmacists become increasingly overworked.

"The pharmacist shortage is a prescription for increasing medication errors," said Mary Anne Koda-Kimble, dean of the School of Pharmacy at the University of California in San Francisco.

Another concern is that the shortage may cause pharmacies to pull out of some areas, particularly rural areas. Some have already begun cutting hours and eliminating weekend service.

Medication errors cost the health care system more than $177 billion last year, up from $77 billion in 1995, according to the Journal of the American Pharmaceutical Association. And the Health and Human Services Department says that errors also cause more than 7,000 deaths a year.

But, said Carmen Catizone, the executive director of the National Association of Boards of Pharmacy, which represents state pharmacy boards and works to strengthen safety standards, it is very difficult to determine how many of the errors are caused by pharmacists.

"When medication errors occur in pharmacies," Mr. Catizone, said, "because of the liability, we don't get the information."

He said that despite persistent lobbying efforts by his organization, only one state, North Carolina, had passed a law requiring pharmacies to report medication errors.

The shortage of pharmacists also hinders their ability to catch errors made by others. "The pharmacist often represents the last safety net," Dr. Koda-Kimble said.

The shortage has been caused largely by increasing demand for prescription drugs in the last decade or so as the population has aged and health care plans offering prescription drug coverage have expanded.

In 1990, 2 billion prescriptions were filled in the United States. By last year, the number had jumped to 3.15 billion, Mr. Schneider said.

As the demand for pharmacists rose in the 1990's, pharmacy school enrollments dropped every year beginning in 1994, said Will Lang, a spokesman for the American Association of Colleges of Pharmacy. Many licensed pharmacists were also lured away to jobs produced during the decade's economic expansion.

The number of pharmacists has risen slightly, to about 196,000 today from almost 181,000 in 1995, according to the Department of Health and Human Services. But the growth has not been nearly enough.

The increased demand for drugs has meant more administrative work for pharmacists, who on average spend as much as 20 percent of their making sure prescriptions are covered by health plans and explaining limitations to patients.

"Pharmacists need to be able to spend less time explaining insurance plans and more time explaining medication," said Susan Winckler, a policy director at the American Pharmaceutical Association.

Congress has taken notice of the pharmacist shortage. Legislation has been introduced in the House to help broaden enrollment at the 83 pharmacy schools. But some say that much more must be done.

"Major systematic changes will be needed," Dr. Koda-Kimble said, or "the pharmacist shortage is likely to become more acute."

February 20, 2001

PHARMACIST SUPPLY AND PHARMACY EDUCATION IN TEXAS

1. Does the State need more pharmacists?

Texas appears to be facing a shortage of pharmacists. A December 2000 report of the U.S. Department of Health and Human Services (HRSA) shows that Texas ranks 44th among the 50 states in the number of pharmacists per 100,0000 population. While this ranking is a concern, it is also consistent with the state's rankings in other critical, health-related occupations. In the same report, Texas is ranked 45th in registered nurses, 41st in dentists, and 40th in physicians per 100,000 population.

The distribution of pharmacists by region in the state, is depicted in the following table (regions are ordered by lowest ratio to highest ratio of pharmacists per population):

Pharmacists Per 100,000 Population by Texas Region

Region	Ratio
Upper Rio Grande (includes El Paso Co.)	41.9
West Texas (includes Ector Co.)	57.7
* South Texas (includes. Bexar, Cameron, Hidalgo, Nueces, Kleberg, Webb cos.)	65.6
Southeast (includes Jefferson Co.)	72.1
Upper East Texas (includes Smith Co.)	78.1
Metroplex (includes Dallas and Tarrant cos.)	82.0
Northwest Texas (includes Wichita and Taylor cos.)	83.7
Central Texas (includes Travis Co.)	88.0
Gulf Coast (includes Harris Co.)	91.7
High Plains (includes Lubbock Co.)	98.8

Source: Texas State Board of Pharmacy, September 2000.

* If Bexar County numbers were to be eliminated from the total, the ratio for the South Texas region would be 55.8 pharmacists per 100,000 population.

Another HRSA study identified some of the causes for the national shortage of pharmacists, including:

- Increased use of a wide range of prescription medications (in part due to an aging population);
- Increased access to health care and more health care providers authorized to prescribe medications;
- The requirement in pharmacy education for a Doctor of Pharmacy degree, the new standard for certification and licensing, which lengthens the education program and increases the amount of training in clinical practice; and
- Strong competition for pharmacists trained at the residency or fellowship level, with schools of pharmacy, managed care organizations, pharmaceutical corporations and hospitals all competing for these pharmacists, resulting in sector shortages especially for schools and hospitals less able to compete economically.

In the same study, HRSA reported proposals for addressing the shortage, including using more technicians to perform repetitive manual tasks commonly performed by pharmacists, greater use of automation to increase efficiency, and streamlining administrative tasks required by health plans and insurers.

2. Do we need a new pharmacy school?

Texas has four pharmacy schools which offer the six-year Doctor of Pharmacy (Pharm.D) degree: The University of Texas at Austin, Texas Southern University, University of Houston, and Texas Tech University Health Sciences Center at its facilities in Amarillo.

Establishing a new pharmacy school would be the most expensive of a number of possible solutions for relieving the shortage of pharmacists in the state. The Coordinating Board estimates that a new six-year pharmacy school (including the construction of a pharmacy building) would cost between $20.7 million and $21.3 million over a five-year period. While cost may be a primary consideration, other factors need to be considered:

- With the lag time in graduating pharmacy students from a new school (a minimum of six years), the Legislature would need to weigh the costs of the new school against possible changes in pharmacy practice that may affect the long-term demand for pharmacists. E.g., Would Texas continue to need additional graduates in 2010 given the atmosphere of proposed health care reform? For example, proposals that change the scope of pharmacist practice and the dispensing of prescription drugs may relieve some of the shortage problem.

- The Legislature also would need to consider vocational trends and the interests of incoming college students. Applications have dropped at two of the four existing pharmacy schools in 2000. If total student enrollment does not grow, a new school would not bring about an increase in graduates among five schools.

In the context of those concerns, some alternatives for meeting the need for pharmacists in Texas include the following:

- Increase the enrollment capacity of existing schools;

- Provide for existing schools to locate additional clinical training sites in critically under-served areas of the state.

- Develop a new joint or cooperative pharmacy education program between an institution located in an underserved area of the state and an existing pharmacy school;
  Under this cooperative model, the first two-years of the professional program are taught at the existing pharmacy school and the second two years, emphasizing clinical training, are taught at the institution located in the underserved area. Examples of existing cooperative programs: The University of Texas at Austin and The University of Texas Health Science Center at San Antonio and The University of Texas at Austin and the University of Texas at El Paso.

- Develop a new cooperative pharmacy education program between an institution located in an underserved area of the state and a new pharmacy school;
  This cooperative model would function similarly to the option described above but would capitalize on existing science and health education resources of an affiliated institution. Possible Example: Texas A&M University System Health Science Center and another Texas A&M University component.

College Student (SA)

- Establish a loan forgiveness program or other incentive program that might attract Texas and out-of-state pharmacy graduates to critically underserved areas of the state;

- Fund the Roberta High Memorial Pharmacist Residency Program;
  This unfunded program was established by the 77th Legislature to support graduate pharmacy education and resident pharmacists. Funding could be targeted for new positions at hospitals and community pharmacy sites in underserved areas.

- Promote measures through professional development or legislation that would eliminate certain administrative and non-professional tasks that would allow pharmacists to focus on tasks they alone are authorized to do. Proposals such as using more technicians for repetitive tasks and expanding automated services could reduce the workload of pharmacists and indirectly relieve the shortage problem. (HRSA reported that retail prescriptions in the United States rose by 44 percent between 1992 and 1999; the estimated annual number of prescriptions filled by each retail pharmacist grew by 32 percent for this same seven year period.)

3. Will a new pharmacy school address the shortage?

The Texas Workforce Commission projects that the state will have 430 job openings for pharmacists per year from 1998 to 2008. In recent years, the pharmacy schools have reported declining graduation rates as they made the transition from the five-year degree program to the clinical-intensive, six-year degree program. In May 2000, graduation numbers took an upward turn with the four pharmacy schools reporting 315 graduates. That total includes the first graduating class of 52 students from Texas Tech University Health Sciences Center (TTUHSC). While three of the four schools do not report retention rates of their graduates, TTUHCS estimated that 95 percent of its 2000 graduates would be licensed in the state two years after receiving their degrees.

The number of graduates appears to help meet the demand for pharmacists through 2008, but does not necessarily resolve the inequitable distribution of pharmacists in the state. Some of the schools have recently reported new initiatives to address the problem. Of the four colleges, The University of Texas at Austin (UT-Austin) has been the most active in the Texas-Mexico Border region, offering a joint pharmacy degree with The University of Texas Health Science Center at San Antonio for over 30 years, and since 1990, partnering with local practitioners in more than eight cities to train pharmacy students in community-based settings. In 1997, UT-Austin also began a cooperative program with The University of Texas at El Paso (UTEP). The model for that cooperative program is comprised of two years of pre-pharmacy instruction at UTEP, two-years of pharmacy instruction at UT-Austin, and two final years of distance education from UT-Austin with on-site training and internships in El Paso.

The University of Texas-Pan American (UT-PA) and UT-Austin would like to use the UT-Austin/UTEP model for a similar program in South Texas. For the 2002-03 biennium, UT-PA has requested $2 million in special item funding to develop an Edinburg facility that is expected to accommodate 72 students.

Texas Tech University Health Sciences Center also is expanding its clinical training to the Dallas area to access additional clinical placement opportunities and to offset professional shortages in that region.

4. Does Texas A&M University-Kingsville have the foundation in place to support a pharmacy school?

Texas A&M University-Kingsville (TAMUK) offers a diverse offering of degree programs with particular strengthens in agriculture, education, engineering and business. Degree offerings, and enrollment and graduation numbers in areas most related to pharmacy education are relatively low. The following table summarizes key information from data reported by the institution for fall 1999:

Number of Declared Majors and Graduates by Related Degree Program

Degree Program	Declared Majors	Bachelor's Degrees Awarded	Master's Degrees Awarded
Physical Sciences			
Biology	352	30	4
Chemistry	30	5	2
Physics	7	2	N/A
Health Sciences			
Speech Pathology/ Audiology	70	21	N/A
Health Studies	13	2	N/A
Medical Lab Tech	2	0	N/A
Total, Institution-wide	5,832	955	297

Source: Institution data reported by TAMUK to the Coordinating Board, fall 1999.

The number of declared majors and graduates from related programs suggests that the institution does not have an adequate internal pool of potential pharmacy students. It would need to attract new students or students from other institutions.

The numbers also suggest that the institution would require significant investments in facilities, faculty, and library resources to support a pharmacy school. The Coordinating Board's campus planning inventory indicates the following science facilities on the Kingsville campus: the Nierman Science Hall, (38,000 square feet) built in 1938; and the Lon C. Hill Hall, (24,000 square feet) built in 1960. The campus also offers the Kleberg Engineering Building (41,000 square feet) as a possible site for a future pharmacy school. It was built in 1950 and is scheduled to be vacated in August 2001 with the completion on a new engineering building. A similar proposal to expand and renovate a 42,000 square foot building for pharmacy education was estimated to cost $8 million in January 2000.

Faculty recruitment also would be a factor in the success of a new program. The Board's *1999 Statistical Report* shows that the average faculty salary of $45,076 at Texas A&M University-Kingsville is the lowest among the nine four-year institutions in the Texas-Mexico Border Region. With competition for pharmacists in the marketplace and among other pharmacy schools, TAMUK would need access to additional funds to initially recruit, and to sustain pharmacy faculty until formula income became adequate.

Finally, TAMUK would need a sufficient number and variety of clinical sites in South Texas to adequately train pharmacy students. All of the state's colleges have had some difficulty establishing clinical sites for their students. Texas Tech University Health Sciences Center, for example, has had a significant problem in the Lubbock and Amarillo area and has expanded its clinical activities to the Dallas area.