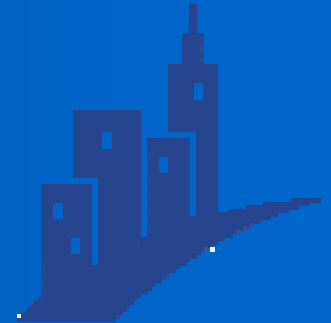


The Brookings Institution

Metropolitan Policy Program
Robert Puentes, Fellow



Caution: Challenges Ahead

A Review of New Urban Demographics and Impacts on Transportation

Eno Foundation Forum on the Future of Urban Transportation

December 6, 2006

Washington, DC



A Review of New Urban Demographics and Impacts on Transportation

Outline

FOUR BROAD DEMOGRAPHIC MEGA-TRENDS



Effect of those trends on metropolitan areas



Impacts on the nation's transportation network



Population Growth



Immigration



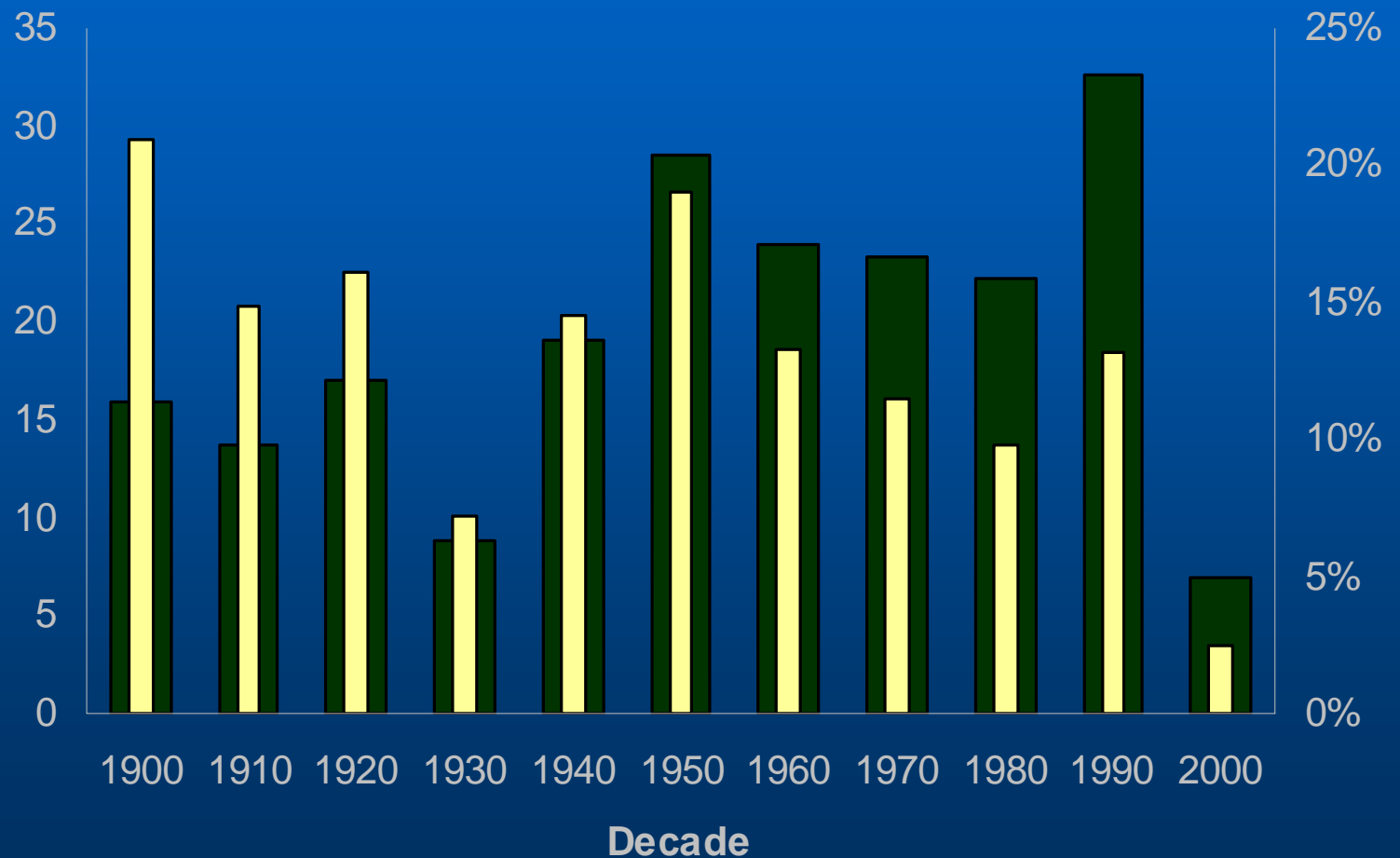
Aging



Internal Migration

The 1990s presented the strongest growth in four decades.

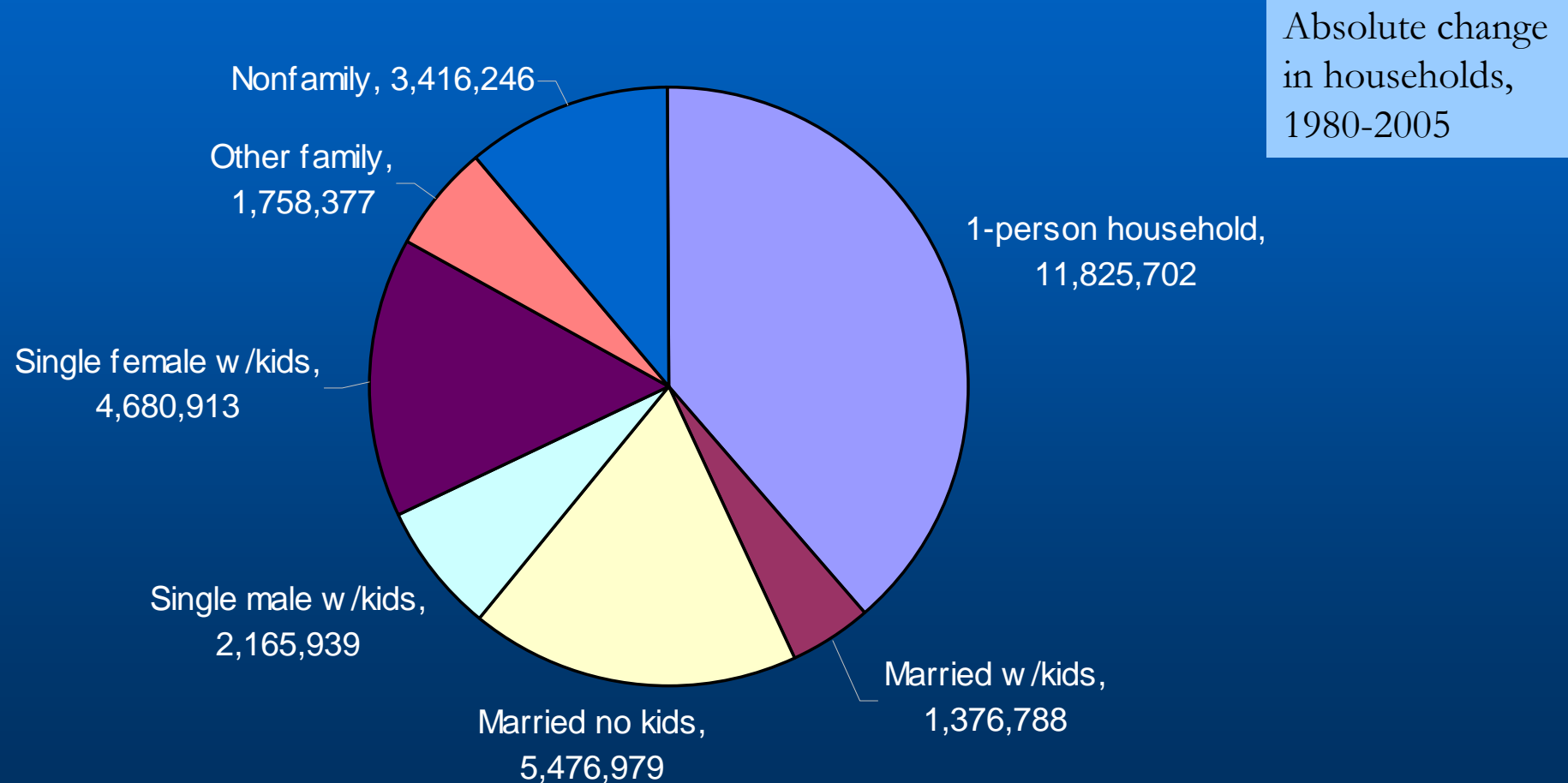
U.S.
population
growth, 1900-
2005



Source: Census

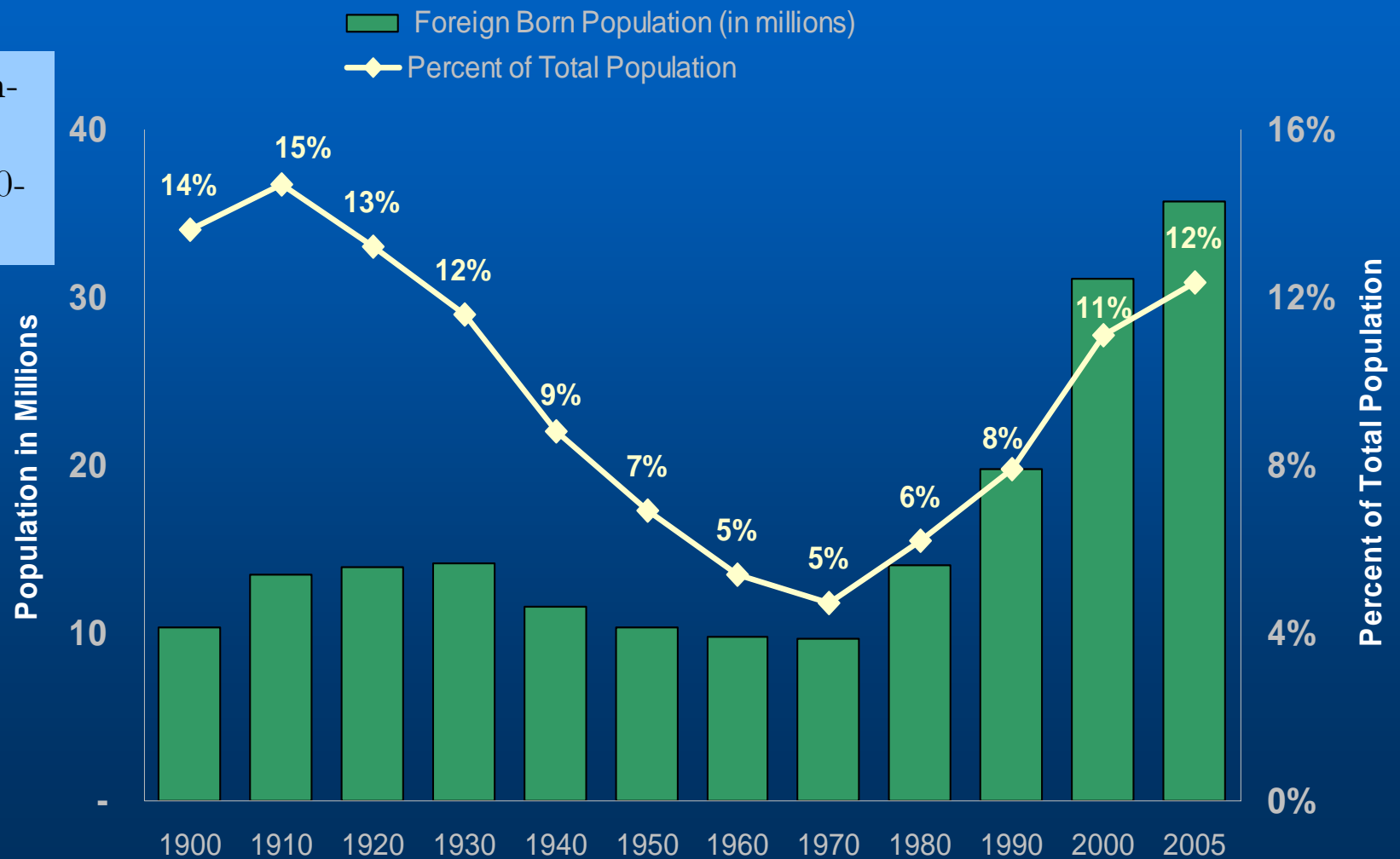
■ Numerical increase (in millions) ■ Percent Increase

Single person households made up -- by far -- the largest increase in household type since 1990.



After several decades of rapid immigration, the *share* of the U.S. population that is foreign-born is approaching early 1900's levels.

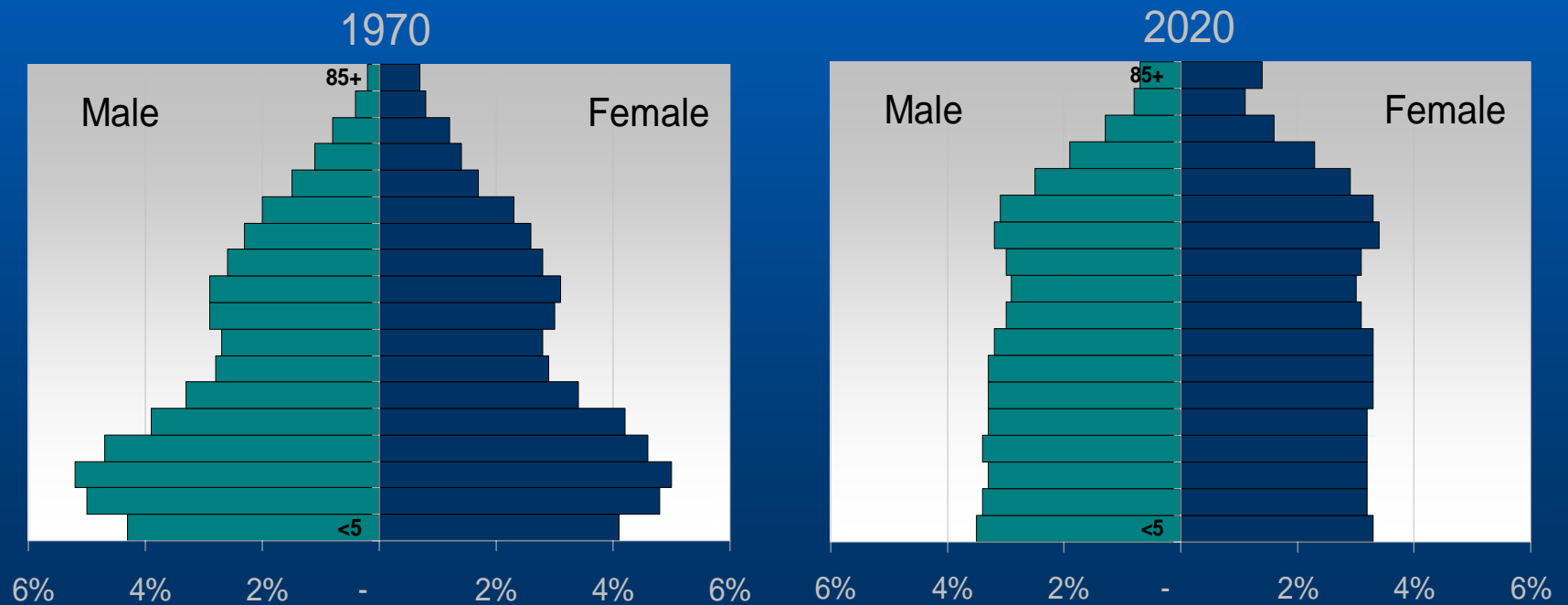
Total foreign-born and percent, 1900-2005



Source: Updated from Singer 2005

At the same time, the U.S. population is aging rapidly.

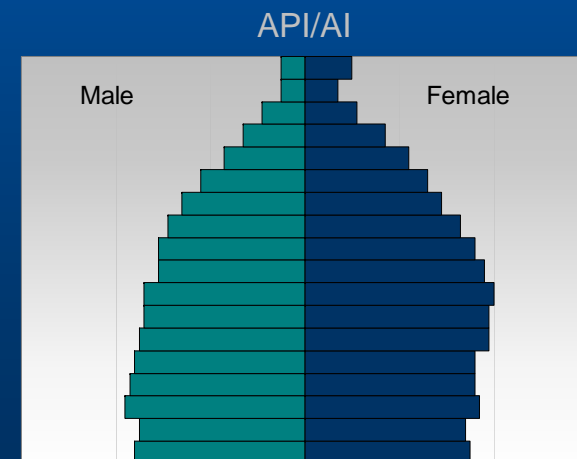
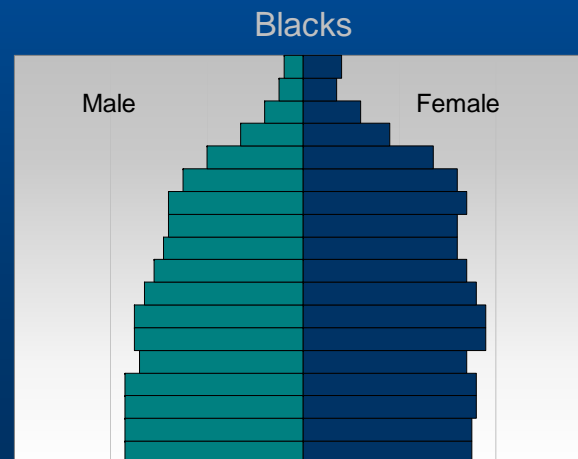
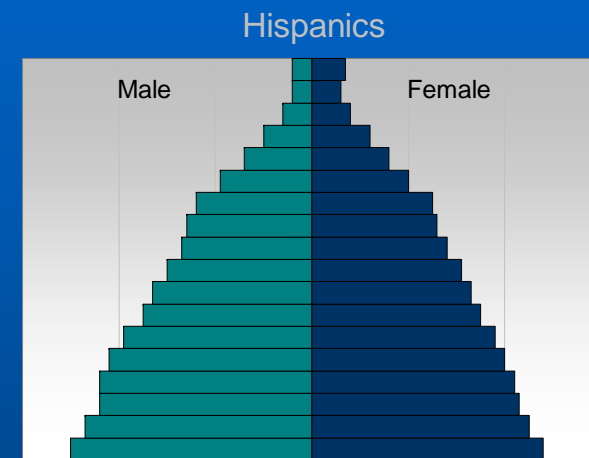
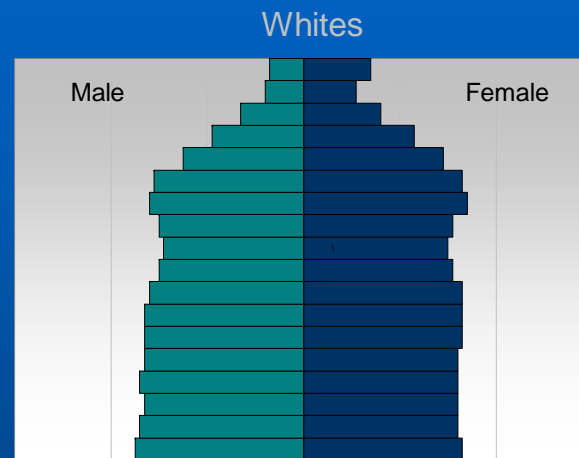
US Age
Distribution,
1970 vs. 2020



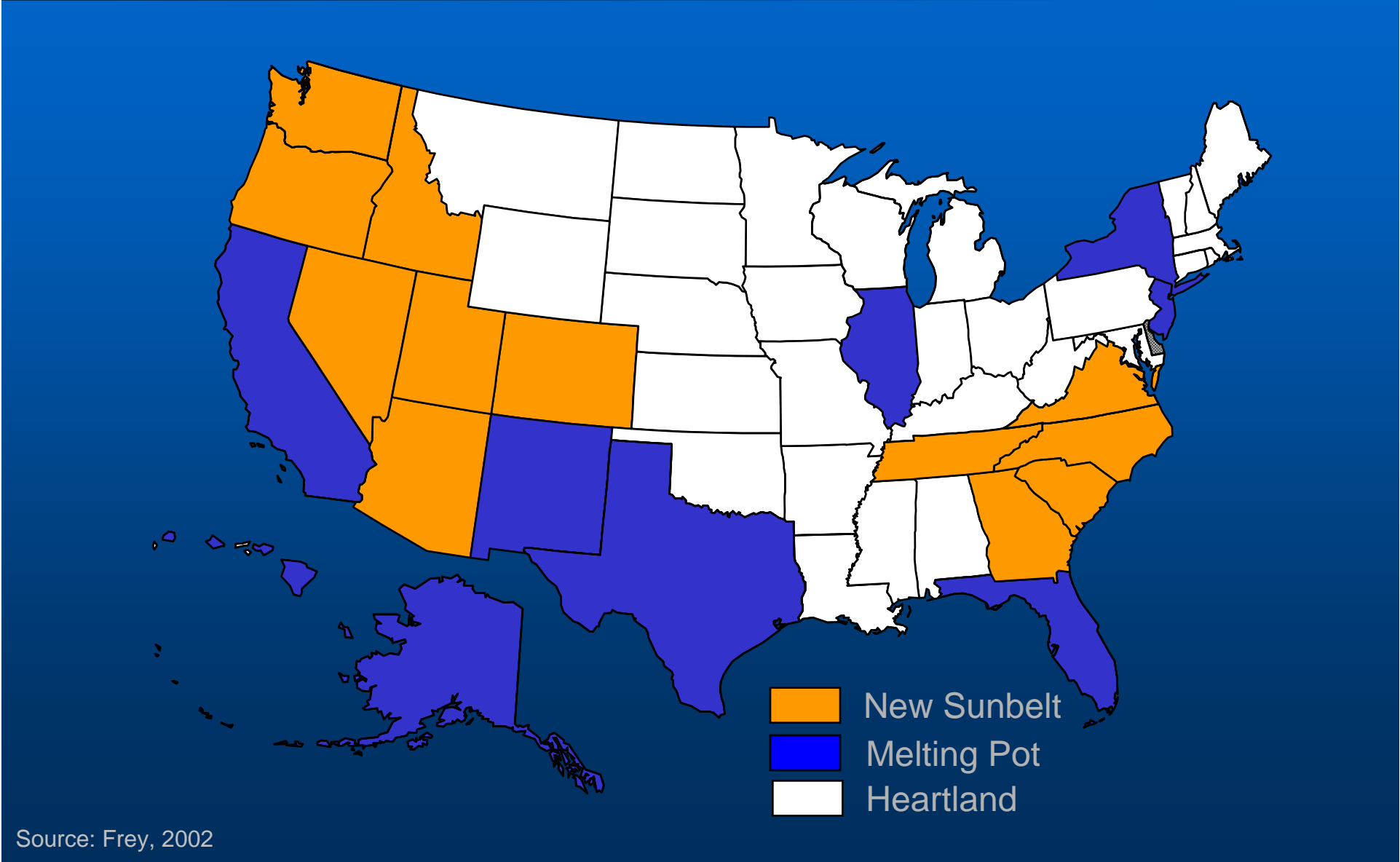
Source: Census

Minorities, however, have younger age structures than whites

US Age
Distribution,
2020

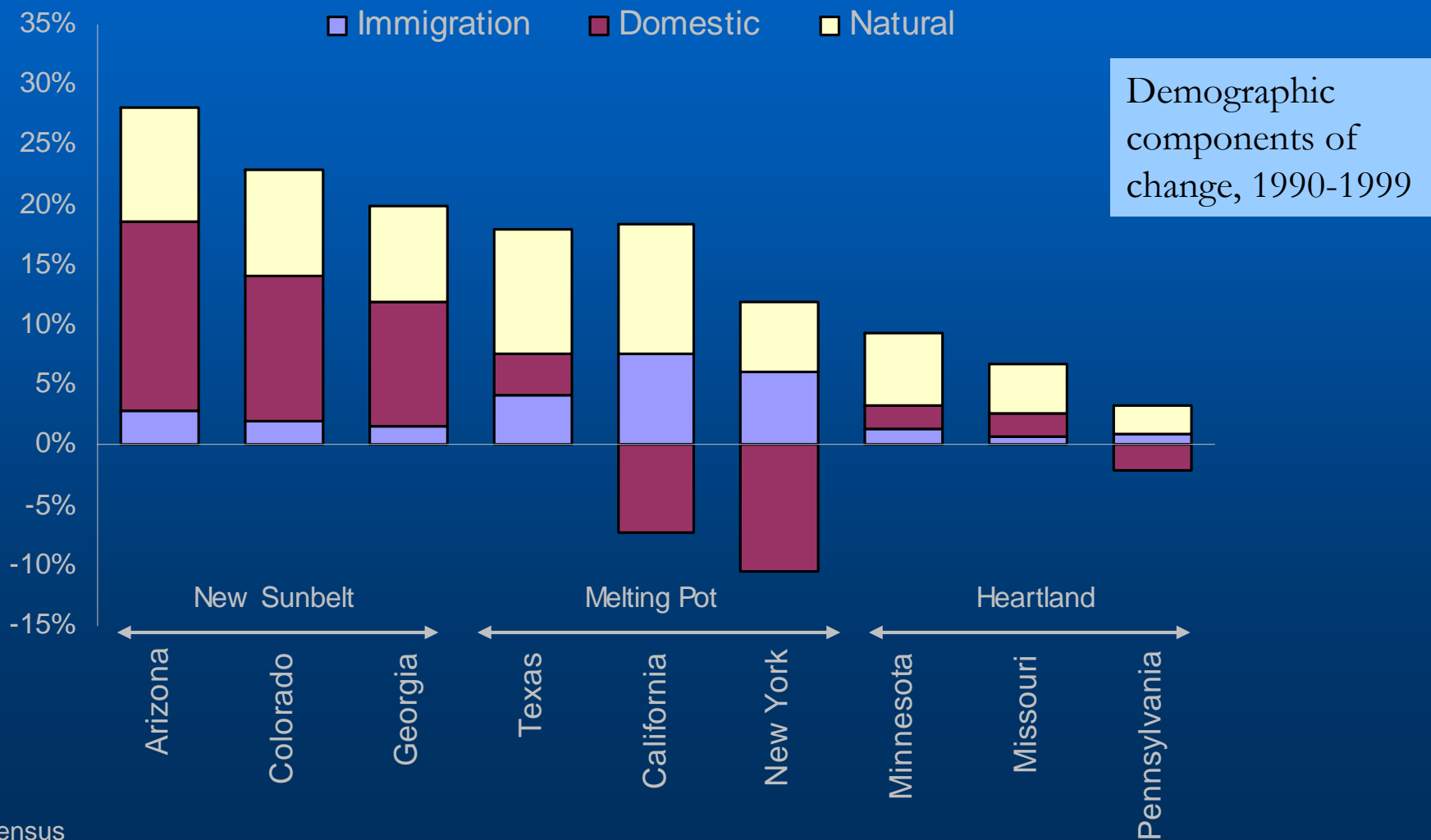


The demographic components of change reveal increasingly sharp differences between states.



Source: Frey, 2002

The demographic components of change reveal increasingly sharp differences between states.





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Outline

Four broad demographic mega-trends



EFFECT OF THOSE TRENDS ON METROPOLITAN AREAS



Impacts on the nation's transportation network



City resurgence



Uneven growth



Racial diversity



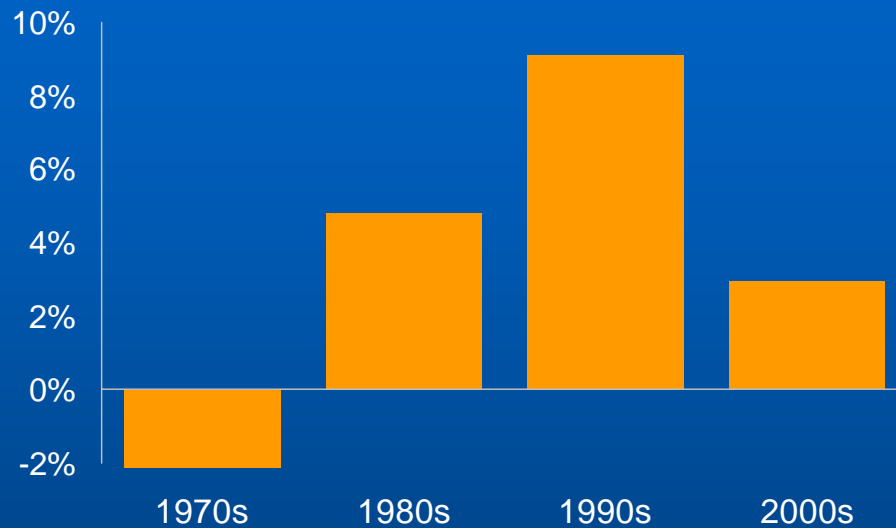
Job sprawl



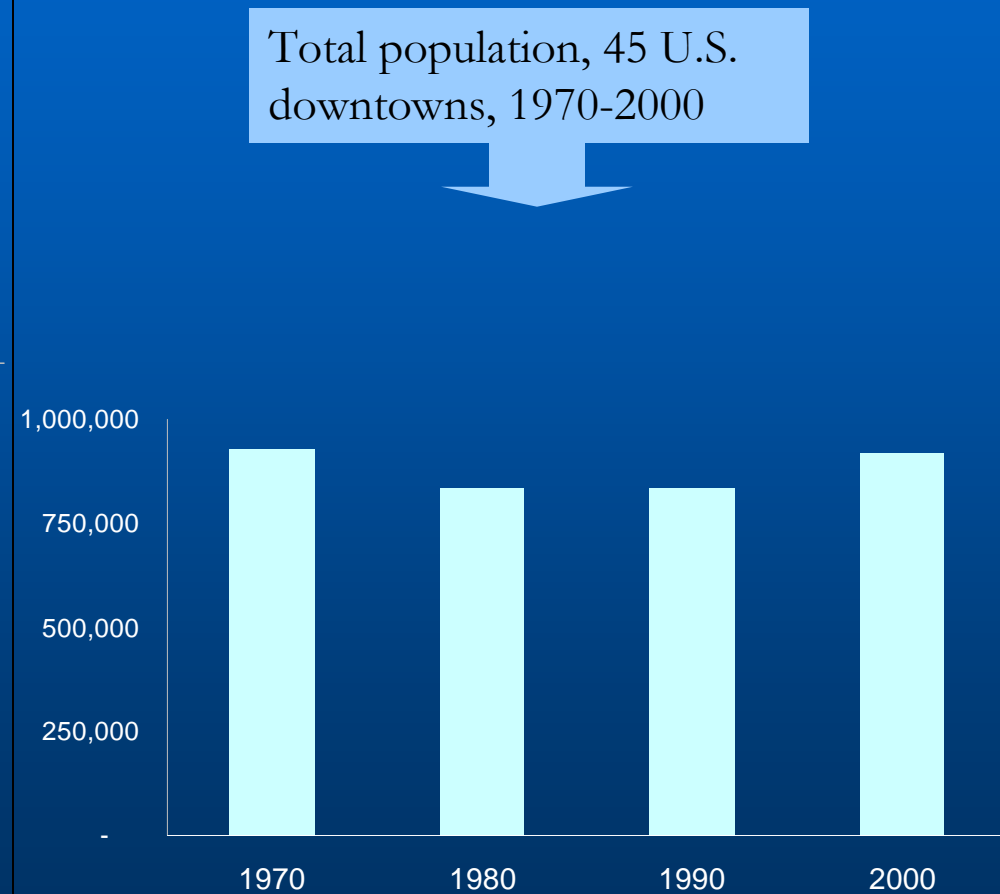
Geography of poverty



Recent demographic and market changes have already led to a surge of population in cities and downtowns.

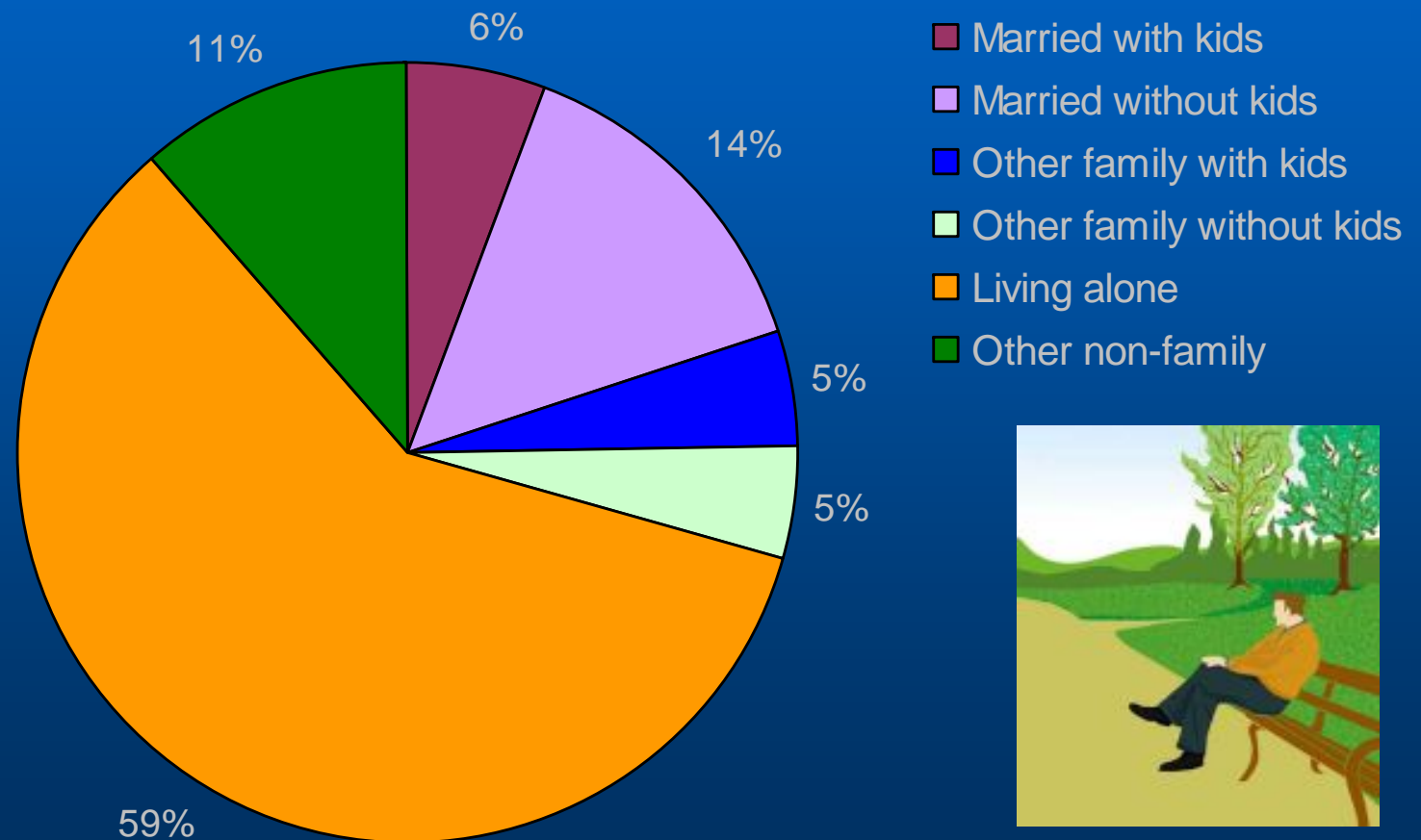


Population growth in 50 largest cities, 1970-2005



The majority of downtowners in 2000 lived alone;
the next largest group contained young couples without kids.

Downtown
households by
type, 2000

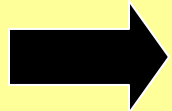


The primary determinant for how a city grows is based on the metropolitan area it is in.

Average city and metro area population change, by category, 1990-2000

City Category	Number of Cities	City Population Change	Metro Population Change
Rapid Growth (over 20%)	18	31%	26%
Significant Growth (10 to 20%)	23	15%	22%
Moderate Growth (2 to 10%)	33	6%	13%
No Growth (-2 to 2%)	6	0%	11%
Loss (below -2%)	20	-7%	6%

City resurgence



Uneven growth



Racial diversity



Job sprawl

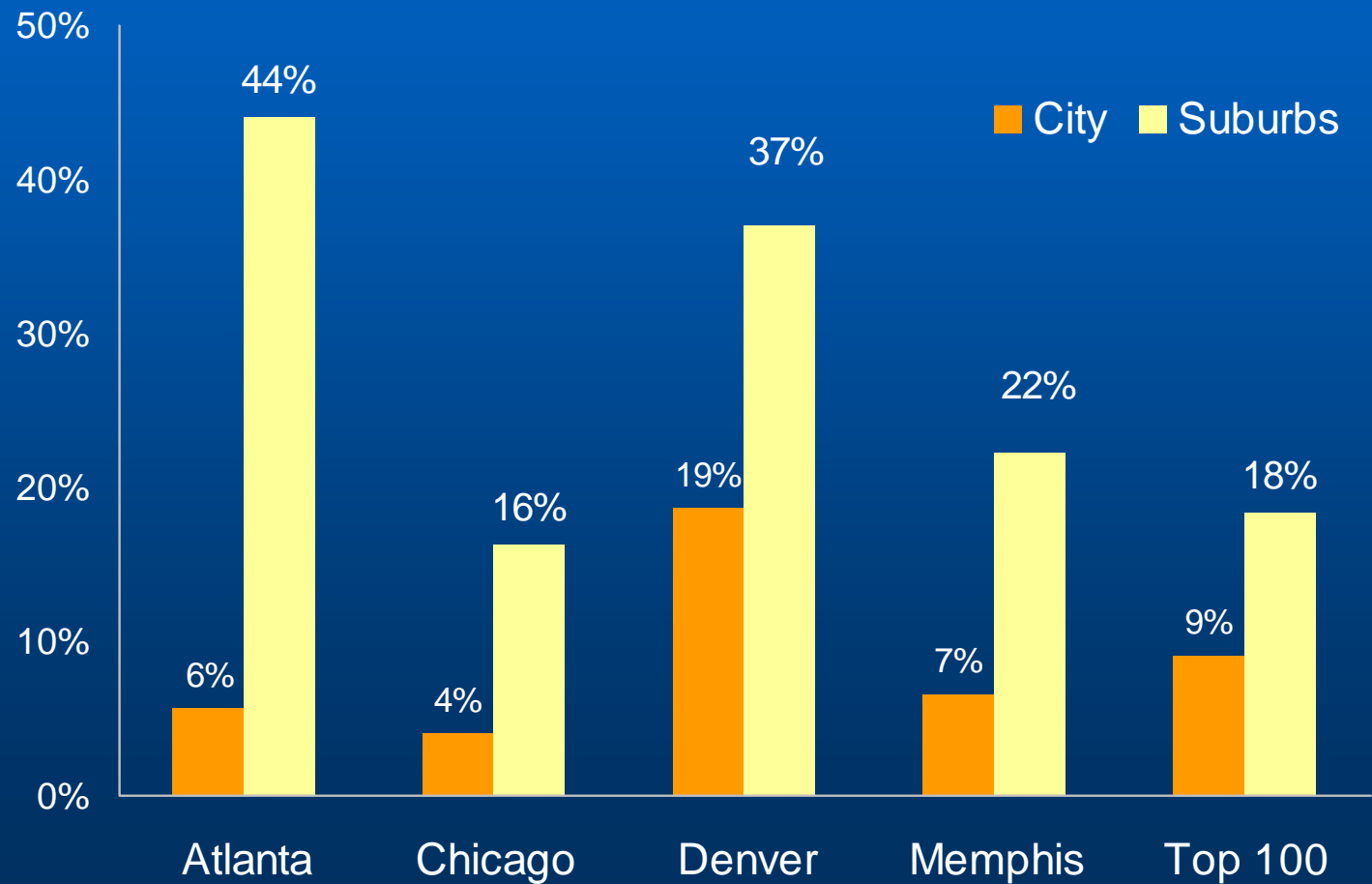
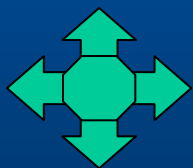


Geography of poverty



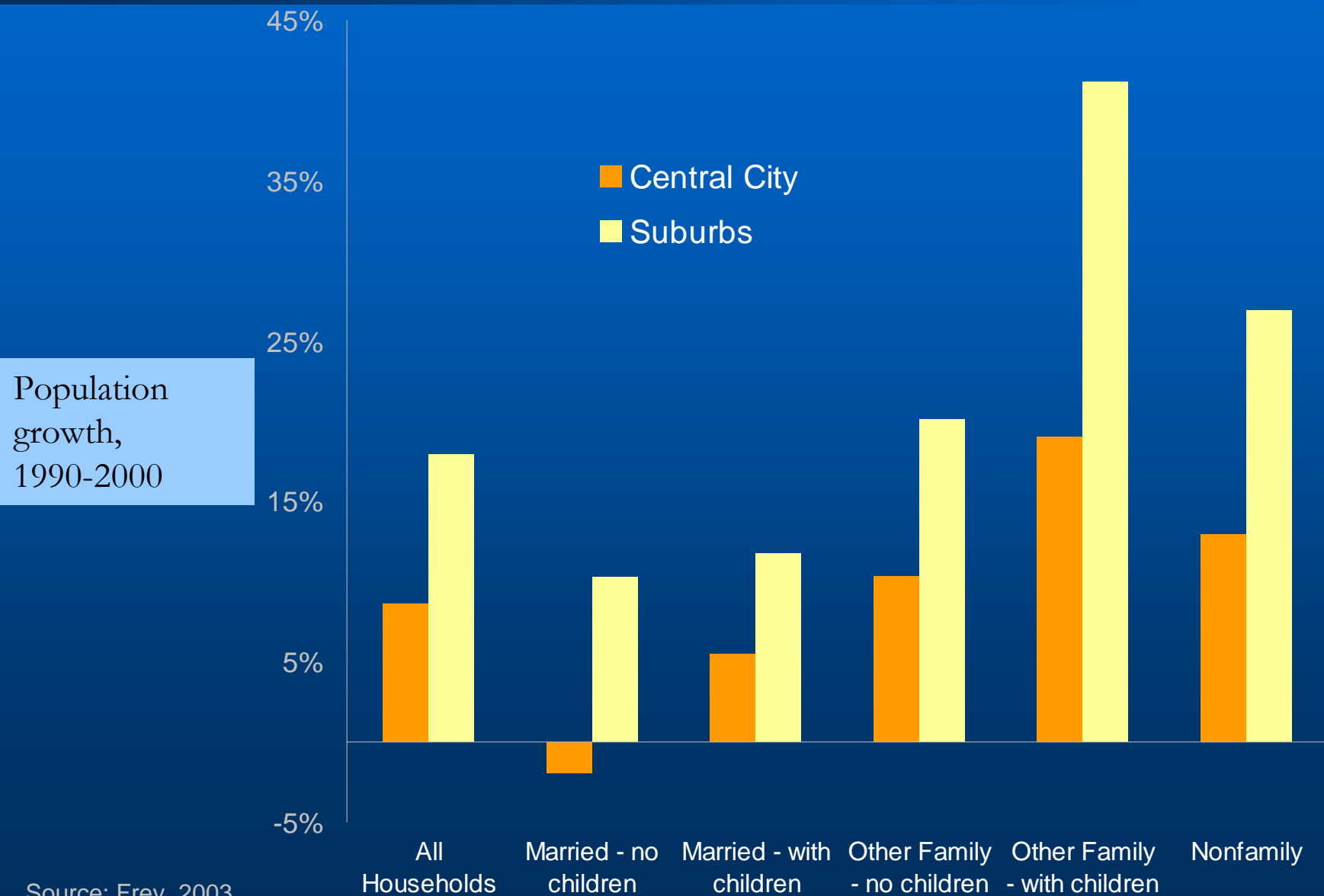
Population is continuing to decentralize in nearly every U.S. metropolitan area.

Selected cities and suburbs, population growth 1990-2000



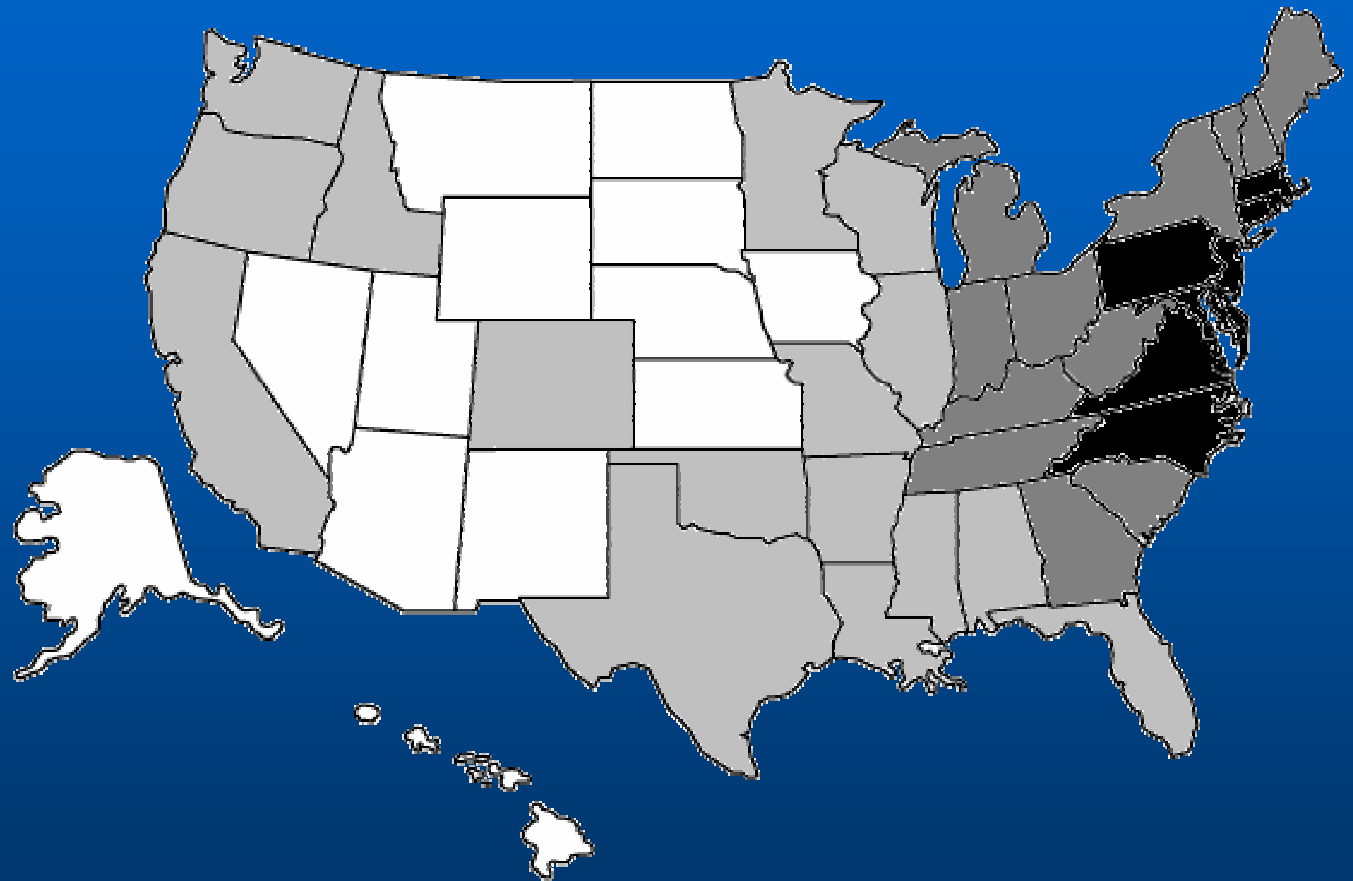
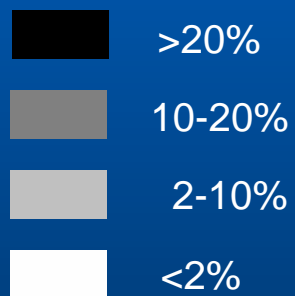
Source: Census

Every household type grew at faster rates in the suburbs than in cities



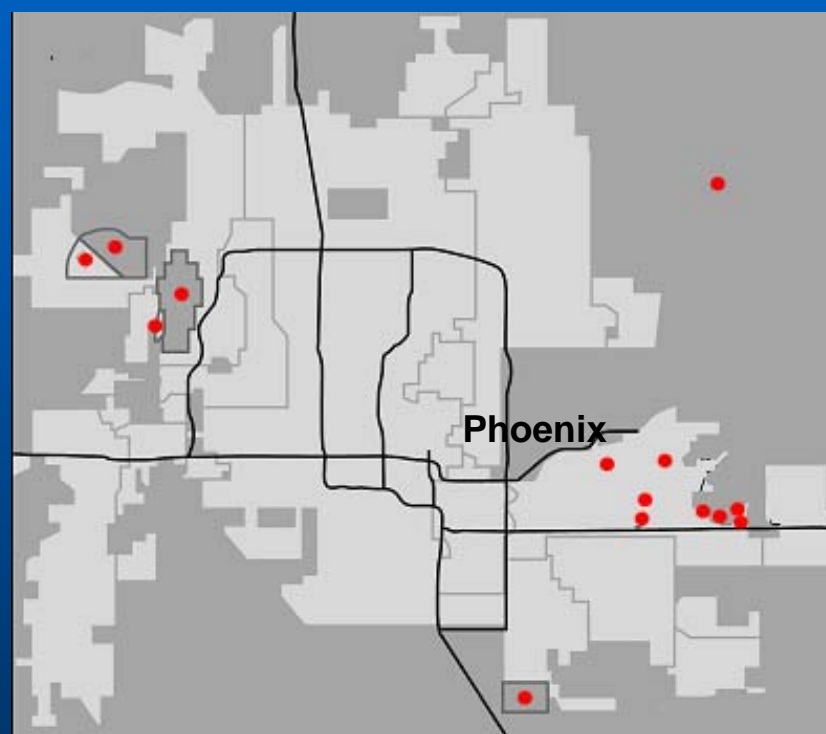
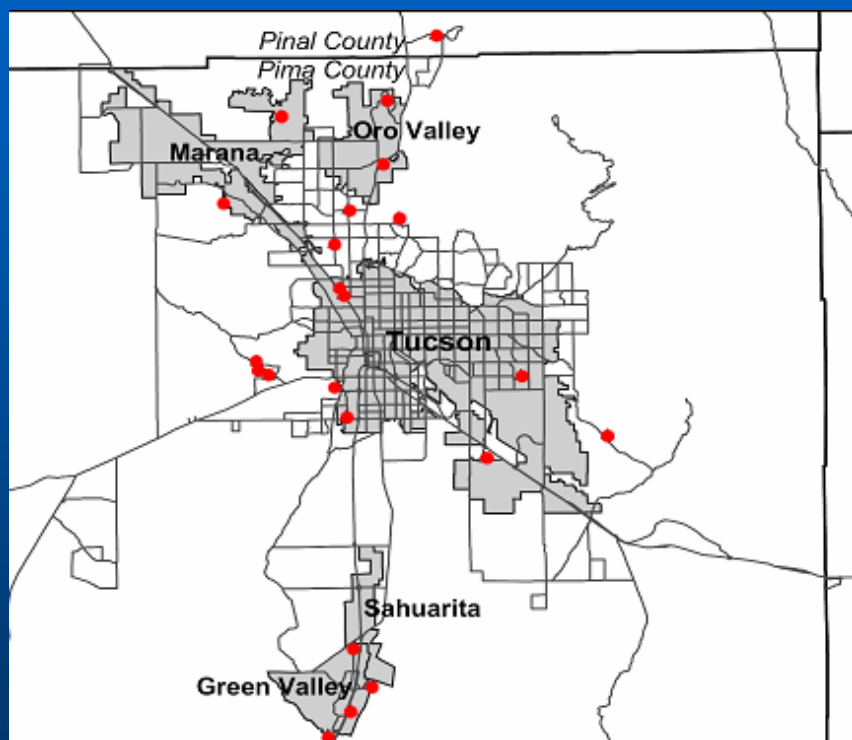
From 1980 to 2000 the states with the highest rates of rural land loss were concentrated in the Northeast and Mid-Atlantic.

Loss in develop-
able rural land,
1980-2000



Source: Theobald, 2005

In some areas in the Southwest, the elderly are becoming disproportionately represented on the suburban fringe.

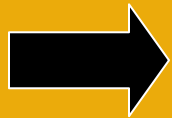


Active adult retirement communities

City resurgence



Uneven growth



Racial diversity



Job sprawl



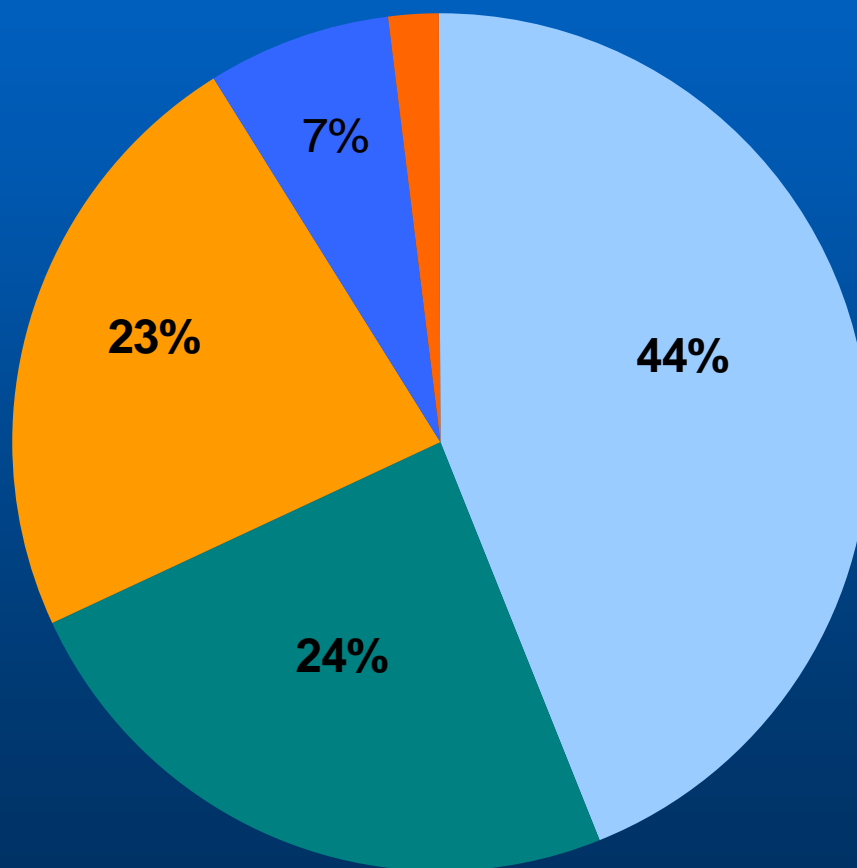
Geography of poverty



In aggregate, the racial makeup of the 100 largest cities has shifted. The top hundred cities are now majority minority

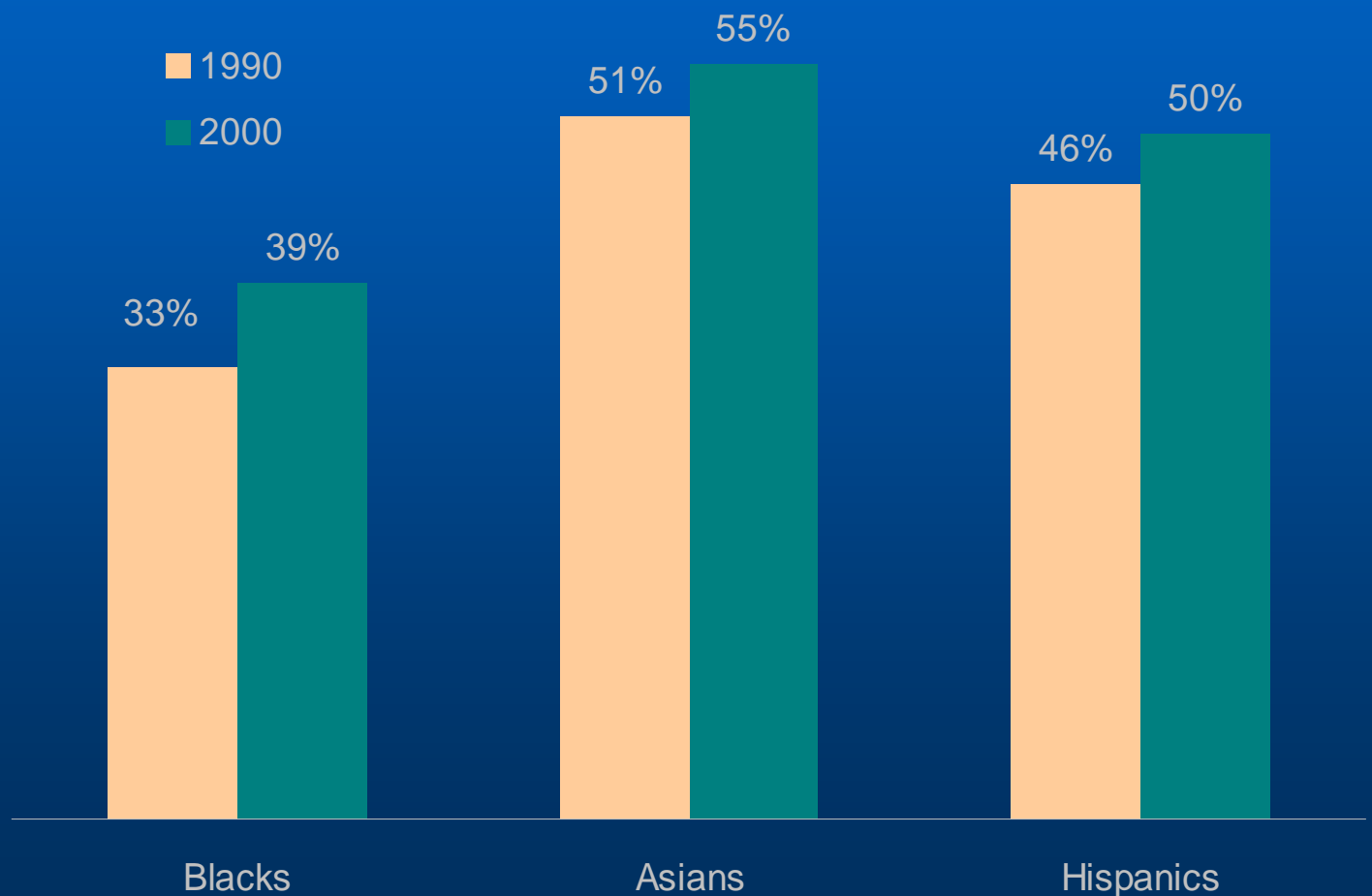
Share of
population by race
and ethnicity,
2000

- White
- Black
- Hispanic
- Asian
- Multi-racial



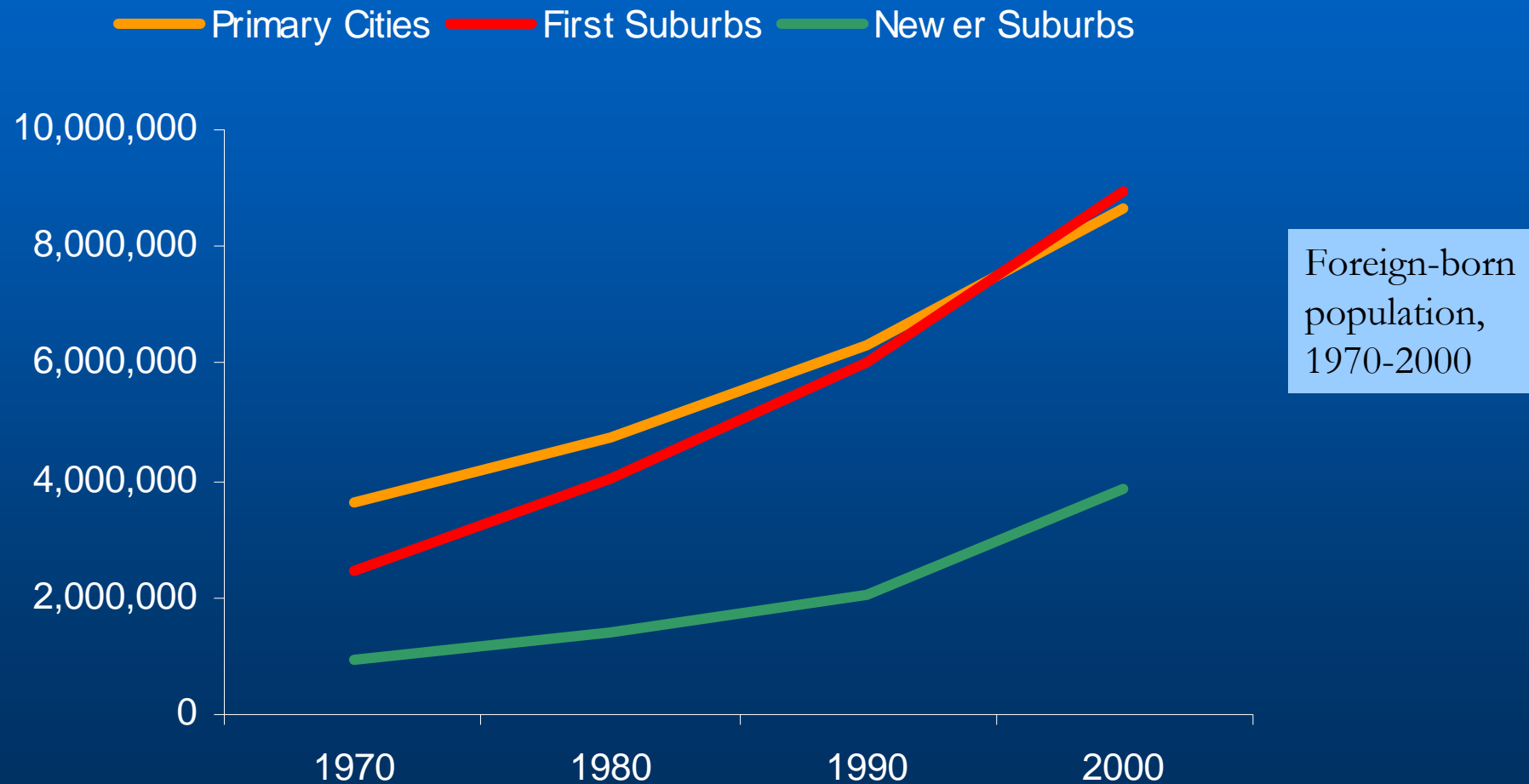
The percent of each racial/ethnic group living in the suburbs increased substantially.

Share of
population by race
and ethnicity,
1990, 2000



Source: Census

Older, inner-ring “first” suburbs are now home to a large and growing number of foreign-born residents.



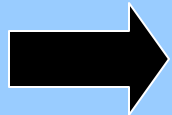
City resurgence



Uneven growth



Racial diversity



Job sprawl

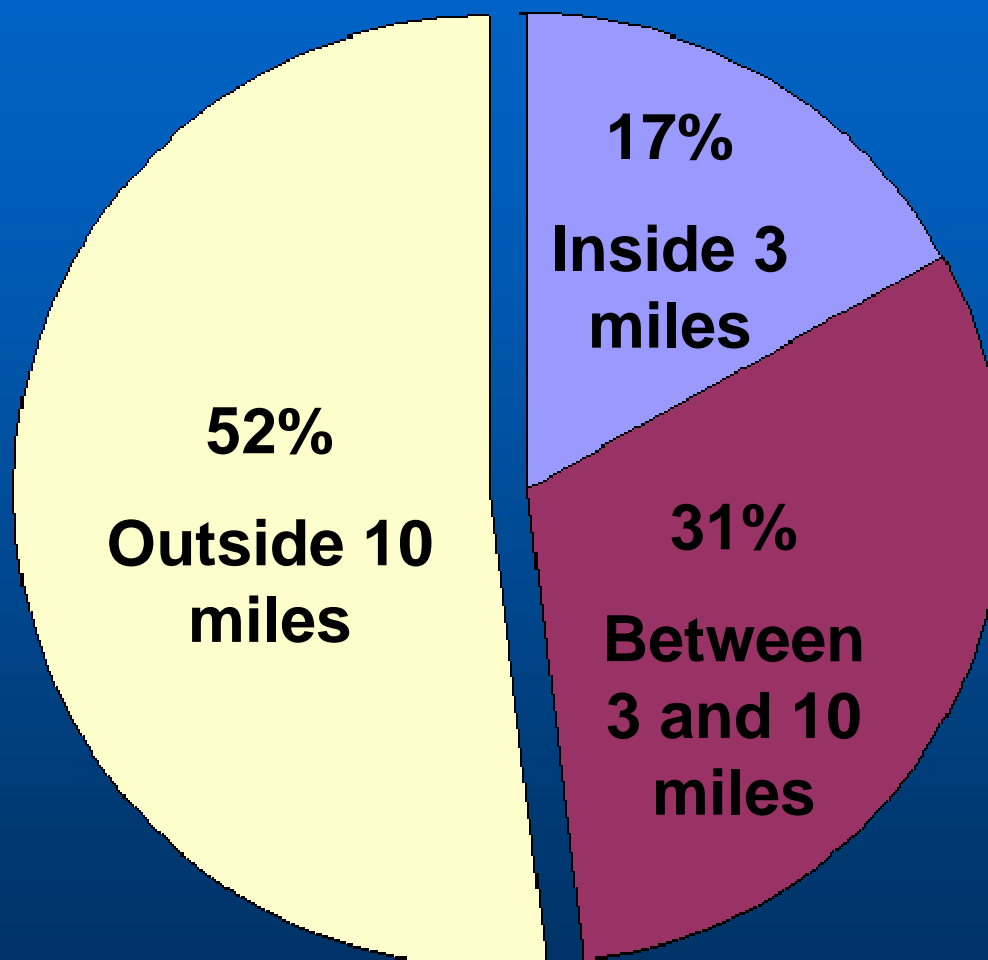


Geography of poverty



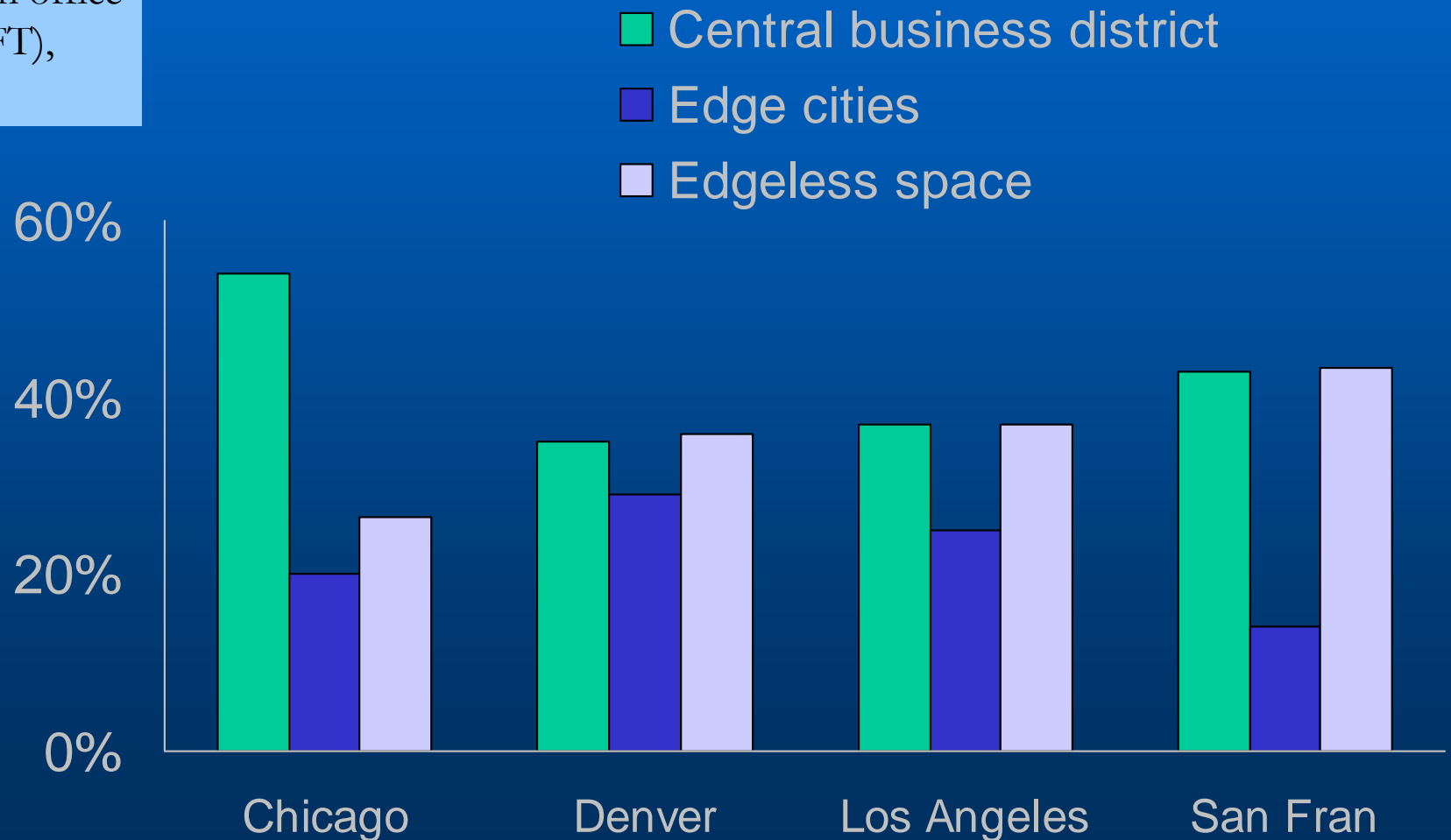
Over half of all jobs in large metropolitan areas are located more than 10 miles outside of downtowns.

Share of jobs
within 3-, 10-, and
greater- than-10-
mile radius of
center, 2002



In many metros, an exit ramp economy dominates office development.

Share of
metropolitan office
space (SQ FT),
1999



Source: Lang, 2003

City resurgence



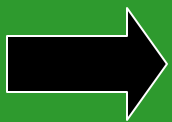
Uneven growth



Racial diversity



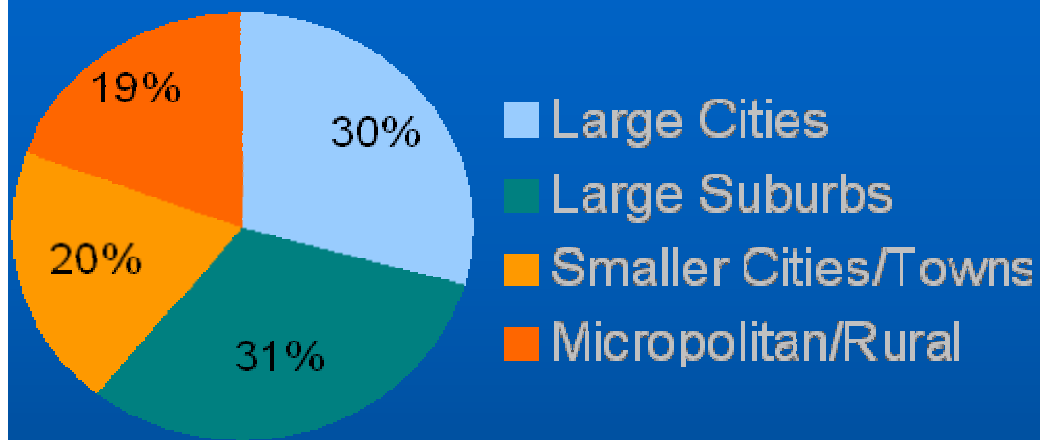
Job sprawl



Geography of poverty

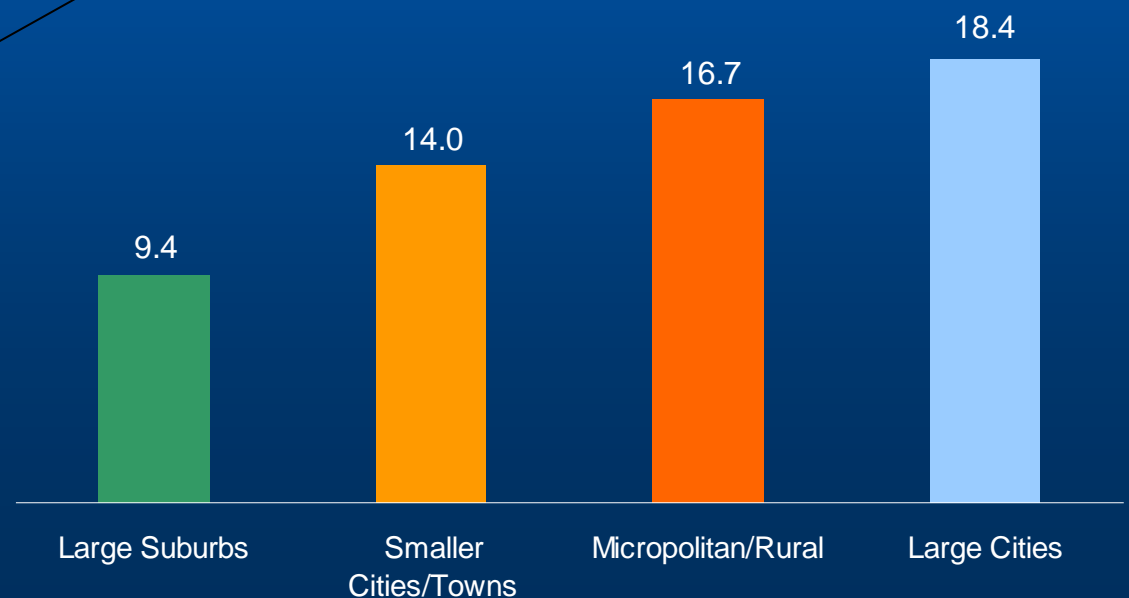


Most of America's poor live in large metropolitan suburbs.
But residents of large cities are twice as *likely* to be poor.



Below-poverty population
by location, 2005

Percentage of people in
poverty, 2005

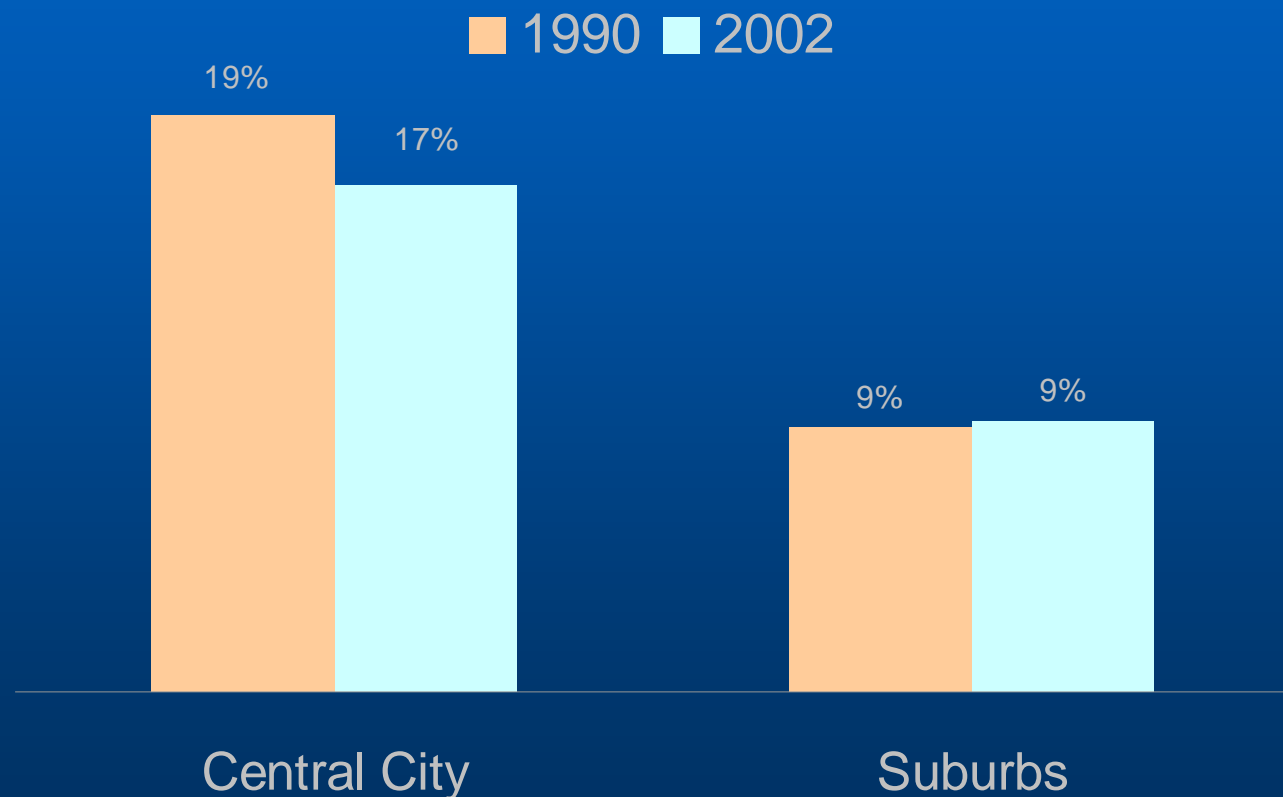


Source: Berube and
Kneebone, 2006

Estimates are roughly +/-
0.5 % pts.

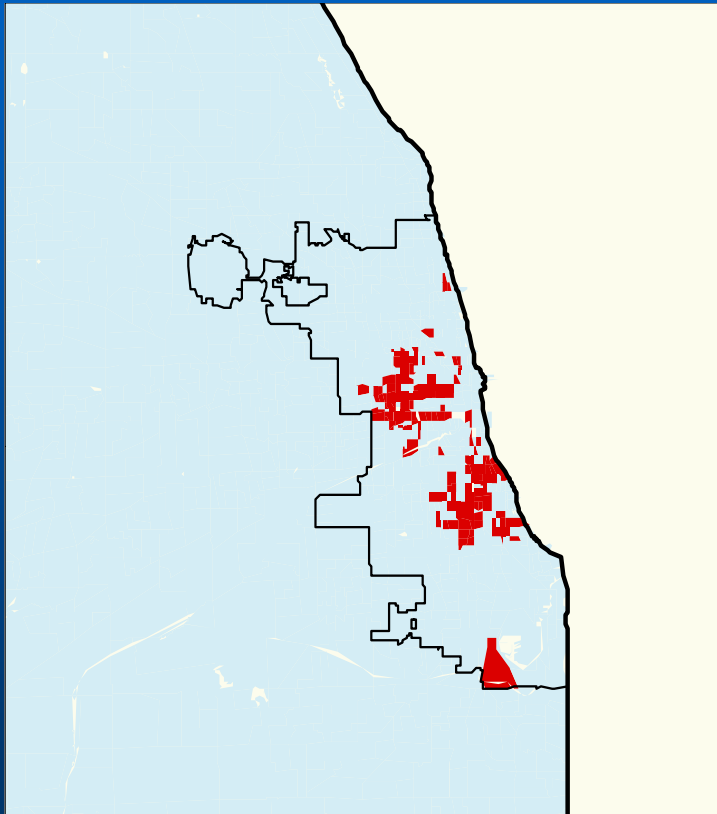
Poverty rates in central cities declined from 1990 to 2002, while poverty rates in the suburbs have increased slightly

Poverty rates for central cities and suburbs, 1990-2001



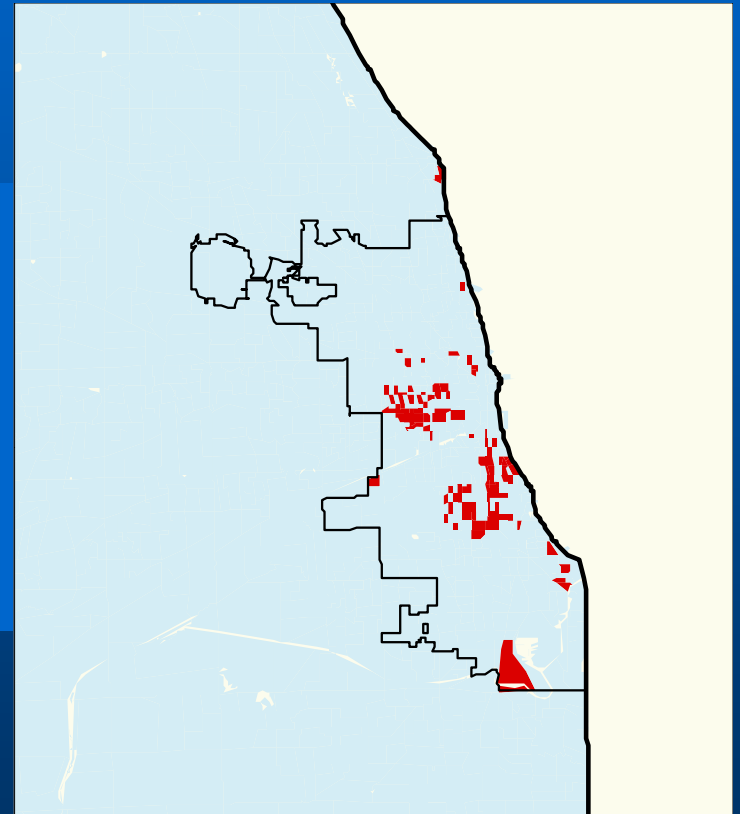
Source: Current Population Survey, 2002

During the 1990s, the number of *high-poverty* neighborhoods in central cities dropped significantly.



1990

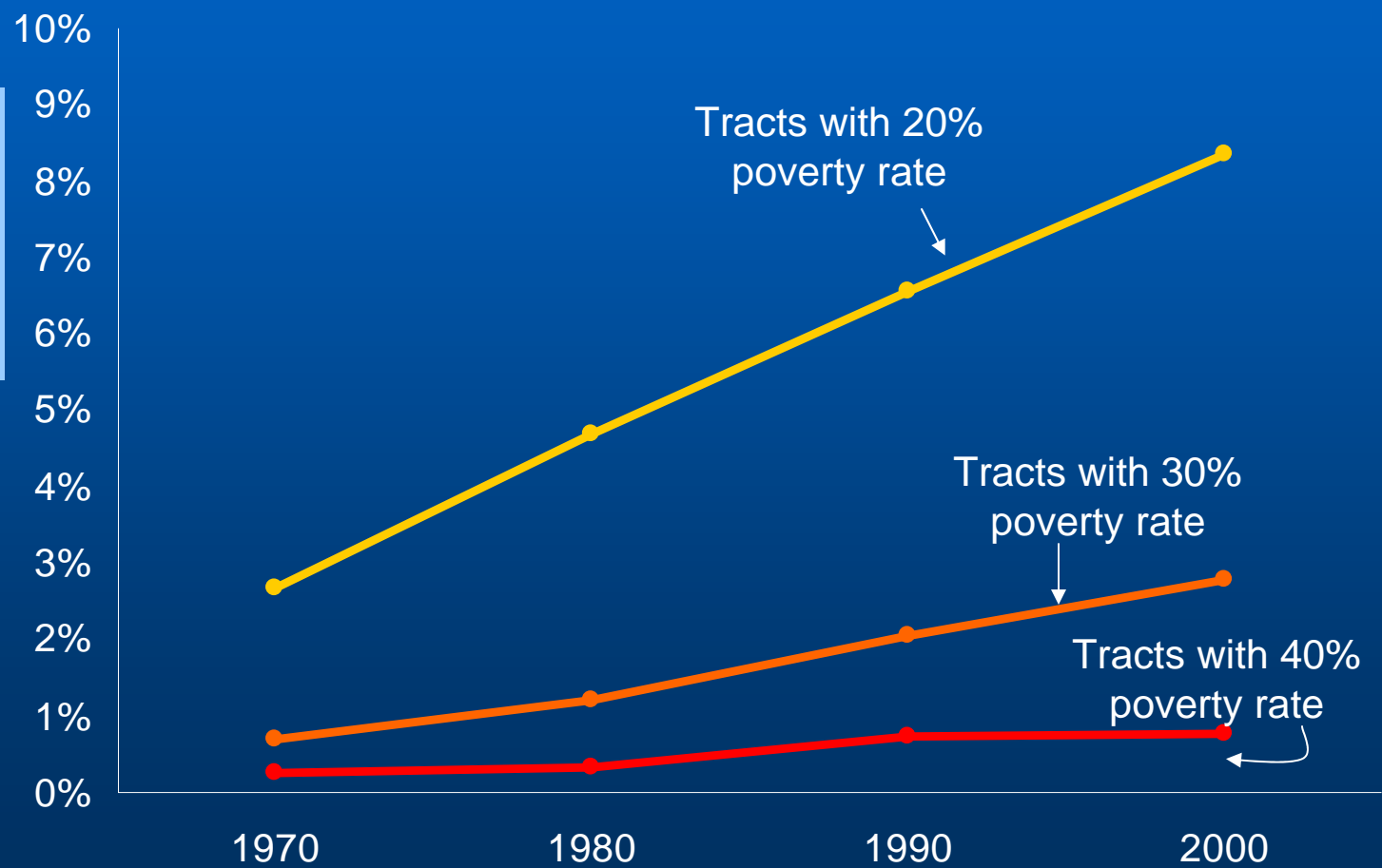
In Chicago,
the number of
high poverty
tracts fell from
187 to 114.



2000

While the number of high-poverty areas is dropping sharply in cities, it is increasing at an alarming rate in first suburbs.

Percent of census tracts in first suburbs exceeding specified poverty thresholds, 1970-2000





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Four broad demographic mega-trends



Effect of those trends on metropolitan areas



**IMPACTS ON THE NATION'S
TRANSPORTATION NETWORK**

1. What does the new urban resurgence mean for transportation?



Transit ridership is up, especially in cities where new rail lines have been constructed.



Non-recreation walking is up markedly, as is walking to school.



Downtowns with efficient, functioning transit systems are surging.

2. If metropolitan areas are decentralizing, what does this do to demand?



More cars. The number of vehicles per household is rising as people per household is falling.



More driving. Increases continue in vehicle miles traveled (VMT), gasoline consumed, and time behind the wheel.



Research shows the primary determinant of VMT is the degree of sprawl.

3. How will increasing diversity and aging in cities and suburbs affect transportation?



Immigrants are more likely to carpool. But their high levels of transit use decline over time.



The elderly are just as dependent on private cars for their mobility and take many fewer transit trips.



Proximity to transit appears to be a growing determinant, irrespective of race.

4. What does continued job sprawl do to commuting patterns?



Suburb-to-suburb commute still dominates. Two-thirds of the increase in flows during the 1990s was suburb-suburb.



Average commute times increased 14% in the 1990s.



Overall, driving alone was the only mode that increased its share. But regionally, transit use and carpooling increased in the West.

5. How does the changing geography of poverty affect job access?



Most low income workers live in inner cities and first suburbs, far from growing employment centers.



Traditional fixed-route public transit is ineffective against this spatial mismatch. Low income adults face long travel times.



Access to opportunities may be the most difficult for the suburban and rural poor without vehicles.

IMPORTANT CONSIDERATIONS FOR THE FUTURE

Built environment: By 2030 about half of the buildings in which Americans live, work, and shop will have been built after 2000. How that is done will have enormous transportation consequences and should provide policy makers a vital opportunity to reshape future development.

Household changes: Childless married-couple and single-person households will grow rapidly and account for nearly half of the net growth in households over the next ten years, but single persons will continue to be the fastest-growing household type. Thus, there appears to be an increasing demand for smaller housing units.

Continued diversity: Minorities are expected to account for 71 percent of household growth from 2006 to 2016, increasing from 63 percent from 1995 to 2005. This suggests a new multi-cultural approach to transportation policy.

Migration shifts: The Census Bureau estimates that Western and Southern states with a strong history of growth management—Florida, California, Washington—will account for the lion's share of growth between 2000 and 2030.

Increasing elderly: By 2030 more than one in five Americans will be over the age of sixty-five, and one-in eleven will be over 85. Addressing the mobility needs of this segment of society will go a long way to solving transportation challenges in general.



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