



# Construction & Materials Outlook

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## Current economic influences

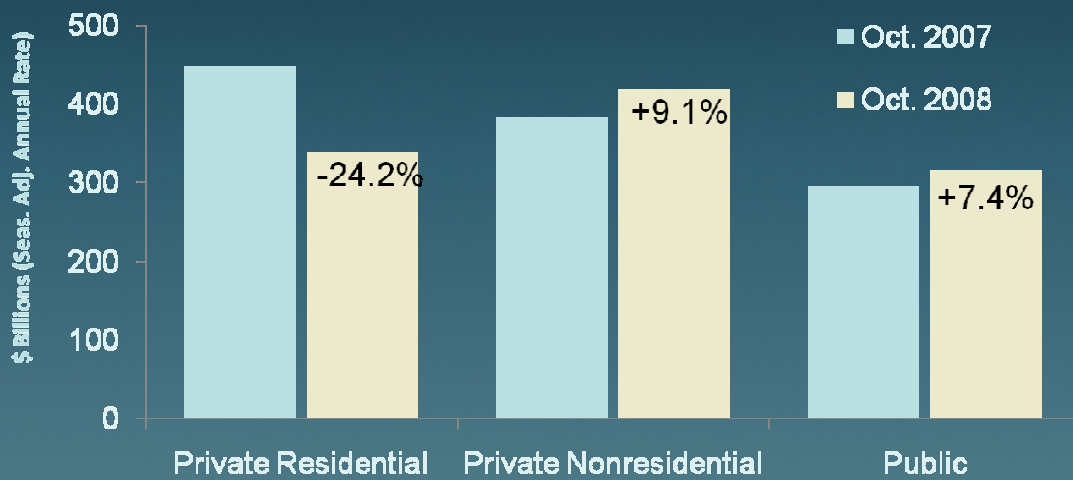
- Credit market freeze affecting private, state and local borrowers
- Weak economic outlook, falling state spending
- No job growth, rising unemployment
- Wages, personal income < CPI change

Source: Author, from BEA (GDP, personal income), BLS (CPI, employment, unemployment)



## The shifting construction market

(total change October 2007 – October 2008: -4.6%)



Source: Census (construction spending)



## Single-family (SF) vs. multifamily (MF)

- **October construction spending (value put in place):**
  - SF: -4.6% vs. September, -41.0% vs. 10/07
  - MF: -0.3% vs. September, -1.4% vs. 10/07
  - Improvements: -3.2% vs. September, 4.2% vs. 10/07
- **October building permits:**
  - SF: -14.5% vs. September, -43.3% vs. 10/07
  - MF: -7.1% vs. September, -33.2% vs. 10/07
- **October housing starts:**
  - SF: -3.3% vs. September, -39.9% vs. 10/07
  - MF: -6.8% vs. September, -33.5% vs. 10/07

Source: Census



## Housing outlook

- **SF: No relief yet for decline in permits, starts or spending, but sales could pick up by early '09**
- **Starts won't improve until mid '09 at best**
- **MF: Rental construction cushioned the fall in condo starts but now many owners are trying to rent out houses and condos**
- **Foreclosures will add to inventories, drag down both sales and rentals**

Source: Author



## Nonres '07 totals, change; '08 YTD change

	'07 Total	Share	Change	'08 YTD
Nonresidential total	\$638 billion	100%	+16%	+12%
Educational	96	15	+13	+ 9
Commercial	88	13	+16	- 2
Highway & street	76	11	+ 6	+ 6
Office	65	11	+19	+14
Power	53	10	+34	+33
Healthcare	43	6	+11	+ 8
Manufacturing	43	8	+20	+49
Transportation	32	5	+16	+10
Lodging	29	5	+58	+33
Communication	27	4	+22	- 4
Sewage & waste disposal	25	4	+ 6	+ 4
Other (amusement; water; safety; relig.; conservation): 9% of total				

Source: Author



## Leading segments in 2008 - 2009

Segment	2007		2008	Forecast	
	Bil. \$	Change	YTD	2008	2009
Power	53	+34%	+33%	+30 to +35%	↗
Energy	17	+55	+17	+15 to +20	↗
Hospitals	31	+14	+ 5	+ 4 to + 7	↗
Higher ed.	30	+13	+18	+15 to +18	↗

BRAC and Homeland Security (part of several segments)

Source: Author



## Weaker segments in 2008 - 2009

Segment	2007		2008	Forecast	
	Bil. \$	Change	YTD	2008	2009
Lodging	29	+58%	+35%	+30 to 33%	↘
Office	65	+19	+14	+10 to 12	↘
Commercial	88	+16	- 2	- 5 to - 2	↘
Primary/ Secondary	59	+15	+ 5	+3 to +6	↘
Highway	76	+ 6	+ 6	+3 to +6	0

Source: Author





## Spending outlook for 2008 - 2009

	Actual	Forecast	
	2007	2008	2009
Residential	-19%	-25 to -30%	- 2 to +2%
Nonresidential	+16	+ 9 to +12	- 3 to - 9
Total	-2.6	- 6 to - 8	- 1 to - 7

But...materials, labor costs may still rise

Source: Census; Author



## Materials and components

- Higher increases for construction inputs than for overall economy:

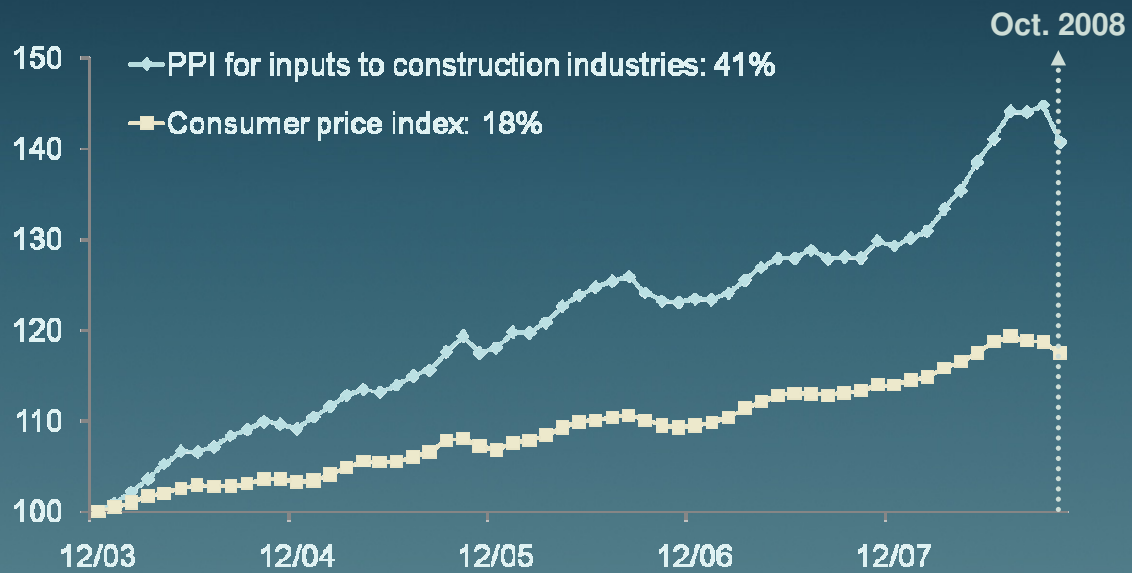
12 mo. to:	12/04	12/05	12/06	12/07	10/08
Const PPI	9.1%	8.2%	4.6%	4.5%	10.0%
CPI-U	3.3%	3.4%	2.5%	4.1%	3.7%

- Cumulative change double the CPI since 12/03:
  - Const PPI: 41%
  - CPI-U: 18%
- Producer price index drivers: steel, gypsum, diesel, asphalt, concrete, copper, plastics, aluminum, wood

Source: BLS (CPI, PPI)



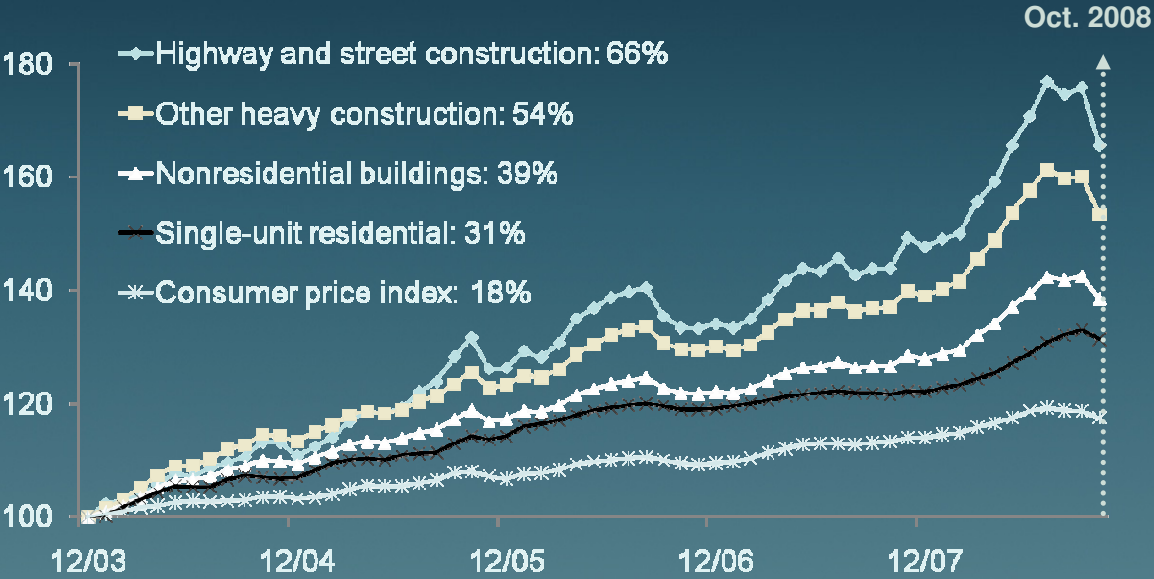
### Change in Producer Prices for Construction vs. Consumer Prices, 2003 - 2008 (December 2003 = 100)



Source: BLS (CPI, PPI)



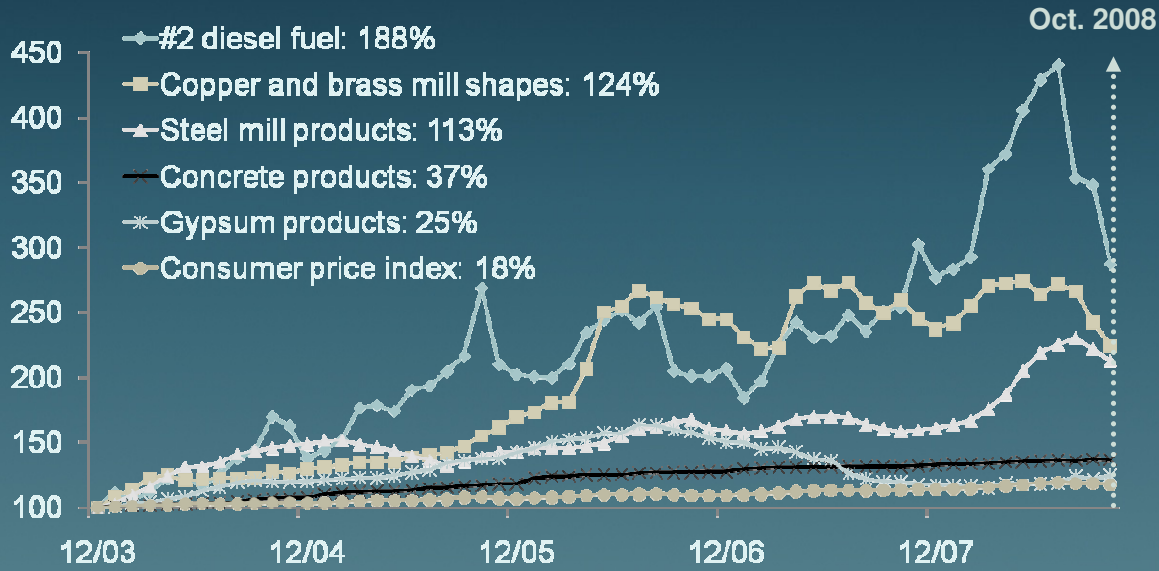
### Change in Producer Prices for Construction Segments, 2003 - 2008 (December 2003 = 100)



Source: BLS (CPI, PPI)



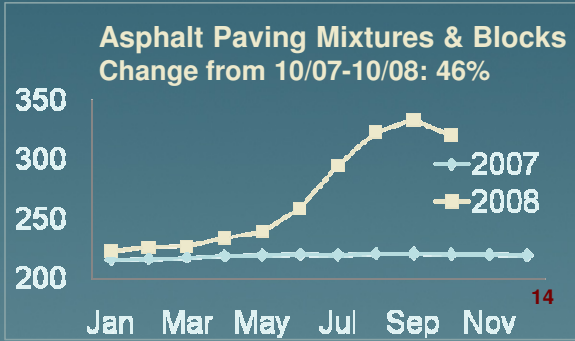
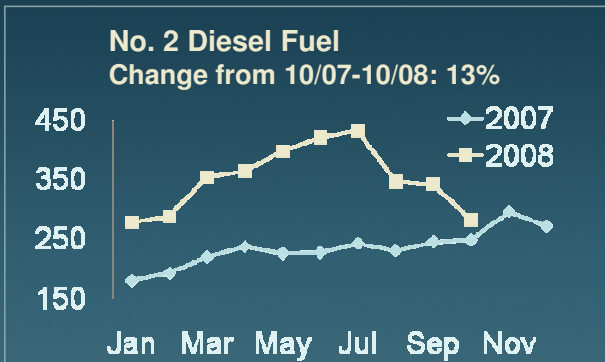
### Change in Producer Prices for Major Construction Inputs, 2003 - 2008 (December 2003 = 100)



Source: BLS (CPI, PPI)



## Producer Price Indexes, 2007 vs. 2008



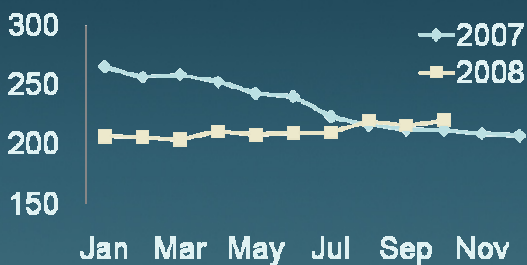
Source: BLS



## Producer Price Indexes, 2007 vs. 2008

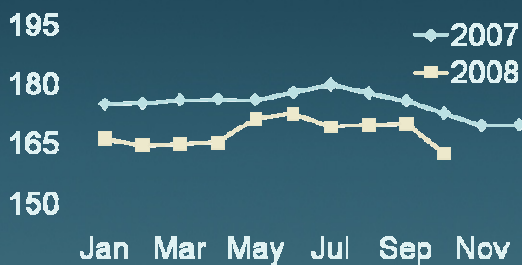
### Gypsum Products

Change from 10/07-10/08: 4.3%



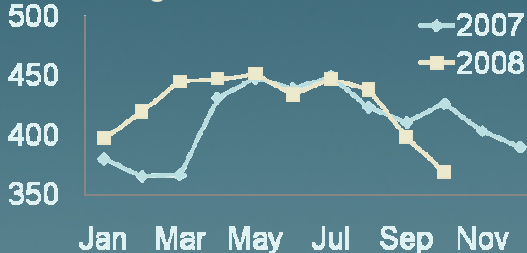
### Lumber and Plywood

Change from 10/07-10/08: -5.8%



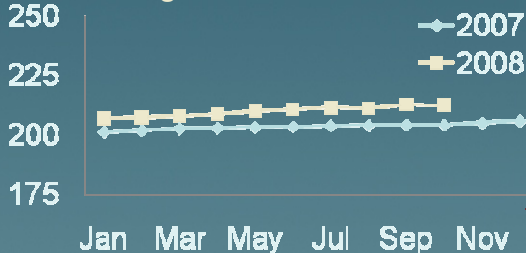
### Copper & Brass Mill Shapes

Change from 10/07-10/08: -13.5%



### Concrete Products

Change from 10/07-10/08: 4.1%





## Outlook for materials in '09 compared to '08

- Lower average prices: diesel, asphalt, steel
- Possible increases: concrete, gypsum, copper, wood products
- Year-over-year PPI change: -2 to +2%

Source: Author's forecasts





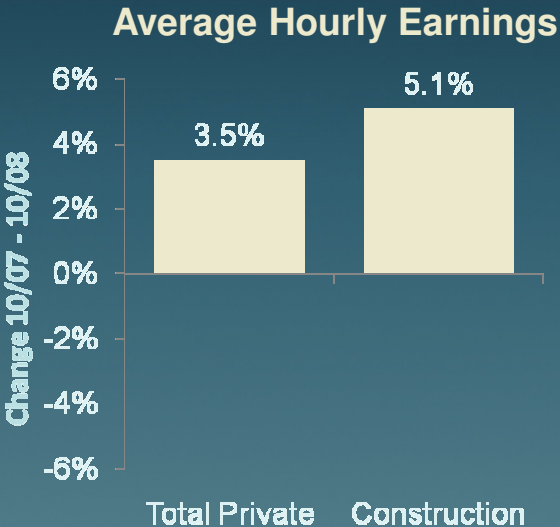
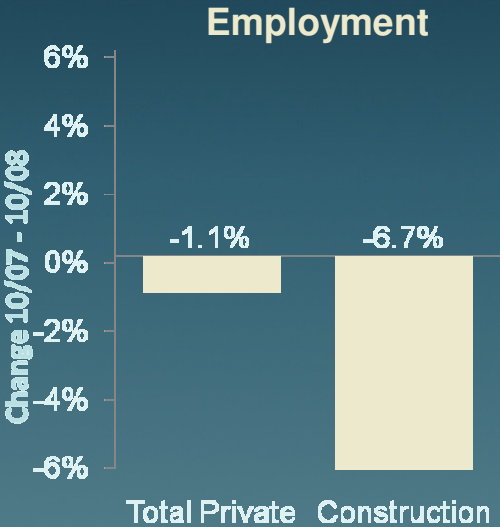
## Outlook for materials (beyond 2009)

- **Industry depends on specific materials that:**
  - are in demand worldwide
  - have erratic supply growth
  - are heavy, bulky or hard to transport
- **Construction requires physical delivery**
- **Thus, industry is subject to price spurts, transport bottlenecks, fuel price swings**
- **Expect 6 to 8% PPI increases, higher spikes**

Source: Author's forecast



# Construction jobs fall, but wages rise



Source: BLS



## Implications for 2008-09 wages

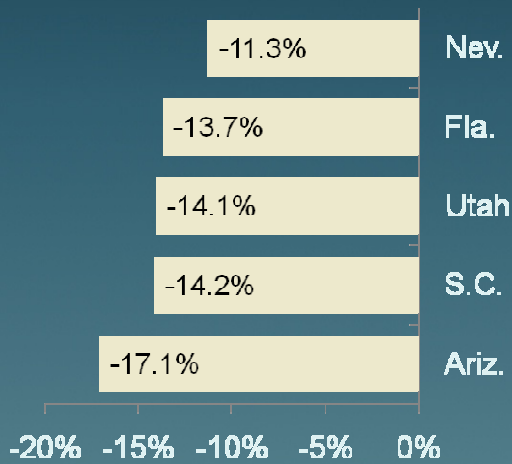
- **Biggest demand in '08 will be for crane operators, other scarce skills**
- **Wages in '08 will rise +5 to +6% vs. +4.1% in '07**
- **Nonres slump in '09 will slow wages to +3 to 4.5%**

Source: Author's forecasts

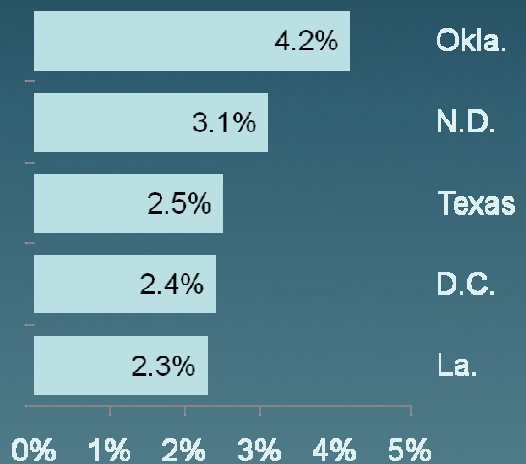


## State construction employment, 10/07 – 10/08 (U.S. total: -6.7%)

### 5 Biggest Losses



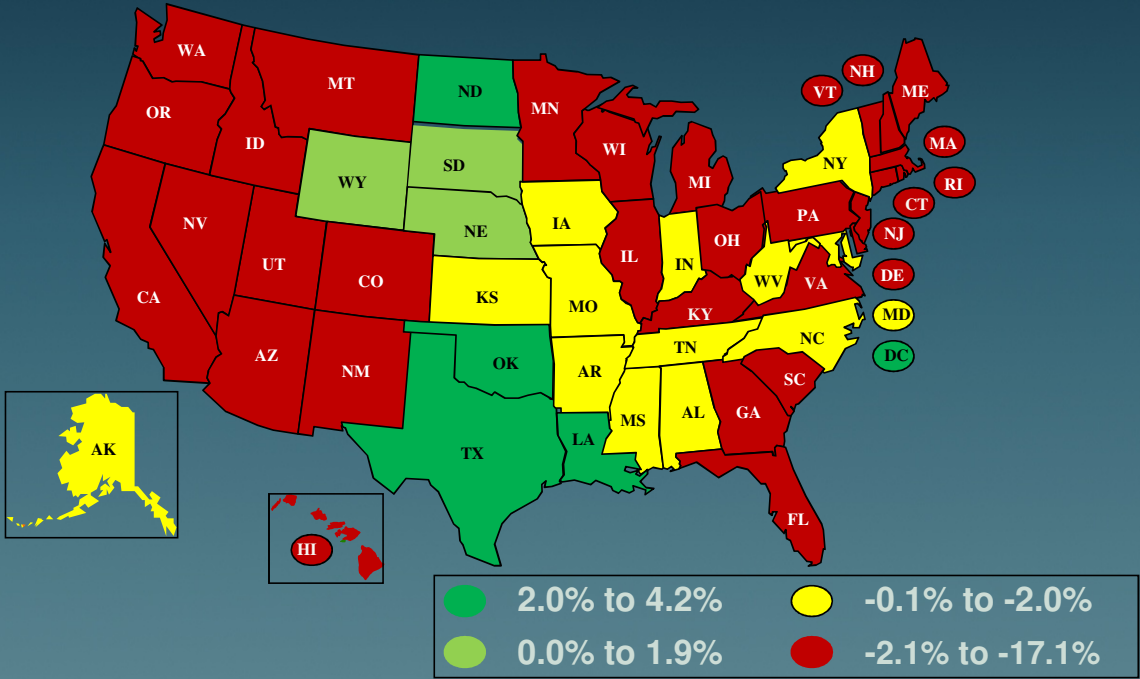
### 5 Biggest Gains



Source: BLS



## State construction employment, 10/07 – 10/08





## Summary for 2008

- **Nonres spending: +9 to +12% (led by energy, power, communications, hospitals, higher ed; weaker highway, retail, office, lodging)**
- **Res: -25 to -30% (no turnaround before '09)**
- **Total construction spending: -6 to -8%**
- **Materials costs: +6 to +8%**
- **Labor costs: +5 to +6%**



## Summary for 2009

- Nonres spending: -3 to -9%
- Res: -2 to +2% (SF up in 2d half, MF down all year)
- Total construction spending: -1 to -7%
- Materials costs: -2 to +2%
- Labor costs: +3 to +4.5%



## **AGC economic resources (sign up by email to [simonsonk@agc.org](mailto:simonsonk@agc.org))**

- **The Data DIGest: weekly one-page email**
- **PPI tables: emailed monthly**
- **State-specific emails (timing varies) and fact sheets: [www.agc.org /factsheets](http://www.agc.org/factsheets)**
- **Webinars/Audioconferences**





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