



AGC of America
THE ASSOCIATED GENERAL CONTRACTORS OF AMERICA
Quality People. Quality Projects.



Construction Spending, Labor & Materials Outlook

October 23, 2013

Ken Simonson

Chief Economist, AGC of America

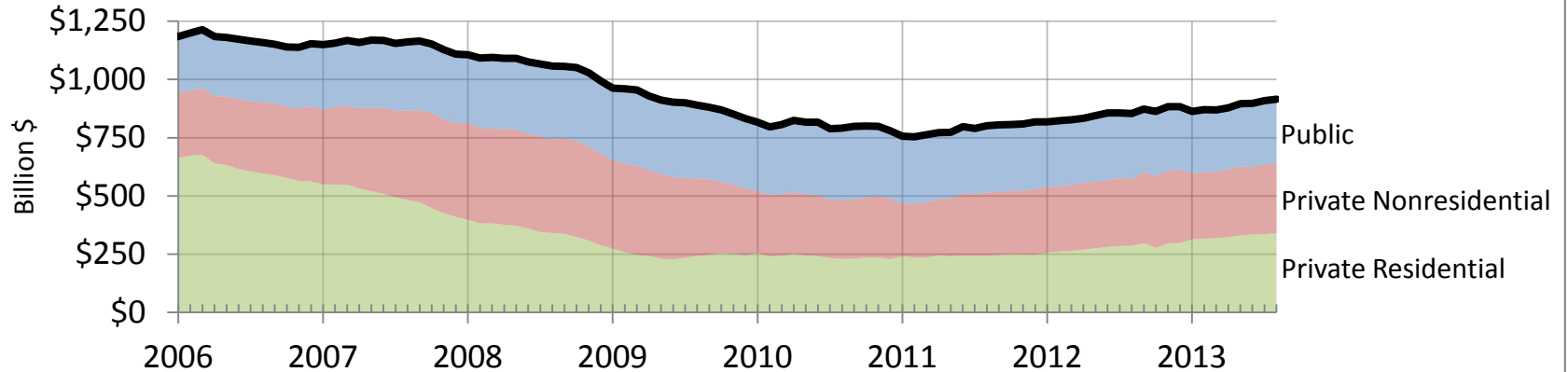
simonsonk@agc.org

Quality People.
Quality Projects.

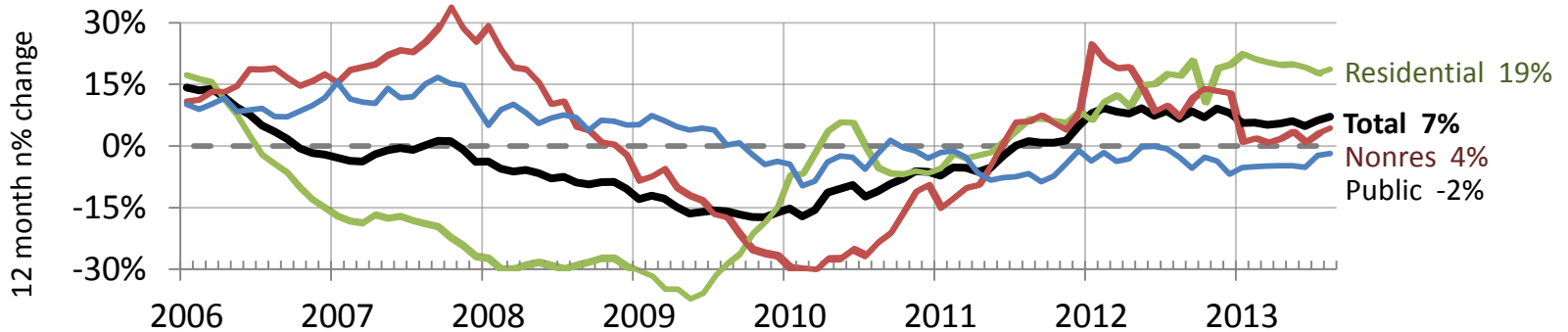


Construction spending (seasonally adjusted annual rate—SAAR)

Total construction, Jan. 2006-Aug. 2013 (billion \$, SAAR)



12-month % change, Jan. 2006-Aug. 2013



Construction is growing, but unevenly

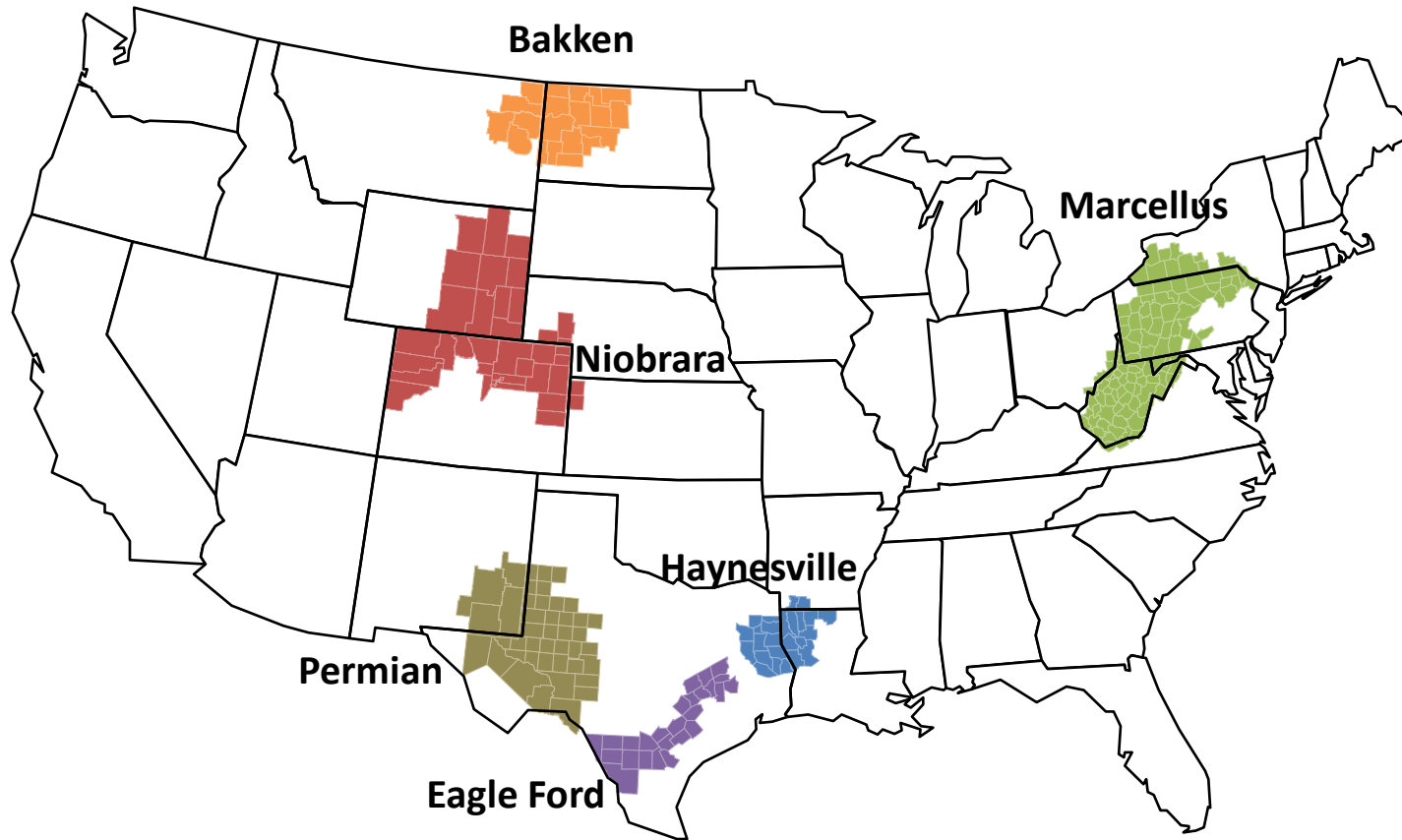
3 trends helping many sectors and regions:

- 'Shale gale'
- Panama Canal expansion
- Residential revival

3 trends holding down construction growth:

- Government spends less on schools, infrastructure
- Consumers switch from stores to online buying
- Employers shrink office space per employee

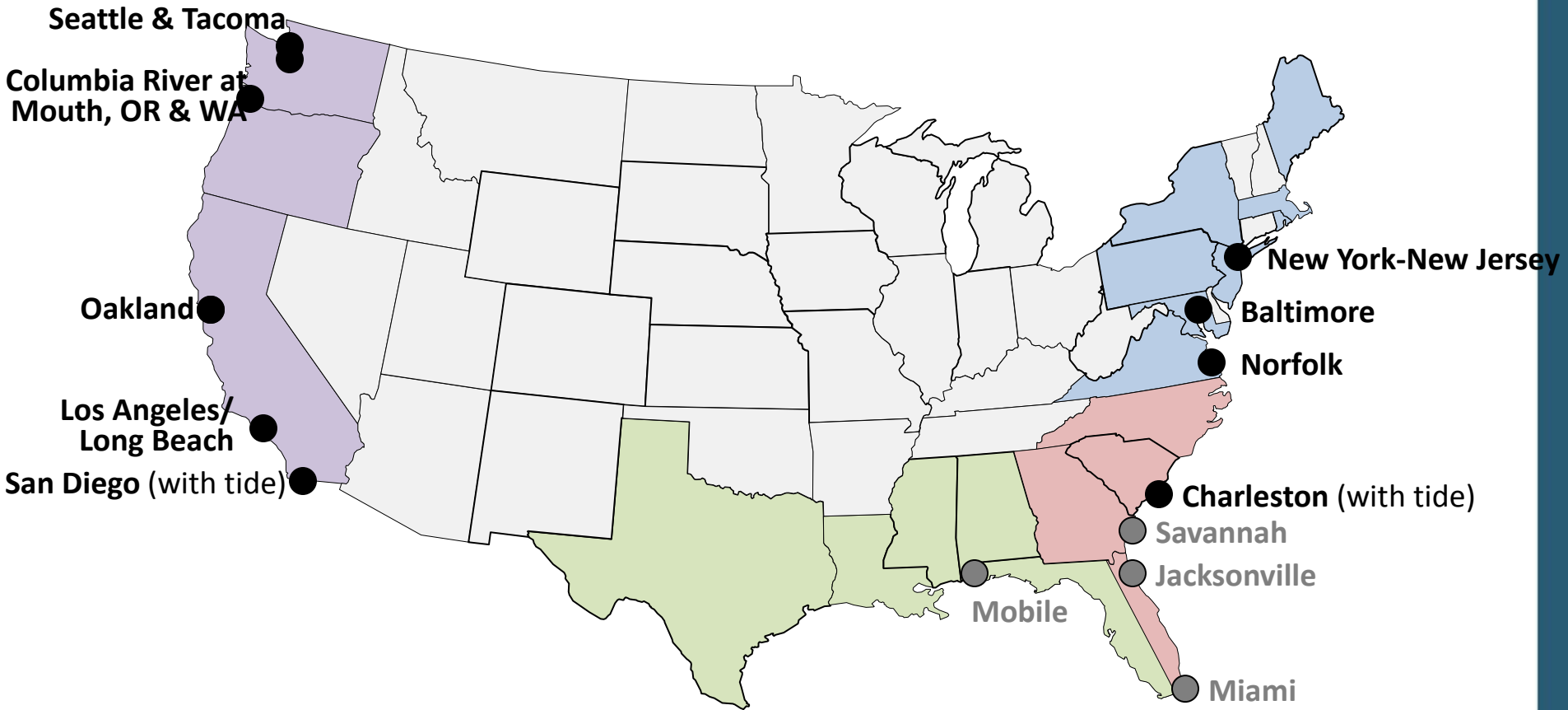
One (or many) bright spot(s): the shale 'gale'



Shale's direct and indirect impacts on construction

- **Onsite:** Each well requires access road, site prep, pad, storage pond, support structures, pipes
- **Nearby:** Products, water require trucking, rail, pipeline, processing
- **Local spending** by drilling firms, workers, royalty holders
- **Upstream:** orders for fracking sand, rigs, compressors, pumps, pipe, tanks, trucks, railcars, processing facilities
- **Downstream:** Petrochemical, power, steel plants; LNG export terminals, fueling stations; LNG-powered vehicles
- **Losers:** coal; maybe wind, solar, nuclear & suppliers

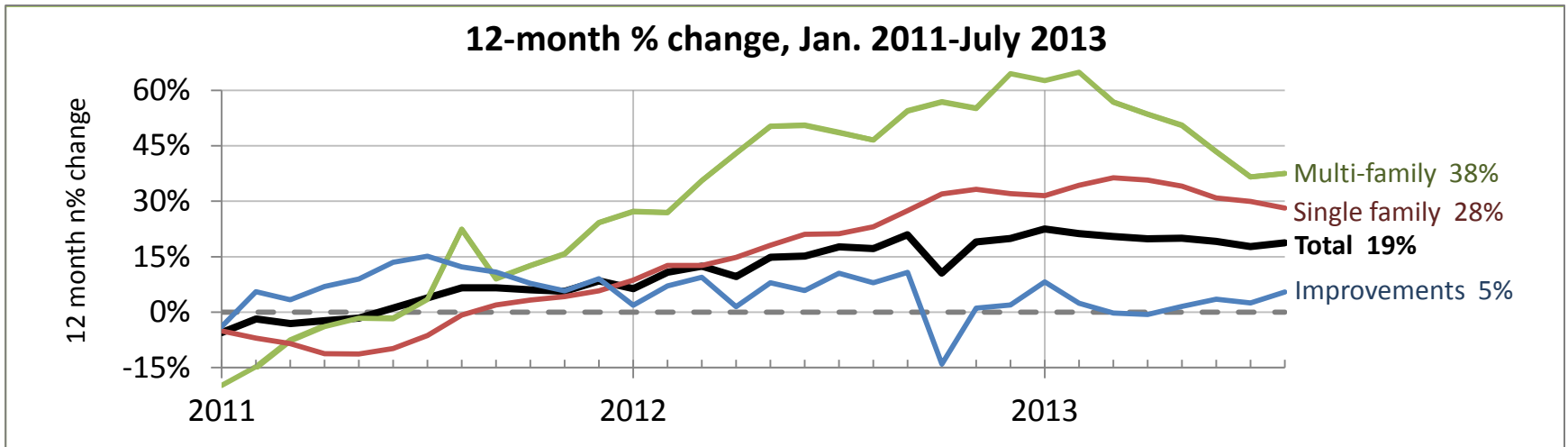
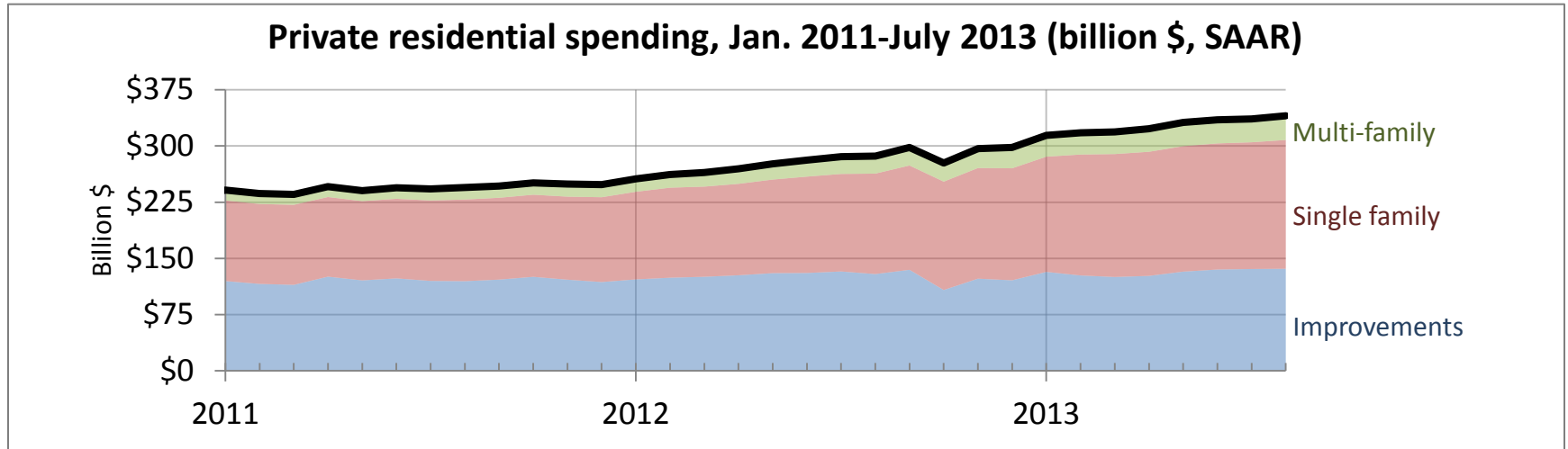
U.S. Post-Panamax Ready Ports



Panama Canal expansion's impacts on construction

- **Ports:** investing in dredging, piers, cranes, land access
- **Nearby:** Storage, warehouse, trucking, rail facilities
- **Bridge, tunnel, highway** improvements
- **Inland:** possible changes in distribution, manufacturing

Private residential spending is still rising—for now



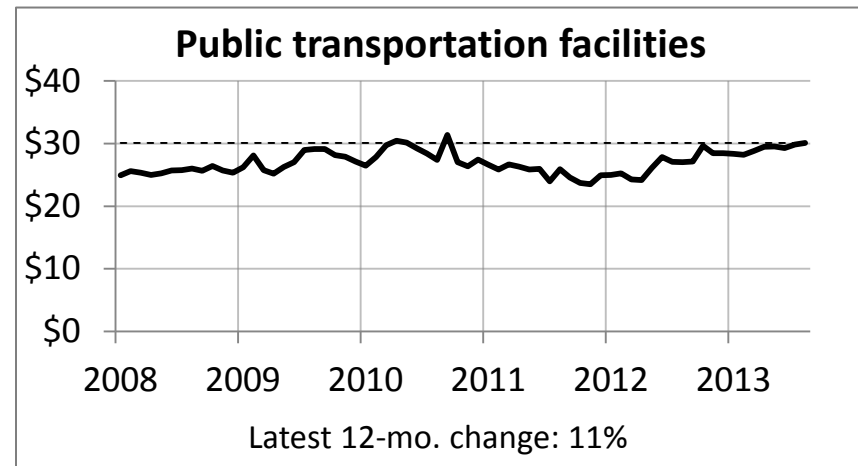
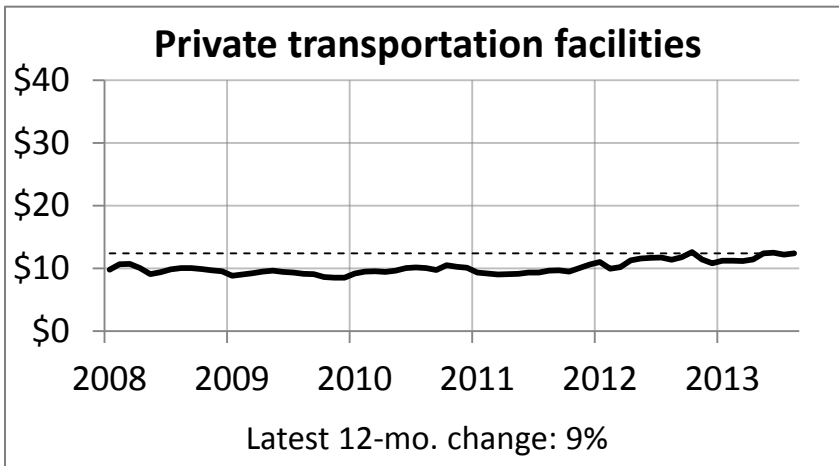
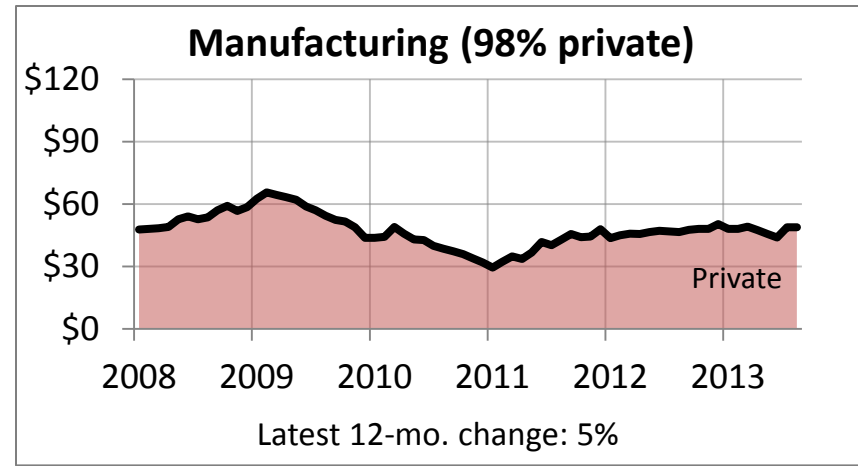
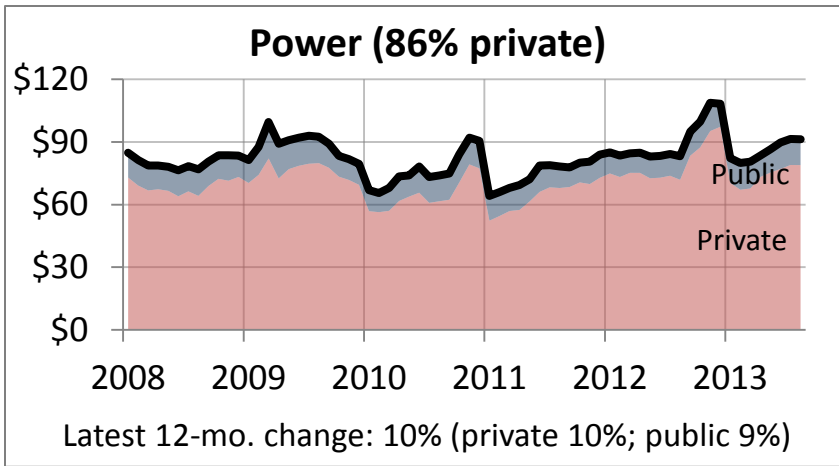
Housing outlook

- SF: rising for now but tight credit, demographic shifts may limit increases
- MF: Upturn should last into and maybe through 2014
 - Vacancy rates near multi-year lows in most cities
 - Preference for urban living, fear of lock-in add to demand
 - Condo market has been slower to revive than rentals
 - Government-subsidized market likely to worsen
- Improvements: should benefit from rising SF sales

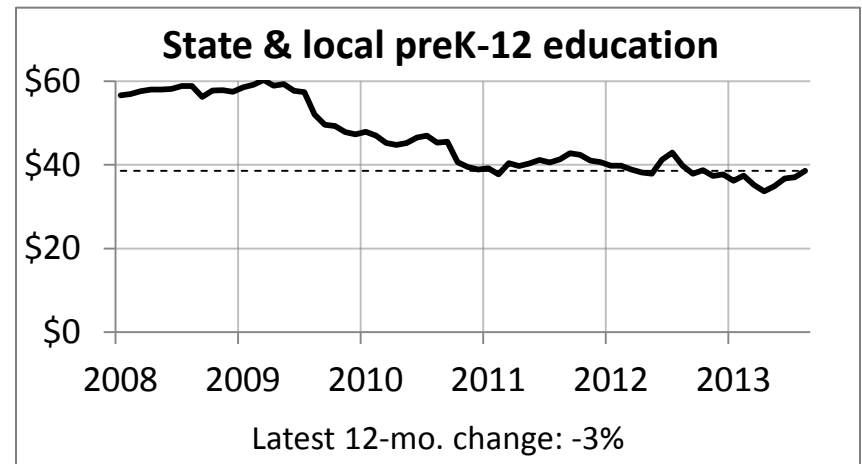
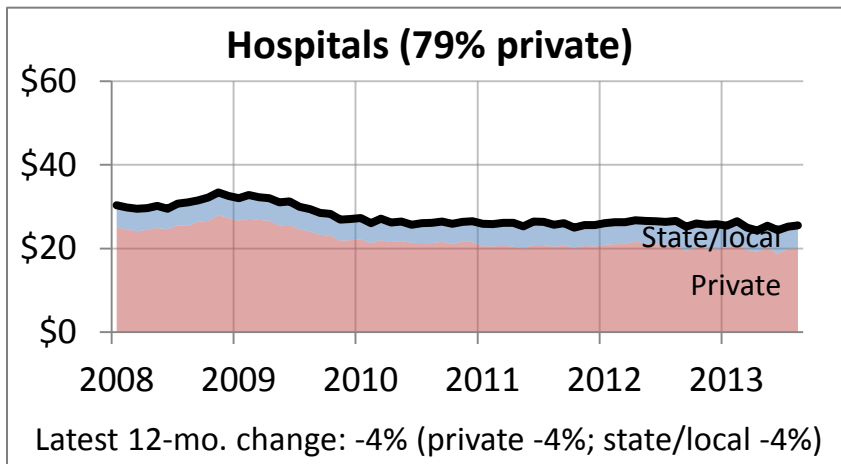
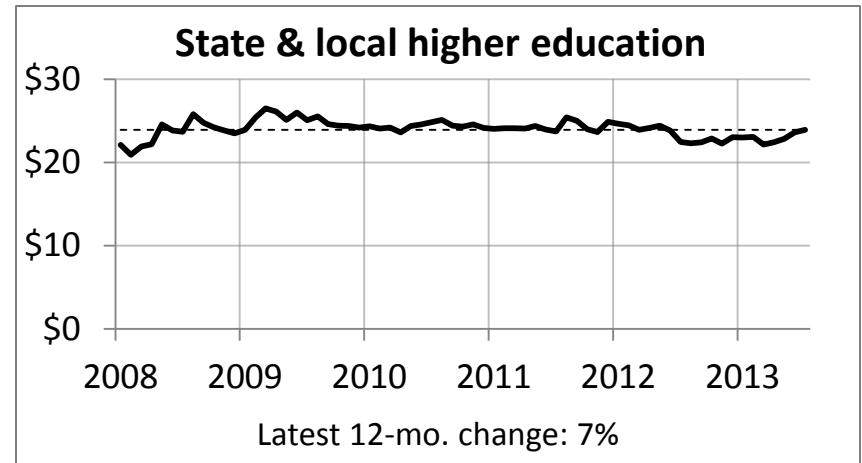
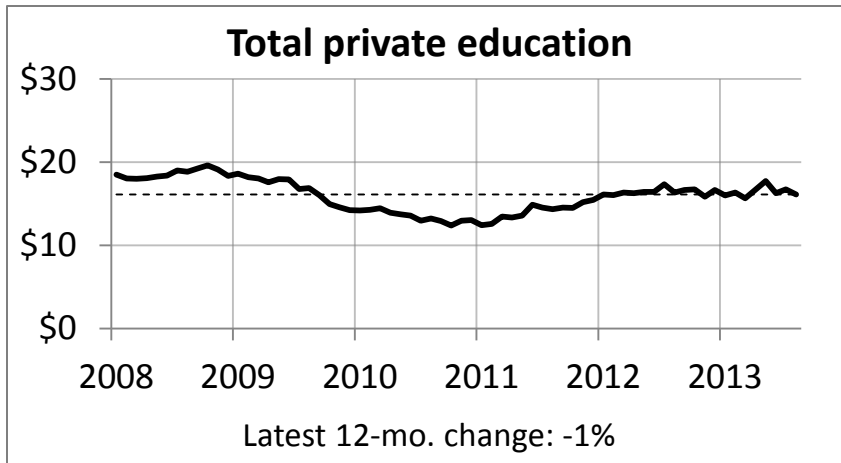
Nonres totals (billion \$, SAAR), share & 12-month change

	<u>8/13 Total</u>	<u>Share</u>	<u>8/12-8/13</u>
Nonresidential	\$569 billion	100%	1%
Power (incl. oil & gas structures, pipelines)	91	16	10
Highway and street	81	14	-1
Educational	80	14	-5
Manufacturing	49	9	5
Commercial (retail, warehouse, farm)	47	8	1
Transportation	42	7	11
Health care	40	7	-5
Office	38	7	-1
Sewage and waste disposal	22	4	3
Communication	16	3	-9
Lodging	15	3	27
Other (amusement; water; public safety; conservation; religious): 8% of total			-4

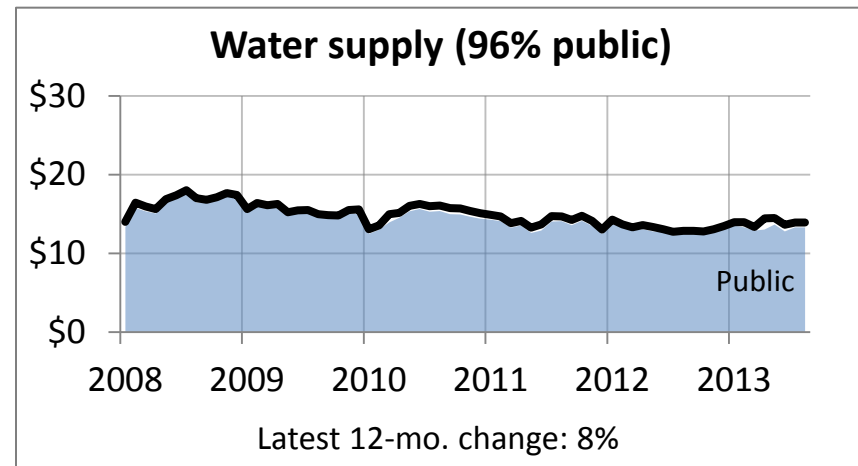
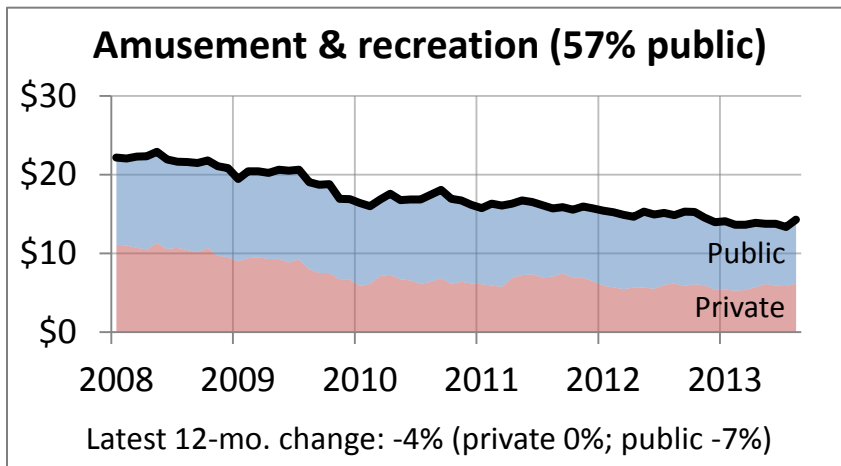
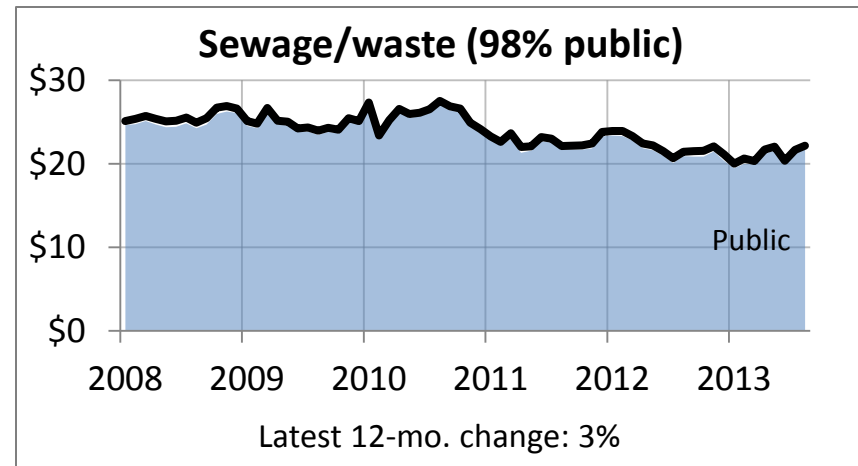
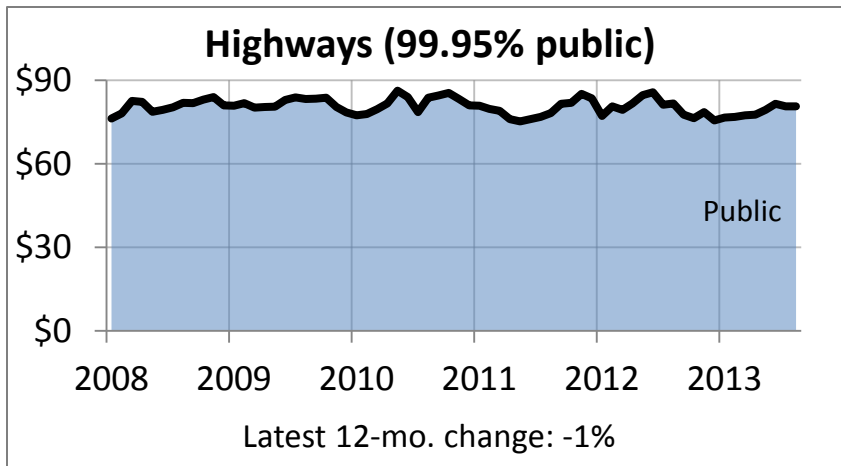
Construction spending: industrial, heavy (billion \$, SAAR)



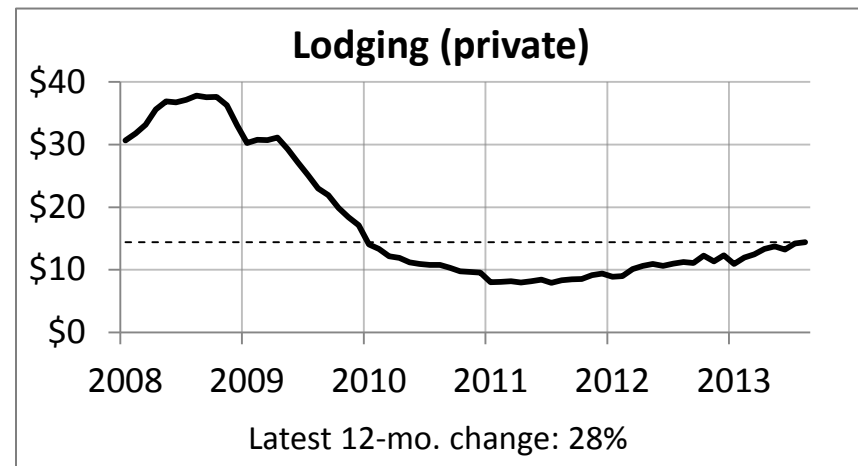
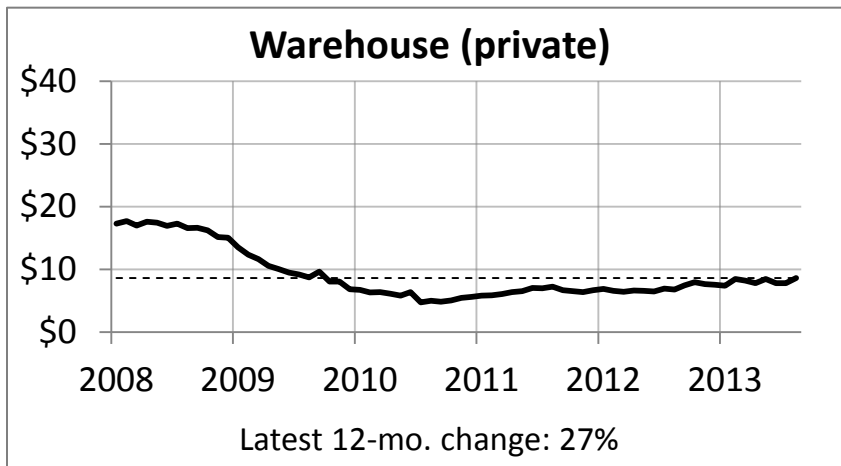
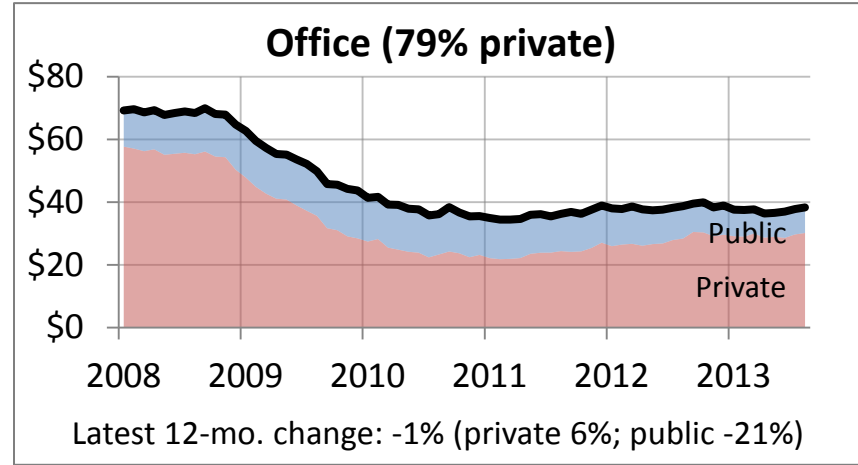
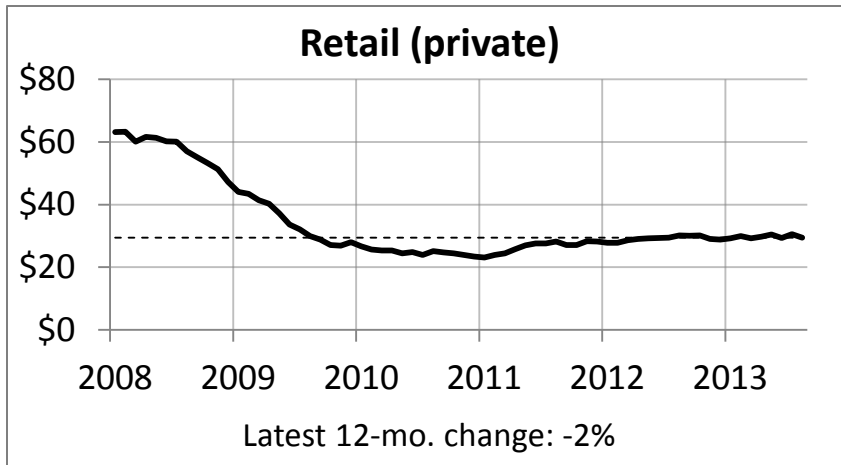
Construction spending: institutional (private + state/local)



Construction spending: public works (billion \$, SAAR)

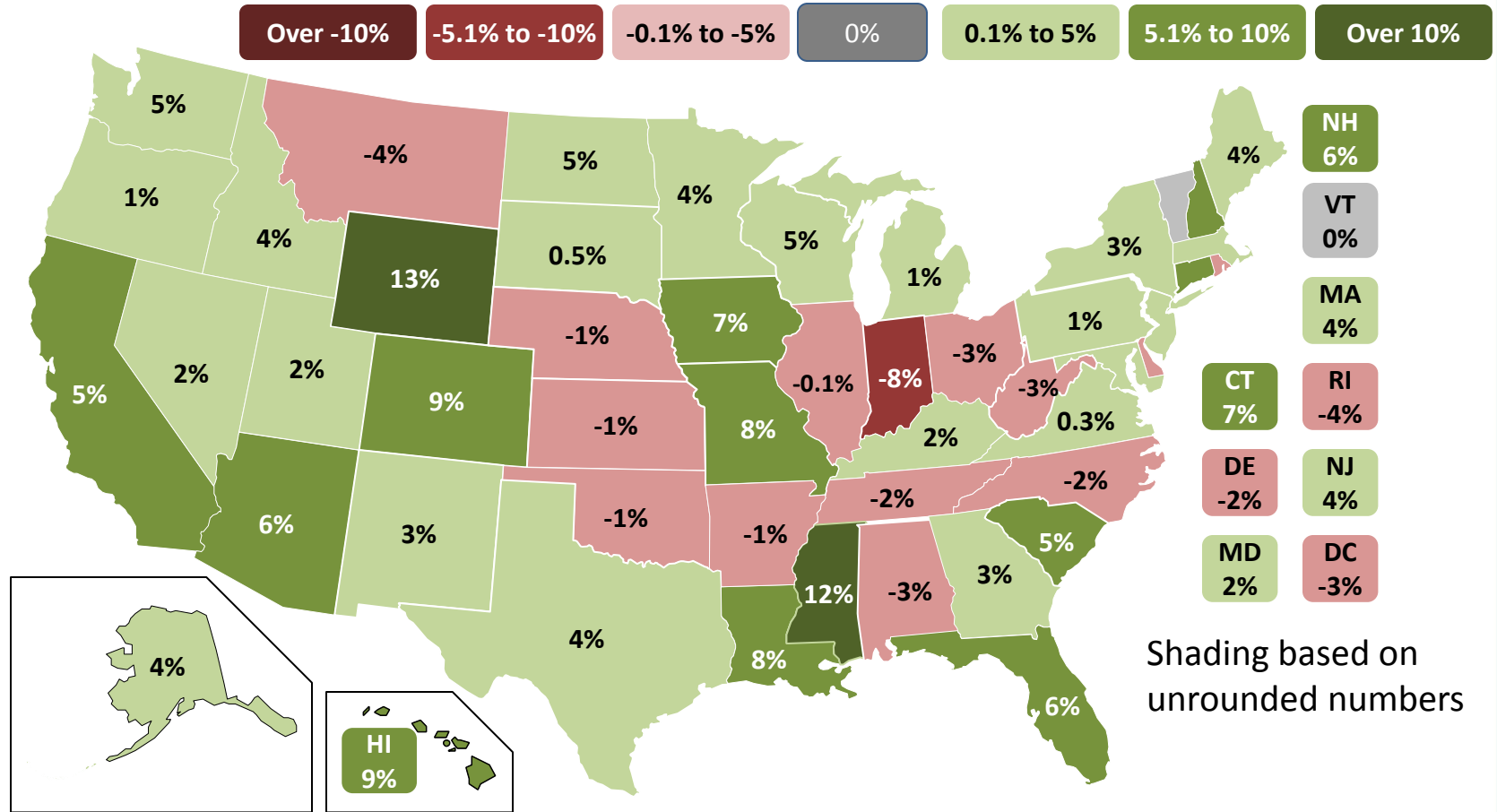


Construction spending: developer-financed (billion \$, SAAR)



State construction employment change (U.S.: 3.1%)

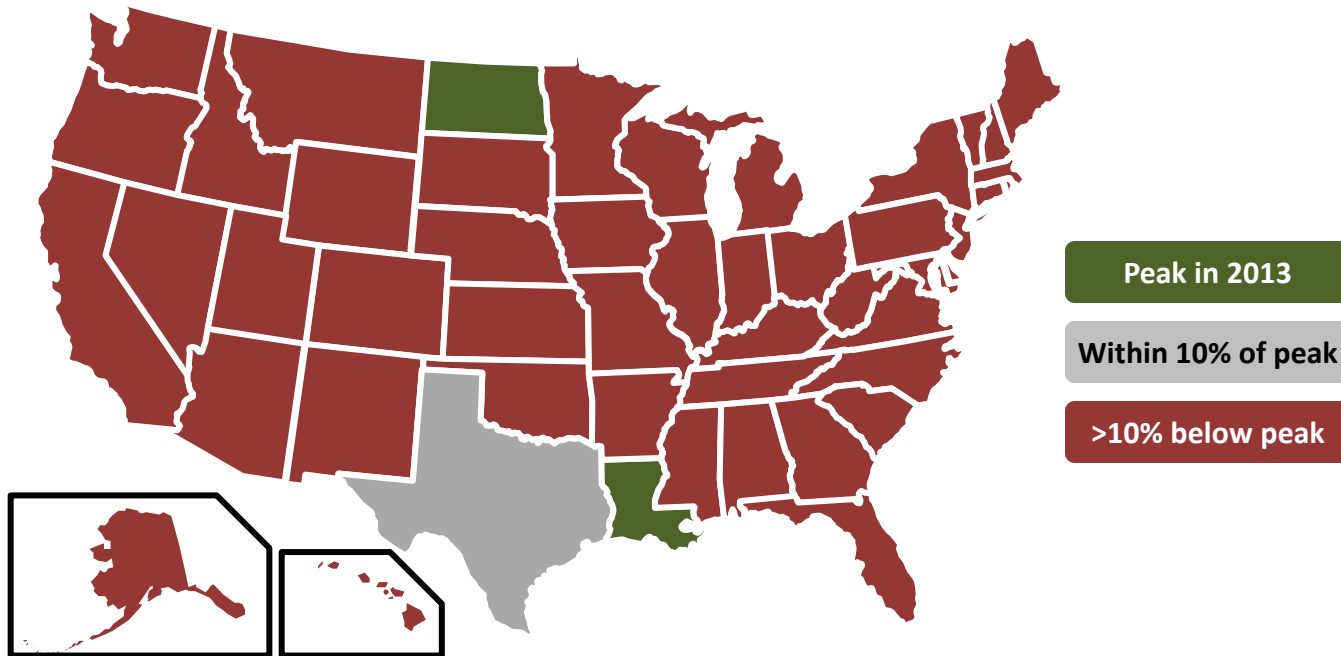
8/12 to 8/13: 35 states **up**, 1 unchanged, 14 + DC **down**



Shading based on unrounded numbers

Construction employment, Aug. '13 vs. peak

- US: construction -25% (-1.9 million) below Apr. '06 peak
- States: LA & ND at new peak in 2013, 47 states > 10% below
- Metros: only 19 of 339 at new Aug. peak, not seas. adjusted



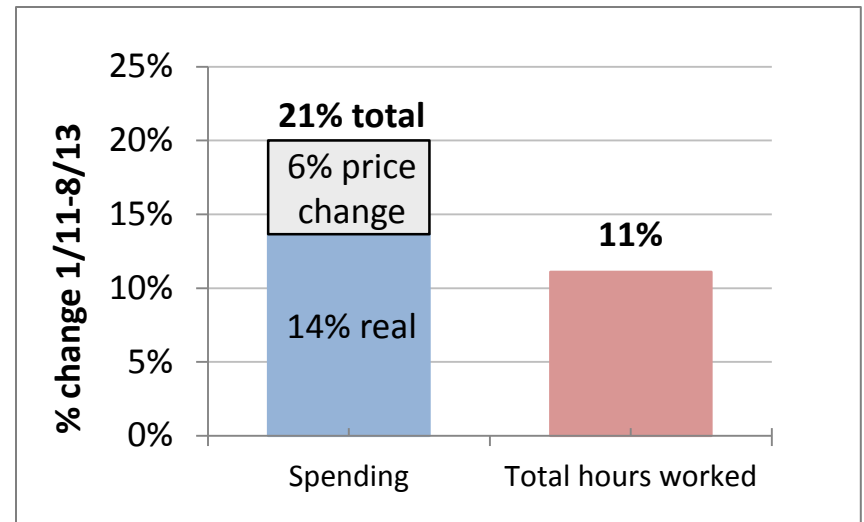
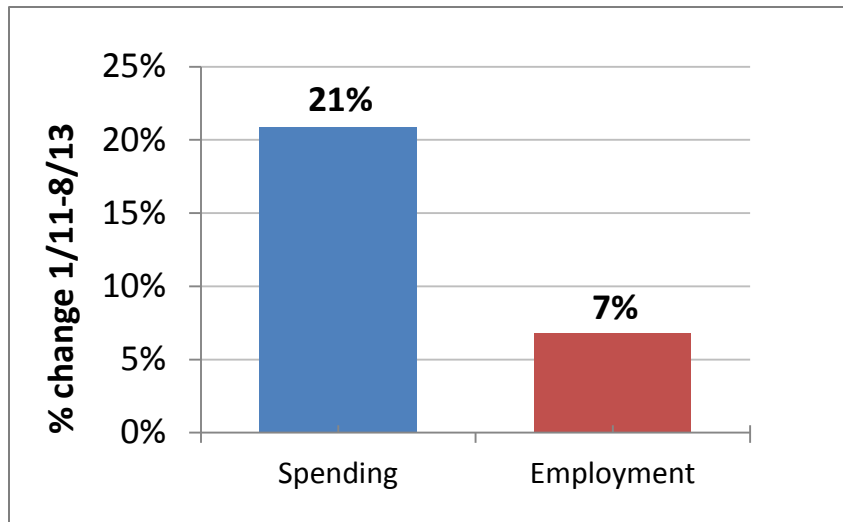
12-Month Percent Change in State Construction Employment (seasonally adjusted), January 2010-Aug. 2013



Construction spending, labor & prices, 1/11-8/13

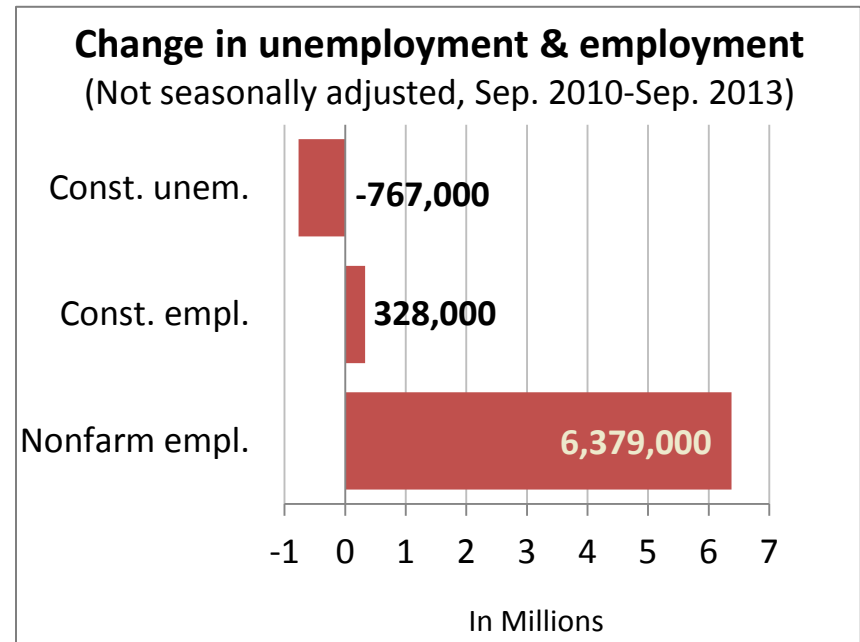
Spending +21% but jobs only +7%. How do they do it?

- Contractors charging slightly more: PPI +6% (industrial buildings)
- More hours per worker: aggregate hours +11% (+3% per employee)
- Implication: further spending growth will trigger bigger pickup in hiring—but will workers be available?

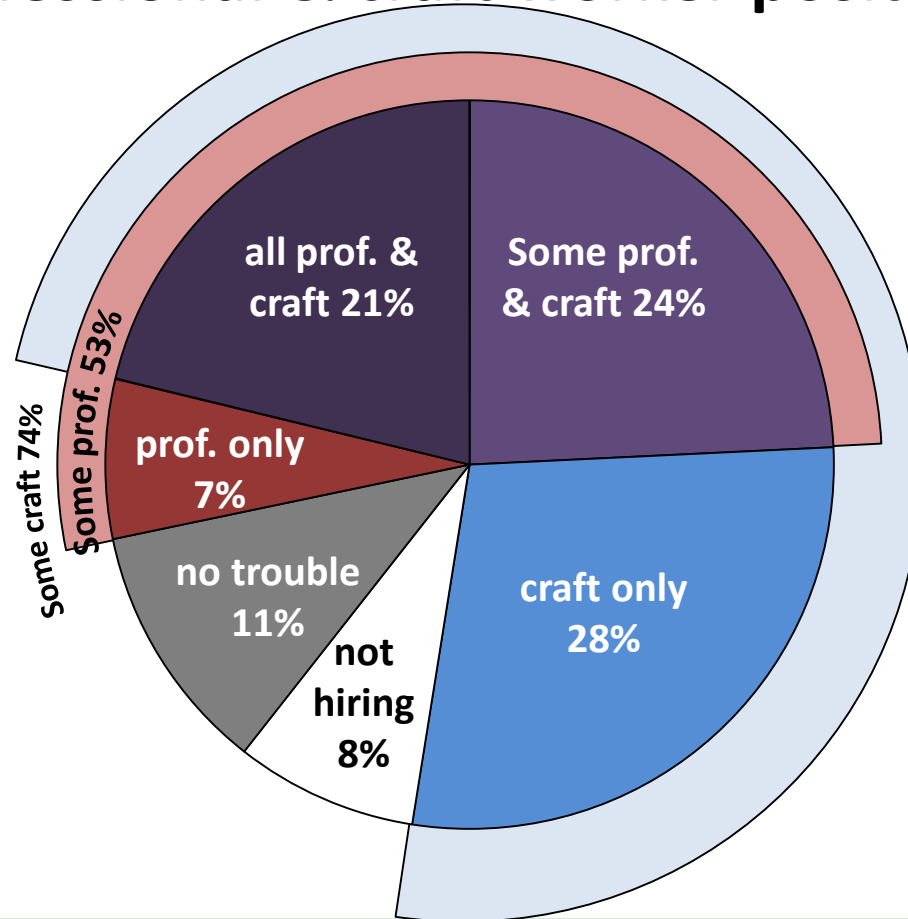


Construction vs. overall (un)employment, 9/10-9/13

- Construction unemployment fell sharply in past 3 years
- But industry employment has risen modestly
- Thus, workers are leaving for other sectors, school, retiring



Percentage of firms having a hard time filling key professional & craft worker positions

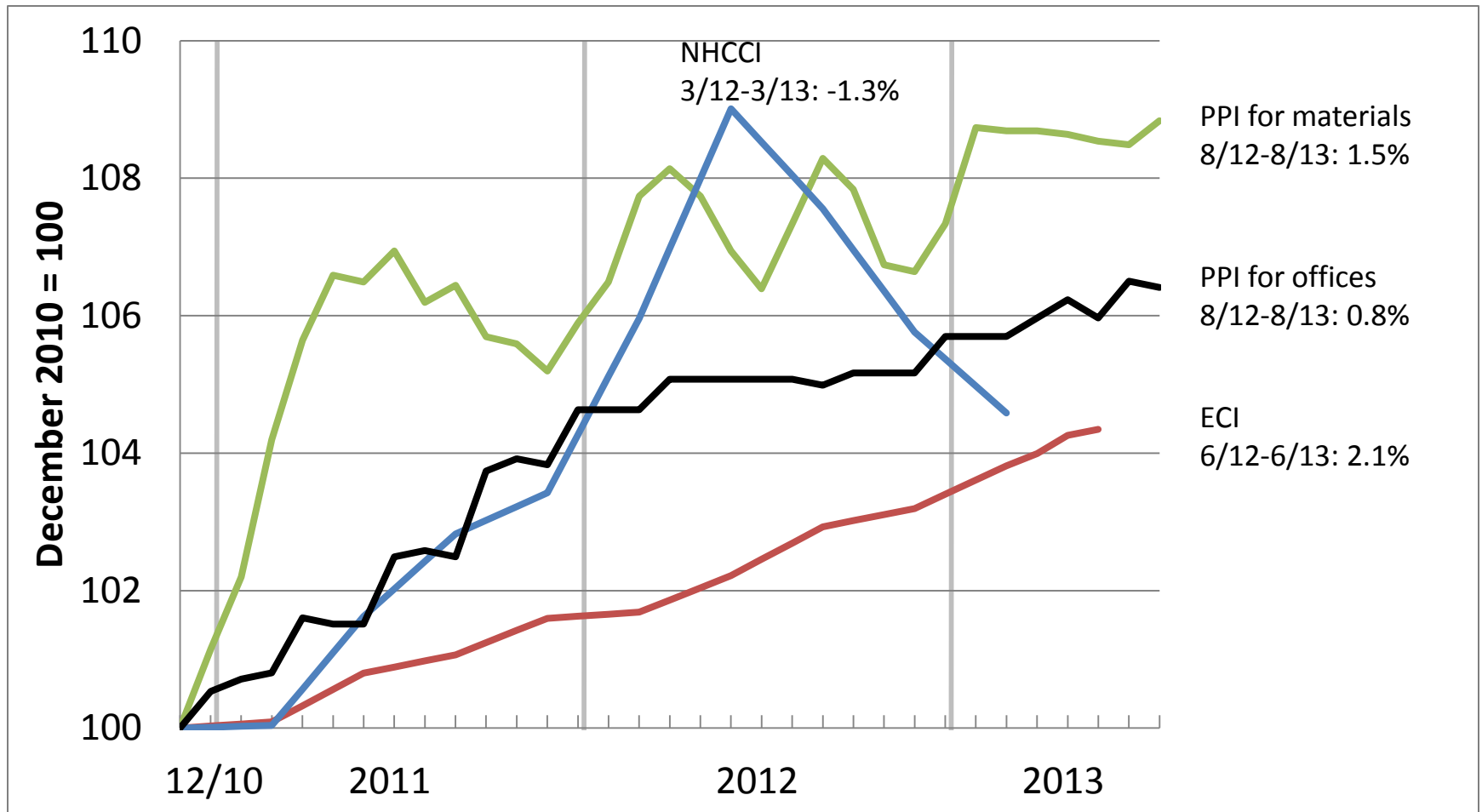


Hardest positions to fill

(% of respondents that are having trouble filling)

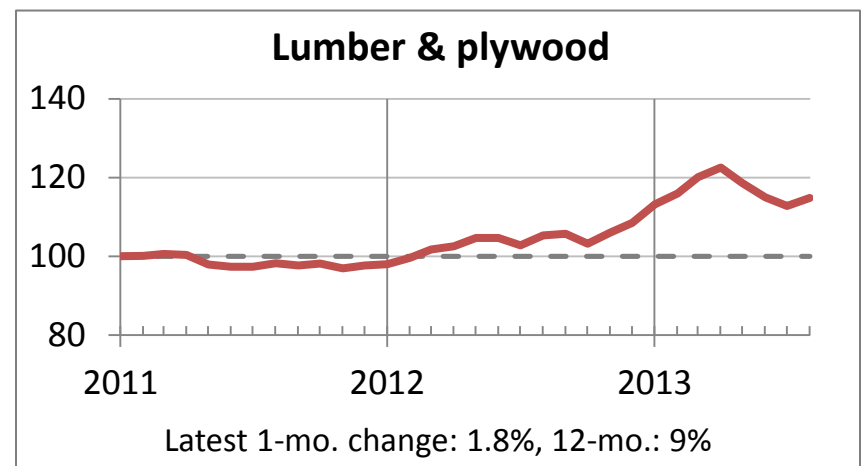
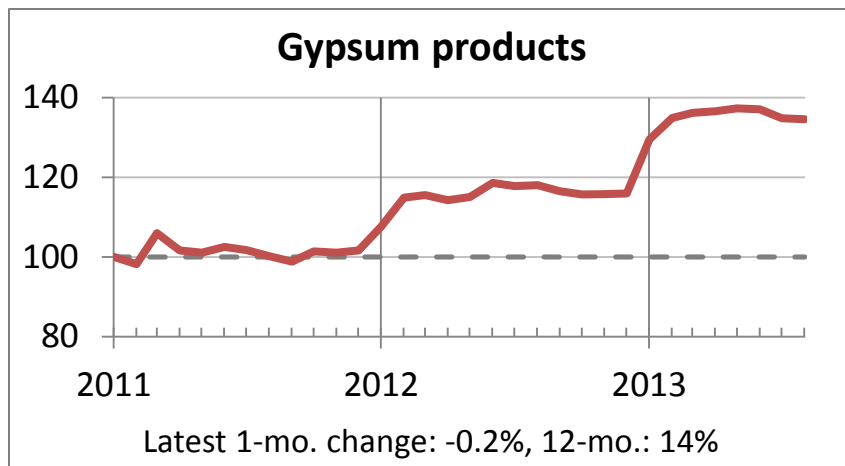
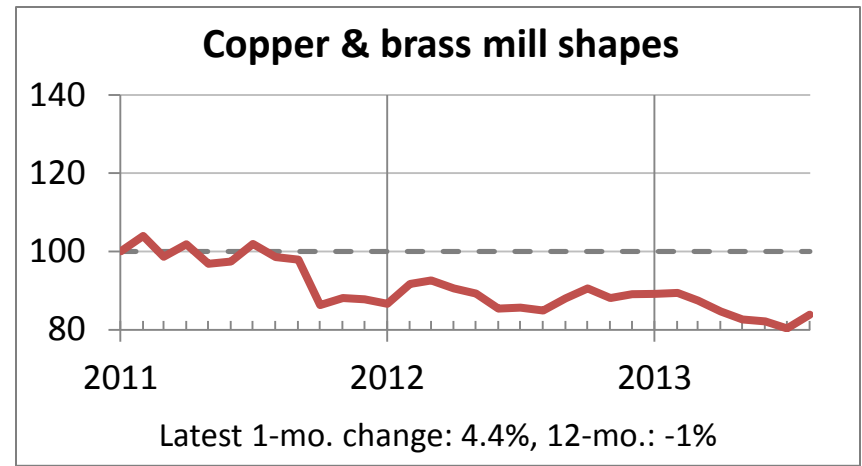
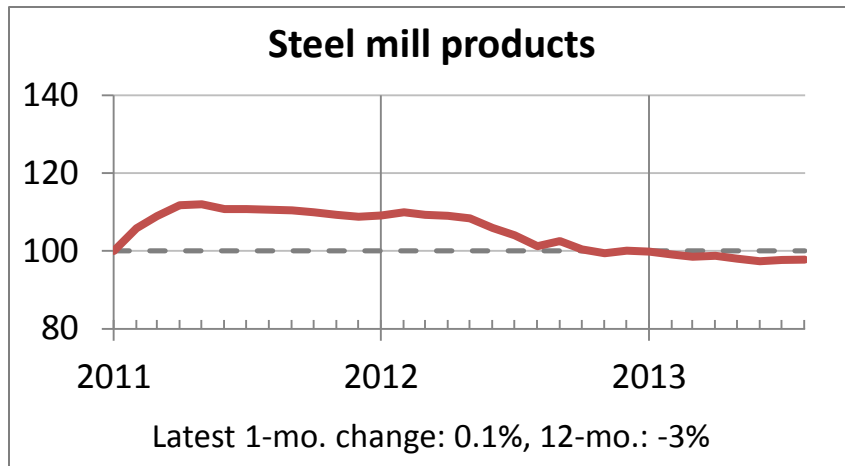
Professional - any	53%
Project managers/supervisors	49
Estimators	35
Engineers	15
<i>No trouble/not hiring</i>	47
Craft - any	74%
Laborers	35
Carpenters	34
Equipment operators	31
<i>No trouble/don't employ crafts</i>	26

Material & labor costs vs. office & highway bid prices since 12/10

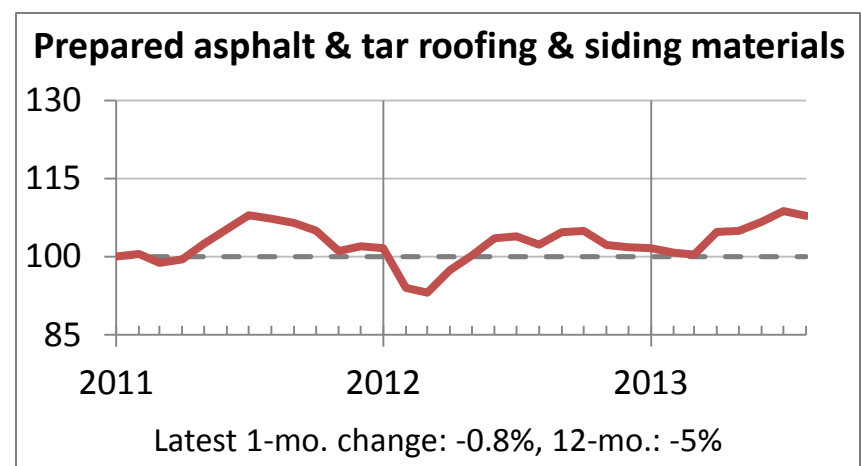
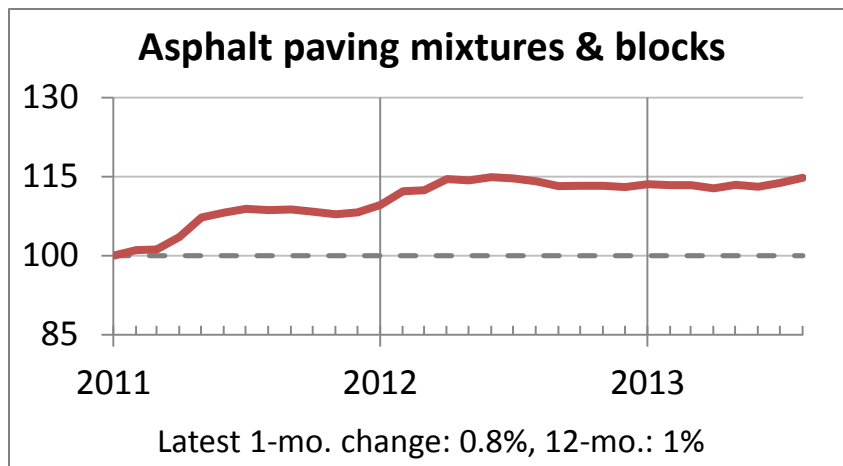
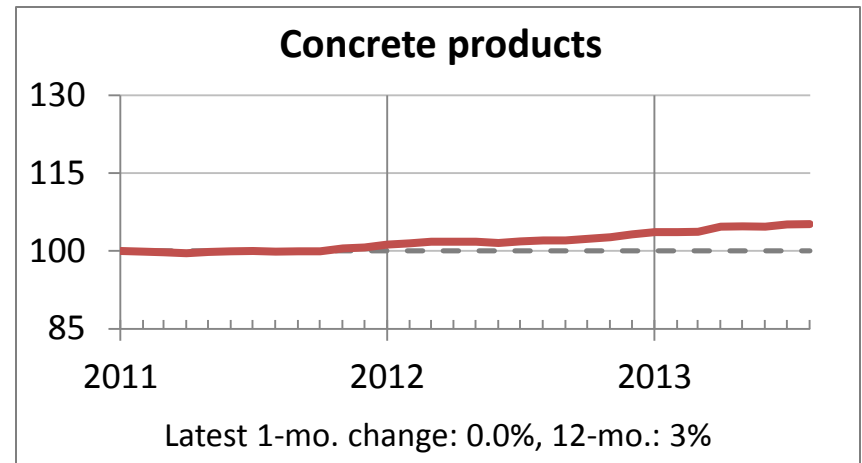
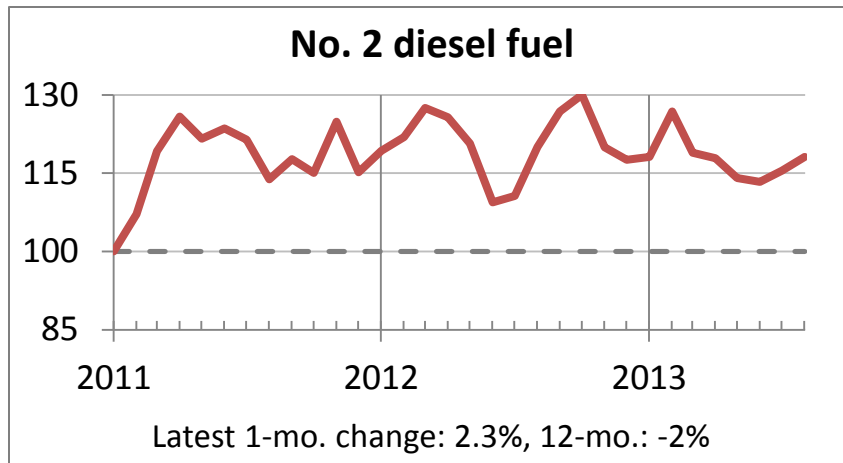


Source: Author, based on Bureau of Labor Statistics for Producer Price Indexes (PPIs) and Employment Cost Index (ECI); Federal Highway Administration for National Highway Construction Cost Index (NHCCI)

Producer price indexes for key inputs, 1/11-8/13 (Jan. 2011=100)



Producer price indexes for key inputs, 1/11-8/13 (Jan. 2011=100)



Summary for 2013

- Total construction spending: +5% to +8% (vs. 9% in '12)
- Res +15% to +20% (vs. 15% in '12): MF very strong, SF ??
- Private nonres +4% to +7% (vs. 16% in '12): more manufacturing, warehouse, data centers; remodels of hotels, office, retail; flat power, health care, private ed
- Public: -3% to -5% (vs. -3% in '12): highways 0%, ed -5%; federal spending-down; states-level; local-small decline
- Materials costs: +1.5 to +2.5% Dec.-Dec. (vs. 1.4% in '12)
- Labor costs: +2% to +2.5% Dec.-Dec. (vs. 1.6% in '12)
- Labor supply: limited craft, professional shortages

Trends: 2014-2017

- Total construction spending: +6% to +10% per year
 - less SF housing, retail; declining public spending
 - new drivers: shale-based gas & oil; Panama Canal widening; more elderly & kids, fewer young adults
- Materials costs: +3%; rare spikes (vs. 2 to 3% for CPI)
- Labor costs: +2.5% to + 5%
- Labor supply: widespread shortages possible due to retirements, competition from other sectors, fewer vets

Summary for 2013, 2014-17

	2012 actual	2013 est.	2014-17 annual average
Total spending	9%	5-8%	6-10%
Private – residential	15%	15-20%	1-10%
– nonresidential	16%	4-7%	1-10%
Public	-3%	-3 to -5%	0 or less
Materials PPI	1.4%	1.5-2.5%	3%; rare spikes
Employment cost index	1.6%	2-2.5%	2.5-5%

AGC economic resources

(email simonsonk@agc.org)

- The Data DIGest: weekly 1-page email (subscribe at www.agc.org/datadigest)
- monthly press releases: spending; PPI; national, state, metro employment
- State and metro data, fact sheets
- Website: <http://www.agc.org/Economics>



Sept. 24-Oct. 2, 2009
Vol. 9, No. 33

Construction job losses remain heavy, widespread; homebuilding rises, nonres sinks

[Download the one-page Data DIGest](#)

City-by-City Construction Employment, August 2009 and 2008

Seasonally adjusted nonfarm payroll job losses in September totaled 263,000, barely half the average of the last 12 months, the Bureau of Labor Statistics (BLS) reported on Friday. (Seasonal adjustment takes into account normal monthly variations in weather and numbers of work days.) *But construction, particularly nonresidential, continued to hemorrhage jobs. Construction lost 1.5% of its September 2008 jobs in the last 12 months, compared to 4% for the entire nonfarm economy. September losses totaled 51,000 in nonresidential building, specialty trade, and heavy and civil engineering construction combined, nearly the monthly average loss of 54,000 over the past 12 months. Residential building and specialty trade contractors shed a combined 13,000 jobs in September, barely a third as many as the monthly average over the 12-month span. One faintly positive sign was that architectural and engineering services employment, a harbinger of future demand for construction, rose for the first time in 15 months, albeit by only 500 jobs (0.04%). Average hourly earnings in construction tumbled 16 cents to \$22.45 in September, bringing the 12-month change to 36 cents or 1.6%, compared to 2.5% for all private-sector production or nonsupervisory employees. The overall unemployment rate climbed to 9.5% in September, not seasonally adjusted (9.8%, seasonally adjusted) from 6.0% a year earlier. The unemployment rate in construction, 17.1%, not seasonally adjusted, again topped every other industry and was up from 9.9% a year earlier.*

For the eighth month in a row, all 372 metro areas had higher unemployment rates in August than a year earlier, BLS reported on Wednesday. (Seasonally adjusted industry and metro unemployment rates are not available.) Of the 369 areas reporting nonfarm payroll employment, 356 had year-to-year losses, 11 had gains and two were unchanged. The largest percentage gains were in Sandusky, Ohio, 2.7%; Hot Springs, Arkansas, 2.6%; Kennewick-Pasco-Richland, Washington, 2.5%; Jonesboro, Ark., 1.9%; and McAllen-Edinburg-Mission, Texas, 1.5%. *If sustained, these gains can lead to more demand for construction. AGC compiled a list of 337 areas, including divisions and subdivisions of the 34 largest metros, for which BLS provided construction employment figures (combined with mining and logging in metros where employment in these industries is small). Construction employment fell over the past 12 months in 324 of these locations, rose in eight and was unchanged in five. The largest 12-month percentage construction employment gains were in Columbus, Indiana, 14% (combined data); Anderson, Ind., 6% (combined); Tulsa (construction only); Longview, Wash. (combined) and Baton Rouge (construction only), 3% each. The worst construction job losses were in Reno-Sparks, Nevada, -35% (construction only); Duluth, Minnesota-Wisconsin, -53% (combined); Tucson, -31% (construction only); Wenatchee-East Wenatchee, Wash., -30% (combined); and Redding, California, -28% (combined).*

Construction in Chicago will not get a boost from the Olympics. The International Olympic Committee today awarded the 2016 Games to Rio.

The Data DIGest is a weekly summary of economic news; items most relevant to construction are in italics. All rights reserved.



Subscribe to Data DIGest
Ken Simonson, Chief Economist, Associated General Contractors of America
Phone: 703-837-5313 • Fax: 703-837-5407 Email: simonsonk@agc.org