

# The Dentist Workforce in North Carolina

Erin Fraher, MPP

Katie Gaul, MA

Jennifer King



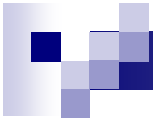
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# Overview

- Trends in supply of dentists in NC
- Geographic distribution of dentists in NC
- Characteristics of NC dentists
  - Demographics
  - Practice characteristics
  - Training location
- Projections



# Supply



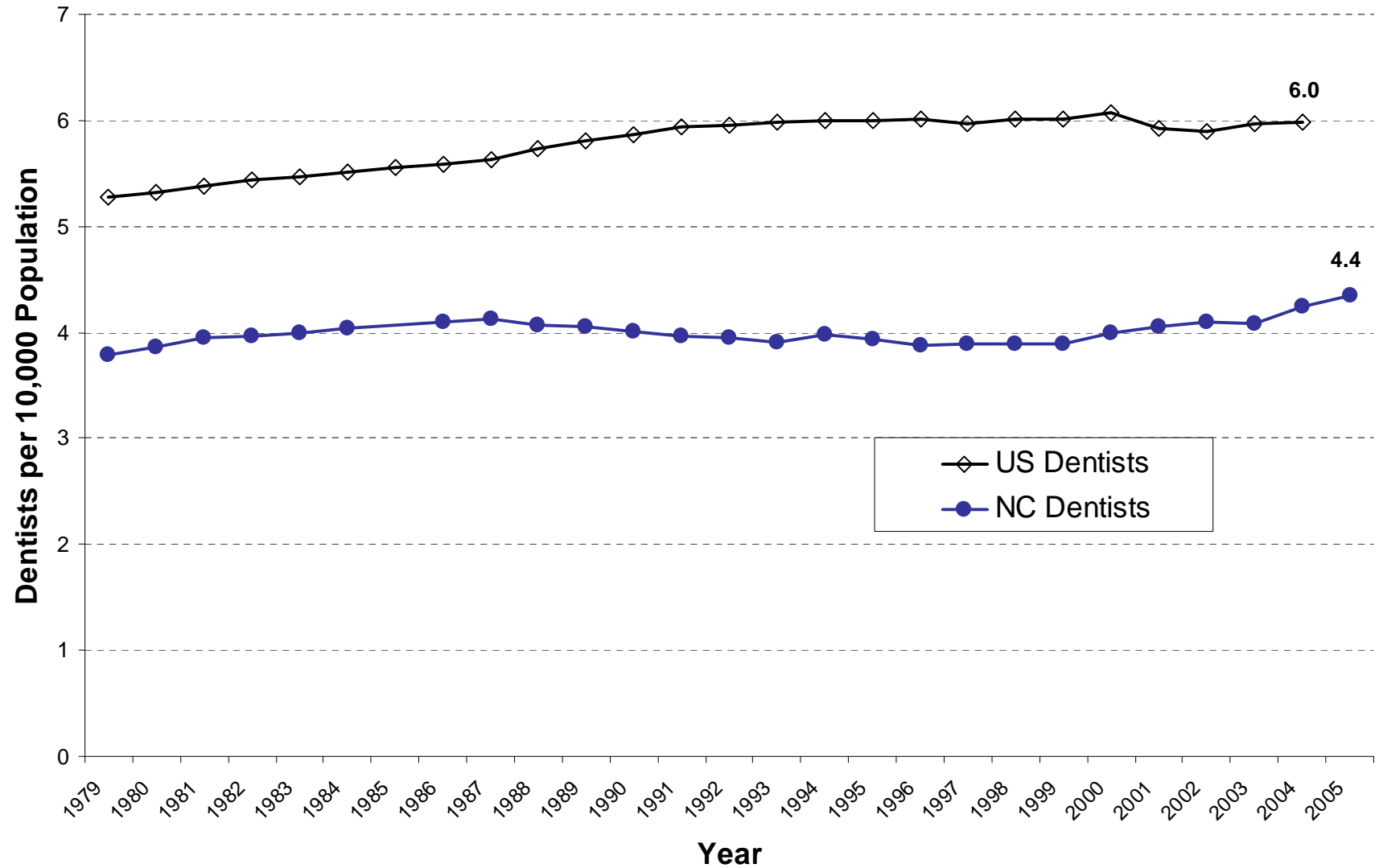


# North Carolina Dental Supply

- NC had 3,772 active dentists in 2005.
- Annual growth in dentist to population ratio has been higher than average in recent years:
  - Increase of 2.8% between 2004 and 2005
  - Increase of 3.9% between 2003 and 2004
  - Average annual increase of <0.5% between 1993 and 2003
- NC supply still lags behind U.S. supply



## Dentists per 10,000 Population, US and NC, 1979 to 2005



Sources: North Carolina Health Professions Data System, 1979 to 2005 with data derived from the North Carolina State Board of Dental Examiners; HRSA, Bureau of Health Professions; US Bureau of the Census; North Carolina Office of State Planning. Figures include all licensed active dental hygienists. North Carolina population data are smoothed figures based on 1980, 1990 and 2000 Censuses.



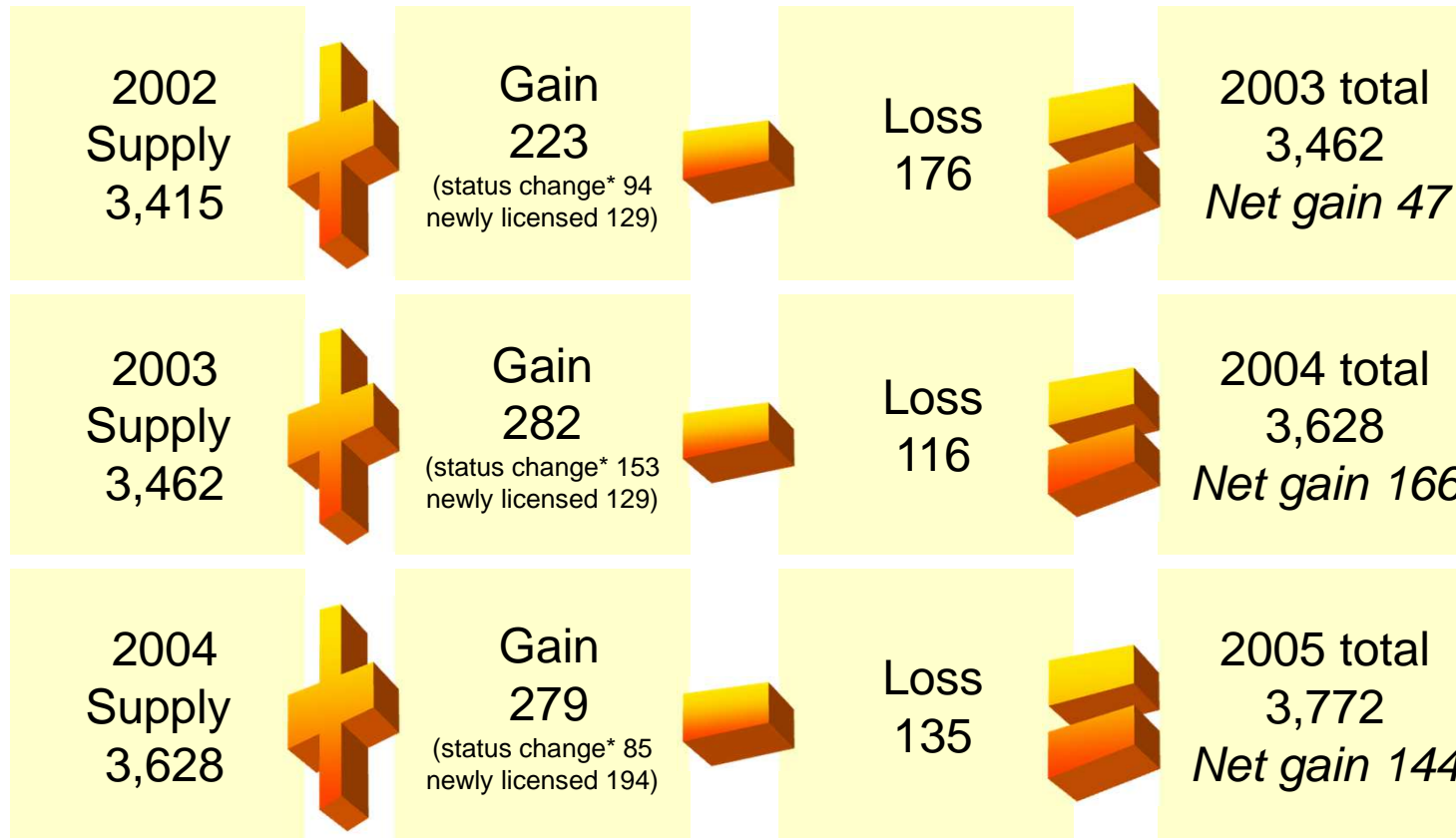
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# North Carolina Dental Workforce Is Dynamic

- About 11% of the workforce either enters or exits practice in a given year.
- Recent increases in growth rate may be due in part to licensure by credential.

# Components of Change, 2002-2005

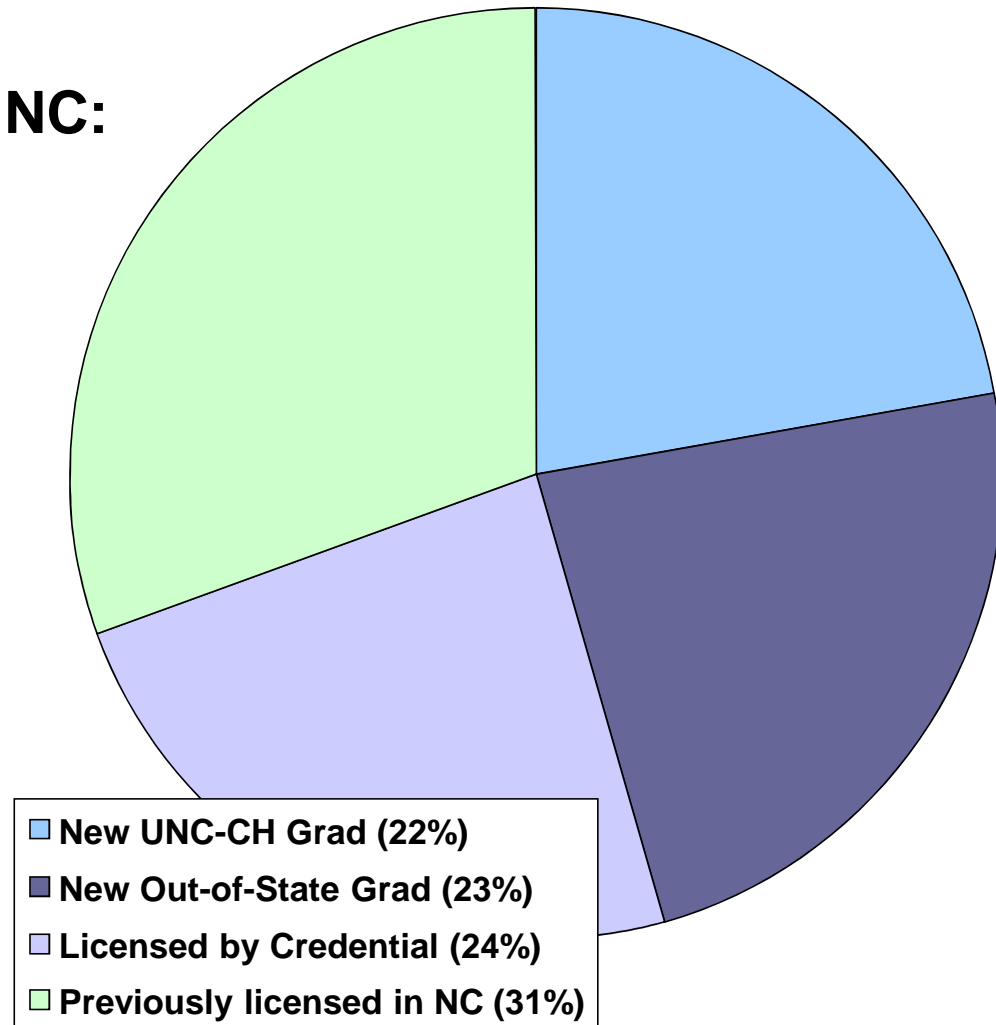


\*Status change indicates dentists who were previously licensed in North Carolina and moved from inactive to active practice or from out-of-state to instate status.

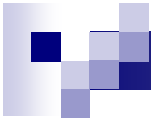
## Dentists Gained in 2005

Of the 279 dentists gained in NC:

- 22% were new graduates from UNC-CH
- 23% were new graduates from other states
- 24% were licensed by credential
- 31% previously held a NC license and were not practicing in 2004







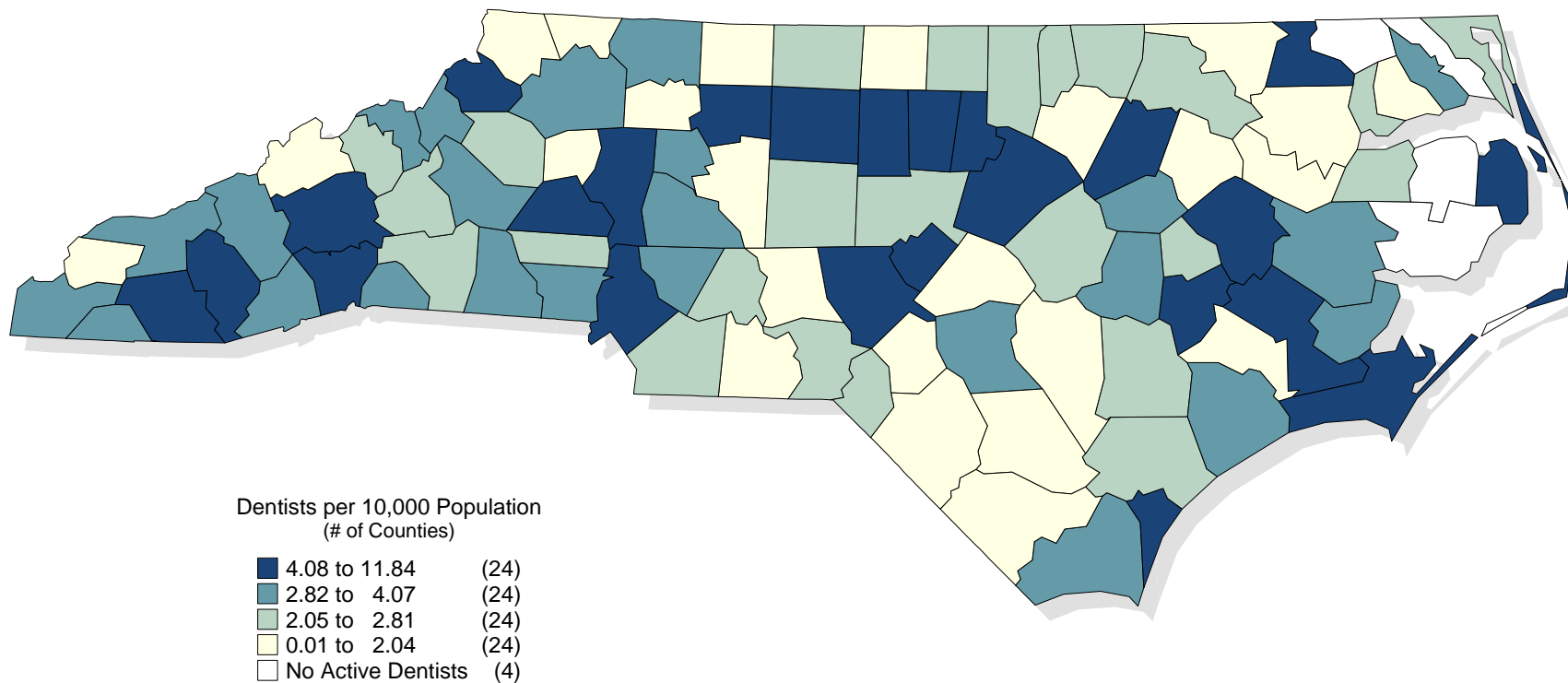
# Geographic Distribution



## Despite Overall Growth, Distribution Is Problematic

- *Supply* of dentists per population is lower in non-metropolitan counties.
- *Growth* in dentists per population is slower in non-metropolitan counties. Between 2000 and 2005, supply grew by:
  - 10.3% in metropolitan areas
  - 3.9% in non-metropolitan areas
- Most counties designated as Dental Health Professional Shortage Areas are non-metropolitan.

## Dentists per 10,000 Population North Carolina, 2005

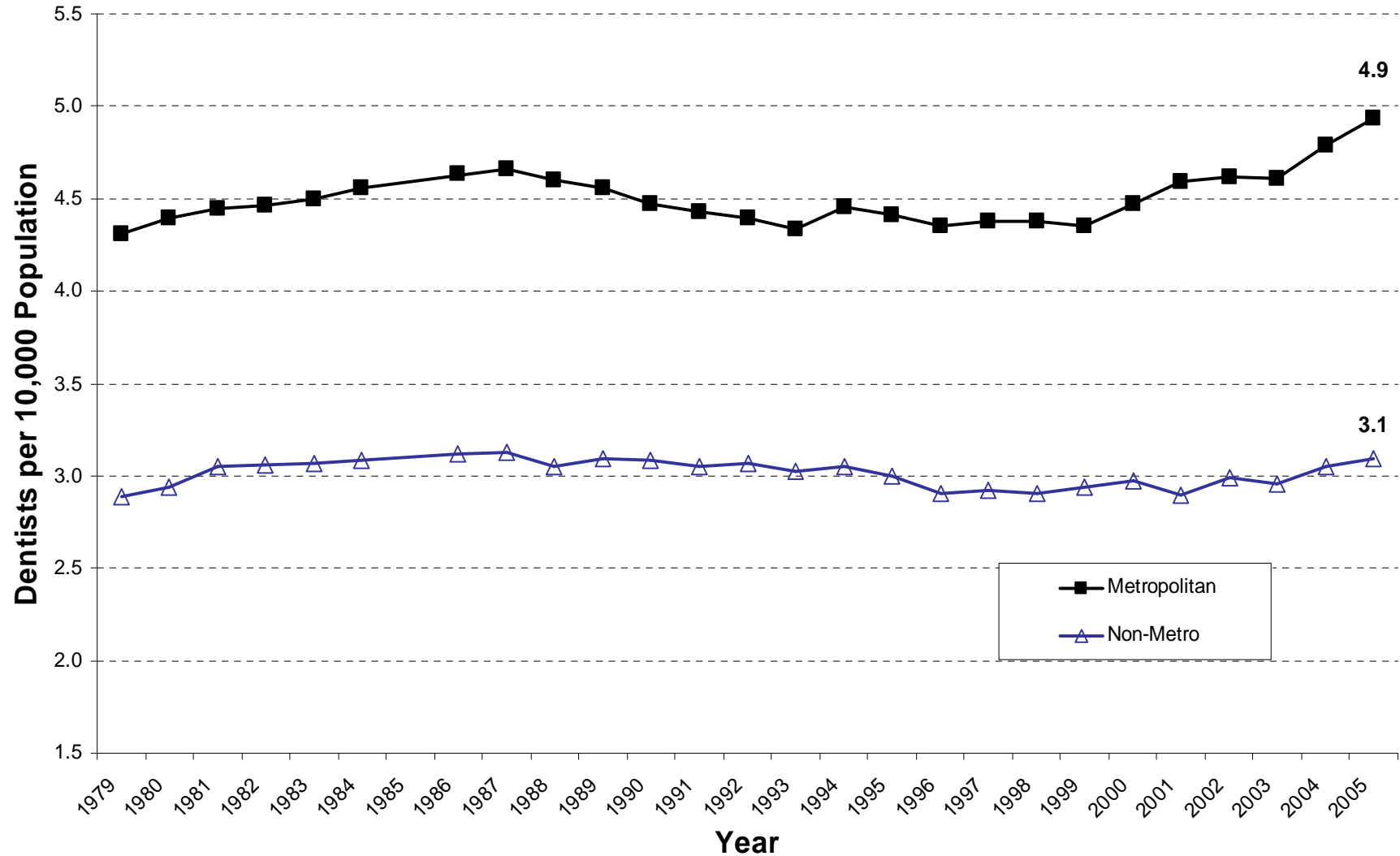


Source: North Carolina Health Professions Data System, with data derived from the NC State Board of Dental Examiners, 2005.

Produced by: North Carolina Health Professions Data System, and the Southeast Regional Center for Health Workforce Studies, Cecil G. Sheps Center for Health Services Research, University of North Carolina at Chapel Hill.

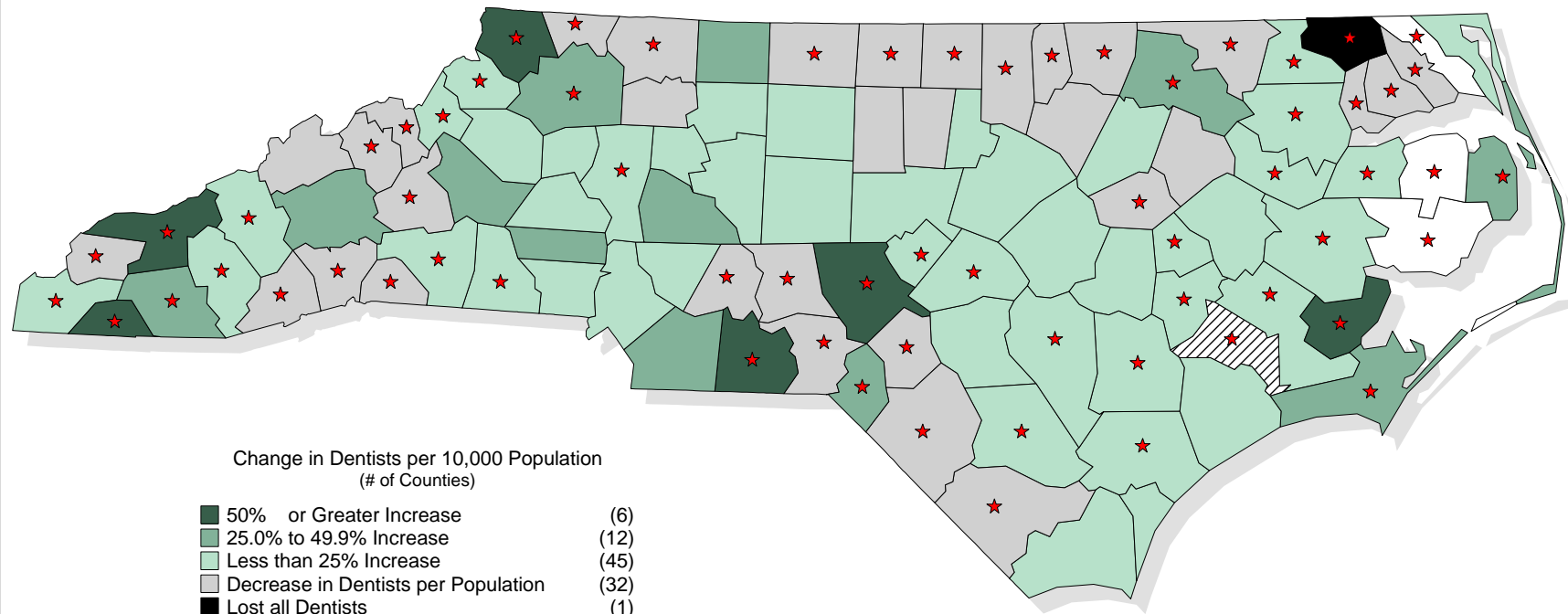
\*Dentists included are active or have unknown activity status.

## Dentists per 10,000 Population by Metropolitan and Nonmetropolitan Counties, North Carolina, 1979-2005



Source for Metropolitan-Nonmetropolitan definition: Office of Management and Budget, 1993.  
 Sources: North Carolina Health Professions Data System, 1979 to 2005 with data derived from the North Carolina State Board of Dental Examiners; North Carolina Office of State Planning. Figures include all licensed active, in-state, dentists.

## Change in Dentists per 10,000 Population North Carolina, 1996-2005



Change in Dentists per 10,000 Population  
(# of Counties)

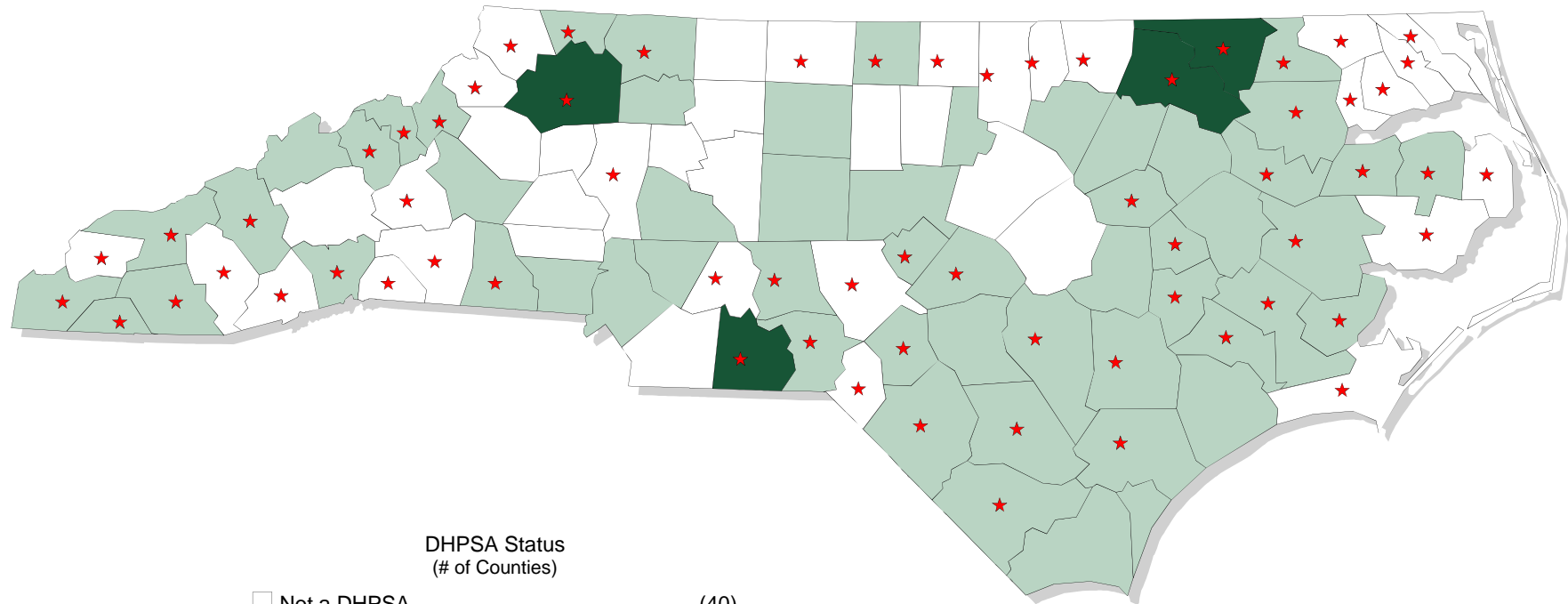
	50% or Greater Increase	(6)
	25.0% to 49.9% Increase	(12)
	Less than 25% Increase	(45)
	Decrease in Dentists per Population	(32)
	Lost all Dentists	(1)
	No Dentists in 1996, One Dentist in 2005	(1)
	No Dentists Either Year	(3)

★ Nonmetropolitan County

Source: North Carolina Health Professions Data System, with data derived from the NC State Board of Dental Examiners, 1996-2005.  
 Produced by: North Carolina Health Professions Data System, and the Southeast Regional Center for Health Workforce Studies, Cecil G. Sheps Center for Health Services Research, University of North Carolina at Chapel Hill.

\*Dentists included are active or have unknown activity status.

## Dental Health Professional Shortage Areas (DHPSAs), North Carolina, February 2004



DHPSA Status  
(# of Counties)

□ Not a DHPSA	(40)
■ Whole County DHPSA	(4)
■ Special Population of Part County DHPSA	(56)

★ Nonmetropolitan County

\*Note: A part county HPSA is one or several sub-county areas designated as a HPSA.

Produced By: Southeast Regional Center for Health Workforce Studies, Cecil G. Sheps Center for Health Services Research, University of North Carolina at Chapel Hill.

Source: US Department of Health & Human Services, Health Resources and Services Administration, Bureau of Health Professions, Shortage Designation Branch, February 2004.



# Demographic Characteristics

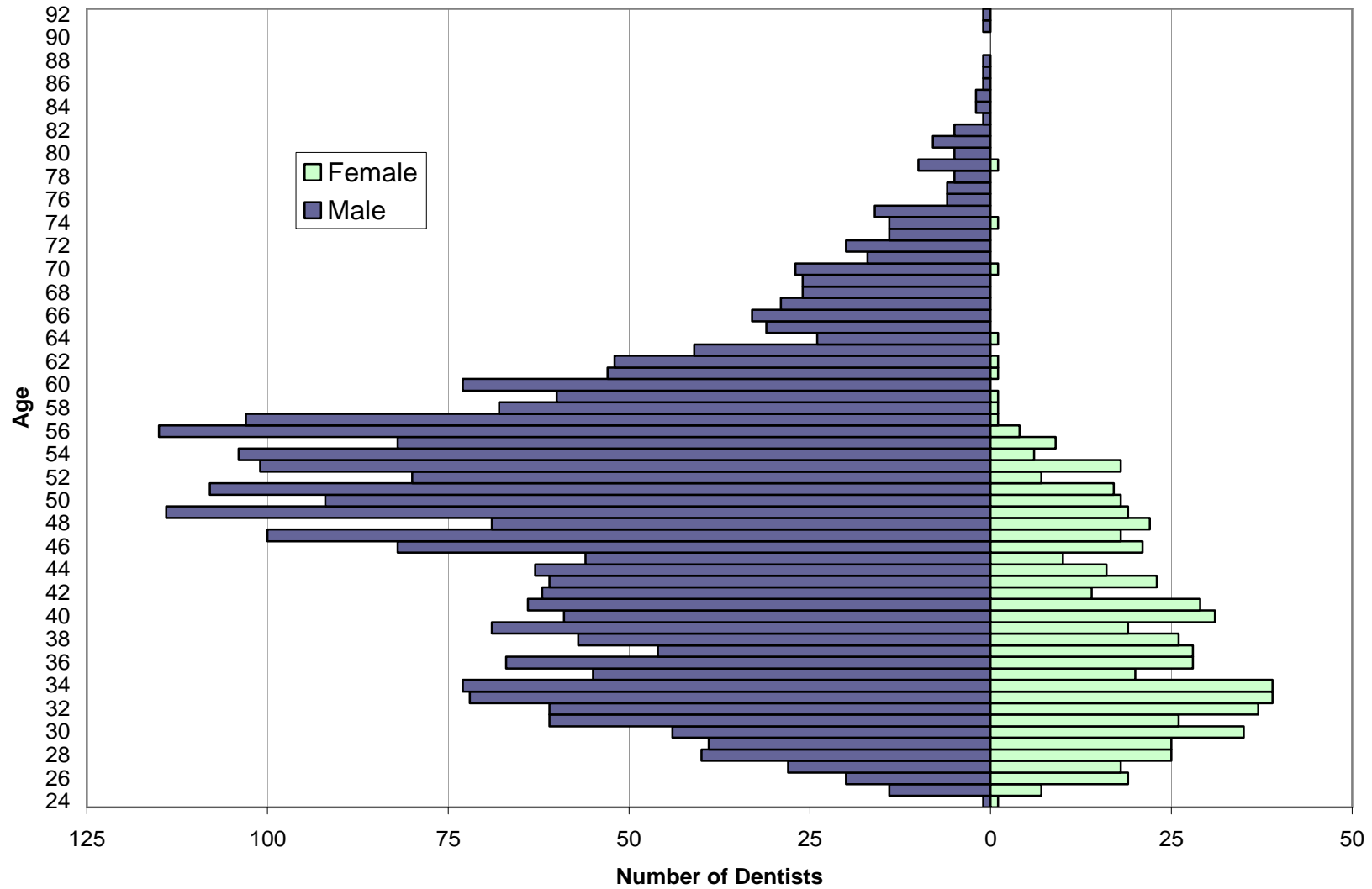


## North Carolina Dental Workforce is Graying

- Over 40% of NC dentists are older than 50.
- The average age of all NC dentists is 47years.
  - Average age in metropolitan counties is 46 years.
  - Average age in non-metropolitan counties is 49 years.
- Female dentists in NC are 10 years younger than male dentists, on average.



# Dentists by Age and Gender, 2005



Sources: North Carolina Health Professions Data System with data derived from the North Carolina State Board of Dental Examiners, 2005. Figures include active, instate dentists licensed in North Carolina as of October 31, 2005.

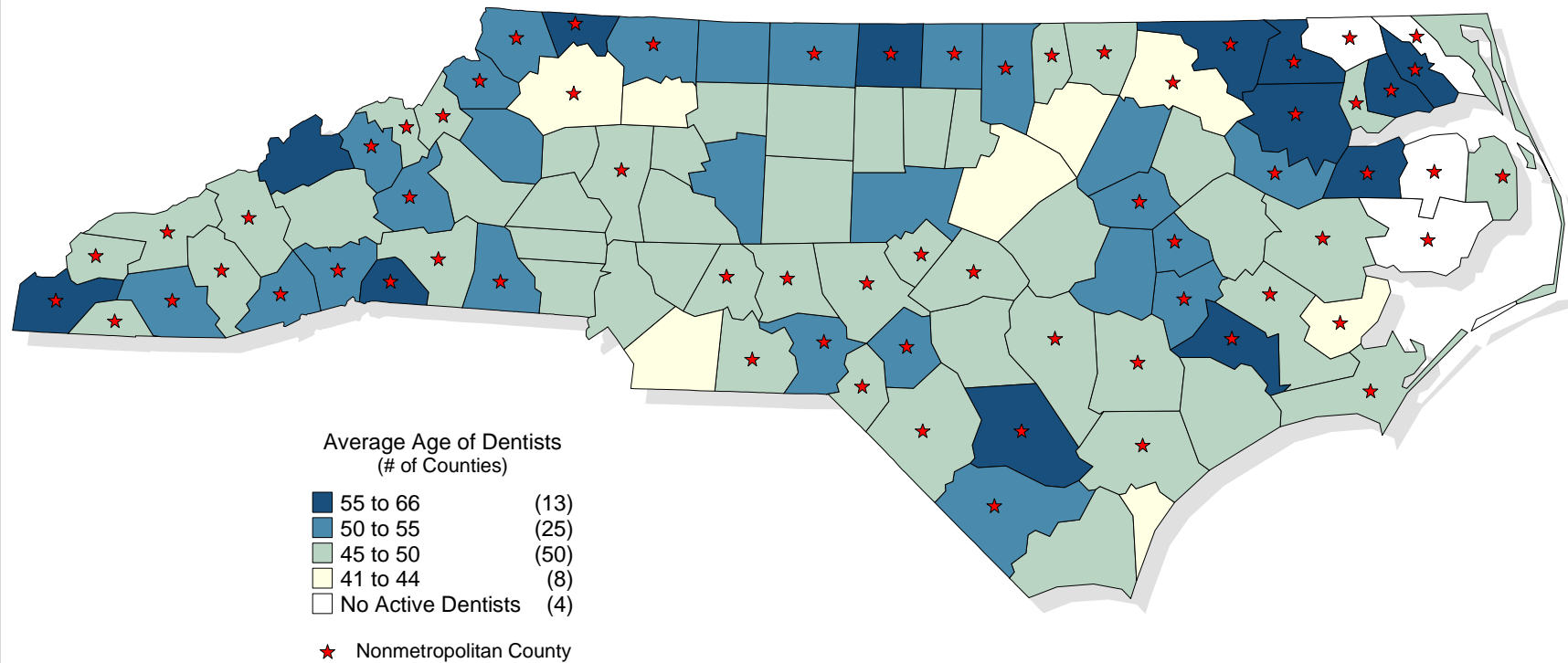


# Age of North Carolina Dentists, 2005

Age	
<31	8.8%
31-40	25.3%
41-50	25.1%
51-60	26.6%
61-70	10.2%
> 70	3.9%

Note: Figures include active, in-state dentists; four dentists had missing age data.  
Sources: North Carolina Health Professions Data System with data derived from the North Carolina State Board of Dental Examiners, 2005 .

## Average Age of Active Dentists North Carolina, 2005



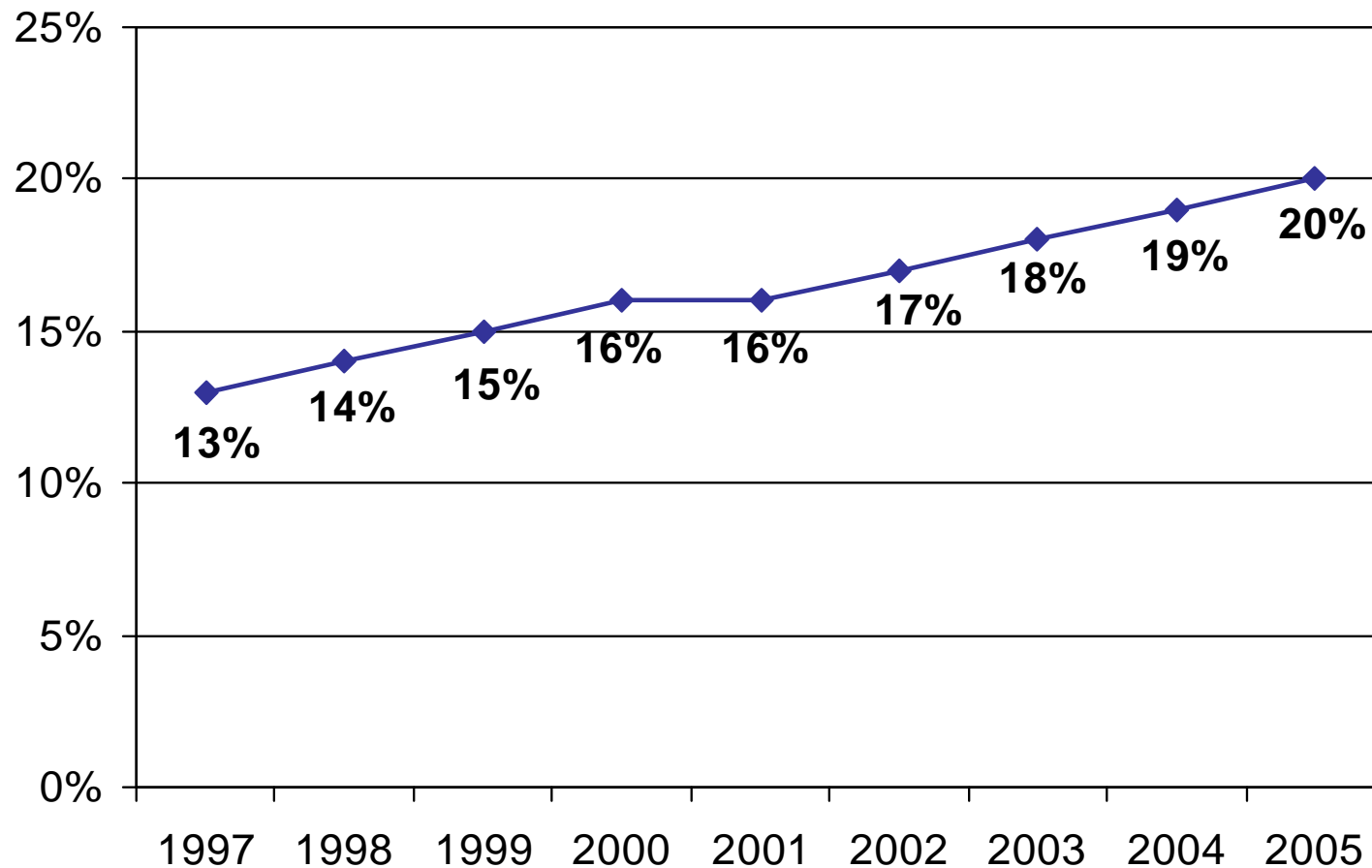
Average age of all dentists in North Carolina = 47.2

Source: North Carolina Health Professions Data System, with data derived from the NC State Board of Dental Examiners, 1996-2005.

Produced by: North Carolina Health Professions Data System, and the Southeast Regional Center for Health Workforce Studies, Cecil G. Sheps Center for Health Services Research, University of North Carolina at Chapel Hill.

\*Age data were missing for four dentists.  
Dentists included are active or have unknown activity status.

# Percentage of Dentists Who Are Female, North Carolina, 1997-2005



Sources: North Carolina Health Professions Data System with data derived from the North Carolina State Board of Dental Examiners, 1997 to 2005 .

## Female Dentists by Form of Employment, North Carolina, 1984 and 2004

	1984		2004	
	% Total Employment	% Women	% Total Employment	% Women
Self-Employed	82%	56%	64%	51%
Partnership or a Group	5%	5%	17%	20%
Individual Practice	3%	9%	11%	16%
Local, County, State or Federal Government	7%	20%	6%	9%
Other	3%	9%	2%	4%
Total	100%	100%	100%	100%

Sources: North Carolina Health Professions Data System with data derived from the North Carolina State Board of Dental Examiners, 2005 . Figures include active, instate dentists licensed in North Carolina as of October 31, 2005.

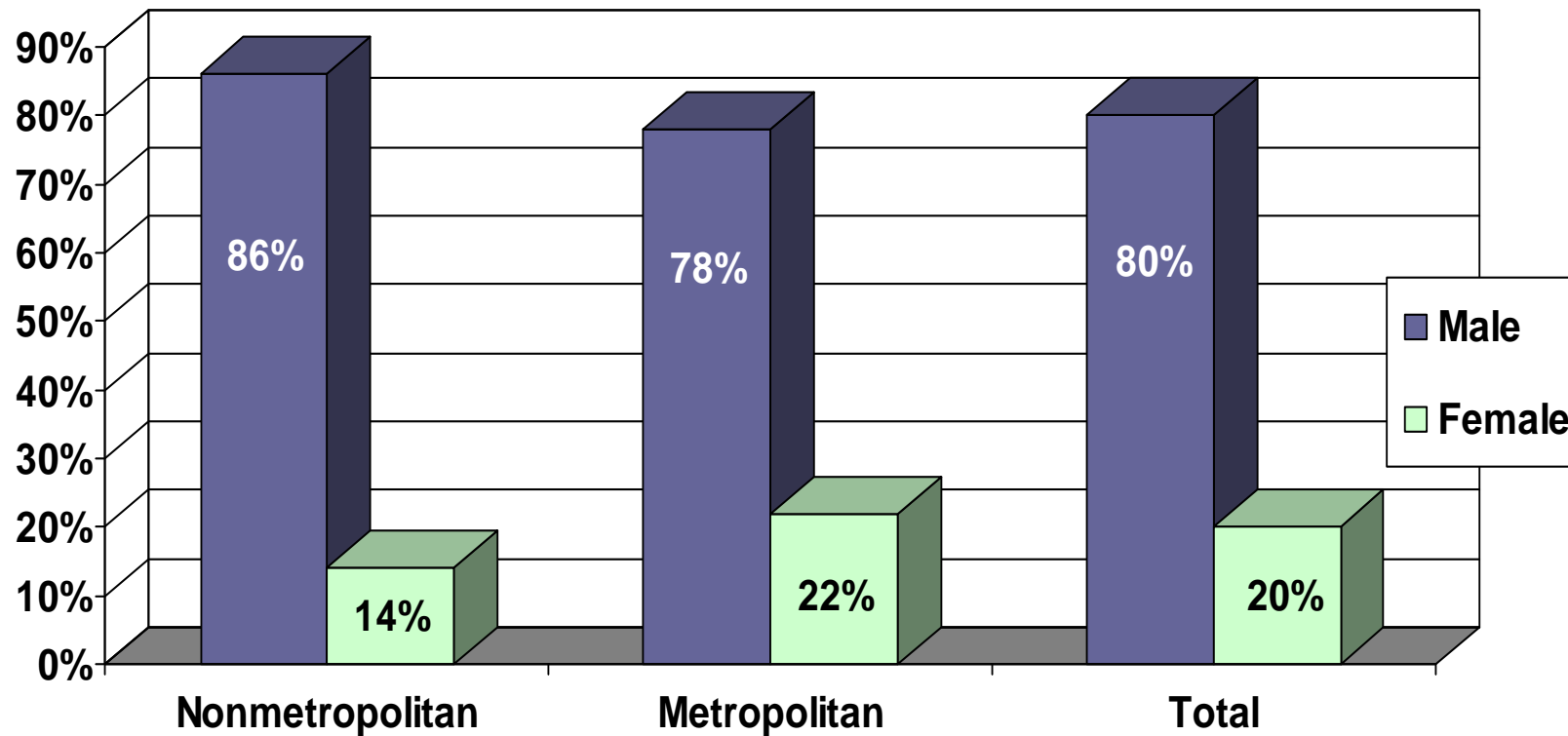
## Difference in Hours Worked per Week, Male Hours-Female Hours, 1984 and 2004

Age	1984		2004	
	Hours per Week	Number of Women	Hours per Week	Number of Women
< 31	1.1	46	2.0	94
31-40	0.4	38	4.5	282
41-50	1.5	6	2.0	186
51-60	-0.7	5	0.8	62
61-70	-2.6	3	-2.8	7
Total	-0.6	98	1.6	631

Average hours/week for males in 1984 was 37 versus 37.6 for females.  
Average hours/week for males in 2004 was 37.4 hours versus 35.7 for females.

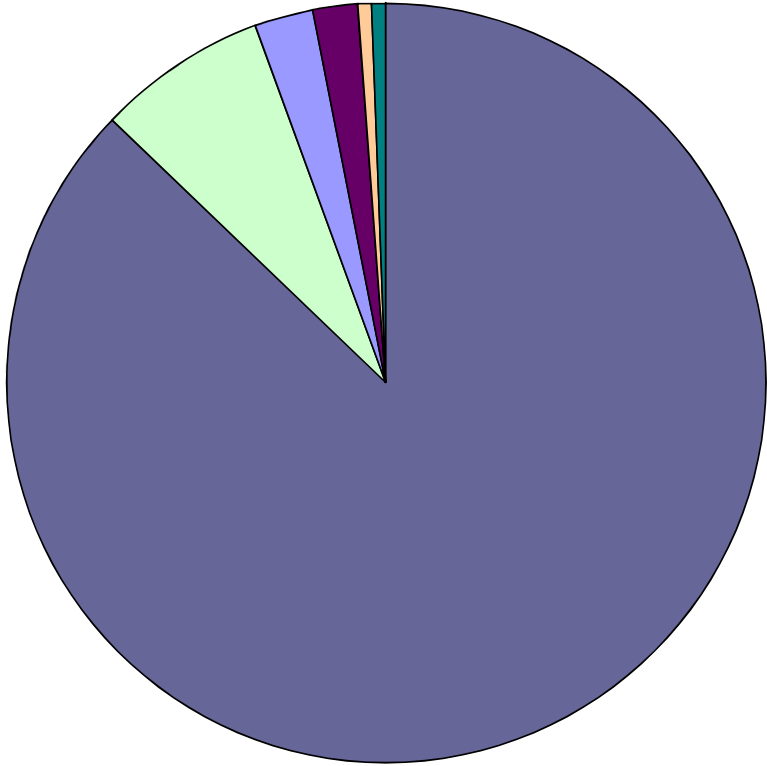
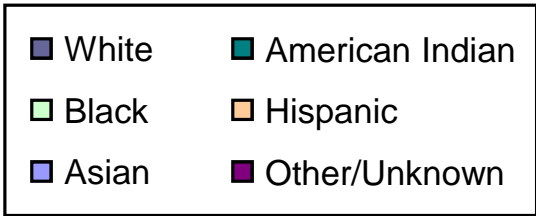
# Dentists by Gender, 2005

Percent of Dentists Who Are Male vs. Female  
in Metropolitan and Nonmetropolitan Areas



Sources: North Carolina Health Professions Data System with data derived from the North Carolina State Board of Dental Examiners, 2005. Figures include active, instate dentists licensed in North Carolina as of October 31, 2005.

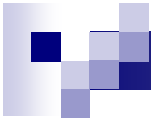
# Dentists by Race, 2005



Race	
White	87.1%
Black	7.4%
Asian	2.6%
Hispanic	0.6%
American Indian	0.5%
Other/ Unknown	1.9%

Sources: North Carolina Health Professions Data System with data derived from the North Carolina State Board of Dental Examiners, 2005 . Figures include active, instate dentists licensed in North Carolina as of October 31, 2005.





# Practice Characteristics

# Over 3 out of 4 North Carolina Dentists are in General Practice

Specialty, 2005	
General Practice	77.8% (2,934)
Orthodontics	6.2% (235)
Oral Surgery	3.7% (140)
Pediatric Dentistry	3.3% (125)
Periodontics	2.6% (99)
Endodontics	2.8% (105)
Public Health	1.8% (66)
Prosthodontics	1.4% (54)
Oral/Maxillofacial Radiology	<1%(12)
Unknown	<1% (2)

Sources: North Carolina Health Professions Data System with data derived from the North Carolina State Board of Dental Examiners, 2005 . Counts include active, instate dentists licensed in North Carolina as of October 31, 2005.

# Most North Carolina Dentists Work in a Dental Practice Office

<b>Practice Setting, 2005</b>			
	<b>Nonmetropolitan</b>	<b>Metropolitan</b>	<b>Total</b>
Dental Practice Office	87.8%	85.4%	85.9%
Clinics	2.6%	3.0%	2.9%
Schools	0%	2.2%	1.7%
Federal/Military	0.7%	1.0%	0.9%
Hospitals	0.1%	1.0%	0.8%
VA/Public Health/Indian Health	3.1%	1.4%	1.8%
Other	3.9%	3.0%	3.2%
Missing	1.8%	3.1%	2.8%
<b>Total</b>	<b>100%</b>	<b>100%*</b>	<b>100%</b>

*\*100.1% due to rounding.*

Sources: North Carolina Health Professions Data System with data derived from the North Carolina State Board of Dental Examiners, 2005 . Counts include active, instate dentists licensed in North Carolina as of October 31, 2005.

# Most North Carolina Dentists Are Self-Employed

<b>Form of Employment, 2005</b>			
	<b>Nonmetropolitan</b>	<b>Metropolitan</b>	<b>Total</b>
Self-Employed	74.9%	65.1%	67.3%
Partnership or a Group	7.2%	14.5%	12.9%
Individual Practice	7.9%	9.6%	9.2%
Local, County, State or Federal Government	5.8%	5.2%	5.3%
Other	2.4%	2.5%	2.4%
Unknown	1.8%	3.1%	2.8%
<b>Total</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>

Sources: North Carolina Health Professions Data System with data derived from the North Carolina State Board of Dental Examiners, 2005 . Counts include active, instate dentists licensed in North Carolina as of October 31, 2005.



# Training

# Over Half of North Carolina Dentists are UNC Graduates

<b>Dentists Trained at UNC, 2005</b>			
	Total Dentists	Dentists Graduating from UNC	% of Dentists Graduating from UNC
Metropolitan Counties	2,953	1,607	54.4%
Nonmetropolitan Counties	819	505	61.7%
Total	3,772	2,112	56.0%

Sources: North Carolina Health Professions Data System with data derived from the North Carolina State Board of Dental Examiners, 2005 . Counts include active, instate dentists licensed in North Carolina as of October 31, 2005.

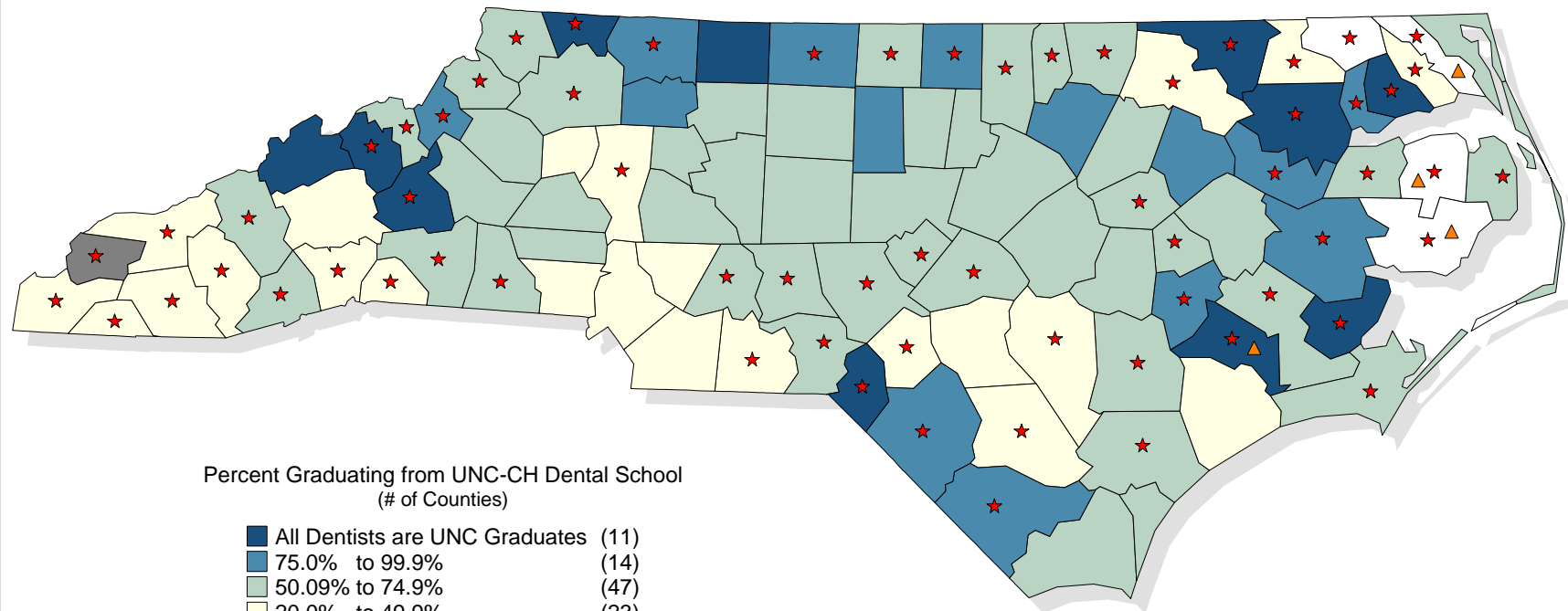


## On Average, 90% of UNC Graduates Stay in North Carolina to Practice

<b>Retention of Dentists Trained at UNC</b>			
Graduation Year	# Grads from UNC-CH	# in 2005 Licensure File	Percent Retention
2000	72	69	95.8%
2001	72	63	87.5%
2002	70	65	92.9%
2003	75	69	92.0%
2004	77	63	81.8%

Sources: North Carolina Health Professions Data System with data derived from the North Carolina State Board of Dental Examiners, 2005 . Figures include active, instate dentists licensed in North Carolina as of October 31, 2005.

## Percent of Dentists who Graduated from UNC-Chapel Hill Dental School North Carolina, 2005



Percent Graduating from UNC-CH Dental School  
(# of Counties)

	All Dentists are UNC Graduates	(11)
	75.0% to 99.9%	(14)
	50.09% to 74.9%	(47)
	20.0% to 49.9%	(23)
	No Active Dentists	(4)
	No UNC Graduates	(1)

▲ County Has No Active Dentists

★ Nonmetropolitan County

Source: North Carolina Health Professions Data System, with data derived from the NC State Board of Dental Examiners, 2005.

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\*Dentists included are active or have unknown activity status.



# Projections: Dentists per 10,000 Population, 2004-2020

