

US Construction Market Outlook

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Robert Gair, Principal
RSMeans Business Solutions

 **Reed Construction Data**
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1 PREDICTION

RED SOX

WIN!!!!

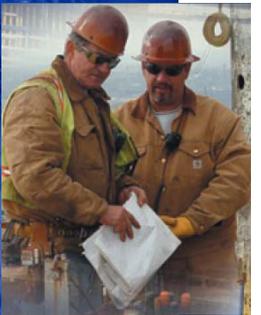
WORLD SERIES



Construction Overview

Update from Nov '07

- **Banner year for non-residential construction**
- **Economy very solid, business investment growing**
- **Material and Labors Costs on the Rise**
- **Capital spending has slowed**
- **Housing bleak through '08, some areas '09**
- **Crude oil up from high of \$66 to \$96 per barrel**



Economic Issues

Positive

- **Economy Has Solid Momentum**
- **Global Growth Remains Strong**
- **Office Vacancy Rates Falling**
- **Consumer Equity Still in Good Supply**
- **Credit Position is Good**
- **Inflation Steady to Lower**



Economic Outlook

Negative

- Sub-prime problems until 2009
- De-valuation of the Dollar
- Trade Deficits





Economic Outlook

Projections...

- Recession possibility 30 – 40%
- GDP projections 1.4 – 2.8%

Key Indicators to Watch...

- Consumer confidence
- Job Creation over 100K per month

Construction Overview

■ Non-Residential

- Increase at a pace of 17% through '07

■ Heavy

- Increase to 11.5% for Highway, Sewer and Water

■ Housing

- Increase slowed to (-)16% through '07



Construction Overview

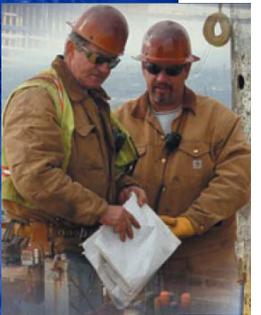
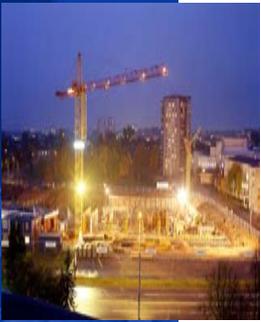
Material Prices

■ Energy costs

- ❑ Crude oil futures bottomed in January
- ❑ Forecast Oil @ \$96. pb and higher
- ❑ Diesel fuel, asphalt, plastics will be on the rise

■ Other comments

- ❑ Gypsum – decline close to 20%
- ❑ Increase of only 1.6%, lower than CPI of 2.4%
- ❑ Since 2003 PPI 28% vs. CPI 13%
- ❑ Forecast 6 – 8% increase for '08
- ❑ Forecast thru 2012 in the same range



2005 - 2007 Construction Results

	<u>'05</u>	<u>'06</u>	<u>'07</u>
■ Resi	11.0%	-13.0%	-16.0%
■ Office	6.3%	14.0%	21.0%
■ Health	6.9%	14.0%	15.0%
■ Ed.	1.3%	6.0%	14.0%
■ Trans	2.0%	12.0%	11.0%
■ Comm	5.2%	10.0%	20.0%
■ Manu	20.7%	22.0%	6.0%



Material Price Changes

<u>Material</u>	<u>'03</u>	<u>'04</u>	<u>'05</u>	<u>'06</u>	<u>'07</u>
#2 diesel fuel	13.0	37.9	46.3	2.3	22.3
Asphalt paving	3.7	4.3	4.2	37.9	1.6
Concrete	1.5	7.6	9.8	10.4	3.6
Plastics	3.2	7.2	22.6	20.1	-1.9
Gypsum	2.8	20.0	18.2	21.2	-21.6
Insulation	2.0	8.6	2.6	7.1	-4.6
Lumber	3.1	5.0	-1.0	-6.1	-1.1
Arch Coatings	3.9	5.3	9.2	8.6	4.3
Steel	1.7	48.8	-3.6	23.3	-3.7
Copper	11.6	29.6	31.0	81.0	0.5
Aluminum	-0.5	9.9	6.6	15.6	1.9



Material Price Changes (2003 – 2007)

Material

'03 – '07

#2 diesel fuel	151.0%
Asphalt paving	55.3%
Concrete	31.8%
Plastics	28.9%
Gypsum	25.6%
Insulation	11.3%
Lumber	-3.5%
Arch Coatings	27.3%
Steel	59.3%
Copper	157.7%
Aluminum	29.1%

05

Material Price Changes

<u>Material</u>	<u>'03</u>	<u>'04</u>	<u>'05</u>	<u>'06</u>	<u>'07</u>
Fab metals	0.1	24.7	3.0	7.5	3.8
Fab Blds	-0.1	20.0	3.3	8.0	5.4
Prefab Blds	-0.7	35.5	2.8	1.2	2.7
Equipment	1.3	6.0	5.0	3.2	2.1
Crude Petro	14.3	30.5	51.3	15.7	23.2
Ind N Gas	20.3	20.1	31.5	-2.9	-4.7



Material Price Changes (2003 – 2007)

<u>Material</u>	<u>'03 – '07</u>
Fab metals	38.2%
Fab Blds	32.4%
Prefab Blds	48.5%
Equipment	17.1%
Crude Petro	154.7%
Ind N Gas	21.3%

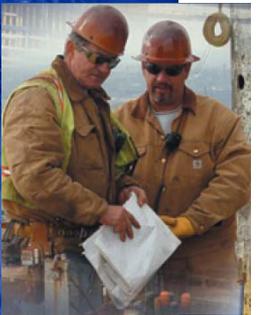
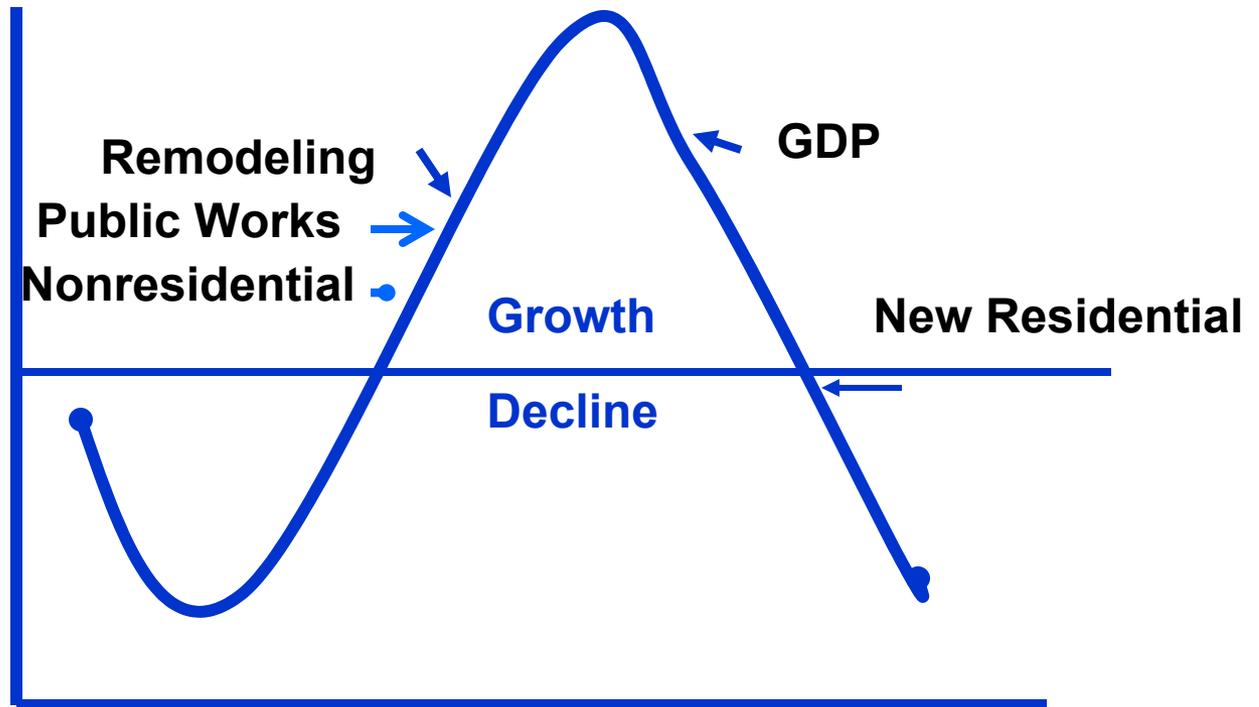


Energy Prices Threaten GDP Growth

	2005	2006	Sept 2007
Crude Oil (\$/bbl.)	54.00	58.00	96.00
Gasoline (\$/gal.)	2.12	2.60	3.09
Natural Gas (\$/Mbtu)	7.15	11.70	7.84
Heating/Diesel (\$/gal. no tax)	1.51	1.81	2.17



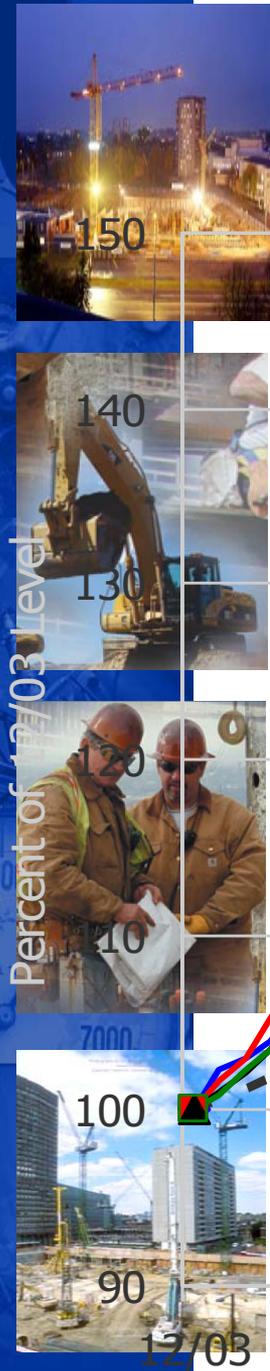
Business Cycle Status



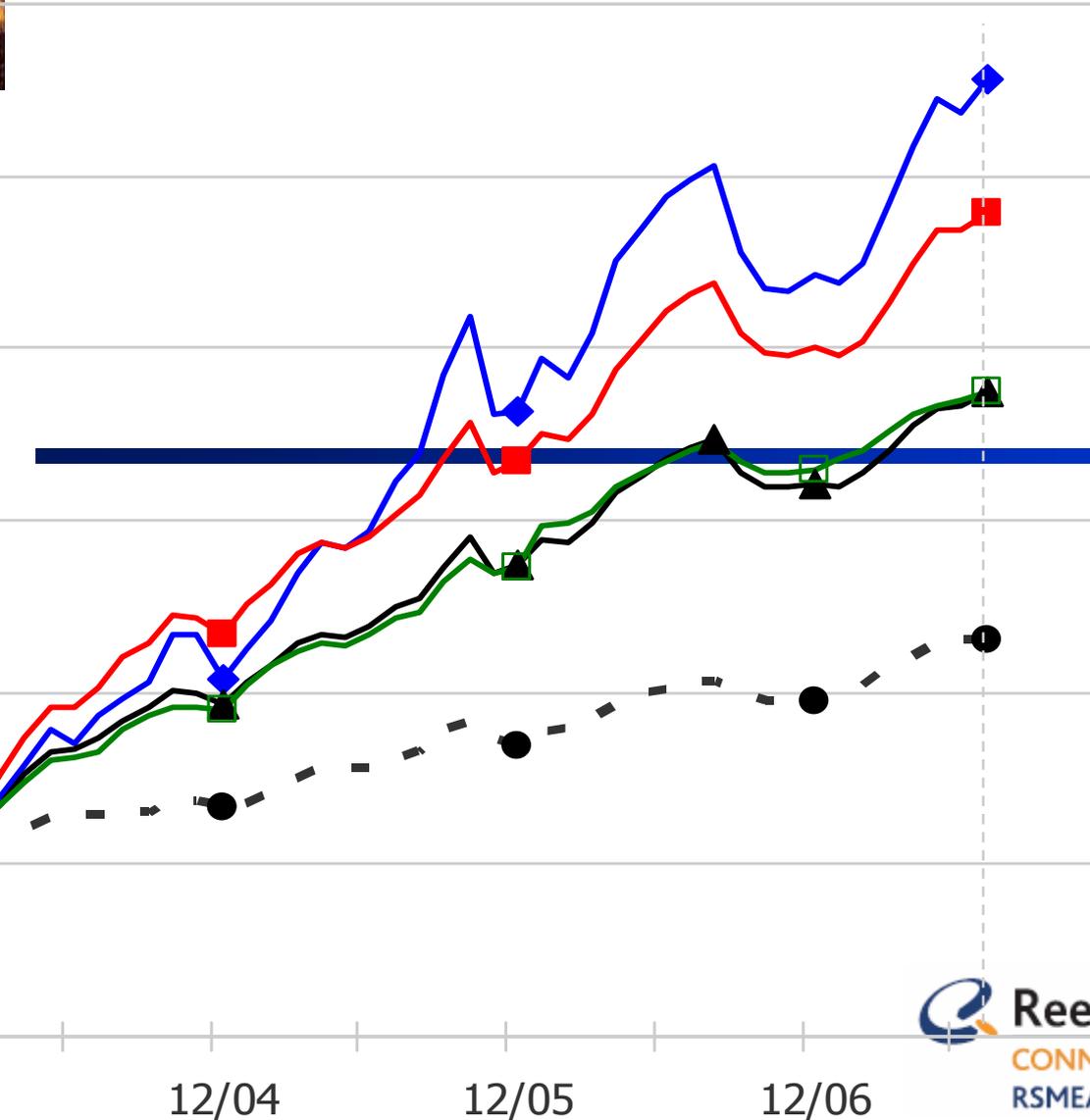
Cumulative Change in PPIs for Construction Types

(All PPIs = 100 in 12/03)

07/07



Percent of 12/03 Level

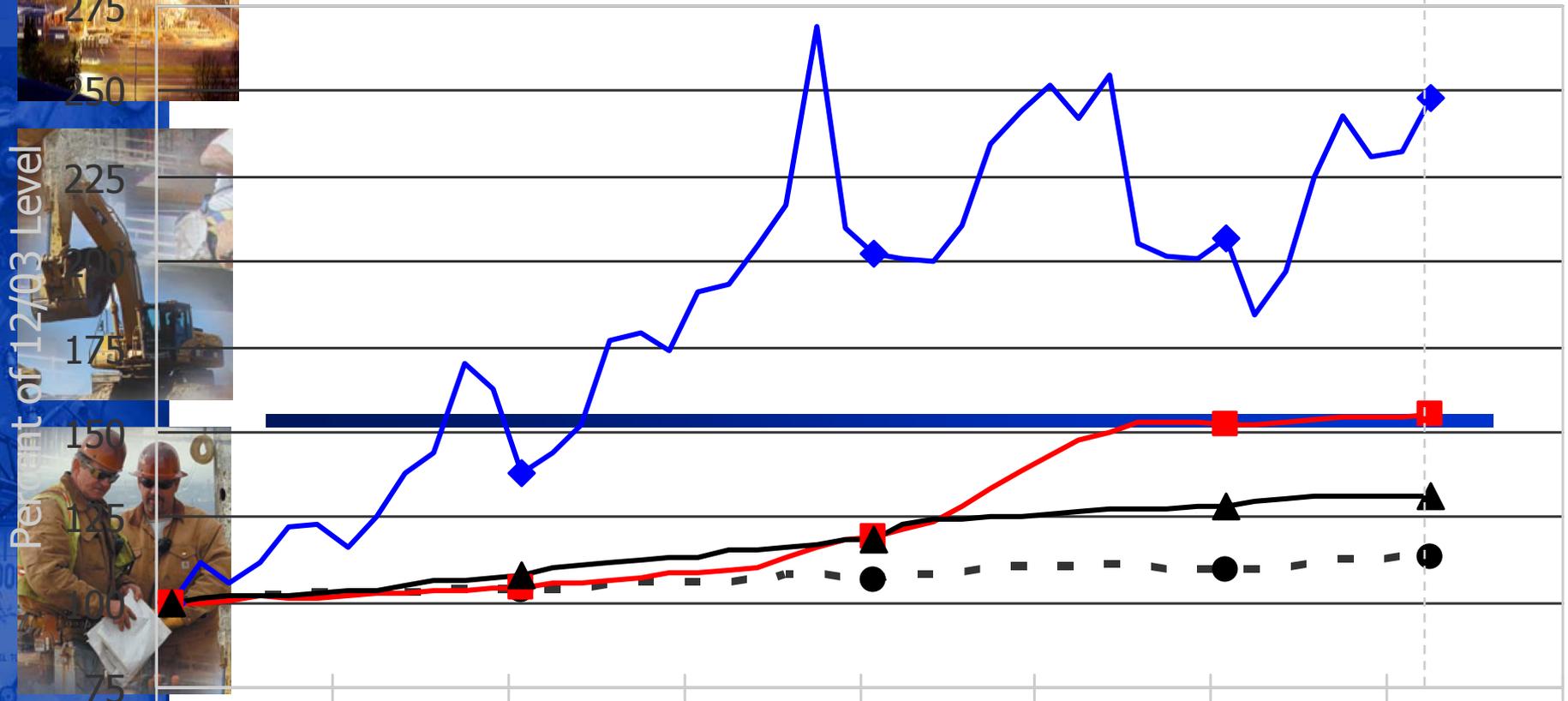


- ● - CPI-U
- ◆ — Highway & Street Construction
- ■ — Other Heavy Construction
- ▲ — Nonresidential Buildings
- □ — Multi-Unit Residential

Cumulative Change in PPIs for Selected Highway Inputs

(All PPIs = 100 in 12/03)

07/07



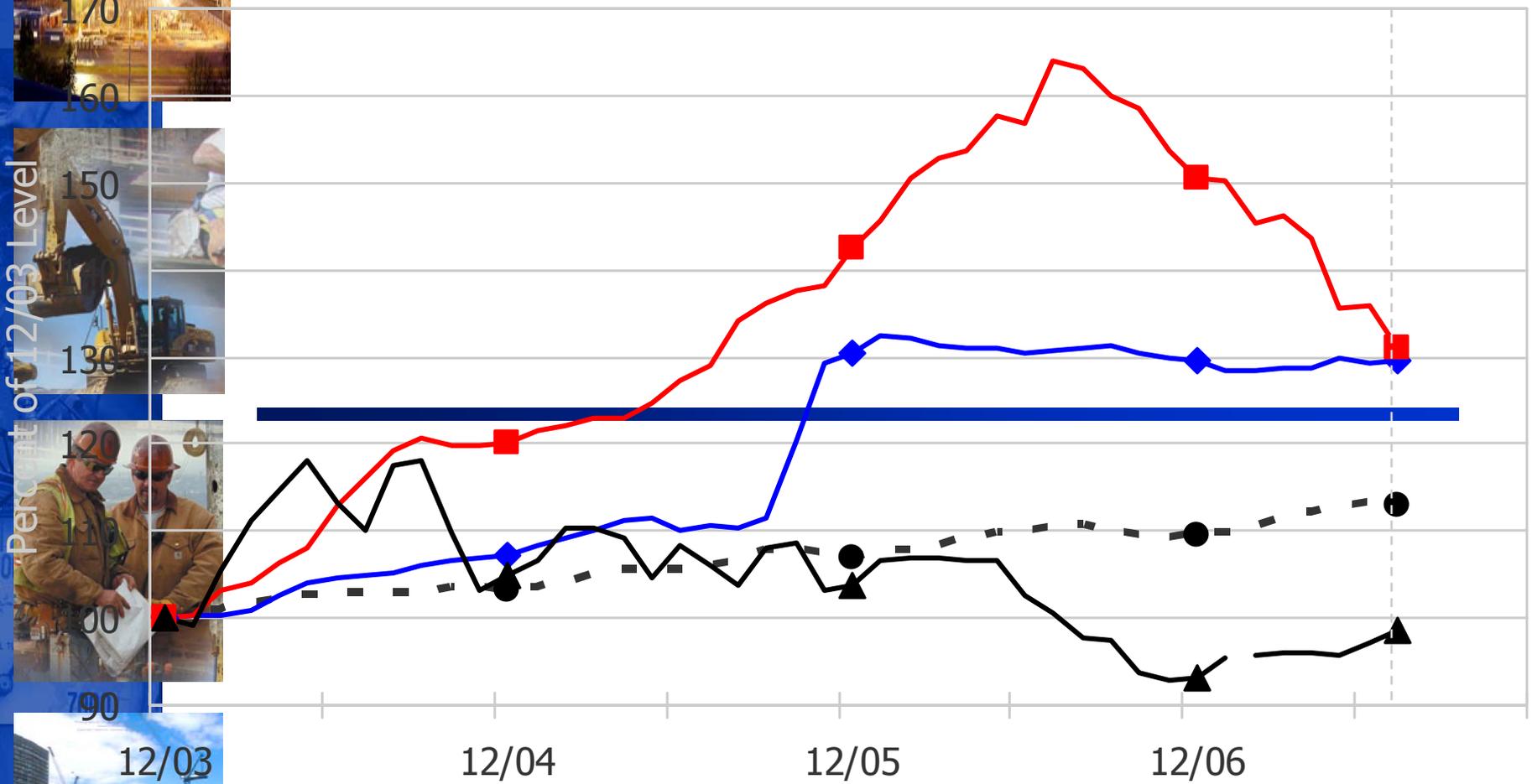
Percent of 12/03 Level

◆ #2 Diesel Fuel
 ■ Asphalt Paving Mixtures & Blocks
 ▲ Concrete Products
 ● PIU

Cumulative Change in PPIs for Selected Building Inputs

(All PPIs = 100 in 12/03)

07/07



● - CPI-U
 ■ - Gypsum Products

◆ - Plastic Construction Products
 ▲ - Lumber & Plywood

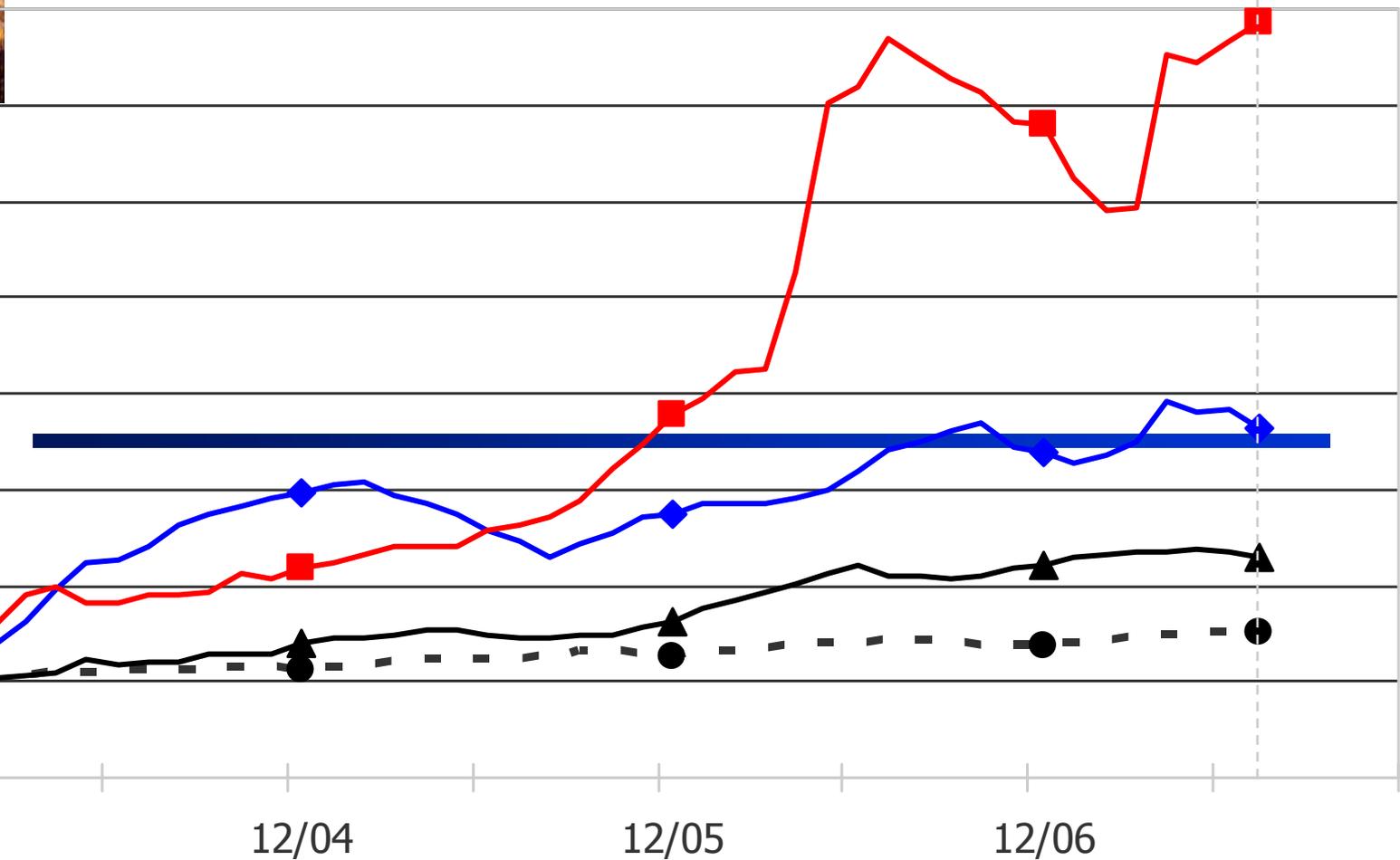


Cumulative Change in PPIs for Selected Metal Products

(All PPIs = 100 in 12/03)

07/07

Percent of 12/03 Level



● - CPI-U

■ - Copper & Brass Mill Shapes

◆ - Steel Mill Products

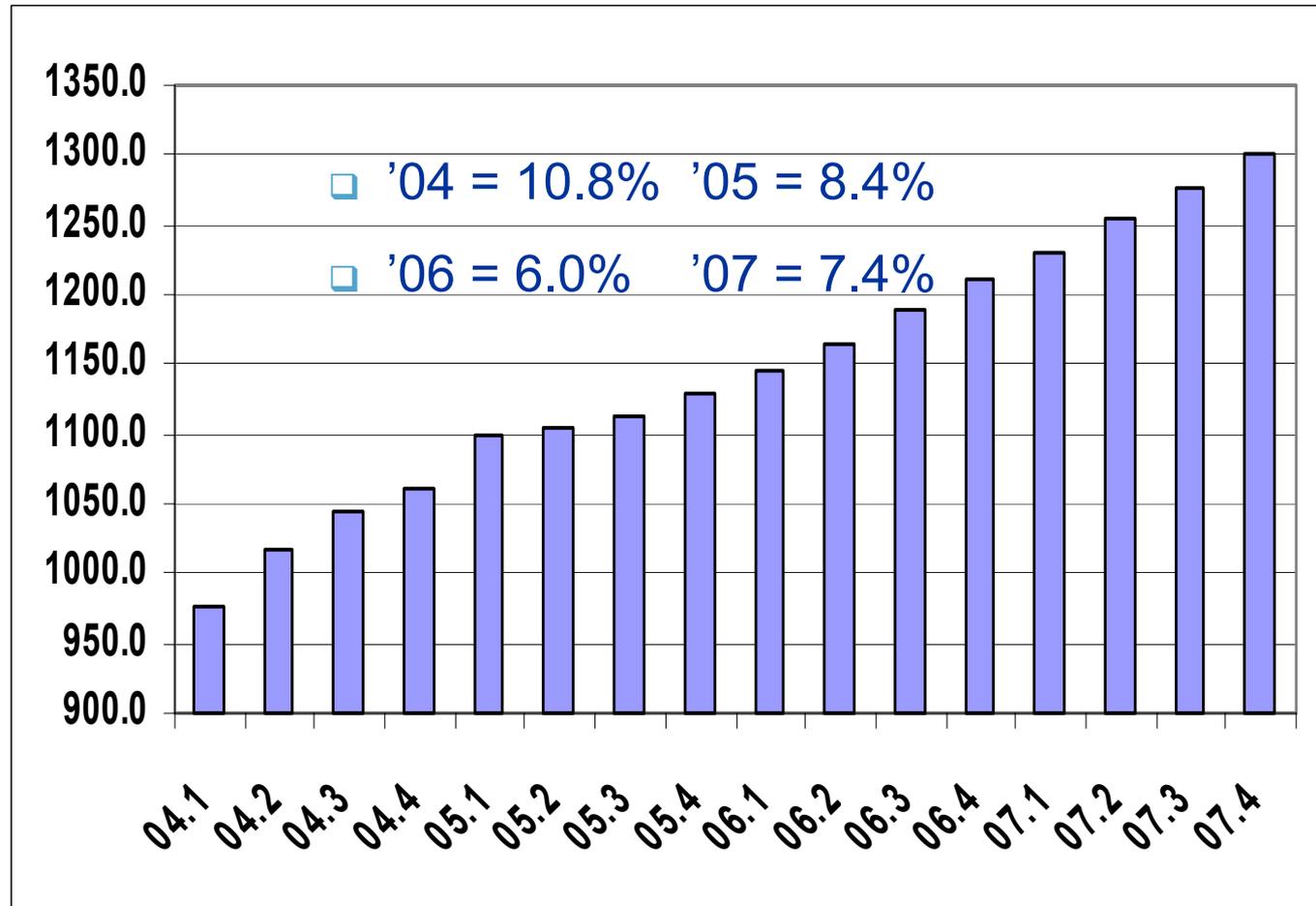
▲ - Aluminum Mill Shapes

Economic Environment for Construction

- Inflation over 3% but “core” rate 2.0% +
- GDP growth
 - '05 Q3 3.7% pre-hurricane strengthening
 - '05 Q4 3.0% disruption & reduced confidence
 - '06 1st H 4.2% rebuilding & lower energy prices
 - '06 2nd H 3.4% rising costs & inventory cuts
 - '07 2.2%
 - '08 2.8%

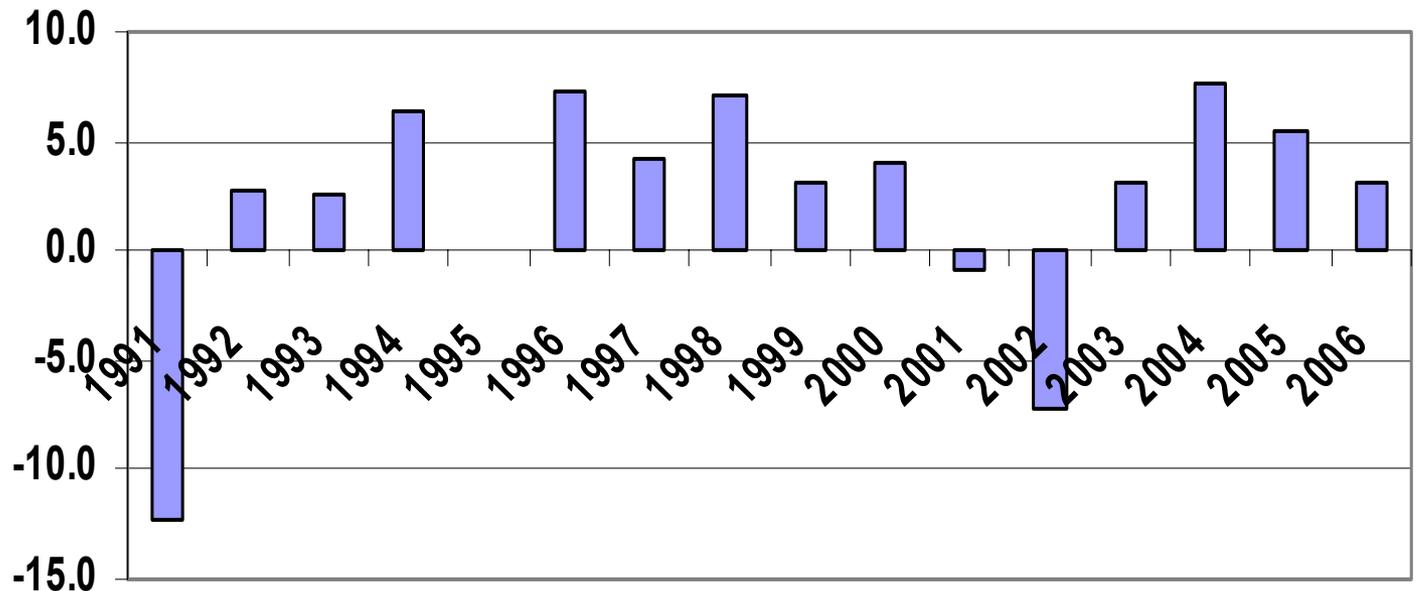


Construction Spending Outlook \$B



Current Market Slowdown is Mild

New Construction Spending
(annual % change, constant dollars)



Construction Outlook by Sector \$B

	2005	2006	2007
New Residential	\$462.4 +9.8%	\$455.5 -1.5%	\$464.5 +2.0%
Commercial	\$128.5 +4.0%	\$141.4 +10.1%	\$161.0 +10.8%
Institutional	\$178.7 +7.3%	\$202.2 +13.2%	\$222.6 +10.1%
Heavy (Engineering)	\$179.1 +7.4%	\$198.8 +11.2%	\$221.0 +11.0%



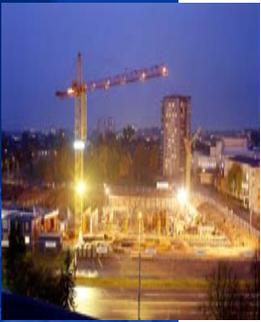
New Residential Market Forecast

Projected # of Homes Started (000's)

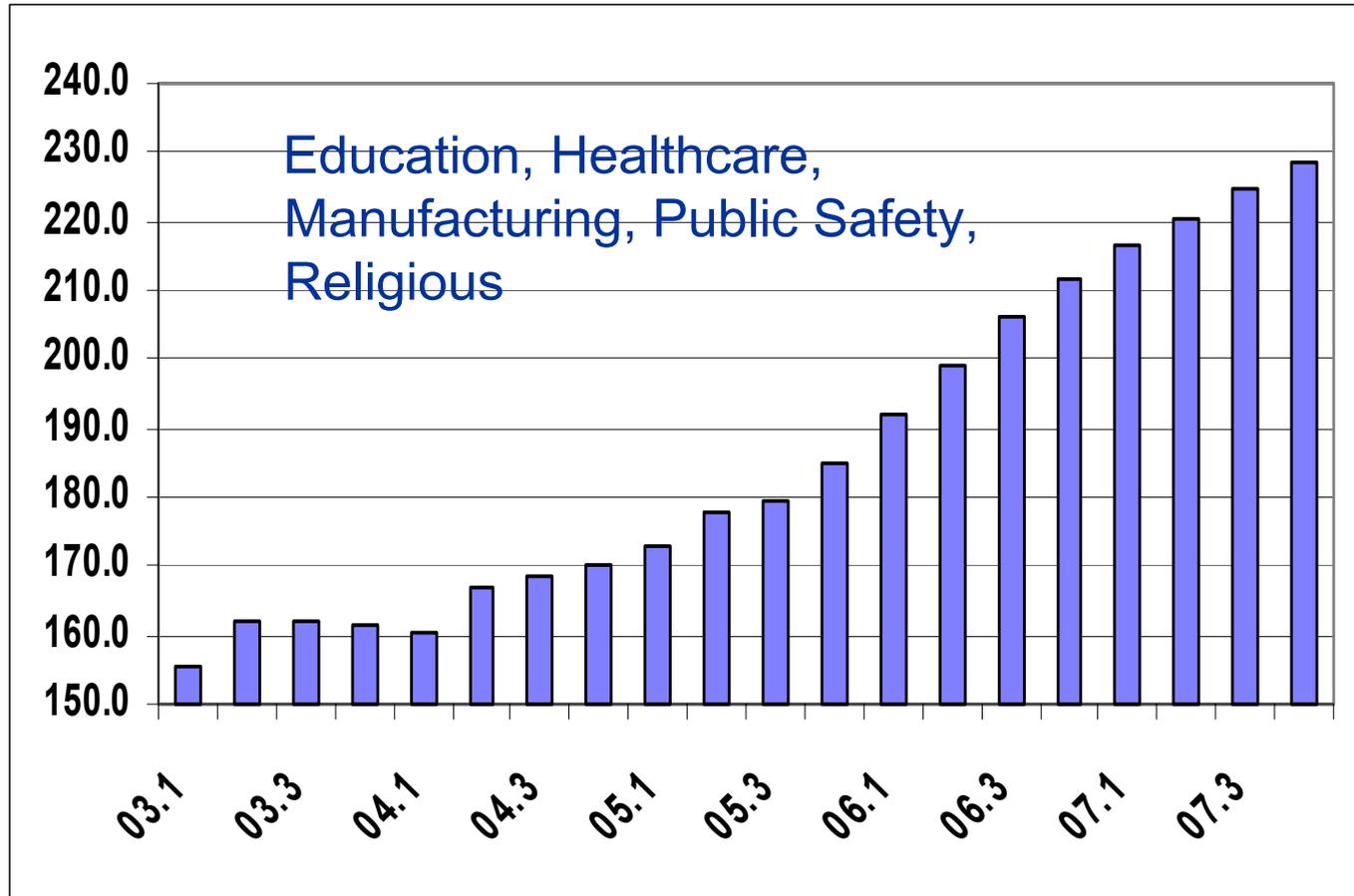
Housing Starts	2005	2006	2007
NE	187	170	167
MW	356	336	329
South	973	896	872
West	518	490	484
US	2034	1893	1850
Single Family	1688	1560	1530
Multi Family	346	333	320

Institutional Building Trends

- Rapid growth phase of building cycle beginning
- Current construction spending, after inflation, is up 2-3% over the last year and slightly above the 2000 peak level
- Projects starts are low but are now rising
- Pre-construction planning rising in most sectors
- Strong expansion expected beyond 2007 - but not as long or as strong as the boom in the 1990's



Institutional Construction Outlook \$B



Institutional Construction Spending \$B



	2005	2006	2007
Healthcare	+37.0 +8.5%	\$41.8 +13.1%	\$46.6 +11.5%
Education	\$77.1 +7.0%	\$88.5 +14.8%	\$98.0 +10.6%
Manufacturing	\$28.3 +20.1%	\$31.7 +11.7%	\$33.9 +6.9

Institutional Market Growth Drivers

■ Healthcare

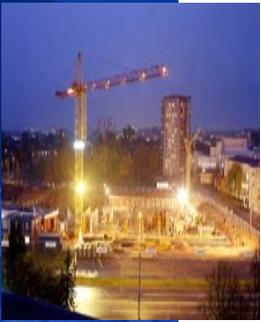
- ❑ Construction fueled by 2002-04 surge in healthcare insurance premiums and public medical programs

■ Education & Public Safety

- ❑ State and local tax receipts have been rising very strongly for two years after a depression level plunge in 2001-2002
- ❑ State budget reserves back to 4-5% of annual spending after dipping to about 2%
- ❑ Strong bonding approvals

■ Manufacturing

- ❑ Capacity use near 80%
- ❑ Declining \$US permits manufacturing to expand faster than the rest of the economy



Heavy Construction Trends

- **Delayed cyclical recovery now underway after**
 - Federal highway fund increase delayed 21 months
 - 11% spurt in 2004 materials prices delayed some projects
- **Current spending, after inflation, is 15% below 2001 peak level**
- **State & local budget balances expanding so most maintenance work back on schedule**
- **Hurricane rebuilding adds to previously scheduled projects**



Heavy Construction Spending \$B

	2005	2006	2007
Highway	\$66.4 +9.4%	\$70.8 +6.7%	\$77.3 +9.2%
Power	\$36.0 +4.2%	\$41.9 +16.4%	\$47.4 +13.1%
Water & Sewer	\$29.9 +12.9%	\$34.0 +13.5%	\$37.6 +10.7%
Transportation Facilities	\$27.0 -0.9%	\$30.3 +12.3%	\$35.4 +16.7



Heavy Market Growth Drivers

■ Highway

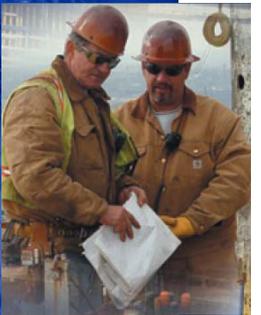
- ❑ Federal funding expanded 6-7% per year
- ❑ Catch up of projects delayed during funding debate

■ Water & Sewer

- ❑ EPA mandated improvements
- ❑ New lines and plants follow building of new neighborhoods

■ Transportation Facilities

- ❑ Mandated security related improvements
- ❑ Airline traffic rising 7% year
- ❑ Capacity reached at many port, rail and truck freight terminals



Trends

- **Building Information Modeling (BIM) is the 'hot topic'**
- **Construction Operations Building Information Exchange (COBIE)**
- **Green / Sustainability are becoming more important, particularly in Healthcare / Ed.**
- **Job Order Contracting is emerging as a Delivery Method for Renovation & Repair Projects, especially in Municipalities, Ed.**

