Colorado vs. The World and the Nation

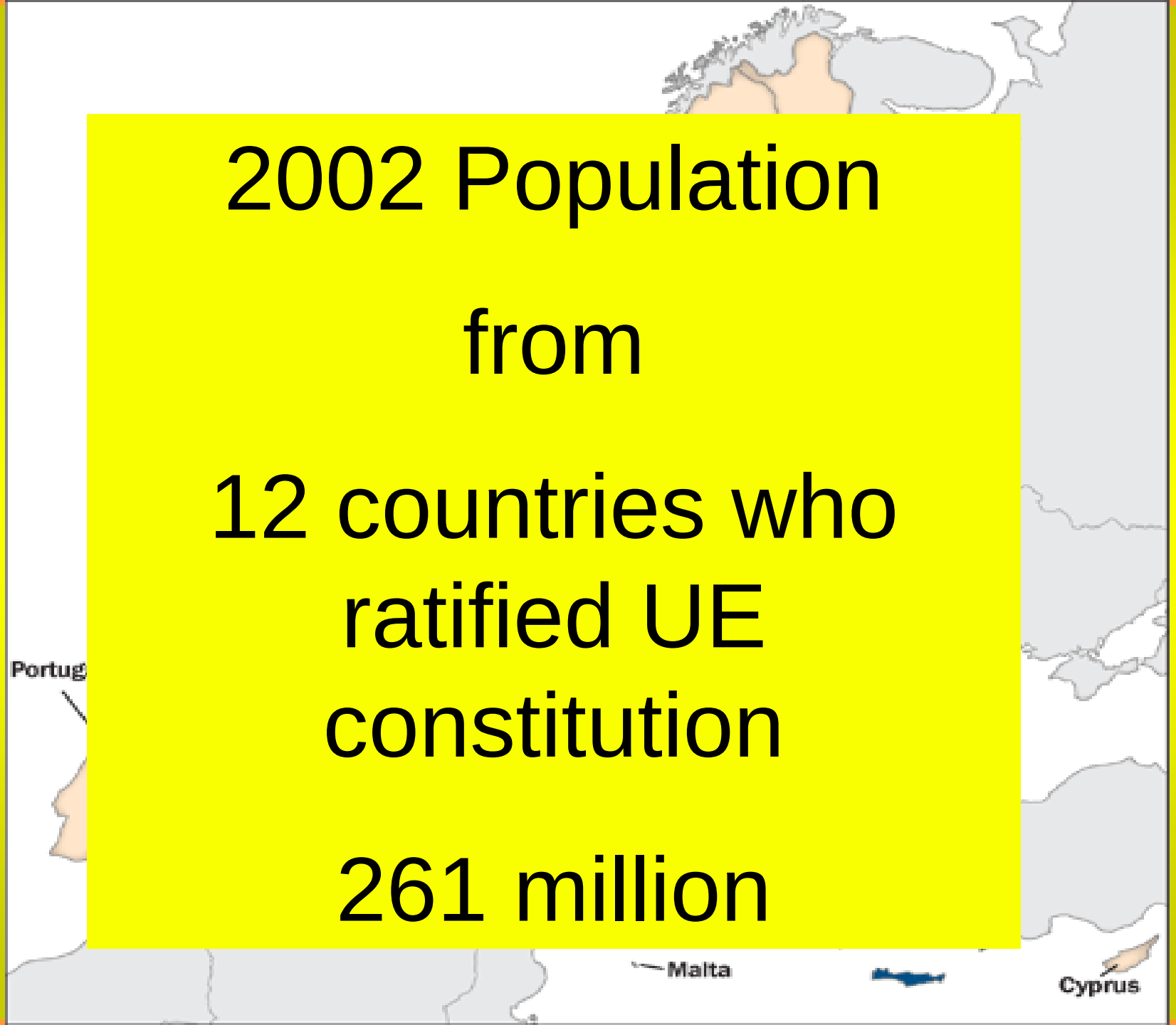
Global Issues and National Competitiveness Will Drive the Colorado Economy of the Future

Where Jobs and Capital Flow

- Resources – minerals, energy, clean water
- Ports – Air, River and Sea
- Skilled or Inexpensive Labor
- Moderate business and regulatory climates
- Fiber optic redundancy
- Market growth, income
- Predictable, stable political systems

Since 2005
Two Major Changes in Largest Markets are reshaping our competitive position

1. Size of economies
2. Population of markets

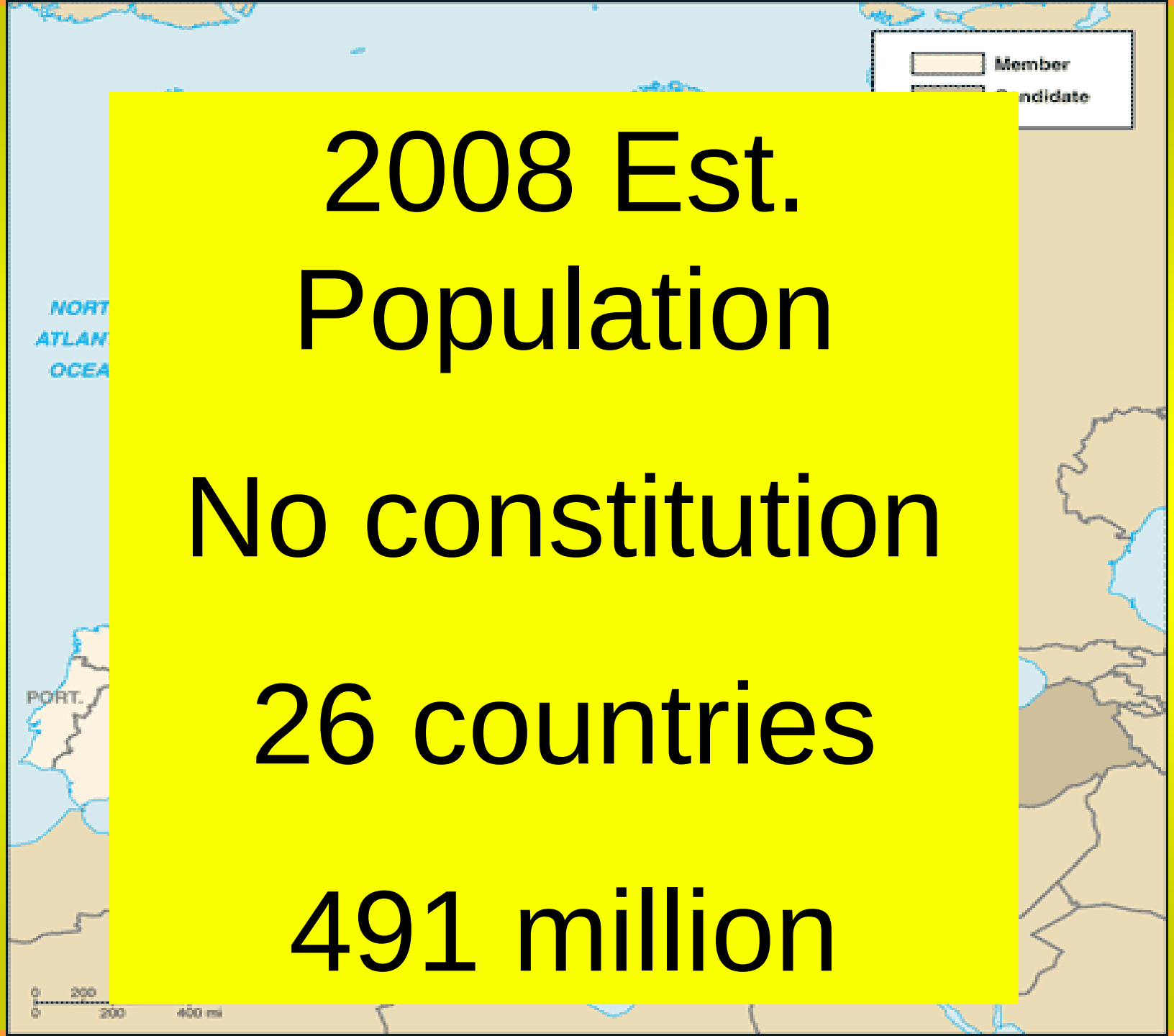


2002 Population

from

12 countries who ratified UE constitution

261 million



2008 Est. Population

No constitution

26 countries

491 million

The Worlds Biggest Economies

2005

1. United States
2. Japan
3. China
4. European Union

2008

1. United States
2. China
3. Japan
4. European Union

Largest Markets by Population

2002

1. China
2. India
3. United States
4. European Union

2007

1. China – 1.30 billion
2. India – 1.15 billion
3. E.U. - .49 billion
4. U.S - .30 billion

Most Productive Economies

5.	Norway	$53,000
7.	Singapore	$49,700
8.	United States	$45,800
11.	Ireland	$43,100
12.	Hong Kong	$42,000
32.	Japan	$33,600
76.	Russia	$14,700
133.	China	$5,300
167.	India	$2,700

Most Productive?

Qatar

$80,900

Fastest Growing Economies

1.	Azerbaijan	23.4%
12.	China	11.4%
24.	India	9.2%
34.	Russia	8.1%
104.	Ireland	5.3%
183.	United States	2.2%
184.	Japan	2.1%

Age and Education of Work Force Predicts Future Productivity

Age of Work Force

- India 25.1 years
- China 33.6 years
- United States 36.7 Years
- European Union 41.0 years
- Japan 43.8 years

Education
School Life (years)

- United States 16.0 years
- European Union 15.5 years
- Japan 15.0 years
- China 11.0 years
- India 10.0 years

Percent of GDP Spent on Education

- United States 5.3%
- European Union 5.1%
- Japan 3.5%
- India 3.2%
- China 1.9%

Who’s Got the Resources?

Fresh Water

- Potable water supplies that are pristine or easily filtered hold one key to future economic development
- Canada, U.S., India, Russia and China have largest fresh water supplies
- The Great Lakes region of U.S. will see a transition from “Rust Belt” to “Water Tank” in next 25 – 50 years as water for semiconductor manufacturing, bio-technology brewing and other water-intensive industries dry up on the Left Coast

The Big O….Oil
Proven Reserves

- Canada Tar Sands 425 billion bbls
- Saudi Arabia 260 billion bbls
- India 2.7 billion bbls
- China 12.8 billion bbls
- United States 21.8 billion bbls

Who's Got Gas……?
Proven Reserves

- United States 5.60 trillion cu m
- China 2.45 trillion cu m
- India 1.10 trillion cu m

Who Produces/Uses Oil
How Much? – barrels per day

	Production	Consumption
• United States	8.3 million	20.8 million
• India	834,000	2.4 million
• China	3.7 million	6.9 million

Natural Gas
Production and Consumption
Cubic Meters

	Production	Consumption
• United States	491 billion	604 billion
• China	59 billion	56 billion
• India	28.7 billion	34.5 billion

Electricity
Production and Consumption
in trillions of kilowatts

	Production	Consumption
• United States	4.1 kWh	3.8 kWh
• China	3.3 kWh	2.9 kWh
• India	.7 kWh	.5 kWh

The United States with 16% of the population of China and India consumes as much electricity as the two countries combined.

But here’s the big “ringer” in oil……

Colorado

Oil from Oil Shale

- Conservative estimate of world oil shale reserves: 2.5 TRILLION barrels
- 2.0 trillion of the oil is in the U.S. Almost all is in the Western Hemisphere
- Colorado, Utah and Wyoming account for 1.5 trillion barrels of the 2.0 trillion is U.S.
- Quality of the naphtha from oil shale can be immediately refined into aviation fuel

Wind

60% of the “clean wind” in the U.S. starts every evening at 5:00 p.m. from I-25 and blows east

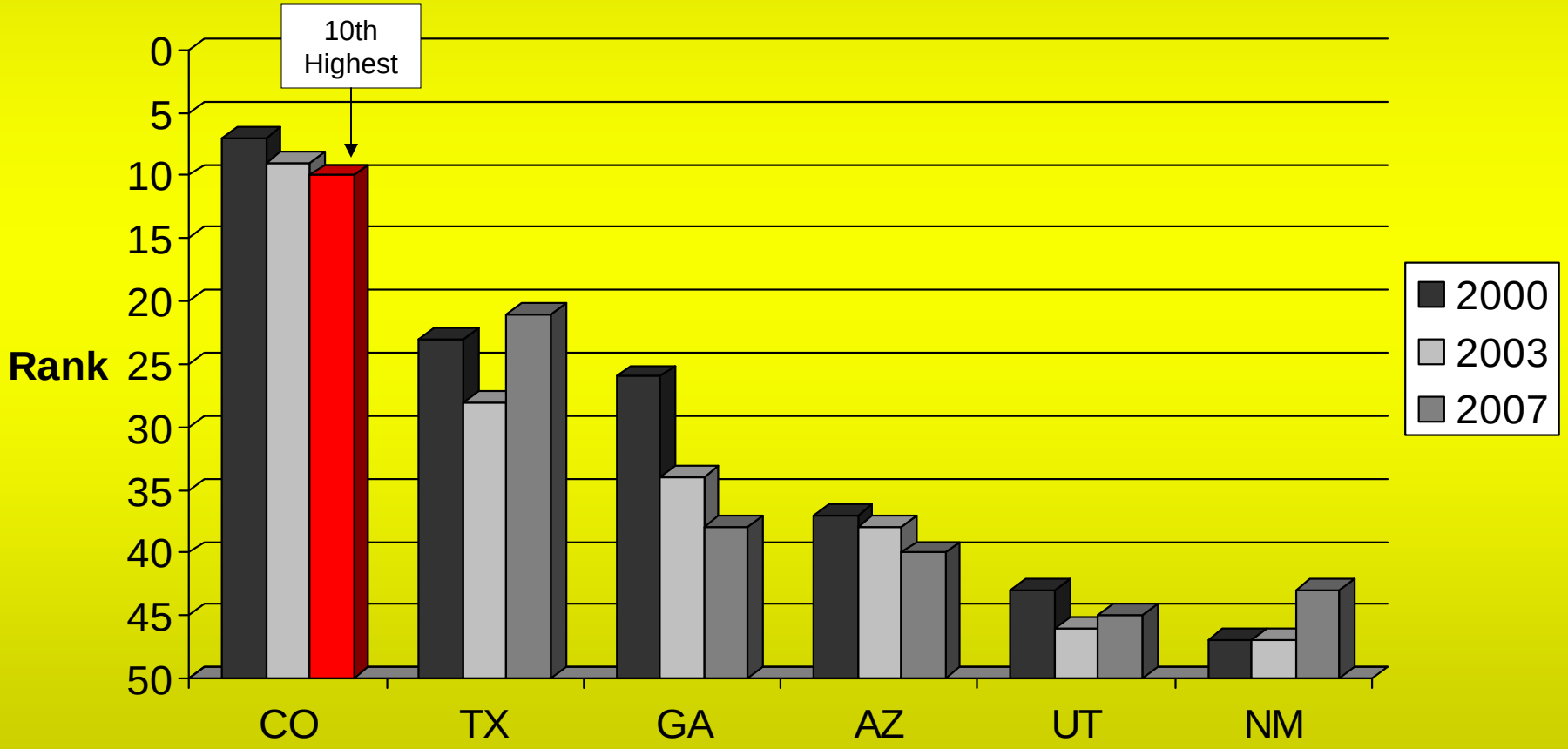
The Wind Tunnel
60% of U.S.'s available
"Clean Wind

2005 Metropolitan Institute at Virginia Tech § Census Report Series

Per Capita Personal Income

U.S. Bureau of Economic Analysis

Colorado vs. Competitors

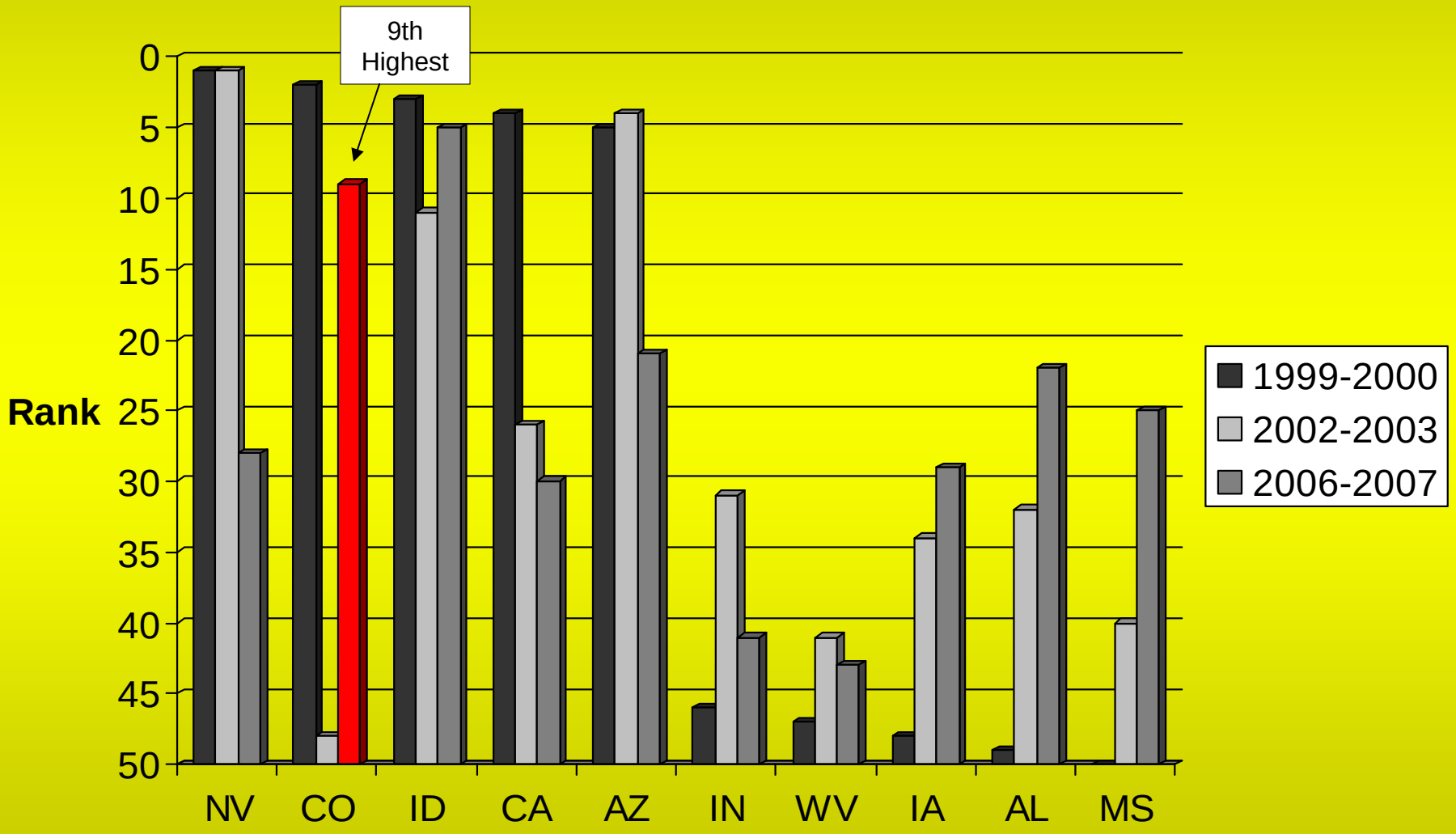


Higher incomes discourage companies with lower paying jobs while providing a lucrative climate to recruit higher paying jobs for well-educated workers. Colorado continues to have a higher per capita personal income than its closest competitors.

Fig. 2

Employment Growth Rankings

U.S. Department of Labor, Bureau of Labor Statistics



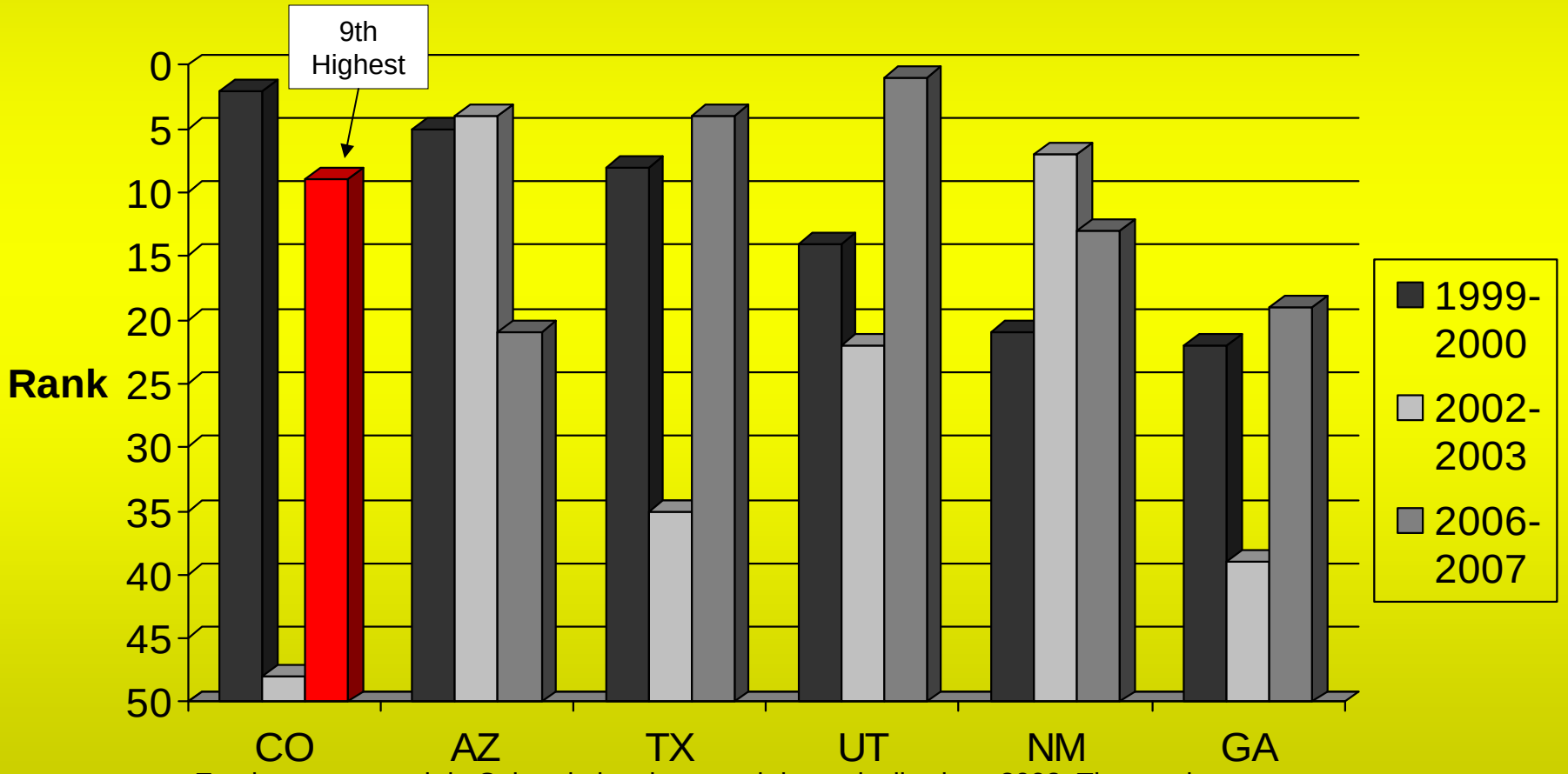
Colorado's job growth following the 2001 recession was more comparable to the industrial areas of the Midwest than to its Sun Belt neighbors. However, Colorado's job growth rate bounced back and remained steady in 2007 while many other states experienced declines.

Fig. 3

Employment Growth Rankings

U.S. Department of Labor, Bureau of Labor Statistics

Colorado vs. Competitors

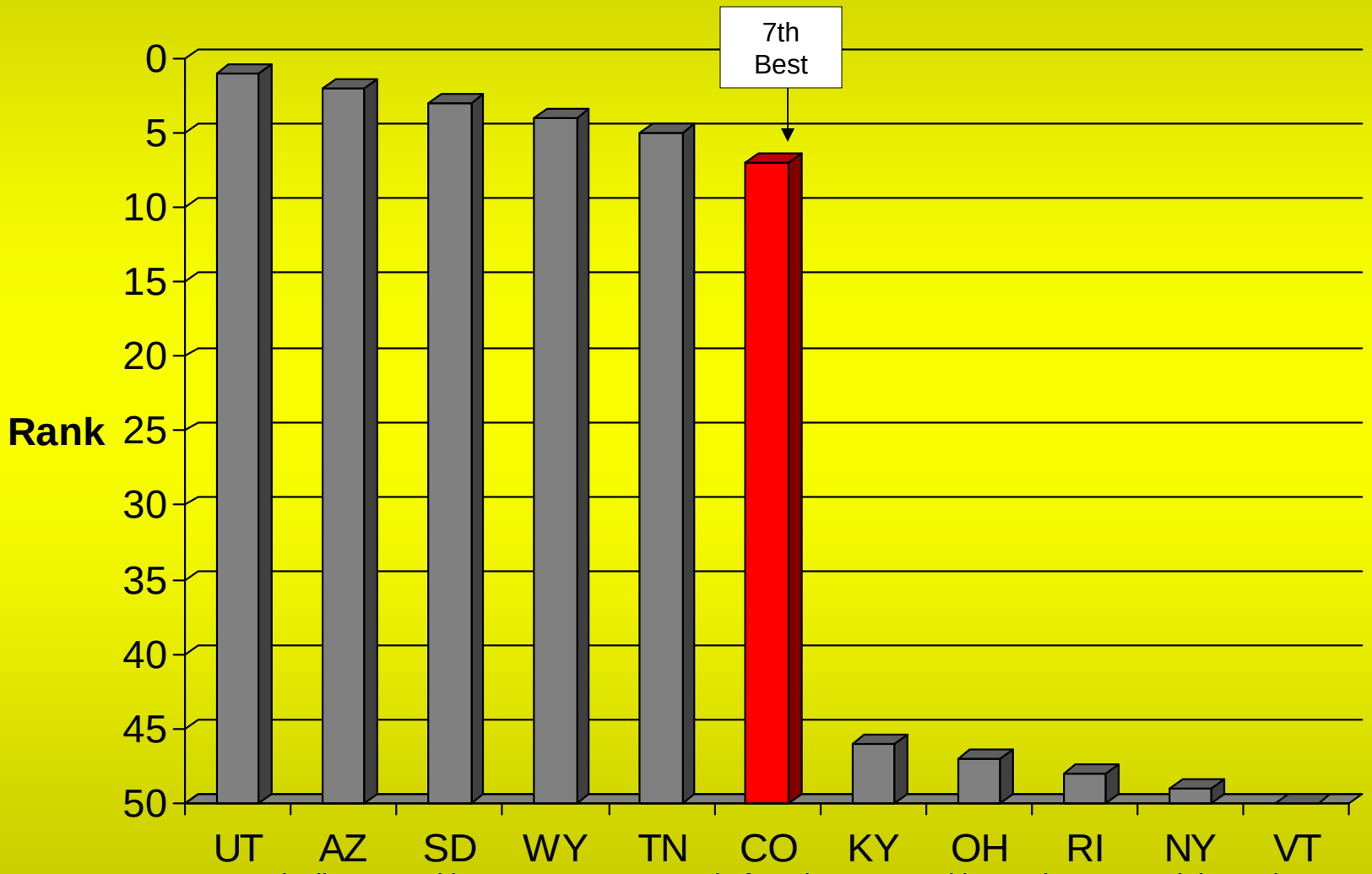


Employment growth in Colorado has improved dramatically since 2003. The employment growth rate in 2007 in Arizona (1.3%), Georgia (1.3%), and New Mexico (1.8%) fell significantly from 2006 levels, all settling below Colorado's rate (2.3%).

Fig. 4

2007 Economic Competitiveness Index

American Legislative Exchange Council

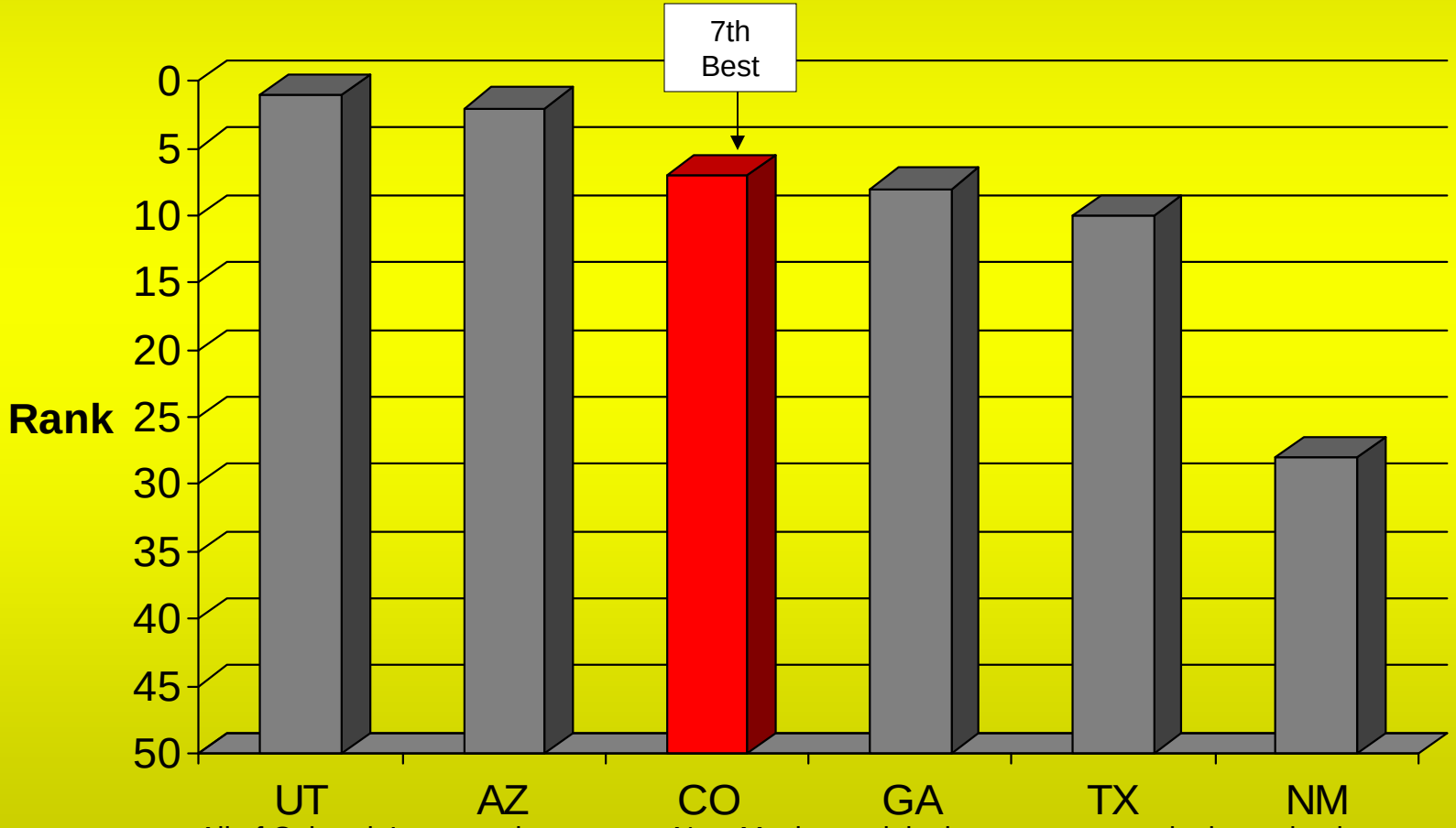


Economically competitive states attract people from less competitive regions around the nation. States ranking highly had positive levels of in-migration due to their competitive tax environments, strong legal systems, and educational opportunities.

2007 Economic Competitiveness Index

American Legislative Exchange Council

Colorado vs. Competitors

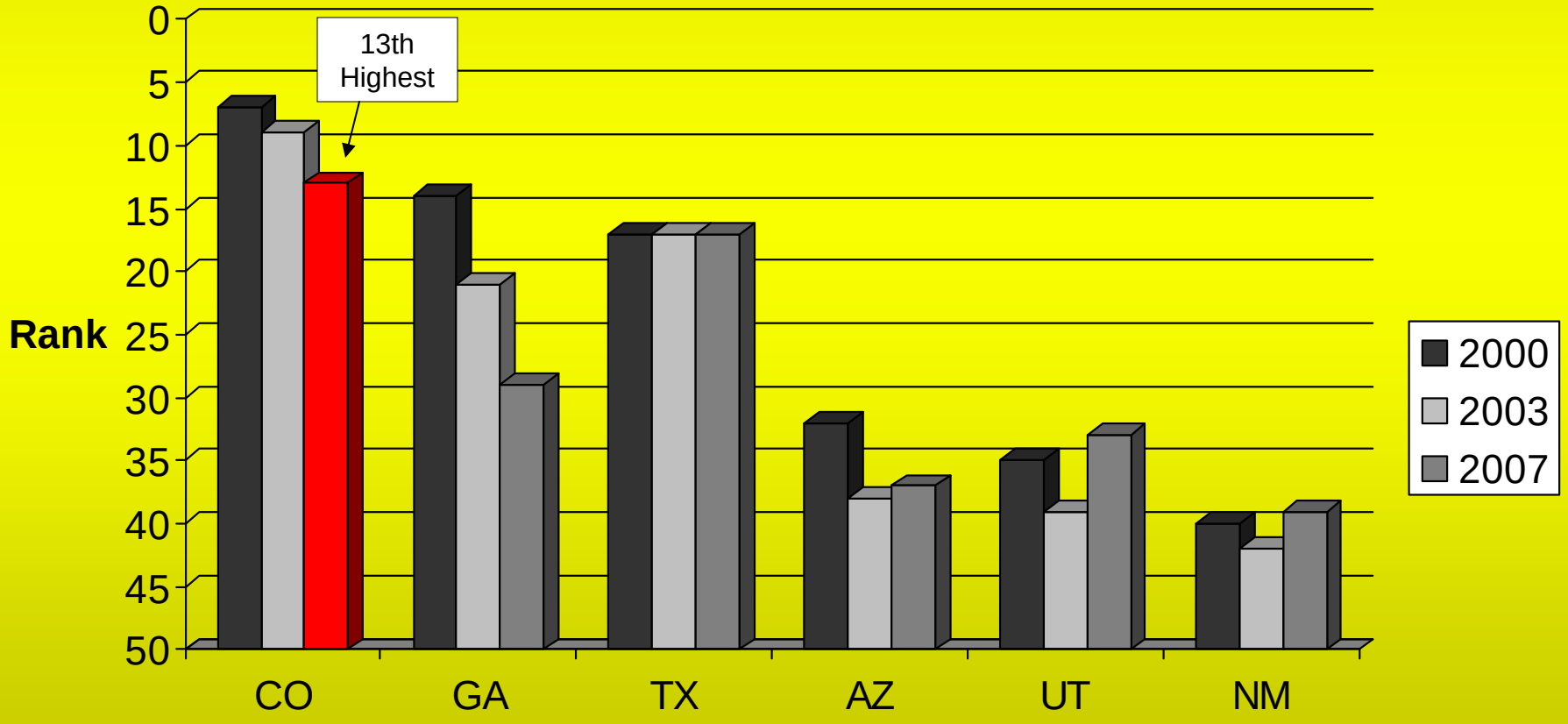


All of Colorado's competitors except New Mexico rank in the top ten states in the nation in economic competitiveness. New Mexico ranked in the bottom half of the nation.

State Gross Domestic Product per Capita

U.S. Bureau of Economic Analysis

Colorado vs. Competitors



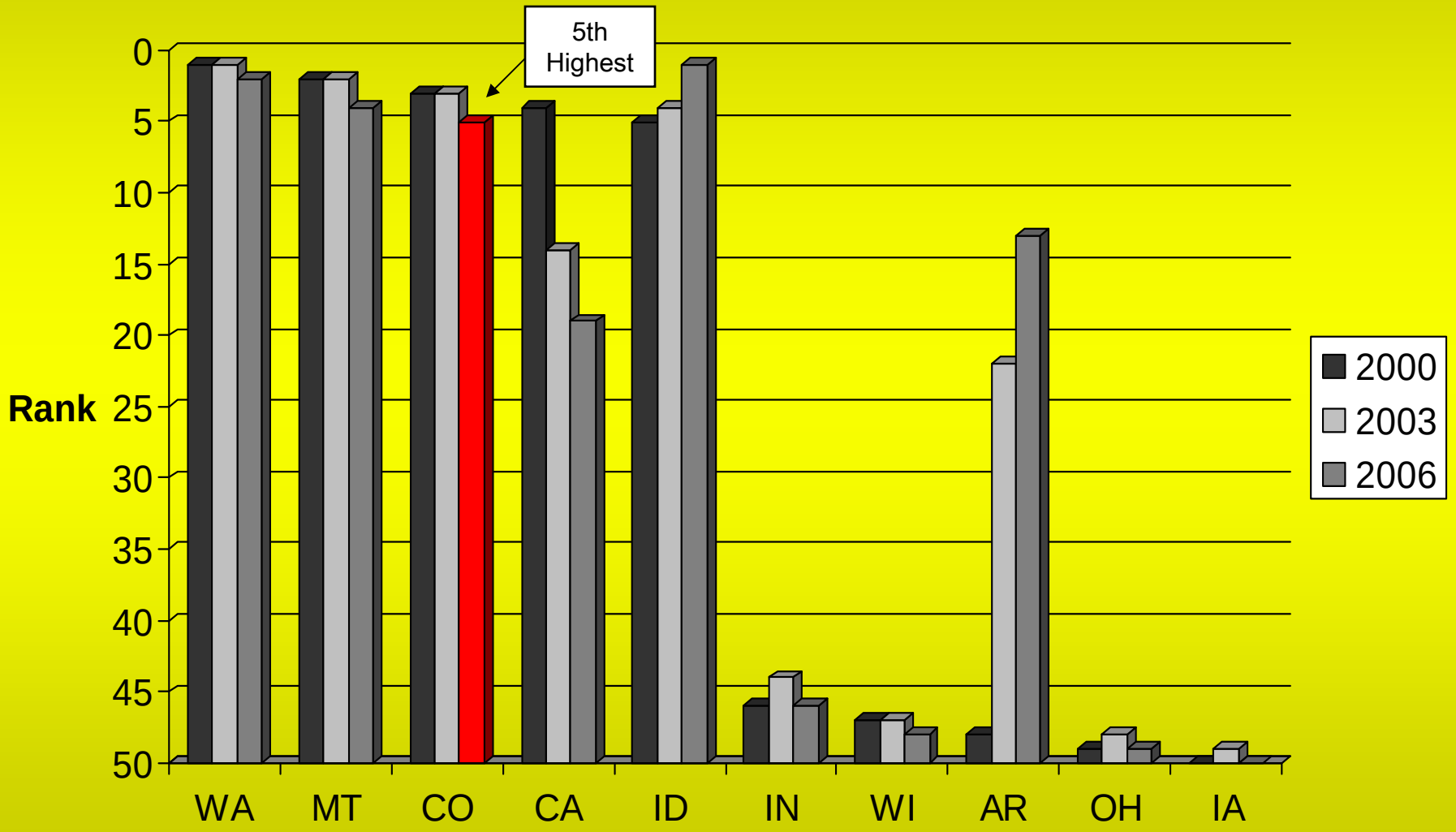
Colorado continues to have higher State GDP per capita than all of its biggest competitors.

Fig. 6

Innovation

Number of New Companies

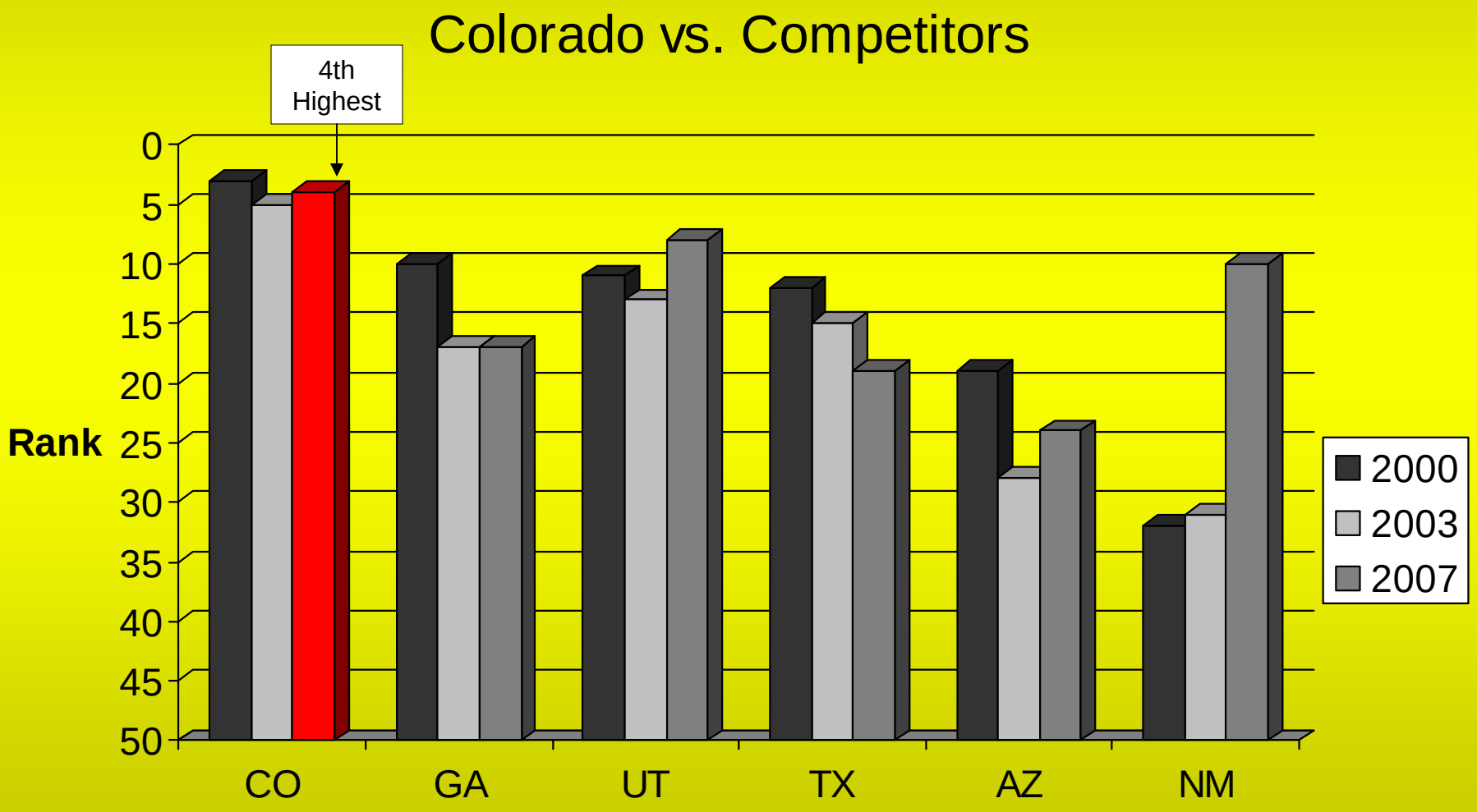
U.S. Small Business Administration; U.S. Bureau of Labor Statistics



Colorado's highly educated workforce and entrepreneurial environment attract and create a high concentration of new companies every year, ranking the state fifth in new companies per 1,000 workers.

Venture Capital Investments per Capita

PriceWaterhouseCoopers MoneyTree Survey

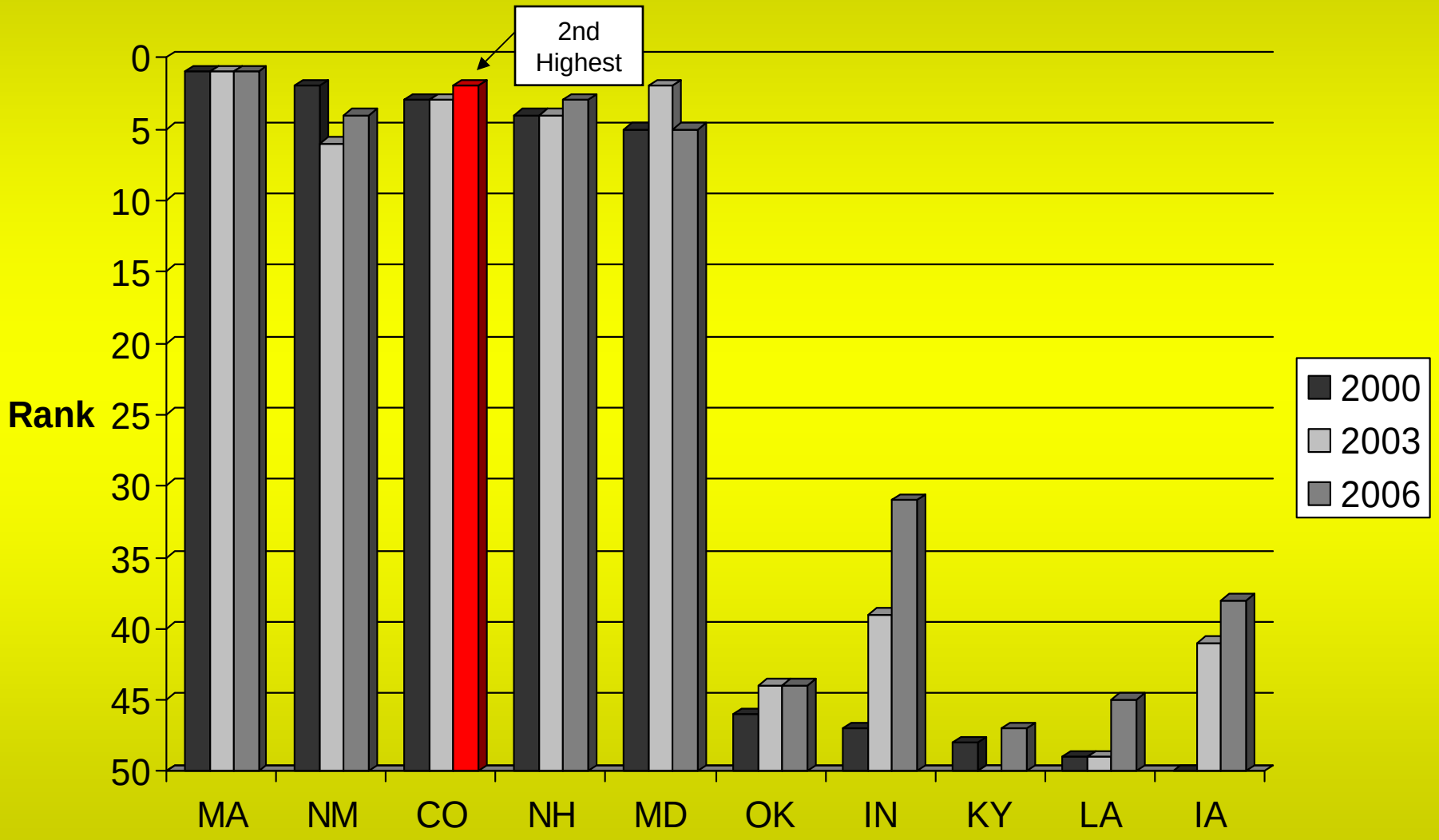


While all of Colorado's competitors ranked in the top half of the 50 states for venture capital investments per capita in 2007, Colorado was the only competitor in the top five states.

Fig. 10

Small Business Innovation Research Grants

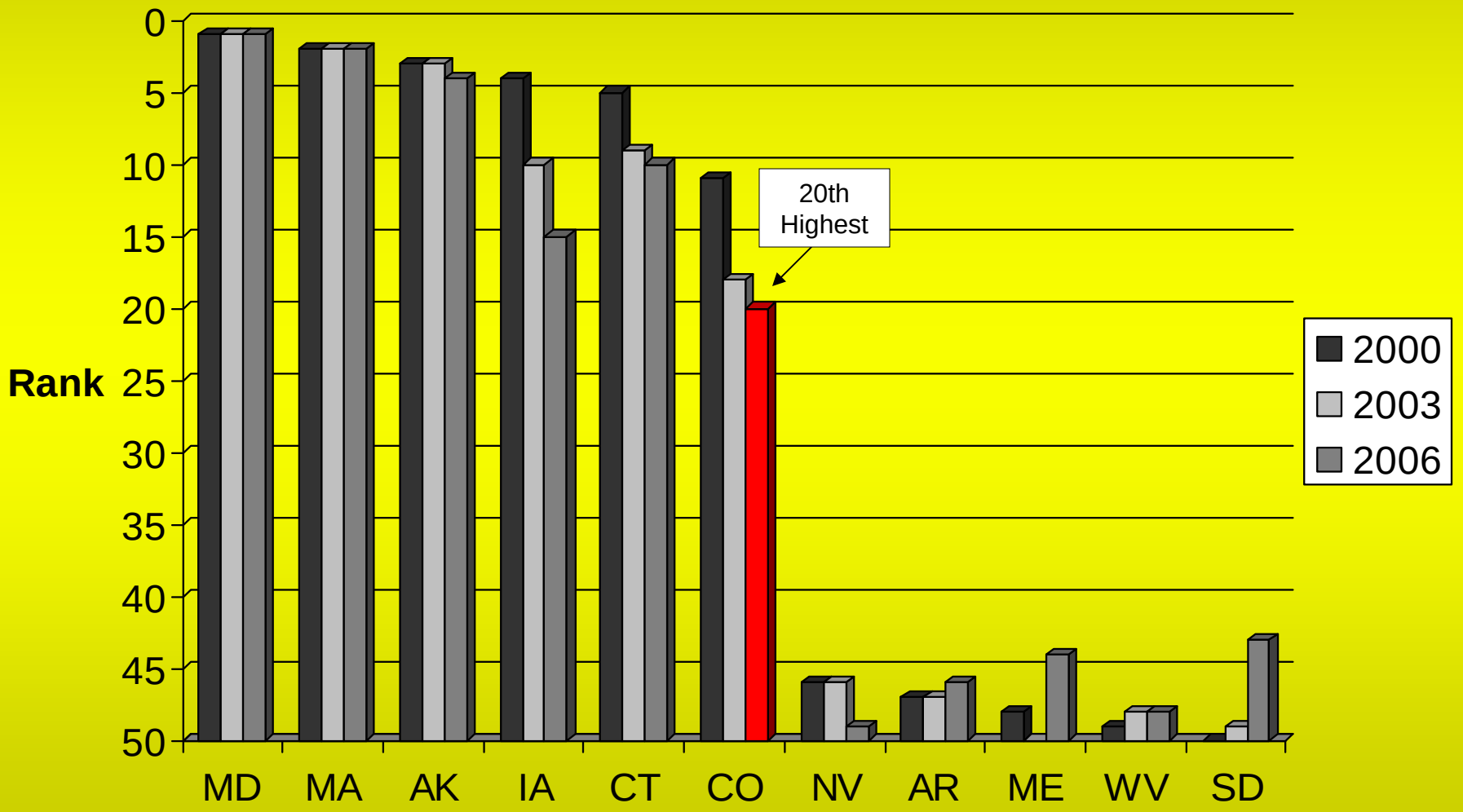
U.S. Small Business Administration; U.S. Bureau of Labor Statistics



SBA's Small Business Innovation Research (SBIR) grant program is often used as a measure of innovation and entrepreneurship. Colorado has historically ranked among the most successful states in garnering a high concentration of SBIR grants.

Total R&D Spending at Academic Institutions Per Capita

National Science Foundation

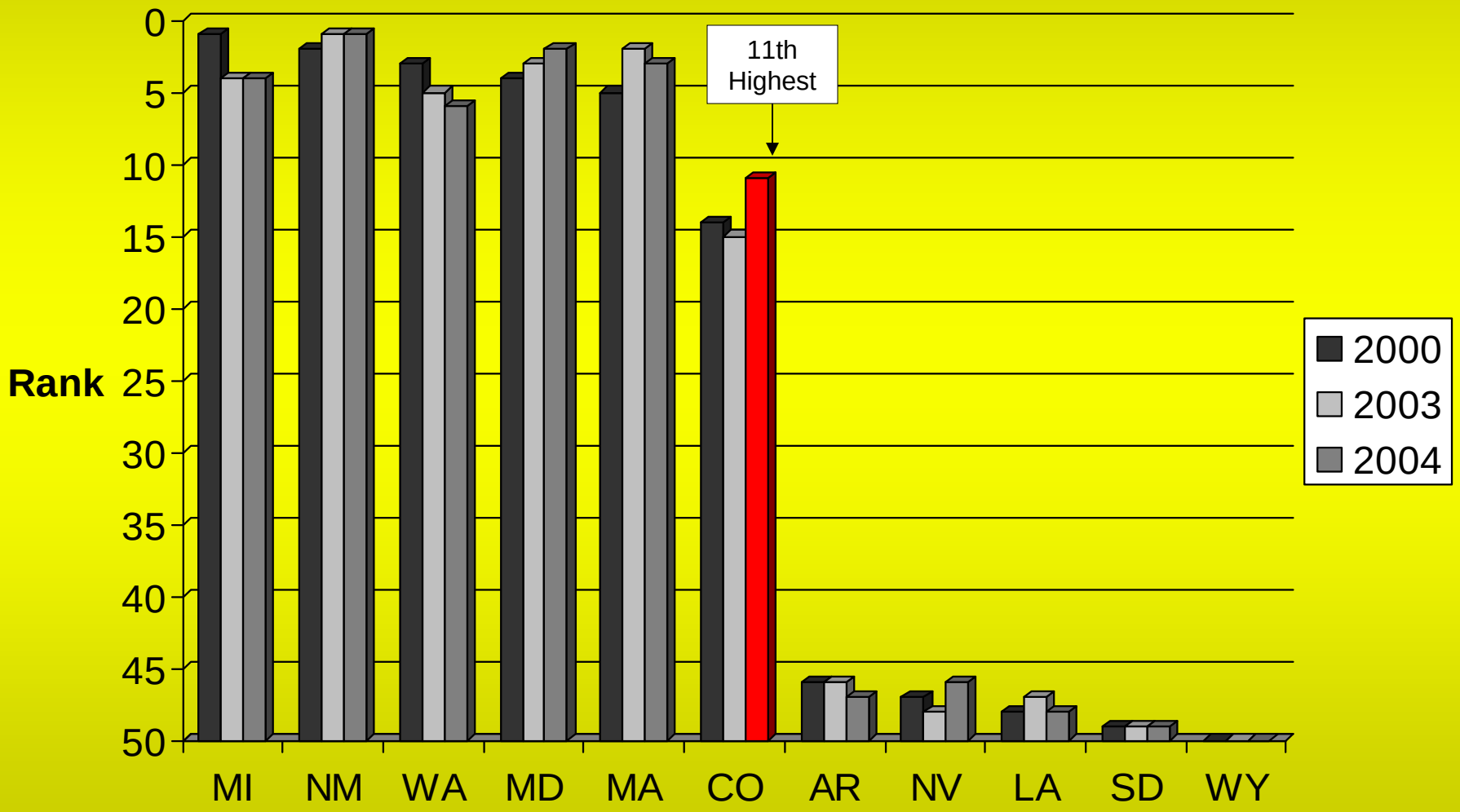


Colorado is a center of R&D spending from both public and private sectors. A strong entrepreneurial economy and substantial federal investments in Colorado universities for energy, aerospace, and medicine, sustain Colorado's rank in the top half of the country.

Fig. 15

Ratio of Total R&D Expenditures to State GDP

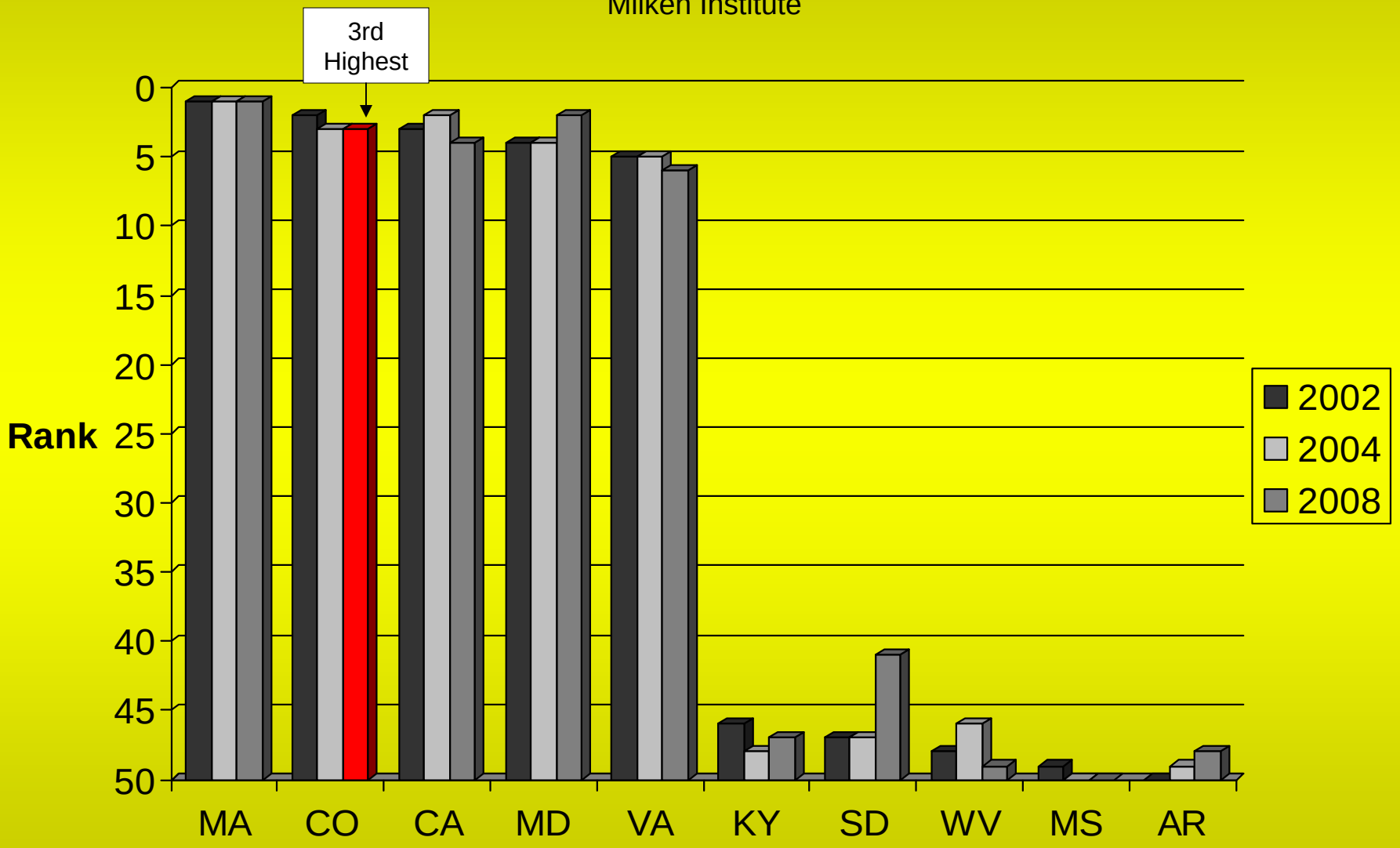
State Science and Technology Institute



A strong entrepreneurial economy and substantial public and private R&D investment has increased Colorado's rank despite slower growth in State Gross Domestic Product per capita.

State Technology and Science Index

Milken Institute

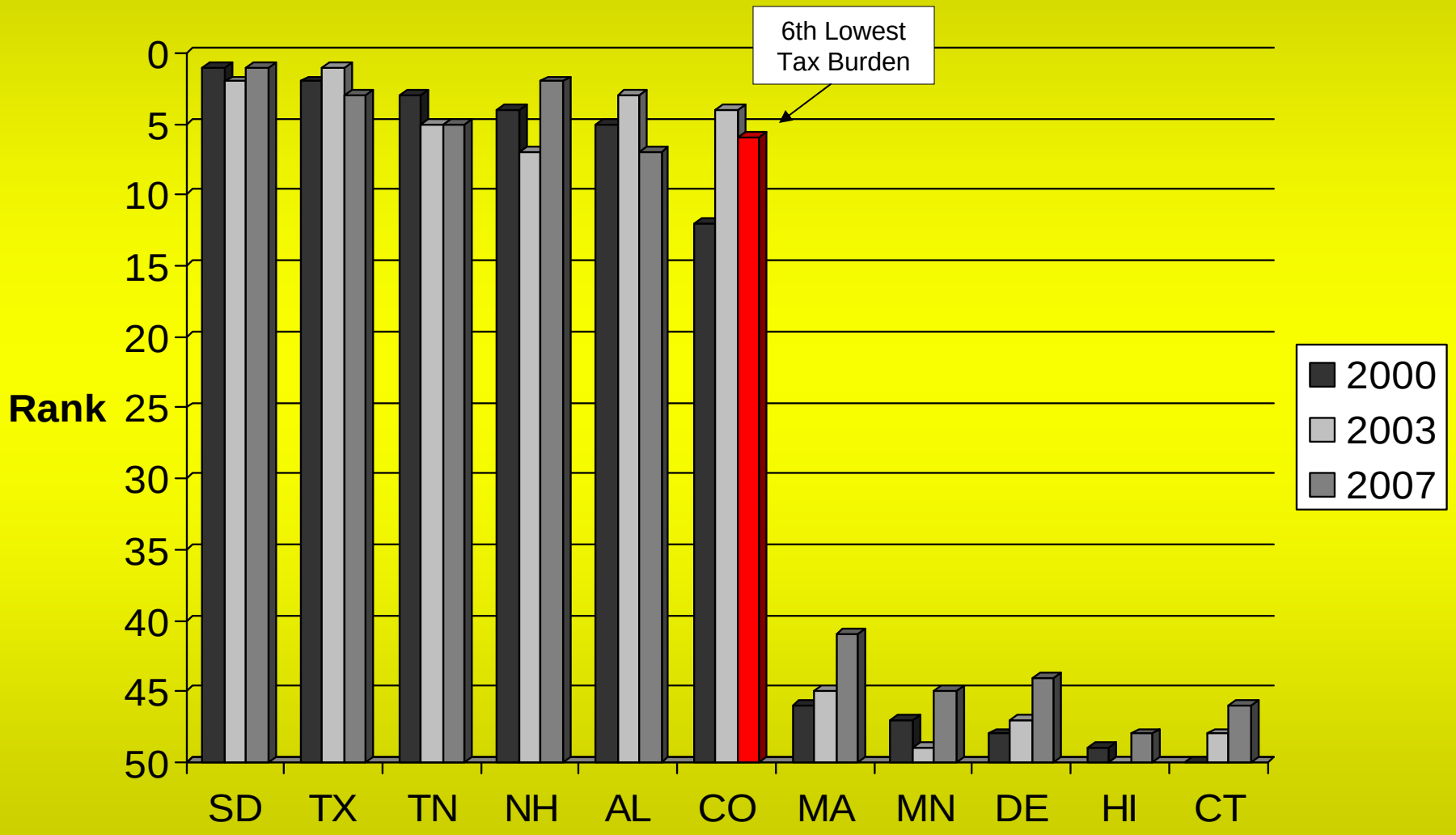


With one of the highest concentrations of scientists and engineers, Colorado is ranked highly for its R&D infrastructure, entrepreneurial culture, human capital investments, innovative work force, and technological dynamism.

Fig. 19

Effective State and Local Tax Burdens

U.S. Census Bureau, Government Finance Series



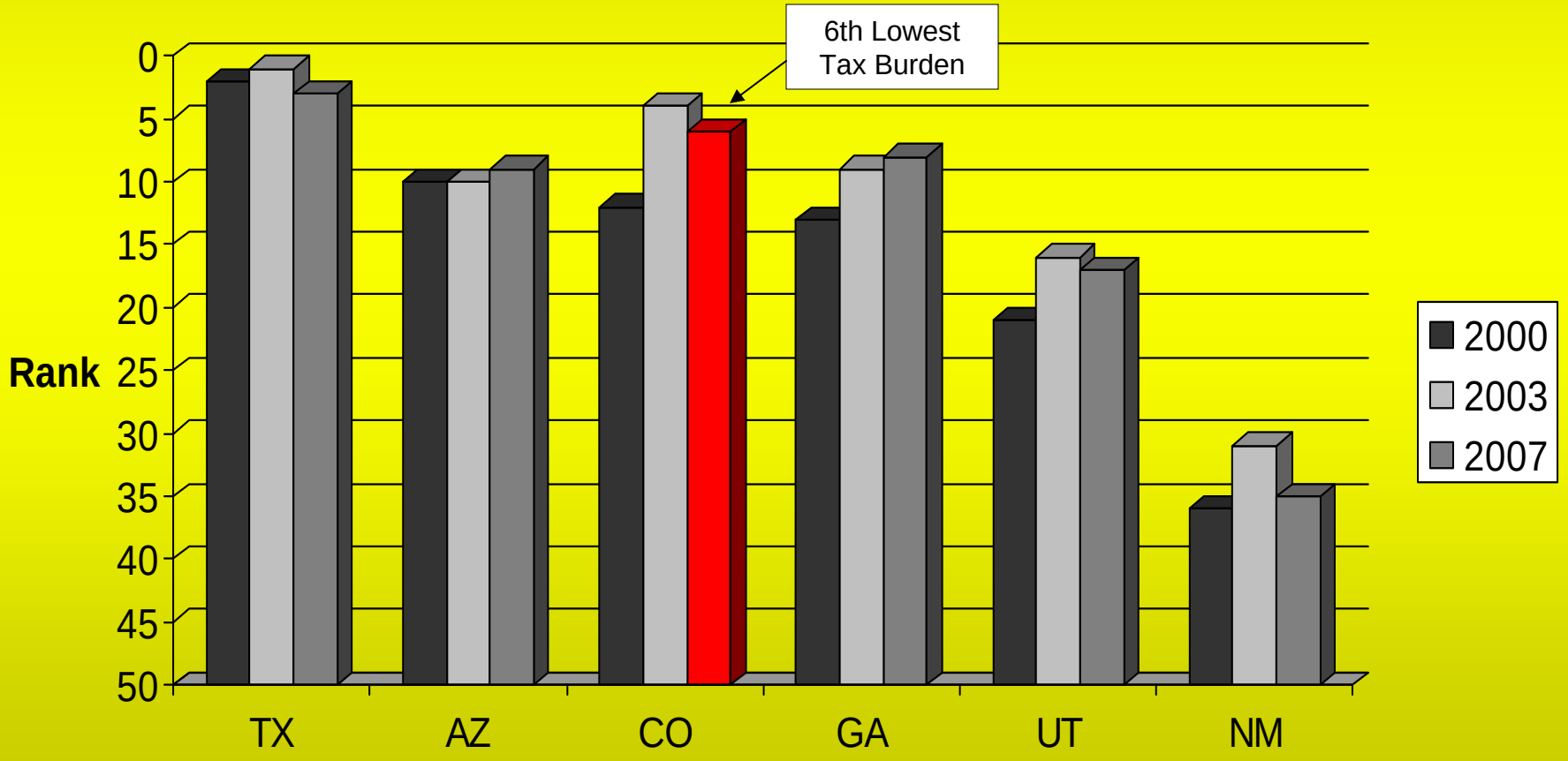
Colorado's historically thrifty state government taxation is offset by higher taxing local governments. Nonetheless, Colorado consistently ranks favorably when combined tax burdens are measured.

Fig. 27

Effective State and Local Tax Burdens

U.S. Census Bureau, Government Finance Series

Colorado vs. Competitors

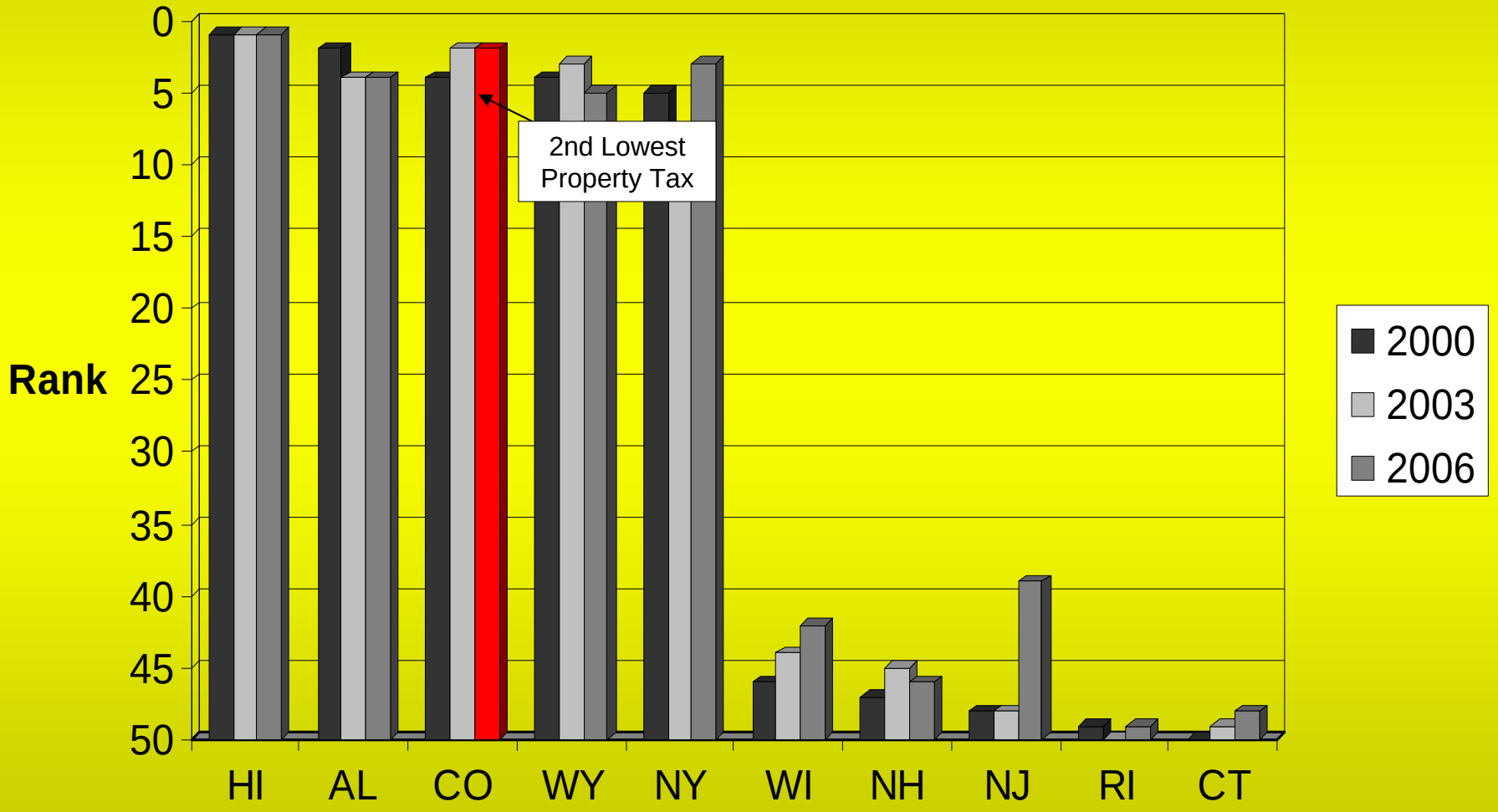


Colorado and Texas have the lowest tax burdens amongst this group of competitors.

Fig. 28

Residential Property Tax Rate in Largest City in Each State

District of Columbia, Office of the Chief Financial Officer

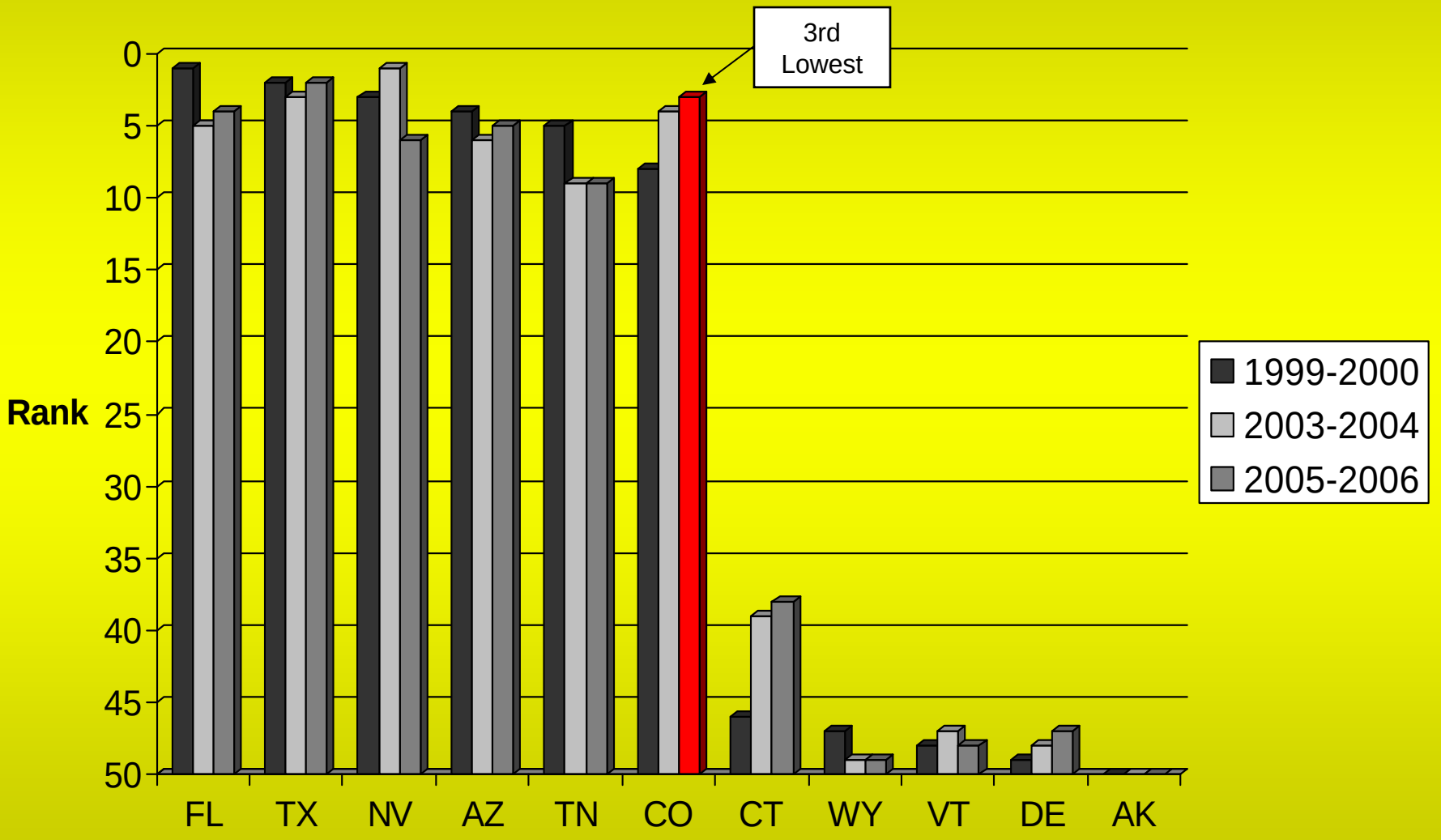


Passed in 1982, the Gallagher Amendment has consistently lowered the assessment ratio of residential property in Colorado. This has led to the second lowest residential property tax rate in the nation.

Fig. 35

State Government General Revenue Per Capita

U.S. Census Bureau, State and Local Government Finances



Colorado's high personal incomes, historically tight budget and spending controls, and a more localized system of taxation, contribute to its low ranking for state revenue per capita.

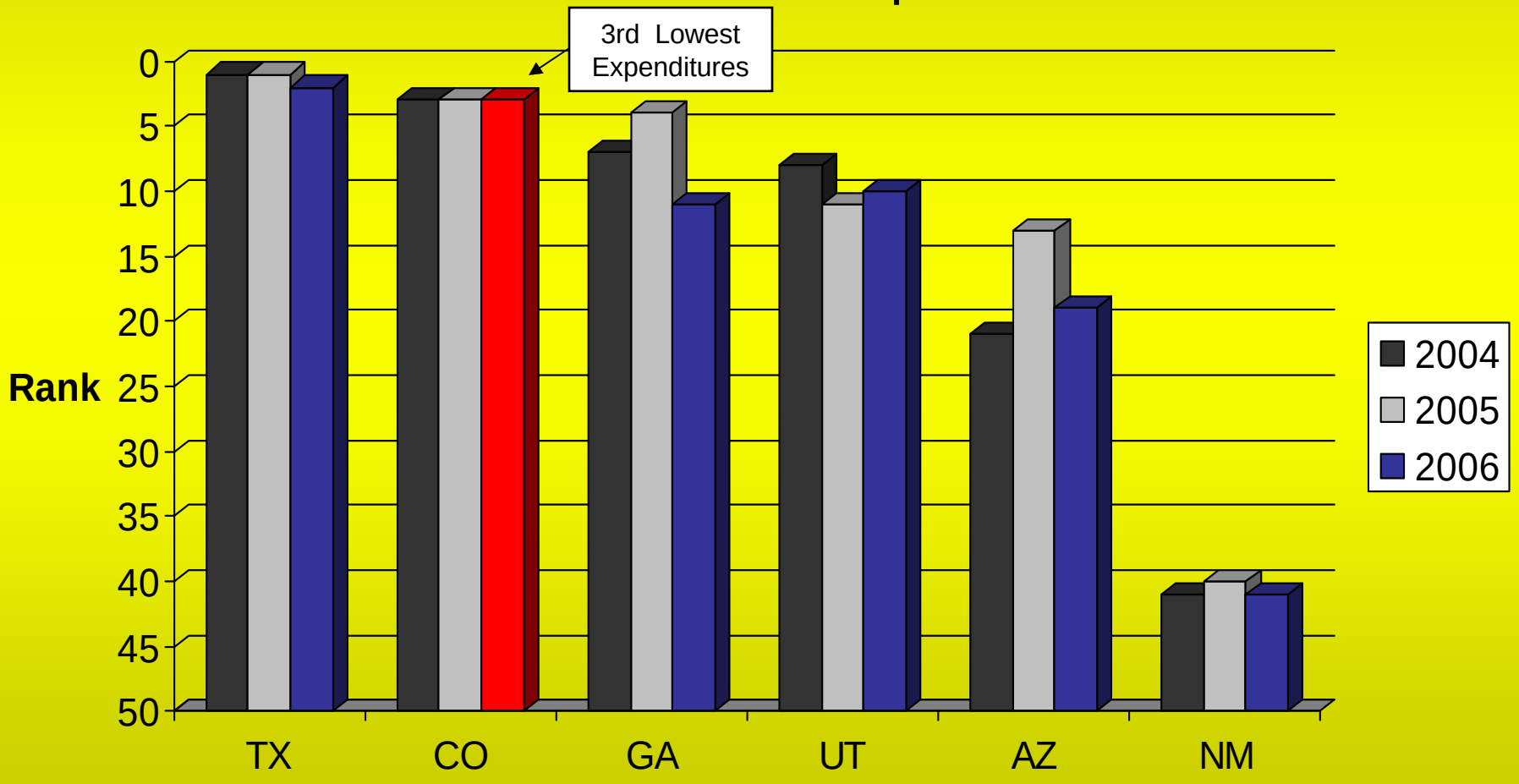
Fig. 39

Lowest Total State Expenditures per Capita

Includes General Fund, Federal Funds, Other State Funds and Bonds

Kaiser State Health Facts

Colorado vs. Competitors

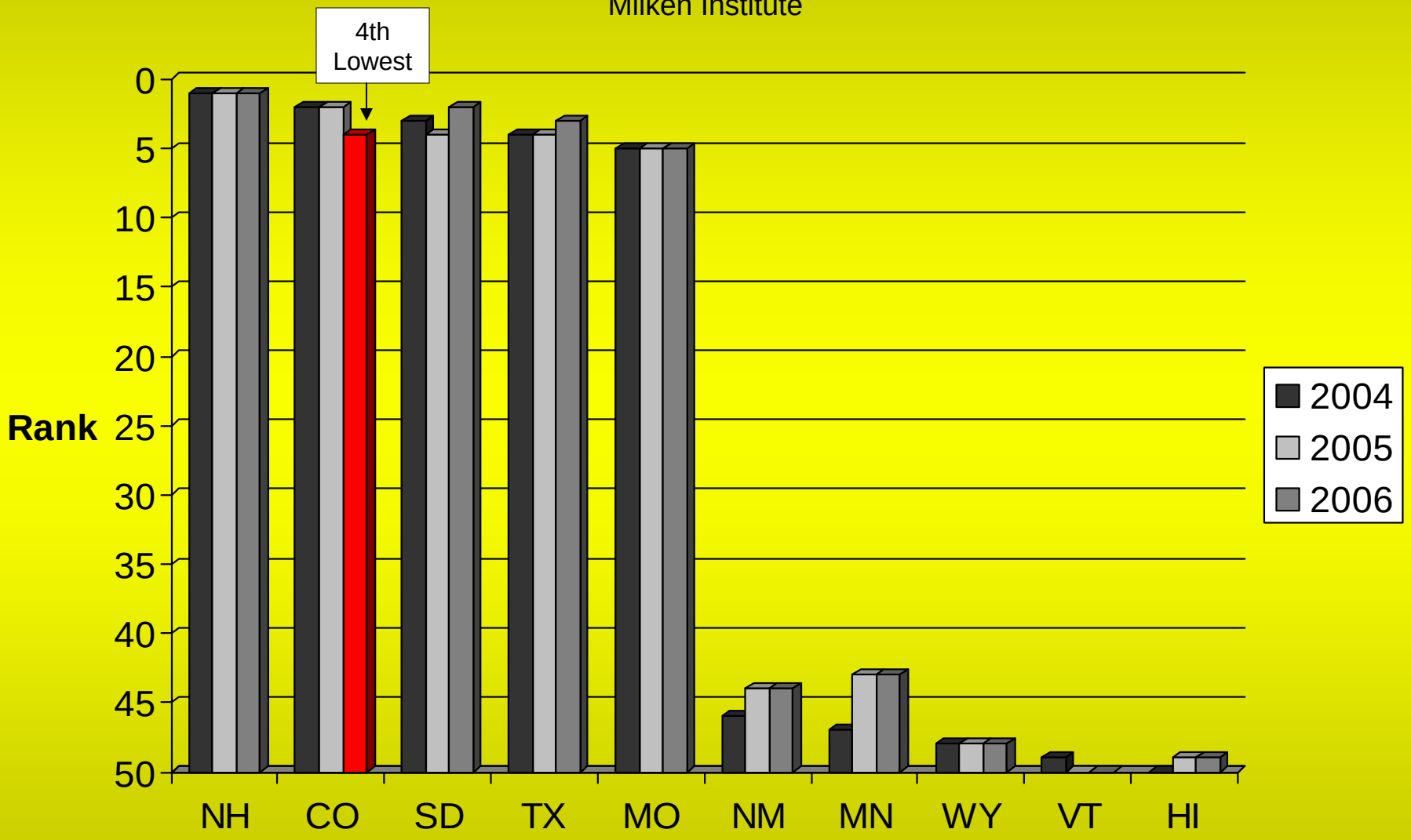


Colorado state government has the lowest expenditures of any of its competitors other than Texas. New Mexico is the only competitor with spending levels ranking it as one of the 25 highest-spending states in the country.

Fig. 42

Cost of Doing Business: Tax Burden Index

Milken Institute

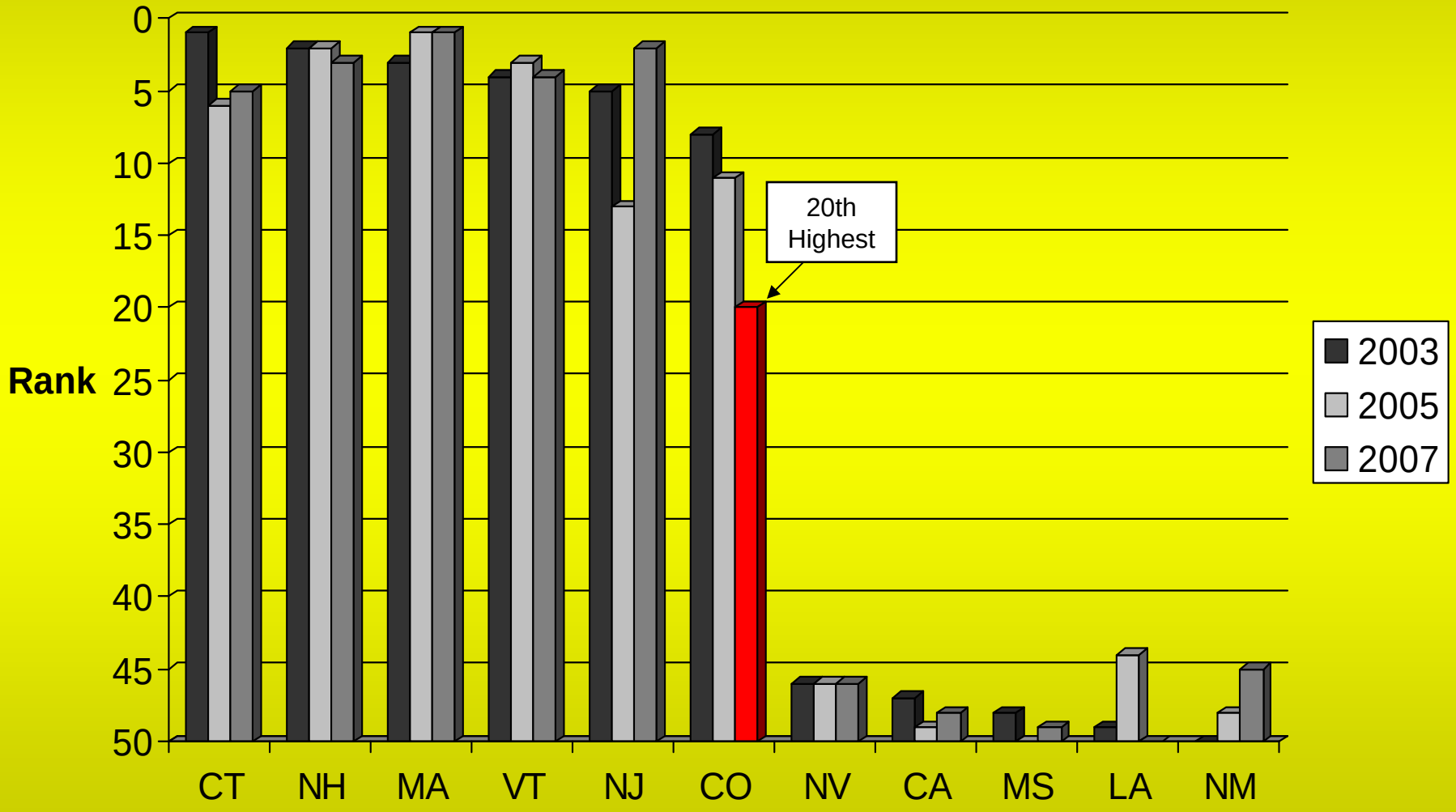


This index excludes the major component of wages in the cost of doing business. Colorado's higher per capita income, not its taxes, are the primary reason that Colorado's cost of doing business ranks in the middle in the overall ranking versus fourth lowest in business tax burden.

Fig. 47

Average Fourth Grade Reading Scores

National Center for Education Statistics



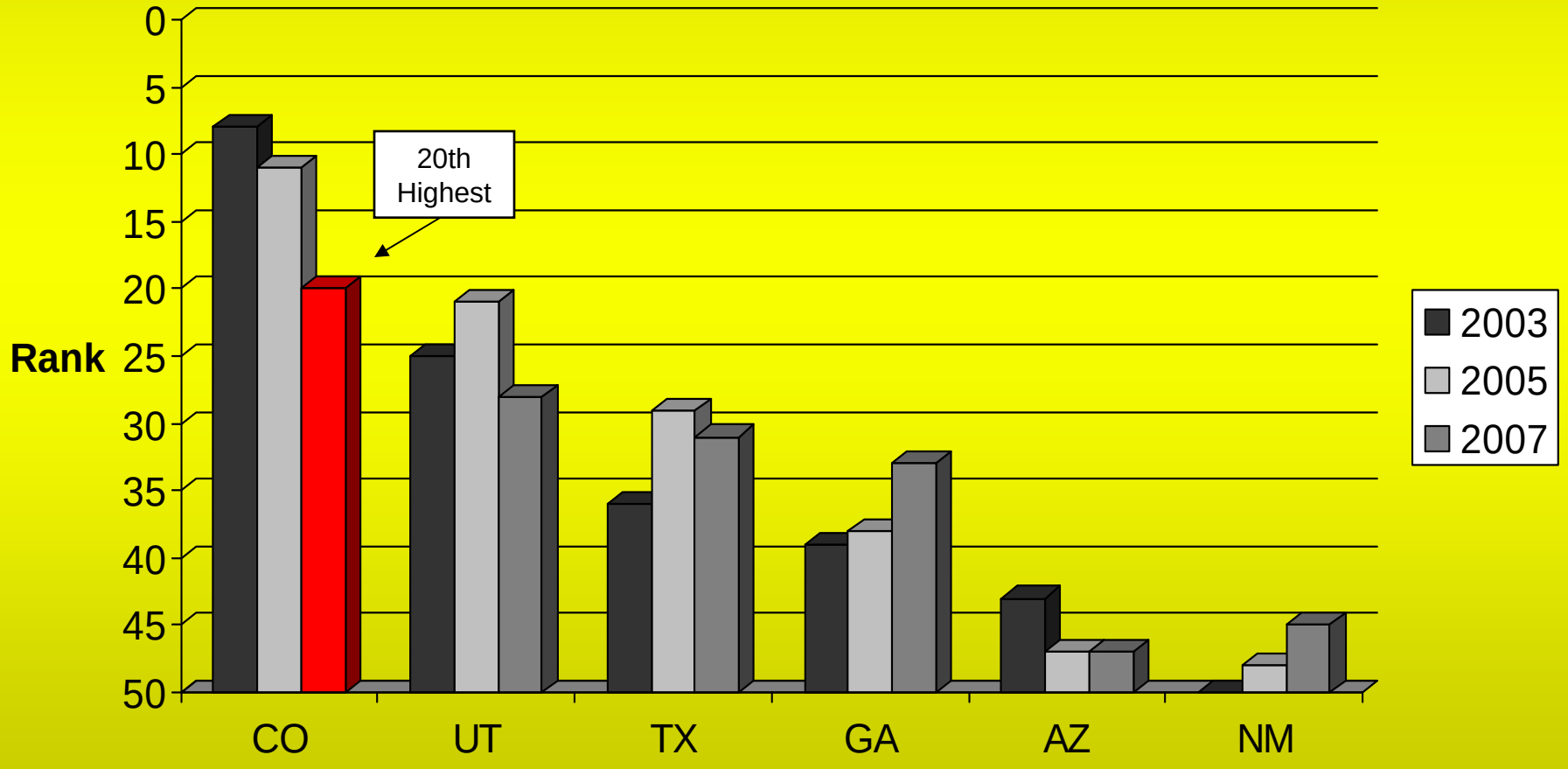
Average overall fourth grade reading scores have declined in recent years. While there is concern regarding this trend, Colorado still ranks in the upper half of the country.

Fig. 61

Average Fourth Grade Reading Scores

National Center for Education Statistics

Colorado vs. Competitors



Fourth grade reading scores are a bigger problem for Colorado's competitors.

Fig. 62

Average Eighth Grade Reading Scores

National Center for Education Statistics

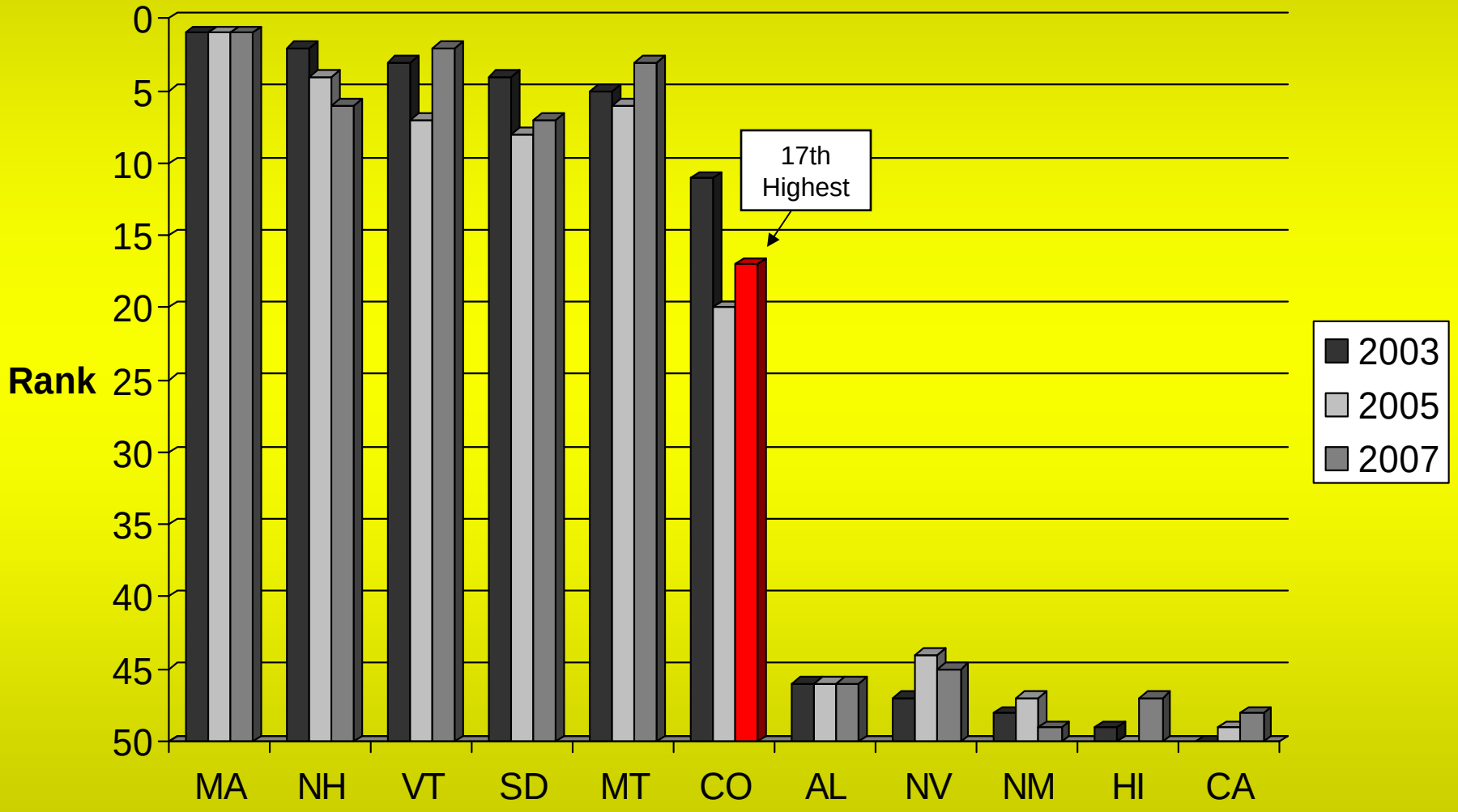
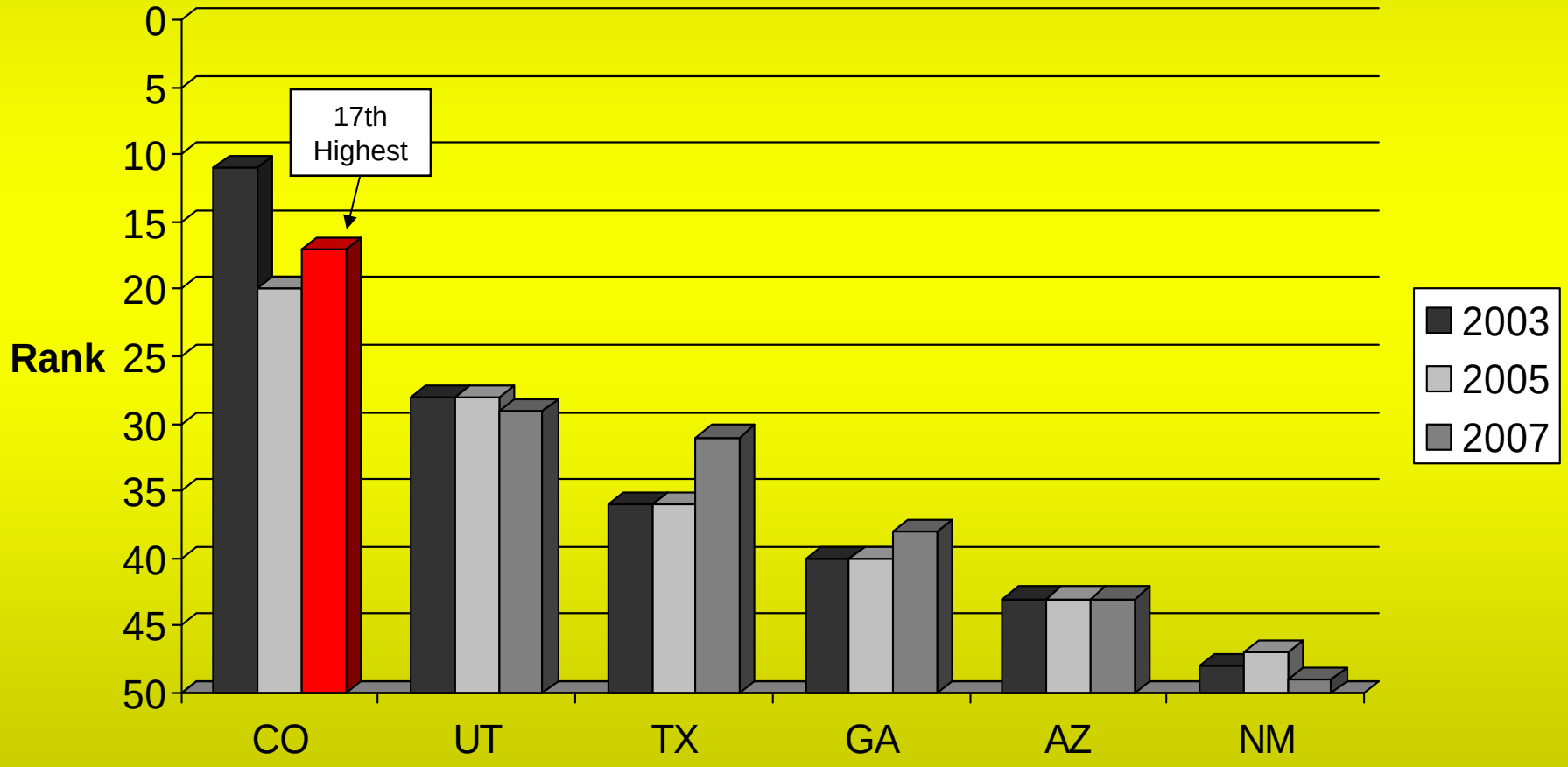


Fig. 65

Average Eighth Grade Reading Scores

National Center for Education Statistics

Colorado vs. Competitors



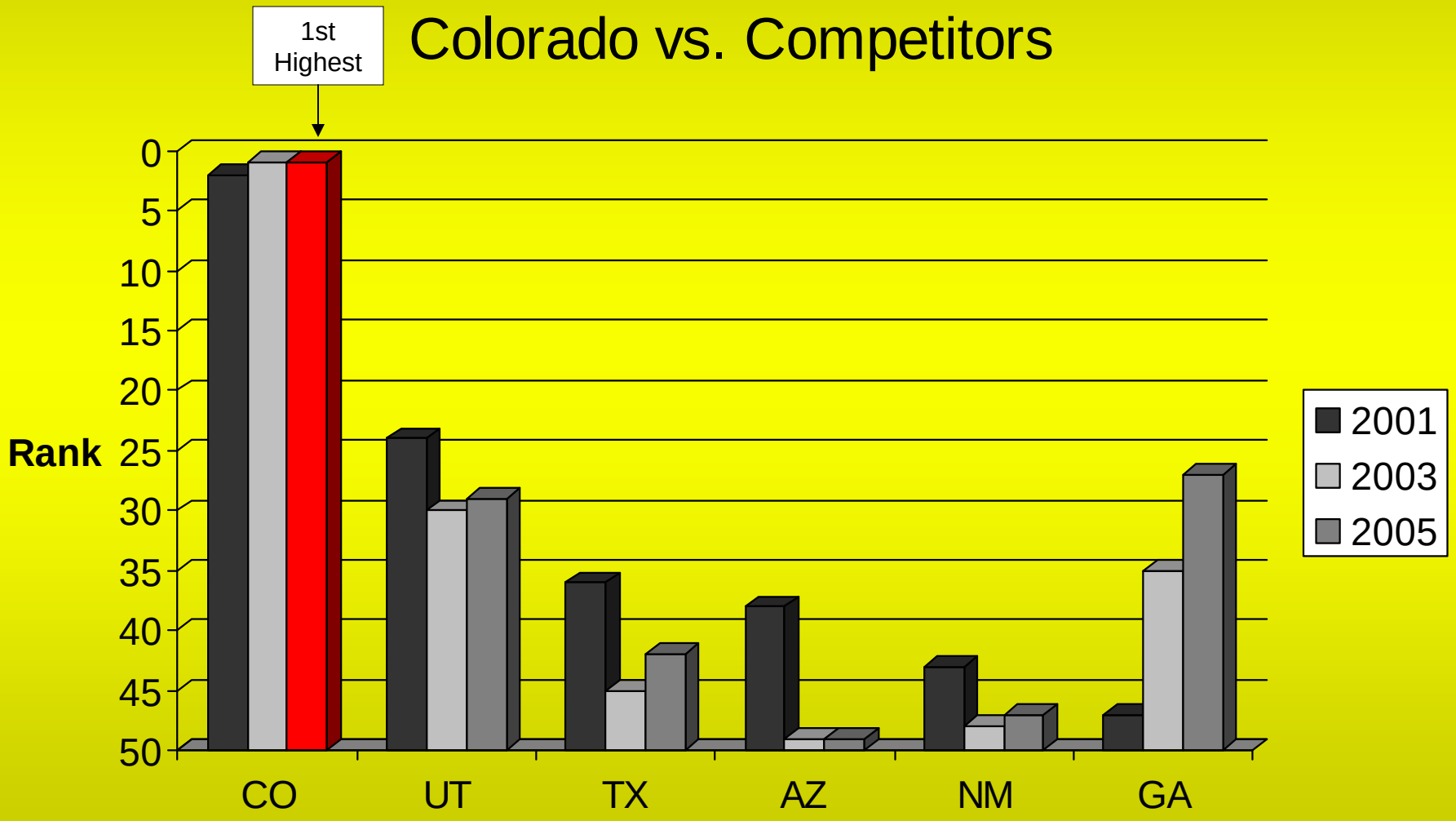
Average eighth grade reading scores are significantly higher in Colorado compared to the competitor states.

Fig. 66

Highest ACT (26 or above) and SAT (1200 or above) Scores per 1,000 High School Graduates

NCHEMS Information Center

Colorado vs. Competitors

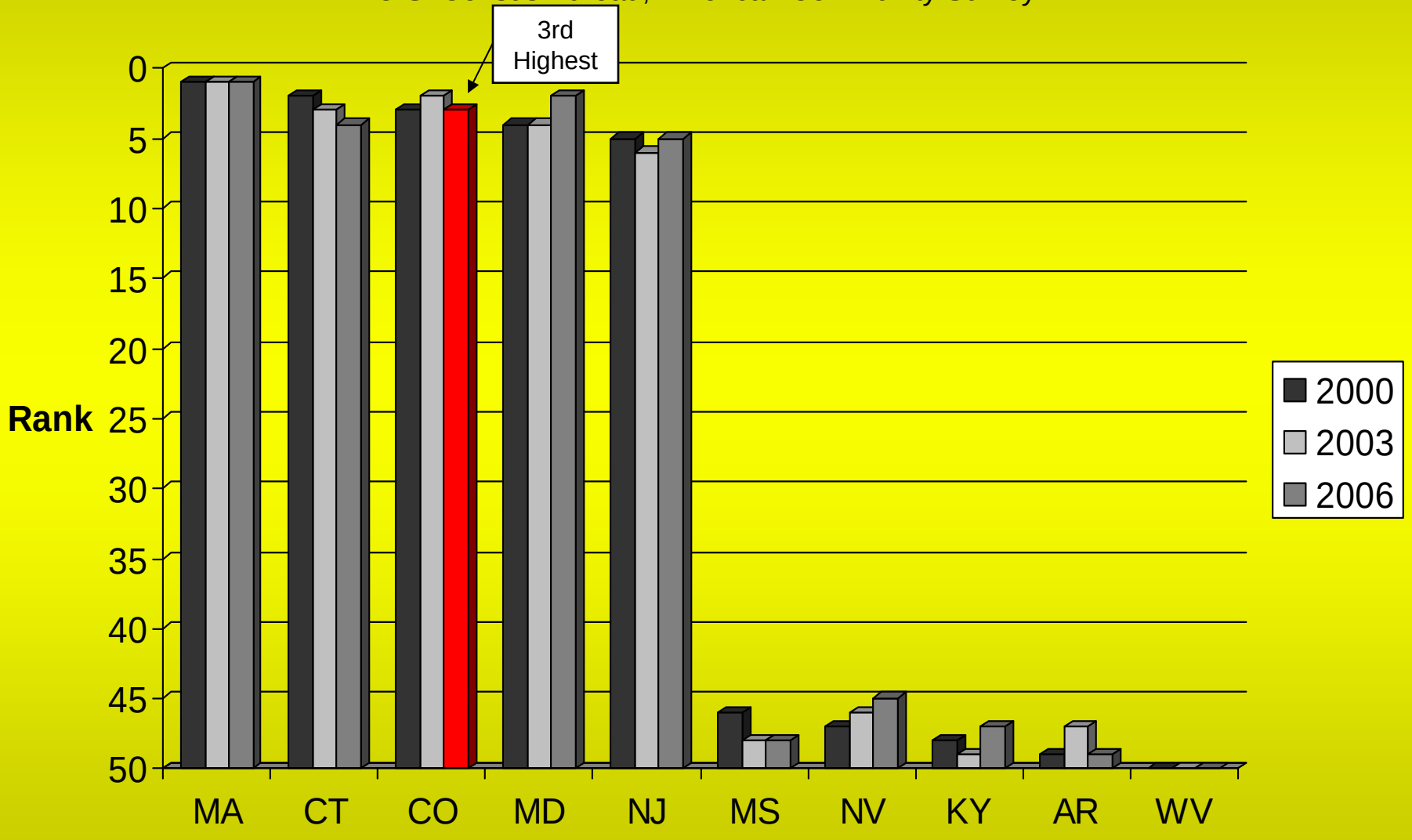


Families with children will find that Colorado is the best at educating bright students. Colorado offers outstanding college prep public schools.

Fig. 72

Population 25+ with Bachelor's Degree or Higher

U.S. Census Bureau, American Community Survey



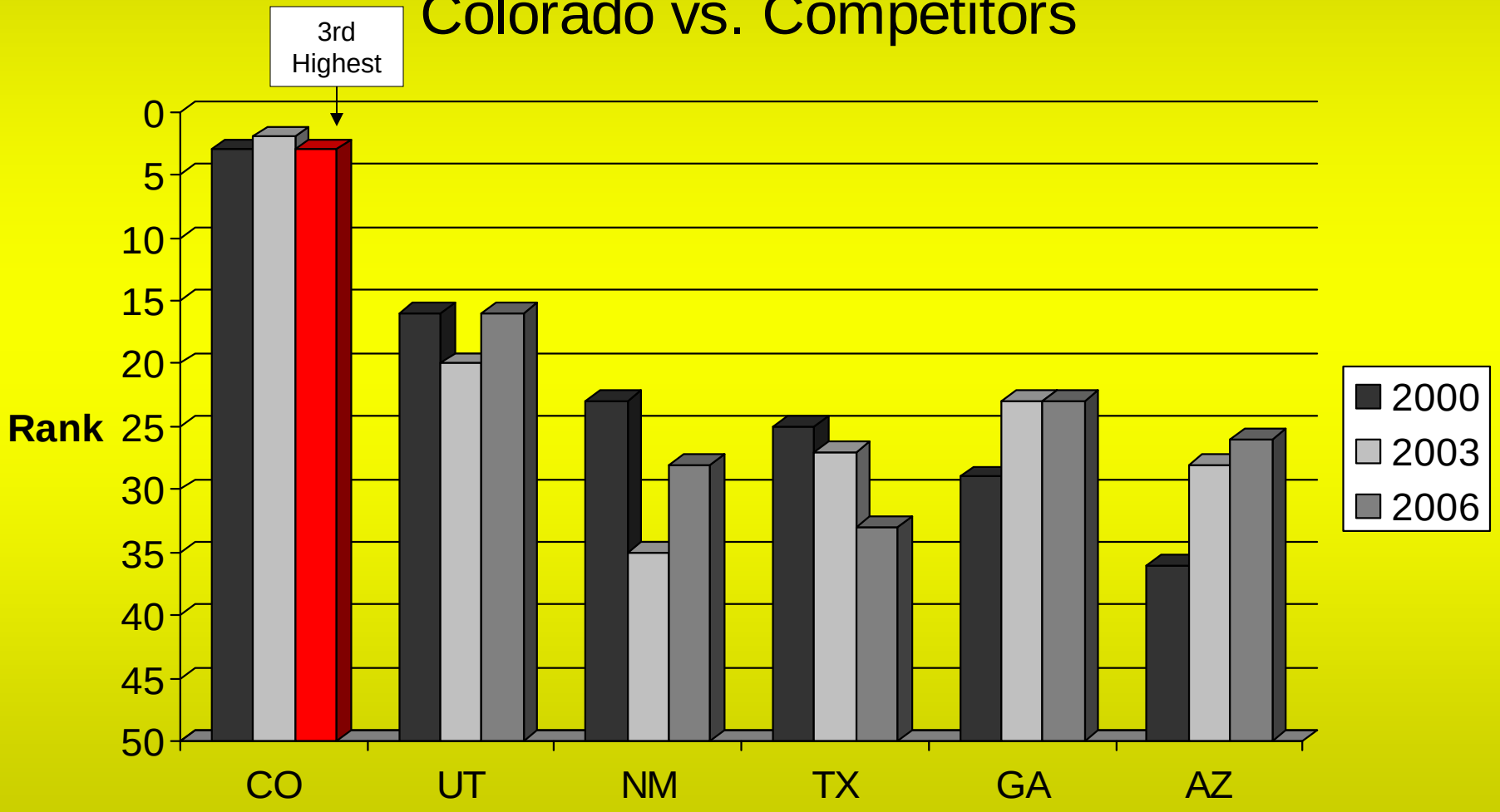
Colorado, with 34.3% of its population over 25 with a bachelors degree or higher, continues to hold its place among the top five states in college-educated adults.

Fig. 75

Population 25+ with Bachelor's Degree or Higher

U.S. Census Bureau, American Community Survey

Colorado vs. Competitors

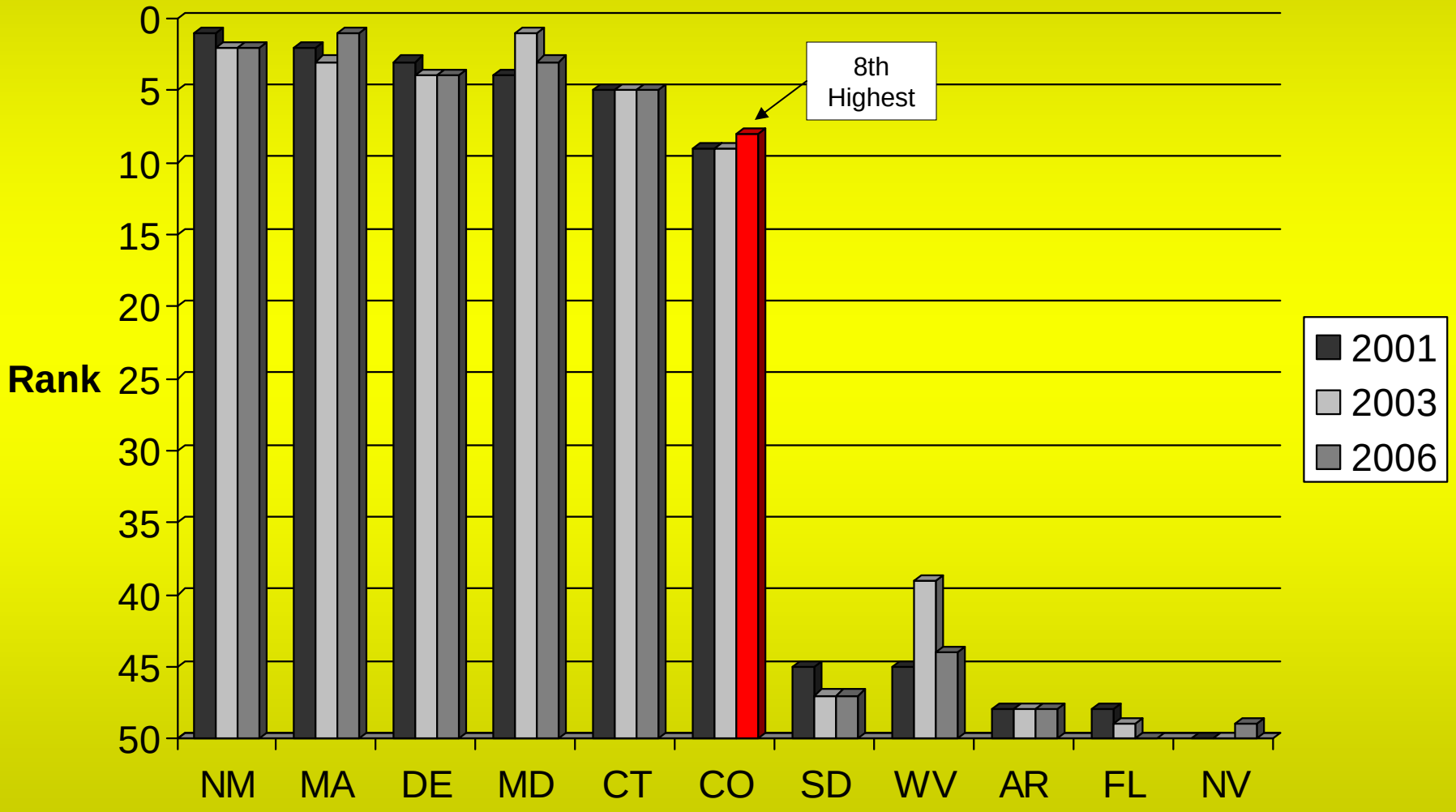


Colorado's advantage against its competitors is the high educational attainment rates of its residents. This results in higher wages for workers.

Fig. 76

Science & Engineering Doctorate Holders as a Percent of the Workforce

National Science Foundation



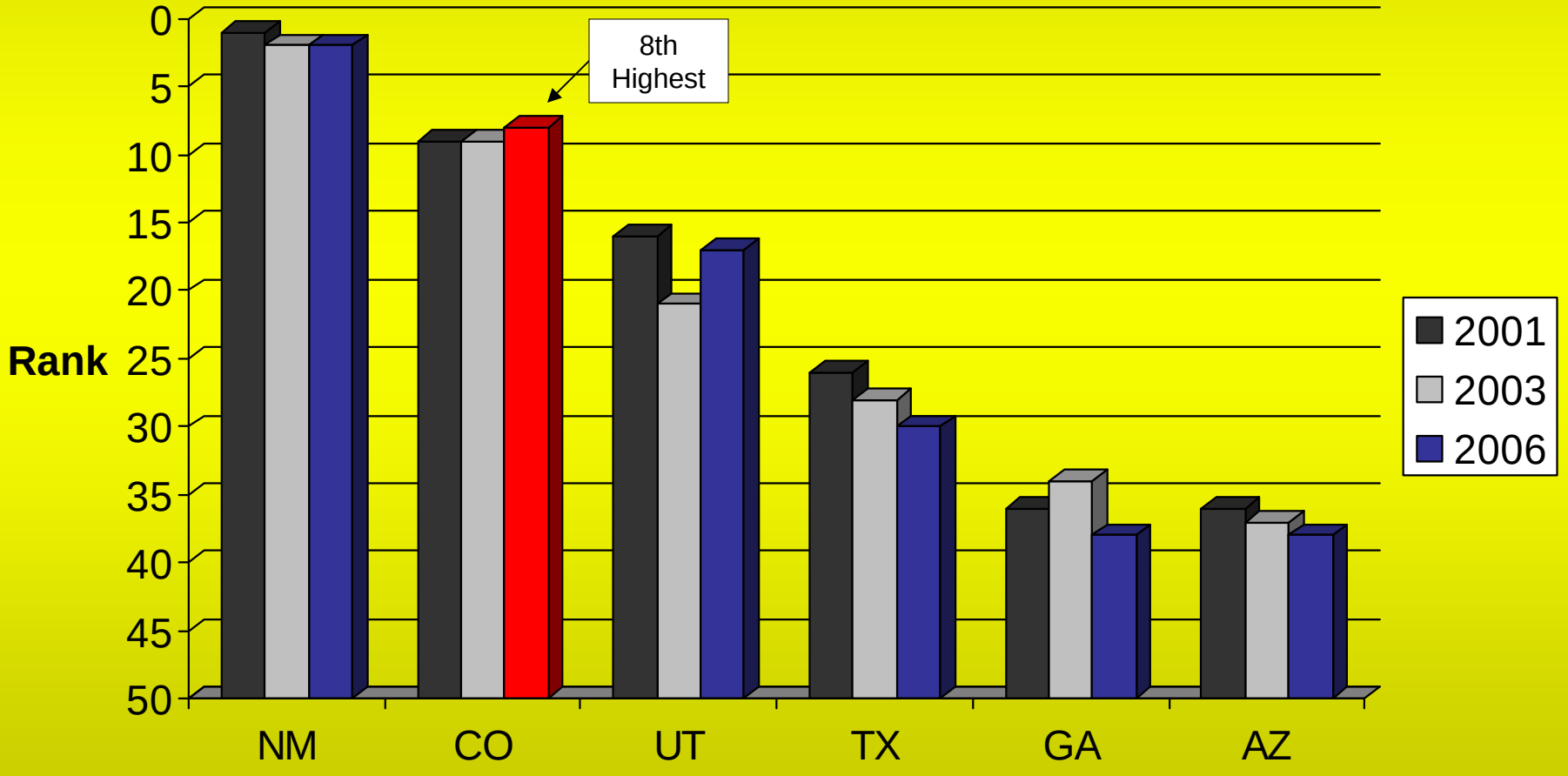
Colorado's research laboratories, universities, and technology-based economy attract scientists and engineers from around the world.

Fig. 77

Science & Engineering Doctorate Holders as a Percent of the Workforce

National Science Foundation

Colorado vs. Competitors

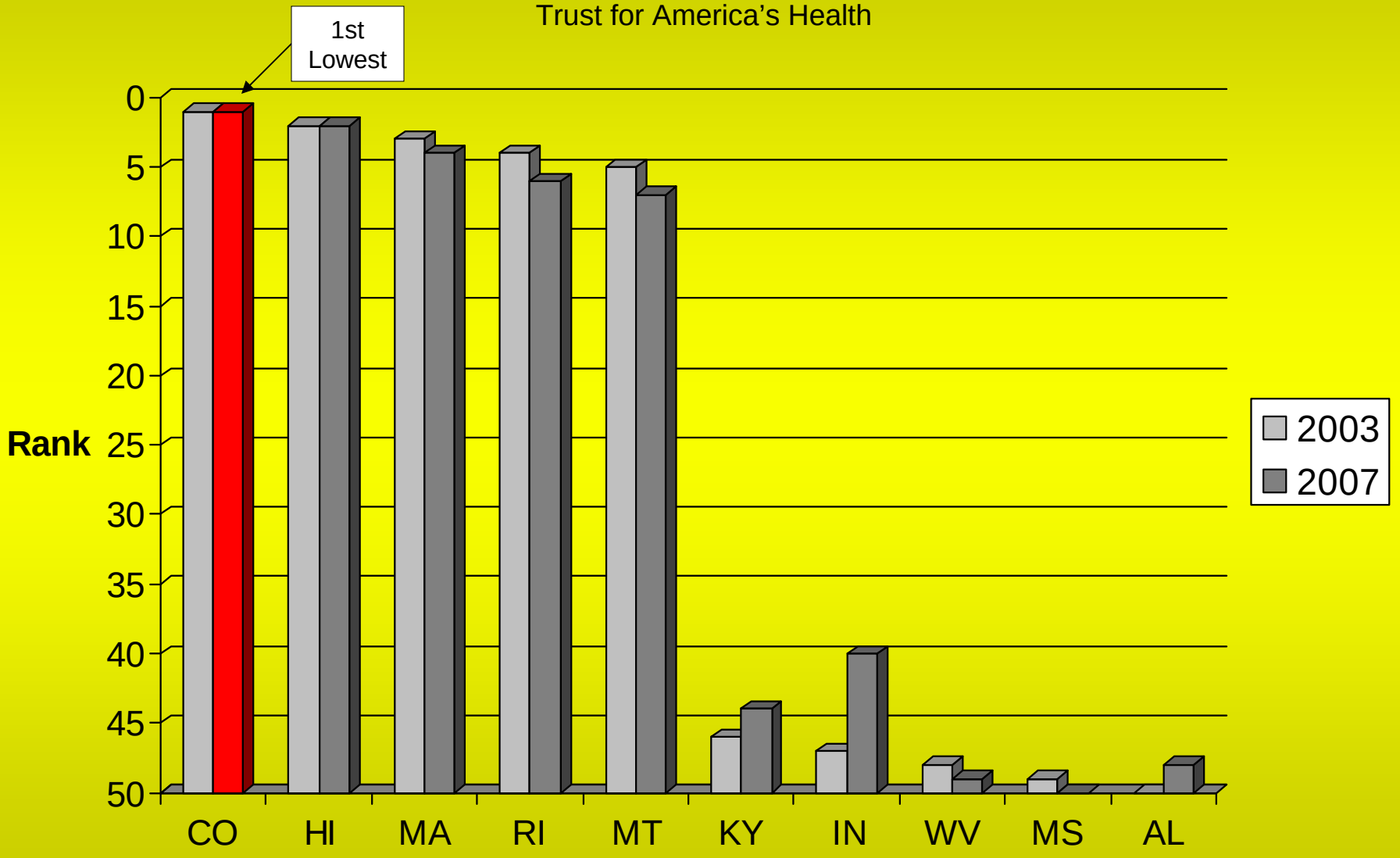


New Mexico's federal laboratories make it a highly ranked state for PhDs in science and engineering.

Fig. 78

Lowest Obesity Prevalence Among Adults

Trust for America's Health

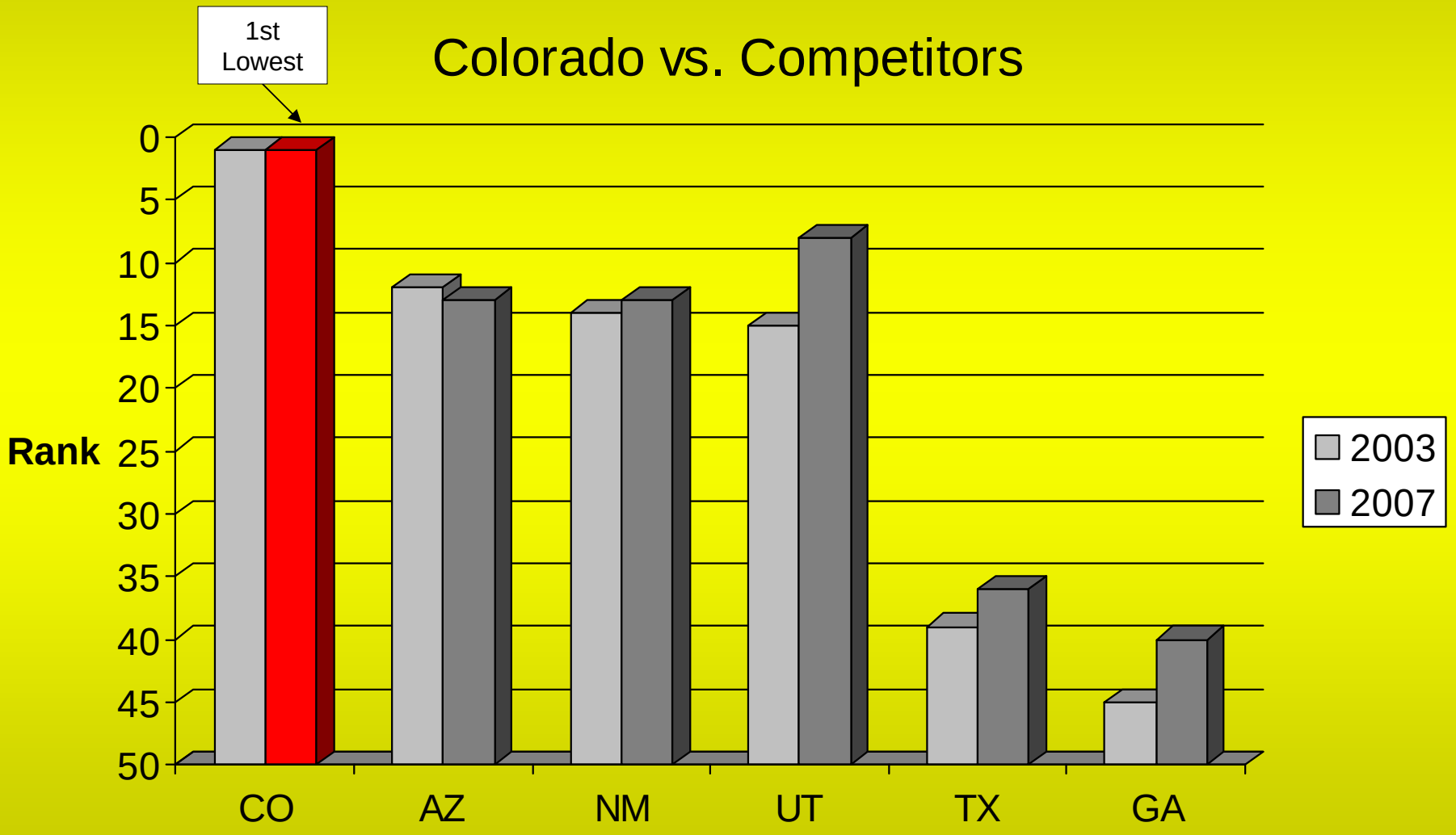


Coloradans are the "thinnest" people in the nation, with only 18.4% of its population diagnosed as obese. Colorado was the only state in 2007 with a rate below 20%. Healthy workers are more productive, require fewer health services, and enjoy longer working lives.

Fig. 87

Lowest Obesity Prevalence Among Adults

Trust for America's Health

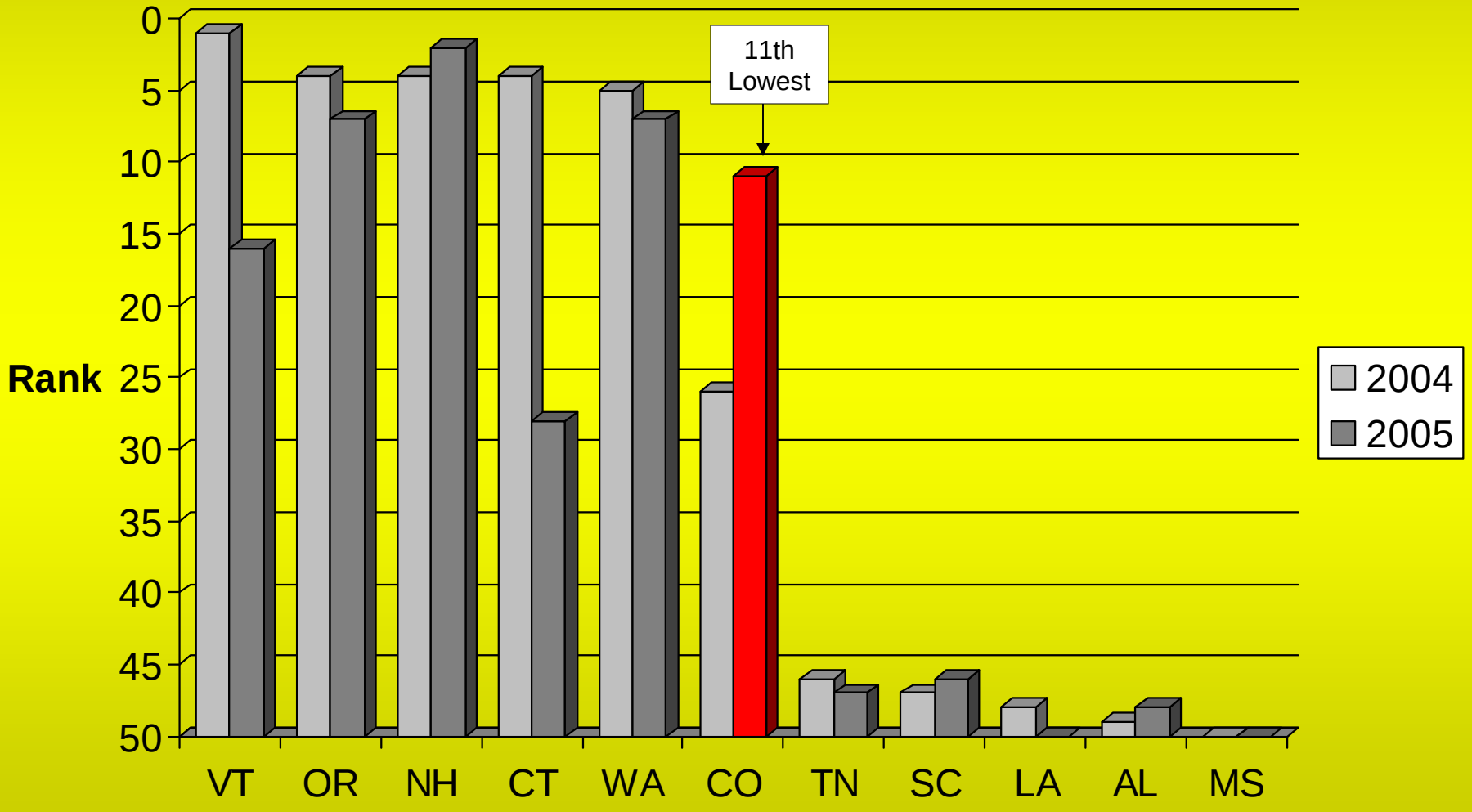


Colorado and Utah rank among the states with the lowest obesity rates.

Fig. 88

Lowest Percentage of Pre-term Births to Live Births (Moved to strengths this past year)

Kaiser State Health Facts



Pre-term births are one measure of the extent and quality of pre-natal care. Southern states with lower educational levels and fewer doctors have the highest number of pre-term births.

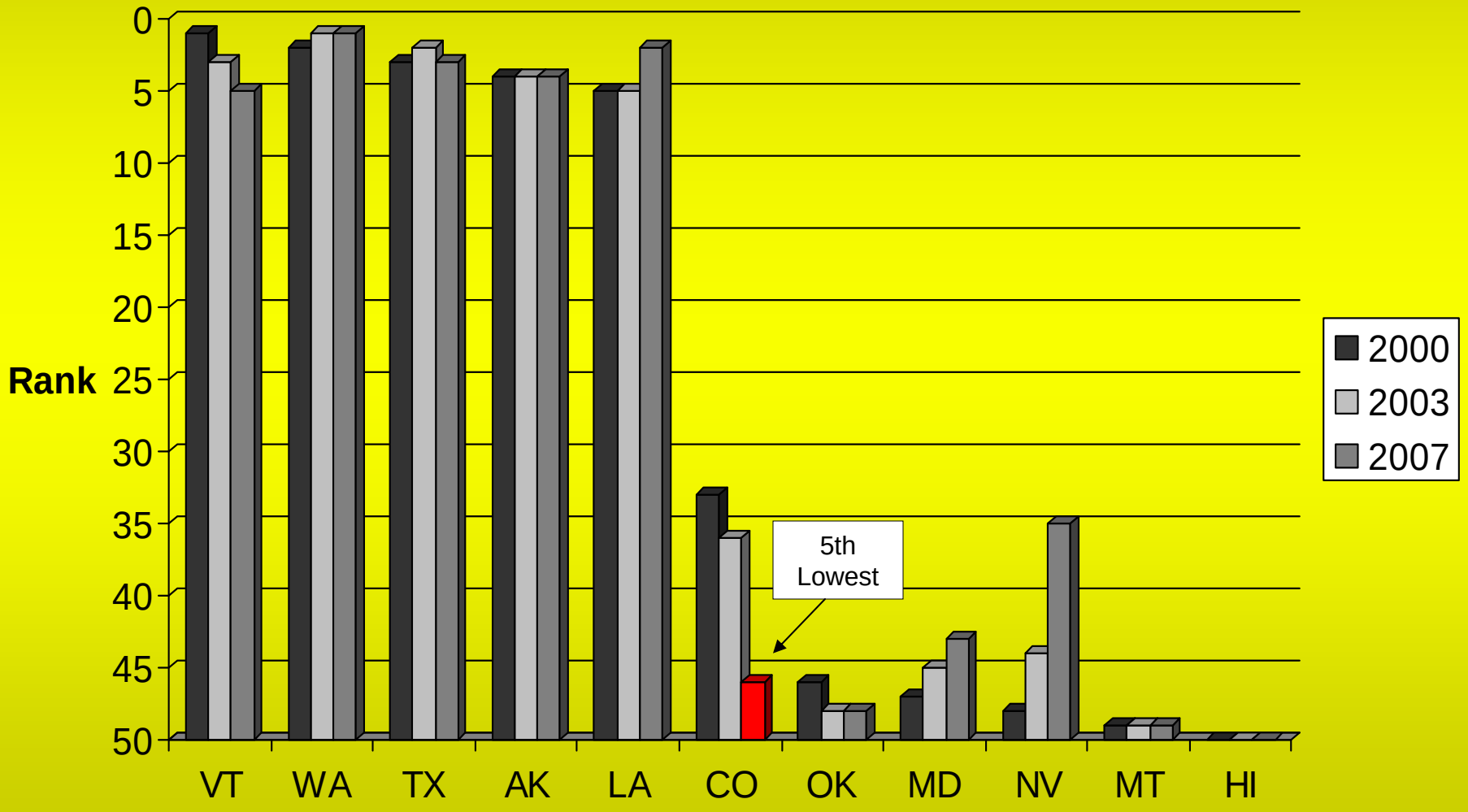
Fig. 155

Where Colorado is Challenged….

Economic policy and public policy sometimes diverge in “Colorado’s Future” debate

Export Dollars per Capita

US Office of Trade and Economic Analysis



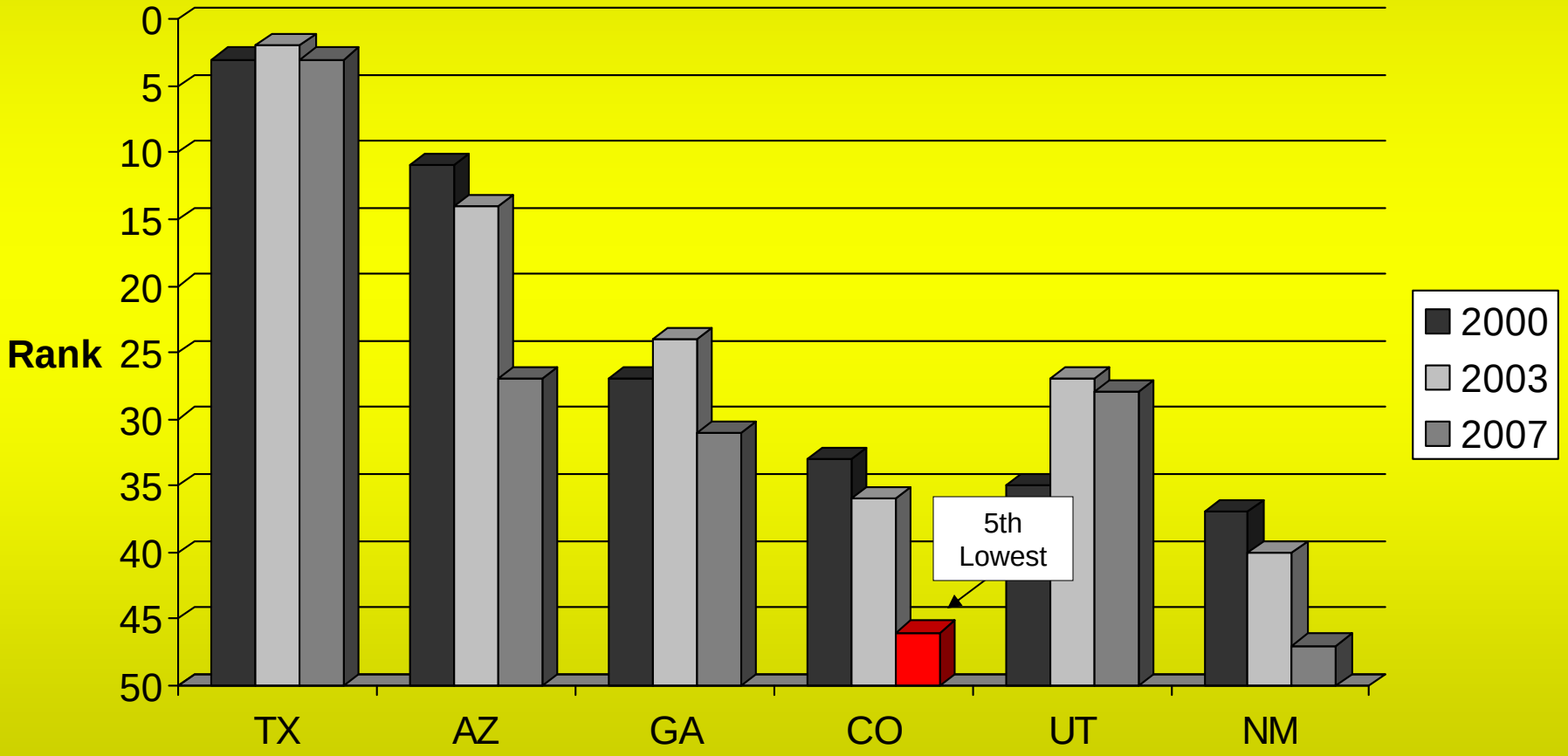
States with either small populations or large concentrations of natural resources or manufacturing typically rank high in this comparison. Colorado's contracting manufacturing base and inland location contribute to the lower ranking.

Fig. 111

Export Dollars per Capita

US Office of Trade and Economic Analysis

Colorado vs. Competitors

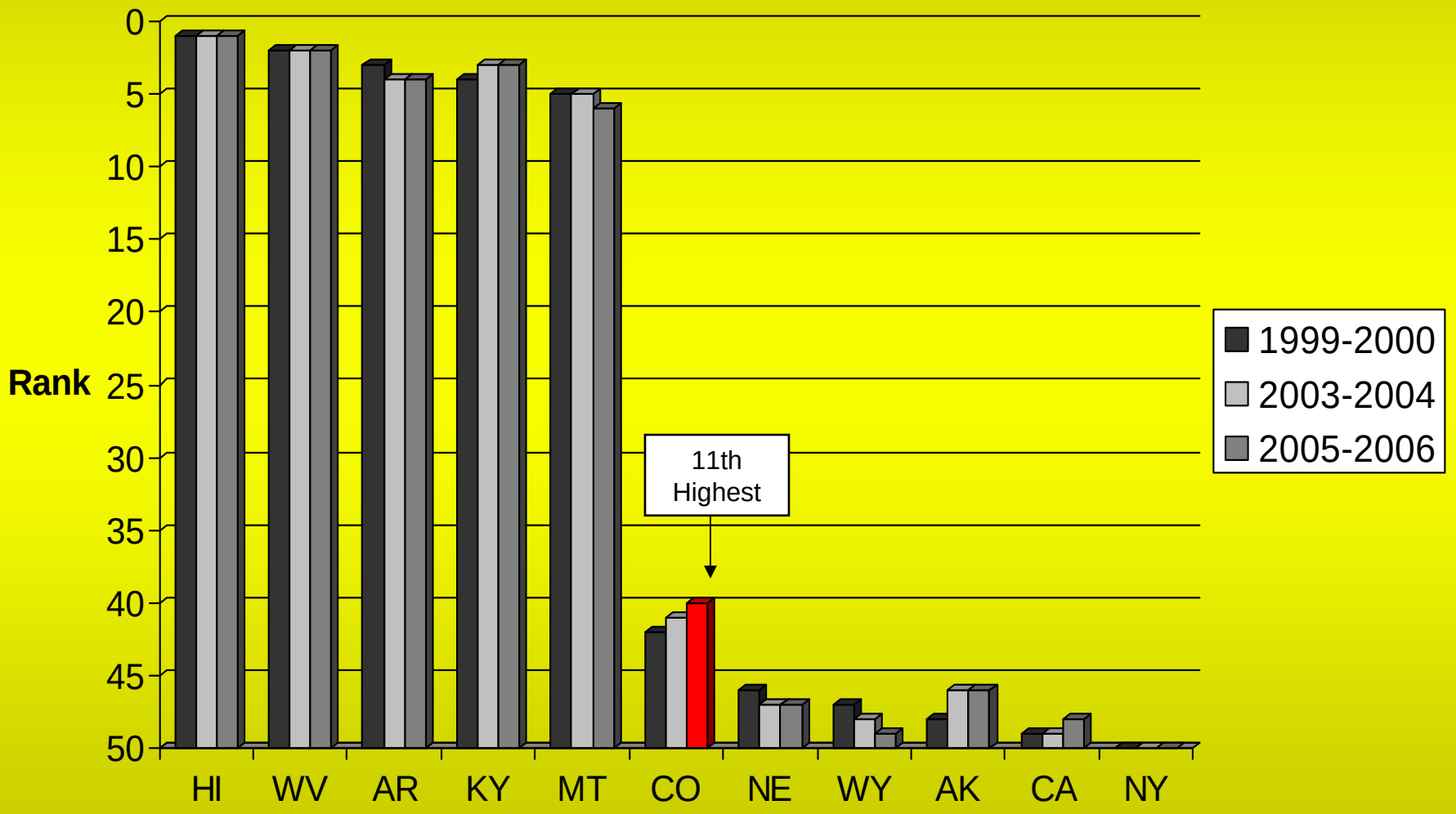


Texas, Arizona, and Georgia have significantly larger manufacturing employment compared to Colorado. While energy-rich, Colorado's manufacturing employment concentration has decreased from 14% in the 1980s to 6.3% in 2006. The lower ranking for Colorado reflects this decline in manufacturing.

Fig. 112

Local Government Total Revenue Per Capita

U.S. Census Bureau, State and Local Government Finances



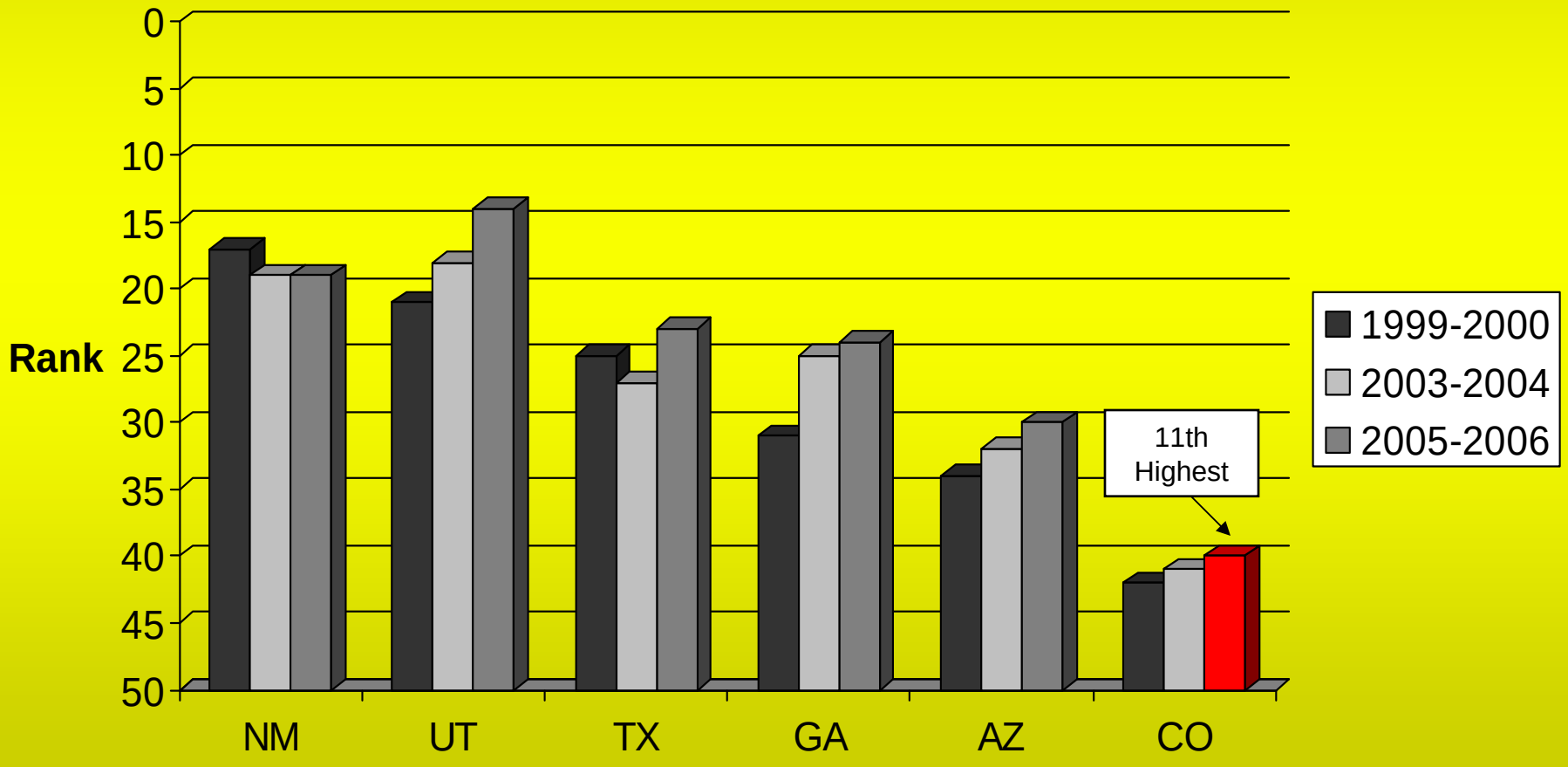
States with low levels of state revenue, generally compensate with higher levels of local government revenue. Colorado is no exception with local revenue per capita generally in the top 10 highest states.

Fig. 115

Local Government Total Revenue Per Capita

U.S. Census Bureau, State and Local Government Finances

Colorado vs. Competitors

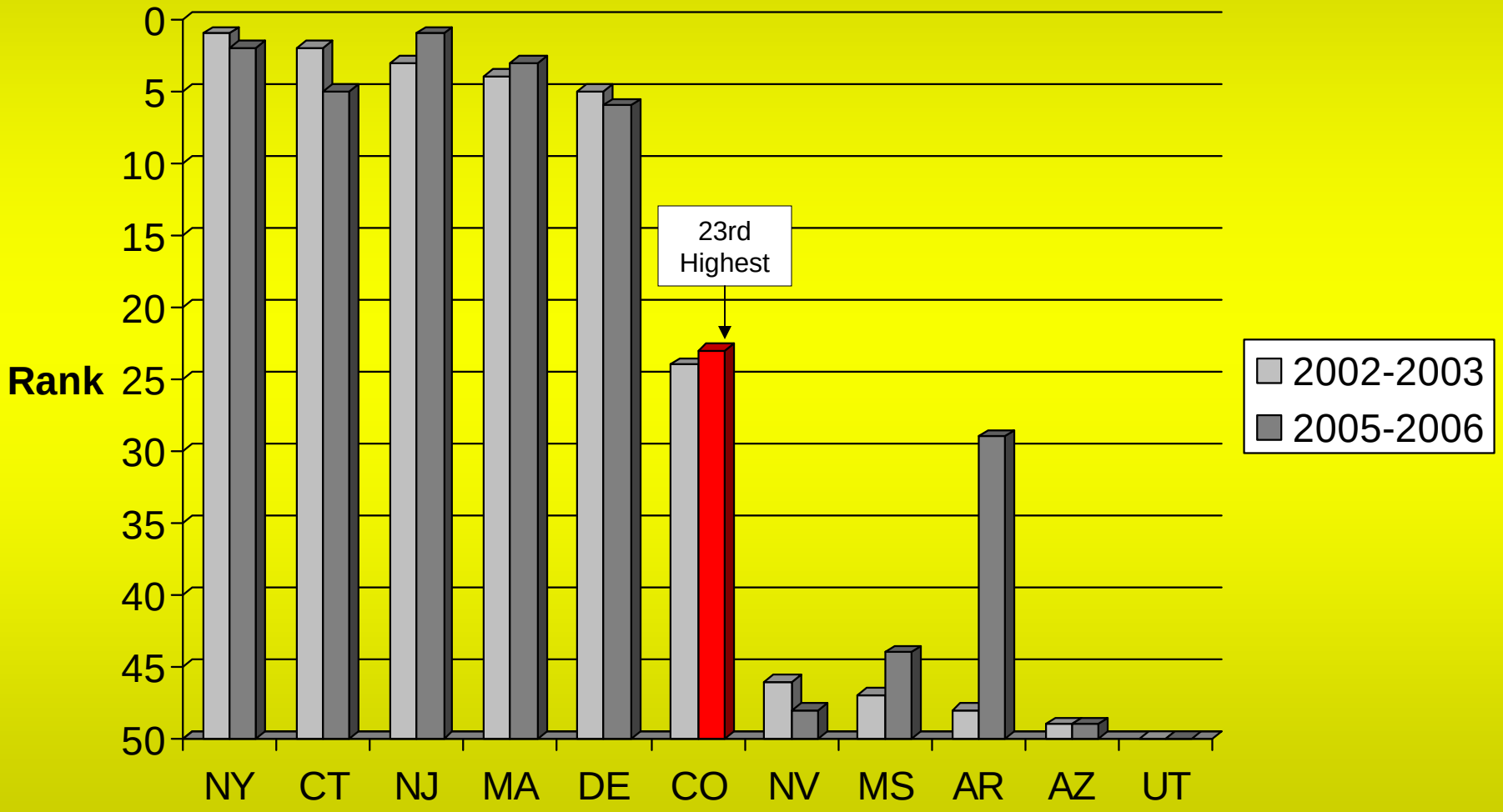


Colorado collects higher volumes of local tax and fee revenue than all of its competitors.

Fig. 116

Expenditures for Public K-12 Schools per Student

National Education Association



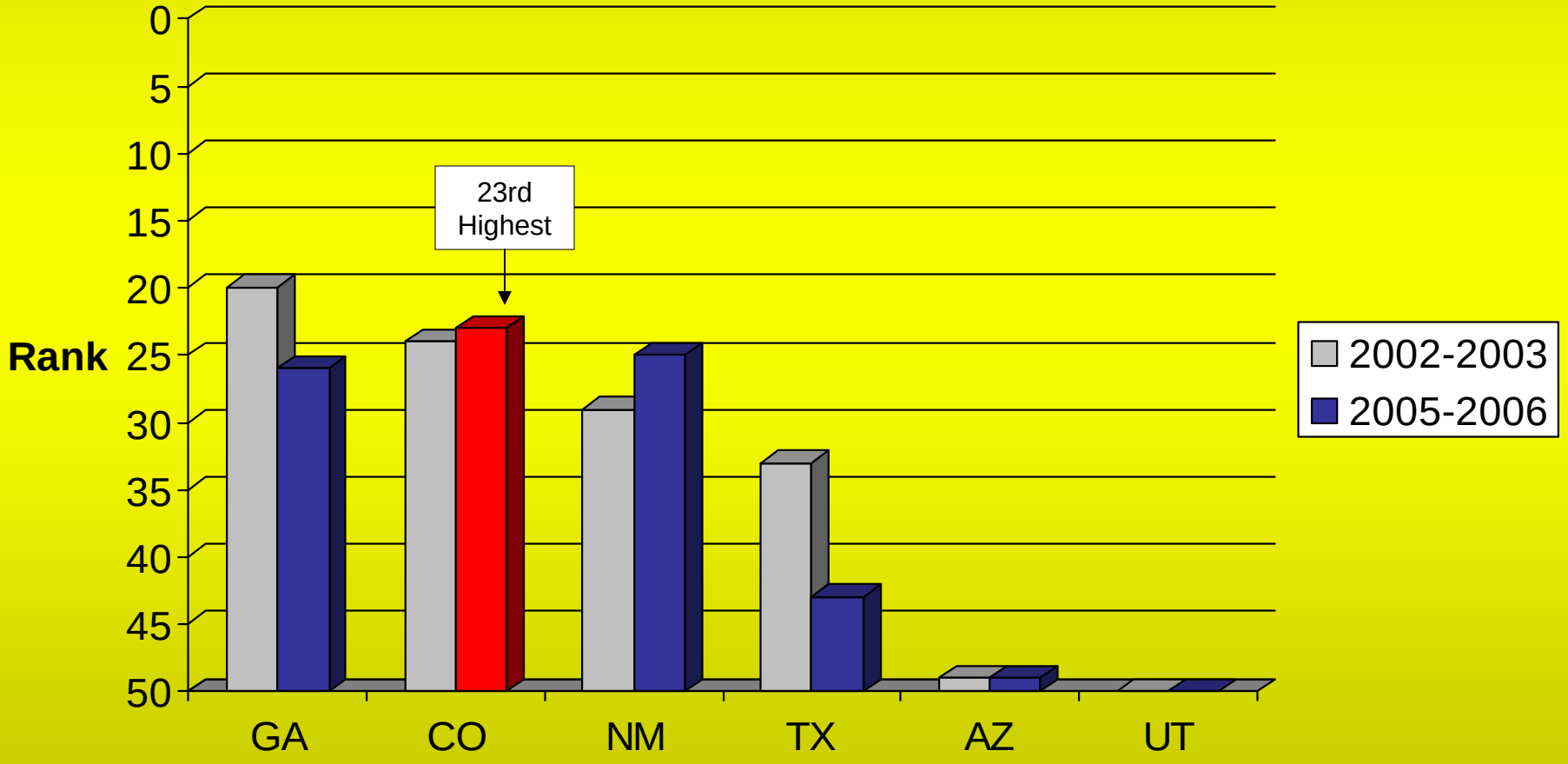
Colorado ranks in the middle of all states for K-12 education funding, a ranking that has remained relatively consistent throughout the years.

Fig. 121

Expenditures for Public K-12 Schools per Student

National Education Association

Colorado vs. Competitors

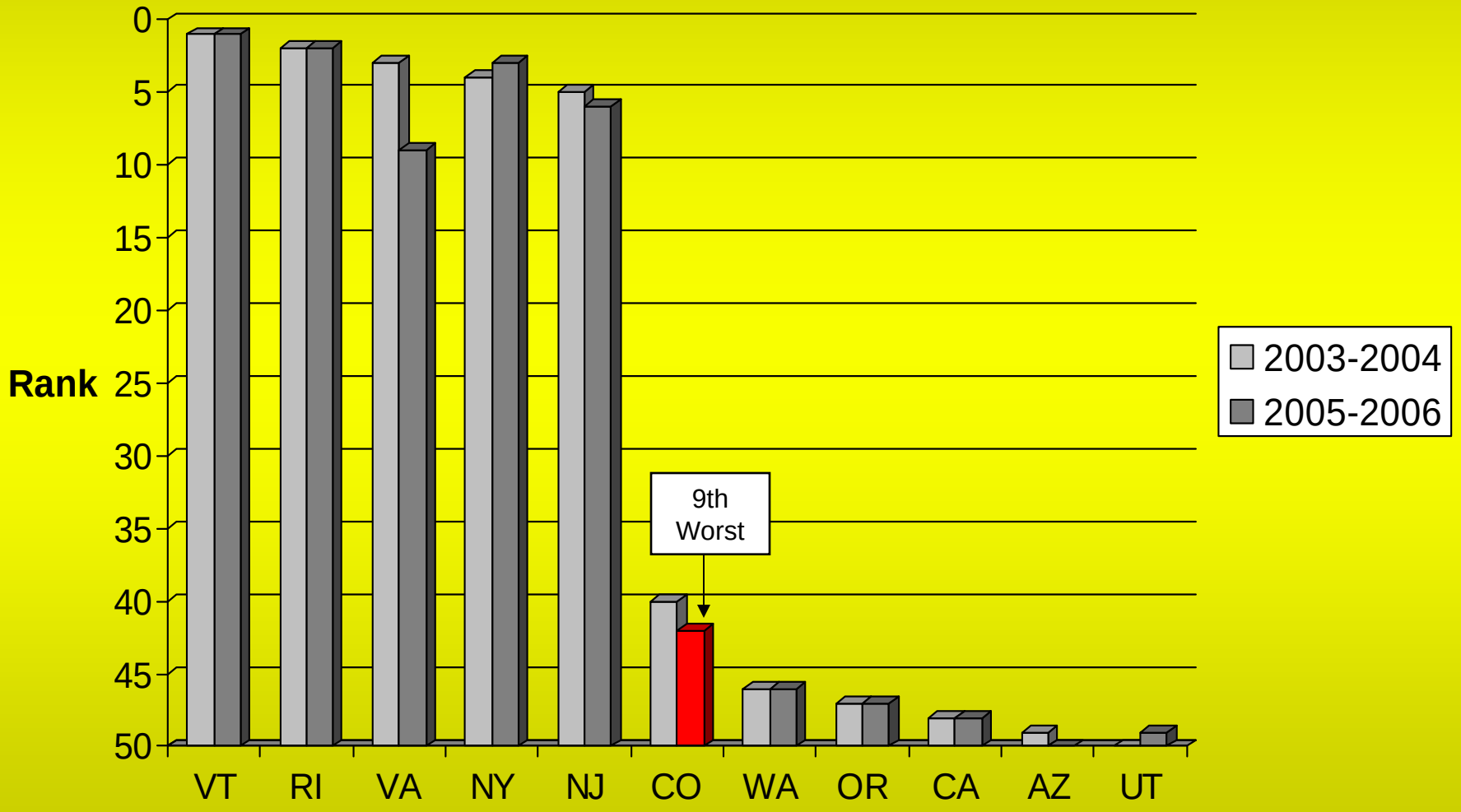


Colorado's ranking in 2005-2006 is similar to Georgia and New Mexico and is significantly higher than Texas, Arizona, and Utah.

Fig. 122

Student-Teacher Ratio in Public Elementary and Secondary Schools

National Education Association



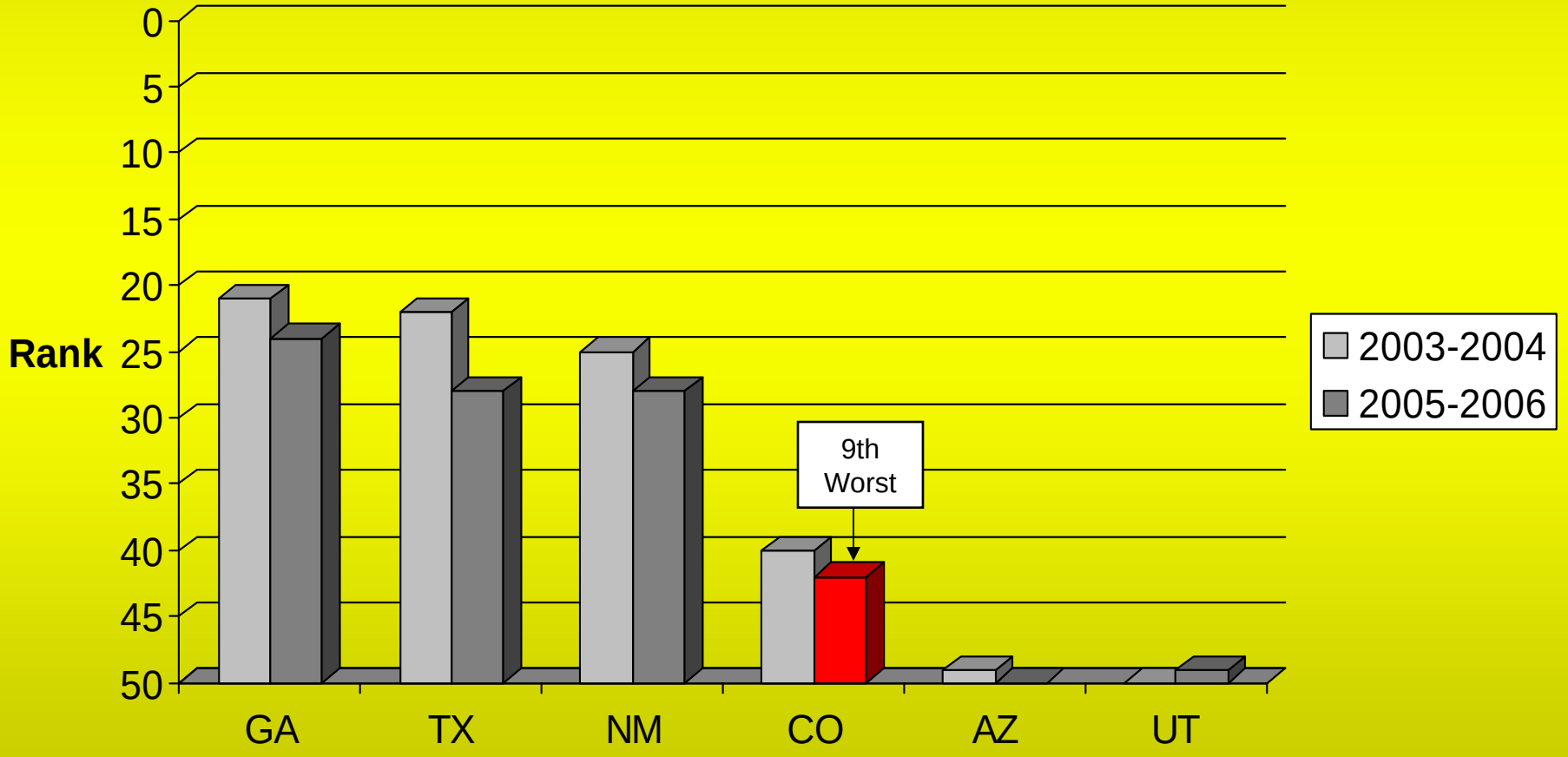
With an average of 17 students per teacher throughout the state, Colorado's student-teacher ratio is ranked as one of the ten worst in the country (National Average = 15.6).

Fig. 125

Student-Teacher Ratio in Public Elementary and Secondary Schools

National Education Association

Colorado vs. Competitors



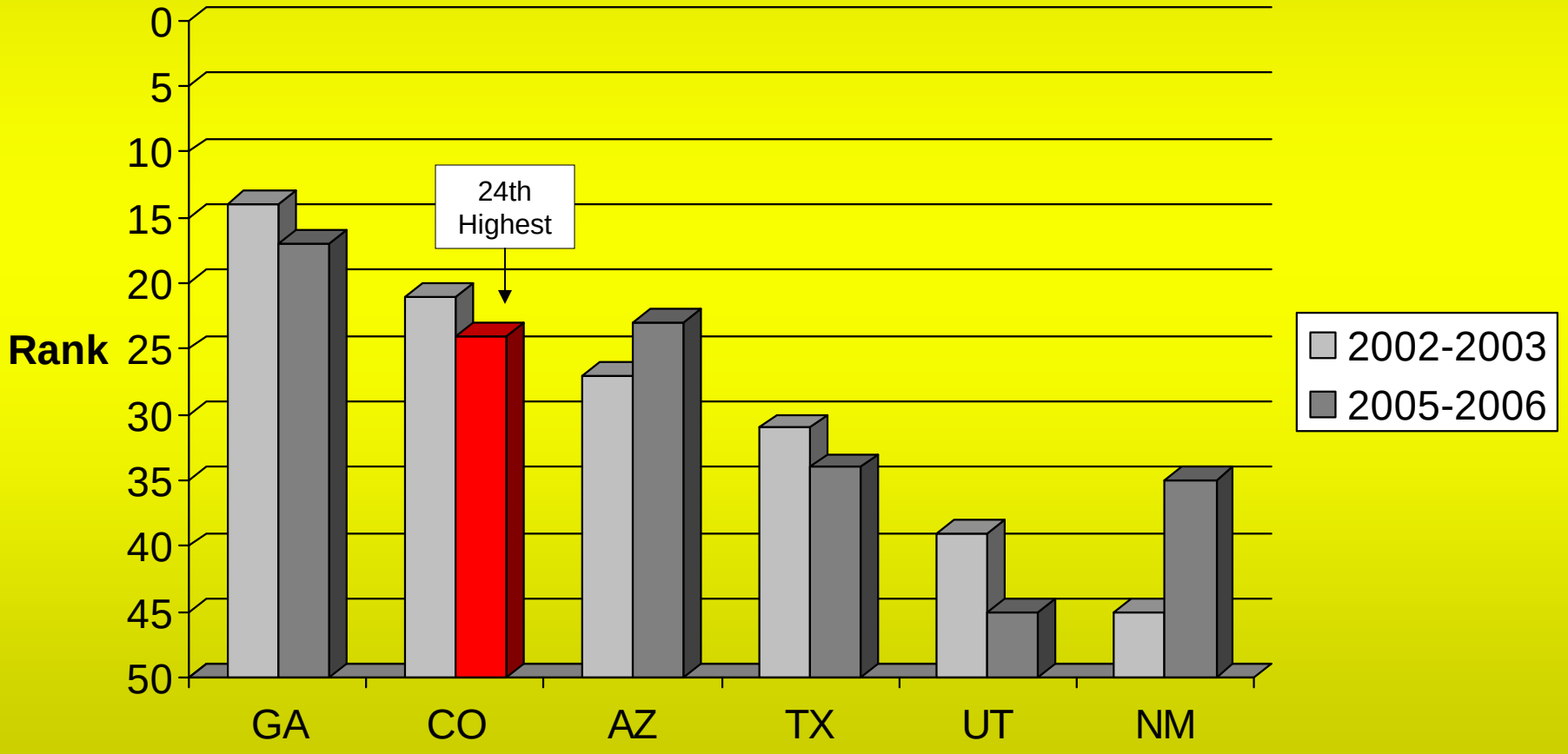
Colorado, Arizona, and Utah have much higher pupil-teacher ratios than their competitors during all of the data years.

Fig. 126

Average Salaries for Public School Teachers

National Education Association

Colorado vs. Competitors



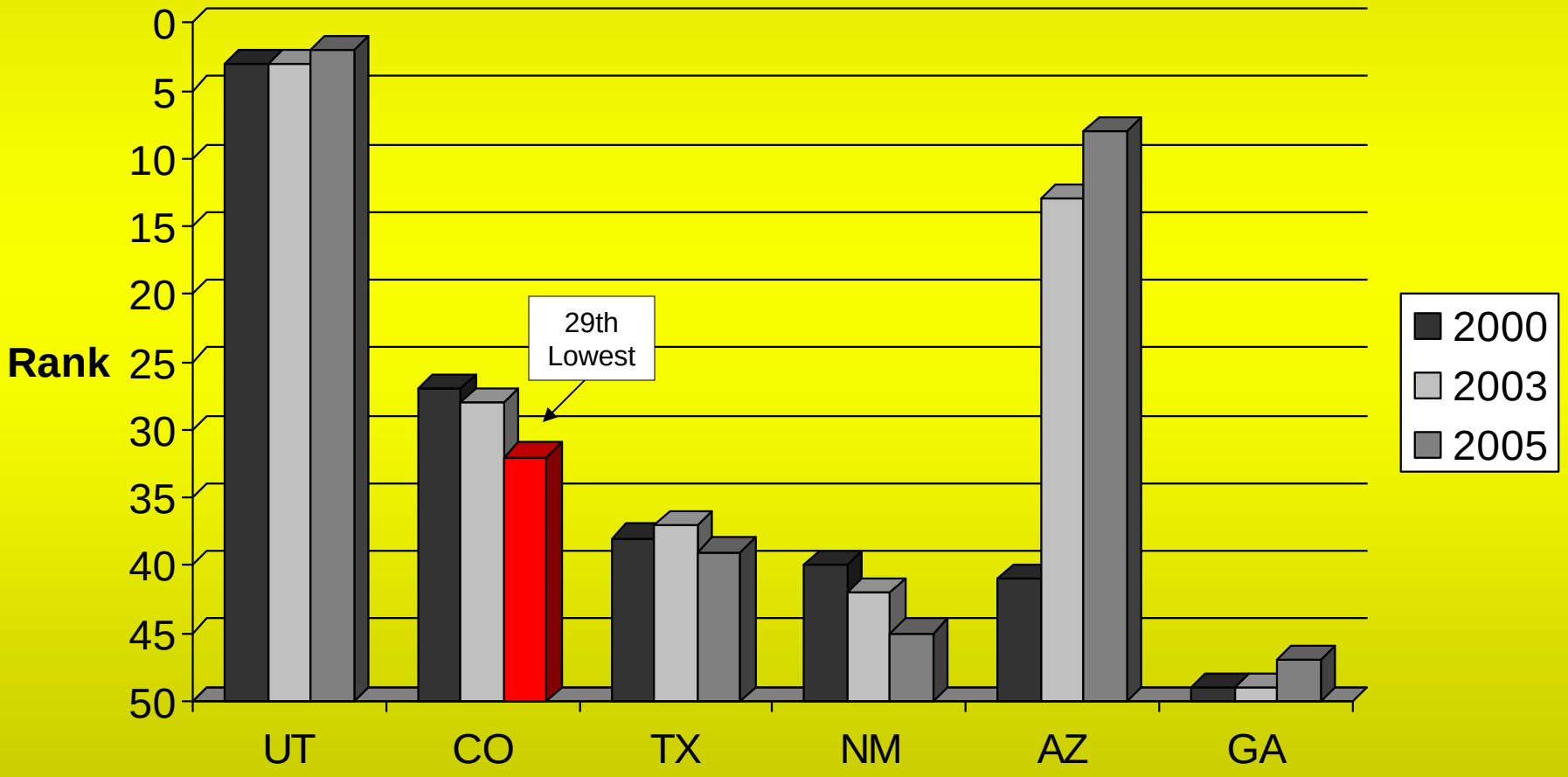
Colorado, Georgia, and Arizona pay teachers in the mid-range compared to the nation. Georgia has launched major initiatives to improve teacher pay to attract better talent, ranking 17th nationally.

Fig. 128

Public High School Graduation Rates

NCHEMS Information Center

Colorado vs. Competitors

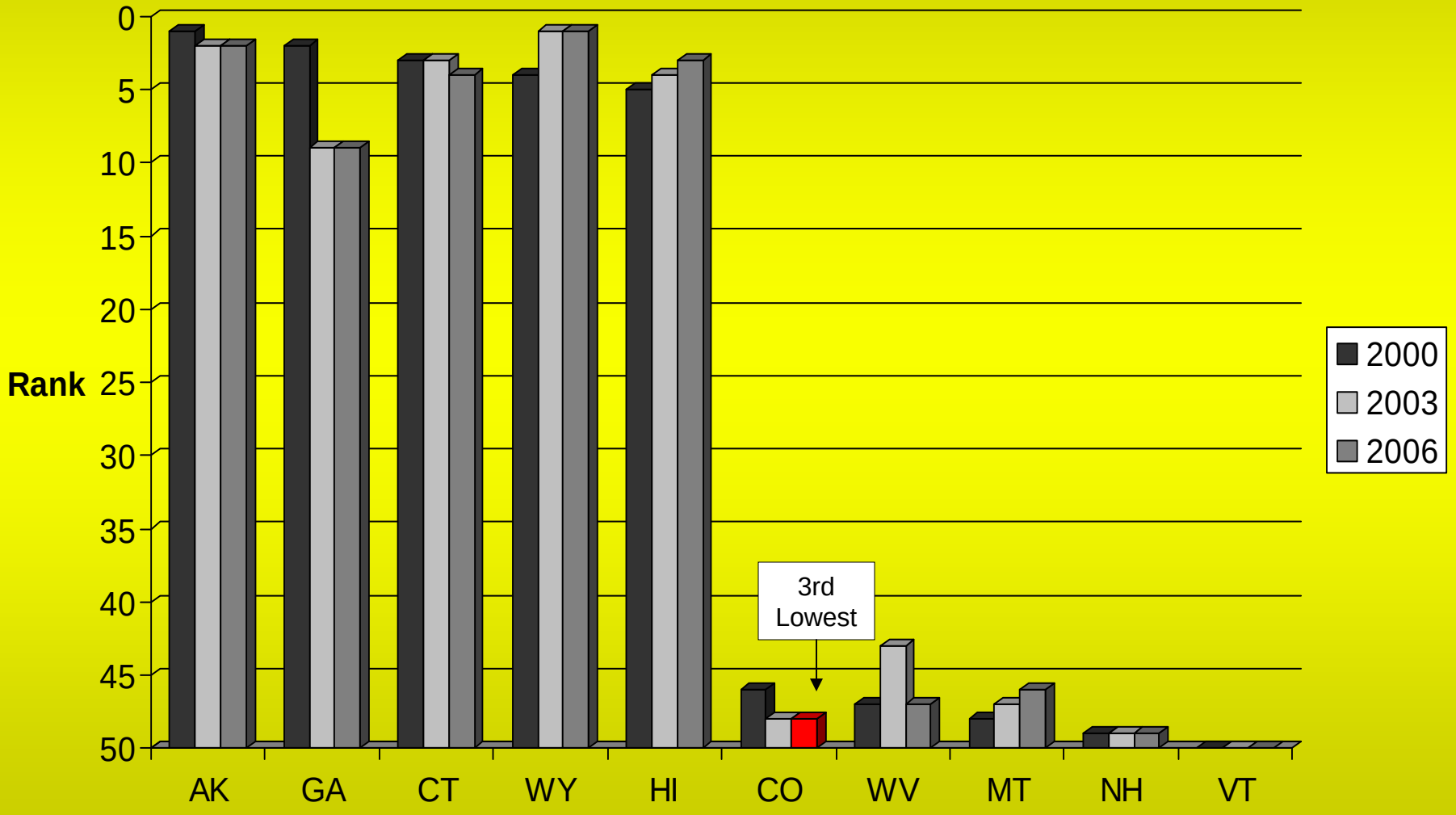


Colorado's declining graduation rates exhibit the disconnect between the state's students and its highly educated workforce. While Colorado exceeds its competitors in high achievement students, Arizona and Utah vastly surpass Colorado in overall graduation rates.

Fig. 130

State and Local Public Higher Education Support per Full-Time Student

NCHEMS Information Center



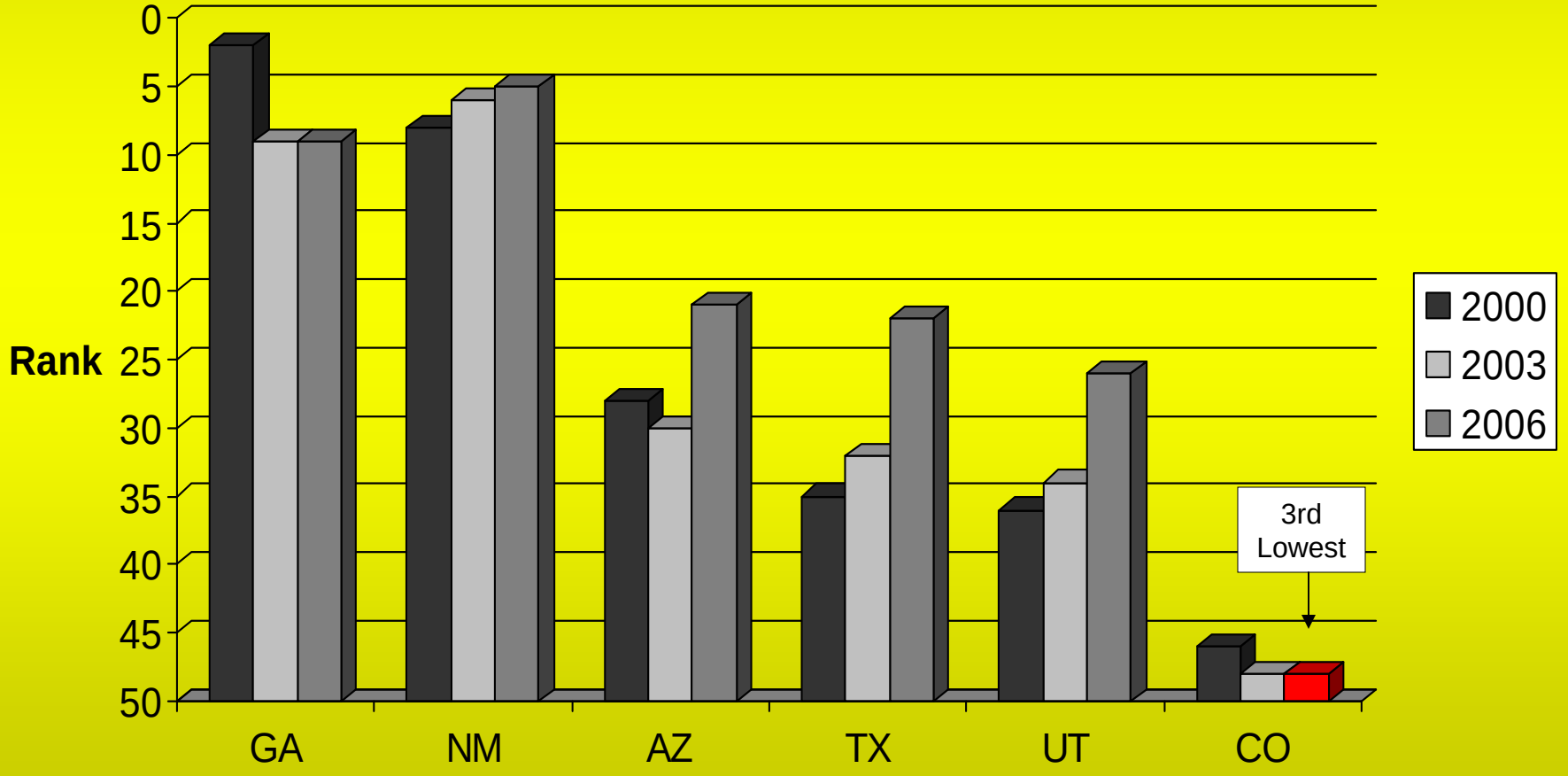
Colorado continues to offer one of the lowest support rates per full-time higher education student. With the passage of Referendum C, rankings are expected to improve.

Fig. 133

State and Local Public Higher Education Support per Full-Time Student

NCHEMS Information Center

Colorado vs. Competitors

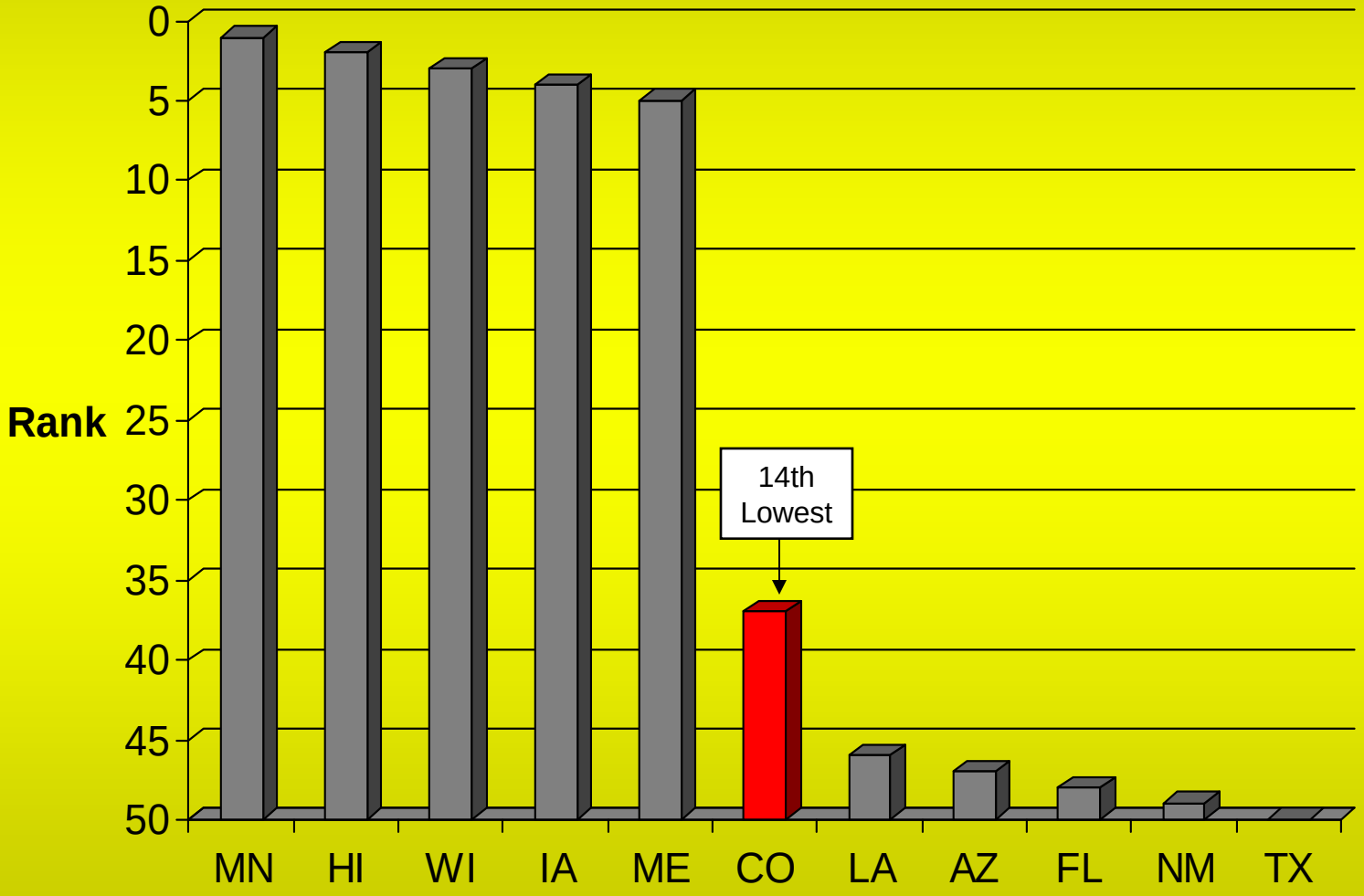


Colorado's competitors continue to provide greater support per student for higher education.

Fig. 134

Percentage of Population with Health Insurance, 2005-2006

Kaiser State Health Facts

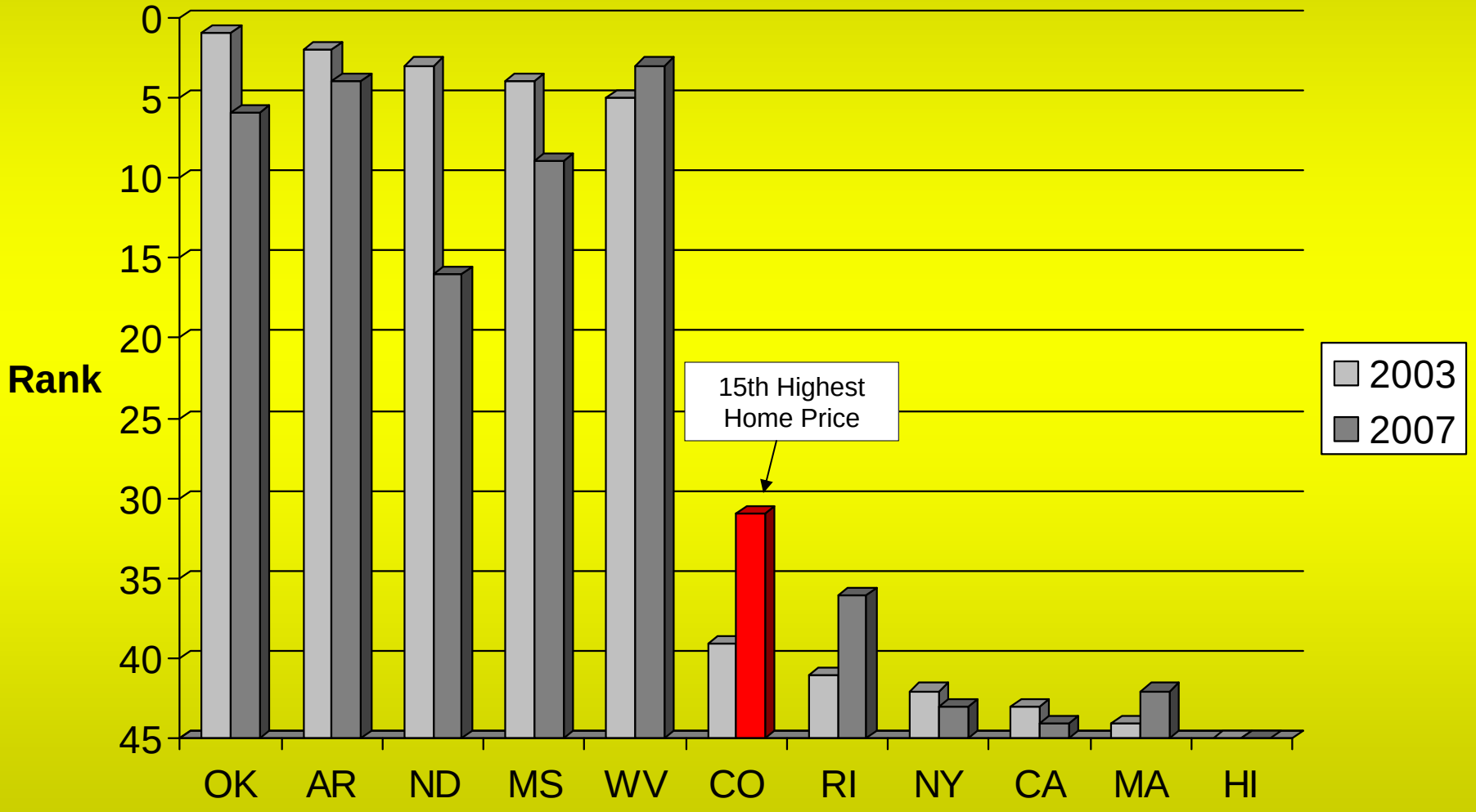


Like many Western States, a relatively high number of Colorado residents (17%) are without health insurance.

Fig. 161

Lowest Single-Family Median Home Price in Largest Metro Area

National Association of Realtors



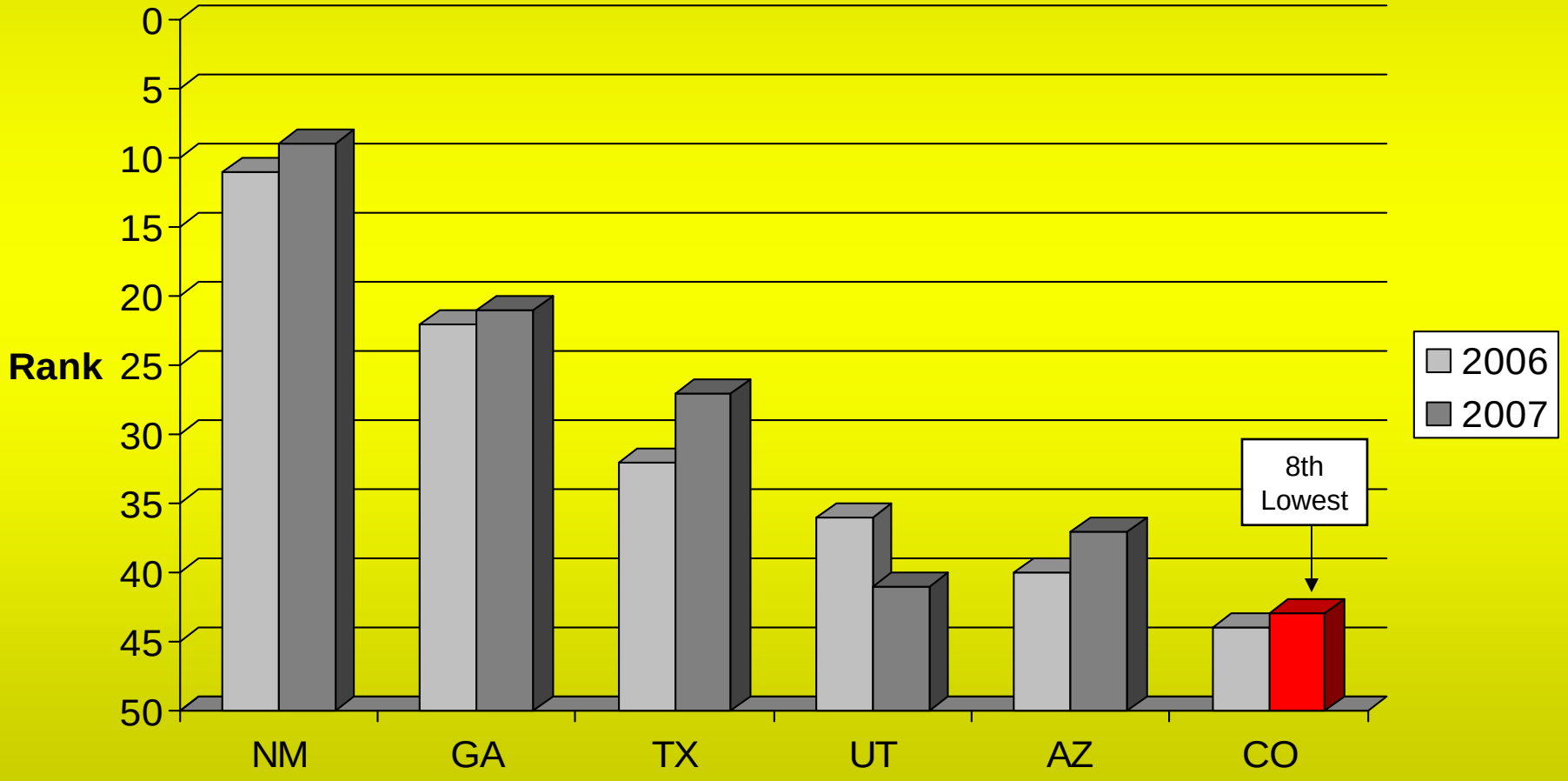
Although the increase in housing prices in Colorado has moderated, home prices are still one of the most expensive in the country. This recent moderation in home prices is one of the reasons for increased investment interest from outside the state.

Fig. 165

Federal Highway Funding Per Capita

Federal Highway Administration; U.S. Census Bureau

Colorado vs. Competitors

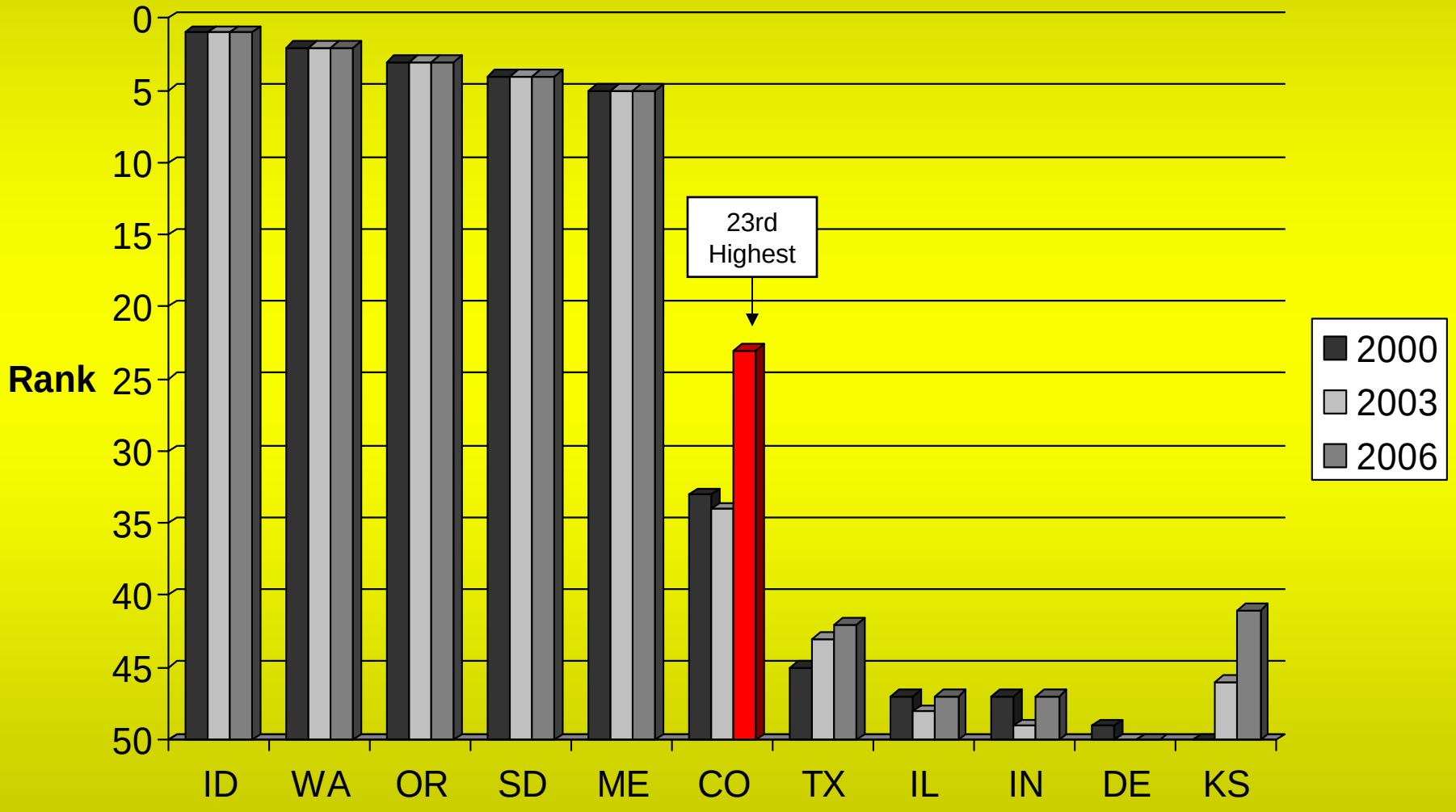


Each of Colorado's competitors receive greater per capita federal funding for roads.

Fig. 171

Percent of Electricity Generated Through Renewable Sources

Energy Information Administration (Possibly move to strength)



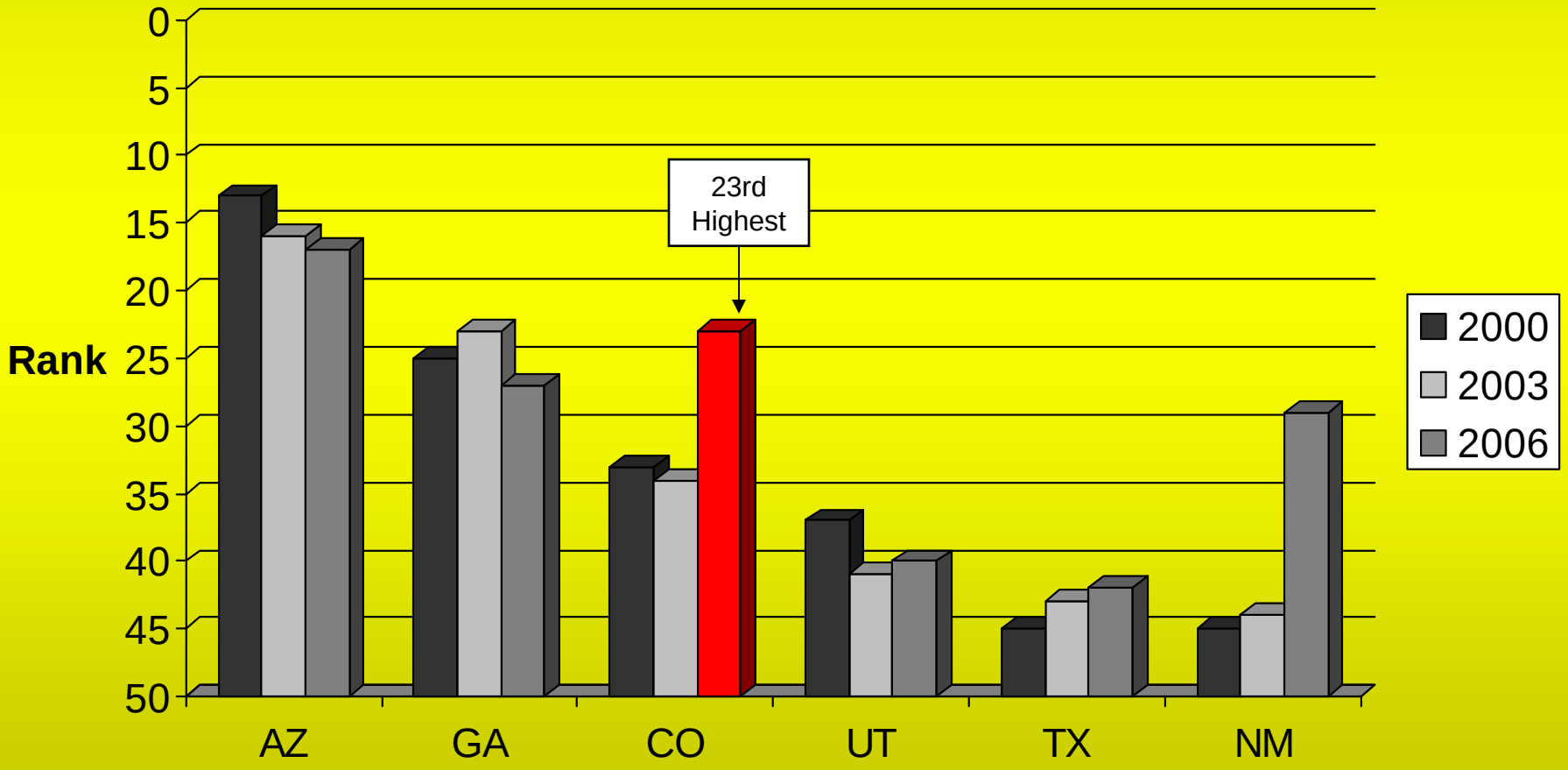
Recent initiatives in mandated use of renewable energy sources - particularly wind energy - coupled with increased private and public sector interest has improved Colorado's ranking.

Fig. 175

Percent of Electricity Generated Through Renewable Sources

Energy Information Administration (Possibly move to strengths)

Colorado vs. Competitors



Arizona initiated a series of renewable energy programs near the turn of the century. The state's early start has given Arizona its present competitive advantage over neighboring states. In recent years Colorado has adopted a more aggressive program.

Fig. 176

We could become……