



# Global Economic Meltdown vs. Ready Mix Consumption in Pacific Southwest Region

Presented to:

National Ready Mix Concrete Association  
Pacific Southwest Promotion Plus Forum

November 20, 1998  
San Jose, California

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The Greystone Group LLC

Investment Banking



# Discussion Outline

- I. U.S. Macro Economic Overview
  - Global Economic Meltdown - Fact or Paranoia?
  
- II. Economic Assessment of Pacific Southwest Region
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  - B. Arizona
  - C. Nevada
  
- III. Ready Mix Concrete Consumption (1980-2007)
  - A. United States
  - B. Pacific Southwest Region
  - C. California
  - D. Arizona
  - E. Nevada



# I. U.S. Macro Economic Overview

## Global Economic Meltdown - Fact or Paranoia?



# U.S. Macro Economic Overview

## A Soft Landing?

- Despite volatility in international economies and U.S. equity markets during the summer, the U.S. economy is still growing, though at easing rates.
- After a strong 4 percent growth in the U.S. GDP during 1997, growth in 1998 is predicted to slow to 3.6 percent according to the National Association of Business Economists (NABE).
- About 80 percent of NABE economists surveyed expect the U.S. economy to ease into a “soft landing” from its heights in recent years, posting a 2.5 percent growth in GDP or lower in 1999.



# U.S. Macro Economic Overview

## A Soft Landing?

- Today, employment is strong, unemployment is low, inflation is absent, housing markets are healthy, the U.S. balance sheet is excellent, public spending is expected to increase and interest rates are favorable.
- Consequently, a dramatic halt in economic activity or an immediate recession is unlikely, in our opinion.
- However, during the next three years there will be a change in economic pace prior to the next long-term up-swing.
- Favoring the experience from history, it is not a question of whether the U.S. economy will have a down cycle or not, only when such a downturn may take place and how severe it will be.



# U.S. Macro Economic Overview

## Less Volatility in Future Construction Markets?

- As long as the fundamentals of interest rates, job growth, unemployment, foreign trade, and corporate capital investments stay within reasonable levels, the U.S. economy is in a position to quickly bounce back from a market correction.
- Consequently, the next national economic downturn should be less dramatic than the recession we experienced in 1990-1991, and we should see continued growth through 1999.
- On the regional levels, the fundamental health of the U.S. economy and an increase in tax revenue per dollar of taxable income will support public spending by local governments, including construction spending.
- Federal commitments like the large Transportation Equity Act for the 21<sup>st</sup> Century (TEA-21) are leading some states and localities to increase their spending.



# U.S. Macro Economic Overview

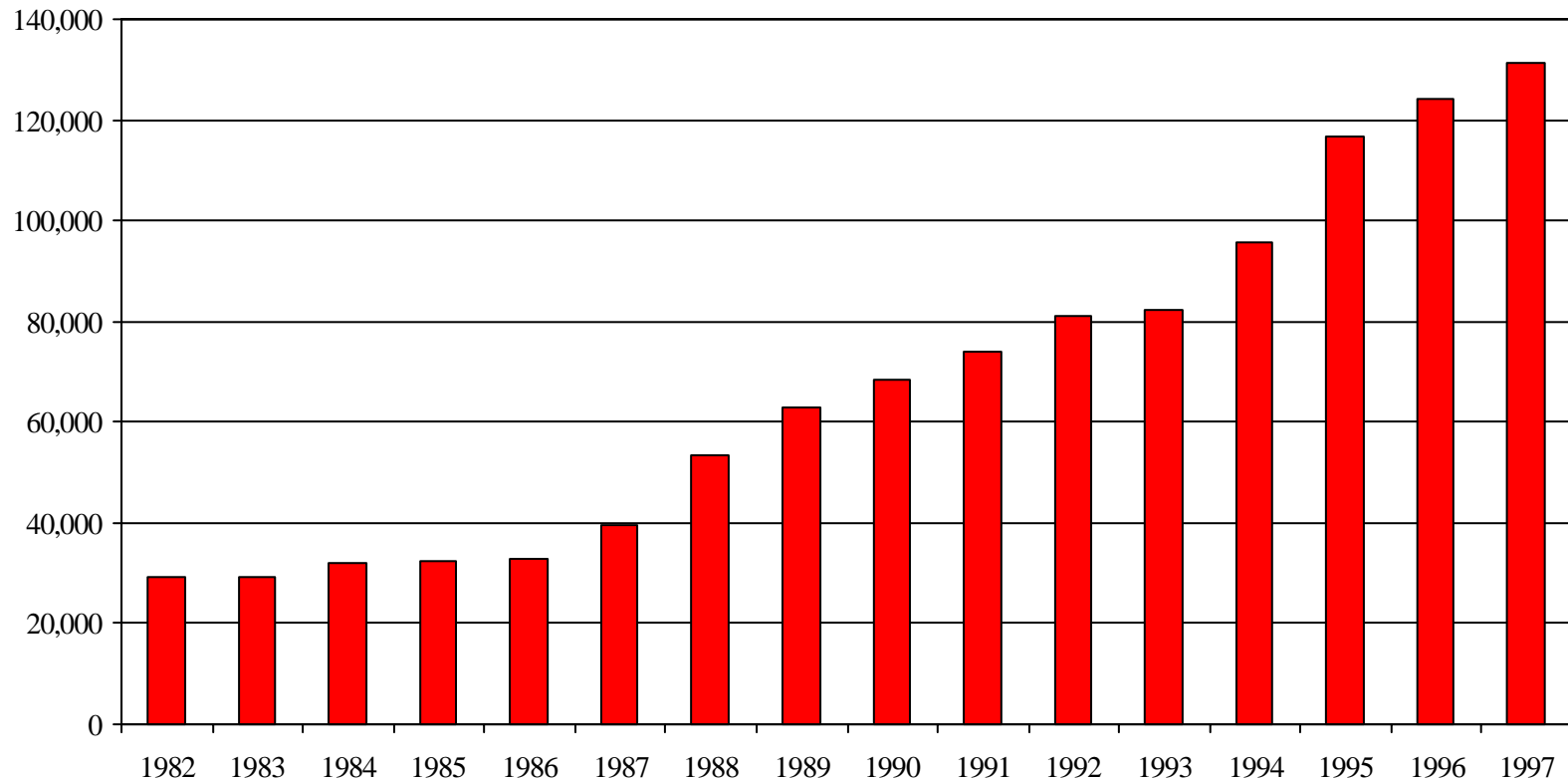
## Impact from Asia

- Doomsday prophets proclaim that the Asian financial turmoil will trigger a global economic meltdown with immediate impact on the U.S. economy.
- In particular, the Pacific Southwest Region has been identified as the big loser from the anticipated decline in exports to Asia, particularly Japan and South Korea.
- Despite the gloomy predictions, there is no substance to suggest economic demise in the Pacific Southwest Region as a result of halting exports, evidenced by California's track record to date.



# U.S. Macro Economic Overview

## California Growth in Exports (\$ Billions)



Source: U.S. Department of Commerce

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# U.S. Macro Economic Overview

## Interest Rates

- A supporting reason for our less dramatic reading of the U.S. economy lies in part with the tools of the Federal Reserve as it has the ability to loosen the money supply by lowering interest rates.
- Given the current low inflation, the Federal Reserve will almost certainly continue to fine tune economic growth.
- Most of NABE economists polled expect the Federal Reserve to lower the fed funds rate between a 0.5 to 1.0 percentage point by mid-1999.



# U.S. Macro Economic Overview

## Interest Rates

- In addition to the positive impact on the stock market, the October 27 rate cut by the Federal Reserve should boost overall consumer spending, particularly in large purchases such as autos and homes.
- Consequently, the refinancing boom that has taken place in latter years is expected to continue, further advancing a healthy level of residential construction activity.
- If our expectations of continued, but eventually slowing, economic growth holds true, interest rates should remain attractive in the short-term.



# U.S. Macro Economic Overview

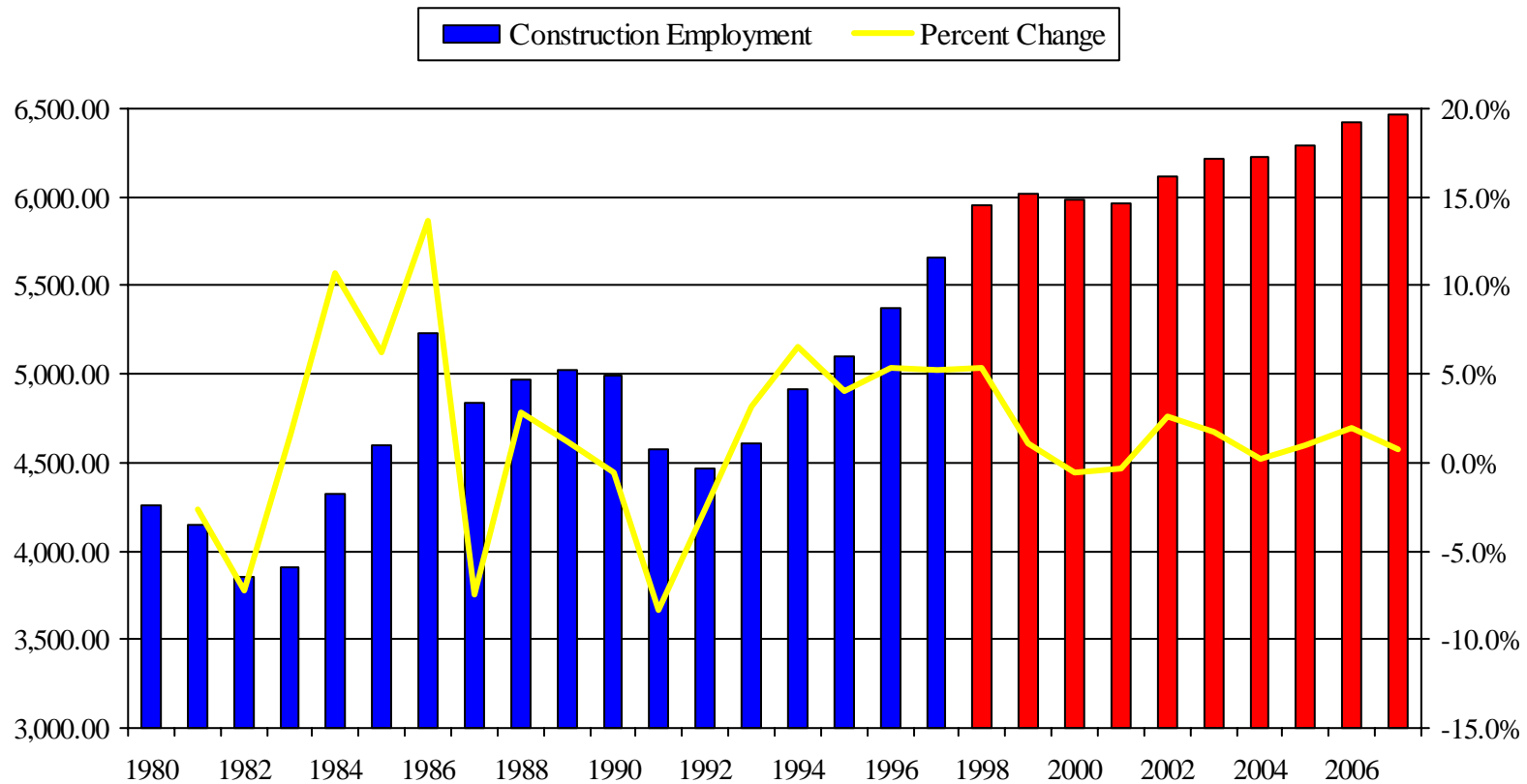
## U.S. Construction Activity

- The strength in the overall economy, combined with a favorable interest rate environment, has made its impact on the construction industry.
- The latest reports on construction spending from the Bureau of Census show that during the first eight months of 1998, \$418.9 billion worth of construction was laid in place, a 5.0 percent increase over the same period in 1997.
- As expected, an examination of the seasonally adjusted annual rate for August 1998 revealed a 5.9 percent hike in private construction spending compared to the August 1997 level.
- Residential building, which accounts for the lion share of private construction dollars, was up a solid 12.4 percent from the same period in 1997.



# U.S. Macro Economic Overview

## U.S. Construction Employment (000 Persons)



Source: Bureau of Labor Statistics, The Greystone Group LLC

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# U.S. Macro Economic Overview

## U.S. Construction Activity

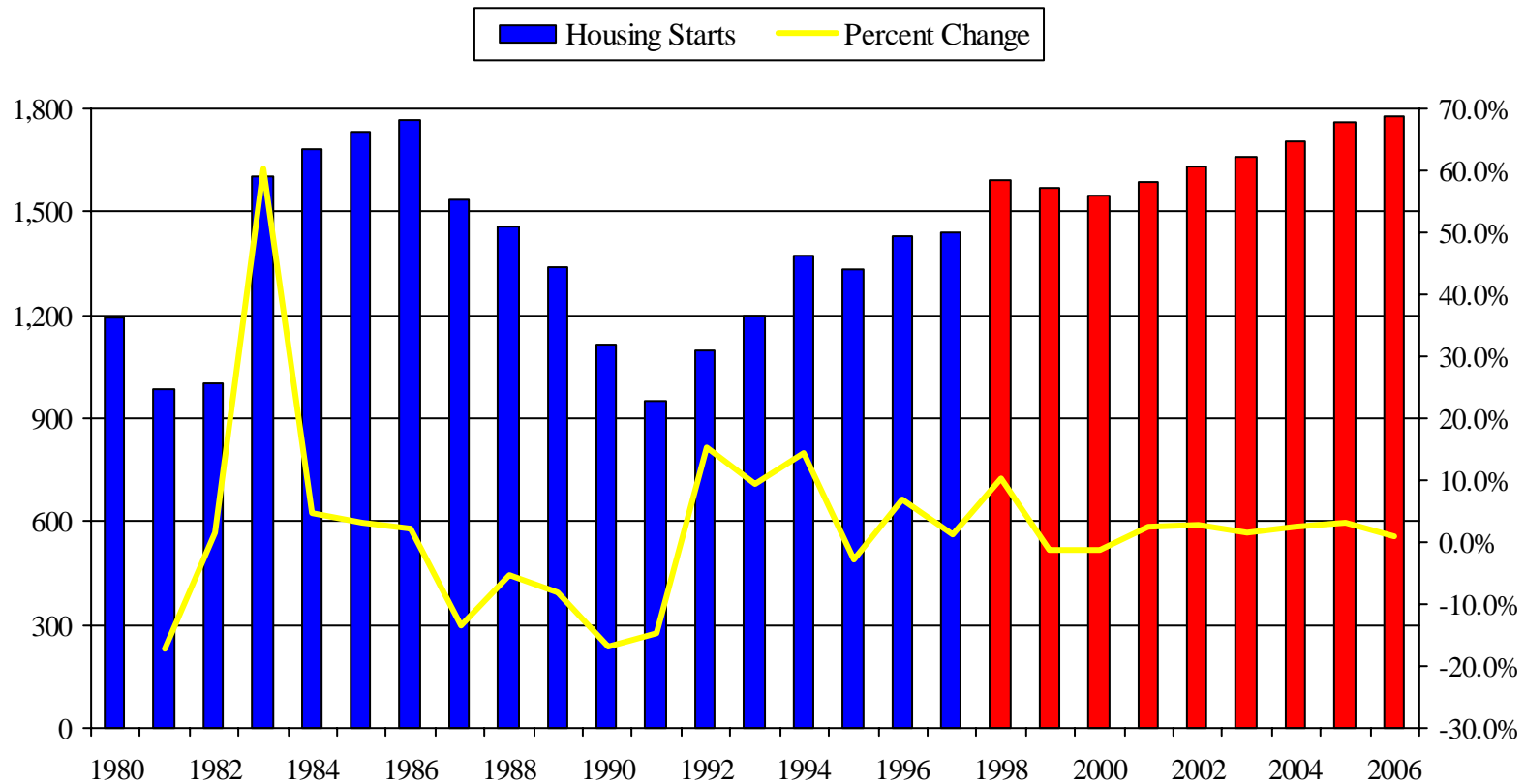
- Early reports on September 1998 housing activities indicate that the number of units is down slightly from the prior month. However, after this summer's intense residential activity some slowdown should be expected.
- In an October 21, 1998, press release, Kent Colton with the National Association of Home Builders summarized his view:

*“The market will probably remain flat for the remainder of the year, with perhaps some additional slowing in the first half next year. Even so, 1998 is shaping up to be an excellent year for housing, with single-family starts projected to hit 1.25 million, the highest annual level in 20 years, and total starts expected to reach 1.59 million, the highest level in more than a decade.”*



# U.S. Macro Economic Overview

## U.S. Housing Starts (000 Units)



Source: U.S. Census Bureau, The Greystone Group LLC

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# U.S. Macro Economic Overview

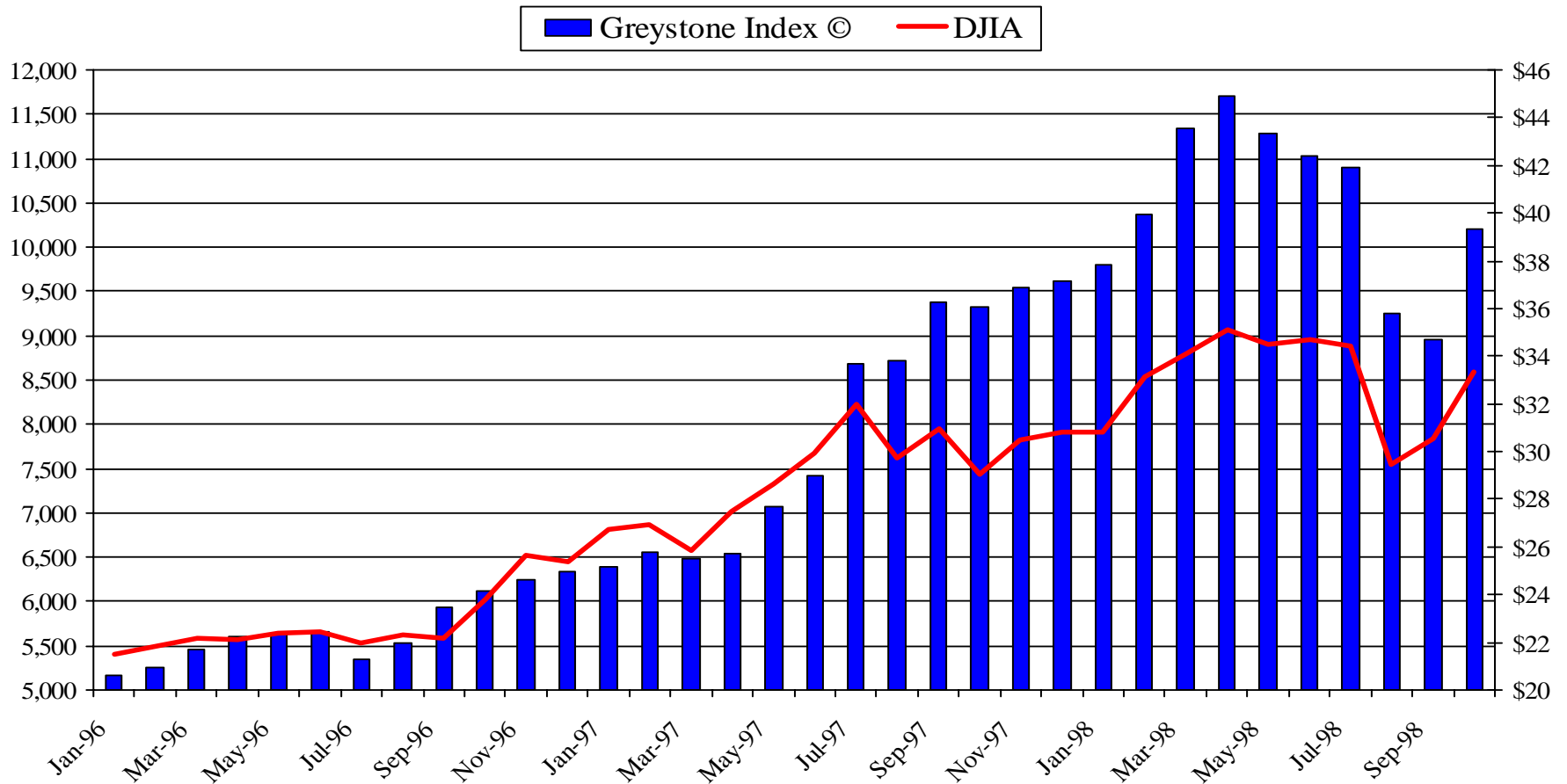
## U.S. Construction Activity

- During August 1998, roadwork accounted for a seasonally adjusted annual rate of 44.8 billion dollars, and future construction spending in highways and streets is expected to continue to climb as a result of the passage of TEA-21.
- TEA-21 will increase the average annual federal highway funding by 44.5 percent during the next six-year period compared to the average annual allocation under the old ISTEA budget.
- Although the construction industry will be affected by an expected moderation in economic activity during the next three years, the long-term prospects are excellent. The *Greystone Index*©, measuring the weighted average stock price of representative publicly traded construction materials companies, illustrates that the market place continues to evaluate the construction materials industry favorably.



# U.S. Macro Economic Overview

## Greystone Index<sup>©</sup> vs. DJIA



Source: Dow Jones Industrial Index, The Greystone Group LLC

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# U.S. Macro Economic Overview

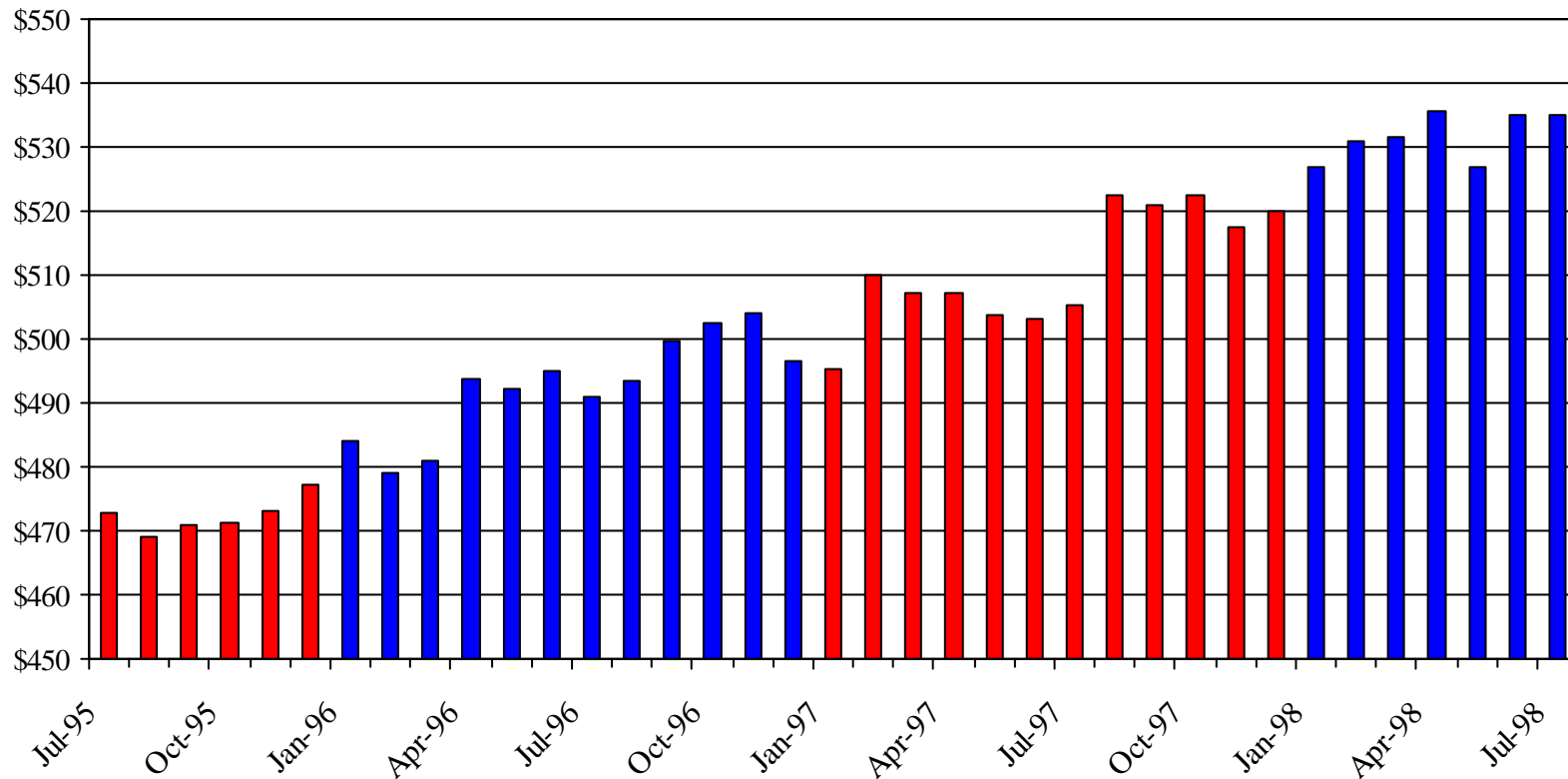
## U.S. Construction Activity

- Industry analysts are pointing out fundamental differences in the current construction cycle versus past cycles, and these differences should have a positive impact on construction materials companies.
- Because the three primary construction segments (private residential, private non-residential and public) have grown at more tempered and consistent rates during the current expansion than during previous cycles, the industry should be able to avoid the usual radical impacts of an economic downturn.
- In most residential markets, inventory levels of speculative homes remain low despite a hot market and tight overall residential inventory. The condition minimizes potential negative effects from a sudden drop in home sales.



# U.S. Macro Economic Overview

## U.S. Construction Spending (Seasonally Adjusted Annual Rate in Billions of 1992 Dollars)



Source: U.S. Department of Commerce, Construction Expenditures Branch

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# U.S. Macro Economic Overview

## U.S. Construction Activity

- Vacancies in the non-residential sector are likewise low. In fact, not only are they lower than at the beginning of the previous recession, but they are also below the level prior to the 1980s building boom.
- The passage of TEA-21 should have a widespread positive effect on overall construction activity. Additionally, its timing will help offset the anticipated reduction in other non-public spending sectors during the short-term.
- In summary, a consistent expansion in construction spending during the 1990s will benefit the construction industry, including construction materials companies, during potential short-term volatile economic markets. In the long-term, refocused public spending in road work combined with healthy residential development will provide an opportunistic period for the industry.



## II. Economic Assessment of Pacific Southwest Region



# California

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# California

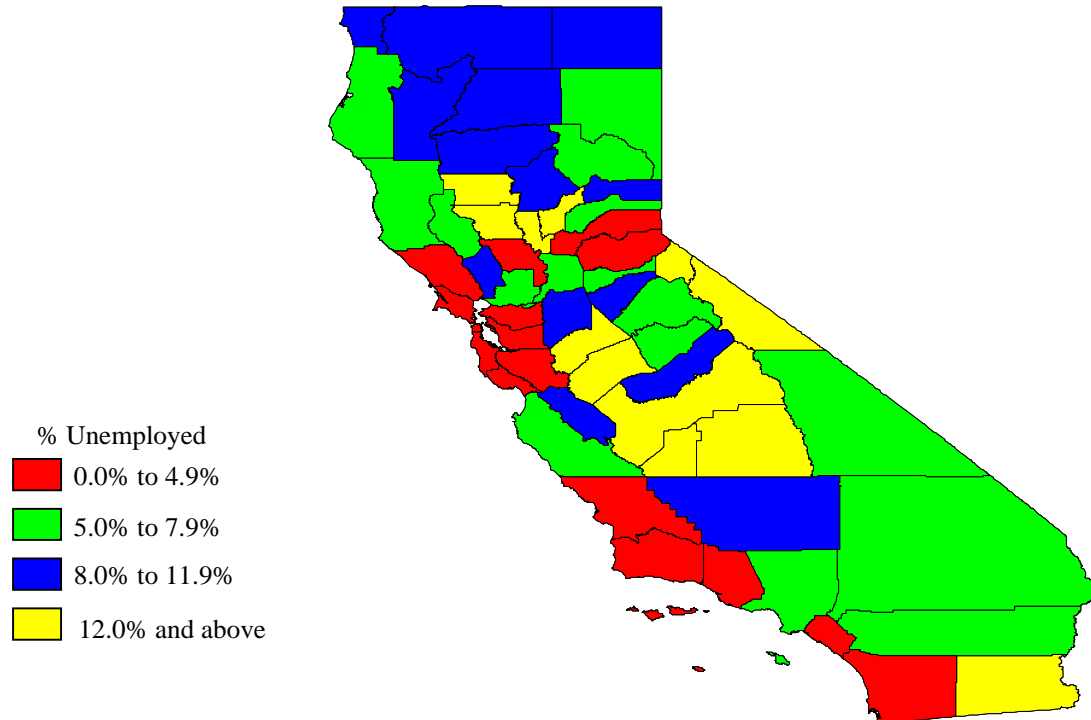
## A Large & Diverse Economy

- California enjoys the strongest economy in the U.S. and is without a doubt the largest and most diverse state in the nation.
- Nearly 33 million people live in the Golden State, roughly 12.2 percent of the U.S. population, filling more than 13 million non-farm jobs.
- A late exit from the 1990-1991 national recession should afford the state an extended period of economic growth.
- Low unemployment rate, an abundance of resources, an economy on the upswing and a very strong construction industry are some of the market factors that will benefit construction materials companies in the decade ahead.



# California

## A Strong Job Market



Source: U.S. Bureau of Labor Statistics

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# California

## Continued High Tech Benefits

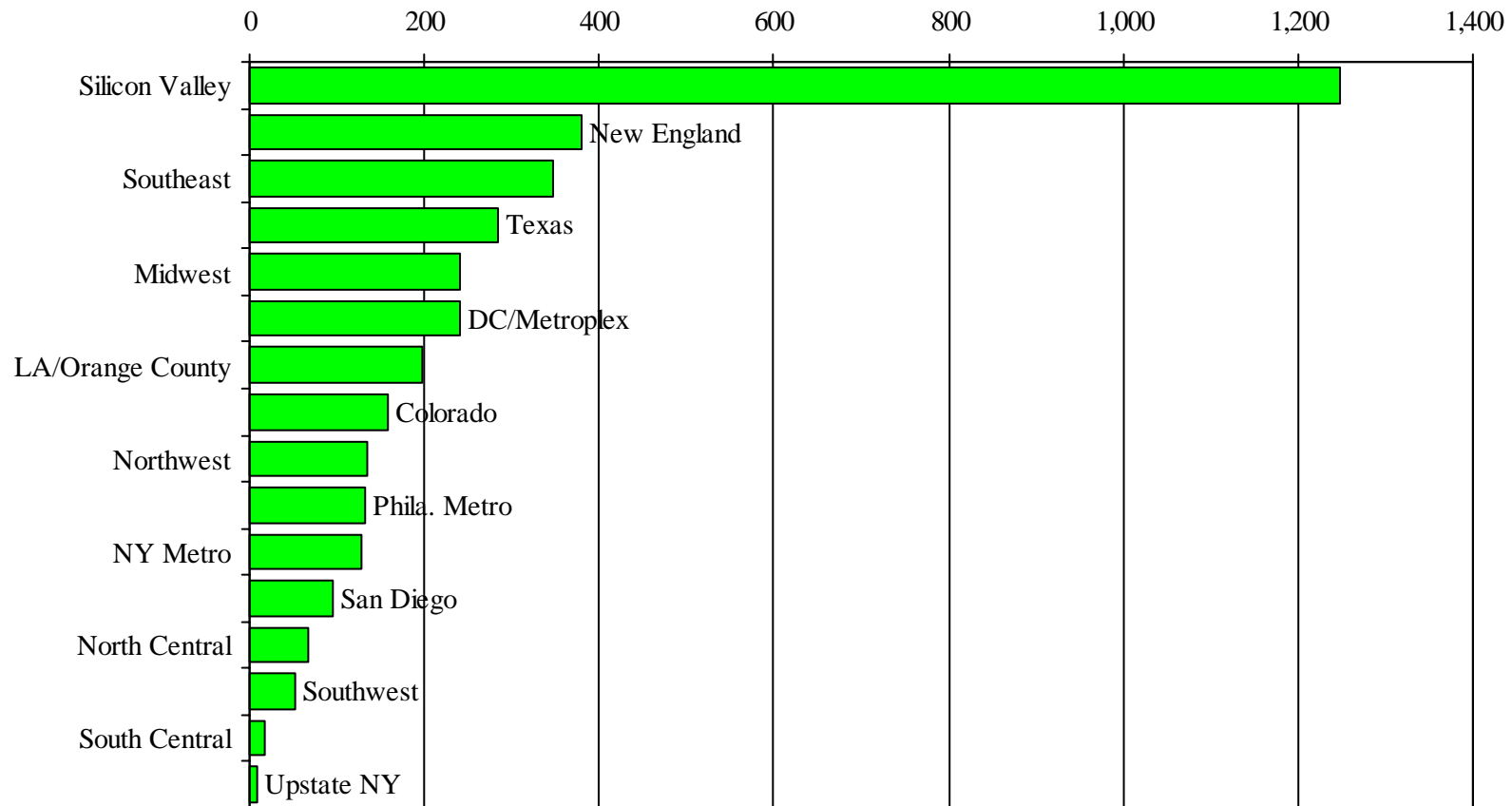
- California's leadership position in IT industries will ensure long-term fiscal and demographic growth, which will support both public and private construction.
- The IT industry represents approximately 13% of the US GDP, has become larger than the healthcare sector, and continues to grow at a rate far in excess of any other major component of the economy.
- California's economy has grown rapidly, particularly due to the incredible expansion of high technology centers such as Silicon Valley.
- Continued venture capital investment in new technology companies will ensure California's leading role in future high technology industries.



# California

## Venture Capital Investments by Region

### 1998 Second Quarter (\$ Millions)



Source: Pricewaterhouse Coopers Survey Research Center

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# California

## Impact from Asia

- During 1997, California exports advanced 5.6 percent to \$131.3 billion after a 6.5 percent increase in 1996, a 22.2 percent jump in 1995 and a 16.4 percent increase in 1994.
- Remaining strong in 1998, state exports totaled \$26.6 billion during the first quarter, up 6.3 percent over the same period in 1997.
- During 1997, the export district of San Francisco accounted for 36.6 percent, Los Angeles represented 56.5 percent and San Diego was responsible for 6.8 percent of the total California export value.



# California

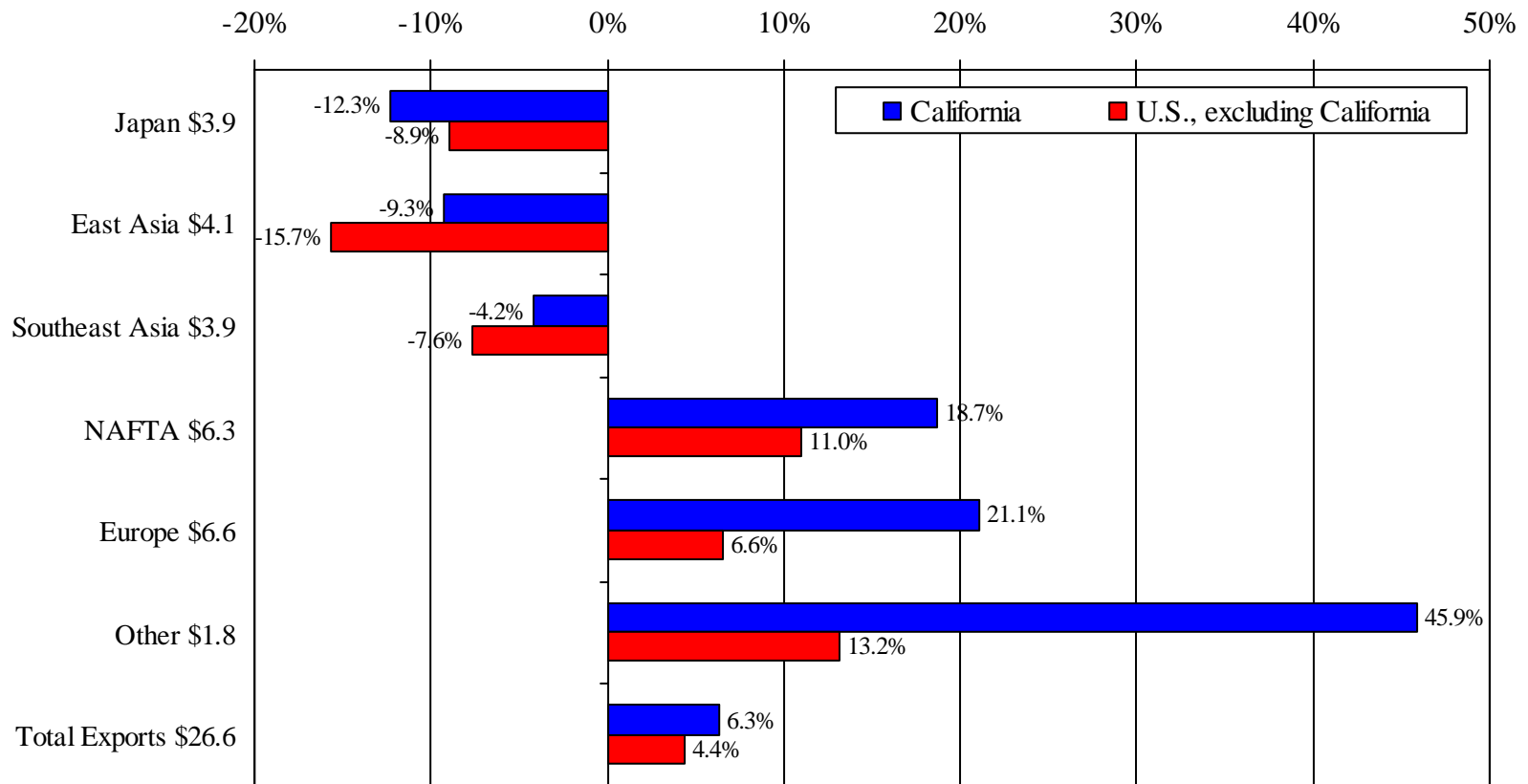
## Impact from Asia

- A decline in exports to Japan by 12.3 percent during the first three months of the year was more than offset by increases in exports to Mexico, Canada and Europe.
- Exports to Mexico and Canada were up 18.7 percent during the first quarter while European exports jumped by 20.5 percent.
- During the second quarter of 1998, exports moderated some, but the value of exports for the first half of 1998 is still strong, roughly the same as in the first half of 1997.



# California

## First Quarter Exports 1998 vs. 1997 (Percent Change & California Exports by Region in \$ Billions)



Source: California Department of Finance

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# California

## Continued Growth in Residential Construction

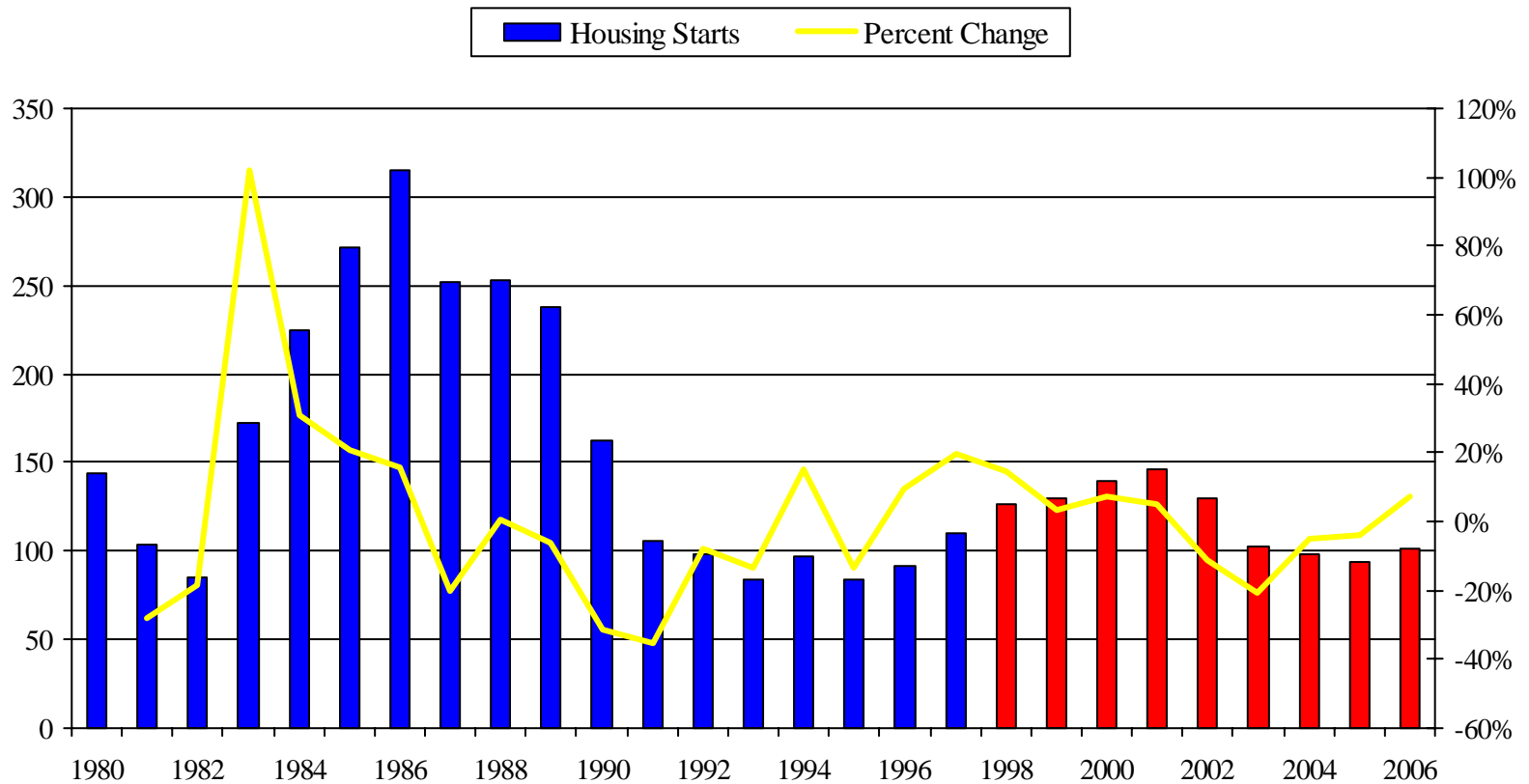
- Many of the factors that restrained California household growth since 1990 have disappeared in the past two years and current hectic residential construction suggests the up-cycle is well underway.
- Advancing job growth rates will attract higher population gains and create a natural requirement for more housing.
- Additionally, affordability is rising, driven by growth in real household incomes combined with 20-year low mortgage rates.



# California

## Housing Starts

(000 Units)



Source: U.S. Census Bureau, The Greystone Group LLC

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# California

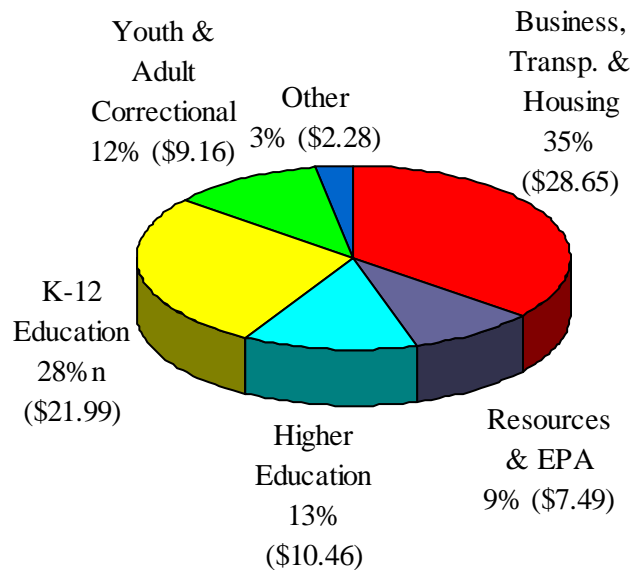
## Continued Growth in Public Construction

- Public spending is expected to grow as the state's \$4.4 billion budget surplus (1998 estimate) will allow public investment in state infrastructure.
- The California Department of Finance has estimated that the state will need approximately \$81 billion in infrastructure needs during the ten-year period 1997-2006.

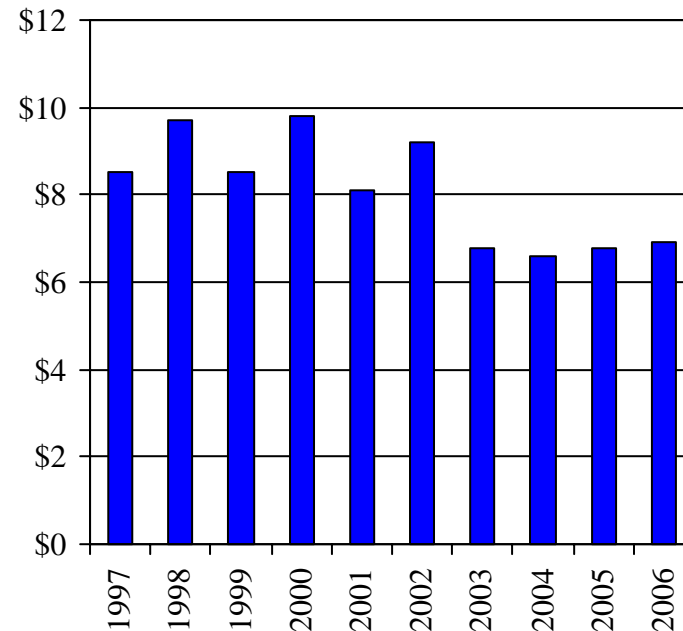


# California Public Spending Needs

Distribution of Ten-Year New Funding Needs, By Agency  
\$ Billions



Gross Annual Infrastructure Needs, All Agencies  
\$ Billions



Source: California Department of Finance

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# California

## Obstacles to Growth

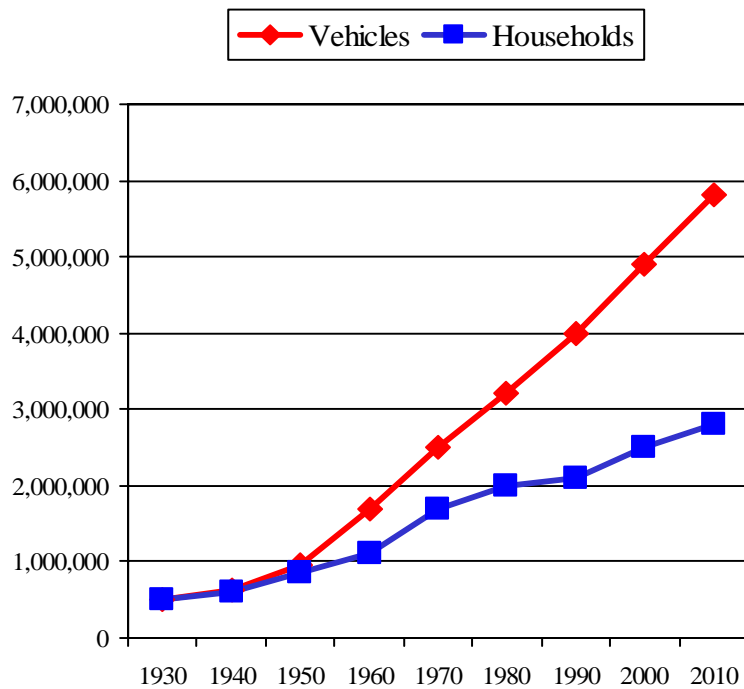
- Low jobless rate will place some constraint on continued job growth.
- High cost of living forces many workers to reside on the outskirts of the industrial centers and commute to work.
- This demographic pattern will cause strain on metropolitan infrastructure and moderate employment growth.
- Conversely, a large commuting population will benefit construction materials producers as state and local government must invest heavily in both new infrastructure construction and maintenance construction to avoid overly congested transportation arteries.



# California

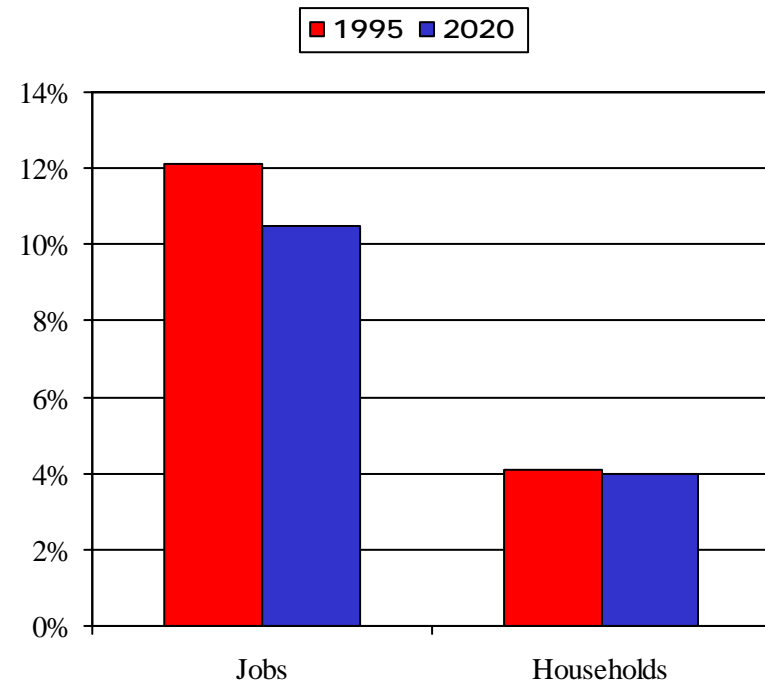
## Support for Infrastructure Spending

Growth in San Francisco Bay Vehicle Ownership



Source: Association of Bay Area Governments

San Francisco Bay Area Jobs & Housing Located Near Ferry and Rail Service



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# Arizona

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# Arizona

## Still Growing Strong

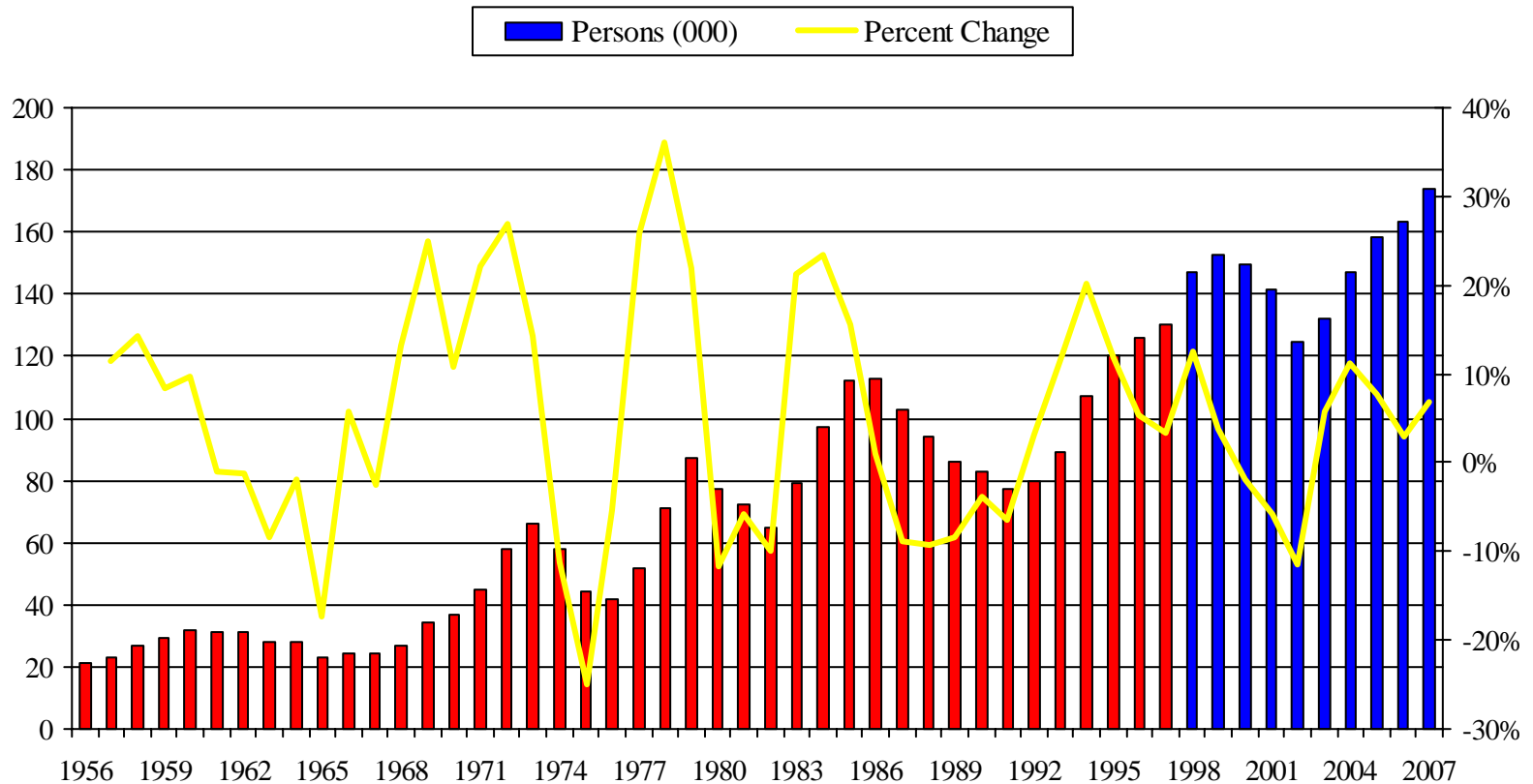
- Arizona's economy continued to gain momentum during the first three quarters of 1998 as both employment and the state's gross product advanced.
- In fact, from 1993 to 1998, the state had the nation's second highest job growth rate, up 33 percent to more than 2 million jobs.
- Arizona's economy, along with other Rocky Mountain region states, continues to outpace the nation in employment and population growth.
- The "million dollar question" for the construction industry is whether Arizona will continue to experience the "boom and bust" cycles that it has in the past.



# Arizona

## Historical & Forecast Construction Cycles

### Construction Employment (000 Persons)



Source: Bureau of Labor Statistics, The Greystone Group LLC

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# Arizona

## Two More Years of Economic Growth?

- According to the Department of Economic Security, Arizona's job growth should advance 4.8 percent in 1998 and 4.1 percent during 1999, generating more than 180,000 new jobs in the state.
- Arizona's unemployment rate has consistently been among the lowest in the nation. Today, it is at its lowest level since the early 1970s.

### September 1998 Unemployment Rates:

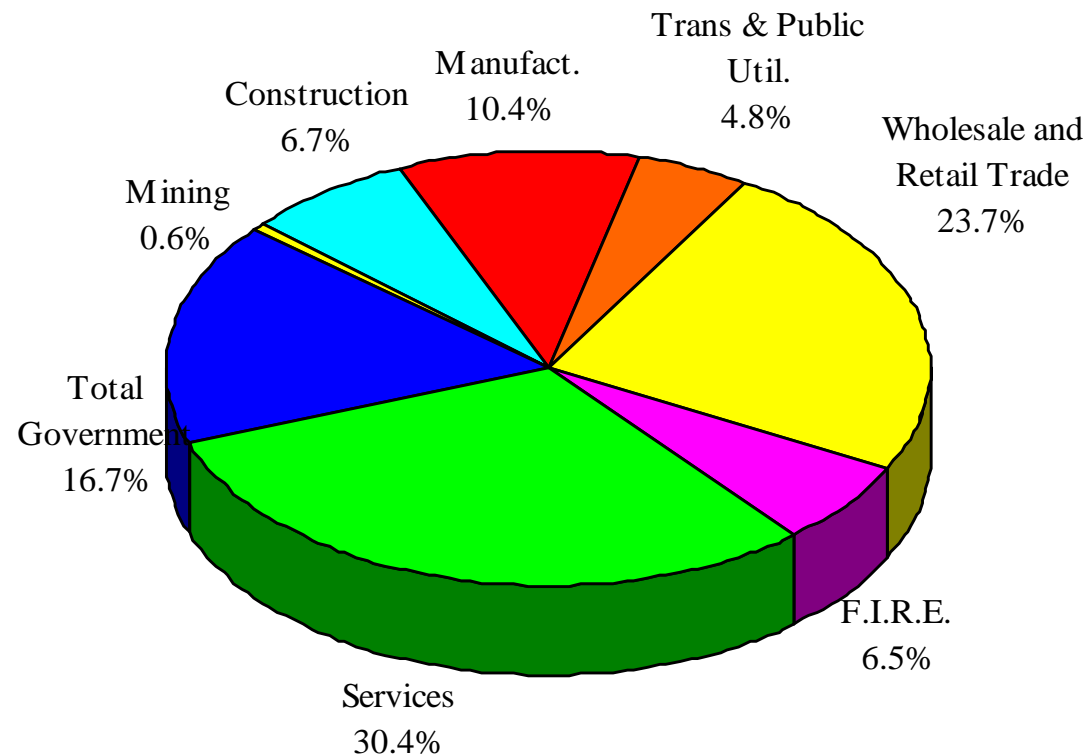
United States	4.6%
Arizona	4.3%
Metro Phoenix	2.9%
Metro Tucson	2.7%



# Arizona

## A Platform for Economic Growth

### Sept. 1998 Employment Distribution



Source: Bureau of Labor Statistics

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# Arizona

## International Economic Impact

- Arizona is a growing tourism destination, both for national and international visitors. During 1997, the United Kingdom sent 193,000 visitors to the state, a 58 percent increase over 1995, and the most from any overseas market.
- Arizona's 1997 exports jumped 36.4 percent to \$13.5 billion according to the U.S. Department of Commerce.
- During the first half of 1998, exports fell by 21 percent from the same period in 1997, but were still up 19.6 percent from 1996.
- NAFTA will continue to support increasing exports to Mexico and Canada. During the first three years of the agreement (1995-1997), Arizona exports to Mexico and Canada rose by 55 percent.



# Arizona

## International Economic Impact

### 1997 Top 5 Export Destinations

<u>Country</u>	<u>\$ Billions</u>	<u>Percent Increase from 1996</u>
Mexico	1.9	21%
Japan	1.8	33%
Netherlands	1.4	160%
Malaysia	1.2	74%
Canada	1.0	11%

Source: Arizona Department of Commerce

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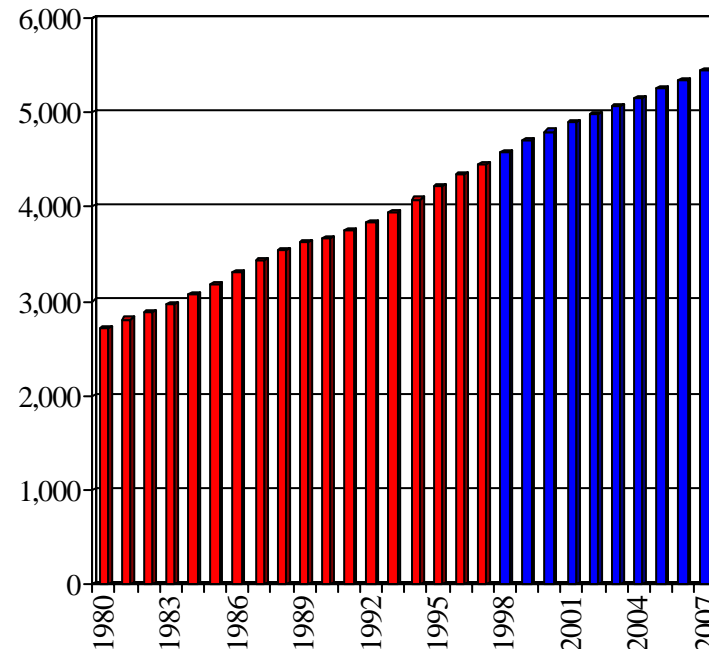


# Arizona

## Positive Demographic Trend

- Arizona enjoys strong personal income growth combined with continued affordable living, large hikes in retail sales, continued expansion in international trade and investments, a booming technology industry and across the board investments in other industries.
- These factors have contributed to a strong 3.6 percent average annual growth in population.

Arizona Population  
(000 Persons)



Source: U.S. Census Bureau, The Greystone Group LLC

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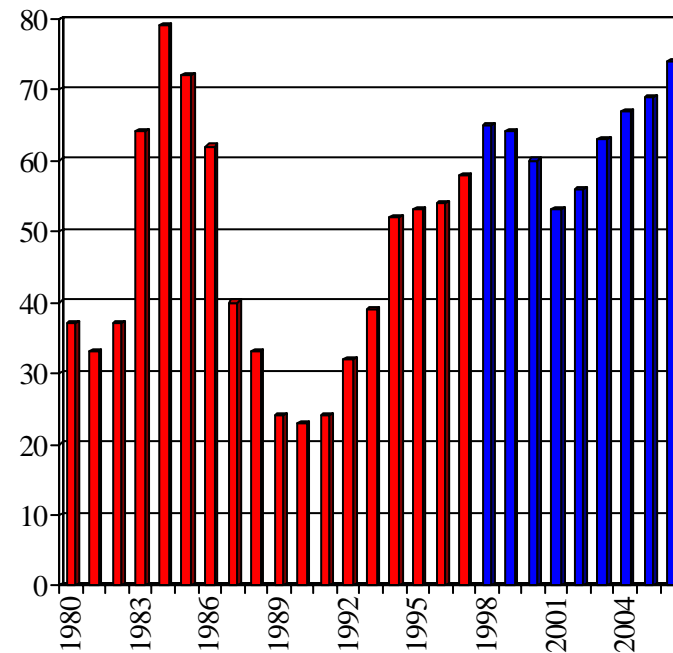


# Arizona

## Cyclical Residential Construction?

- The trend for housing starts, which typically lead construction materials consumption trends, appears to be approaching the peak of the current cycle.
- After advancing 35.2 percent in 1992, 21.6 percent during 1993 and 34.1 percent in 1994, growth in housing starts cooled to 1.7 percent and 1.9 percent during 1995 and 1996 respectively. Despite a solid 7.7 percent advance during 1997, a long-term growth rate at this level is not anticipated to be sustainable.

Arizona Housing Starts  
(000 Units)



Source: U.S. Census Bureau, The Greystone Group LLC

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# Nevada

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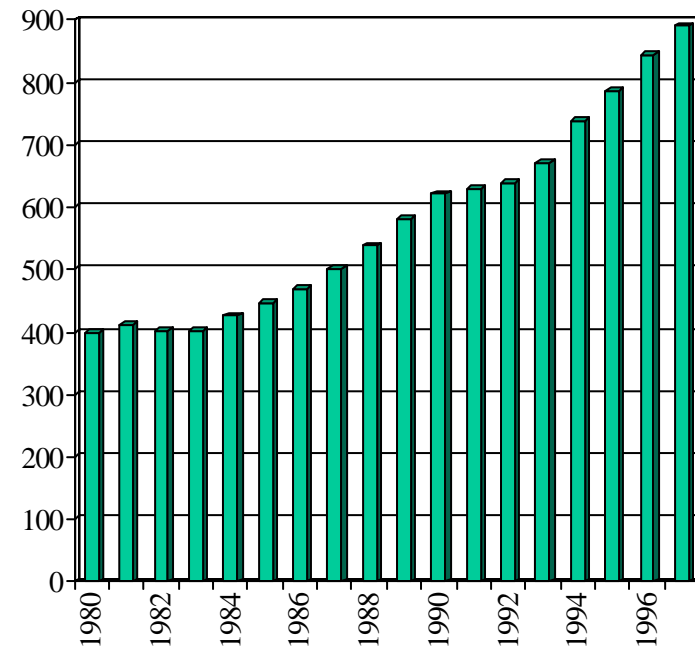


# Nevada

## Incredible Historical Growth

- Since 1982, Nevada's employment has grown at an average annual rate of 8.1 percent, far exceeding the national rate of 2.4 percent.
- Population growth rates, averaging 6.0 percent between 1982 and 1997, have been the strongest in the nation. The national average was 1.0 percent per year during the same period.

NEVADA EMPLOYMENT  
(000 Persons)



Source: Bureau of Labor Statistics, The Greystone Group LLC

The Greystone Group LLC

Investment Banking



# Nevada

## Continued Long Term Growth?

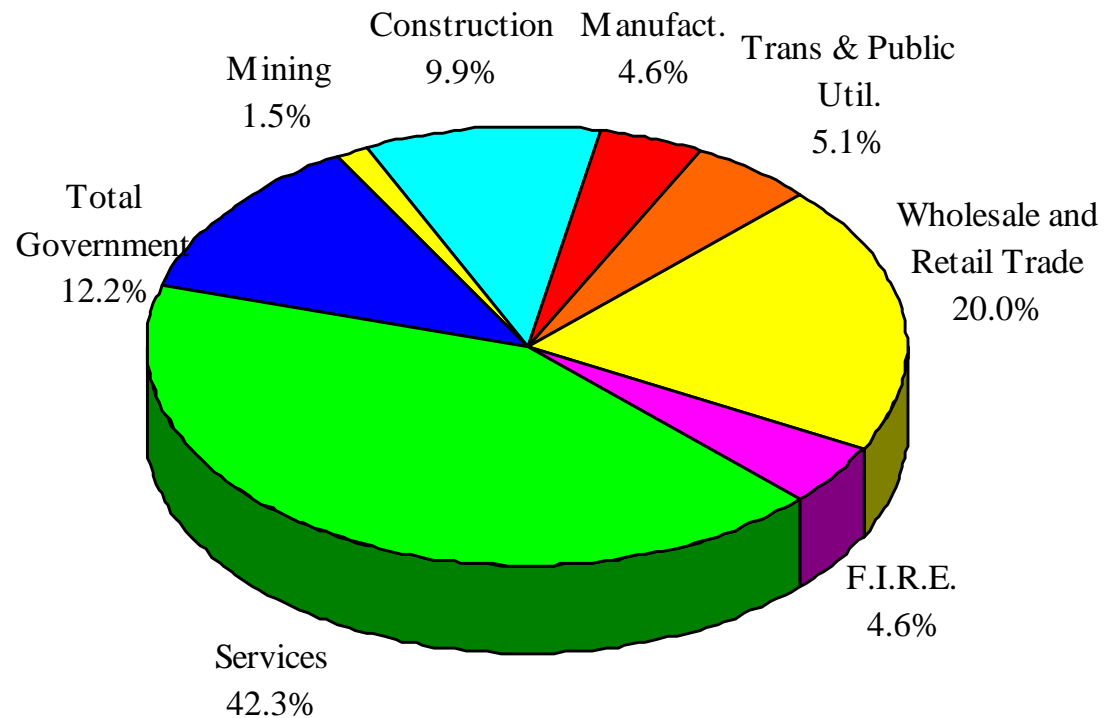
- Despite its reliance on tourism and entertainment as the prime drivers of the state's growth, Nevada has achieved a diversified economic base with employment distributed across primary sectors from manufacturing to trade and construction.
- Sustaining diversification across these basic industry sectors has been important to Nevada, enabling the state to quickly recover from recent national recessions (1980-1982 and 1990-1991).
- Yet, due to the economic reliance on tourism and gambling, Nevada's economic cycle will correlate to the general national economy, consumer sentiment and available discretionary spending.



# Nevada

## Supportive Economic Base

### Sept. 1998 Employment Distribution



Source: Bureau of Labor Statistics

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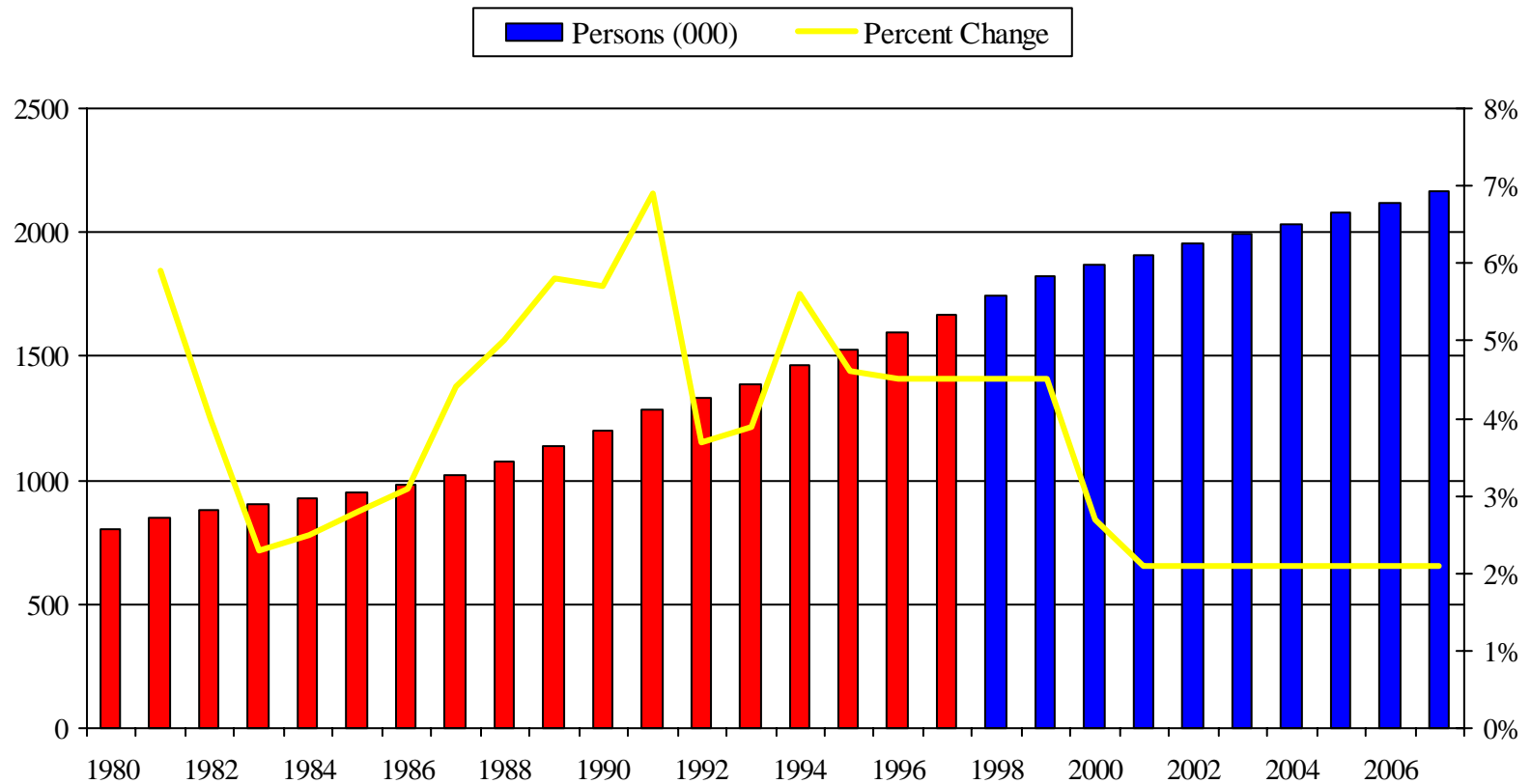
# Nevada

## Favorable Demographic trends

- In-migration, which has been necessary to support the above national average job growth, may slow down in the next few years.
- During 1997, Nevada's population grew by 4.5 percent, leading all states, and by December 1997, the population was estimated at almost 1.7 million.
- By the year 2007, Nevada is projected to be home to more than 2.2 million residents.
- More importantly, the majority of these people will live and work in the Las Vegas metropolitan area, driving demand for continued development of public and private construction dependent on ready mix concrete.

# Nevada

## Population Growth (000 Persons)



Source: Bureau of Labor Statistics

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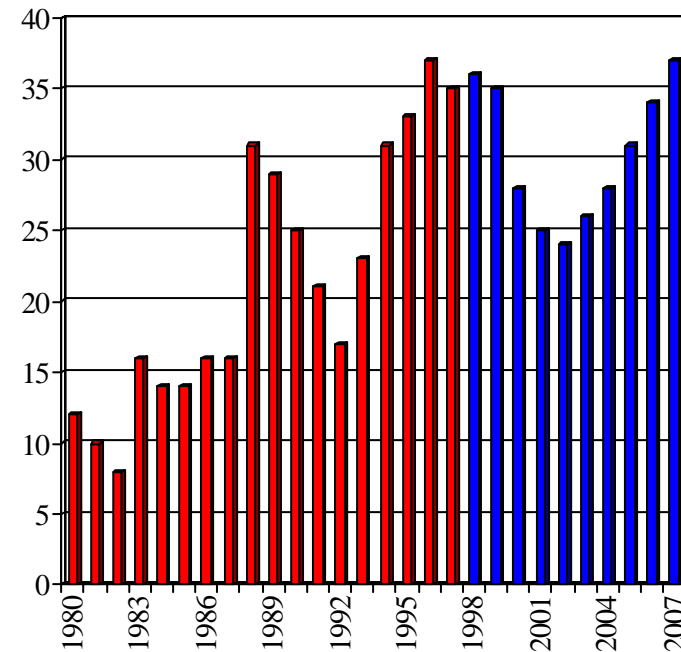


# Nevada

## Healthy Residential Construction

- During 1997, approximately 35,000 housing units were authorized, down slightly from 37,000 units during 1996, but still above the 33,000 units authorized in 1995.
- Today's hectic residential construction activity is further illustrated when compared to the fifteen-year historical average of 23,000 units per year.
- Historical housing cycles have corresponded with overall economic activity, hitting the low points in 1982 and 1992.

Nevada Housing Starts  
(000 Units)



Source: U.S. Census Bureau, The Greystone Group LLC

The Greystone Group LLC

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# Nevada

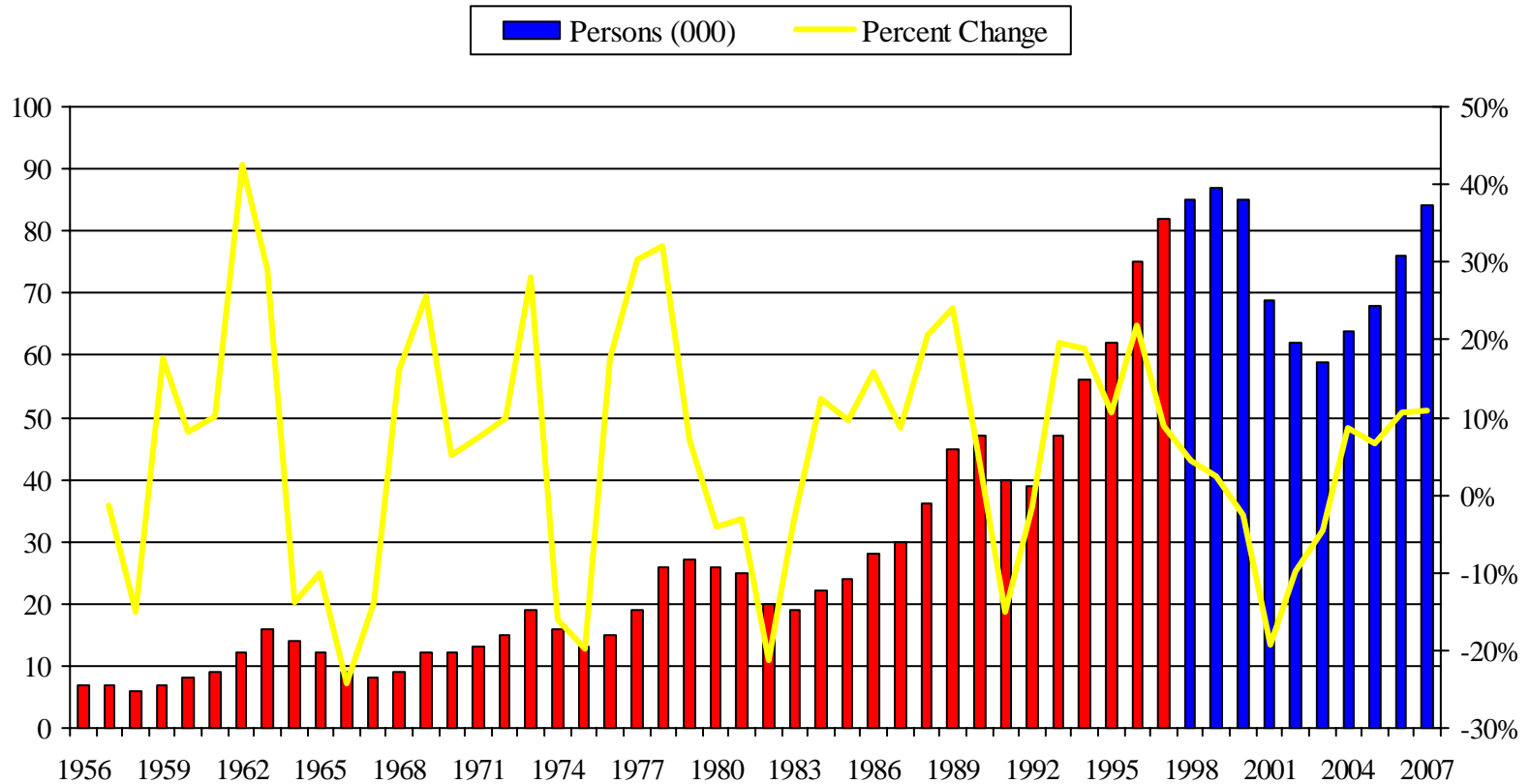
## Can the Trend be Sustained?

- Compared to the approximately 19,500 construction jobs supported by the Nevada economy in 1980, today's level of 93,400 construction workers (September 1998, not seasonally adjusted) seem almost unreal, representing an average annual growth rate of approximately 22 percent during the past 17 years.
- In order to support a growing population, housing market and commercial construction, a healthy average level of construction employment during the next ten-year period is expected.
- However, we expect a dip during the forecast ten-year cycle, commencing at the turn of the century.



# Nevada

## Historical & Forecast Construction Cycles Construction Employment (000 Persons)



Source: U.S. Census Bureau, The Greystone Group LLC

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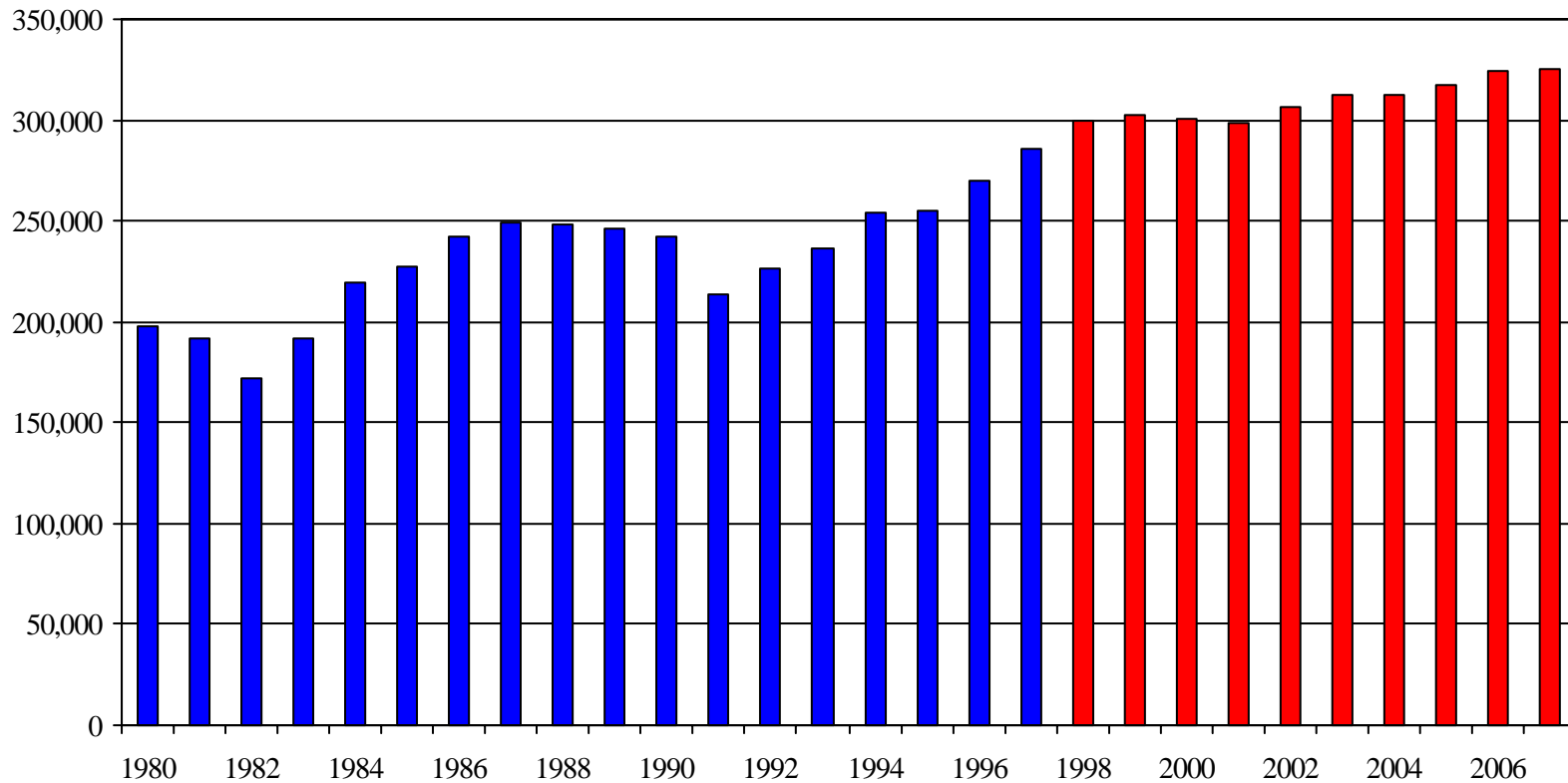


# III. Ready Mix Concrete Consumption (1980-2007)



# United States

## Ready Mix Concrete Consumption (000 CYD)



Source: Portland Cement Association, The Greystone Group LLC

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# United States

## Ready Mix Concrete Consumption (000 CYD)

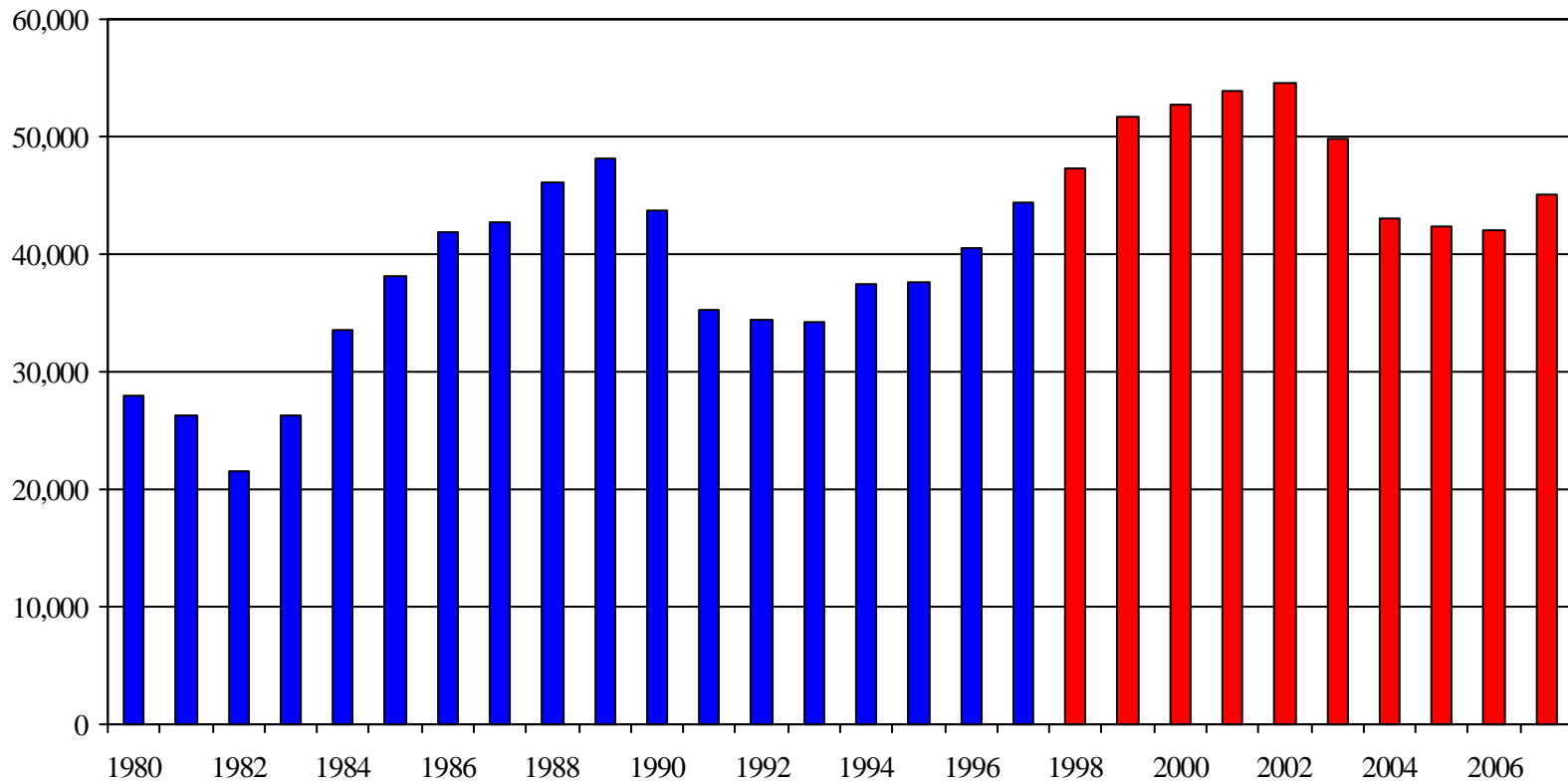
	<u>1988-1997</u>	<u>1998-2007</u>	<u>Avg. Annual % Change</u>
High	285,521	325,263	1.4%
Low	214,017	298,867	4.0%
Average	247,761	309,896	2.5%



# Pacific Southwest Region

## Ready Mix Concrete Consumption

(000 CYD)



Source: Portland Cement Association, The Greystone Group LLC

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# Pacific Southwest Region

## Ready Mix Concrete Consumption

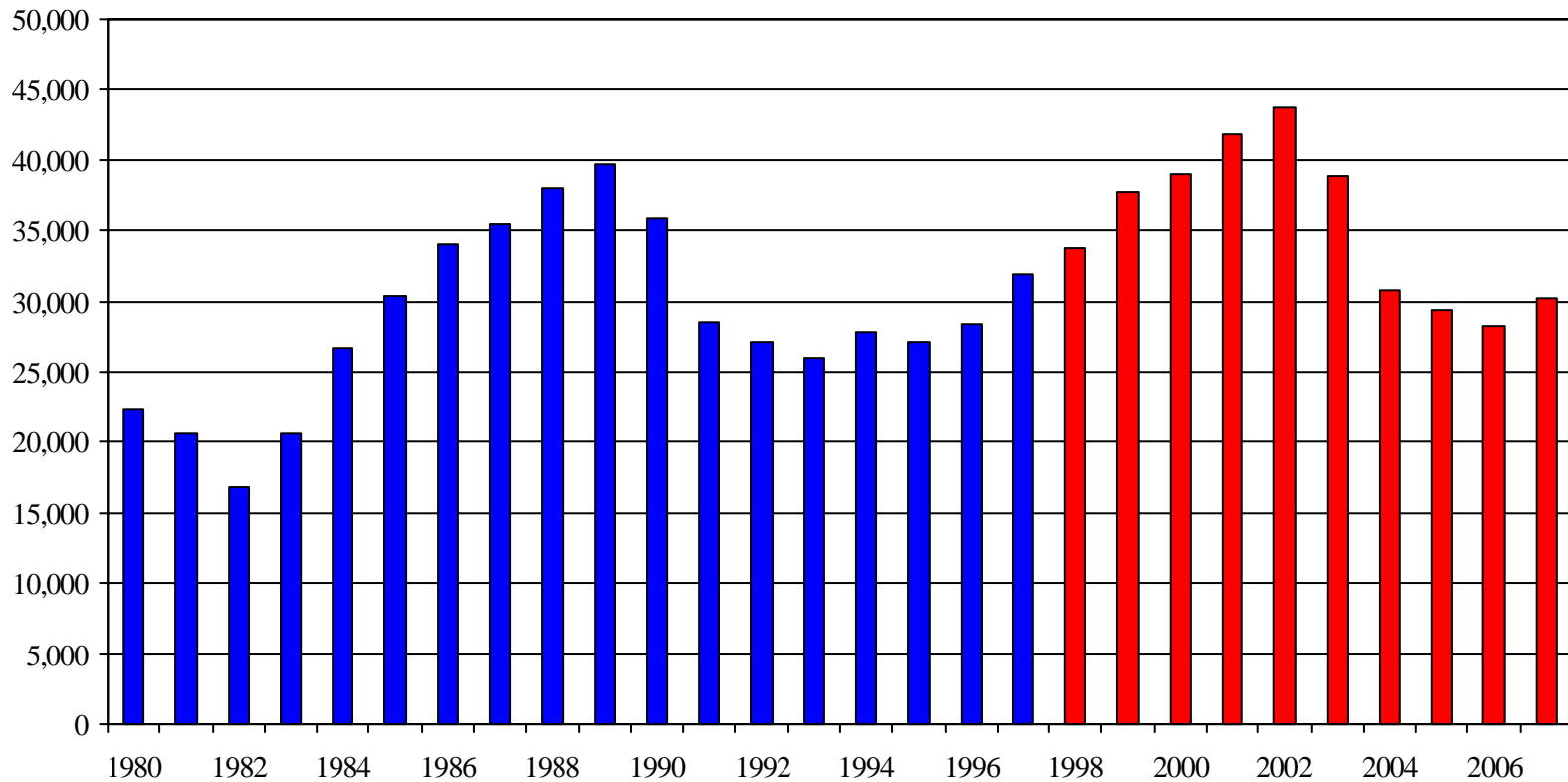
(000 CYD)

	<u>1988-1997</u>	<u>1998-2007</u>	<u>Avg. Annual % Change</u>
High	48,217	54,561	1.3%
Low	34,186	41,983	2.3%
Average	40,206	48,242	2.0%



# California

## Ready Mix Concrete Consumption (000 CYD)



Source: Portland Cement Association, The Greystone Group LLC

The Greystone Group LLC

Investment Banking



# California

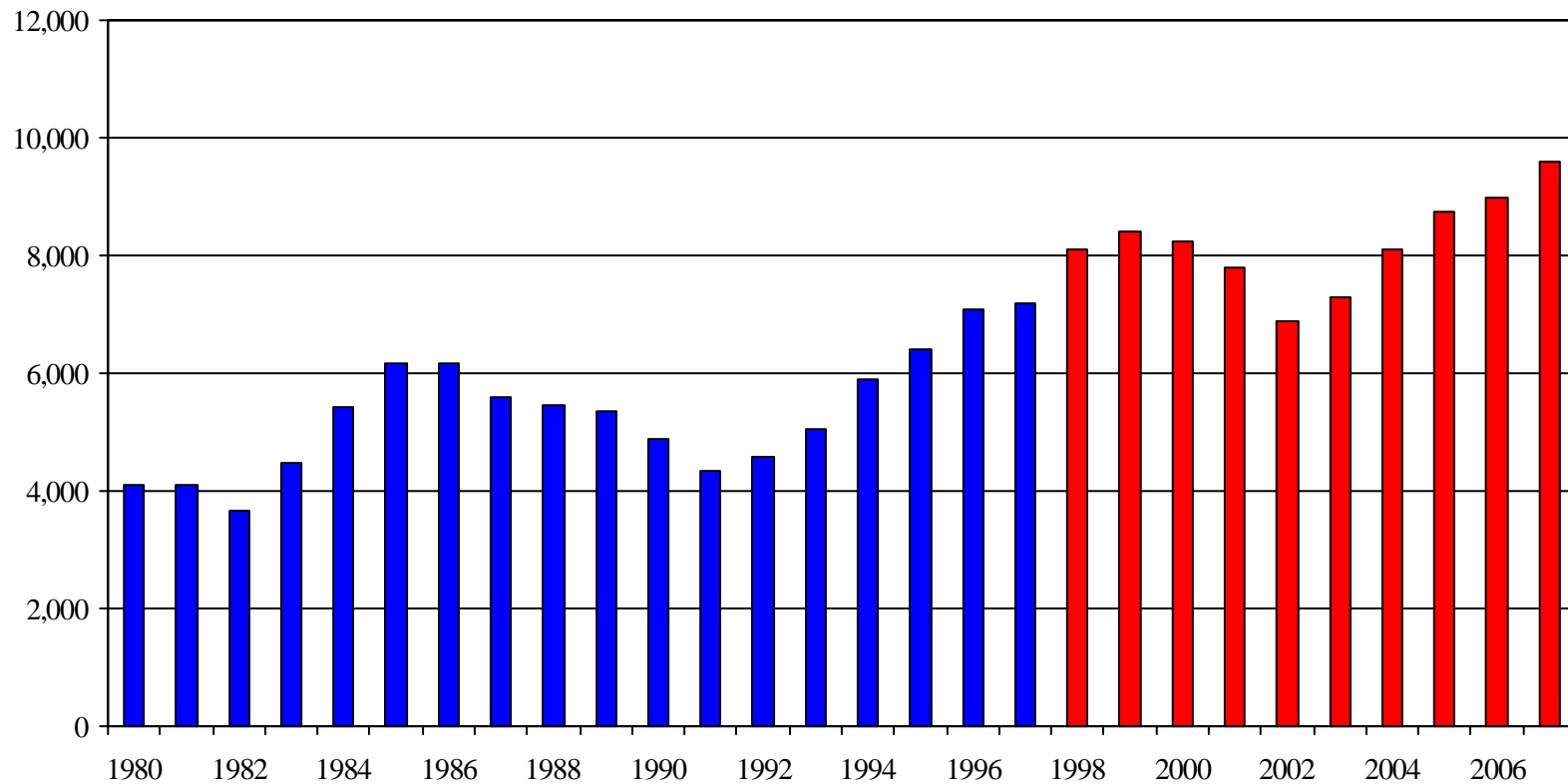
## Ready Mix Concrete Consumption (000 CYD)

	<u>1988-1997</u>	<u>1998-2007</u>	<u>Avg. Annual % Change</u>
High	39,656	43,745	1.0%
Low	26,047	28,201	0.8%
Average	31,032	35,339	1.4%



# Arizona

## Ready Mix Concrete Consumption (000 CYD)



Source: Portland Cement Association, The Greystone Group LLC

The Greystone Group LLC

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# Arizona

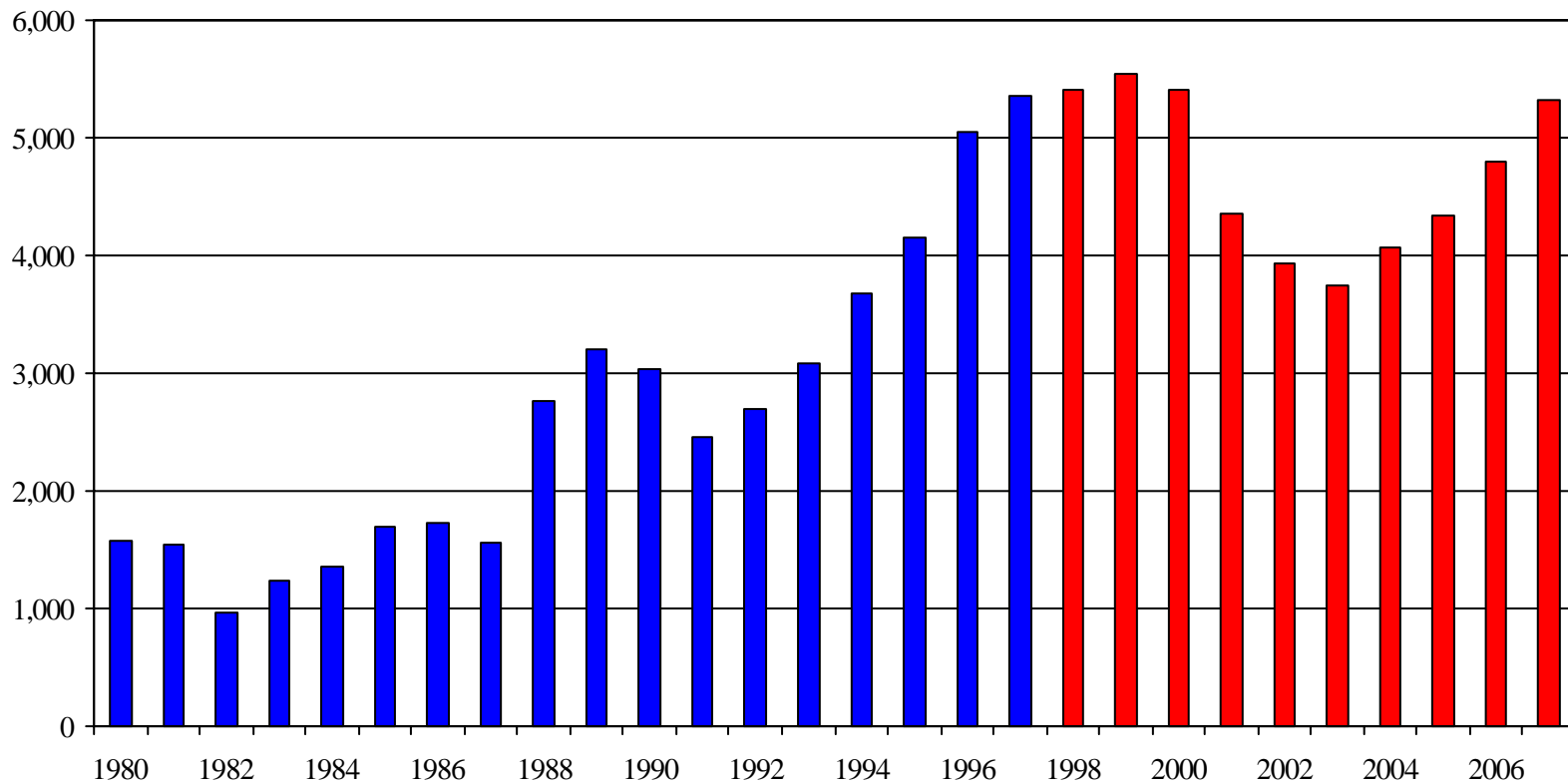
## Ready Mix Concrete Consumption (000 CYD)

	<u>1988-1997</u>	<u>1998-2007</u>	<u>Avg. Annual % Change</u>
High	7,193	9,597	3.3%
Low	4,332	6,886	5.9%
Average	5,626	8,212	4.6%



# Nevada

## Ready Mix Concrete Consumption (000 CYD)



Source: Portland Cement Association, The Greystone Group LLC

The Greystone Group LLC

Investment Banking



# Nevada

## Ready Mix Concrete Consumption (000 CYD)

	<u>1988-1997</u>	<u>1998-2007</u>	<u>Avg. Annual % Change</u>
High	5,351	5,543	0.4%
Low	2,452	3,746	5.3%
Average	3,548	4,691	3.2%



# Cement Pricing Activity

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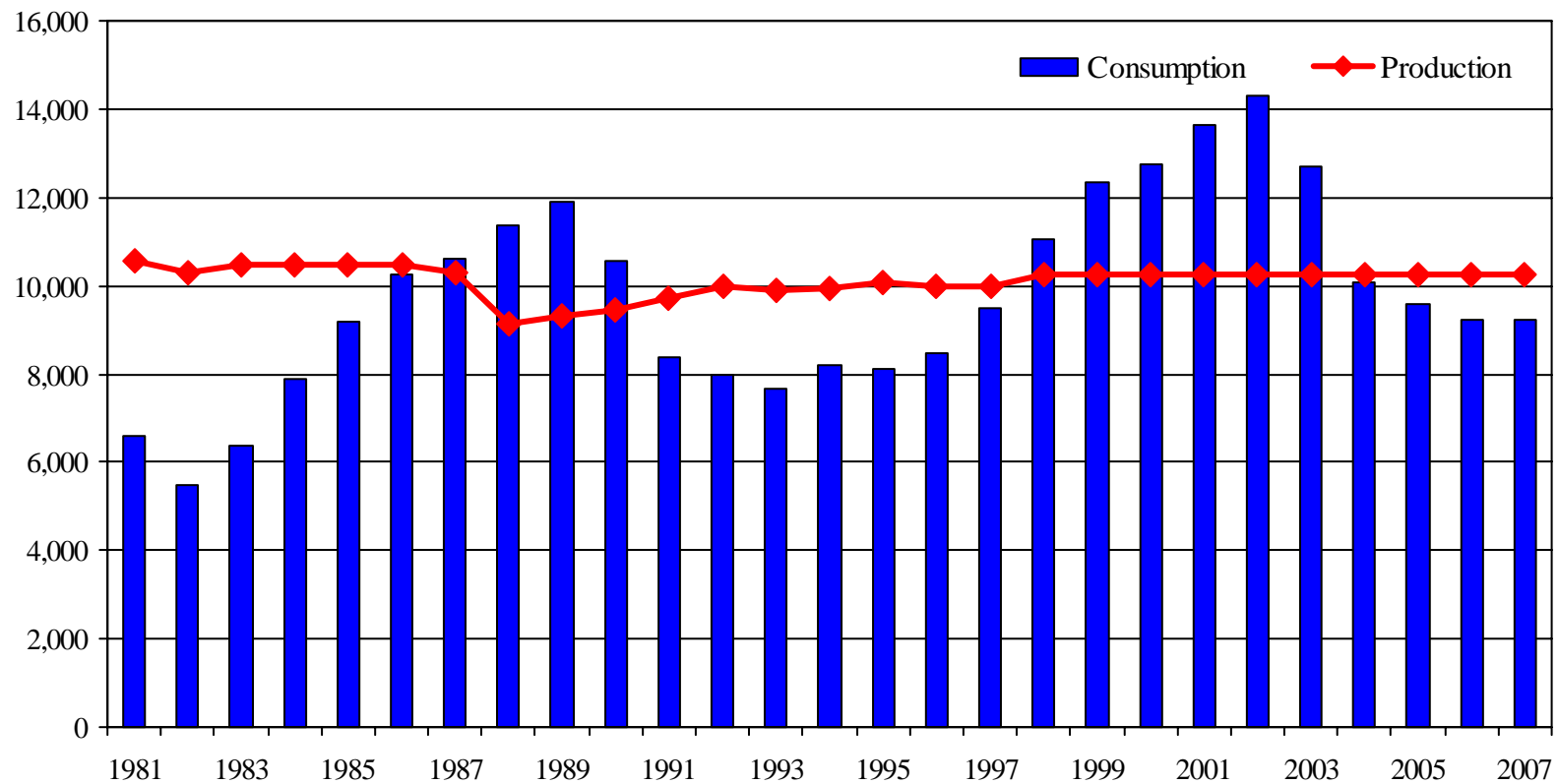
The Greystone Group LLC

Investment Banking



# California

## Cement Production/Consumption (000 MT)



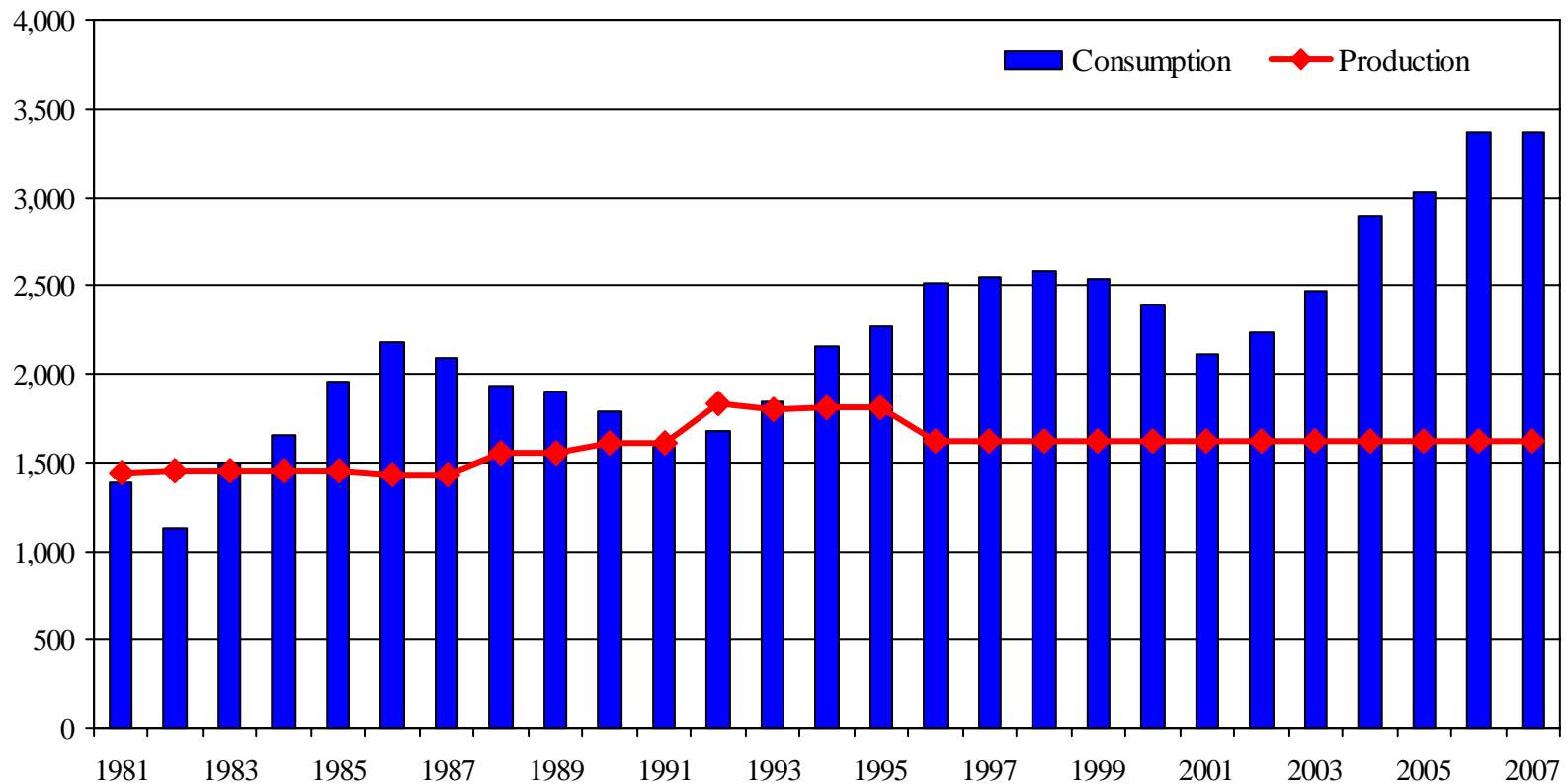
The Greystone Group LLC

Investment Banking



# Arizona

## Cement Production/Consumption (000 MT)



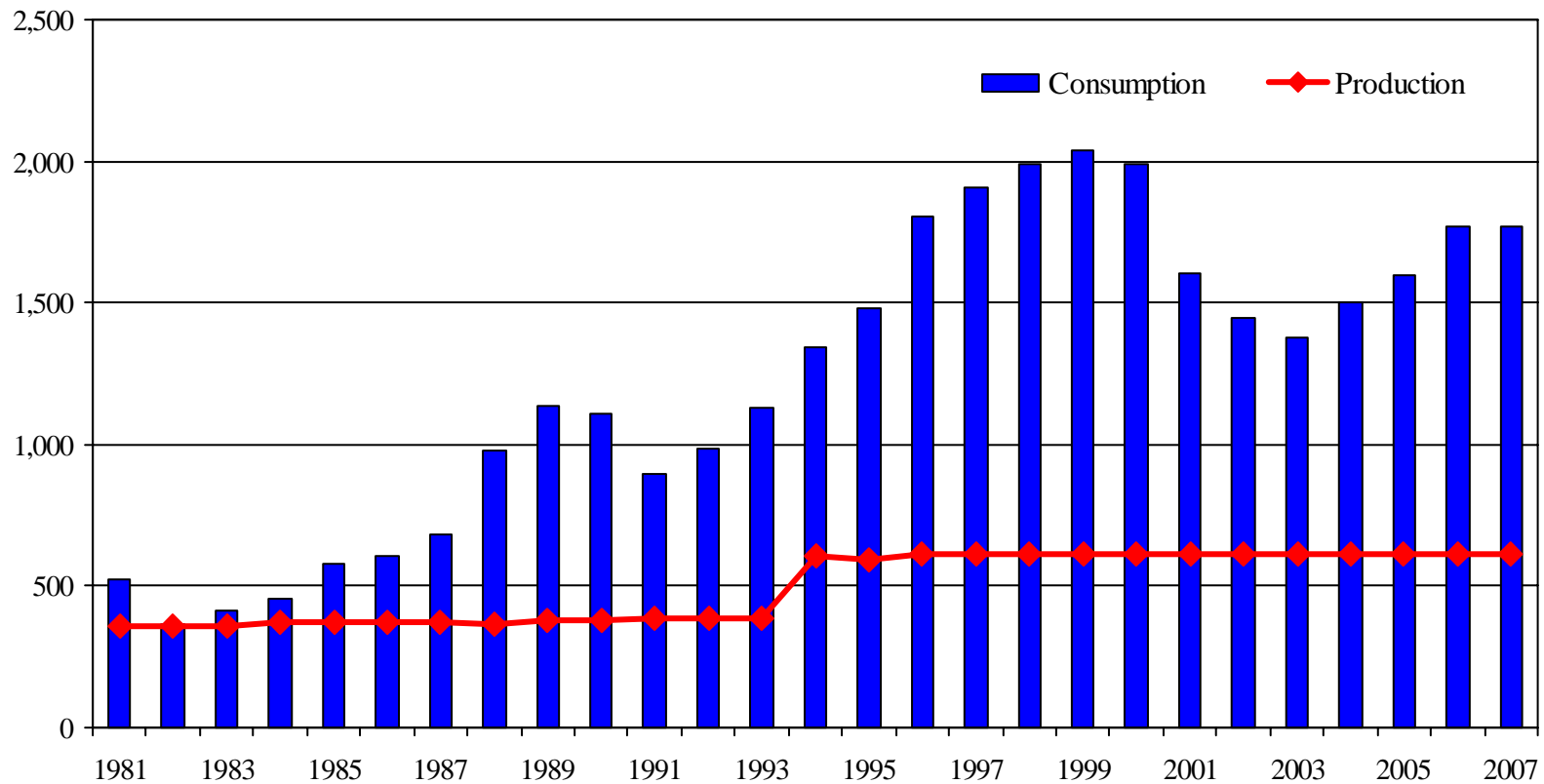
The Greystone Group LLC

Investment Banking



# Nevada

## Cement Production/Consumption (000 MT)



The Greystone Group LLC

Investment Banking