

## **Cement Outlook: 2007**

Intercem

Galveston, Texas

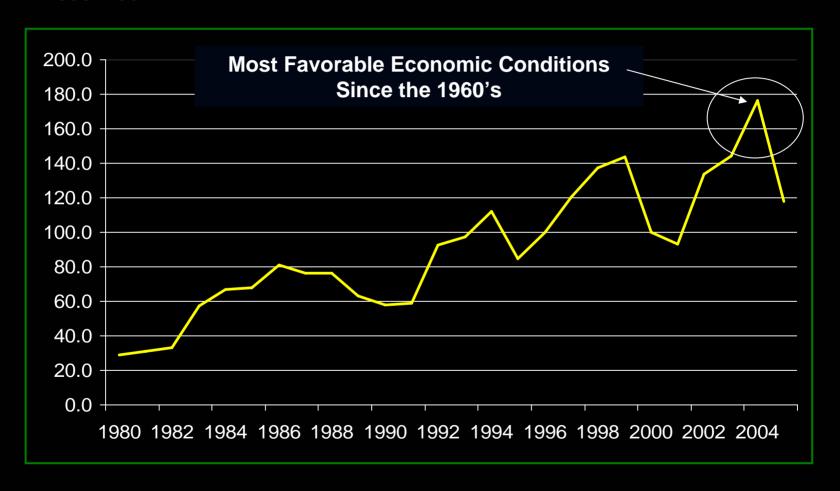
Edward J. Sullivan

Staff Vice President and PCA Chief Economist



### **Economic Comfort Index \***

1996=100



•Combines Real GDP Against the Levels Interest Rates, Inflation and Unemployment

### **Construction Market In Transition**

- Slowing Economic Growth
  - Rising Inflation, Higher Interest Rates, High Energy Prices, Slower Job Creation
- Construction Market Flattening
  - Harsher Decline in Residential
  - Slower Nonresidential & Public Recoveries
  - Higher Material Costs
  - Potential for Market Contraction in 2007
- Cement Supply Slow to Adjust to Slower Growth Environment
  - Imports May Smash Last Year's Record
    - Could create a 6 MMT overhang by year-end.
  - Tight Market Conditions Dramatically Reduced
- Add Extra Dose of Conservatism to Forward Plans
  - Particularly true for states where total cement consumption is highly dependent on housing.
  - Prepare Contingency Plans Incorporating Downside Risks.



## **U.S. Economic Outlook**

## **Key Near Term Economic Issues**

- Oil Prices:
  - Is the recent rundown sustainable?
- Inflation:
  - Supply side generated will it subside enough to the Federal Reserve's criteria
- Interest Rates:
  - Resumption in increases?
- Housing Decline:
  - Hard landing or false read of data?
- Job Creation:
  - Can we maintain current level of unemployment?



# **Energy Outlook**

### Oil Price Outlook

## Oil Prices are declining as projected.

Retreat to 2002 levels not going to happen.

#### Strong International Demand

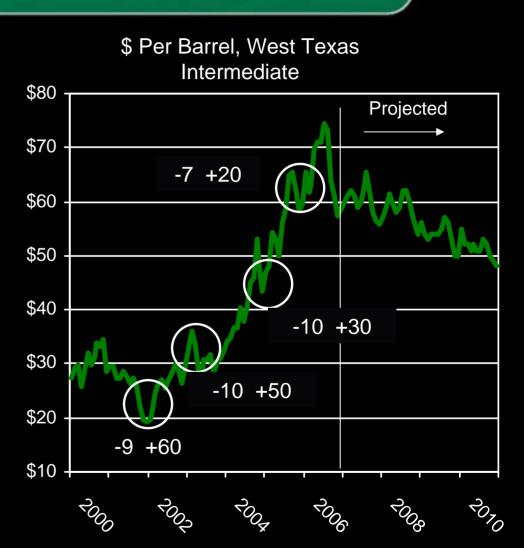
- Japan's Economic Recovery
- Stronger Asian Demand: China & India

#### Supply Disruptions Continue

- Middle East Uncertainties, Nigeria, Venezuela
- Iran & Uranium Enrichment

#### OPEC Actions

- \$60 per barrel target?
- 2006: \$65.85 per barrel WTI2007: \$60.30



## **Gasoline Price Impact**

#### Gasoline Prices Topped \$3

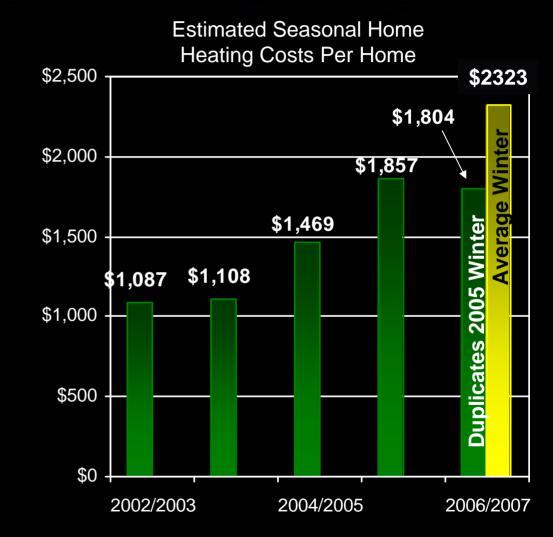
- Seasonal patterns suggest September peak.
- Declines incorporated.
- Gasoline Purchases To Account for 5.3% of Total Consumption.
  - **2005**: 4.2%, 2004: 3.6%, 2003: 3.3%
- Steals \$125 Billion from Consumer Spending Compared to 2005
  - Rising gasoline prices stole \$75 Billion in 2005 and \$50 Billion in 2003

## Estimated Annual Gasoline Spending Per Vehicle



## **Heating Oil Impact**

- Peak Heating Season Begins In November
- Slight Retraction from High 2005 Levels.
  - \$700 increase over "normal" 2004 levels.
  - 2005 impacts minimized by mild winter conditions.
- Assumes "Average" Winter.
  - Adverse impact increases with severity of winter.





## **Inflation Outlook**

### **Inflation Outlook**

#### Higher Energy Prices Structure

- Still Cyclical...but...
- Stronger Asian Demand: China & India

#### Labor Costs Rising

- Unemployment Rates Decline below 5%
- Workers Cautious in Pushing for Increases
- Productivity Growth Easing?

#### Structurally Weaker Dollar

- Trade Deficit Widens
- Structurally Higher Transportation Costs
  - Energy & Logistical bottlenecks
- **2006: 3.4% 2007: 2.7%**
- Supply Side Inflation: Tougher to reduce.

#### Annual Percent Change, CPI Urban

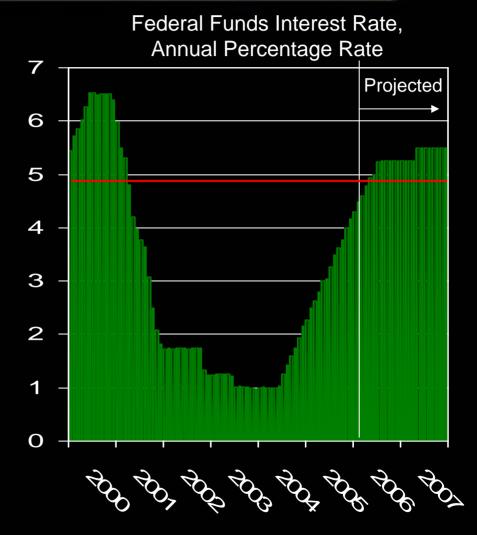




## **Interest Rate Outlook**

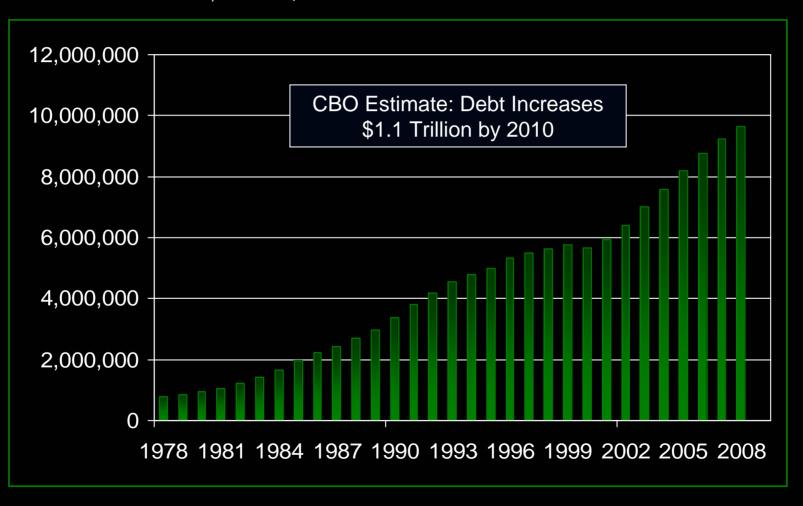
## **Federal Reserve Policy Actions**

- Overall Economy & Job Growth Slowing.
- Inflation a growing concern.
  - Nature of inflation: Supply Side. Improvement may disappoint Fed Expectations.
  - Target rate = 2.0%
- Dilemma: Inflation or Growth?
- Do not count out further Fed Tightening.
  - One more rate hike anticipated during 2007 (May/June).
  - Federal Funds to 5.5%
- Risk of Fed over-reaction.



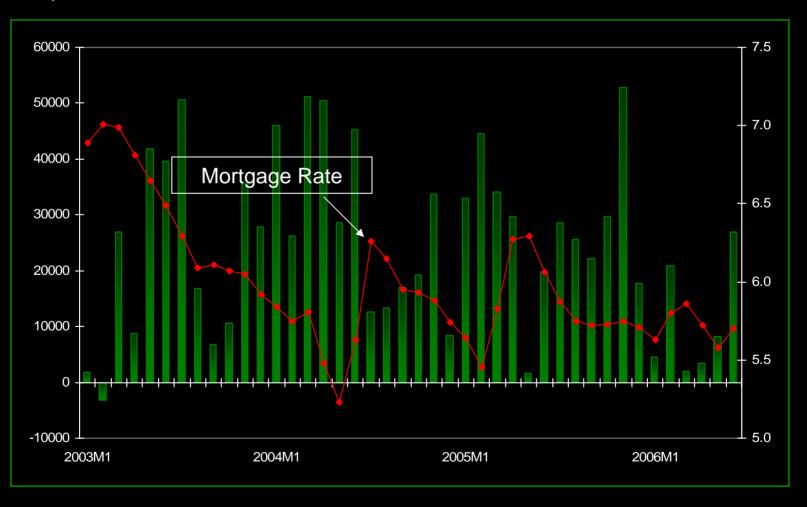
# Total Public U.S. Debt .... Approaching \$10 Trillion

Total Public Debt, Million \$



# Net Foreign Purchases: US Bonds & Notes

#### \$ Millions



China May Diversify its Portfolio Away from U.S.

# **Interest Rate Conclusions:** 2007-2010

#### Higher Inflation Premiums

- Add to "Real" Rates

#### Federal Reserve

- New Fed Chairman demonstrates resolve
- Favors Inflation Targeting (2%)

#### Larger Public Demand for Funds

- Middle East
- New Orleans

#### Private Demand for Funds Increase

#### Foreign Supply Slows

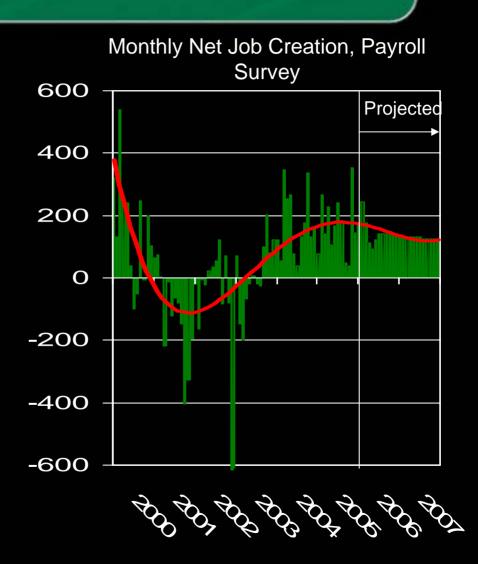
- Weak Dollar lower foreign returns
- Competing Investment Instruments
- Strength in Equities Draws Funds from Bond Market



# **Employment Outlook**

### **Labor Market Outlook**

- Job growth slowing from 1<sup>st</sup> Quarter average of 176,000 net new jobs per month to 2<sup>nd</sup> Quarter averaging 110,000 net new jobs per month.
- 2006: 1.7 million 2007: 1.6 million net new jobs creation
- 2006-2008 Job creation: Estimated at 4.7 million jobs 2006-2008, compared to 6.1 million in Spring forecast.
- Unemployment rises to 4.8% year end. 2007: 5.2%
- Slow down in trend of accelerating wages by 2008.



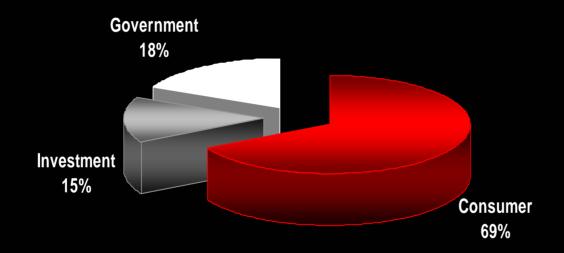


## **Economic Outlook**

### **Consumer Worksheet**

- Pay Increase Averages 3.5%.
- Health Insurance Premiums Rise 7%-11%.
- State and Local Property Taxes Rise.
  - Reassessments based on high home appreciation
- Energy Prices Take a Large Bite.
  - Even in context of recent improvement.
- Inflation Running near 3%
- Interest Rates Rising in Context of Record Consumer Debt
- Tapping Home Equity Not as Viable As In the Past
- Slowdown in Job Creation
- Consumer Growth Rate Under Pressure

## **Snap Shot of Economic Activity**



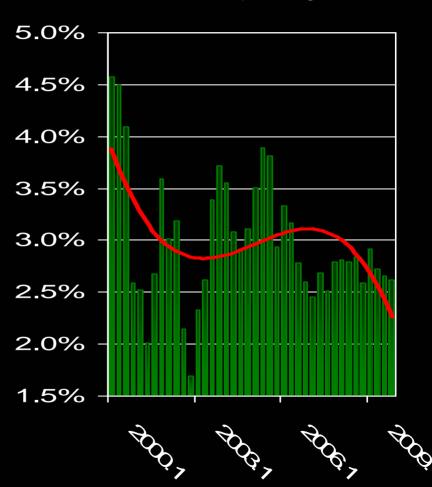
Consumption acts as the anchor for US economic activity.

Any retrenchment in consumer spending will lead to slower economy-wide growth rates

## **Consumer Spending**

- Consumer spending accounts for more than 2 out of every 3 dollars created by U.S. economy.
- Slower Job & income growth implies slower growth in consumer spending.
- Higher Oil prices, inflation and rising interest rates dampen improvement in sentiment.
- Affordability erodes, but high from historical perspective.
- Less home refinancing activity & growth in mortgage ARMs dampen
- Slower Automotive Spending
- Consumer Spending Grows below 3.0% next two years. Downside risk.

#### Consumer Spending Outlook



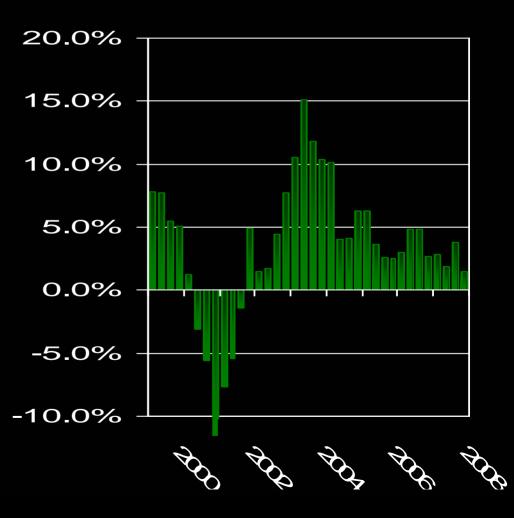
## **Investment Spending**

- Near term outlook remains positive...but less so than six months ago.
- Fixed, Non-residential investment has recorded strong growth during last two years.
  - Economic growth improves expected return on investment.
  - Funds availability
    - Internal Funds: Profitability
    - External Funds: Favorable rate environment
  - Risk premiums reduced
    - Small borrowers easier credit terms and conditions.

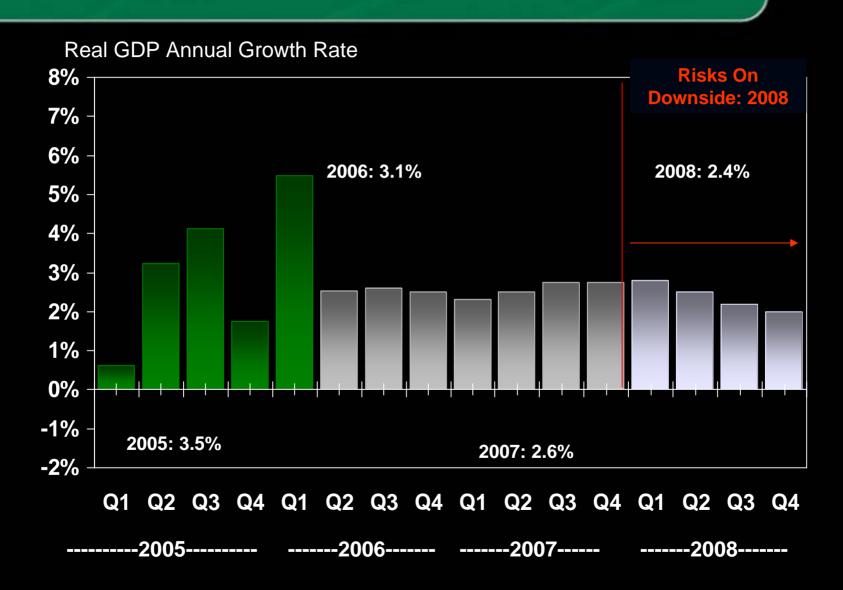
#### Going Forward:

- Slower economic growth, higher costs reduce expected ROI.
- Slower profit environment adds extra does of caution in spending for investment.

Nonresidential Fixed Investment, Annual Percent Change



### **Economic Outlook: Real GDP Growth**



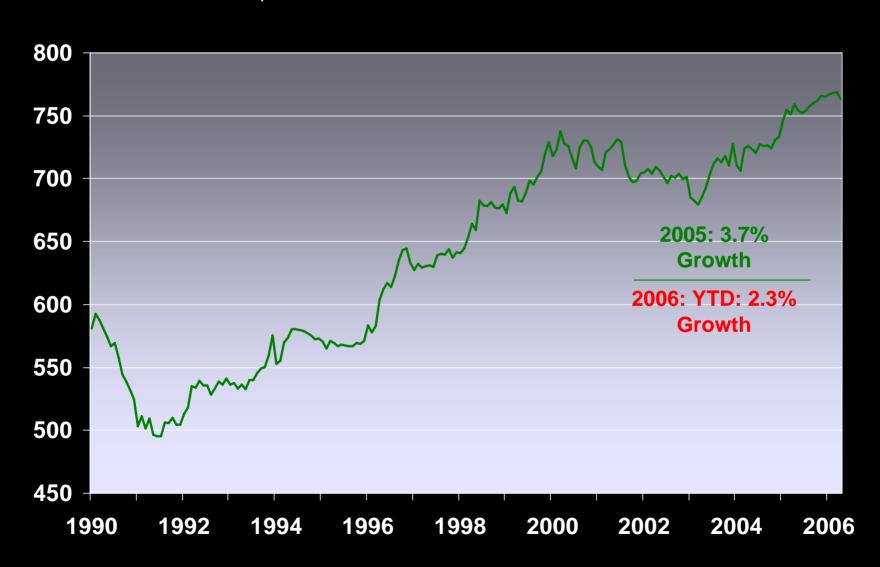


# Construction & Cement Outlook

**Overview** 

## **Total Construction**

#### **Billion 1996 \$**



# Changing Composition of Construction Spending

2001-2005

Low Interest Rates, Weak Economy

- Growth Leader: Residential
  - Low Interest Rates
- Public
  - State Tax Revenues Hurt by Anemic Economic Growth
- Growth Laggard: Nonresidential
  - Weak Economy

2006-2010

Rising Interest Rates, Strong Economy

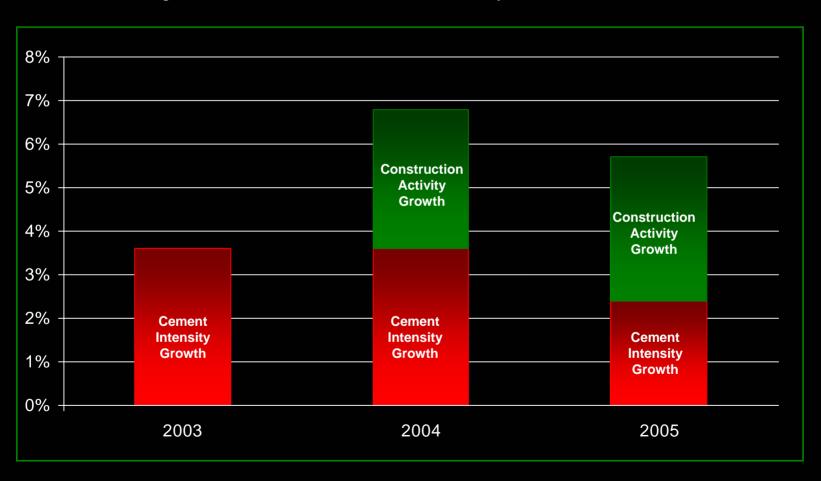
- Growth Leader : Nonresidential
  - Strong Economy
- Public
  - State Tax Revenues Recovery Due to Strong Economic Growth
- Growth Laggard : Residential
  - Rising Interest Rates



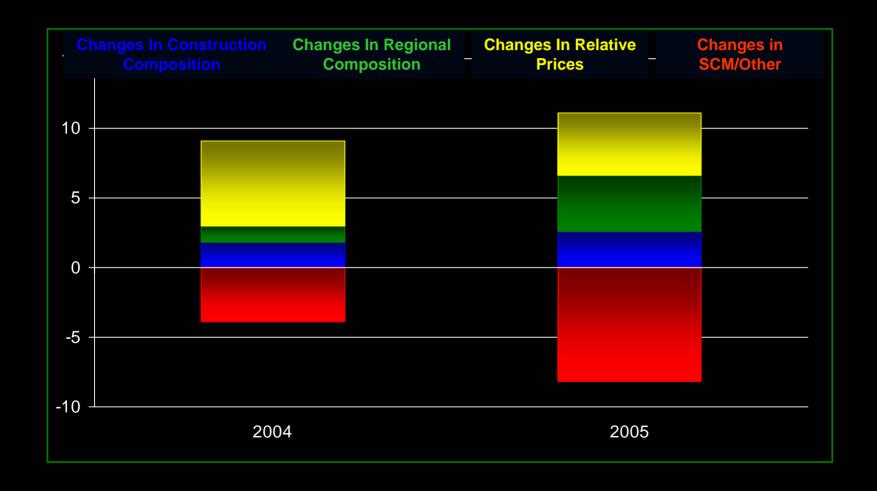
## **Cement Intensities**

### Composition Of Cement Growth: Construction Activity Vs Cement Intensity Growth

Annual Percent Change, Real Put-In-Place Construction & Cement Intensity



# Composition Of Intensity Growth Preliminary Estimates\*



<sup>\*</sup>Based on Forthcoming PCA Economics Report

## **Cement Intensity Outlook**

- Competitive price position Vs other building materials
- Composition of construction
- Nonresidential intensities are cyclical
- Code changes: hurricane
- Green environment
- Product
- SCM's steal some intensity growth
- Fiscal healing: local roads higher portion of construction \$





## **Residential Construction**

**Single Family** 

# Strength in Starts More Than Low Rates...

#### The Cyclical Upside: 2001 - 2005

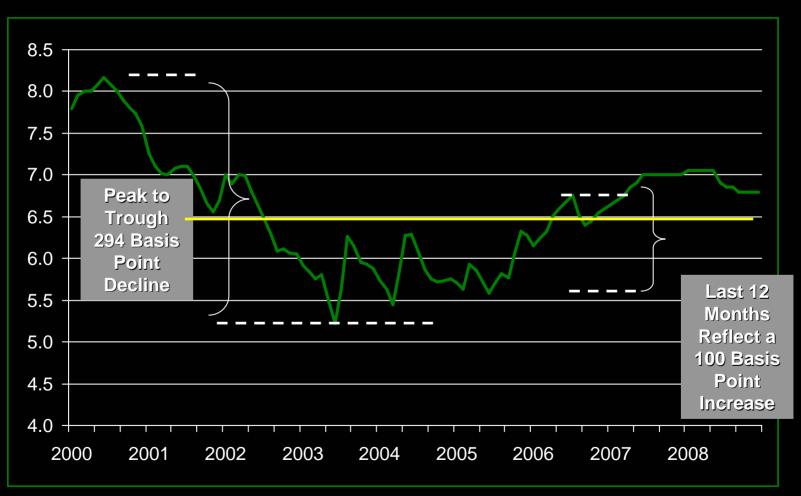
- Low mortgage rates key factor in single family starts over past few years.
- Emergence of exotic mortgages also a key factor...particularly in strong home appreciation environment.
- Easy credit conditions contributed to strong home-buying environment.
- Speculators add froth to market in light of strong appreciation rates.

#### The Cyclical Downside: 2006 - 2009

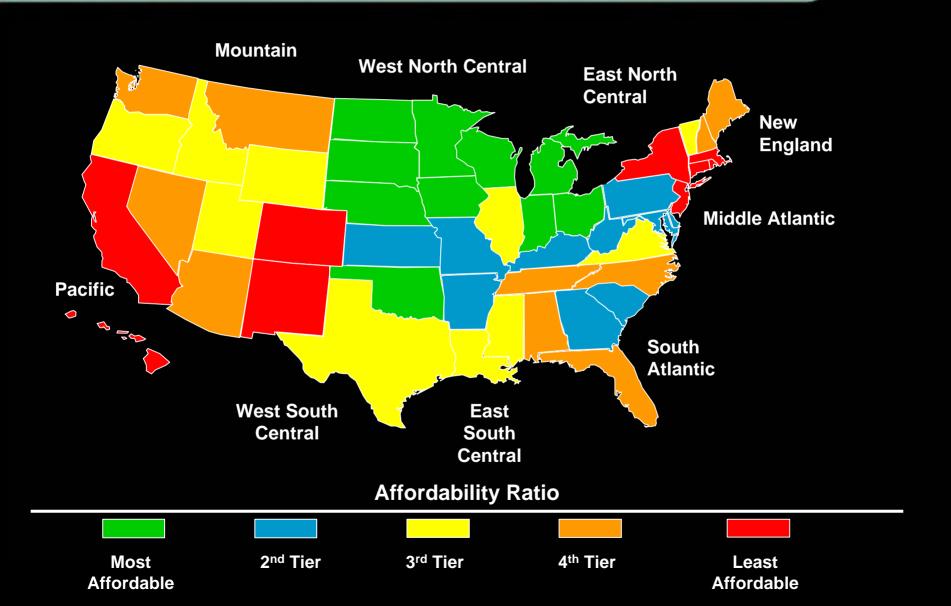
- Mortgage rates rising.
- Exotic mortgages losing favor.
- Defaults and delinquencies cause a deterioration in credit quality and a tightening of credit conditions
- Speculators reduced/disappear in lower appreciation rate environment

# **Mortgage Rates:** 30 Year Conventional

Annual Growth Rate, 30 Year Conventional

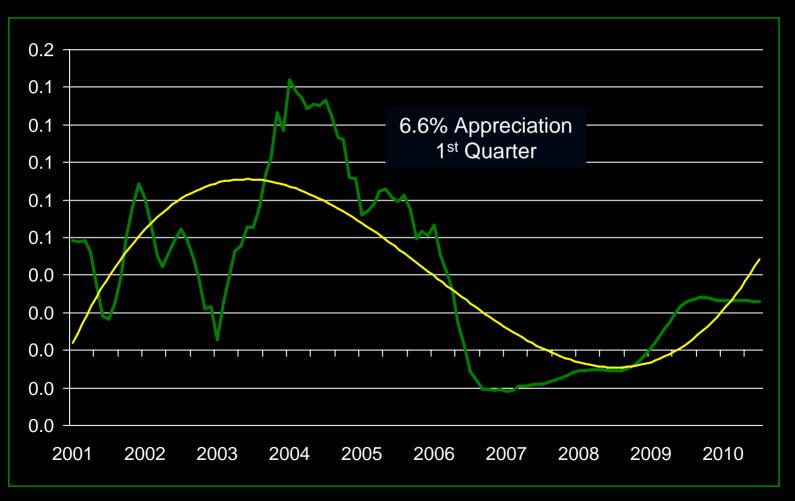


## **Affordability Index**



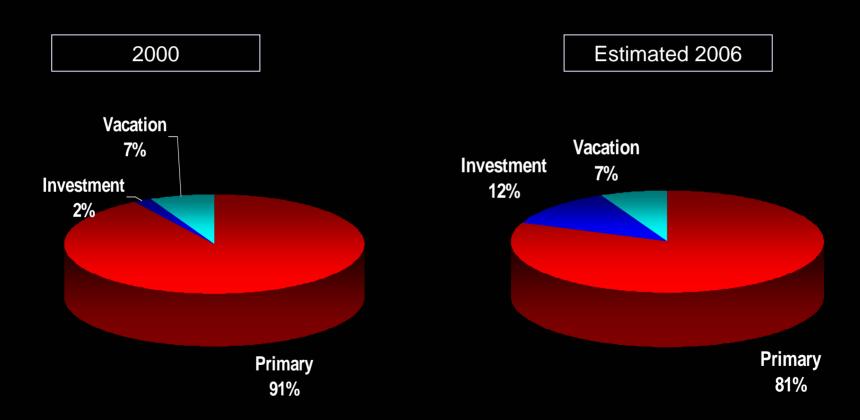
### **Home Appreciation Rate**

Annual Growth Rate, Median Home Price



Improves Affordability: Stronger 2009/2010 Outlook

### **Profile: Single Family Buyer**



Coastal and Resort Areas: Double the National Average For Speculators

Note: Speculators Are 1st to Leave the Market

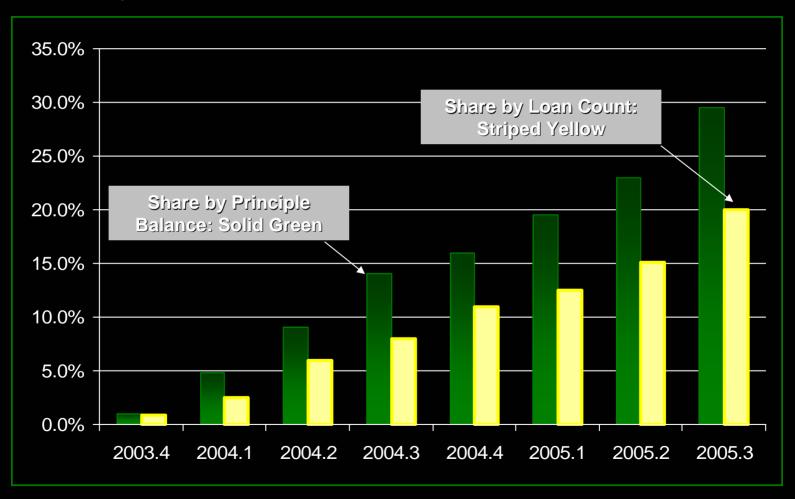
### **Growing Home Price & Income Gap**

#### Annual Growth Rate Comparison



## **Emergence of Exotic Mortgages**

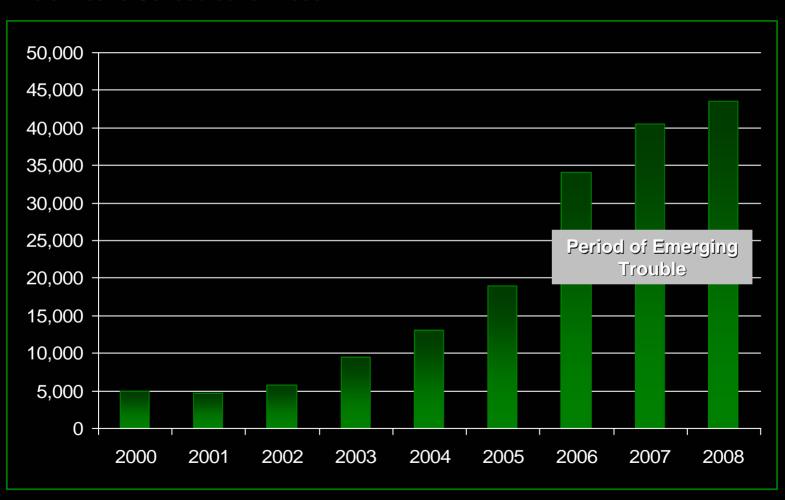
Interest Only Loan Share of Sub-Prime Market



Note: Sub-Prime accounts for 36% total mortgage market

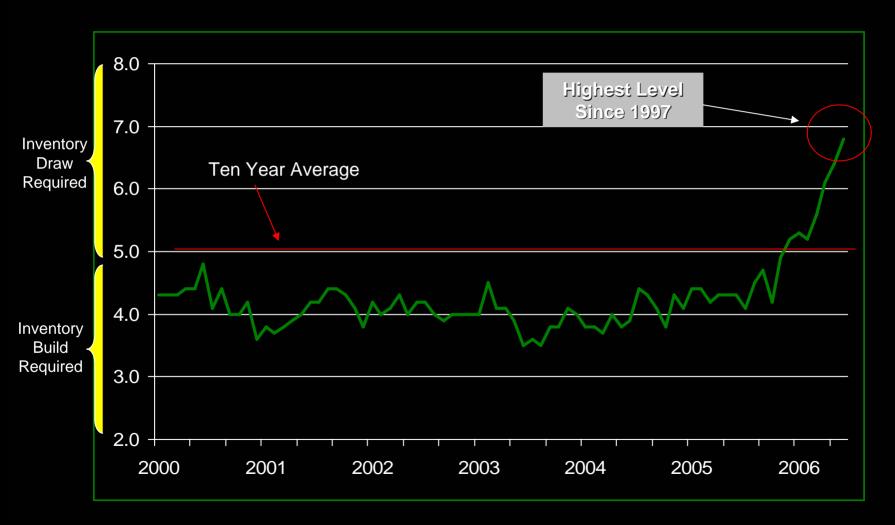
## **Sub-Prime Mortgage Resets**

Total Loans Scheduled for Reset



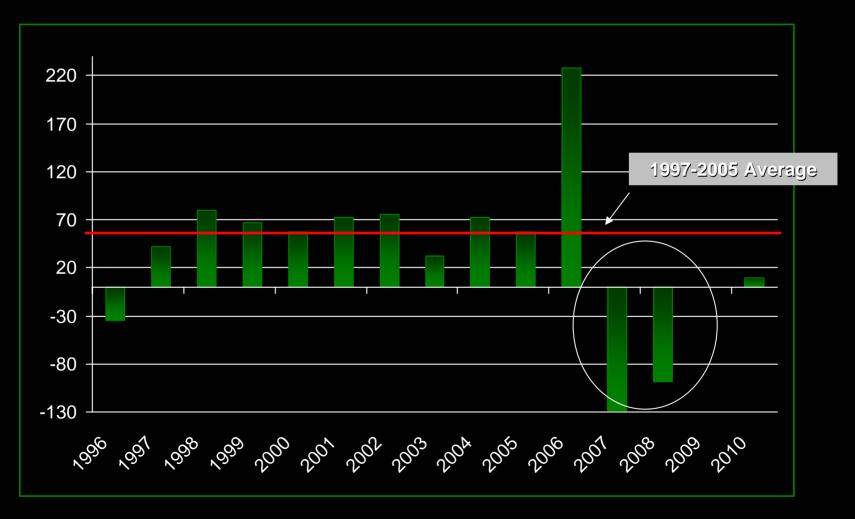
### **Inventory Draw Required**

Homes on Market/Monthly Selling Rate



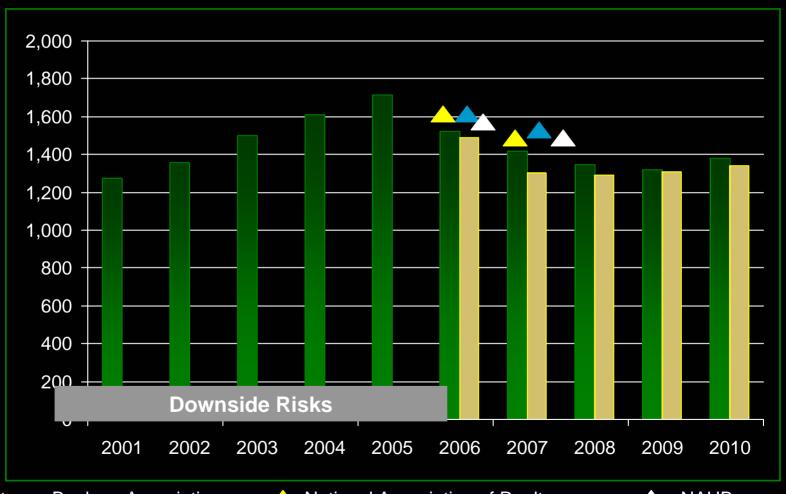
### **SF Inventory Adjustment Outlook**

(000) Units



### **Single Family Housing Starts**

(000) Units





# Nonresidential Construction

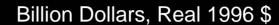
**Overview** 

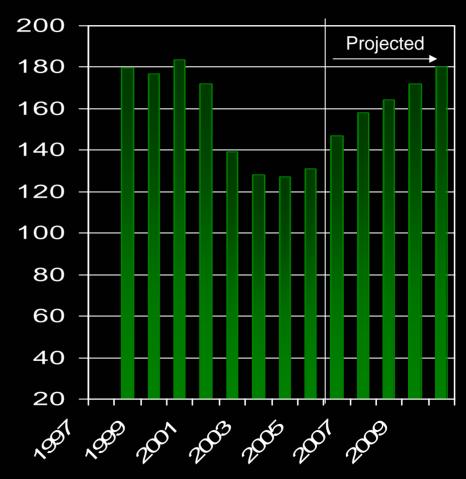
### **Nonresidential Construction**



### **Nonresidential Outlook**

- Underlying nonresidential drivers improving.
- Despite large percentage gains for 2006, most markets weak from historical perspective.
- Past cyclical peak not realized.
- Slower growth outlook depresses expected ROI and tempers recovery.
- High material costs reduce growth.
- Increasing cement intensities reinforce construction activity gains.
- Institutional nonresidential gaining momentum; less sensitive to slower growth environment



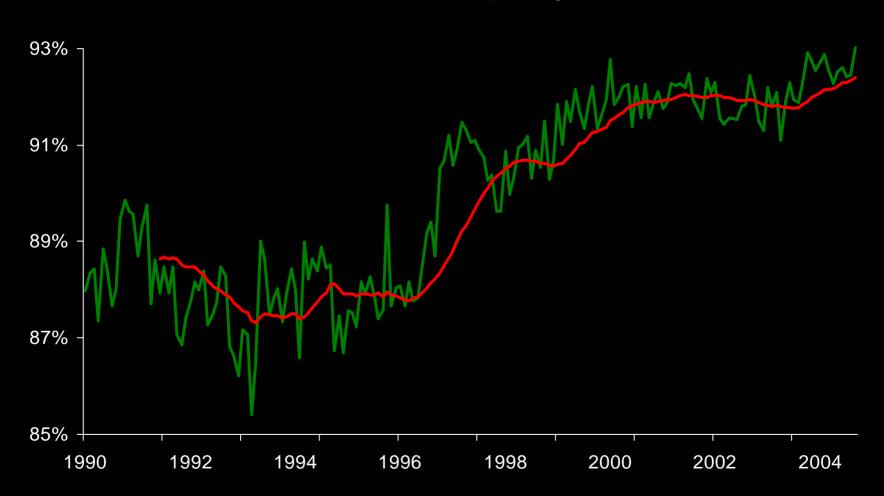




## **Public Construction**

### Public Construction Outlook: State & Local Share of Public Construction

Percent of Total Public Construction Spending

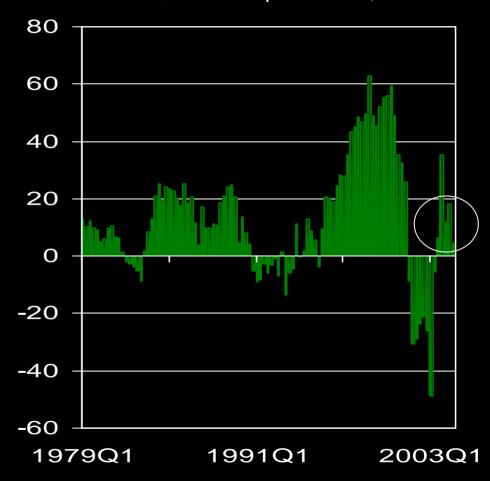




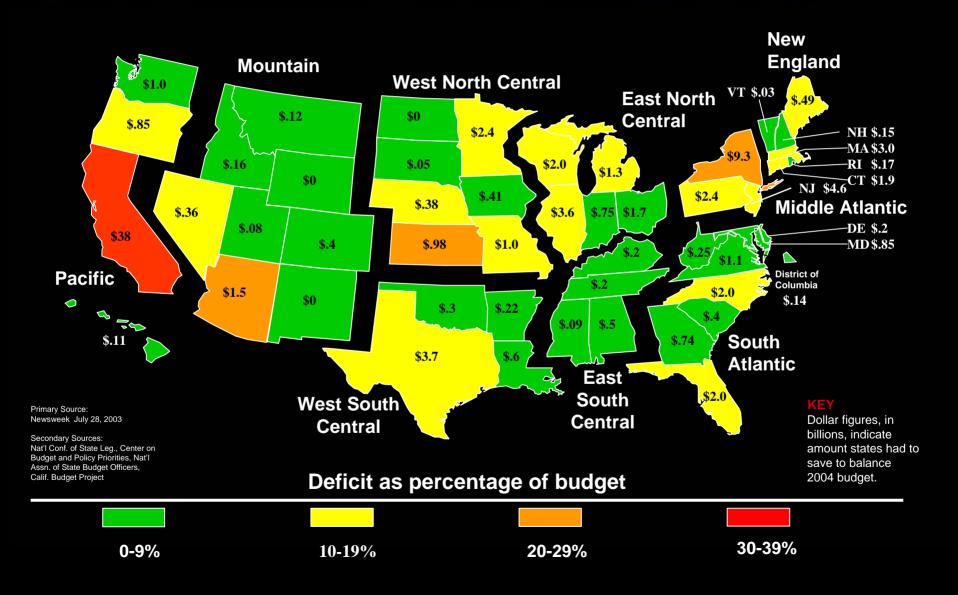
#### **Public Construction Outlook**

- 93% of public construction performed at state/local level.
- State/Local fiscal problems fading.
- Revenue growth improves with economy and job growth.
- Surpluses will re-emerge.
- Pent-up demand released.
- Highway Bill adds strength.
- **2006:** +4.8% 2007: +5.5%
- Note: 2005: +1.9%

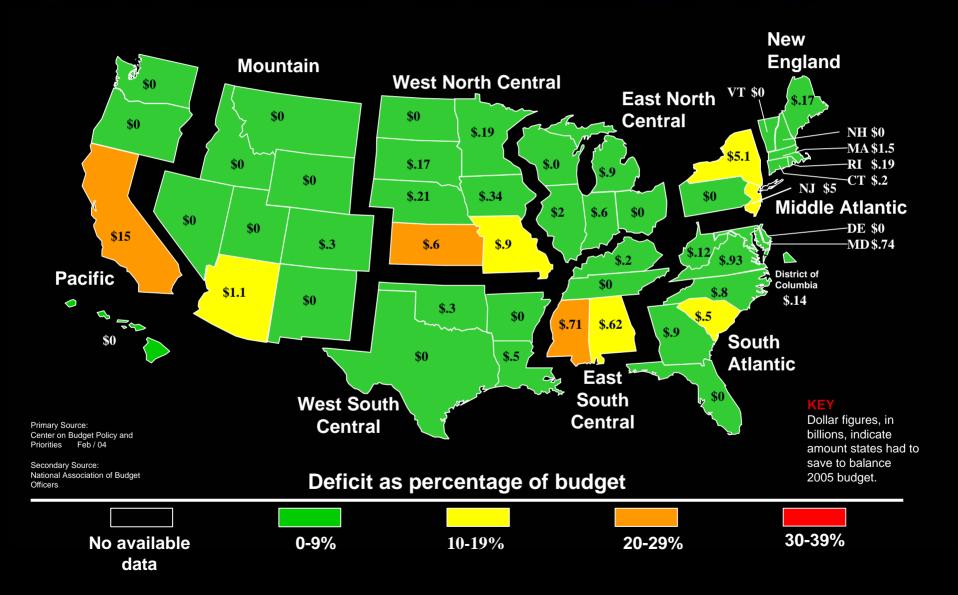
Billion \$ State Surplus/Deficit, NIPA



# Public Construction Outlook: State Deficit Estimates Fiscal Year 2004



# Public Construction Outlook: State Deficit Estimates Fiscal Year 2005



### **Construction Costs**



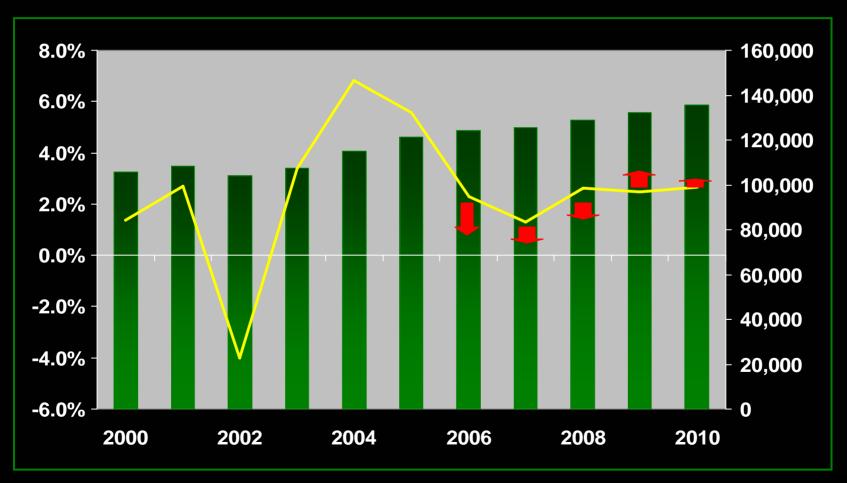


## **Market Conditions**

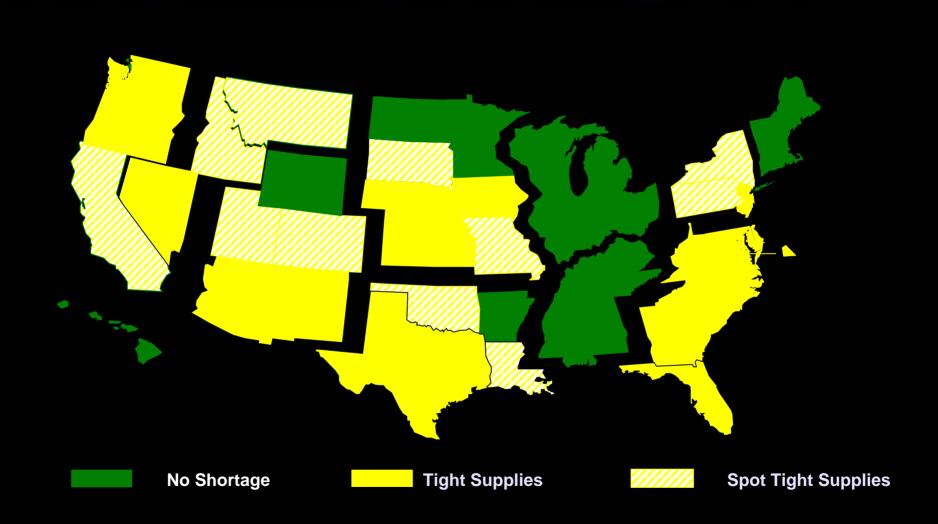
### **Portland Cement Outlook**

Annual Percent Change Growth Rate Yellow Line

Million Metric Tons Volume, Green Bar



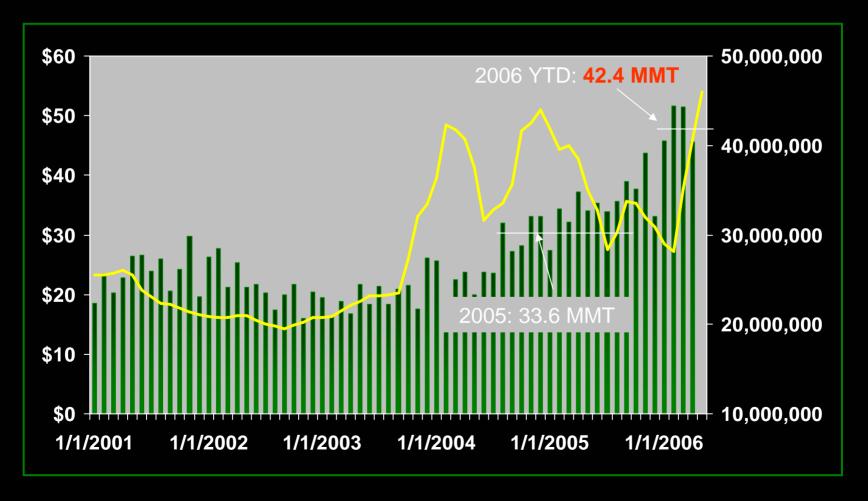
## **Cement Supply Survey Summer 2005**



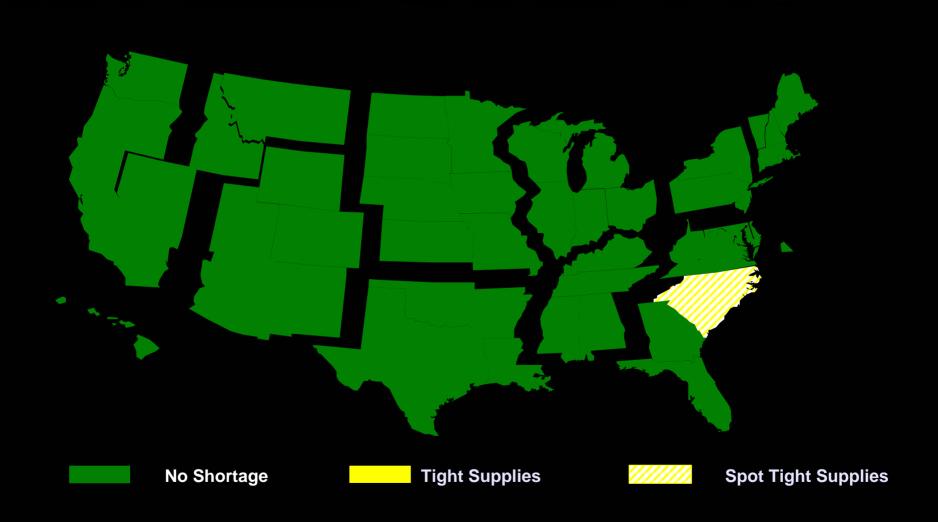
## Import Volume & Freight Rates

Freight \$ Per Ton, Handymax, Asia-Gulf

Import Volume, Million Metric Tons



### **Cement Supply Survey Summer 2006**

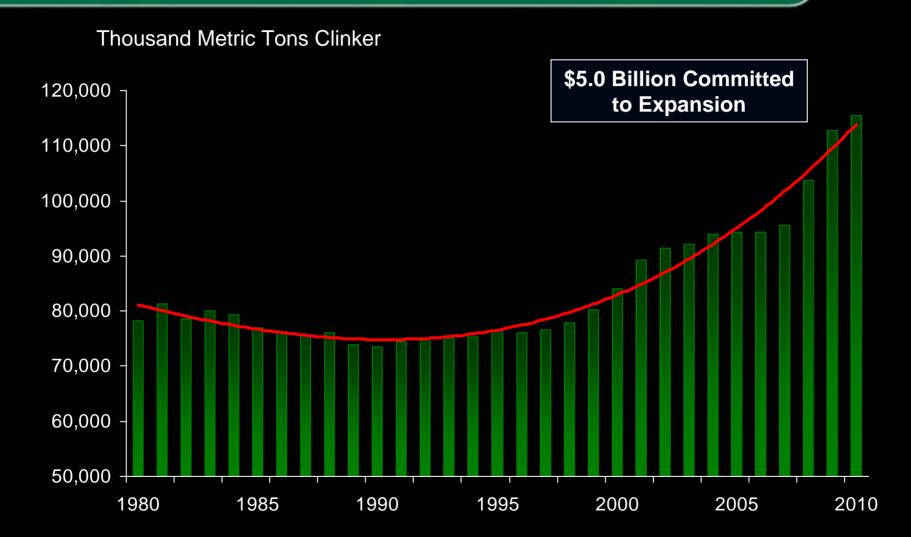


### **Market Balances: Trend**

#### **Adjusted Supply Vs Consumption**



## **Cement Capacity Outlook**







## Conclusions

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