

# Health Professions Workforce

## For the Health of Texas

February 28, 2011

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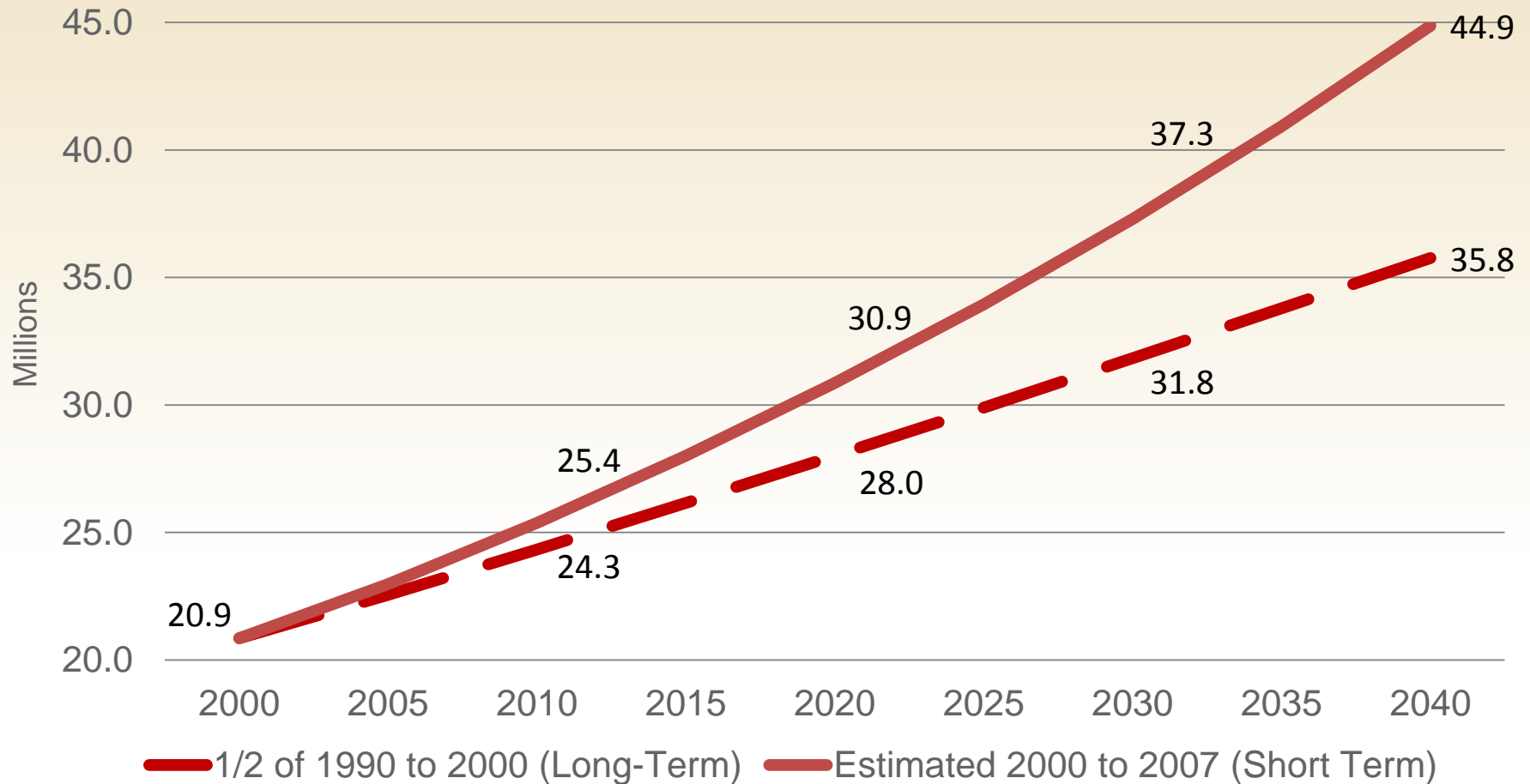
# Past and Current Workforce Issues

- Data, Needs Assessment and Planning
- Shortages and Maldistribution
- Diversity and Cultural Competency
- Aging of the Workforce
- Specific Shortages / Special Programs
- Technology, Telemedicine and Electronic Records
- Recruitment of Students and Providers
- Educational Models for the Future
- Border Health Issues
- Addressing Health Disparities / Chronic Diseases
- Access to Health Care
- Education and Prevention
- Scope of Practice Issues

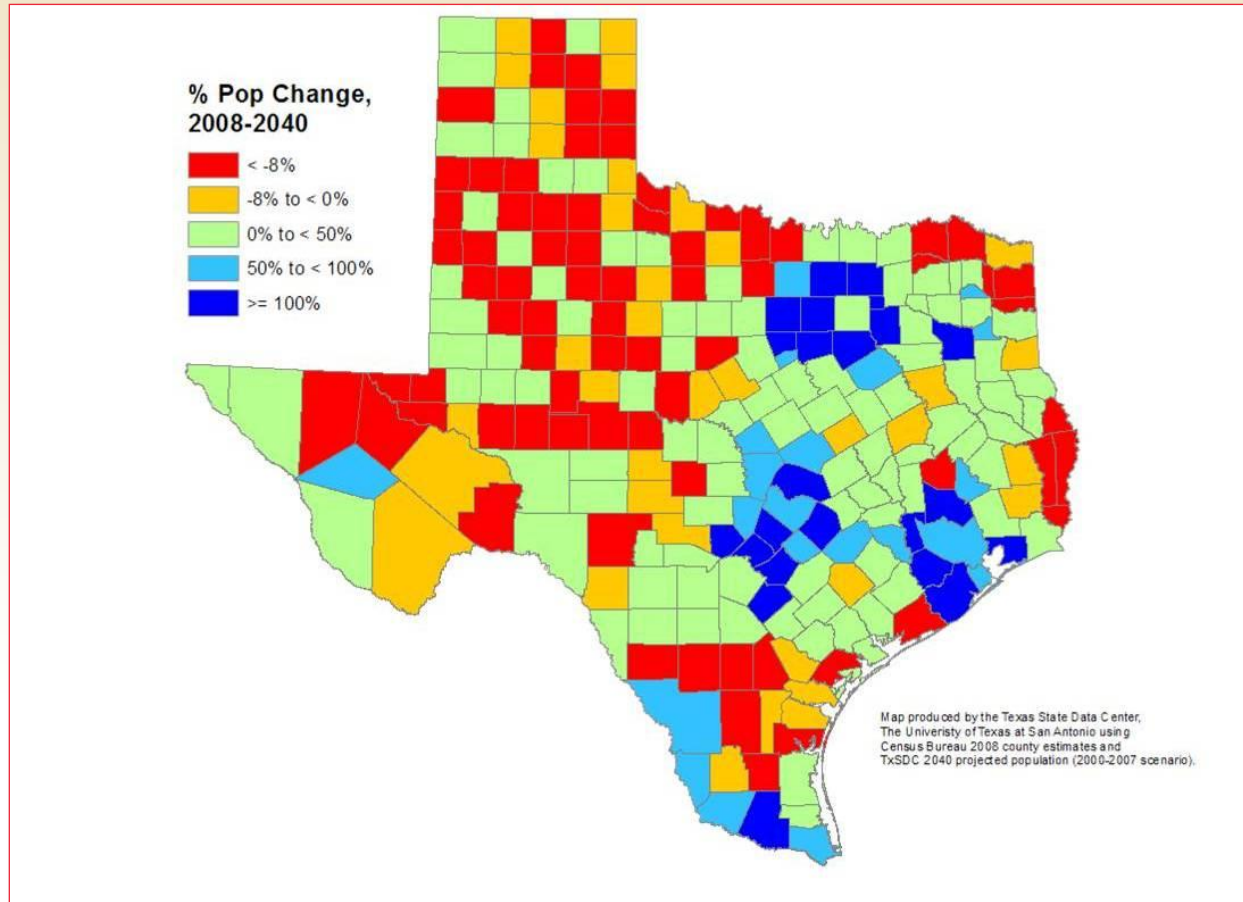
# Specific Shortages and Special Programs

- Mental Health Professionals
- Dentists
- Pharmacists
- Mid-wives
- Clinical Laboratory Scientists
- Radiology Technologists
- Geneticists
- Physical Therapists
- Physician Assistants
- Pediatric Specialists
- Gerontologists
- Public Health Professionals

# Projected Population of Texas to 2040



# Projected Percent Change in Total Population Texas Counties (2008-2040)



# Population Trends

## Implications for Health Care Demand

- Rapid Growth Rate
- Geographic Shifts
- Shifts in Ethnic Composition (Increase in Hispanics)
- Age of the Population (youth and longevity)
- Increases in Morbidity

# Sources of Population Growth

2008 to 2009

+ Births: +410,000

- Deaths: -164,000

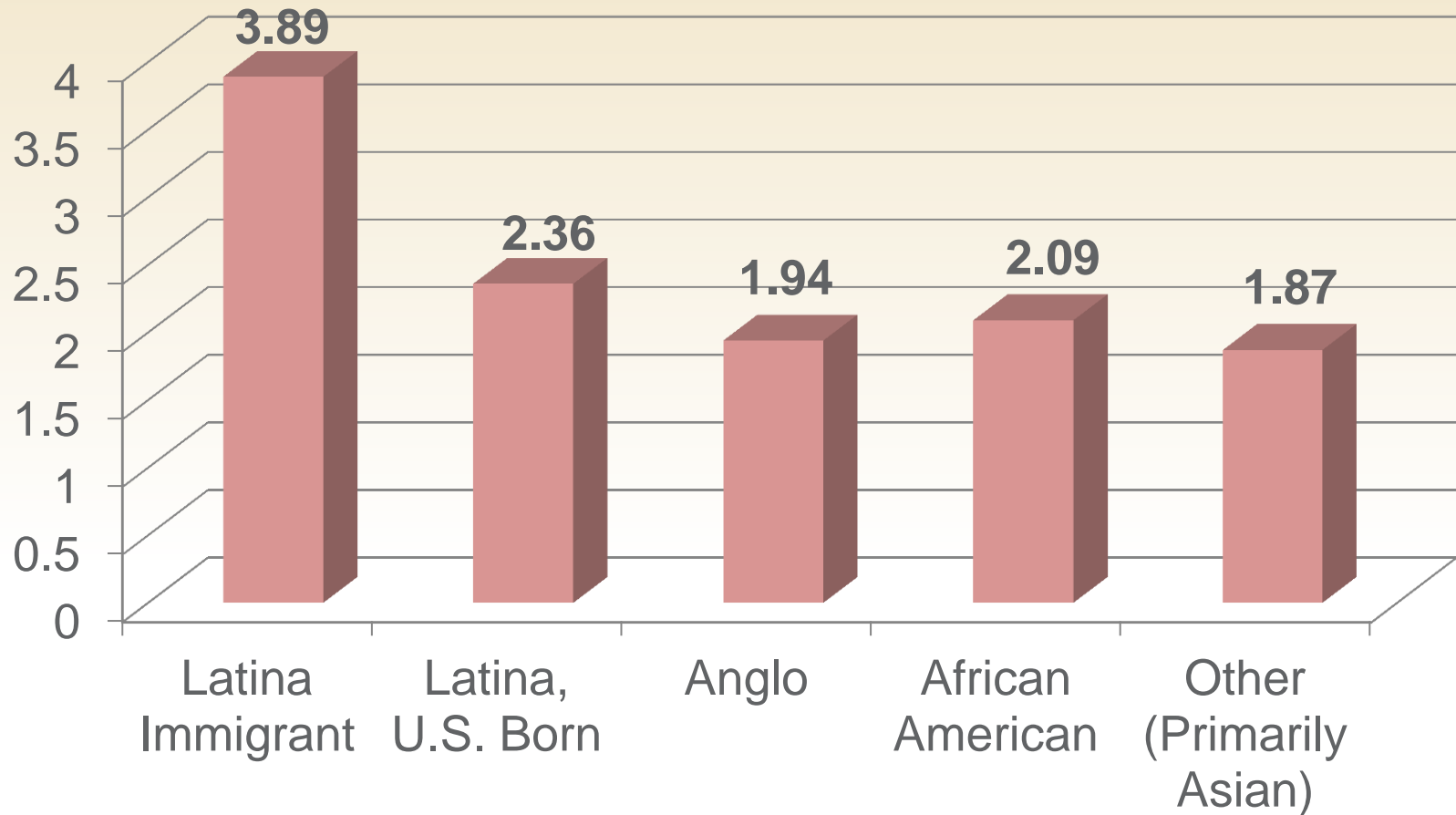
+ Migration from other countries: +88,000

+ Migration from other states: +143,000

Total: ~ 477,000

# Total Fertility Rate by Ethnicity

Texas, 2000



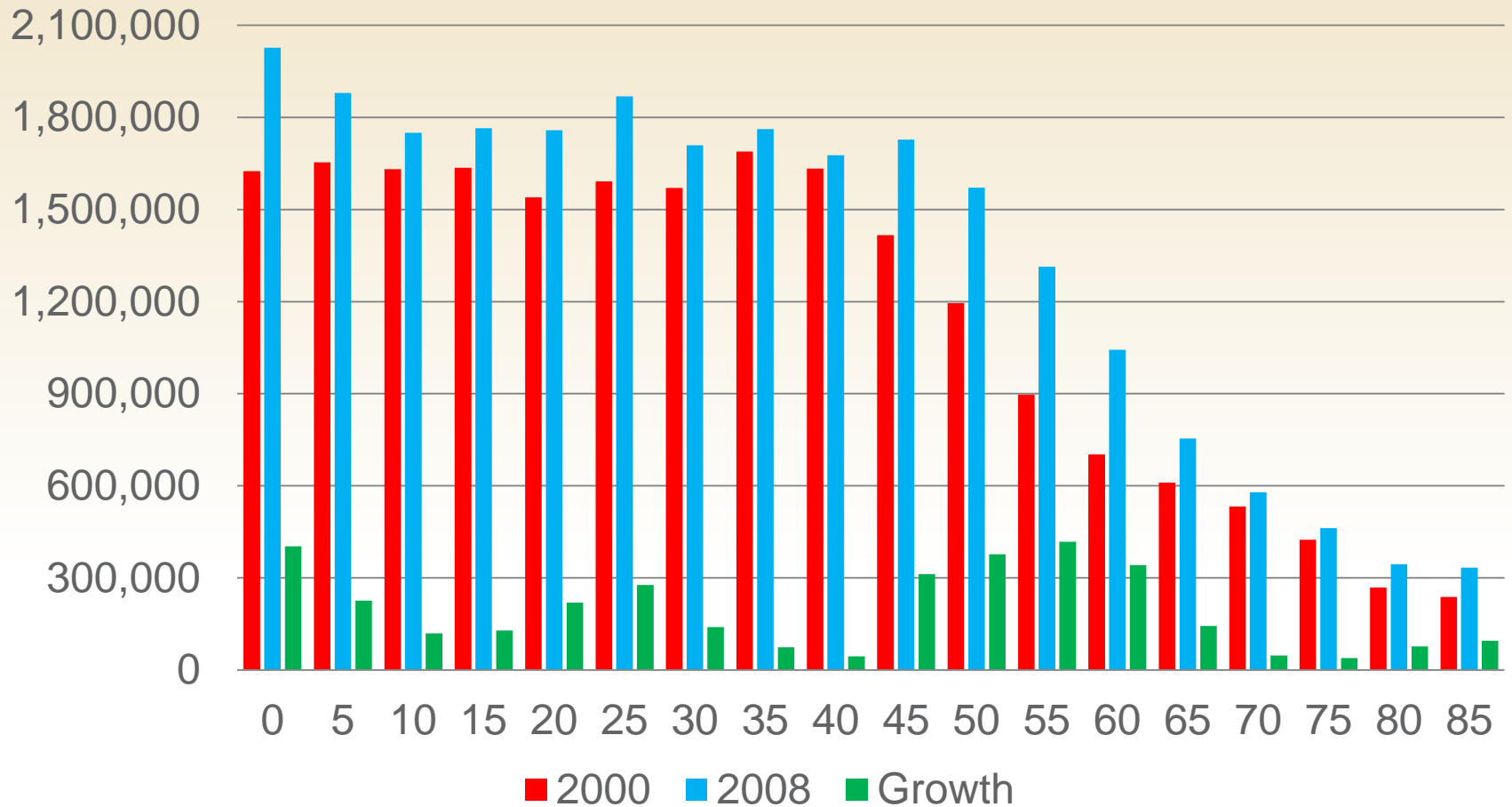


# Growth of Texas Race/Ethnic Groups 2000 to 2008

Race/ Ethnic Group	2000	2008	Growth	Percent Increase	Percent of Growth
Black	2,349,641	2,748,323	398,682	17.0	11.5
Anglo	10,927,538	11,525,623	598,085	5.5	17.2
Latino	6,670,122	8,870,475	2,200,353	33.0	63.3
Asian	549,054	810,967	261,913	47.7	7.5
Other/Two +	355,465	371,586	16,121	4.5	0.5
Total	20,853,820	24,328,982	3,475,154	16.7	100.0

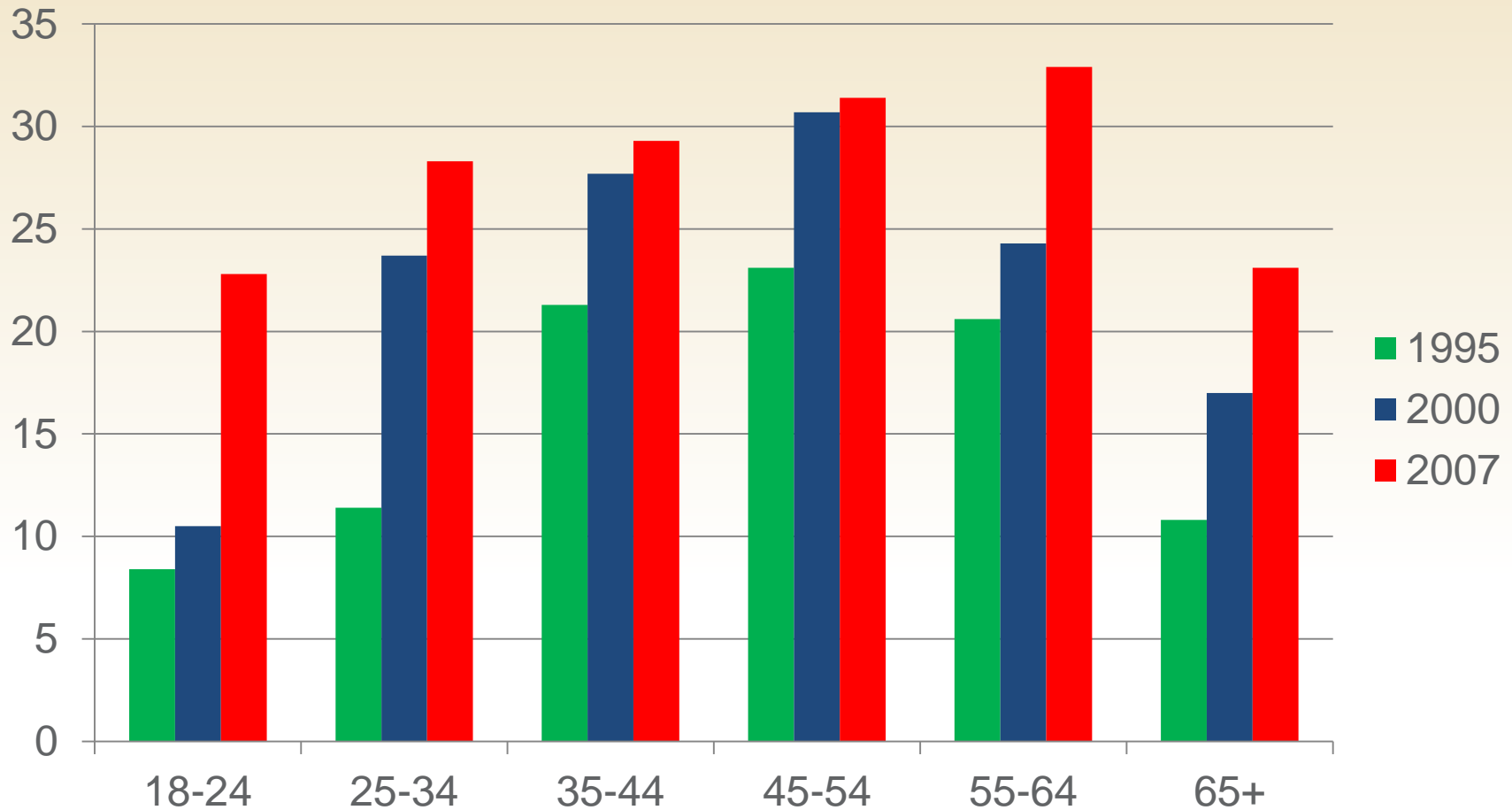
# Population Growth by Age

## 2000 to 2008



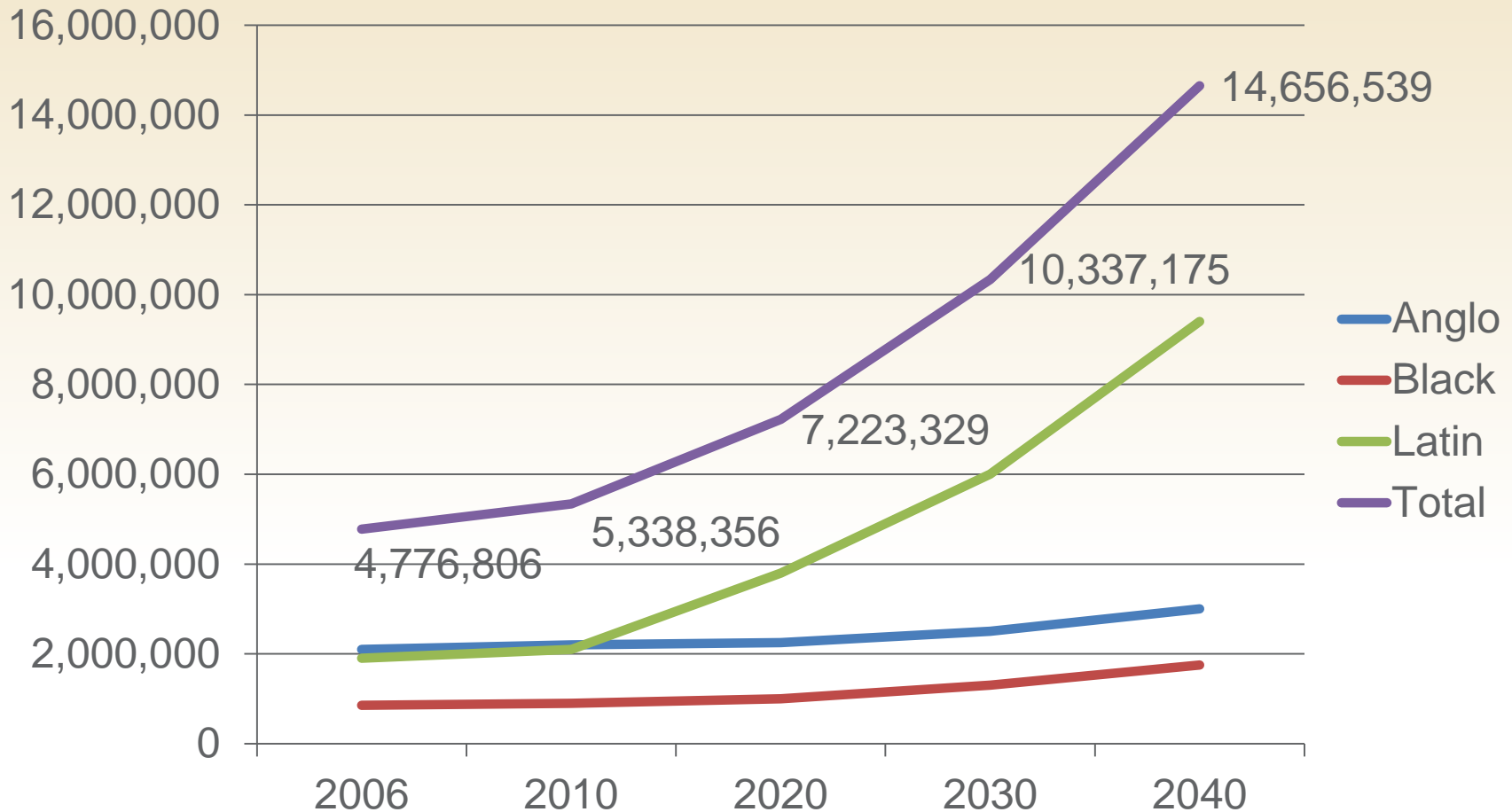
# Age and Obesity in Texas

1995, 2000, 2007



# Projected Increase in Obesity by Ethnicity

## Texas, 2006 to 2040



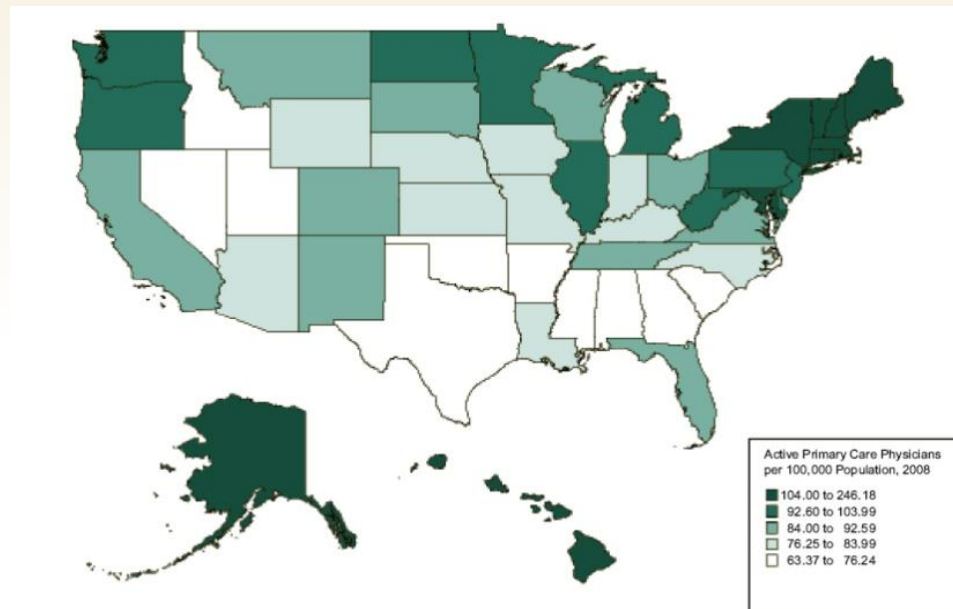
# Shortages and Maldistribution

- There is a shortage of all health professions in Texas with the exception of LVNs
- Physicians, registered nurses, physical therapists, clinical laboratory scientists, occupational therapists, pharmacists, dentists, audiologists, and other health care professionals all number LESS per 100,000 population than the national averages
- In addition, the supply of health professionals in rural and border areas is even far LESS than it is in urban and non-border areas
- 73 percent of the counties in Texas are designated Health Professions Shortage Areas
- The most severe shortages in the health professions are in the area of mental health services

# Shortages and Maldistribution

- Texas leads the nation in population growth
- Texas ranks **42nd** among 50 states in the ratio of physicians to population and **47th** in ratio of nurses to population
- From 2000 to 2008, the Texas physician supply grew 21% while the number of Texans grew 19%

PRIMARY CARE PHYSICIANS PER CAPITA (2008)

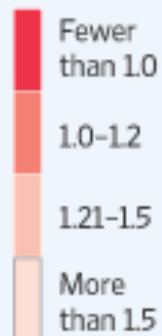


Source: July 1, 2008 population estimates are from the U.S. Census Bureau (Release date: December 22, 2008). Physician data are from the AMA Physician Masterfile (December 31, 2008).

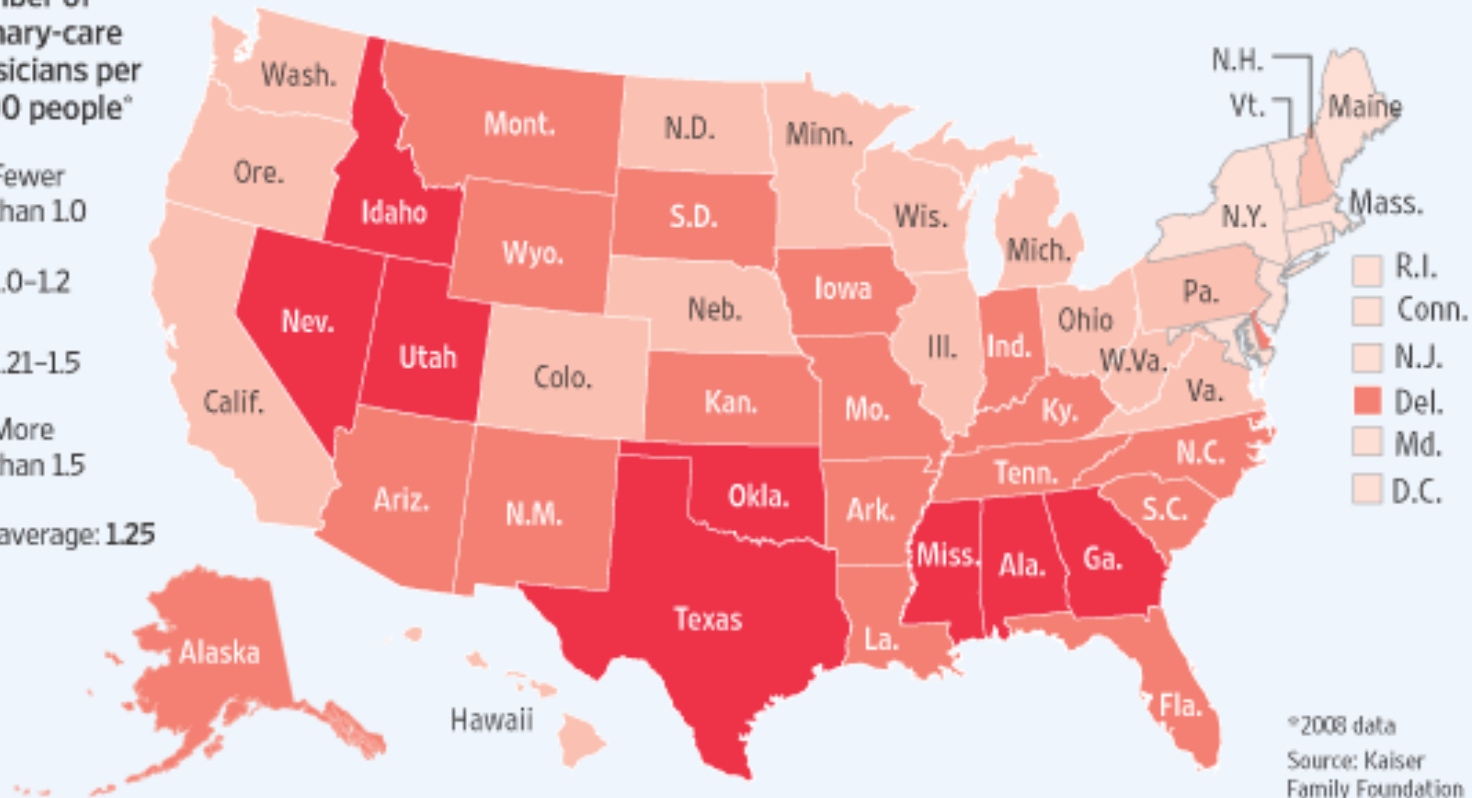
# Primary Care Physician Shortages

**Waiting Room** | A shortage of doctors could strain health-care services

Number of primary-care physicians per 1,000 people\*



U.S. average: 1.25



# Shortages and Maldistribution

Physicians in Direct Patient Care	2004	2009	Increase	Percent
Primary Care	15,374	16,830	1,456	9.6
Specialist	19,558	22,544	2,986	15.3
Total	34,932	39,374	4,442	12.7
Population (Millions)	22.4	24.8	2.4	10.5

- The number of specialist physicians is growing faster than the State's Population.
- The number of primary care physicians is not.



# Direct Patient Care Physicians Facts at a Glance 2008

## Direct Patient Care Physicians:

Total – 38,387

White	65.0%
Black	4.7%
Hispanic	11.6%
Other	18.7%

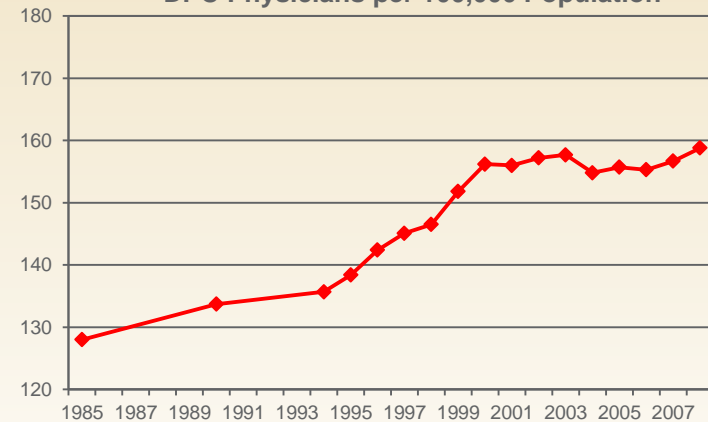
Male	74.3%
Female	25.7%

## Providers/100,000 Population:

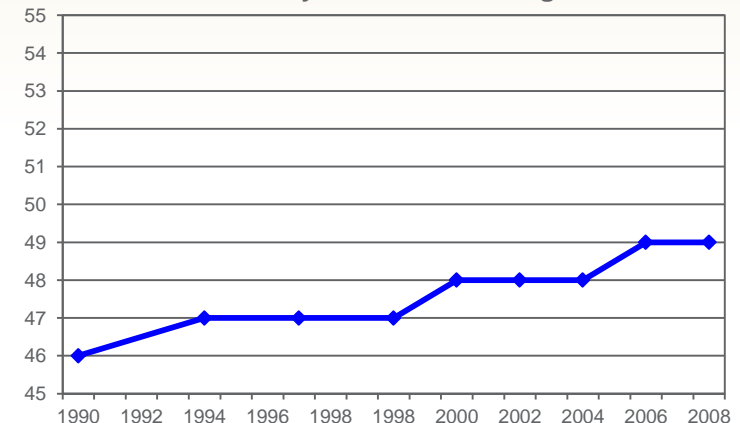
Texas	158.8
Border Urban	106.7
Non-Border Urban	176.7
Border Rural	50.1
Non-Border Rural	91.2

Number of counties with no  
Direct Patient Care Physicians – 25

DPC Physicians per 100,000 Population



DPC Physicians: Median Ages



# Primary Care Physicians Facts at a Glance 2008

## Primary Care Physicians:

Total – 16,528

White 58.3%  
Black 6.3%  
Hispanic 14.4%  
Other 21.1%

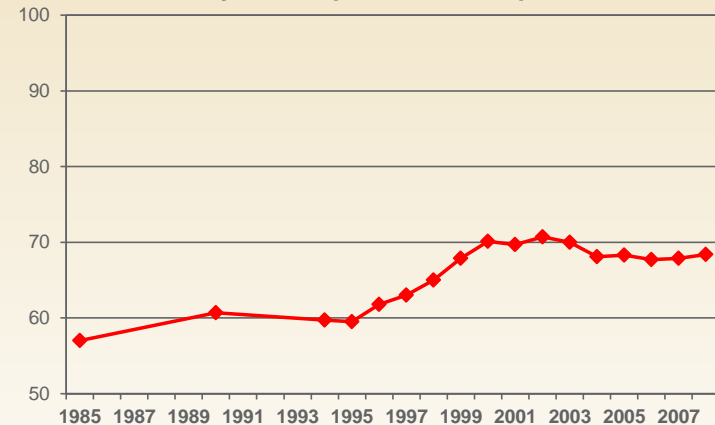
Male 64.9%  
Female 35.1%

## Providers/100,000 Population:

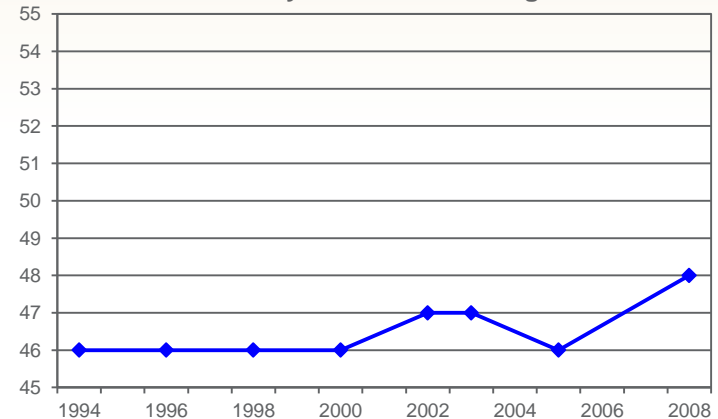
Texas 68.4  
Border Urban 52.8  
Non-Border Urban 72.7  
Border Rural 35.4  
Non-Border Rural 55.0

Number of counties with no  
Primary Care Physicians – 27

PC Physicians per 100,000 Population

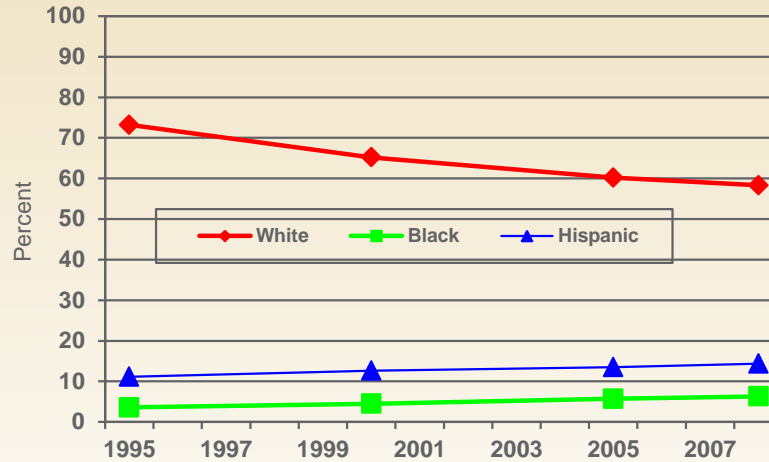


PC Physicians: Median Ages

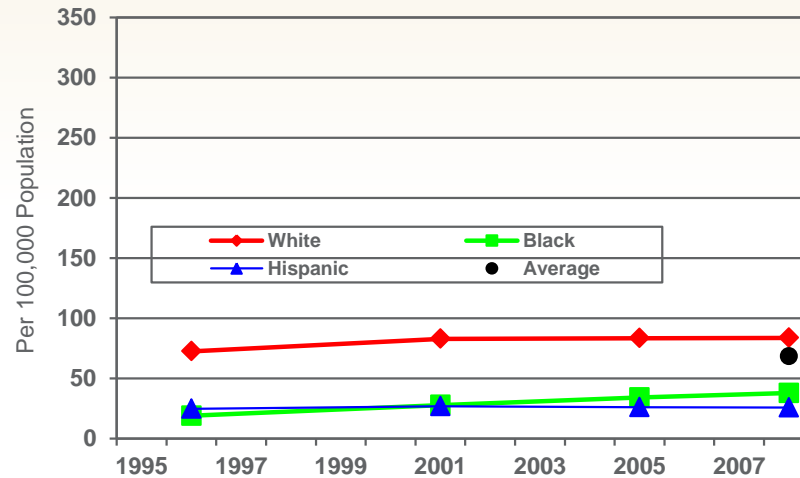


# Primary Care Physician Demographic Trends

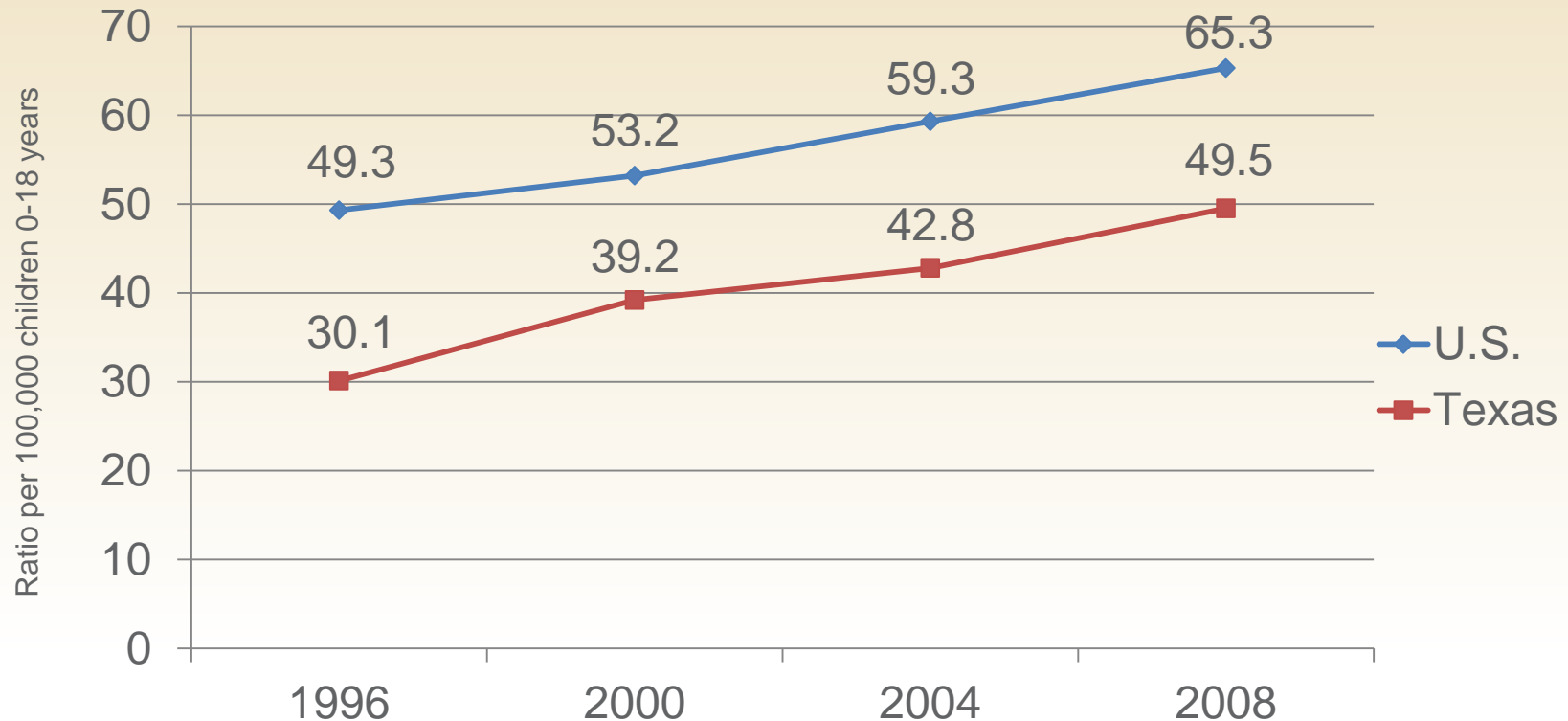
Race/Ethnicity Trends  
percent of total



Supply Ratio Trends  
by Race/Ethnicity



# Ratio of General Pediatricians Per 100,000 Children 0-18 Years of Age Selected Years, Texas and U.S., 1996 to 2008



While the Texas general pediatrician to pediatric population ratio has increased by 65% between 1996 and 2008, it consistently remains lower than the national average.

# Physician Distribution

## A Type of Shortage!

As of April 2009 there were 118 Whole County Health Profession Shortage Areas (HPSAs) for primary care, and 109 sub-county geographic or special population HPSAs in Texas.

Whole county HPSAs are predominately in rural counties and sub-county HPSAs are predominately in urban counties.

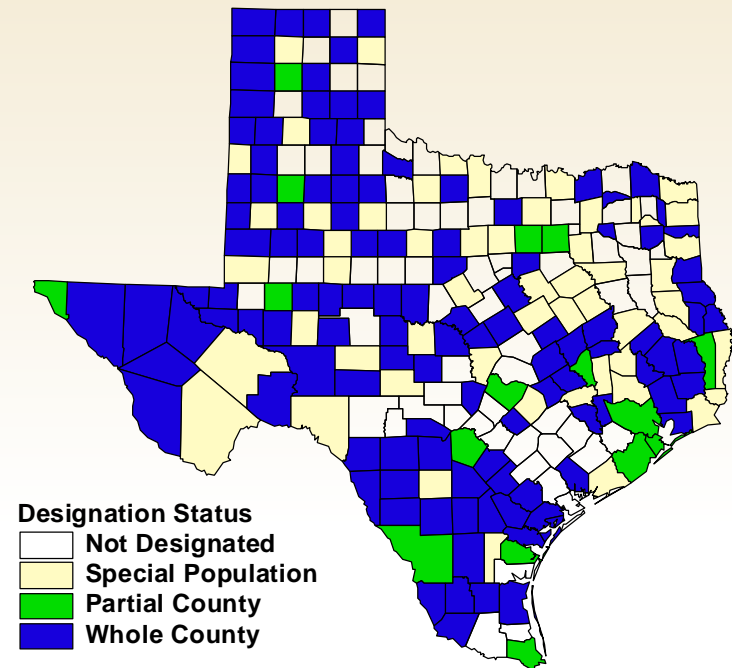
5,245,681 people lived in HPSAs.

More people live in Partial County HPSAs than Whole County HPSAs

It was estimated that 542 primary care physicians would have been needed to alleviate the maldistribution.

2009 Harris Ratio with 3,059 physicians = 1,313:1  
# Physicians for 3,500:1 ratio = 1,146  
Harris could lose 1,913 physicians and not qualify as shortage area

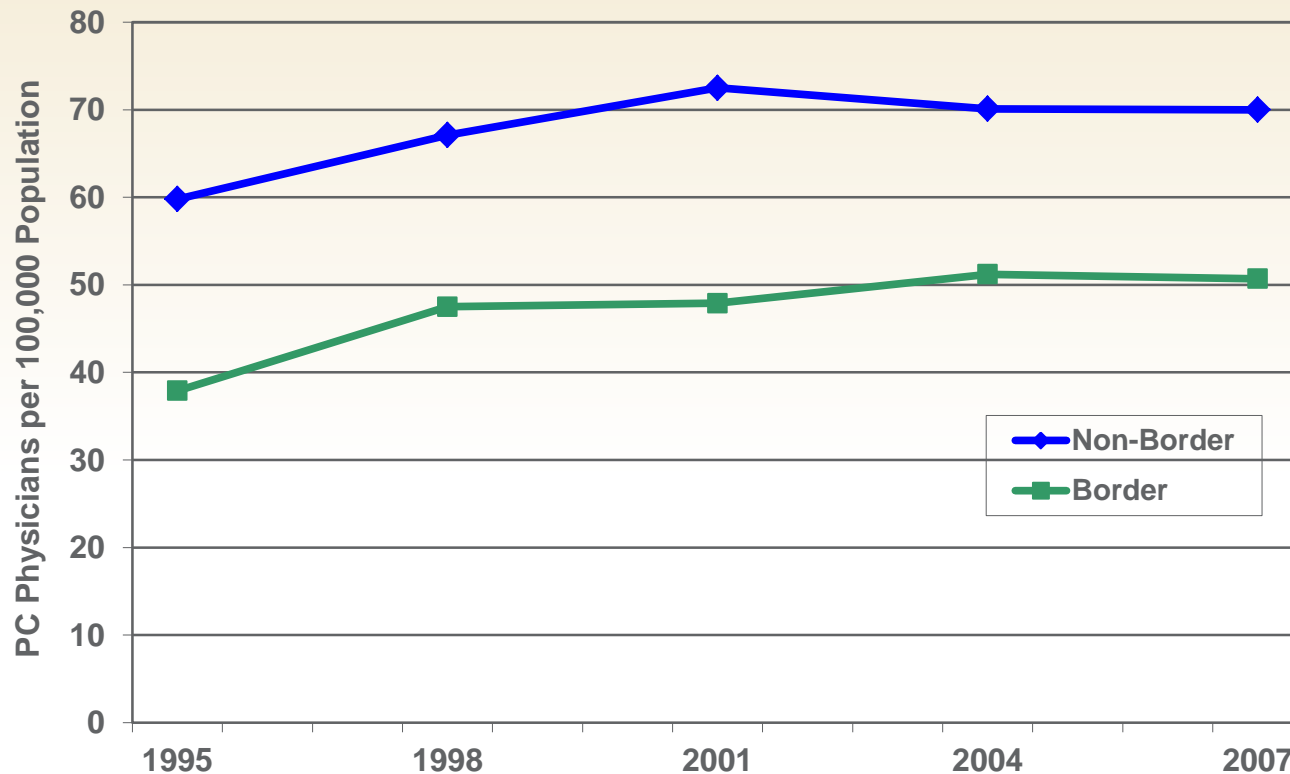
### Federally Designated Health Professional Shortage Areas (HPSAs) Texas April 2009



Ratio needed to qualify – 3,500:1  
Texas 2009 ratio – 1,478:1

# Texas – Mexico Border Issues

## Primary Care Physician Supply Ratios Border and Non-Border Counties 1995-2007



# Physician Assistant Facts

## 2008

### Physician Assistants:

Total – 4,191

White	73.2%
Black	6.0%
Hispanic	14.0%
Other	6.8%

Male	41.7%
Female	58.3%

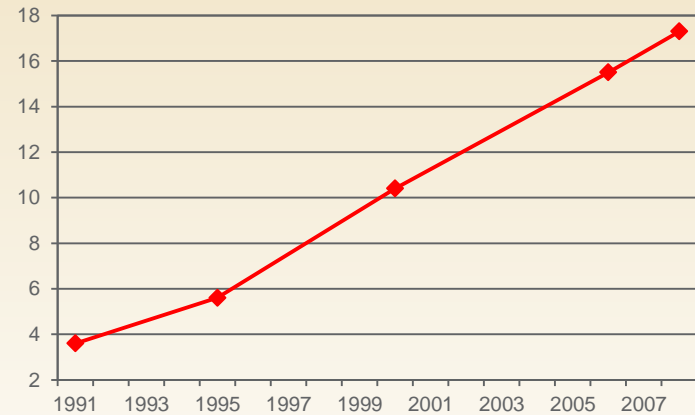
\* Females became the majority in 2002

### Providers/100,000 Population:

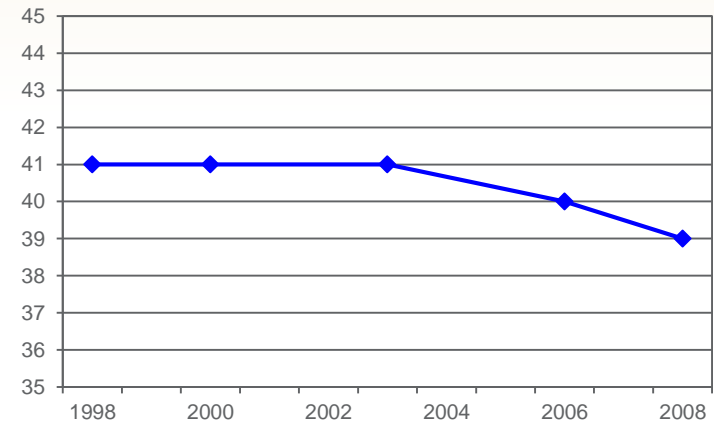
Texas	17.3
Border Urban	13.5
Non-Border Urban	18.5
Border Rural	16.0
Non-Border Rural	12.8

Number of counties with no  
Physician Assistants – 63

Physician Assistants per 100,000 Population

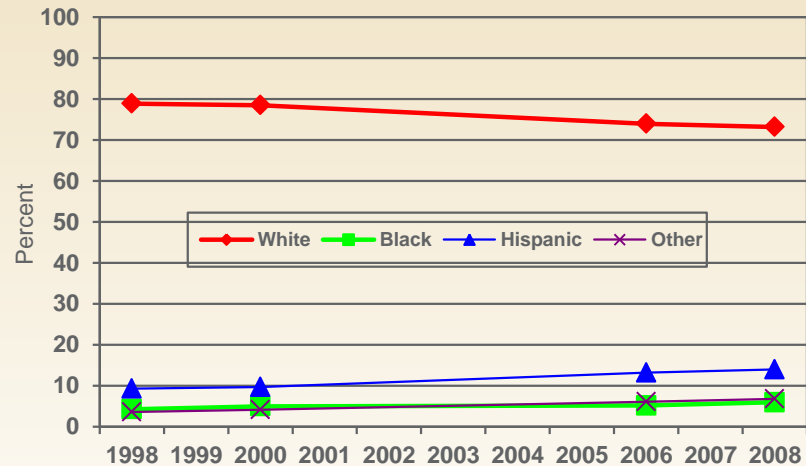


Physician Assistants: Median Ages

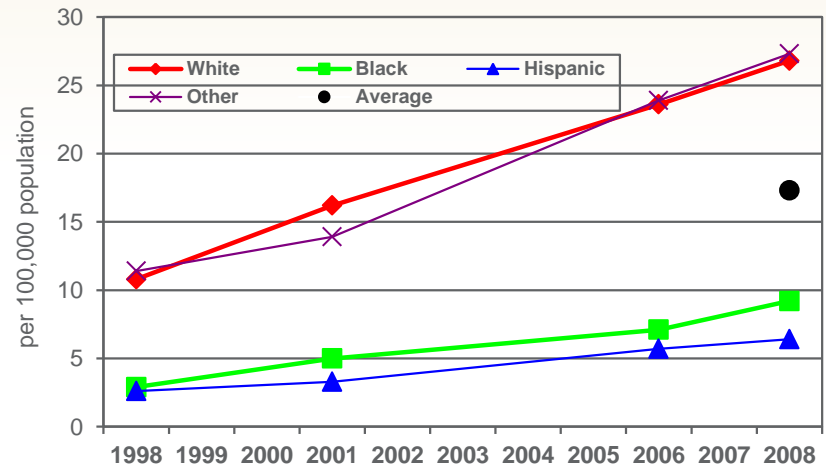


# Physician Assistant Demographic Trends

Race/Ethnicity Trends  
percent of total



Supply Ratio Trends  
by Race/Ethnicity





# Registered Nurse Facts

## 2008

### Registered Nurses:

Total – 162,304

White	71.0%
Black	8.3%
Hispanic	9.8%
Other	10.9%

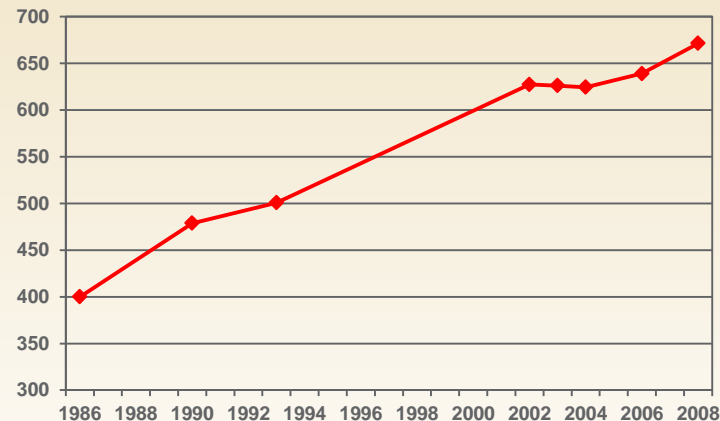
Male	10.1%
Female	89.9%

### Providers/100,000 Population:

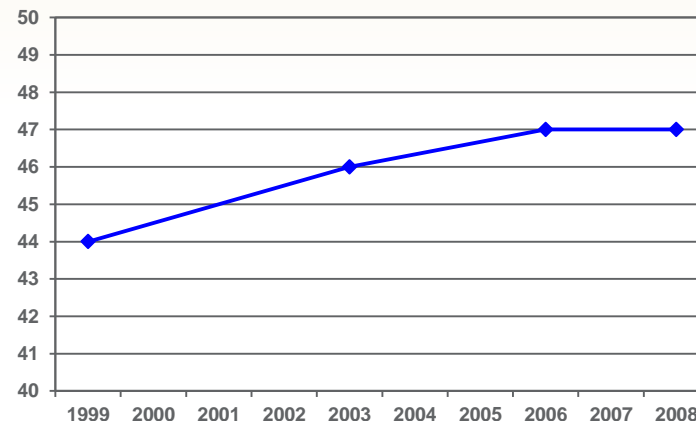
Texas	671.3
Border Urban	483.1
Non-Border Urban	730.9
Border Rural	230.6
Non-Border Rural	470.1

Number of counties with no  
Registered Nurses – 3

Registered Nurses per 100,000 Population

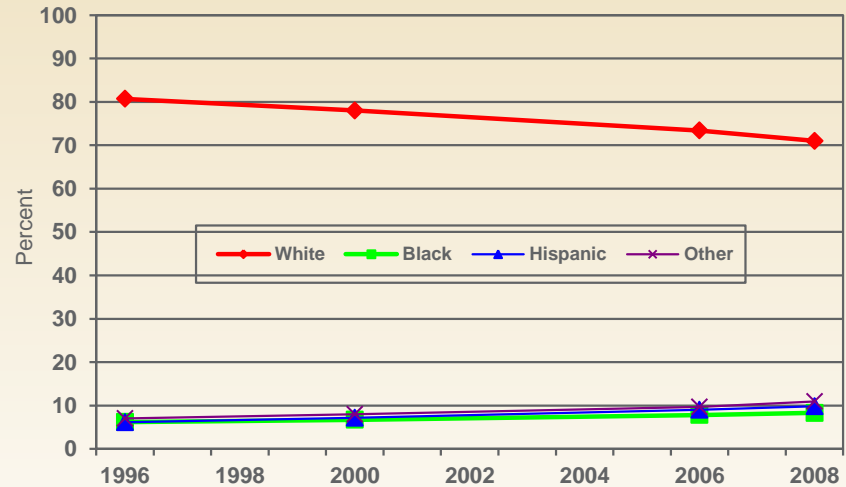


Registered Nurse: Median Ages

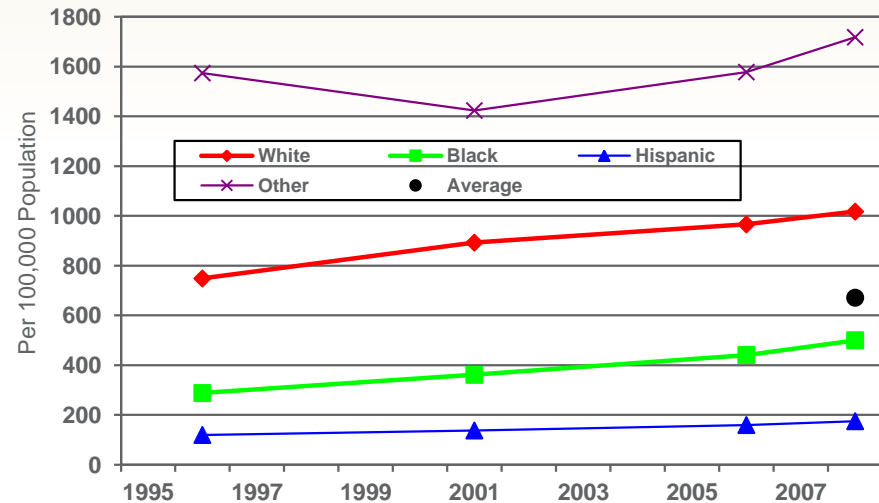


# Registered Nurse Demographic Trends

Race/Ethnicity Trends  
percent of total



Supply Ratio Trends  
by Race/Ethnicity



# Nurse Practitioner Facts

## 2009

### Nurse Practitioners:

Total - 5,745

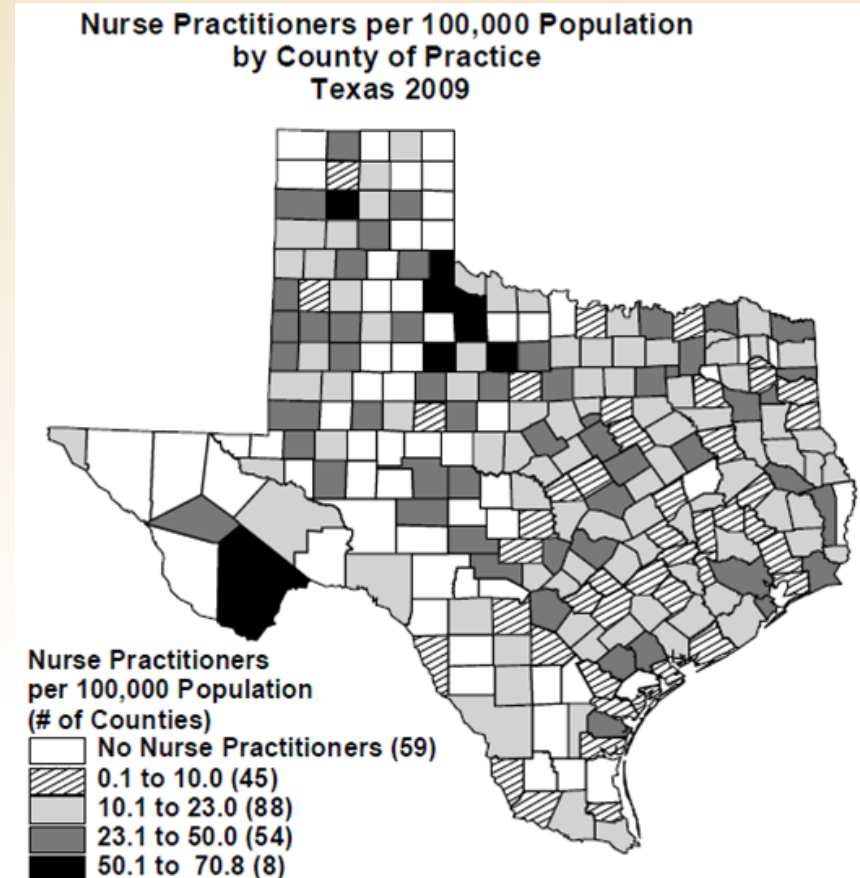
White	77.5%
Black	7.0%
Hispanic	9.8%
Other	5.8%

Male	9.8%
Female	90.2%

### Providers/100,000 Population:

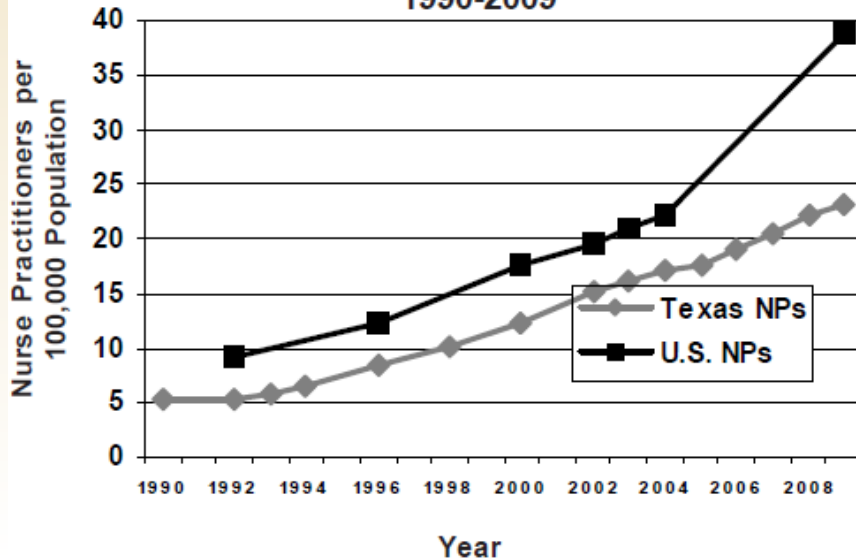
Border Urban	17.0
Non-Border Urban	25.1
Border Rural	8.3
Non-Border Rural	15.5

Number of counties with no  
Nurse Practitioners— 59



# Nurse Practitioner Trends

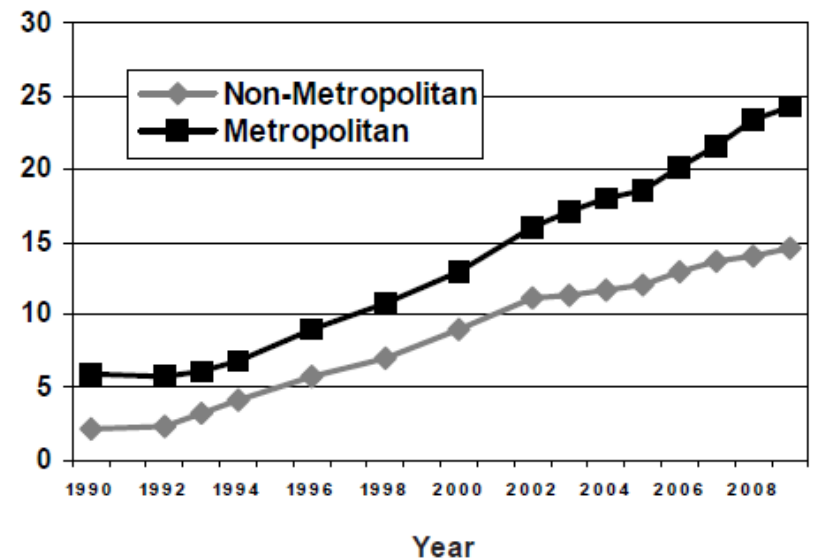
**Figure 3. Nurse Practitioners per 100,000 Population, U.S. and Texas, 1990-2009**



Source: Texas Board of Nursing; HRSA, Bureau of Health Professions and other sources; see page 7.

Notes: Texas data include all licensed, active, in-state nurse practitioners; U.S. data may vary.

**Figure 4. Nurse Practitioners per 100,000 Population, Metropolitan and Non-metropolitan Counties, Texas, 1990-2009**



Source: Texas Board of Nursing.

Notes: Source for Metropolitan-Nonmetropolitan definition: Office of Management and Budget. Figures include all licensed, active, in-state nurse practitioners.

# General Dentist\* Facts

## 2008

### Dentists:

Total – 8,987

No race/ethnicity data available;  
in the future should be collected  
by new Minimum Data Set

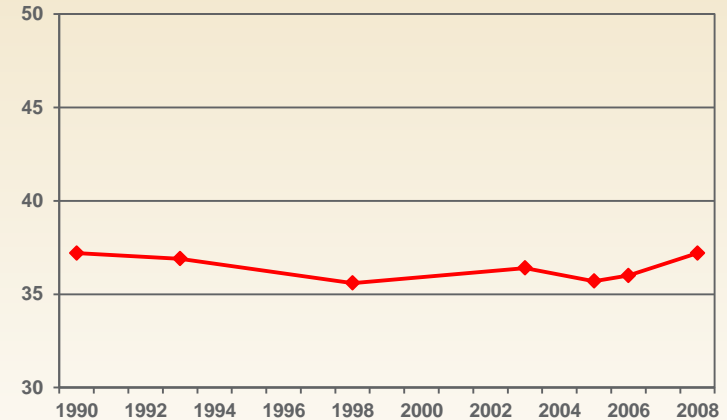
Male 73.3%  
Female 26.7%

### Providers/100,000 Population:

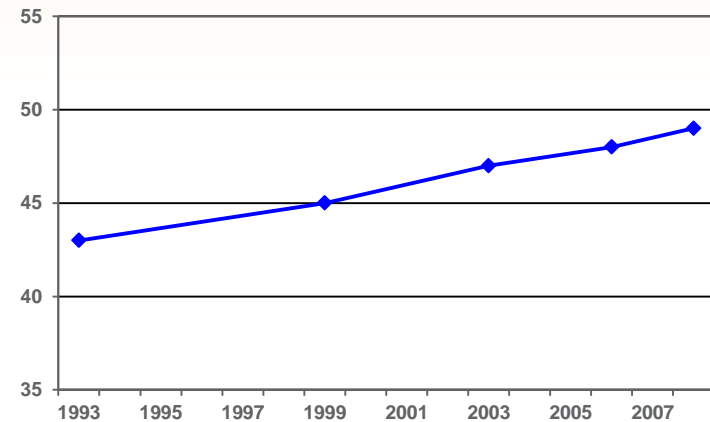
Texas	37.2
Border Urban	16.5
Non-Border Urban	41.8
Border Rural	11.9
Non-Border Rural	25.3

Number of counties with no  
Dentists – 46

General Dentists per 100,000 Population



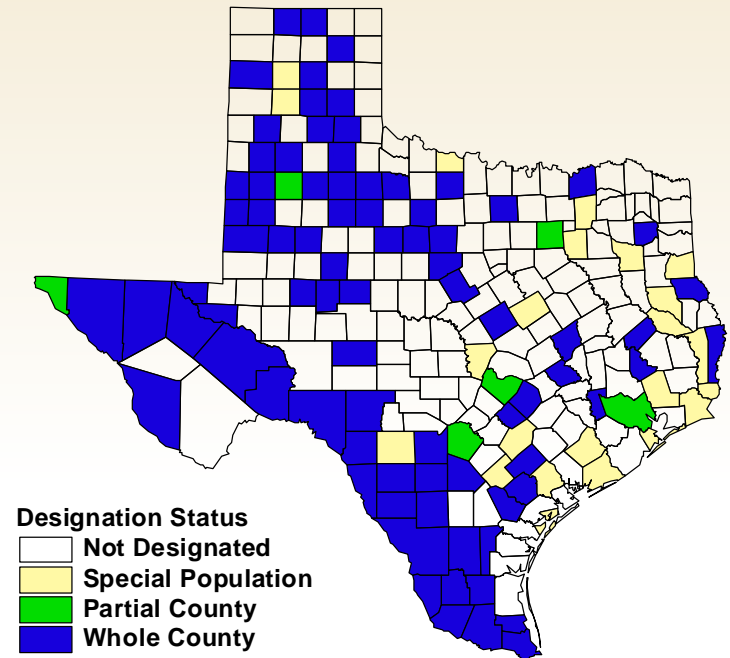
General Dentists: Median Ages



# Dental Health Professional Shortage Areas

## Federally Designated Dental Health Health Professional Shortage Areas (HPSAs) January 1, 2009

As of January 1, 2009 there were 82 Whole County Dental Health Profession Shortage Areas (HPSAs), and 50 sub-county geographic or special population HPSAs in Texas.



# Pharmacist Facts

## 2008

### Pharmacists:

Total – 18,623

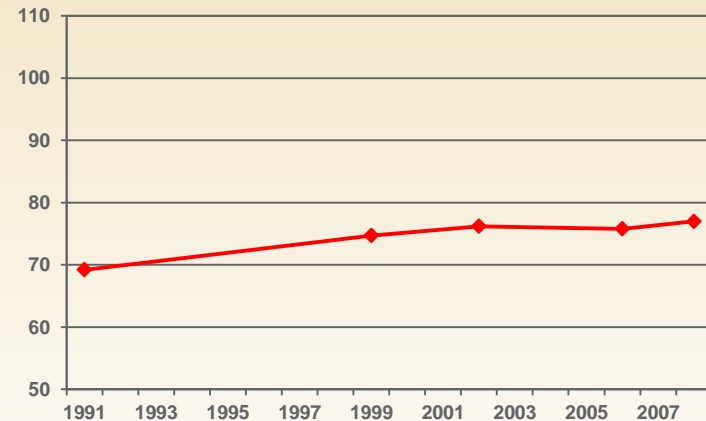
White	59.8%
Black	13.5%
Hispanic	8.6%
Other	18.0%
Male	49.6%
Female	50.4%

### Providers/100,000 Population:

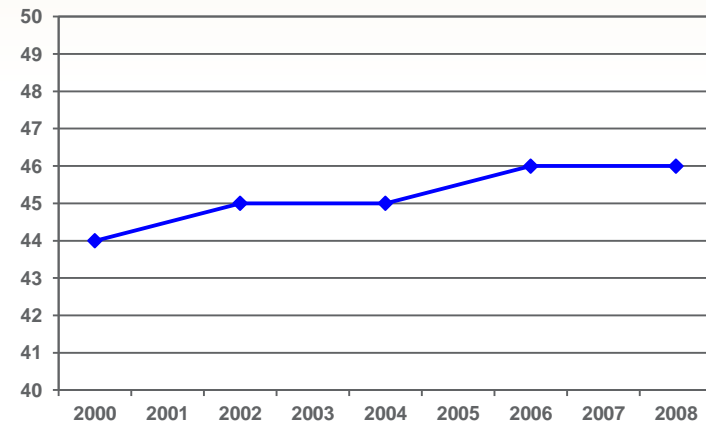
Texas	77.0
Border Urban	42.7
Non-Border Urban	84.9
Border Rural	31.5
Non-Border Rural	56.4

Number of counties with no  
Pharmacists – 27

Pharmacists per 100,000 Population



Pharmacist: Median Ages



# Psychiatrist Facts

## 2008

### Psychiatrists:

Total – 1,617

White	65.6%
Black	3.8%
Hispanic	12.3%
Other	18.2%

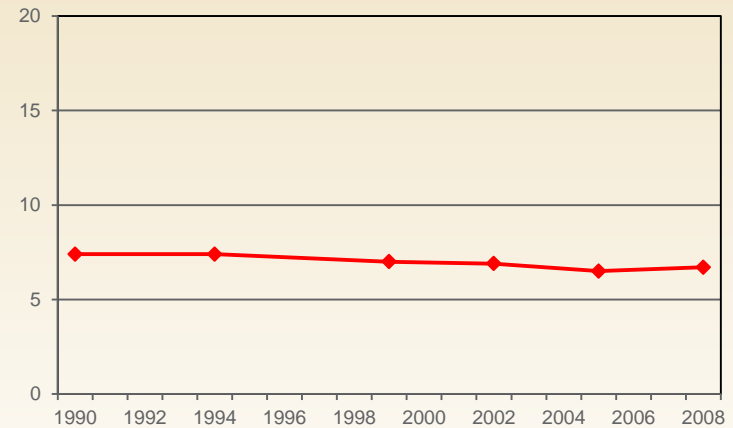
Male	63.5%
Female	36.5%

### Providers/100,000 Population:

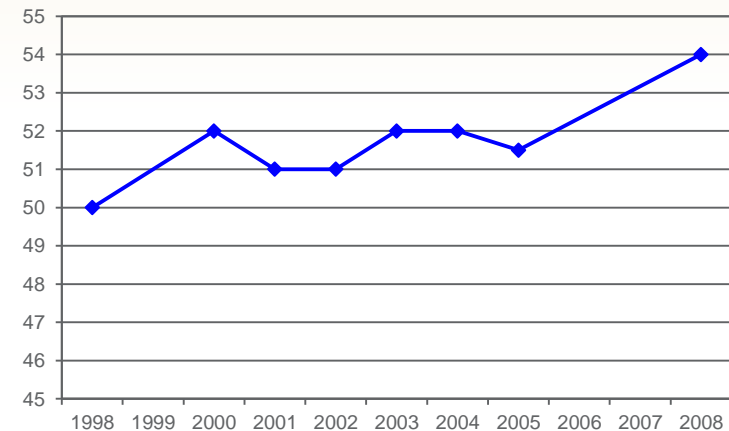
Texas	6.7
Border Urban	2.6
Non-Border Urban	7.8
Border Rural	1.0
Non-Border Rural	3.3

Number of counties with no  
Psychiatrists – 171

Psychiatrists per 100,000 Population



Psychiatrist: Median Ages

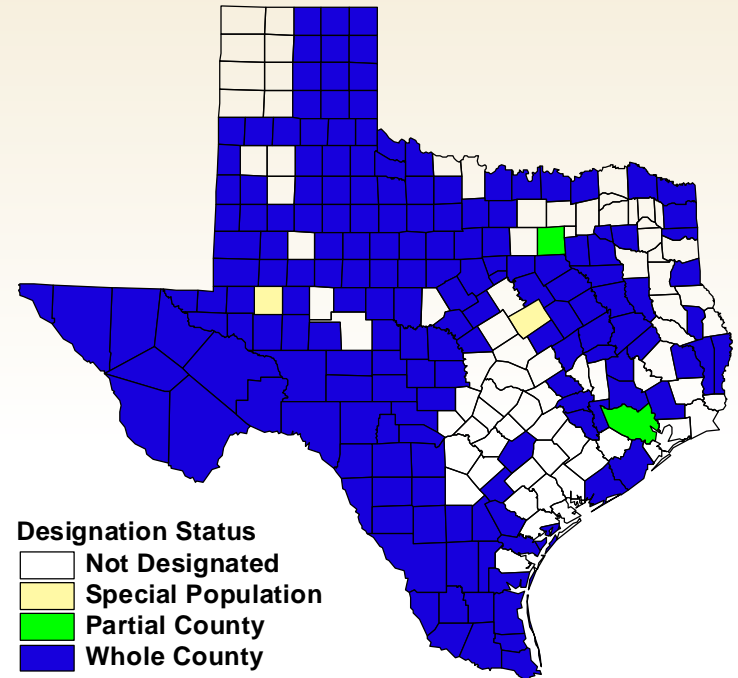




# Mental Health Professional Shortage Areas

As of March 10, 2009 there were 172 whole county Health Profession Shortage Areas (HPSAs) for mental health, and 12 sub-county geographic or special population HPSAs in Texas.

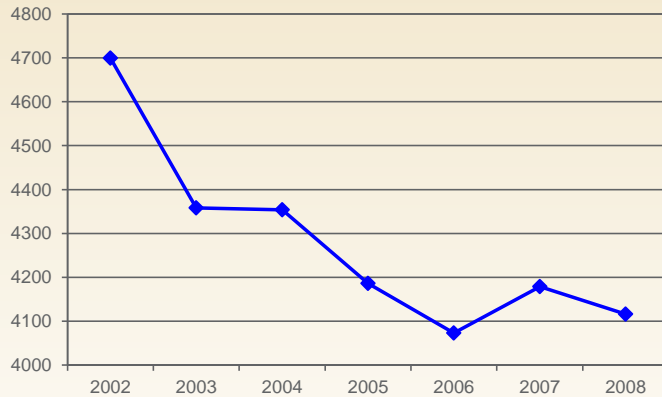
**Federally Designated Health Professional Shortage Areas (HPSAs) in Texas for Mental Health as of March 2009**



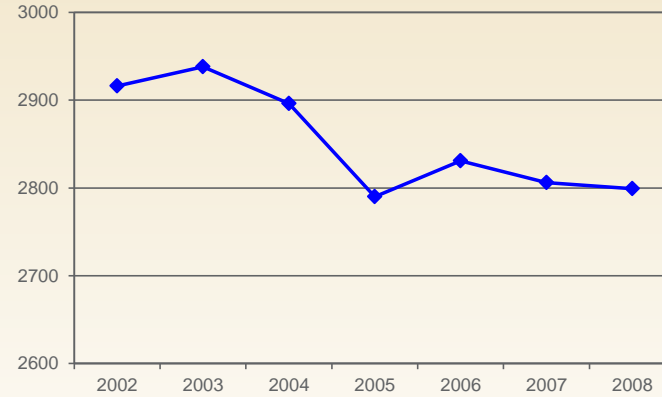
# Mental Health Professions

## Loss in Numbers

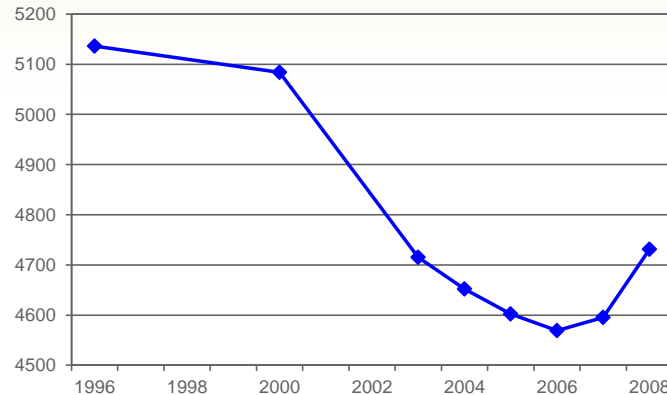
### Licensed Chemical Dependency Counselors



### Marriage and Family Therapists



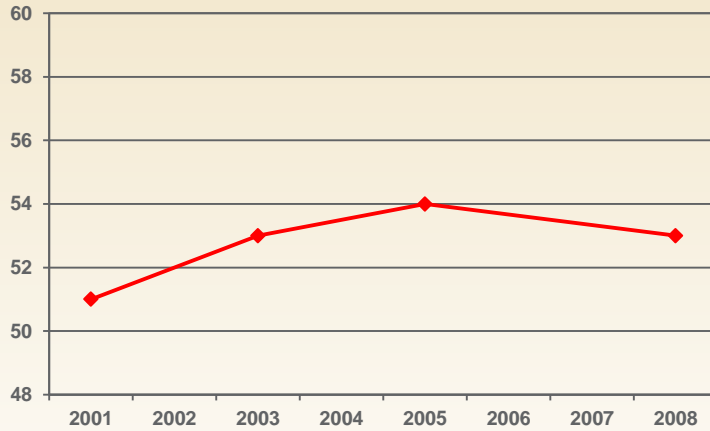
### Psychiatric Nurses



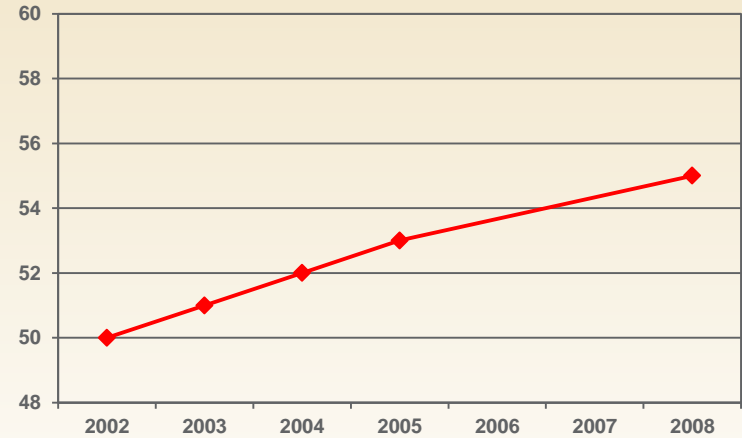
# Mental Health Professions

## Median Age Trends

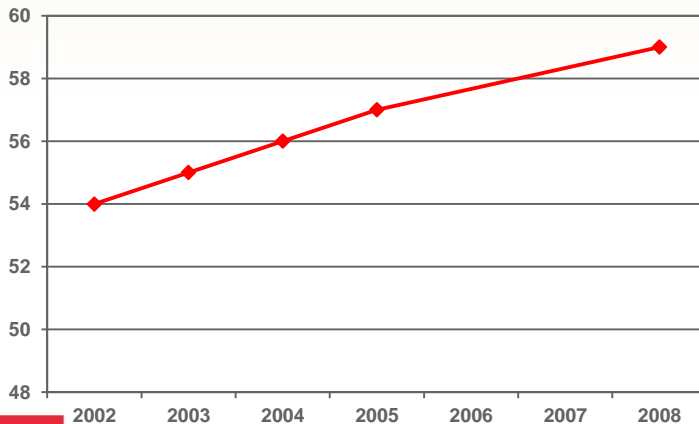
Licensed Professional Counselors



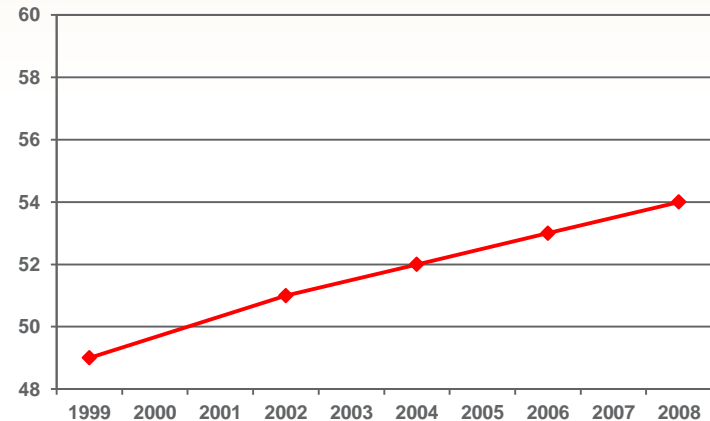
Licensed Chemical Dependency Counselors



Marriage and Family Therapists



Psychiatric Nurses



# Health Professions Action Plan

- Assure that every Texan has access to local health care services for wellness, prevention, acute care, chronic care, behavioral health services, and specialty services
- Assure that Texas has a culturally competent, linguistically appropriate, and state-of-the-art trained health professions workforce that utilizes evidence-based decision making to assure that Texans receive quality, safe health care at reasonable costs
- Assure that the Texas health professions infrastructure has access to state-of-the-art electronic health records, telemedicine services, and decision support services that set the highest standards for health care delivery
- Assure that no Texan goes without prevention and educational services related to wellness and chronic disease management

# Workforce Solutions

- Physician Workforce
  - Expand GME positions over the state of Texas to assure 10 percent greater than the number of Texas graduates
- Nurse education programs, especially nurse educators
- Expand the number of behavioral health professionals
- Expand health professions education
- Evaluate scope of practice based upon evidence based medicine, patient safety, and access to care impact

# Graduate Medical Education Programs

- Demographics

- Texas's population is growing faster than any other state
- Diversity of the population continues to increase

- Health Professions Shortages

- There is a deficit of health care professionals in Texas (except LVNs) compared to other states
- There is a maldistribution of health care providers throughout Texas
- The number of new physicians graduating from Texas medical schools is not keeping pace with the population growth
- The number of physicians per 100,000 Texans is LESS than the national number over the US, especially in the rural and border areas

- Graduate Medical Education Positions

- The number of resident physician positions is NOT keeping pace with the number of new Texas medical school graduates
- Physicians are more likely to practice in the state in which they do their residency program

# Preparing the Health Professions Workforce

- Sustain those state programs that have demonstrated a positive impact on the recruitment of students into the professions
  - JAMP
  - T-STEM
- Sustain scholarship and loan repayment programs for health professionals electing to practice in underserved areas
- Assure that diversity and cultural / language competencies are valued in the long-term development of Texas' workforce
- Sustain and expand community programs through AHEC and ORCA that provide student mentoring and career development in the health professions
- Expand the training of Community Health Workers



REFORM? NO WAY. YOU COULD MAKE A REAL MESS OF THINGS.



M. WUERKER  
POLITICO



# Workforce Requirements for Health Reform

- Expand Graduate Medical Education (GME) programs
  - Primary Care
  - Specialty Care
- Expand the graduation rates of nursing and allied health science professionals
- Expand the number of behavioral health professionals
- Create innovative models for health care delivery
  - Inter-professional teams for management of chronic disease
  - Re-visit scope of practice standards for advanced practice nurses and physician assistance
  - Re-visit scope of practice for psychologists, MSWs and other mental health professionals
  - Expand the services available to patients through community health centers (FQHCs)
- Incent professionals who elect to practice in underserved areas to care for vulnerable populations
  - Scholarships, loan repayment programs
  - Preferential reimbursement programs