
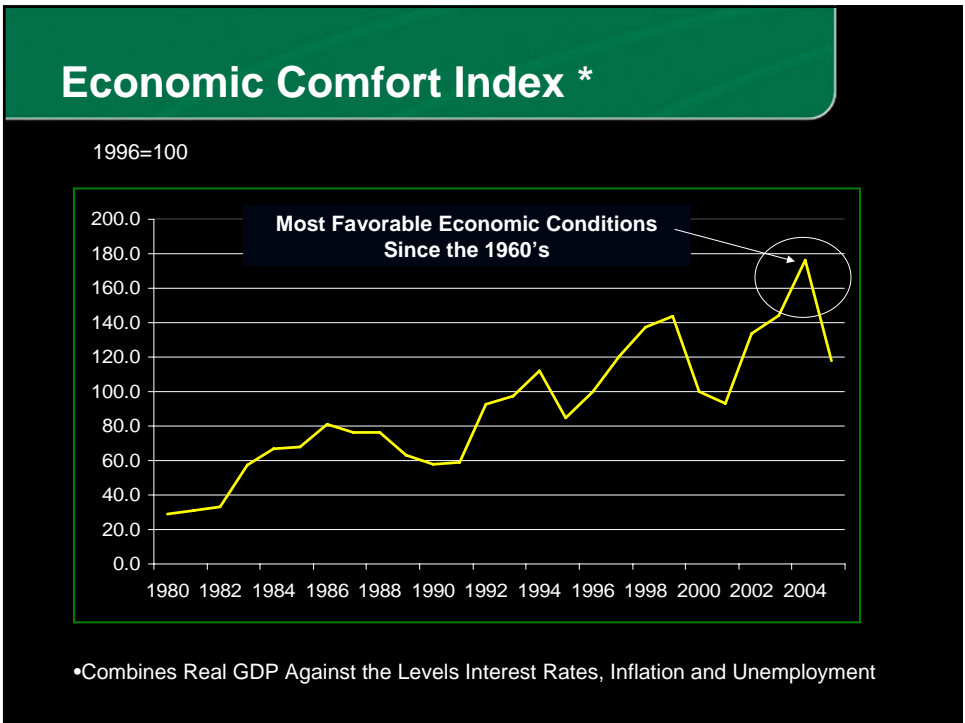


Cement Outlook: 2007



Pennsylvania Concrete Conference
Grantville, Pennsylvania
Edward J. Sullivan
Staff Vice President and PCA Chief Economist

For the Second Straight Year Awarded Most Accurate Forecaster (GDP) by the Chicago Federal Reserve



Key Near Term Economic Issues

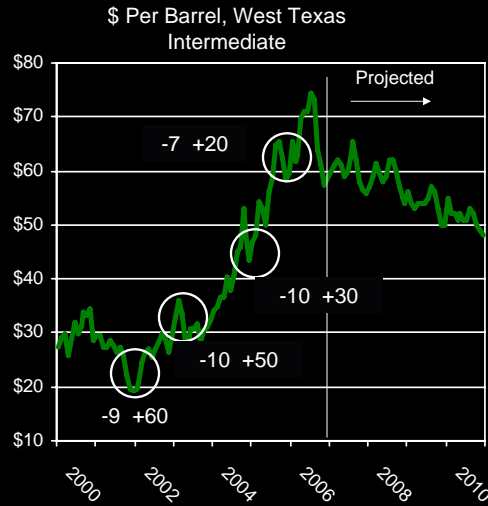
- Oil Prices:
 - Is the recent rundown sustainable?
- Housing Decline:
 - Hard landing or false read of data?
- Manufacturing Softness
- Job Creation:
 - Can we maintain current level of unemployment?



Energy Outlook

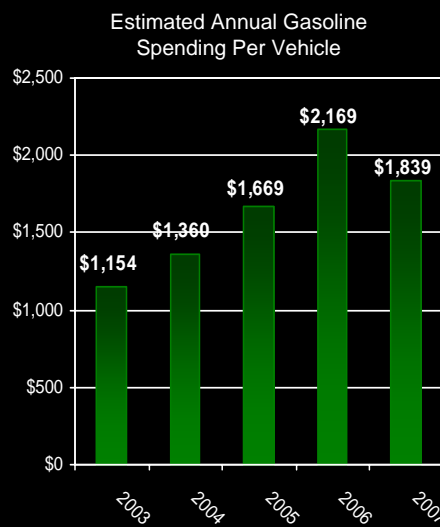
Oil Price Outlook

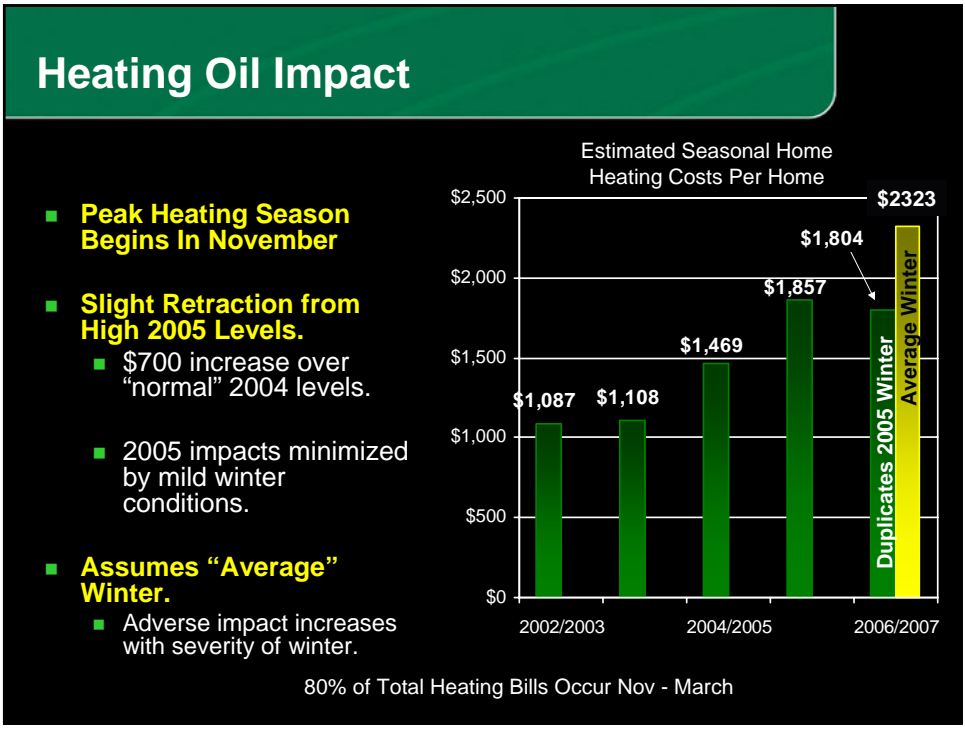
- **Oil Prices are declining as projected.**
 - Retreat to 2002 levels not going to happen.
- **Strong International Demand**
 - Japan's Economic Recovery
 - Stronger Asian Demand: China & India
- **Supply Disruptions Continue**
 - Middle East Uncertainties, Nigeria, Venezuela
 - Iran & Uranium Enrichment
- **OPEC Actions**
 - \$60 per barrel target?
- **2006: \$65.85 per barrel WTI**
2007: \$60.30



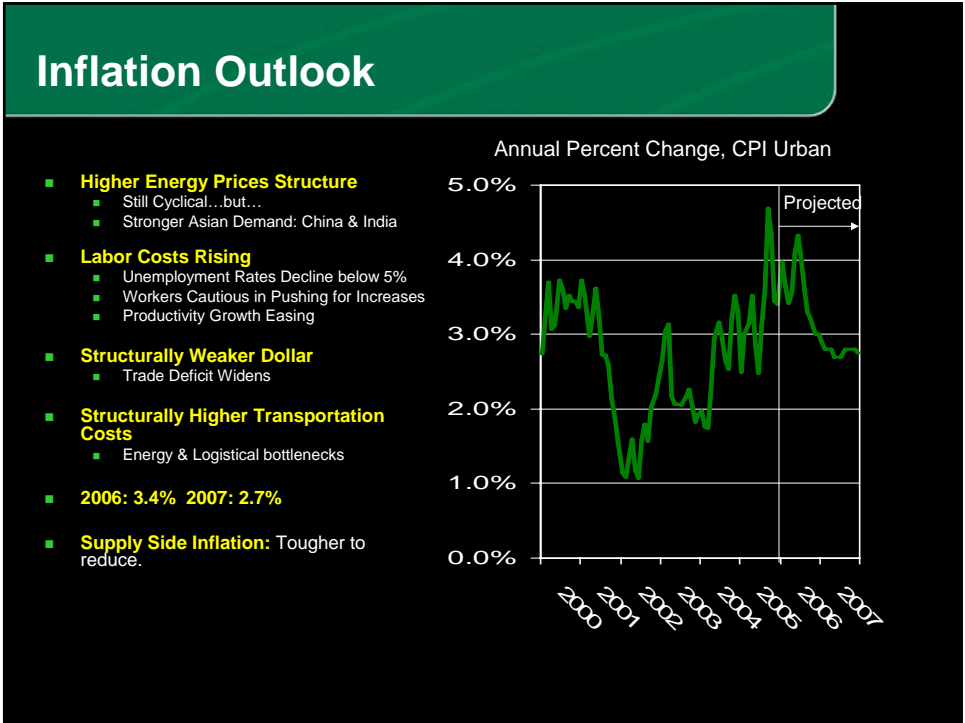
Gasoline Price Impact

- **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



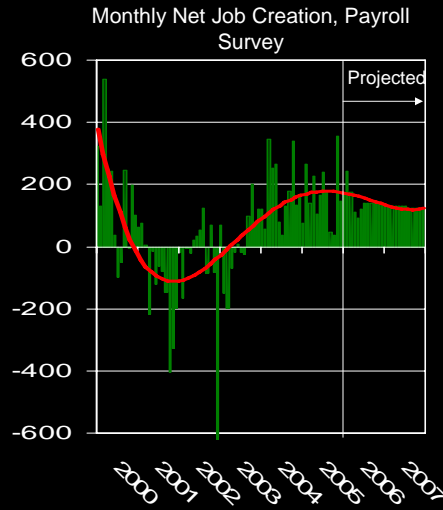


Inflation Outlook



Labor Market Outlook

- Job growth slowing from 1st Quarter average of 176,000 net new jobs per month to 2nd 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.



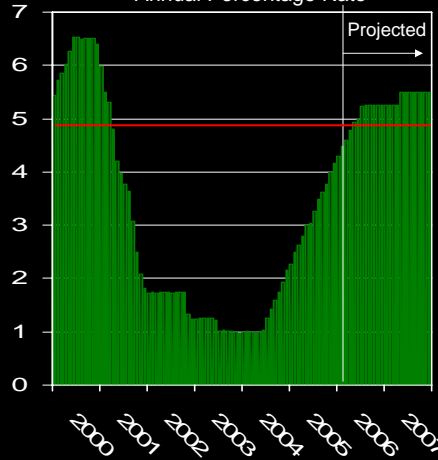
Interest Rate Outlook



Federal Reserve Policy Actions

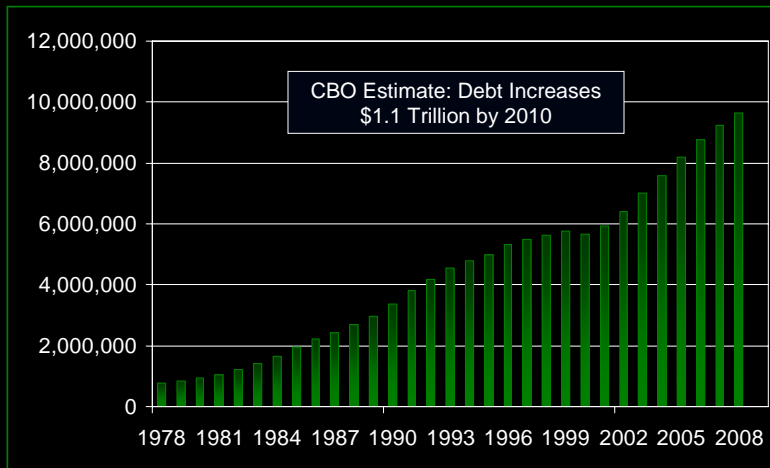
- Overall Economy & Job Growth Slowing.
- Inflation a growing concern.
 - Nature of inflation: Supply Side. Improvement may disappoint Fed Expectations.
 - Target rate = 2.0%
- Dilemma: Inflation or Growth?
- Do not count out further Fed Tightening.
 - Federal Funds to 5.5%

Federal Funds Interest Rate, Annual Percentage Rate

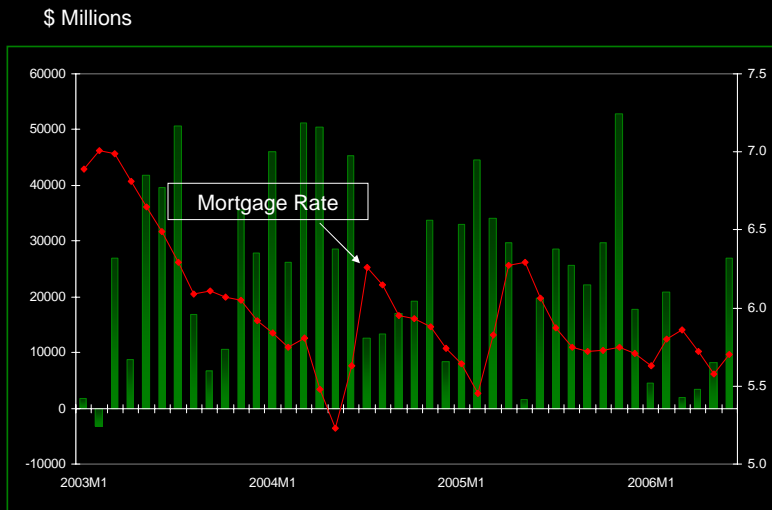


Total Public U.S. Debt Approaching \$10 Trillion

Total Public Debt, Million \$



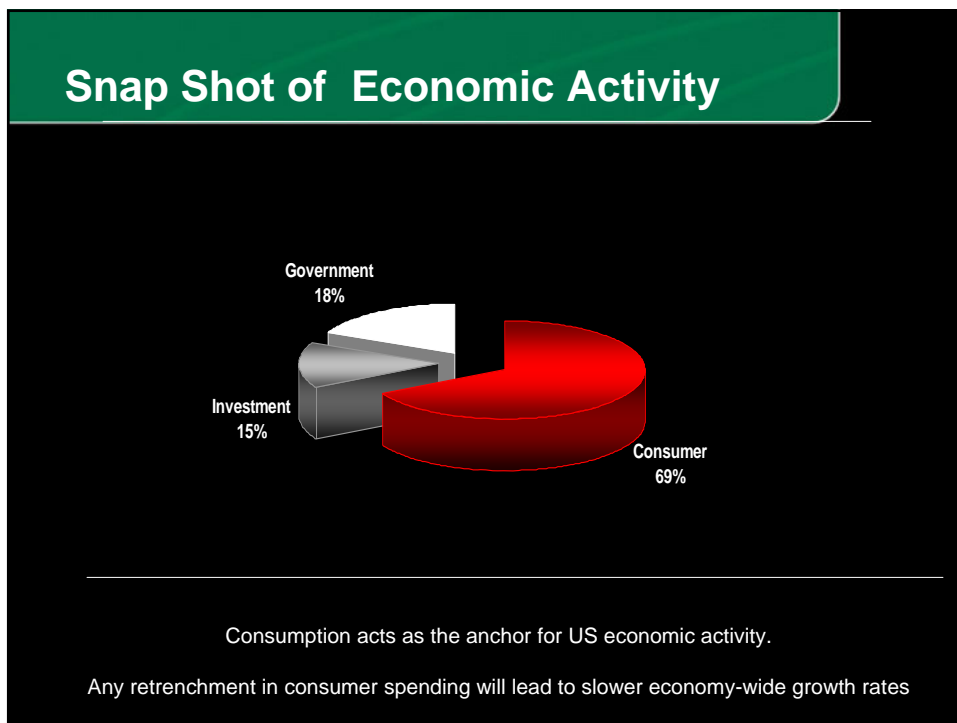
Net Foreign Purchases: US Bonds & Notes



China May Diversify its Portfolio Away from U.S.

Interest Rate Conclusions: 2007-2010

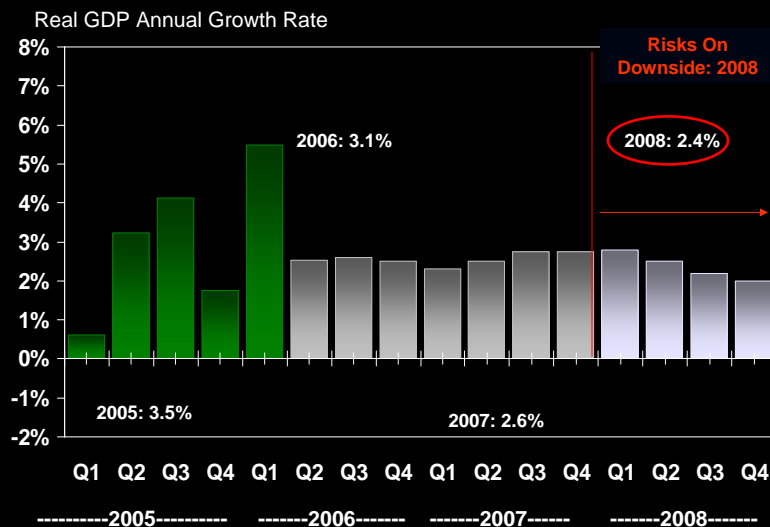
- **Higher Inflation Premiums**
 - Add to "Real" Rates
- **Federal Reserve**
 - New Fed Chairman demonstrates resolve
 - Favors Inflation Targeting (2%)
- **Larger Public Demand for Funds**
 - Middle East
 - New Orleans
- **Private Demand for Funds Increase**
- **Foreign Supply Slows**
 - Weak Dollar lower foreign returns
 - Competing Investment Instruments
- **Strength in Equities Draws Funds from Bond Market**

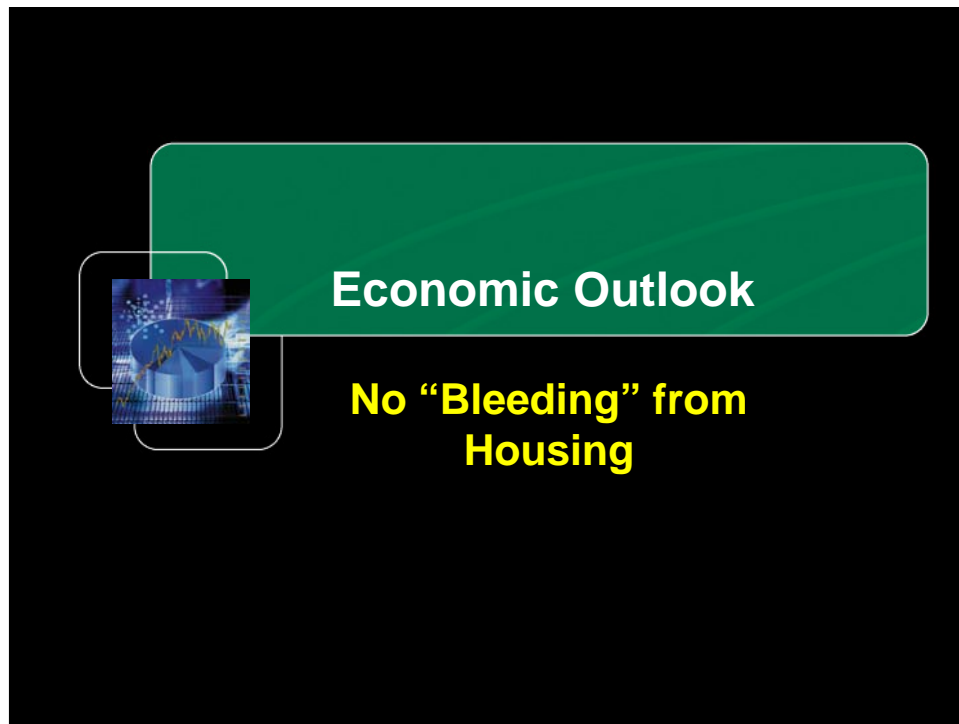


Consumer Worksheet

- 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**

Economic Outlook : Real GDP Growth

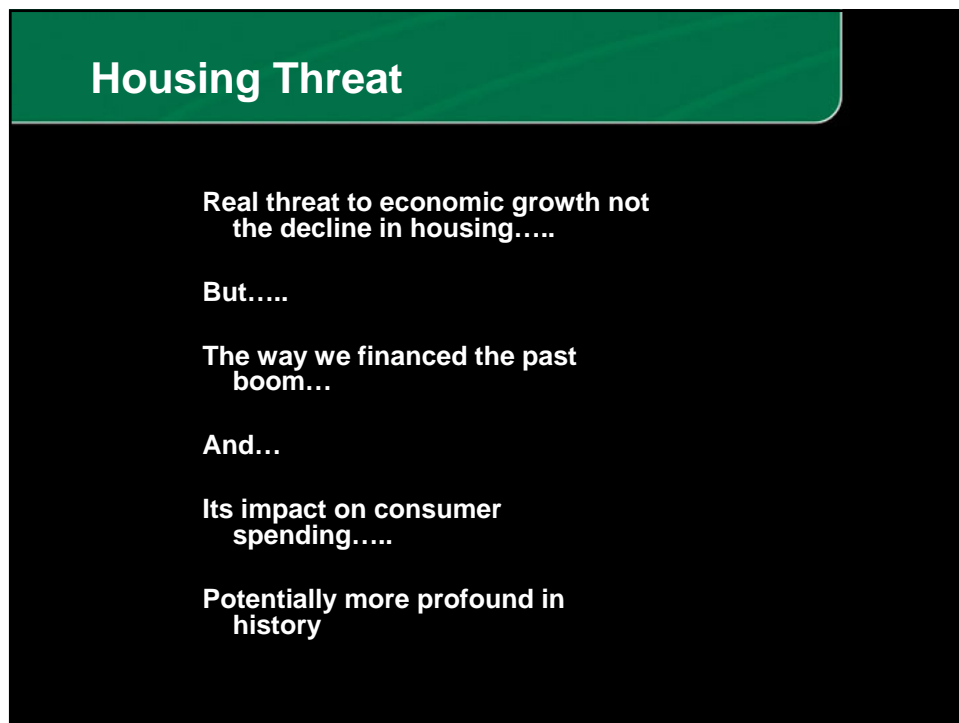




Economic Outlook

No “Bleeding” from Housing

The slide features a dark background with a green rounded rectangular header. To the left of the header is a small square icon containing a blue and white line graph with a rising trend. The text is centered and uses a bold, sans-serif font.



Housing Threat

- Real threat to economic growth not the decline in housing.....
- But.....
- The way we financed the past boom...
- And...
- Its impact on consumer spending.....
- Potentially more profound in history

The slide has a dark background with a green rounded rectangular header. The text is centered and uses a bold, sans-serif font. The list items are separated by vertical ellipses.

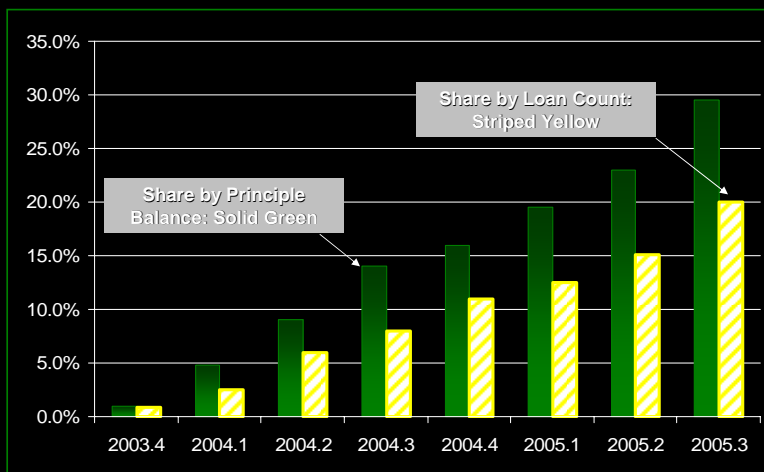
Growing Home Price & Income Gap

Annual Growth Rate Comparison

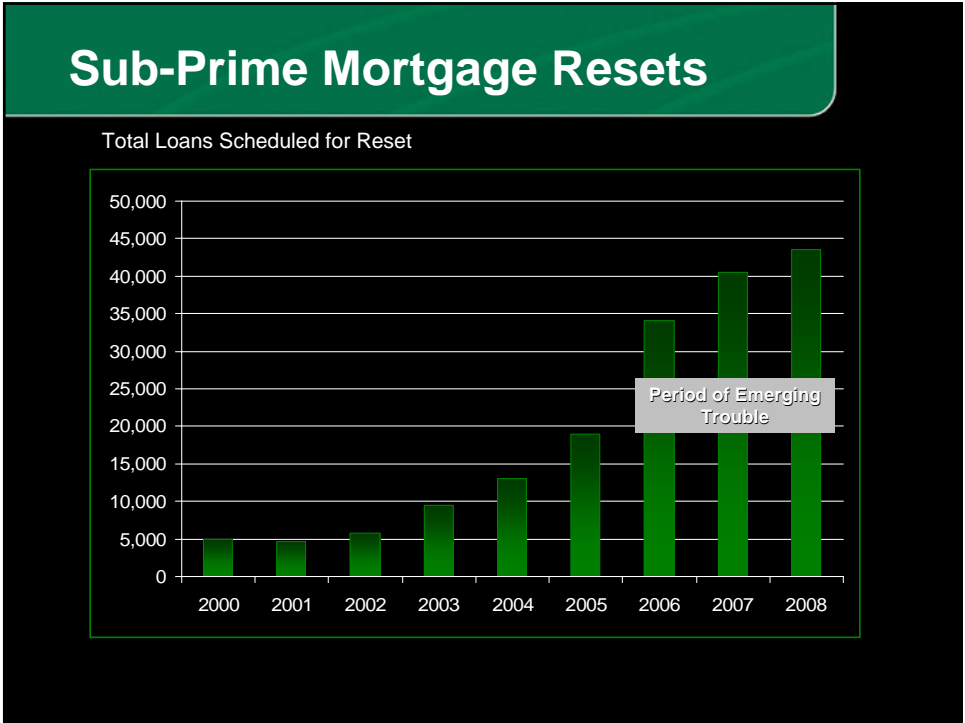


Emergence of Exotic Mortgages

Interest Only Loan Share of Sub-Prime Market

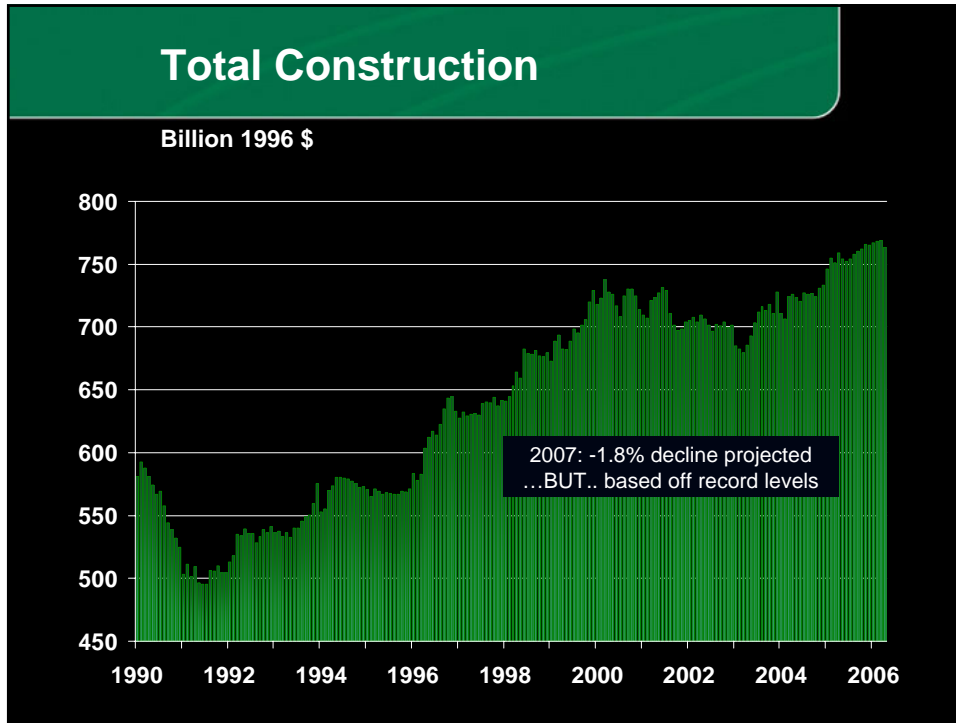


Note: Sub-Prime accounts for 36% total mortgage market



Construction & Cement Outlook

Overview



Changing Composition of Construction Spending Growth

2001-2005	2006-2009
Low Interest Rates, Weak Economy	Rising Interest Rates, Strong Economy
<ul style="list-style-type: none"> ■ Growth Leader: Residential <ul style="list-style-type: none"> ■ Low Interest Rates ■ Public <ul style="list-style-type: none"> ■ State Tax Revenues Hurt by Anemic Economic Growth ■ Growth Laggard: Nonresidential <ul style="list-style-type: none"> ■ Weak Economy 	<ul style="list-style-type: none"> ■ Growth Leader : Nonresidential <ul style="list-style-type: none"> ■ Strong Economy ■ Public <ul style="list-style-type: none"> ■ State Tax Revenues Recovery Due to Strong Economic Growth ■ Growth Laggard : Residential <ul style="list-style-type: none"> ■ Rising Interest Rates

Construction Spending Vs Cement Consumption

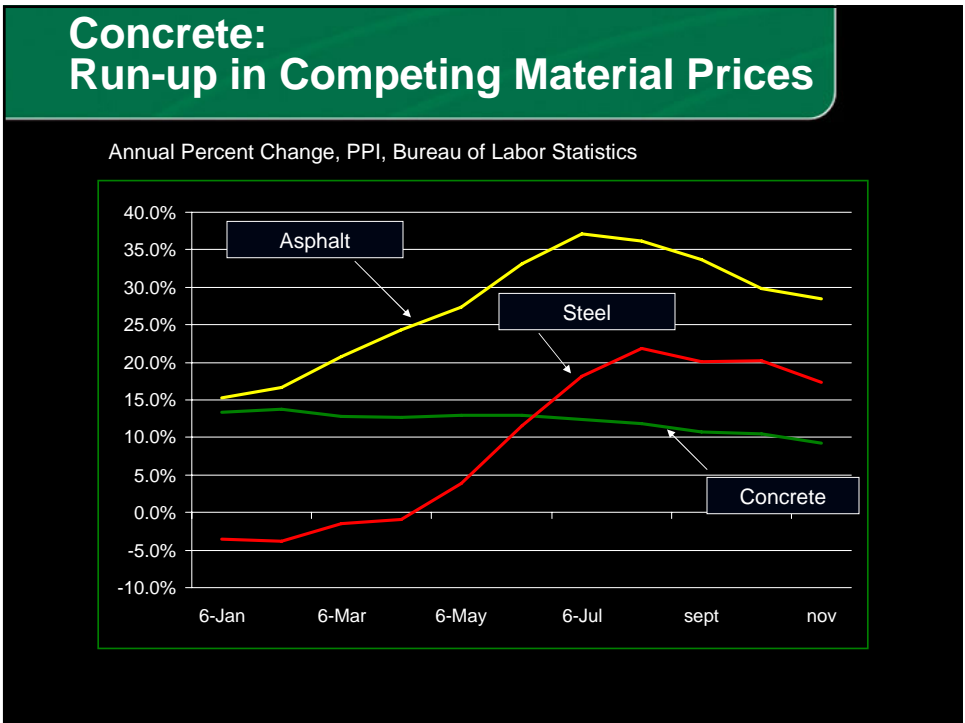
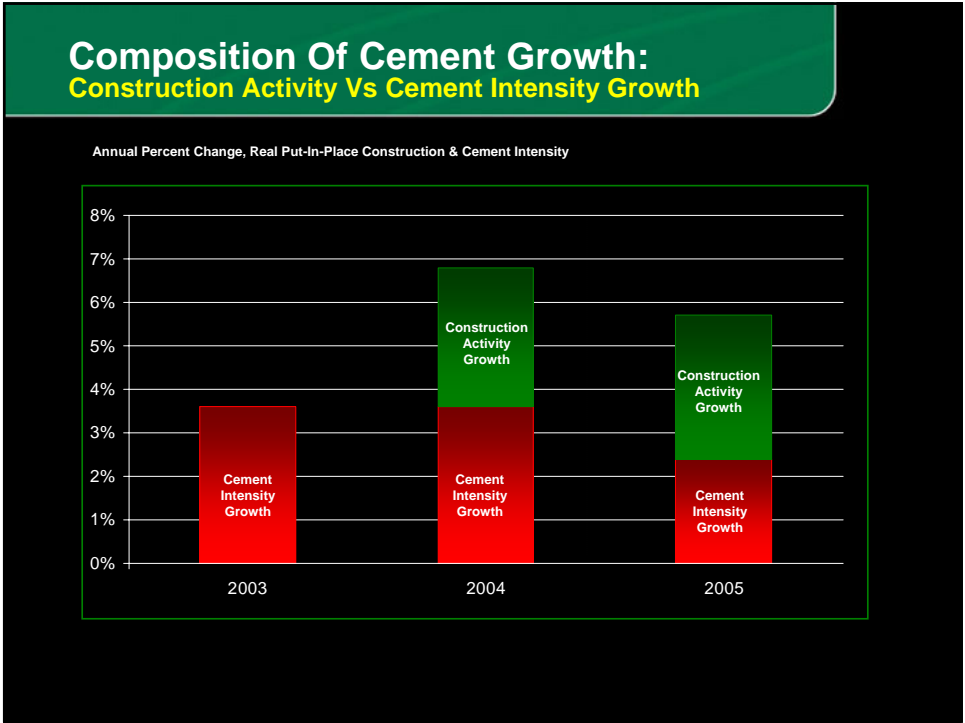
Slight weakening in
construction activity

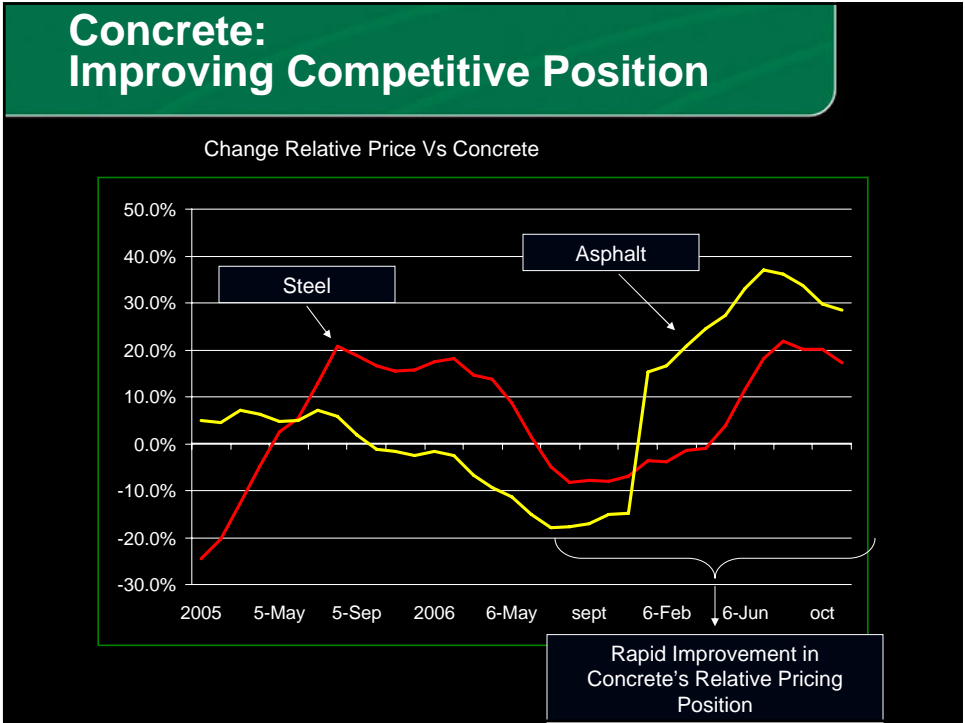
But.....

More concrete use per dollar
of spending

Cement Intensities

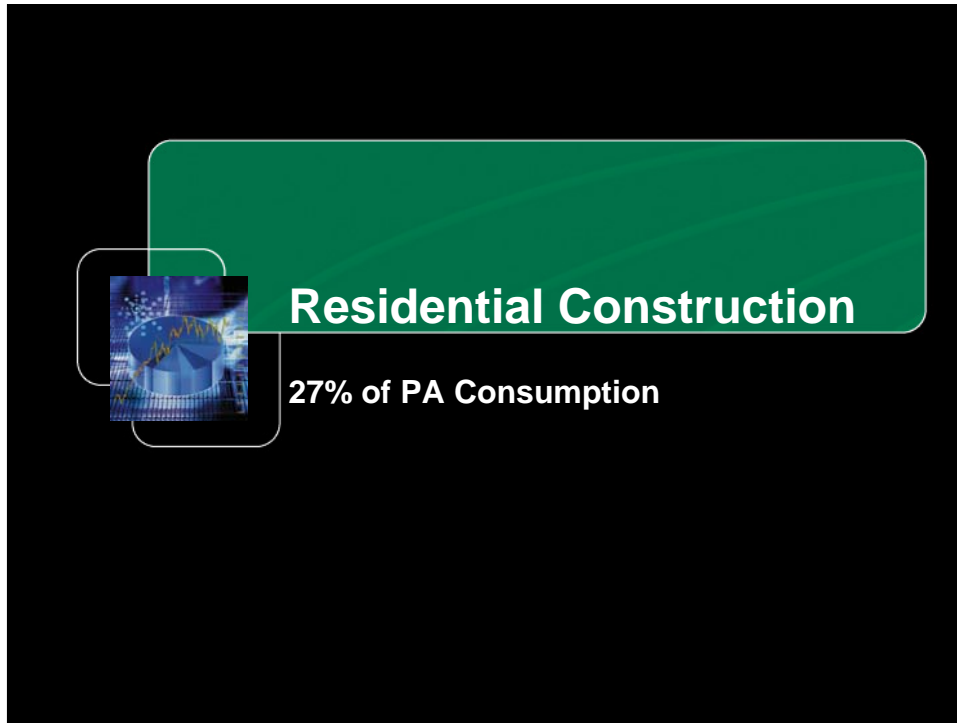






Competitive Position Vs Asphalt

- Sustained high oil prices**
- Plus.....**
- More efficient refining processes**
- Suggest.....**
- New competitive position of
Concrete is sustained...**
- It is not a temporary phenomenon**



Residential Construction

27% of PA Consumption

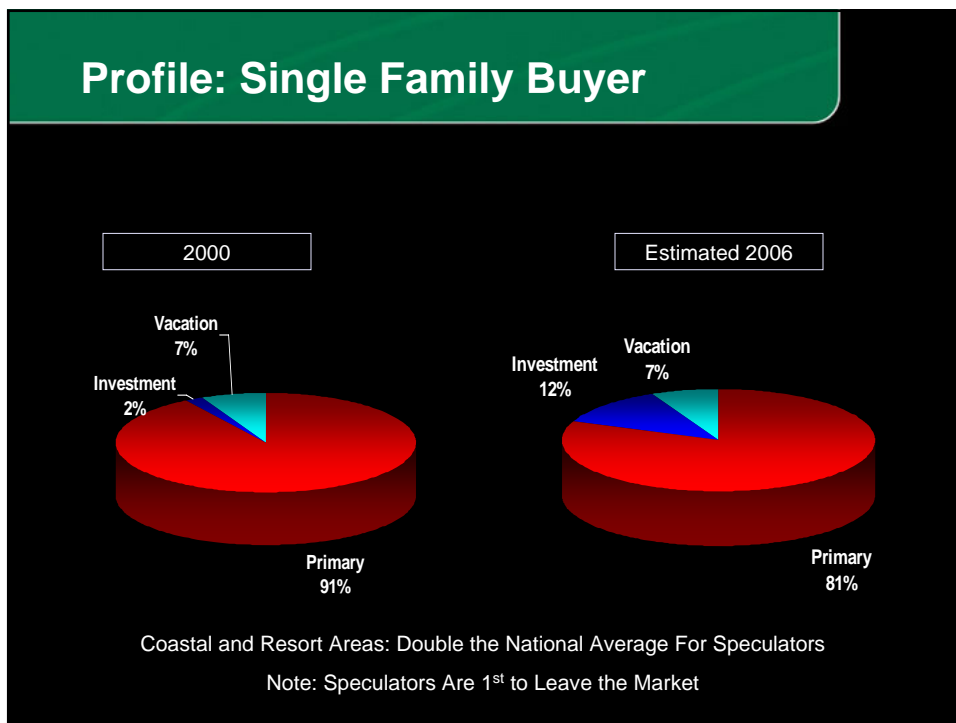
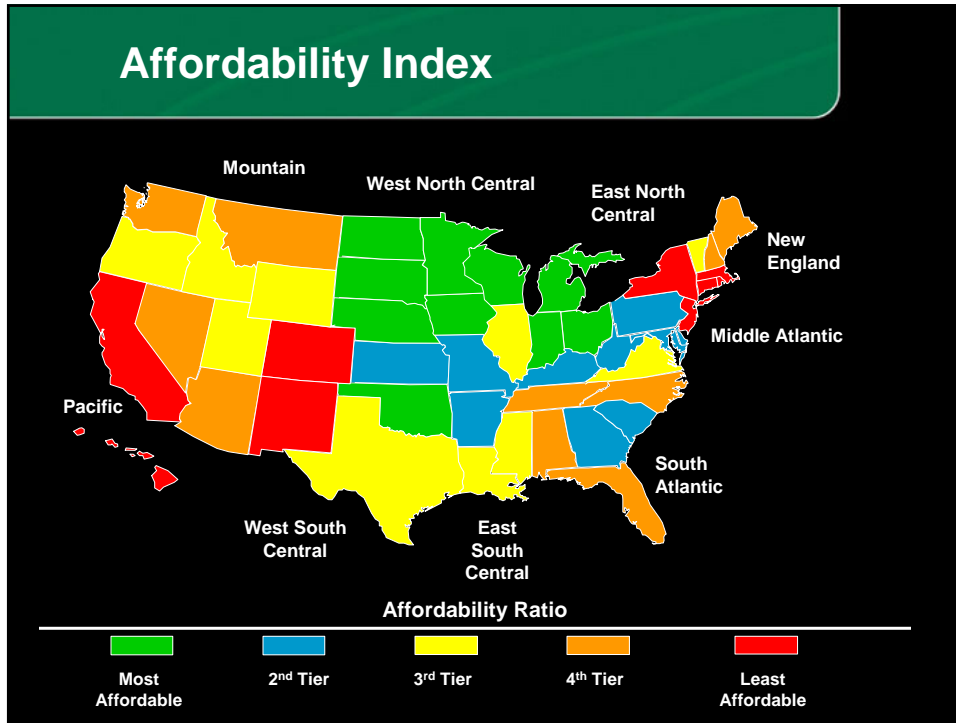
Strength in Starts More Than Low Rates...

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.

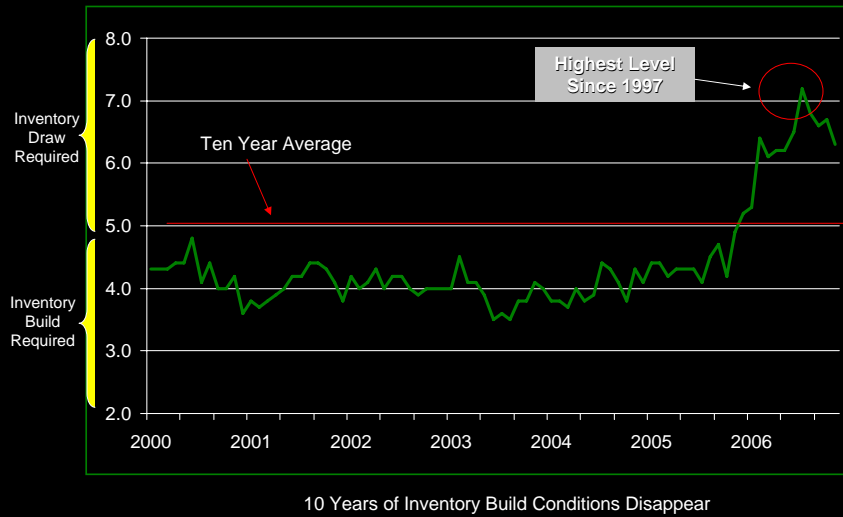
The Cyclical Downside: 2006 - 2009

- 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



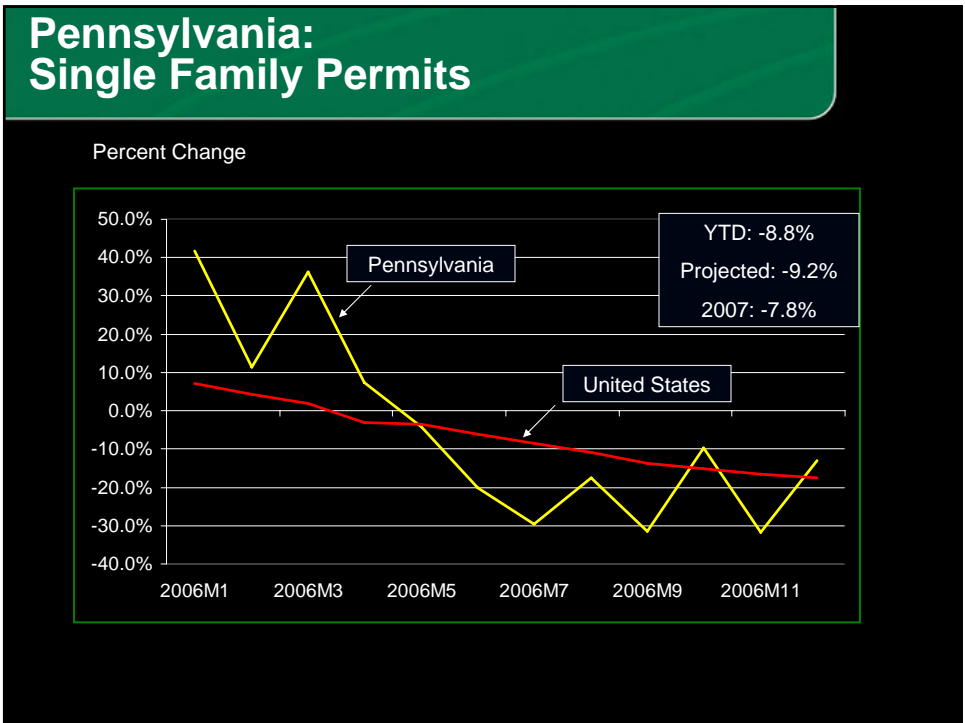
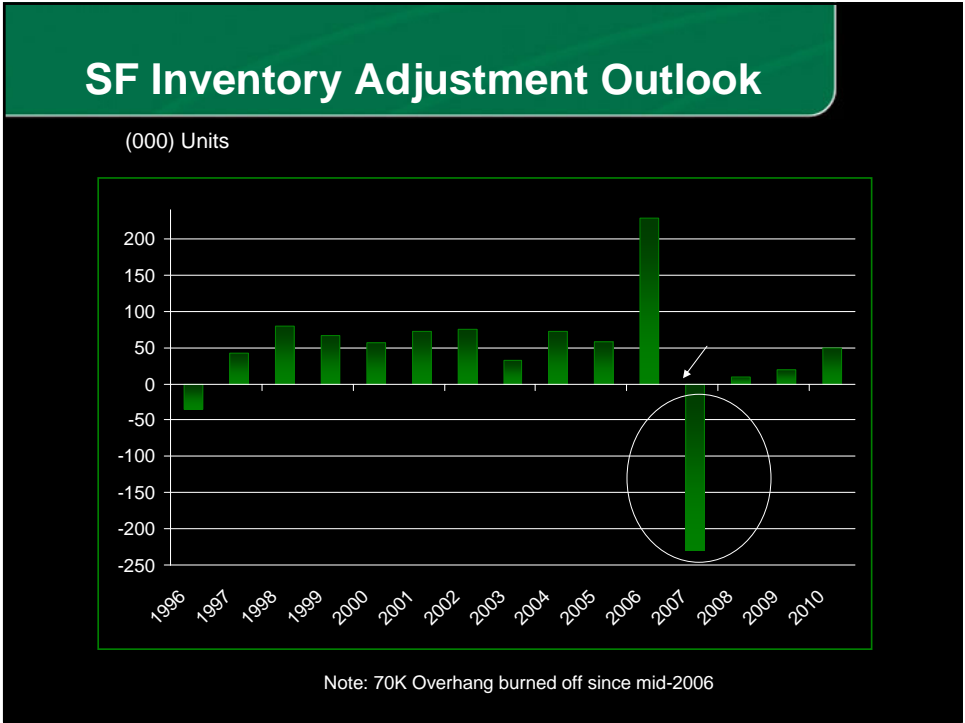
Inventory Draw Required

Homes on Market/Monthly Selling Rate




Estimating the Size of Overhang and Speed of Burn Off

- **What is the desired level of inventory?**
 - Historical: 5 months....Overhang = 135K
 - Past cyclical low: 3.5 months....Overhang = 283K
 - **PCA** 4 months assumption...Overhang = 233K
- **When is excess burned off?**
 - 5 months desired supply = February 2007
 - 4 months desired supply = July 2007 (**PCA**)
 - 3.5 months desired supply = November 2007
- **Slow gradual gains achieved after burn off.**



Nonresidential Construction

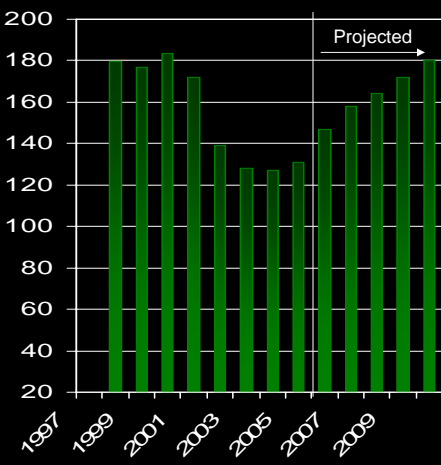


18% of PA Consumption

Nonresidential Outlook

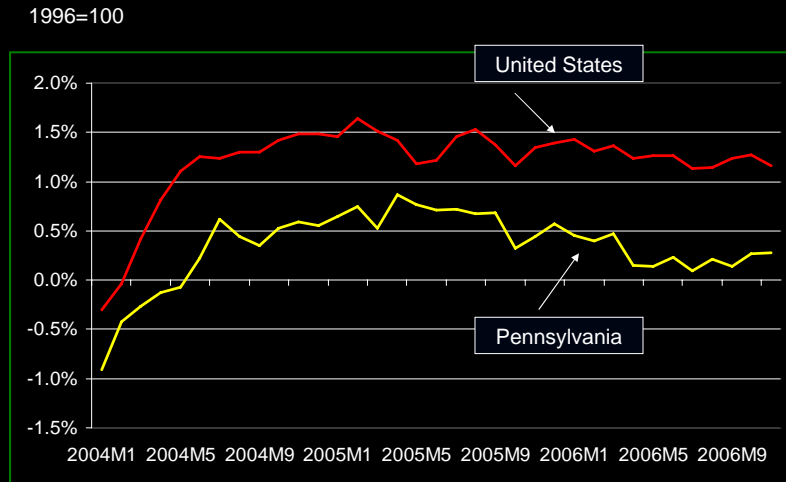
- Underlying nonresidential drivers improving.
- Despite large percentage gains for 2006, most markets weak from historical perspective.
- Past cyclical peak not realized.
- Slower growth outlook depresses expected ROI and tempers recovery.
- High material costs reduce growth.
- Increasing cement intensities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

Billion Dollars, Real 1996 \$



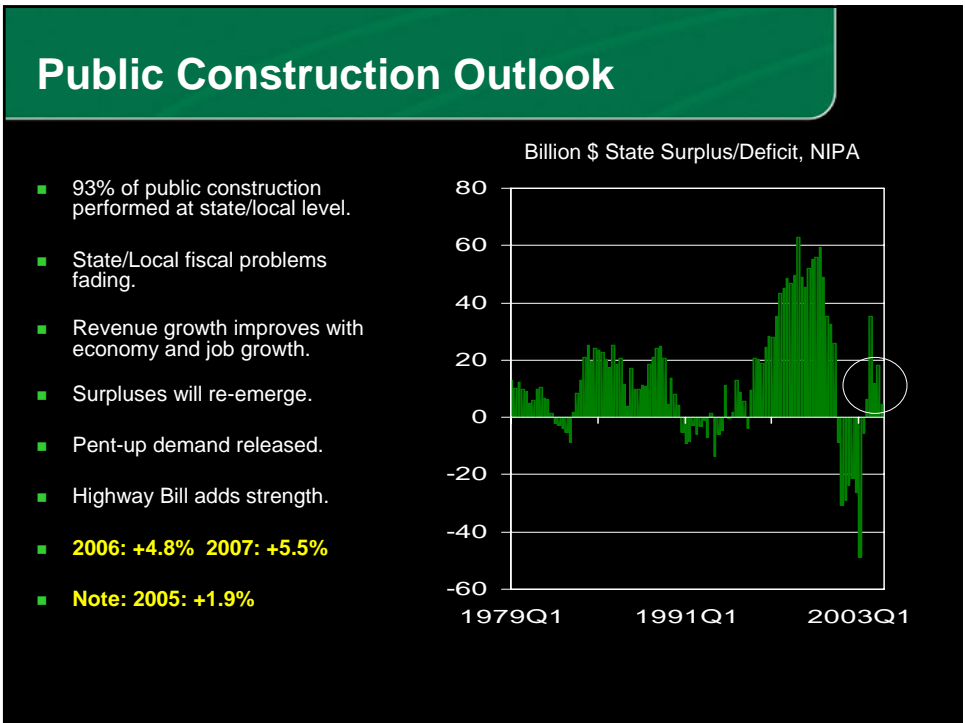
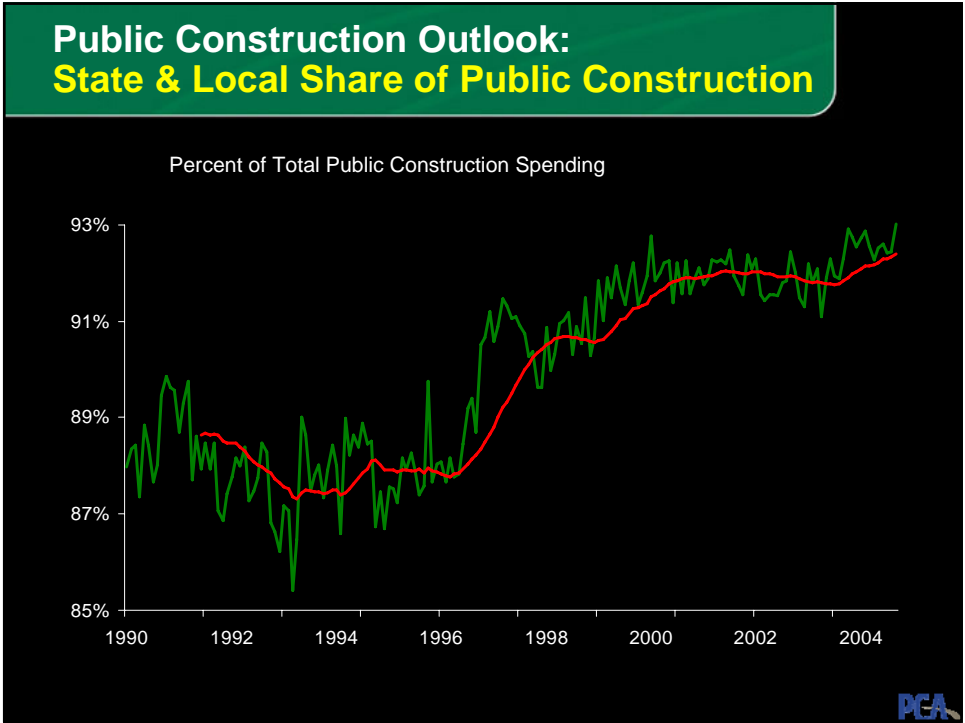
Year	Value (Billion Dollars)
1997	180
1998	175
1999	170
2000	185
2001	170
2002	140
2003	130
2004	125
2005	125
2006	130
2007 (Projected)	145
2008 (Projected)	160
2009 (Projected)	170

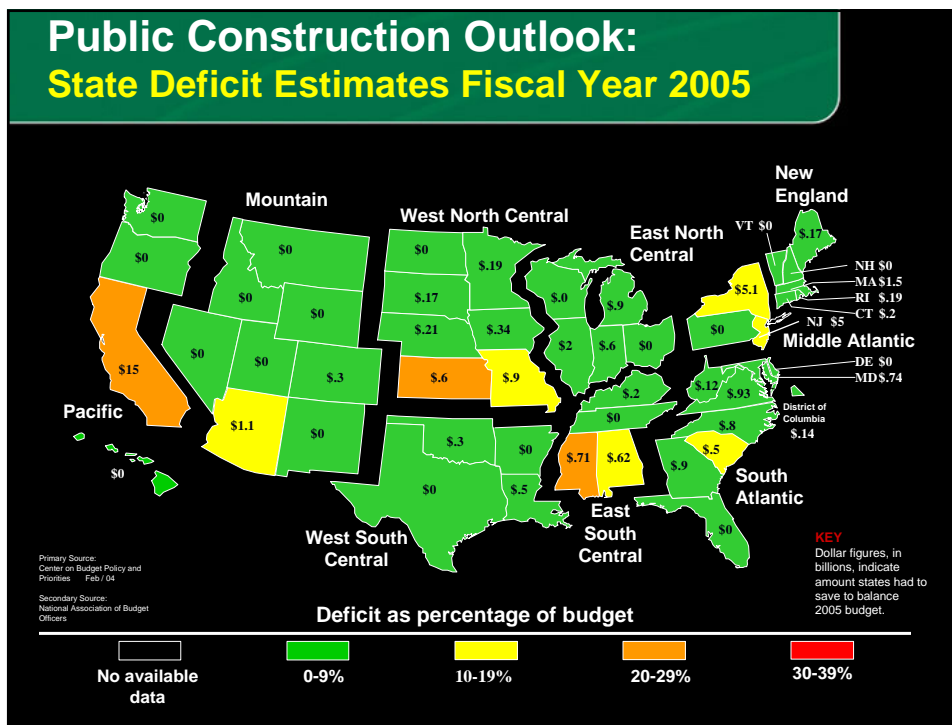
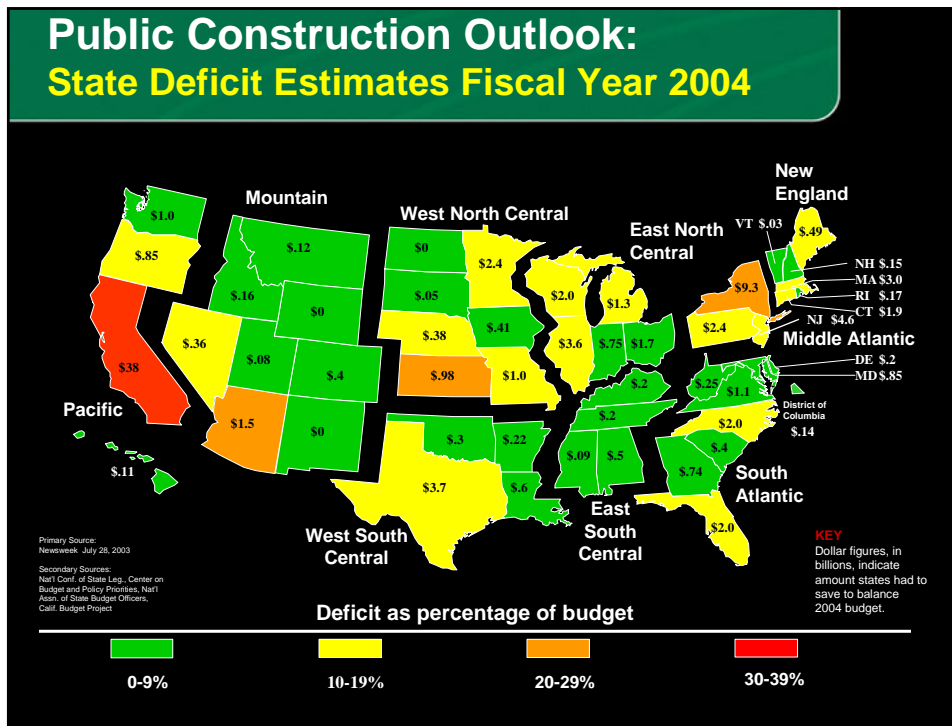
Pennsylvania: Nonresidential Employment



Public Construction

55% of PA Consumption





Construction Costs

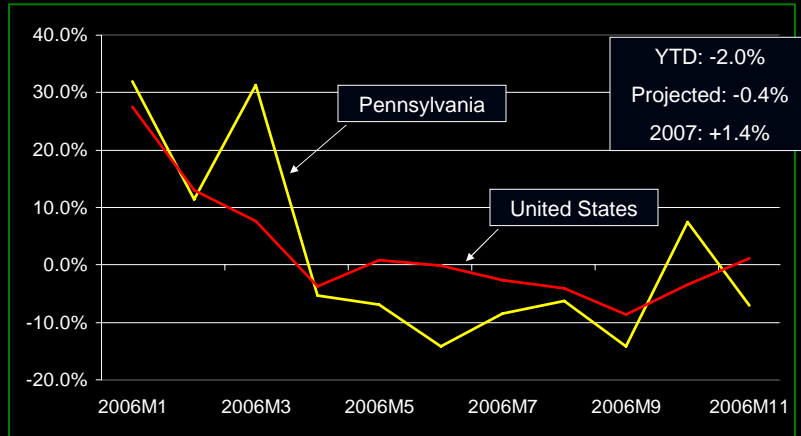


Market Conditions



Pennsylvania: Portland Cement Consumption

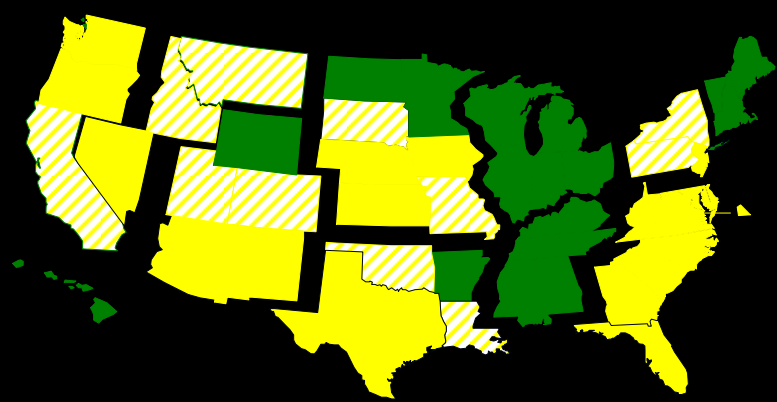
Percent Change



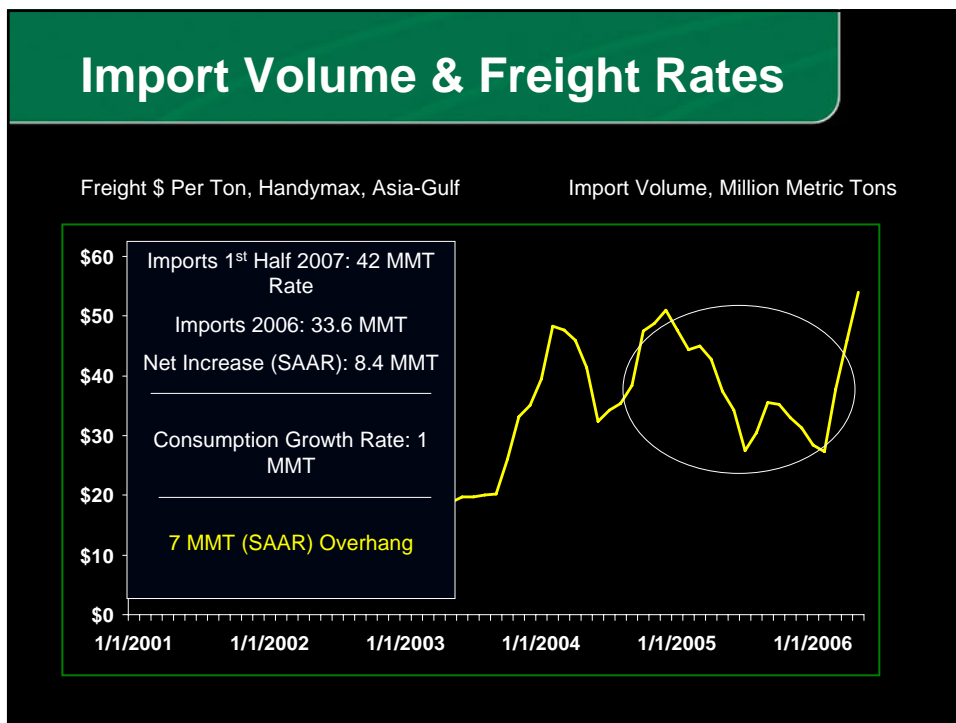
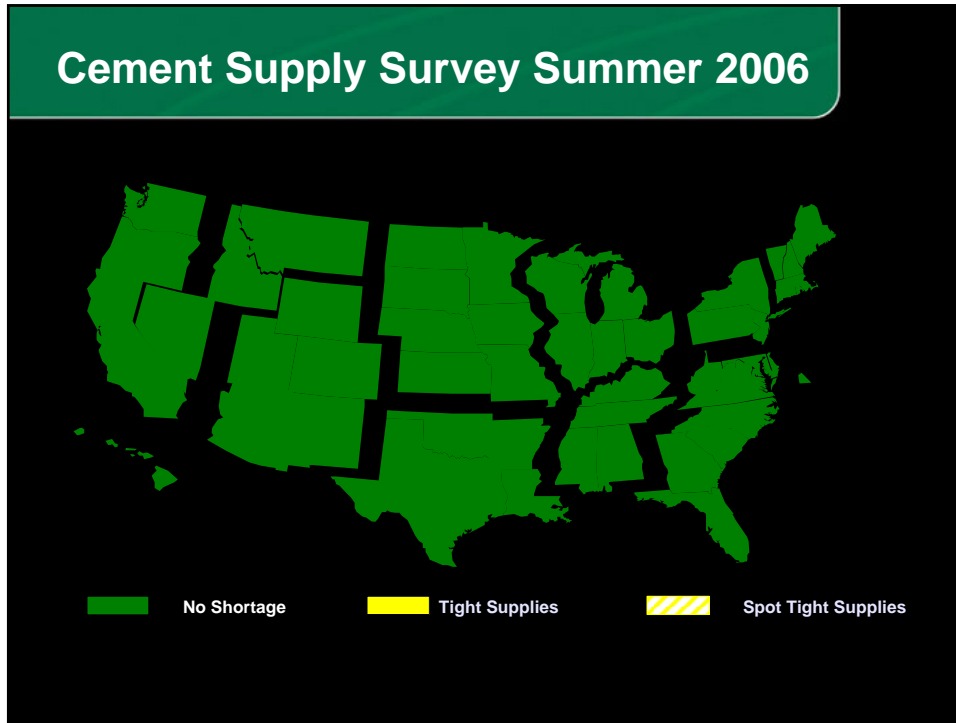
YTD: -2.0%
 Projected: -0.4%
 2007: +1.4%

Marginal decline based on housing and from 3.3 MMT Market:
 Weakness continues in West, Marginal gains in East

Cement Supply Survey Summer 2005



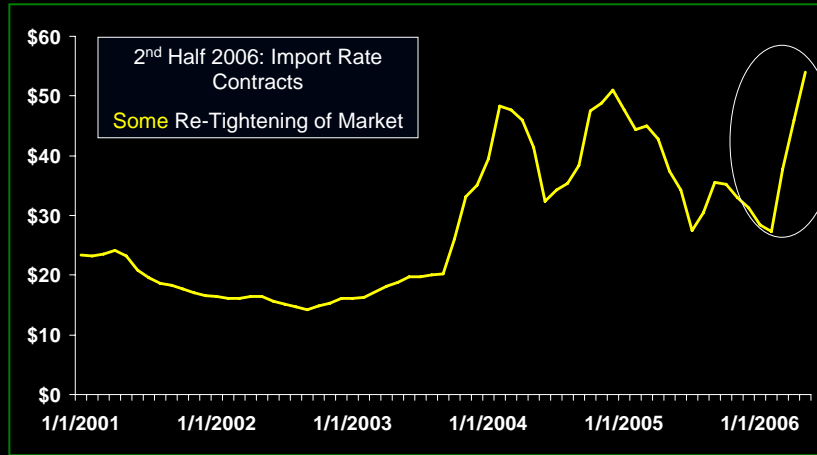
■ No Shortage
 ■ Tight Supplies
 Spot Tight Supplies



Import Volume & Freight Rates

Freight \$ Per Ton, Handymax, Asia-Gulf

Import Volume, Million Metric Tons



Conclusions



Cement Outlook: 2007



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