



# Construction & Materials Outlook

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## Current economic influences

- Credit market freeze affecting private, state and local borrowers
- Weak demand for income-producing properties
- Falling state spending
- No job growth, rising unemployment
- Stimulus (details: [www.agc.org/stimulus](http://www.agc.org/stimulus))



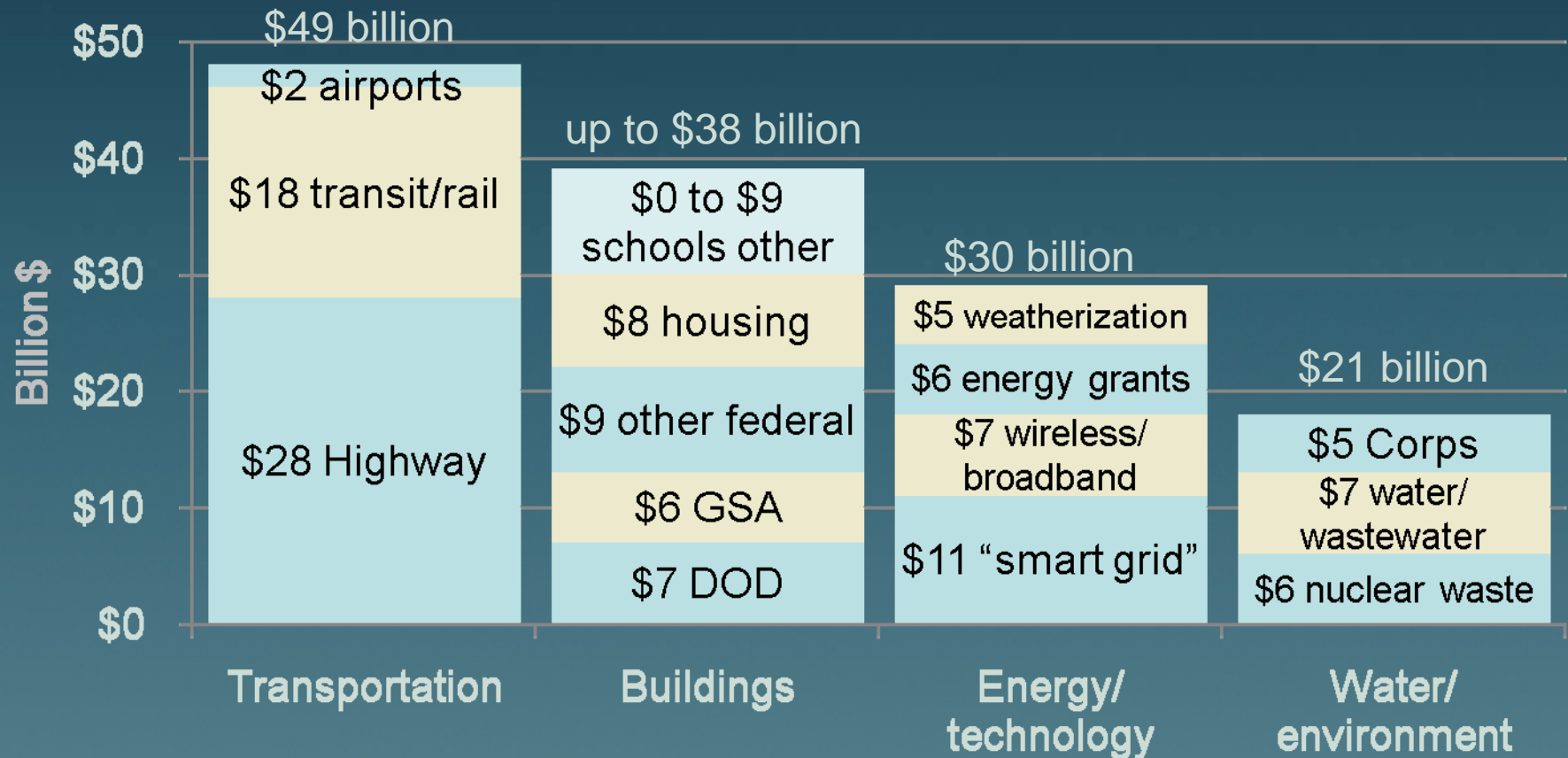
## Economic Stimulus Package

**Total of \$787 billion in spending and tax cuts**

- **\$308 billion in appropriated spending**
- **\$269 billion in direct spending (refundable portion of tax credits, unemployment benefits, Medicaid reimbursement to states, etc.)**
- **\$211 billion in tax cuts**



# Economic Stimulus Package





## Stimulus tax provisions affecting construction

- 1-year delay (to 2012) in 3% withholding on gov. contracts
- Increased expensing
- Net operating loss: 5 year carryback of NOL for small business (<\$15 mil. in gross receipts)
- Qualified school construction bonds
- “Build America” bonds
- Bonds for “recovery zones,” tribal areas, renewable energy, energy conservation
- Modified renewable energy, conservation credits



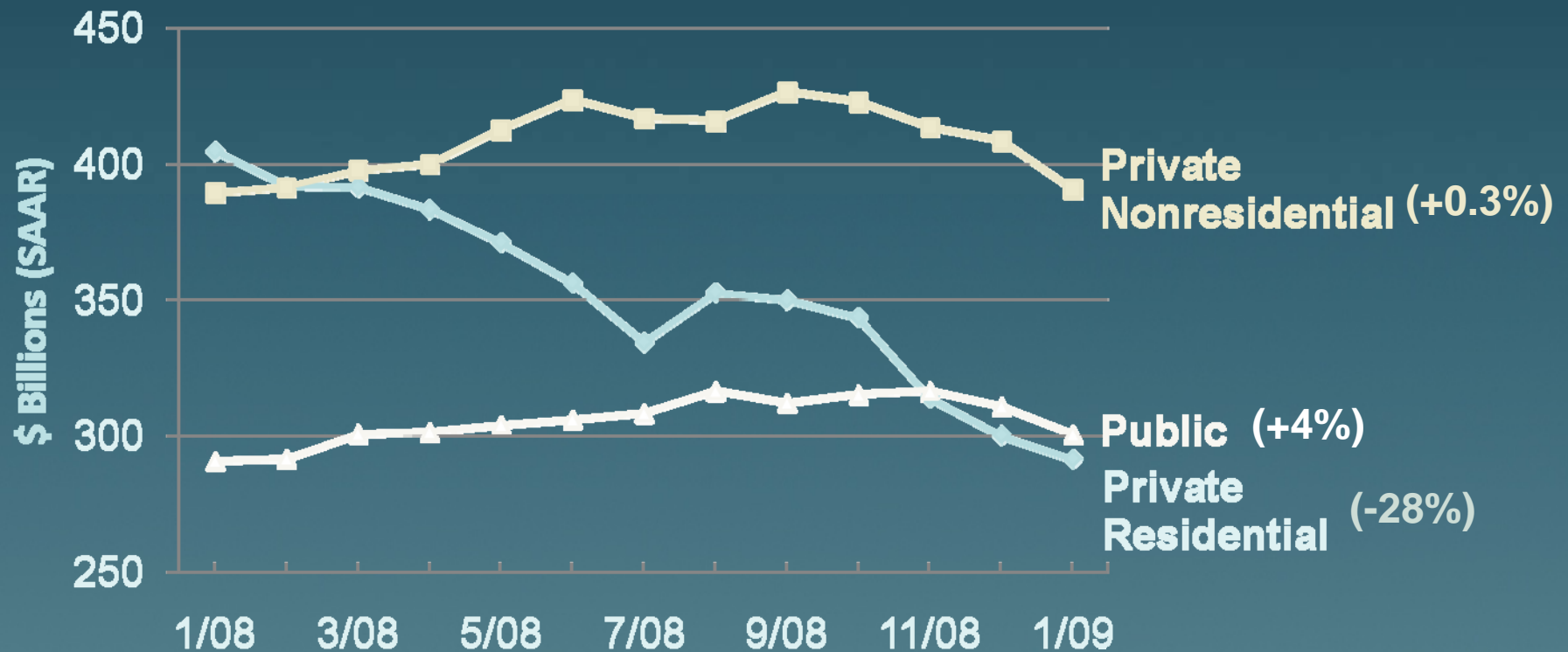
## Stimulus timing, strings

- **Timing – highways**
  - States must obligate ½ of their total by June 30
  - States must obligate remainder by Feb. 17, 2010
- **Timing – other construction: language varies**
- **Conditions**
  - Davis-Bacon
  - Buy American
  - No E-Verify requirement or broad-based FAR
  - No project labor agreement mandate, but...



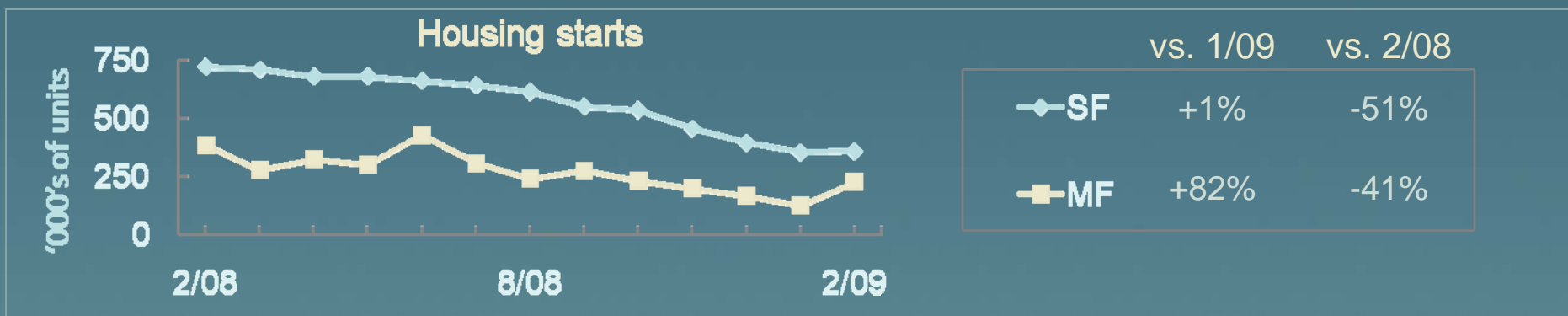
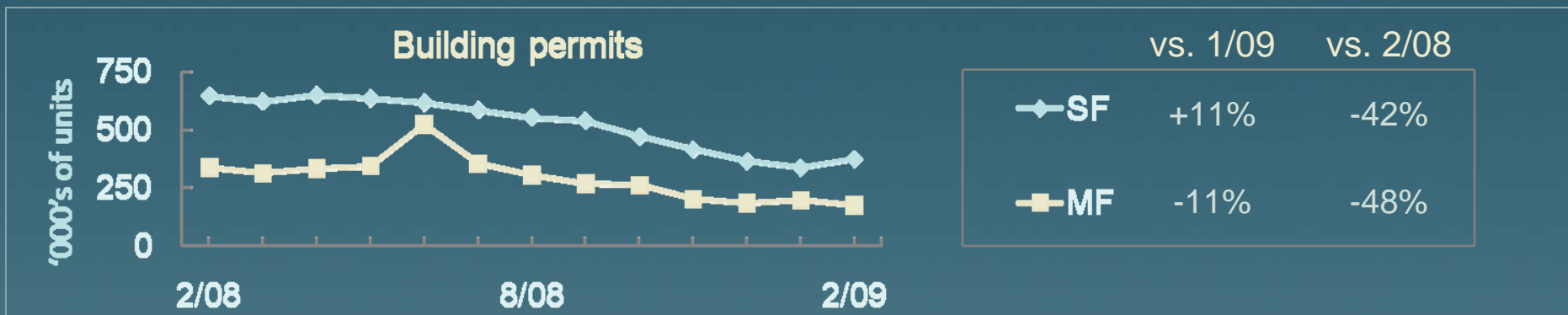
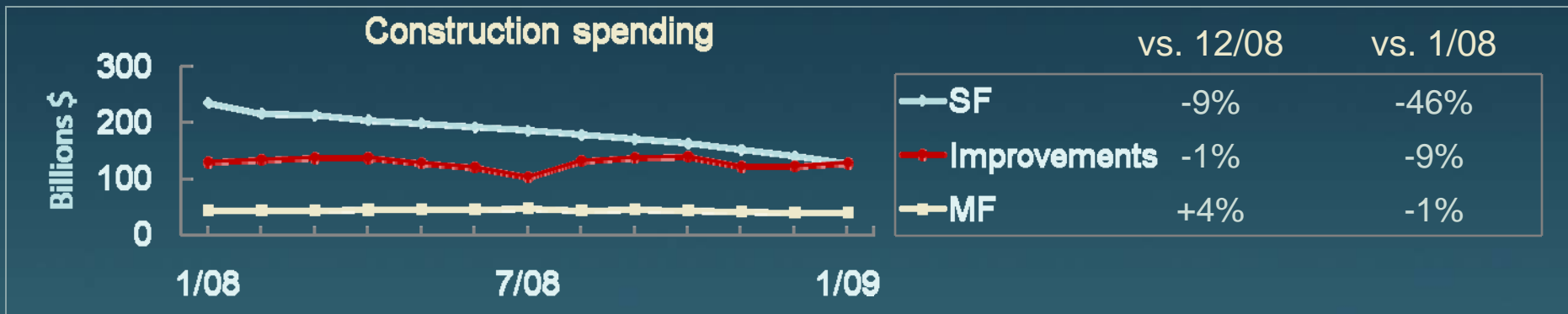
# The shifting construction market (construction spending, seasonally adjusted annual rate)

Total change January 2008 – January 2009: -9%





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







## Housing outlook

- **SF: No relief yet for decline in permits, starts or spending, but sales could pick up by mid-'09**
- **Starts won't improve until late-'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**



## Nonres totals, share, 1- & 12-month change

	1/09 Total	Share	vs. 12/08	vs. 1/08
<b>Nonresidential total</b>	\$687 billion	100%	- 4%	+ 2%
Educational	104	15	+ 1	+ 4
Highway and street	79	12	- 1	+ 6
Commercial	73	11	- 3	- 19
Manufacturing	73	11	0	+ 49
Power	68	10	- 12	+ 8
Office	68	10	- 2	- 4
Health care	46	7	- 5	+ 6
Lodging	32	5	- 5	0
Transportation	33	5	- 2	- 1
Sewage and waste disposal	26	4	- 4	+ 2
Amusement and recreation	21	3	- 3	- 9
Other (communication; public safety; relig.; conservation): 9% of total				



## Public construction (seas. adj. annual rate)

	<b>1/09 Total</b> \$304 billion	<b>State/Local</b> \$277 billion	<b>Federal</b> \$27 billion
Educational	85	84	2
Highway and street	79	78	1
Sewage and waste disposal	25	24	
Transportation	23	21	2
Water supply	16	15	
Office	16	10	6
Public safety	14	9	4
Amusement and recreation	12	12	
Power	8	8	1
Other (health care; residential; conservation; commercial): \$24 billion			



## Spending outlook for 2009

	<b>Actual 2008</b>	<b>Forecast 2009</b>
<b>Residential</b>	<b>- 27%</b>	<b>- 2 to +2%</b>
<b>Nonresidential</b>	<b>+12%</b>	<b>- 3 to - 9%</b>
<b>Total</b>	<b>- 5%</b>	<b>- 1 to - 7%</b>

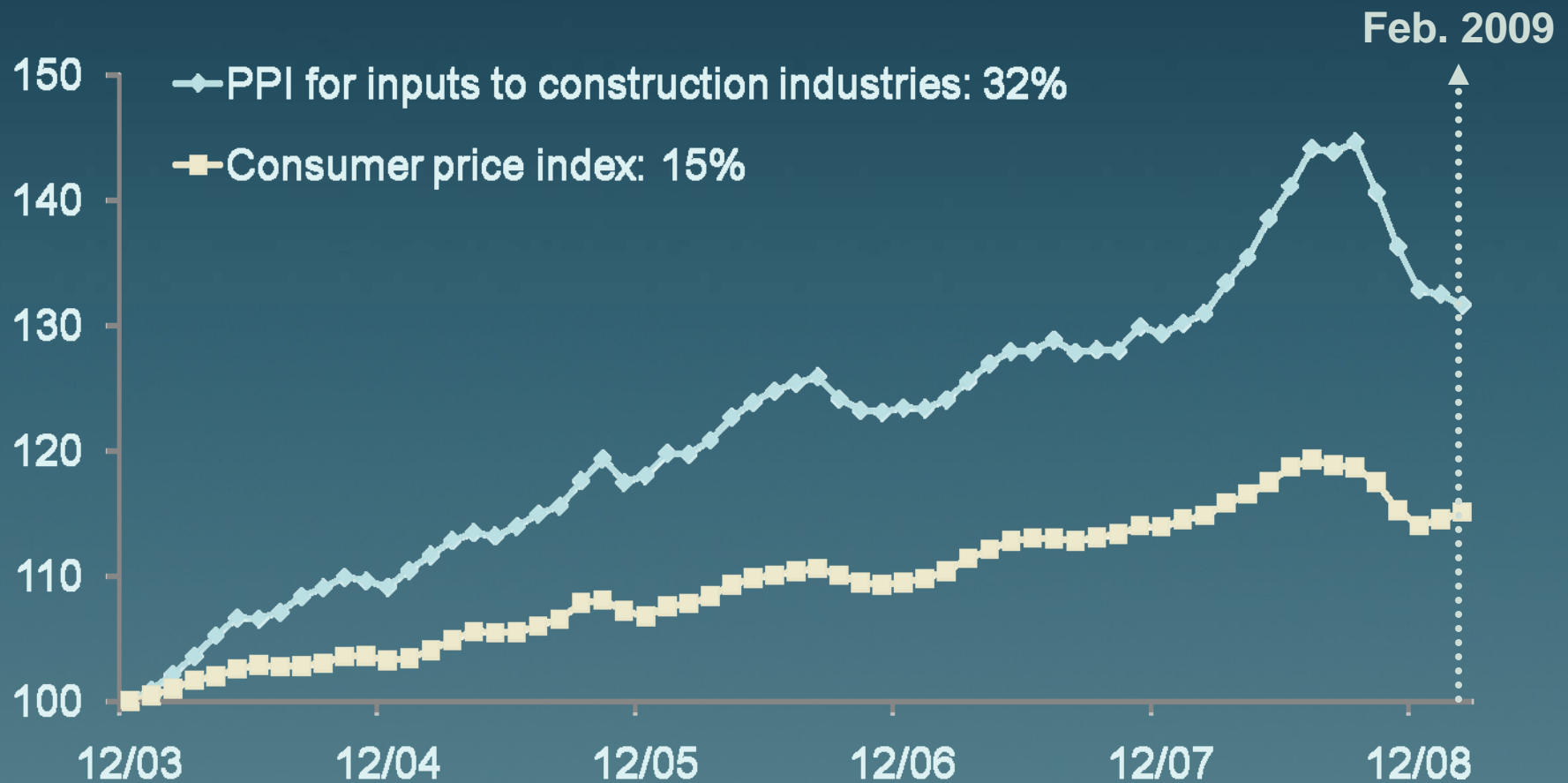


## Materials and components

- Higher increases for construction inputs than for overall economy
- Cumulative change double the CPI since 12/03:
  - Const PPI: 32%
  - CPI-U: 15%
- Producer price index drivers: steel, gypsum, diesel, asphalt, concrete, copper, plastics, aluminum, wood



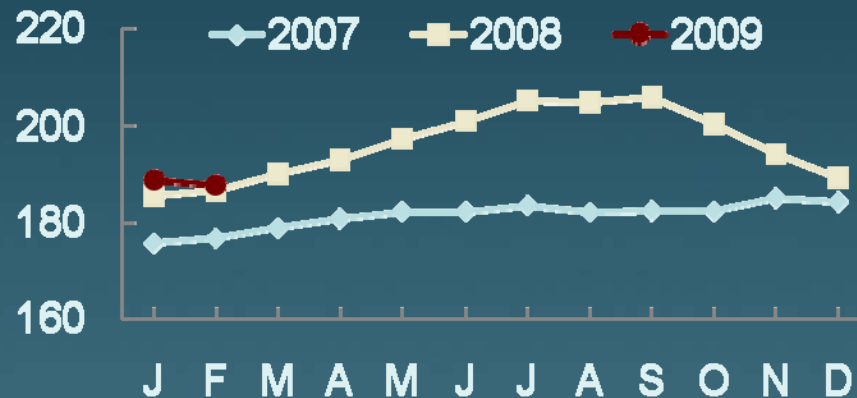
## Change in Producer Prices for Construction vs. Consumer Prices, 2003 - 2009 (December 2003 = 100)



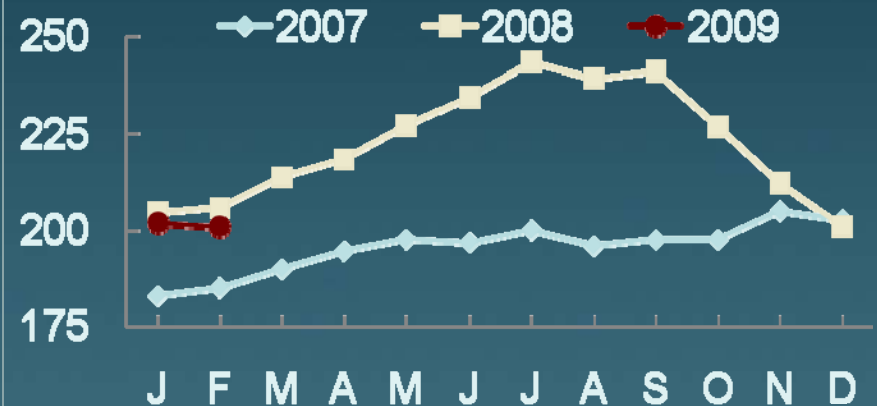


## Producer Price Indexes, 2007 - 2009

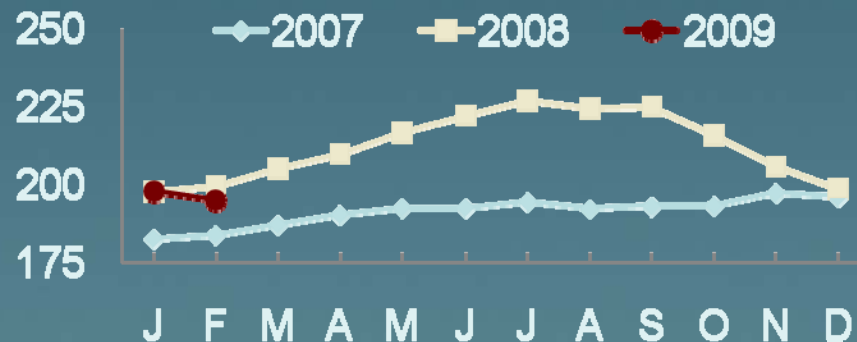
**Inputs to construction industries**  
 Change from 2/08-2/09: 0.5%



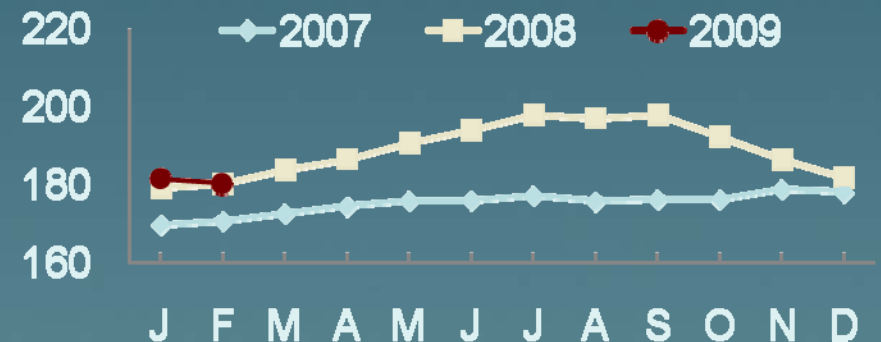
**Highway & street construction**  
 Change from 2/08-2/09: -2.5%



**Other heavy construction**  
 Change from 2/08-2/09: -2.4%



**Nonresidential buildings**  
 Change from 2/08-2/09: -0.1%

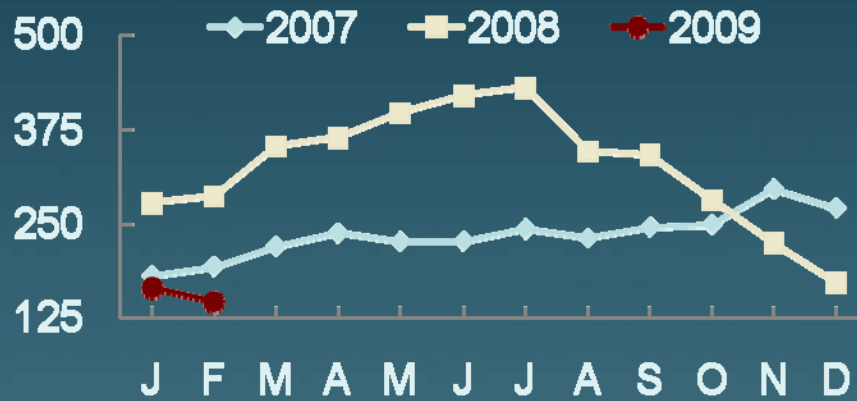




## Producer Price Indexes, 2007 - 2009

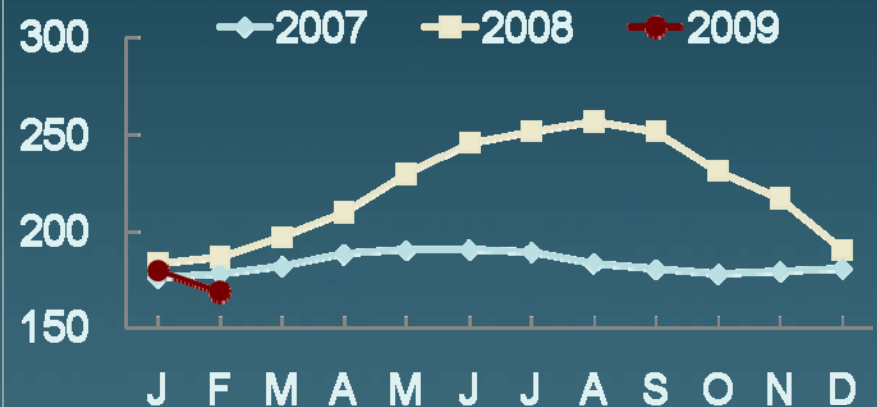
**No. 2 Diesel Fuel**

Change from 2/08-2/09: -49.4%



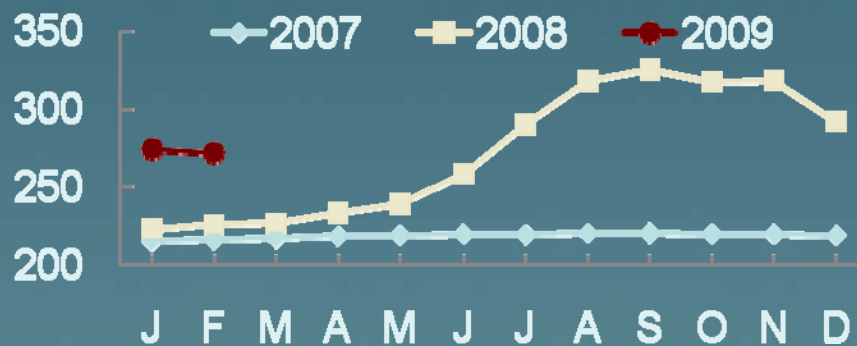
**Steel Mill Products**

Change from 2/08-2/09: -9.8%



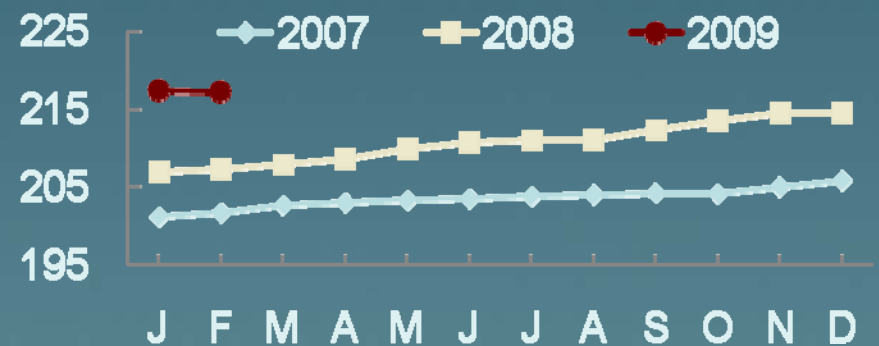
**Asphalt Paving Mixtures & Blocks**

Change from 2/08-2/09: 20.1%



**Concrete Products**

Change from 2/08-2/09: 4.8%

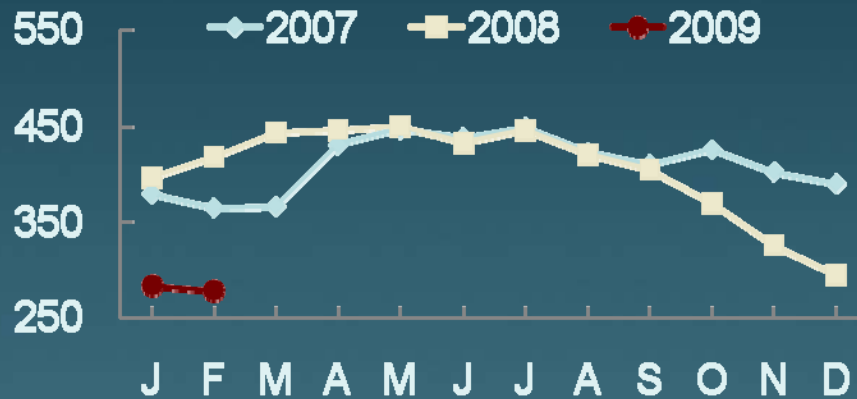




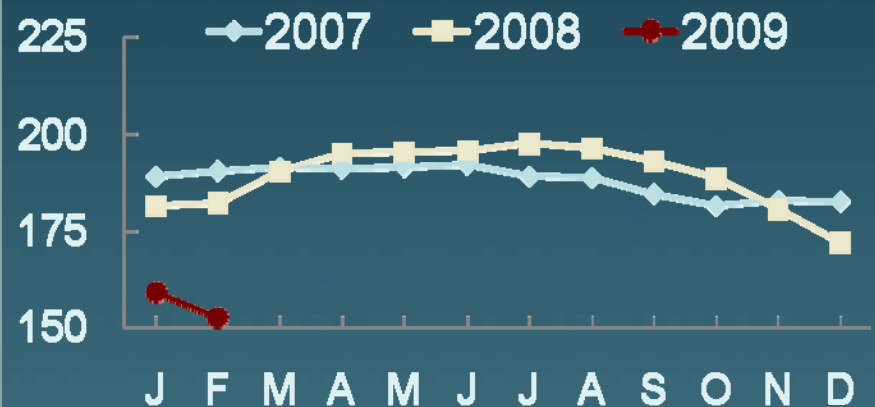


## Producer Price Indexes, 2007 - 2009

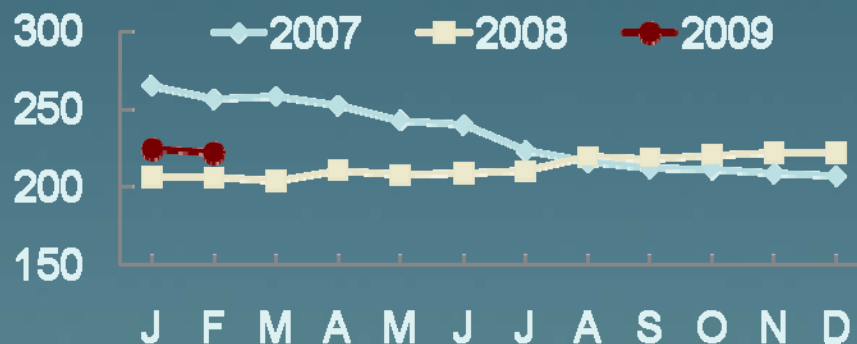
**Copper & Brass Mill Shapes**  
 Change from 2/08-2/09: -33.7%



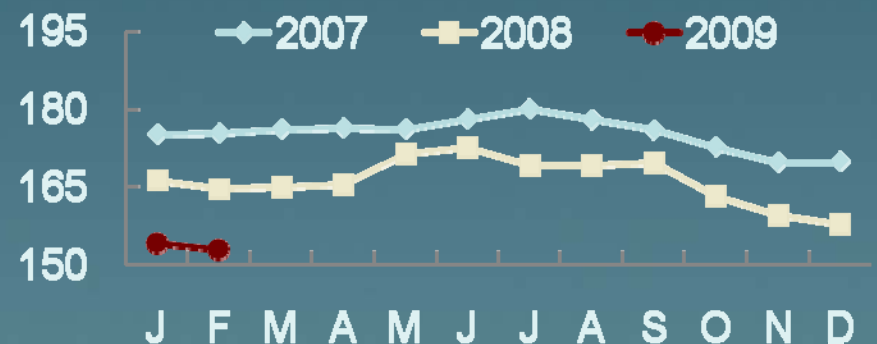
**Aluminum Mill Shapes**  
 Change from 2/08-2/09: -16.4%



**Gypsum Products**  
 Change from 2/08-2/09: 7.8%



**Lumber and Plywood**  
 Change from 2/08-2/09: -7.1%





## 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: -4% to 0%

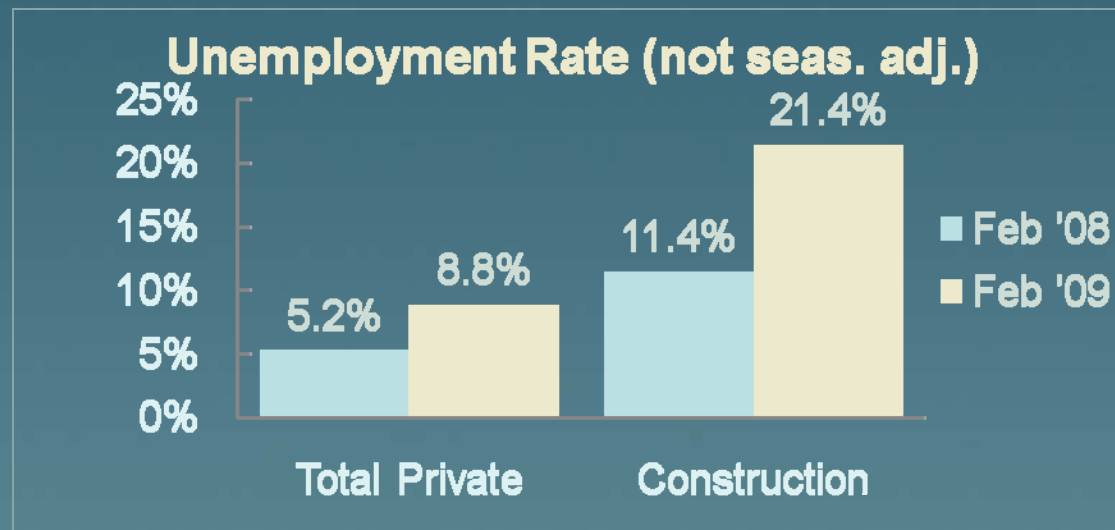
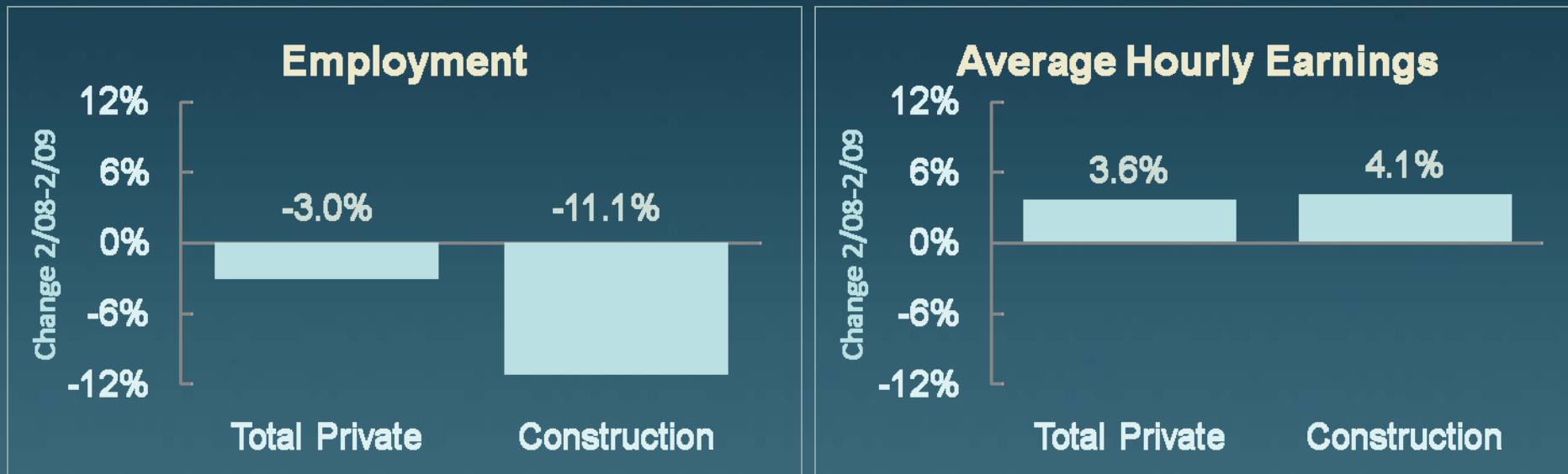


## Outlook for materials (beyond 2009)

- **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**

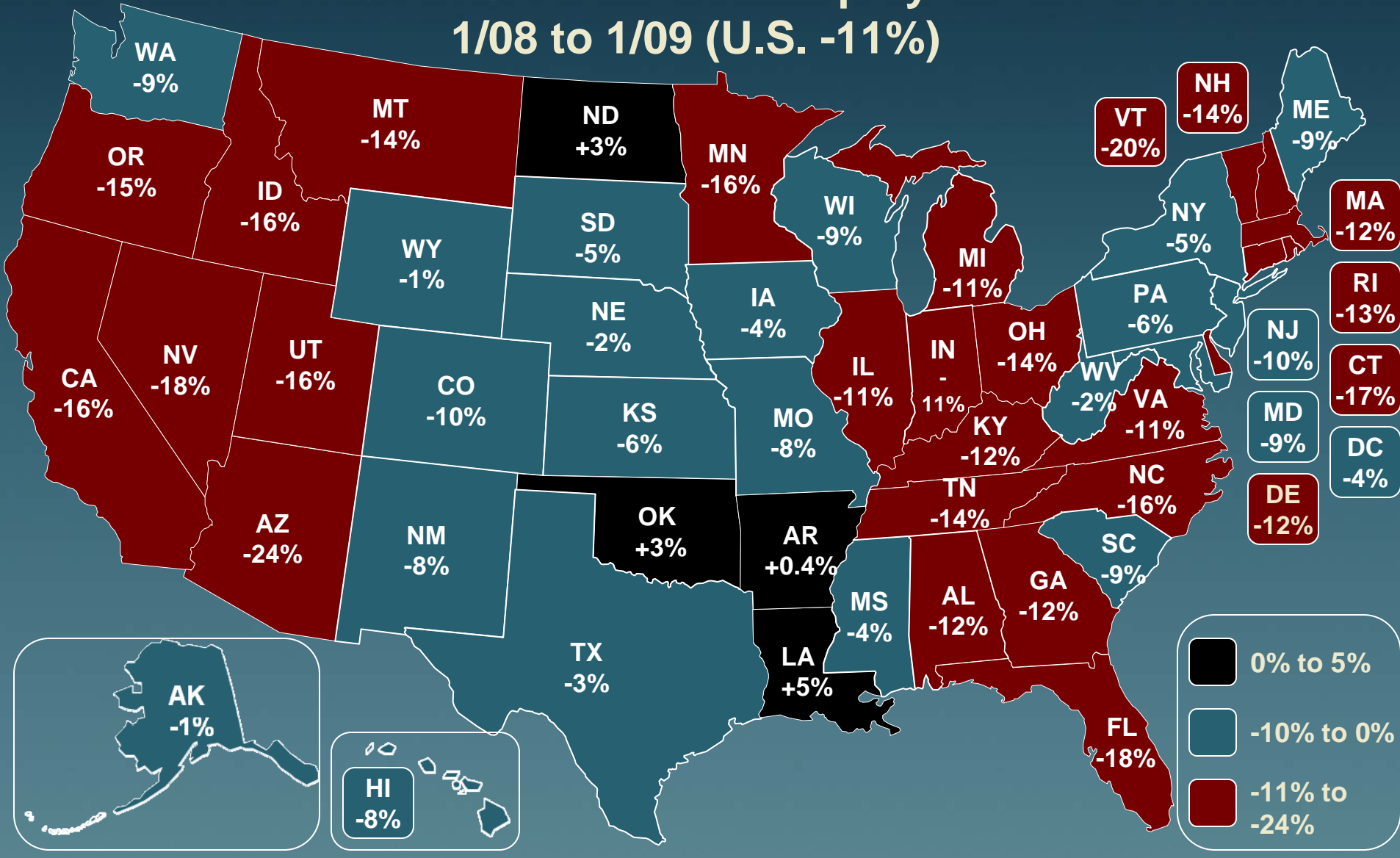


## Construction jobs fall, but wages rise (seasonally adjusted)





## State Construction Employment 1/08 to 1/09 (U.S. -11%)





## 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: -4% to 0%
- Labor costs: +3% to +4%



## **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 stimulus estimates and fact sheets: [www.agc.org/stimulus](http://www.agc.org/stimulus)**
- **Webinars/audioconferences**
- **Member emails on stimulus jobs, credit market**



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## The Construction Industry in North Carolina

### The Economic Impact of Stimulus Investment in North Carolina:

- An additional \$1 billion in nonresidential construction spending would add about \$2.4 billion to the state's Gross Domestic Product (GDP), about \$755 million to personal earnings and create or sustain 24,000 jobs.
  - 8,200 of these jobs would be on-site construction jobs located within North Carolina.
  - 3,800 of these jobs would be direct and indirect jobs associated with construction supply materials and services. The majority of these jobs would be located within the state but there would be some out of state jobs supported.
  - 12,000 of these jobs would be created when construction, supplier and service providers spend their incomes. These jobs would be based in North Carolina and throughout the economy.

### Construction Employment:

- In 2007, a total of 477,000 jobs were supported by the direct and indirect outlays associated with the state's nonresidential construction spending.
- The construction industry (residential plus nonresidential) employed 239,000 workers in December 2008, a decrease of 19,700 (7.6%) from May 2008 when construction employment in North Carolina peaked.

### Nonresidential Construction Spending:

- Nonresidential construction spending in North Carolina totaled an estimated \$19.5 billion in 2007.
- This direct construction spending in the state contributed a total of \$47.2 billion (11.8%) to state GDP of \$399.4 billion.
- Direct construction spending in the state added \$14.8 billion in additional personal earnings to the benefit of North Carolina residents working in the state.

### Construction Industry Pay:

- In 2007 annual pay of all construction workers in North Carolina averaged \$38,900, 0.8% more than the average for all private sector employees.

### Small Business:

- North Carolina had 28,000 construction firms in 2006, of which 91.3% were small businesses employing fewer than 20 workers.

# The Data DIGest

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## Construction PPIs drop; CPIs are mixed; AIA, MHC show residential rise, nonres drop

The **producer price index** (PPI) for finished goods in February slipped 0.1% before seasonal adjustment (but rose 0.1%, seasonally adjusted) and 1.3% over 12 months, the Bureau of Labor Statistics (BLS) reported on Tuesday. *The PPI for inputs to construction industries dropped 0.6% for the month and edged up 0.5% over 12 months. Materials prices fell for the most part—steeply in some cases. The PPI for diesel fuel plunged 11% and 49%; steel mill products, -6.1% and -9.8%; aluminum mill shapes, -4.2% and -16%; copper and brass mill shapes, -1.8% and -34%; lumber and plywood, -0.8% and -7.1%. Items that partly reversed previous run-ups include asphalt paving mixtures and blocks, down 1.1% for the month but still 20% higher than in February 2008; gypsum products, -1.1% and 7.8%; concrete products, -0.1% and 4.8%; and plastic construction products, -0.1% and 3.4%. PPIs for inputs to construction types all fell for the month but varied over the 12-month span: highway and street construction inputs, -0.5% and -2.5%; other heavy construction, -1.5% and -2.4%; nonresidential buildings, -0.7% and -0.1%; multi-unit residential, -0.6% and 1.1%; and single-unit, -0.3% and 3.1%.*

The **consumer price index** (CPI) for all urban consumers in February climbed 0.5% before adjustment (0.4%, seasonally adjusted) but only 0.2% over 12 months, BLS reported today. *The CPI for urban wage earners and clerical workers (CPI-W), used to adjust many labor contracts in construction and other industries, fell 0.3% over 12 months.*

The American Institute of Architects announced today that its Architecture Billings Index (ABI), which measures the difference between architecture firms that reporting rising or falling billings in the last month, rose slightly in February to 35 from an all-time low of 33 in January, but still far below a breakeven level of 50. Firms with institutional and mixed practices set new lows of 37 and 40, respectively; commercial/industrial practices held at 32; residential rose a point to 33.

*The value of new construction starts in February slumped 8% at a seasonally adjusted annual rate (SAAR), McGraw-Hill Construction (MHC) reported on Monday, based on its own data compilation. Nonresidential building and nonbuilding construction each tumbled 13%. Residential building increased 9%, with single-family up 7% and multifamily up 16% “after a depressed January.” For the first two months of 2009 combined, starts were down 45% from the same months of last year, although last year’s numbers were swelled by “five exceptionally large projects” totaling \$12 billion. MHC, like Reed Construction Data, counts the full value of new projects in the month they start, which can make monthly or year-over-year comparisons tricky. In contrast, the Census Bureau reports “spending put in place”—an estimate of spending in a given month on projects underway. Even aside from these huge projects, MHC said “nonresidential building for the first two months of 2009 would be down 35% from a year ago, while total construction would be down 37%.” The total was dragged down by residential building, -55% year-to-date, and nonbuilding construction, -13%.*

*Consistent with MHC’s residential figures, Census reported on Tuesday that the number of housing units started in February rose 22% (SAAR), with single-family up 1% and multifamily up 82% after several very weak months. Compared to a year ago, single-family starts fell 51% and multifamily, -41%. Building permits, a reliable predictor of near-term starts, rose 3% overall (SAAR) for the month, with single-family permits up 11% but multifamily down 11%. Compared to a year ago, the number of permits shriveled 44%: -42% for single-family, -48% for multifamily.*

**Industrial production** (IP) at mines, utilities and factories fell for the fourth straight month in February, by 1.4%, seasonally adjusted, the Federal Reserve reported on Monday. *“Production in the manufacturing sector moved down 0.7%, with broad-based declines among its components,” including a 2.2% drop in output of construction supplies. Compared to a year ago, manufacturing IP was down 13%, with output of construction supplies down 18%. Capacity utilization in manufacturing sank to 67.4% of capacity, an all-time low in a series that began in 1948. Together, current output and capacity utilization can indicate future demand for factory construction.*

In January, seasonally adjusted nonfarm **payroll employment** decreased in 42 states, increased in seven states and the District of Columbia, and was unchanged in Vermont, BLS reported on March 11. Compared to January 2008, employment fell in 44 states and rose in six plus D.C. The largest 12-month percentage decreases were in Arizona and Michigan, -6.2% each; Nevada, -5.1%; Florida, -4.5%; and Ohio, -4.0%. The largest increases were in Wyoming, 2.4%; D.C., 1.7%; Alaska, 0.9%; North Dakota, 0.8%; and Oklahoma, 0.4%. *Construction employment fell in January in 36 states, was unchanged (or within 100 of prior levels) in 10 plus D.C., and rose only in Michigan, Indiana, Louisiana and Mississippi. Over 12 months, construction employment fell everywhere except Louisiana, +6,800 or 5%; Oklahoma, 2,200 or 3%; North Dakota, 600 or 3%; and Arkansas, 200 or 0.4%. The largest 12-month percentage losses in construction were in Arizona, -24%; Vermont, -20%; Nevada and Florida, -18% each; and Connecticut, -17%. Nationally, construction employment shrank 10% from January 2008 to January 2009.*

Total **revenue of architectural and related services firms** fell 3.9% in the fourth quarter of 2008, not seasonally adjusted, after rising 1.8% in the third quarter, Census reported on Friday. Revenue of **engineering services firms** rose 3.2% and 3.4%, respectively. *The slowdown is a harbinger of future demand for construction.*