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

Quality People.
Quality Projects.

Construction Spending, Labor & Materials Outlook

Carolinas AGC Winter Meeting

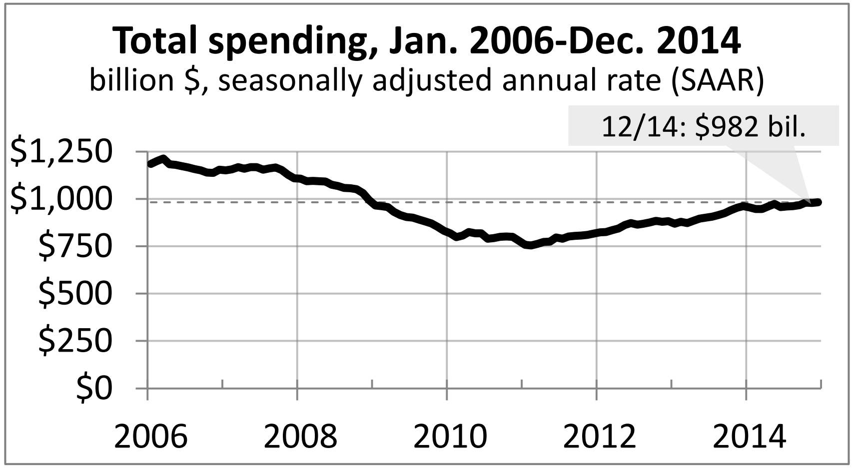
Nassau, Bahamas, February 5, 2015

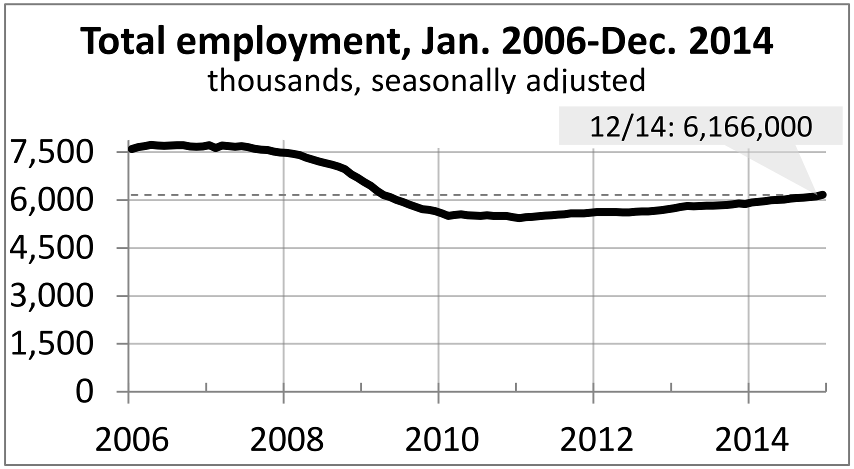
Ken Simonson

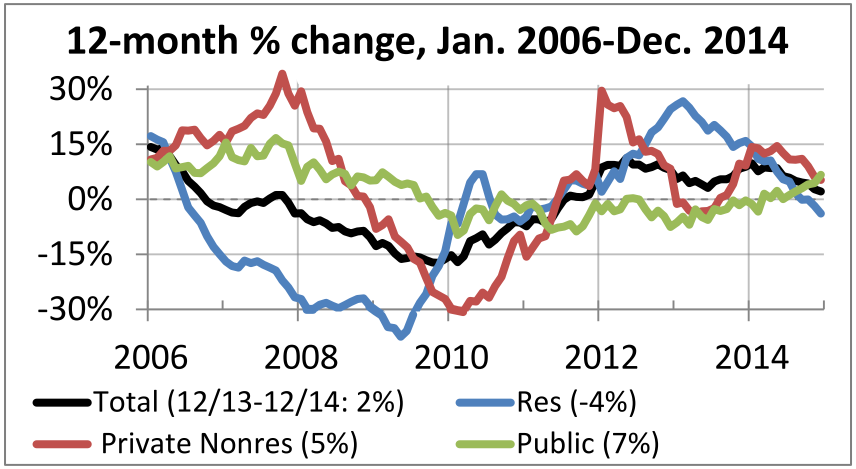
Chief Economist, AGC of America

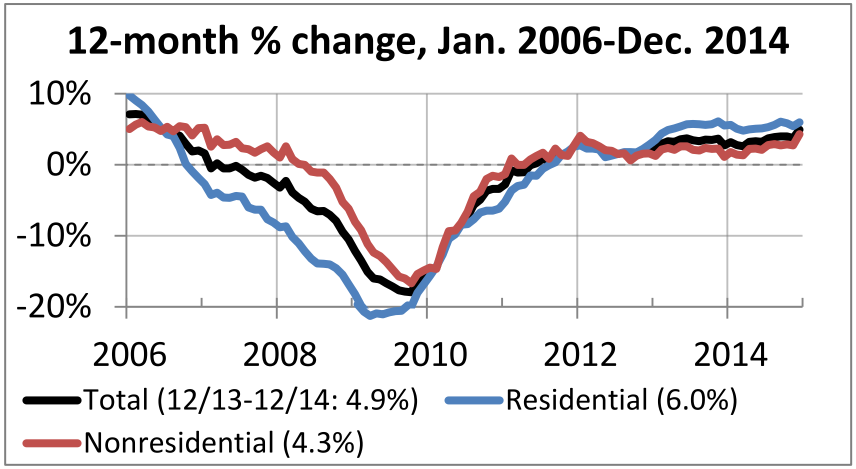
simonsonk@agc.org

Construction spending & employment, 2006-14









Source: BLS, Census Bureau construction spending reports

Construction is growing, but unevenly

3 trends helping many sectors and regions:

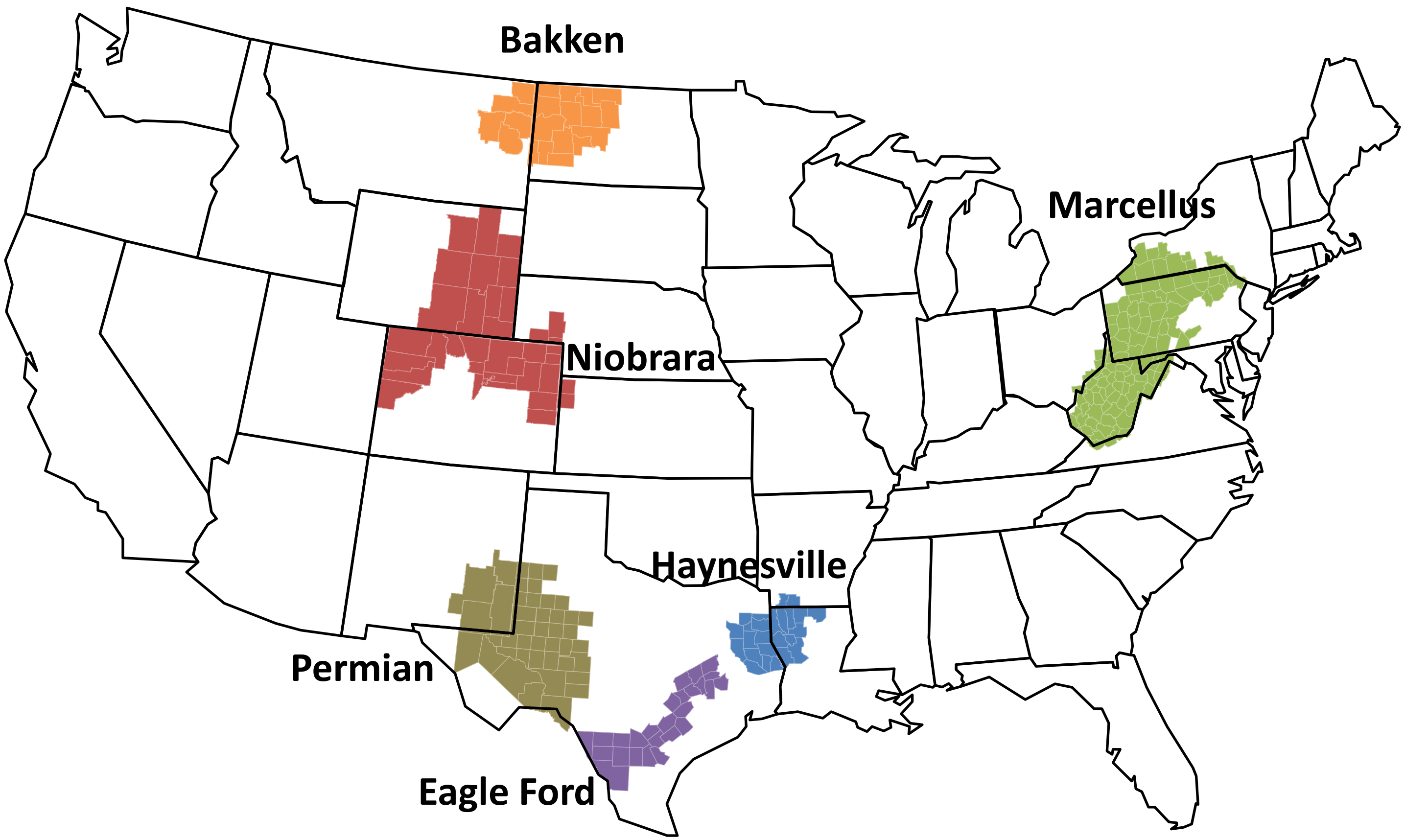
- ‘Shale gale’—continuing despite oil price plunge
- Panama Canal expansion
- Residential revival, especially multifamily

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

Source: Author

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



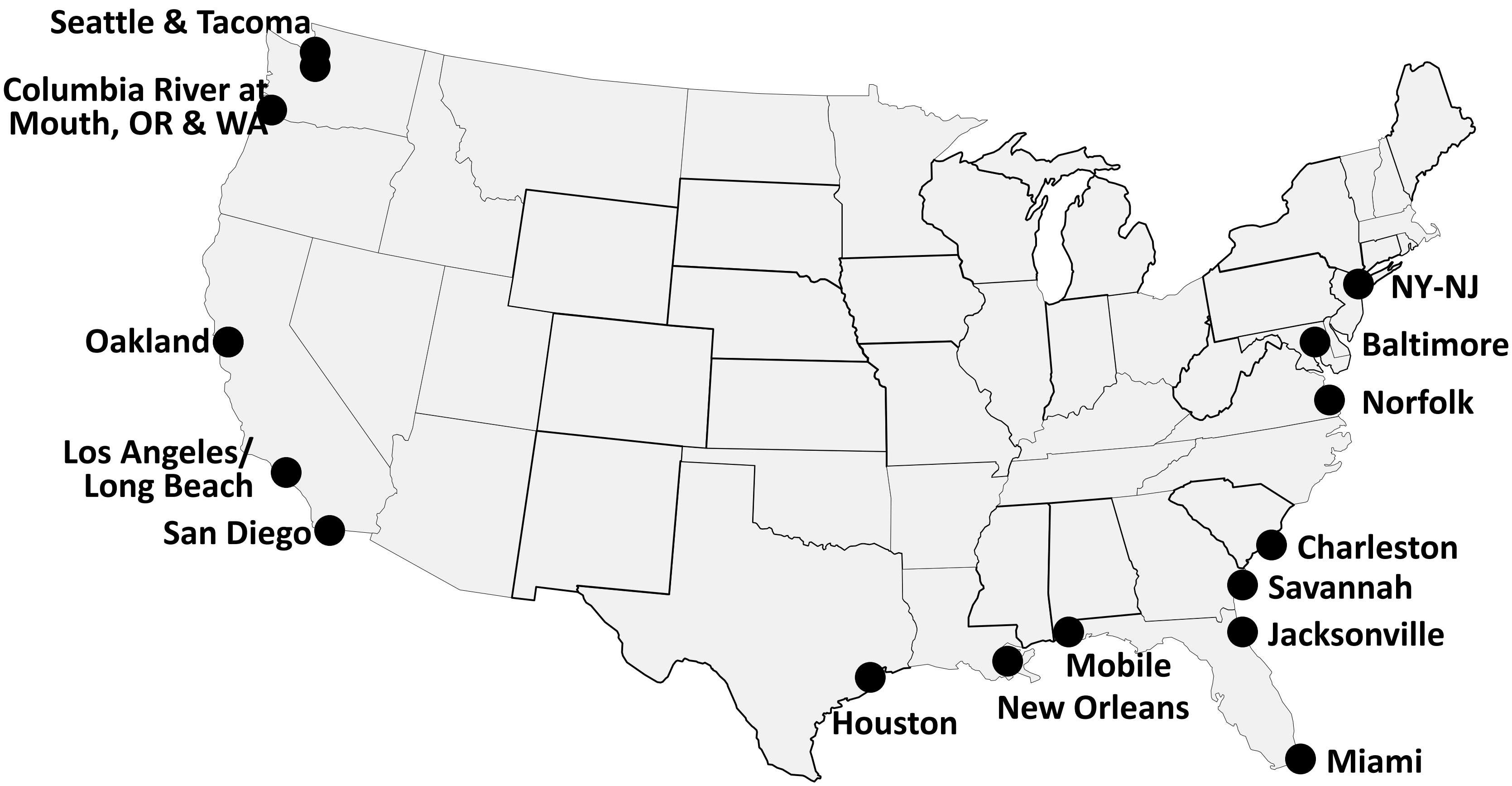
Source: U.S. Energy Information Administration

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; NG-powered vehicles
- **Losers:** coal; maybe wind, solar, nuclear & their suppliers

Source: Author

U.S. ports affected by Panama Canal expansion



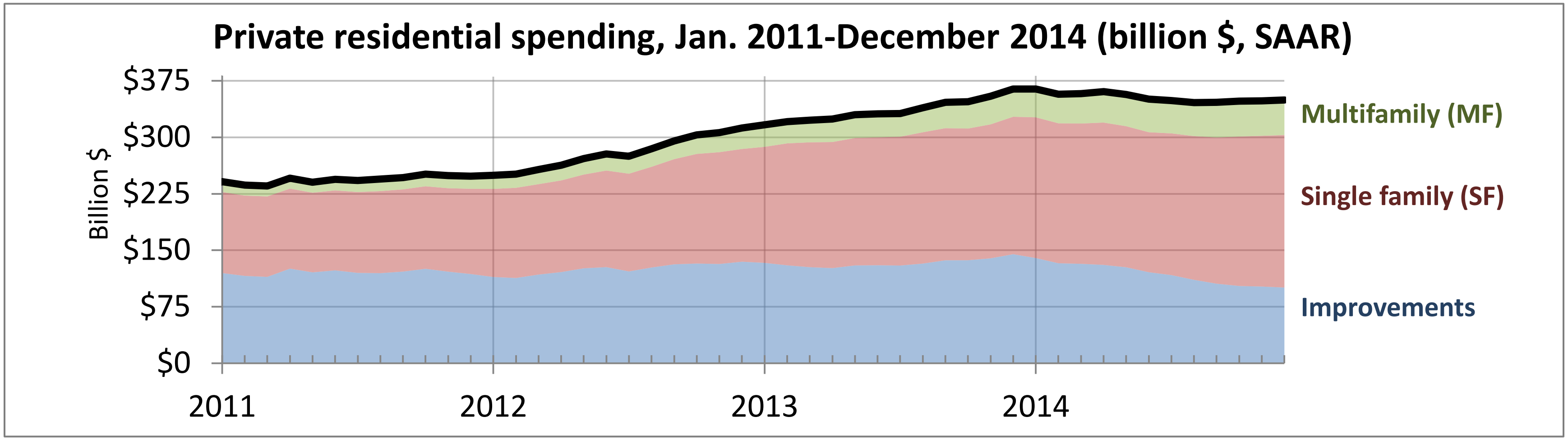
Source: U.S. Army Corps of Engineers

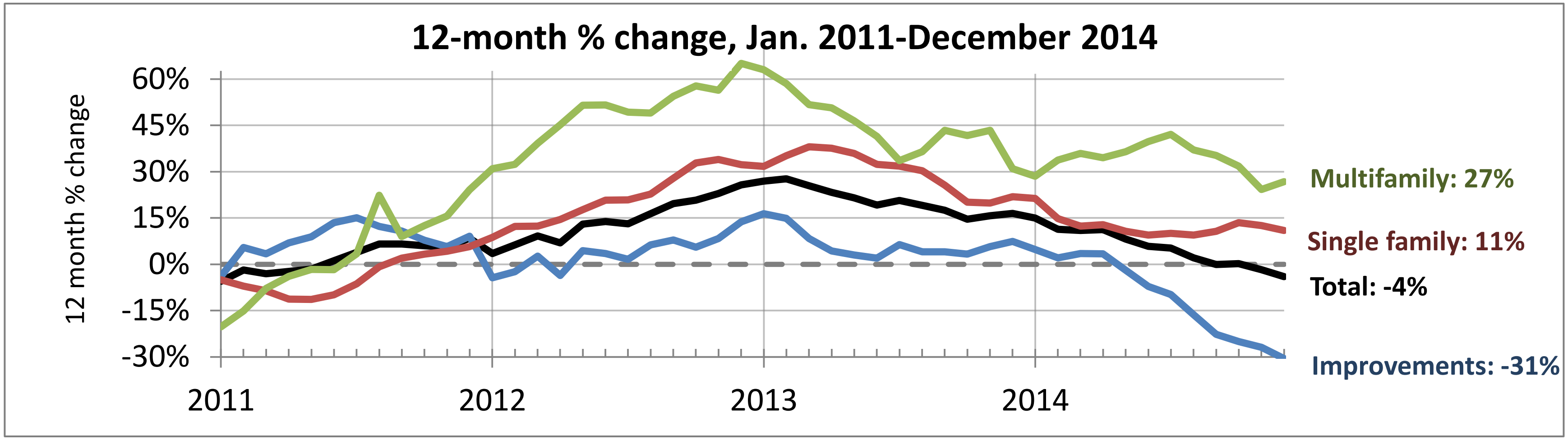
Panama Canal expansion's impacts on construction

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

Source: Author

Private residential spending: MF still soaring, SF slowing





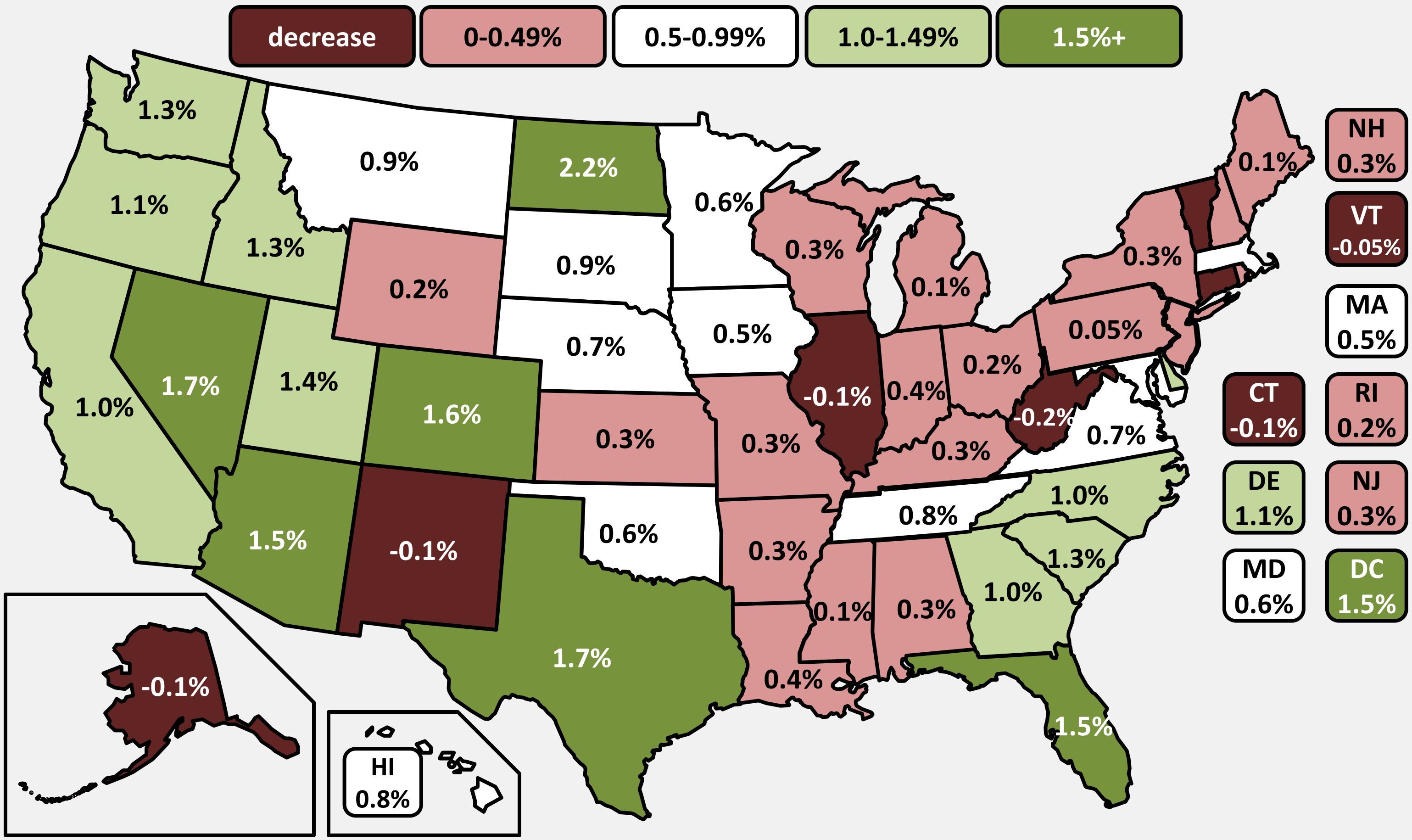
Source: Census Bureau construction spending reports

Housing outlook

- SF: rising for now but tight credit, fear of lock-in, demographic shifts may limit increases
- MF: Upturn should last through 2015
  - Vacancy rates near multi-year lows in most cities
  - Preference for urban living adds to demand
  - Condos have been slower to revive than rentals
  - Government-subsidized market remains weak
- Improvements: down in ‘14 but should track SF sales

Source: Author

Population change by state, July 2013-July 2014 (U.S.: 0.75%)



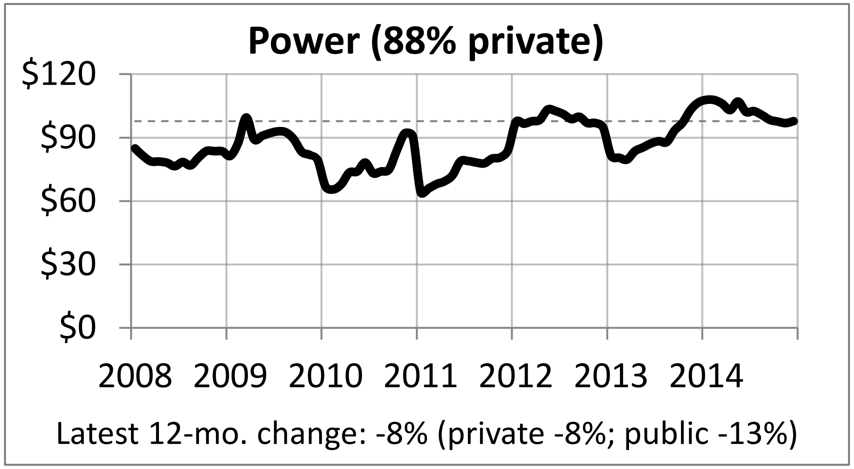
Source: U.S. Census Bureau News

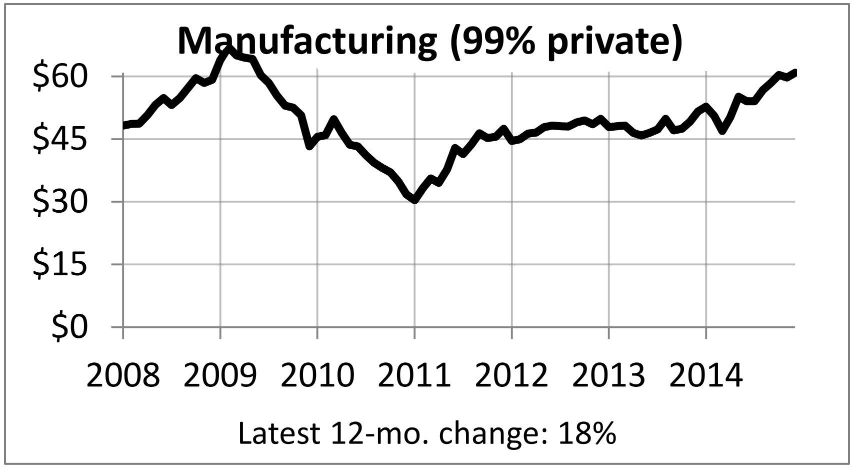
Nonresidential segments: 2014 total & 2015 forecast

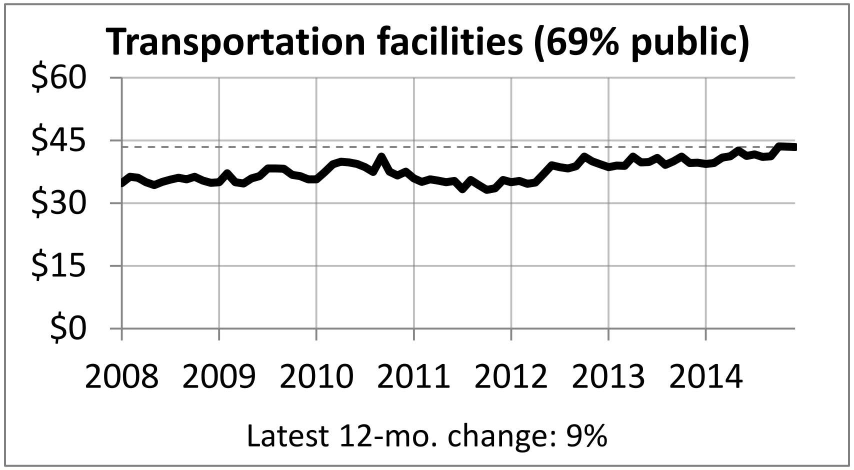
	2014 total	2014 vs. 2013	2015 forecast
Nonresidential	$606 billion	7 %	4-8 %
Power (incl. oil & gas structures, pipelines)	101	12	10+
Highway and street	85	4	0 to -5
Educational	78	1	0 to 5
Commercial (retail, warehouse, farm)	57	12	0 to 5
Manufacturing	55	15	10+
Office	45	19	5+
Transportation	42	5	2 to 5
Health care	39	-6	0 to -5
Sewage and waste disposal	23	4	
Lodging	16	18	10+
Amusement & recreation	17	7	
Other (communication; water; public safety; conservation; religious): 8% of total		-2	

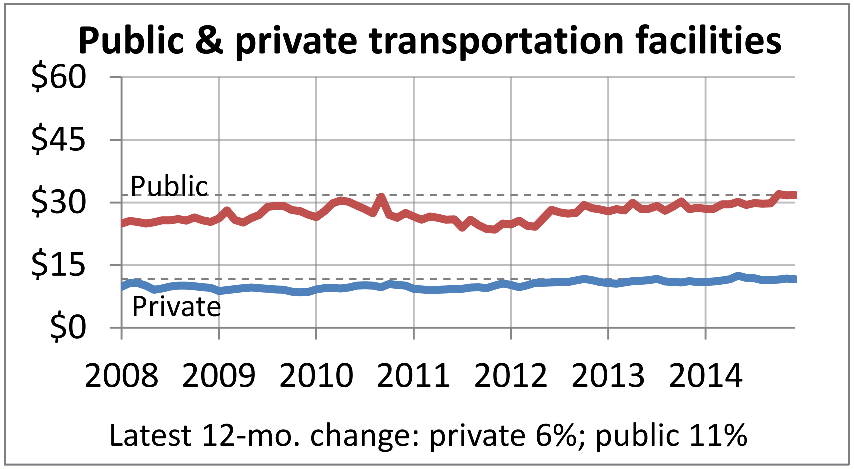
Source: Census Bureau construction spending report; Author's forecast

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



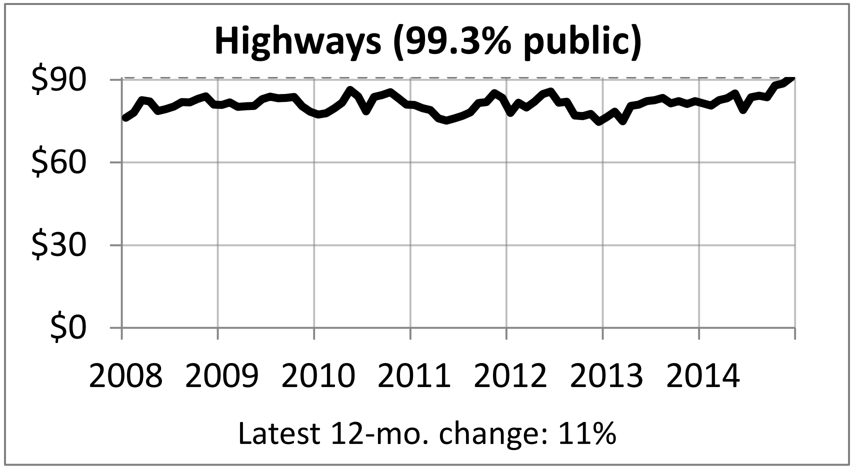


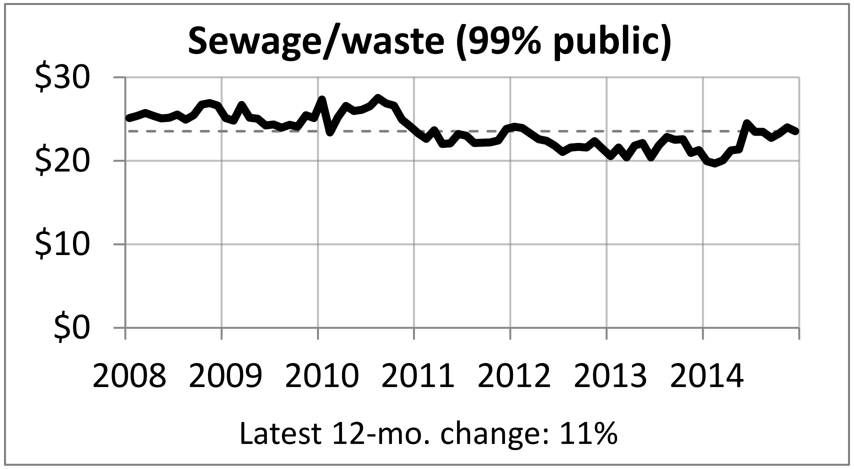


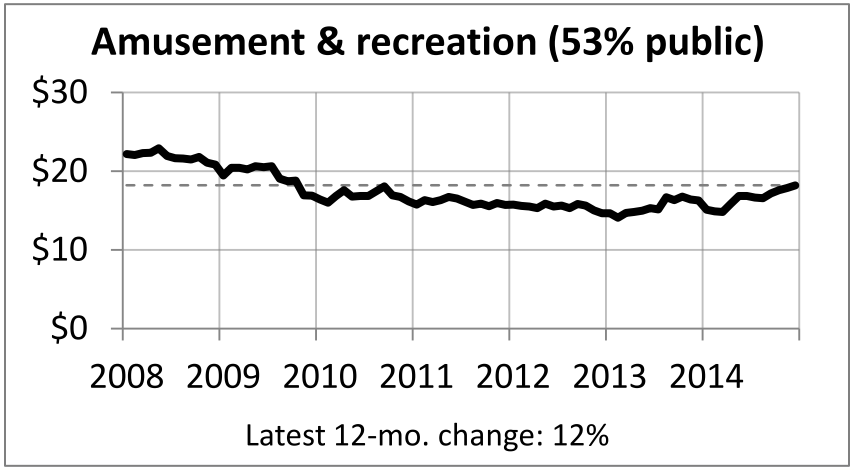


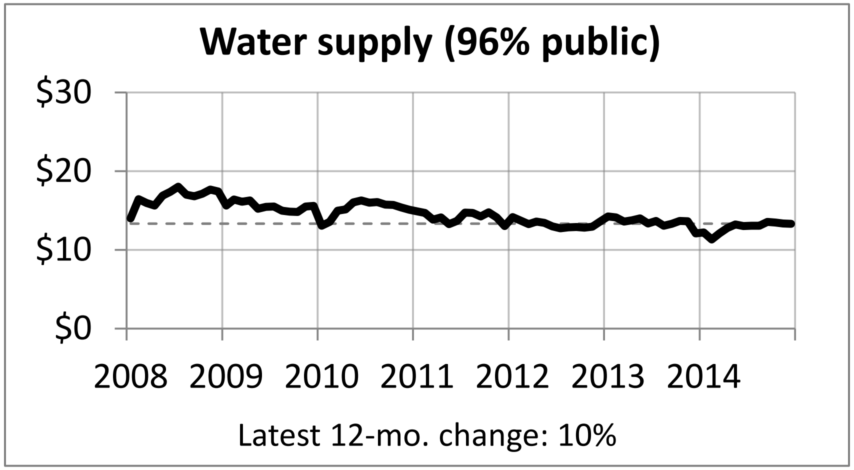
Source: Census Bureau construction spending reports

Construction spending: public works (billion $, SAAR)



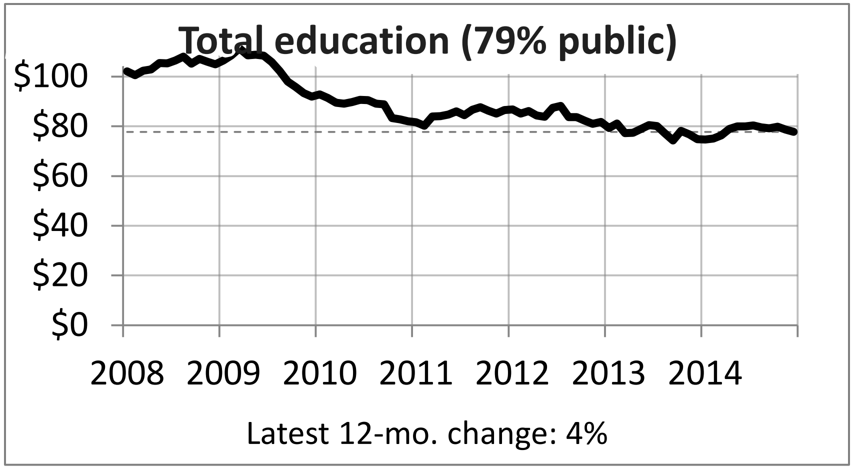


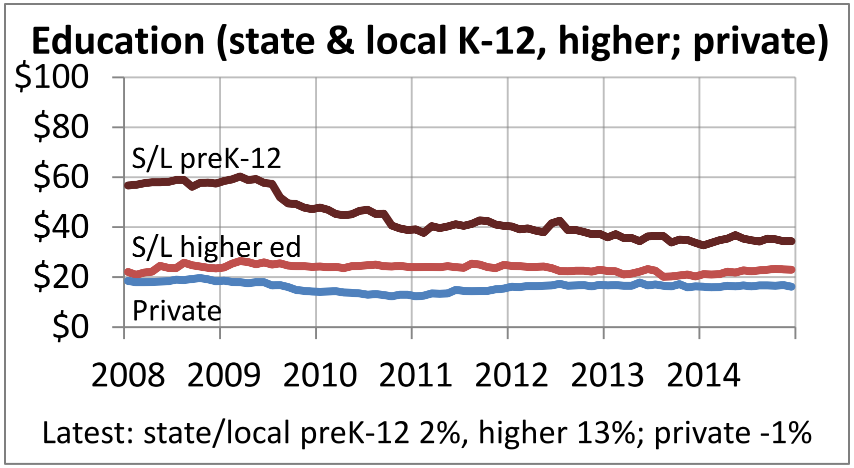


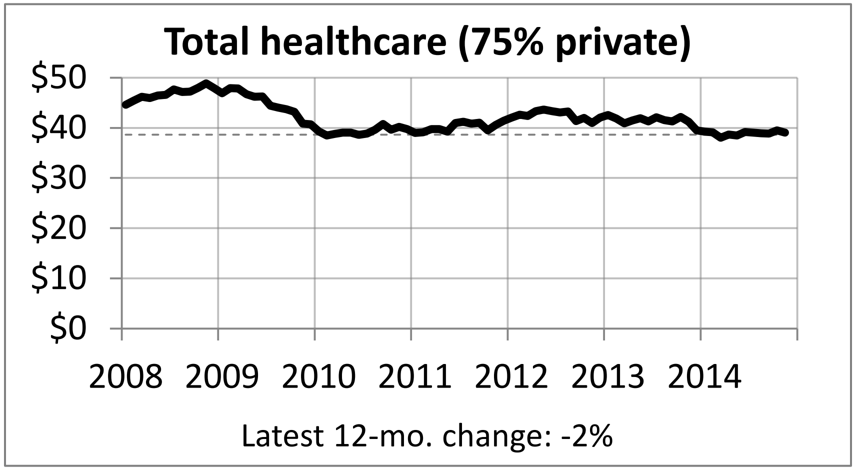


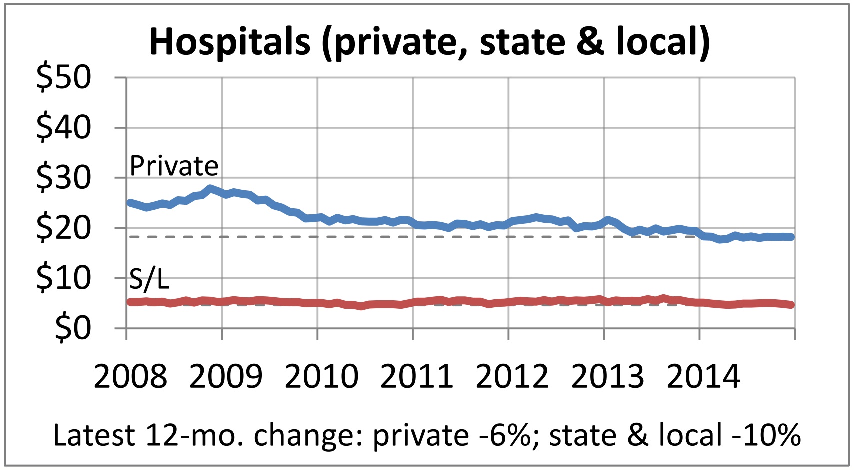
Source: Census Bureau construction spending reports

Construction spending: institutional (private + state/local)





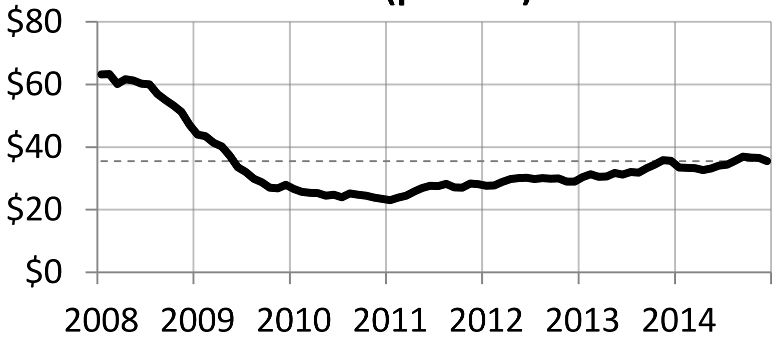




Source: Census Bureau construction spending reports

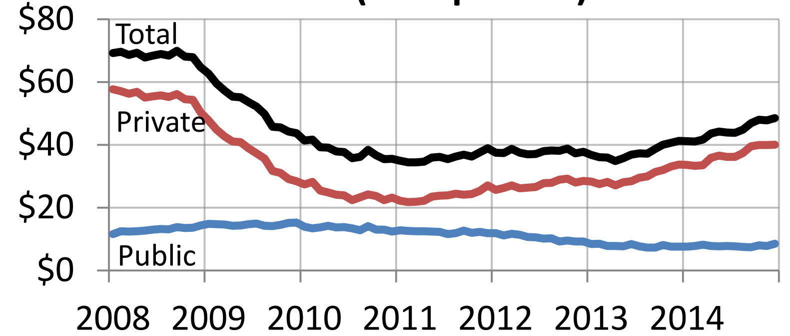
Construction spending: developer-financed (billion $, SAAR)

Retail (private)



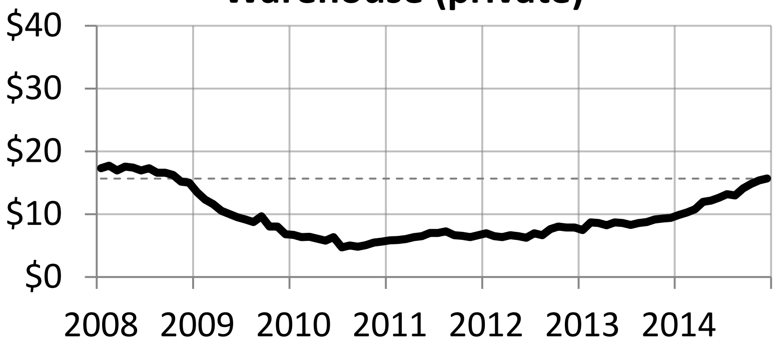
Latest 12-mo. change: -0.3%

Office (83% private)



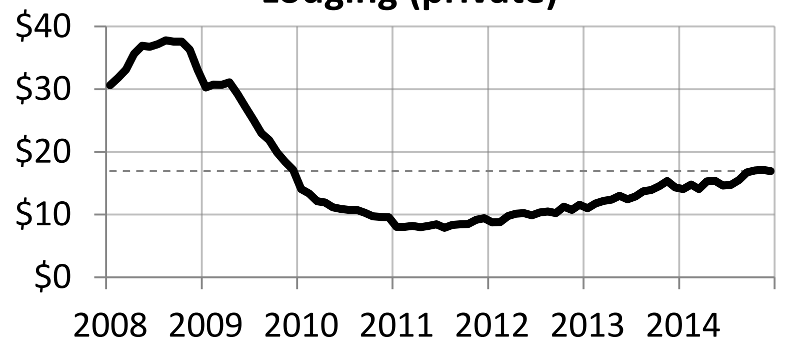
Latest 12-mo. change: 18% (private 19%; public 12%)

Warehouse (private)



Latest 12-mo. change: 66%

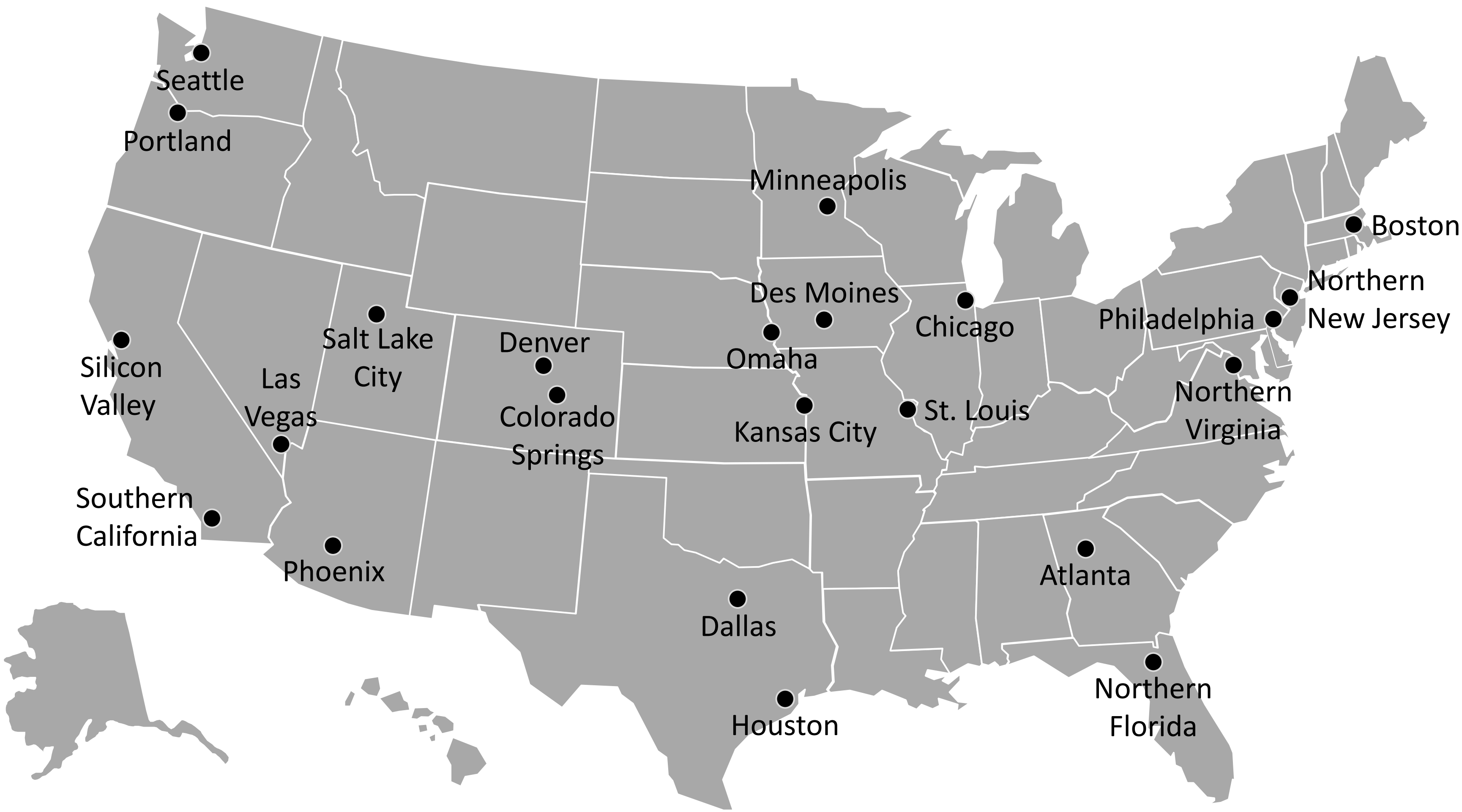
Lodging (private)



Latest 12-mo. change: 18%

Source: Census Bureau construction spending reports

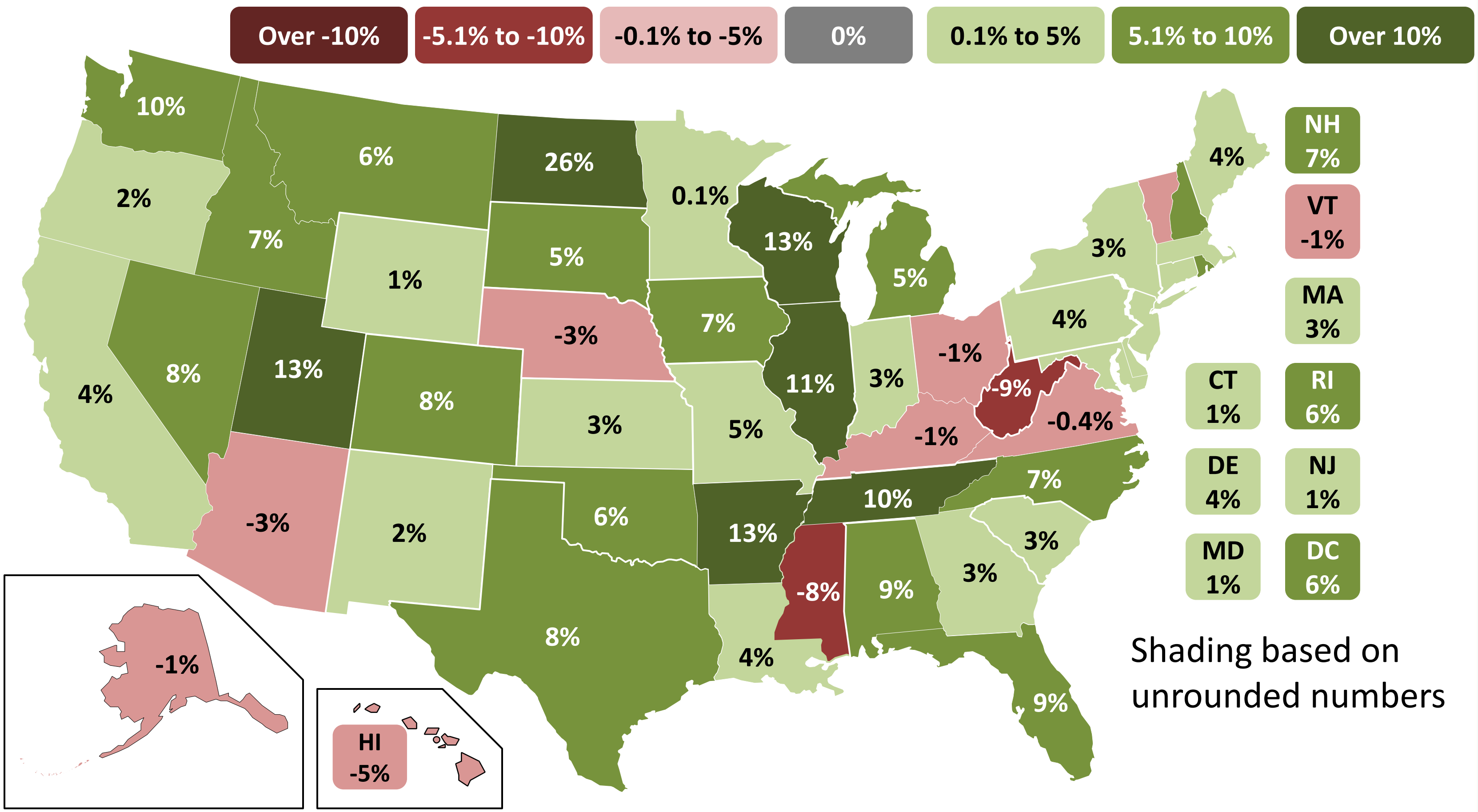
Major locations for data centers



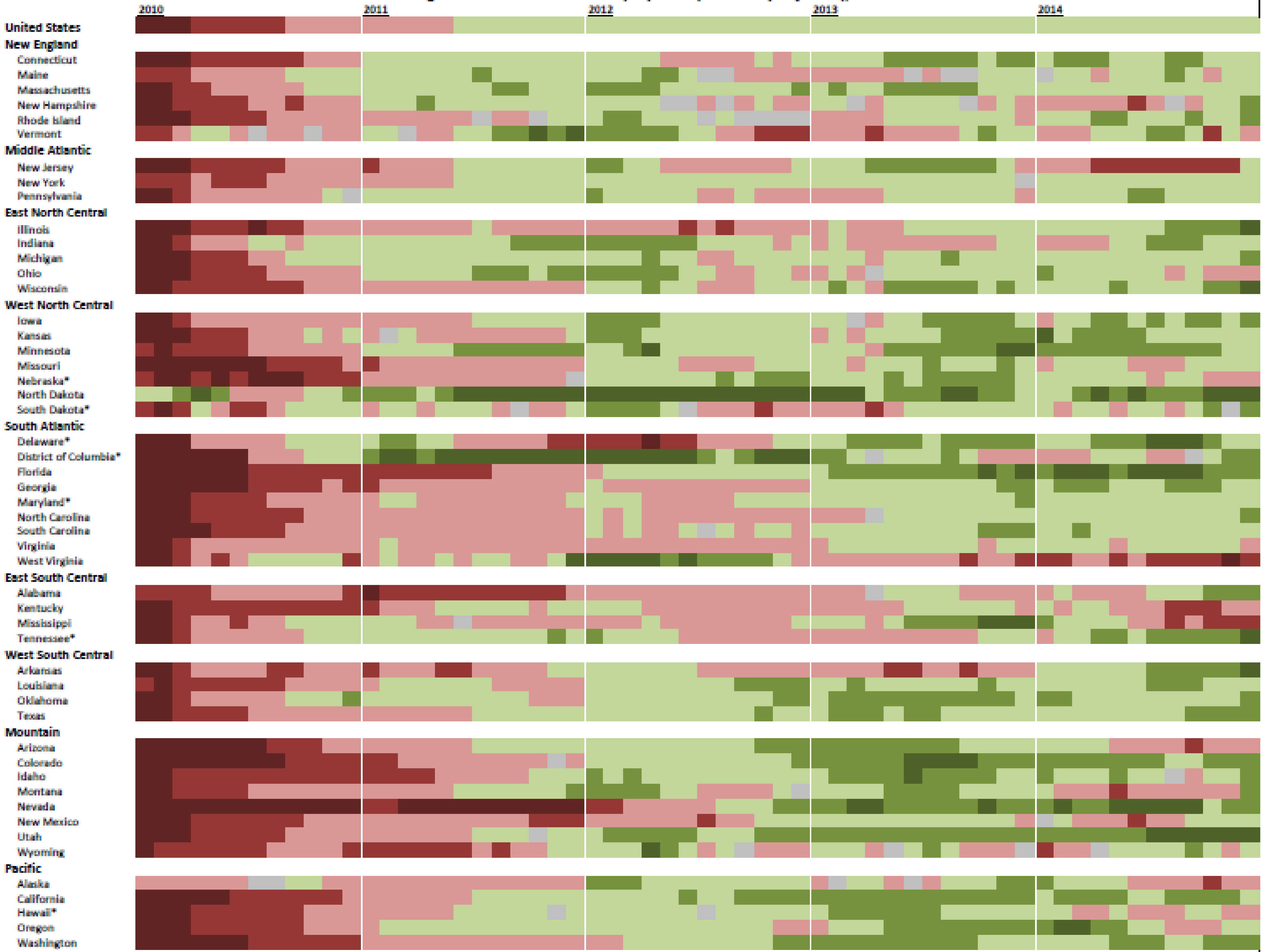
Source: www.DataCenterKnowledge.com, from CBRE, ASHRAE

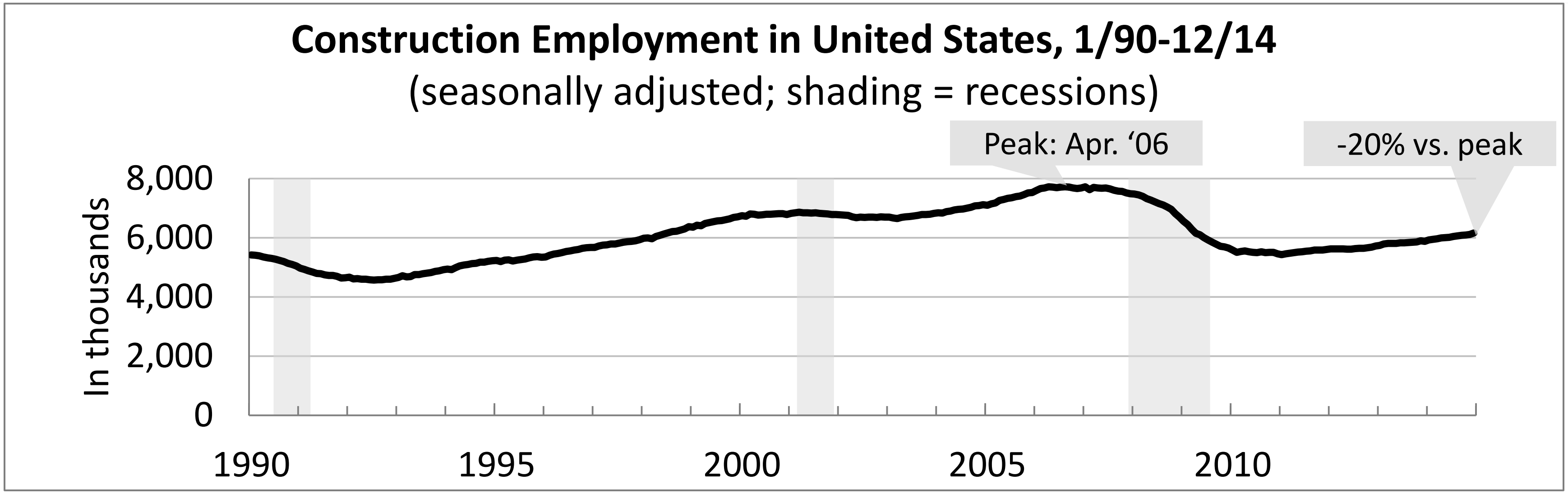
State construction employment change (U.S.: 4.9%)

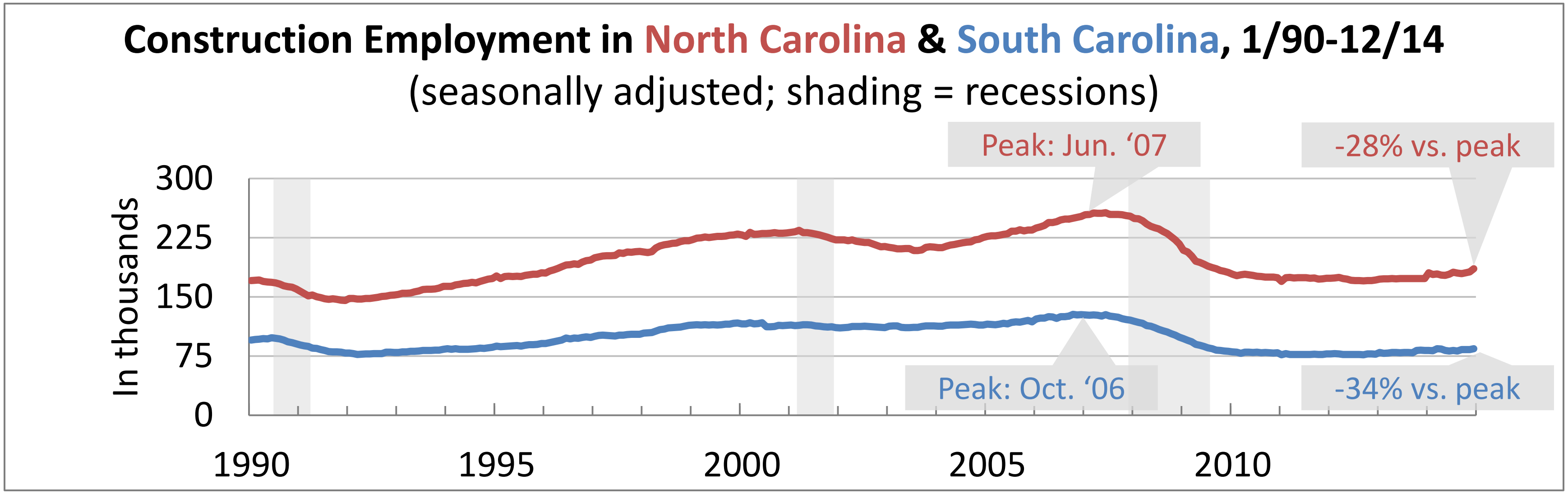
12/13 to 12/14: 40 states + DC up, 10 down



12-Month Percent Change in State Construction Employment (seasonally adjusted), 2010-December 2014



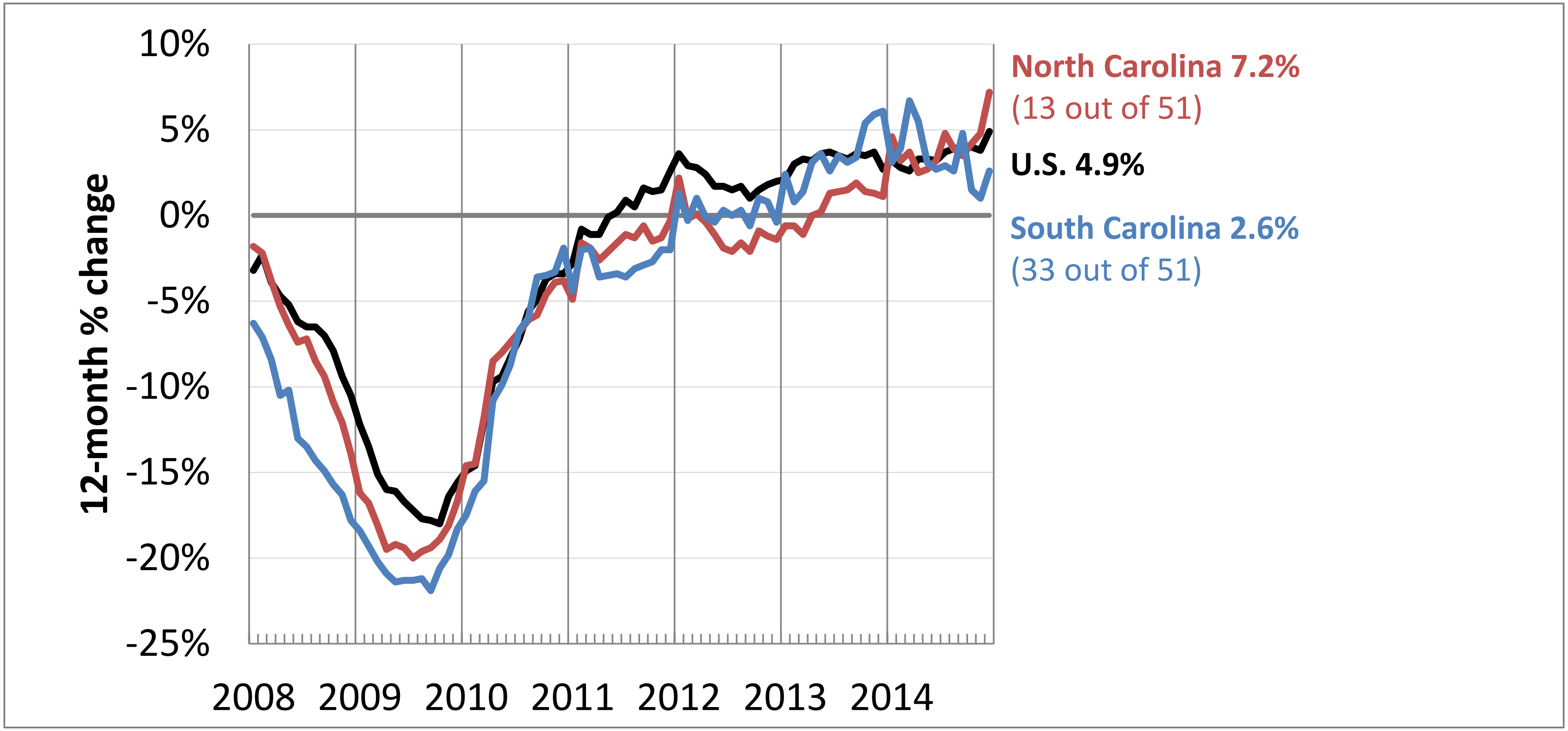

Construction Employment in United States, 1/90-12/14
(seasonally adjusted; shading = recessions)
Peak: Apr. '06
-20% vs. peak
In thousands
8,000
6,000
4,000
2,000
0
1990
1995
2000
2005
2010


Construction Employment in North Carolina & South Carolina, 1/90-12/14
(seasonally adjusted; shading = recessions)
Peak: Jun. '07
-28% vs. peak
Peak: Oct. '06
-34% vs. peak
In thousands
300
225
150
75
0
1990
1995
2000
2005
2010

Source: BLS

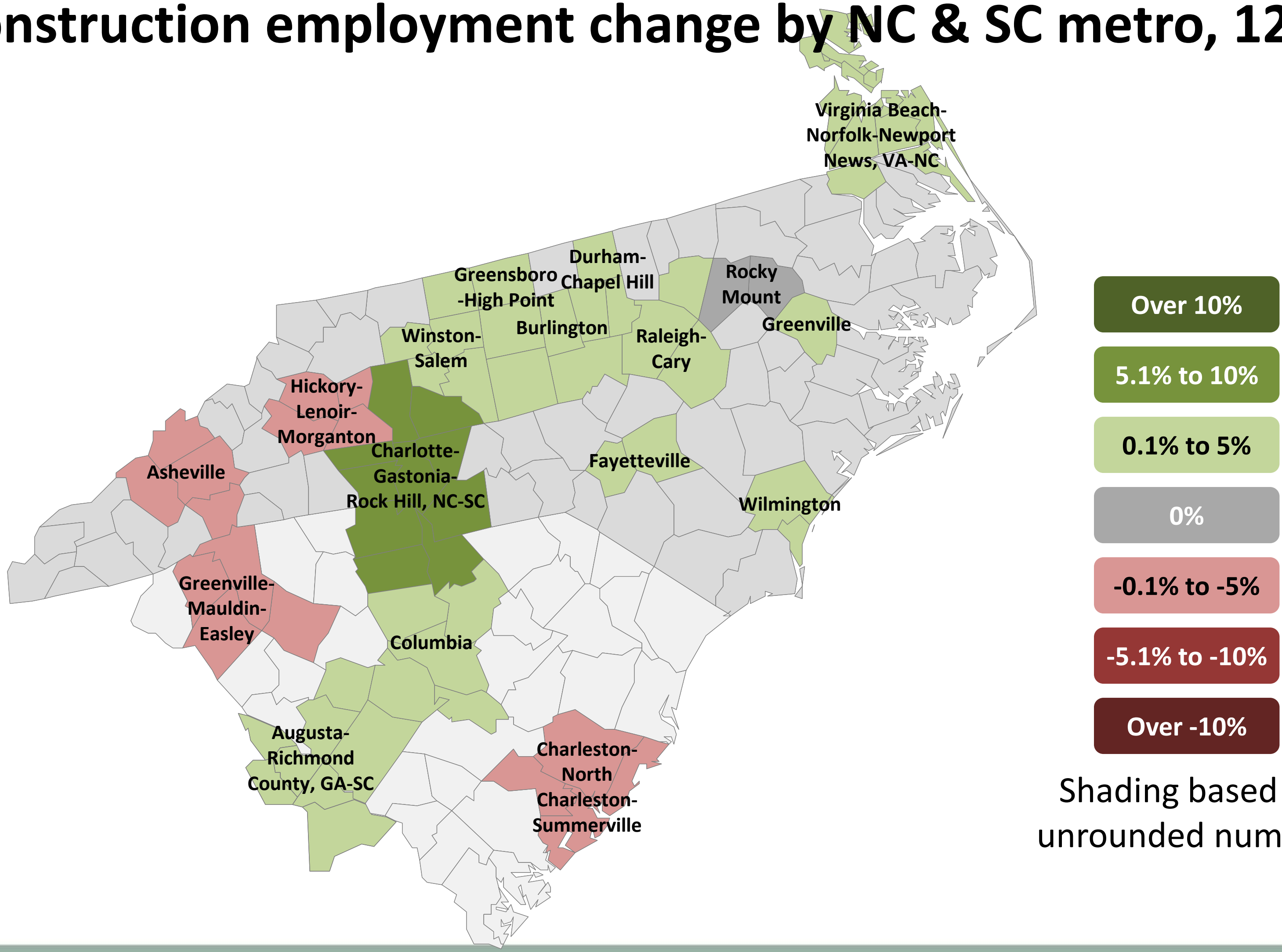
Construction Employment Change from Year Ago

1/08-12/14 (seasonally adjusted)



Source: BLS

Construction employment change by NC & SC metro, 12/13-12/14

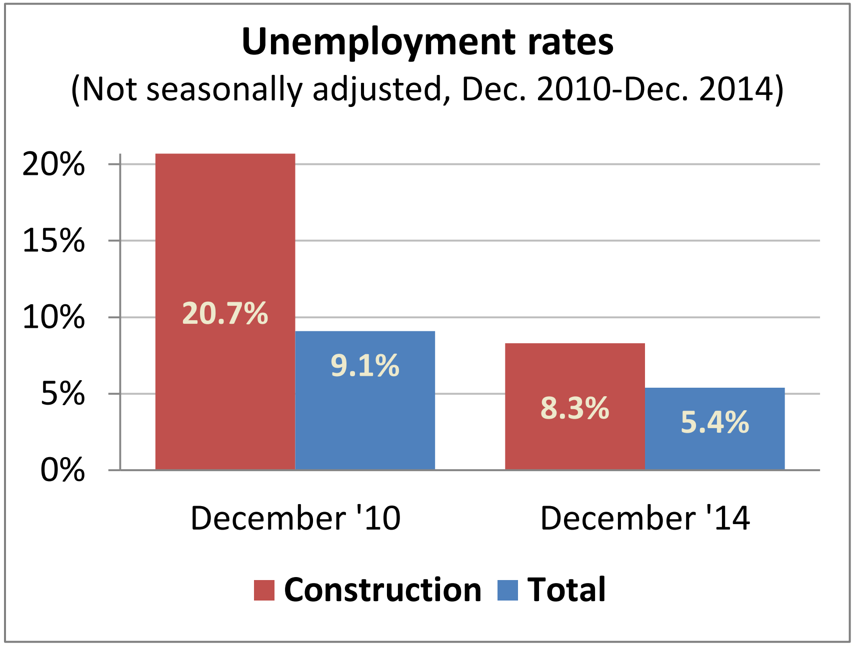


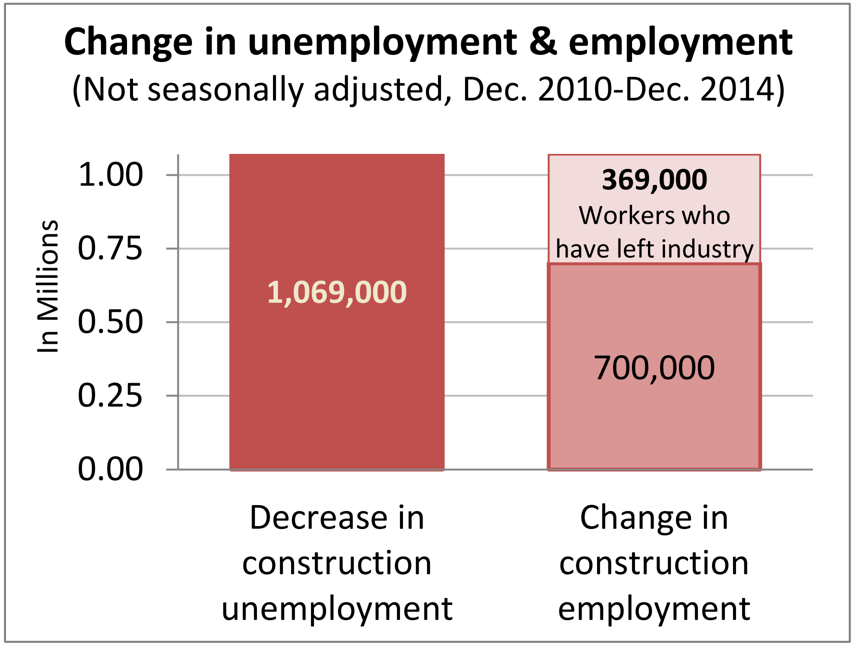
Shading based on unrounded numbers

Source: BLS state and regional employment report

Change in construction (un)employment, 12/10-12/14

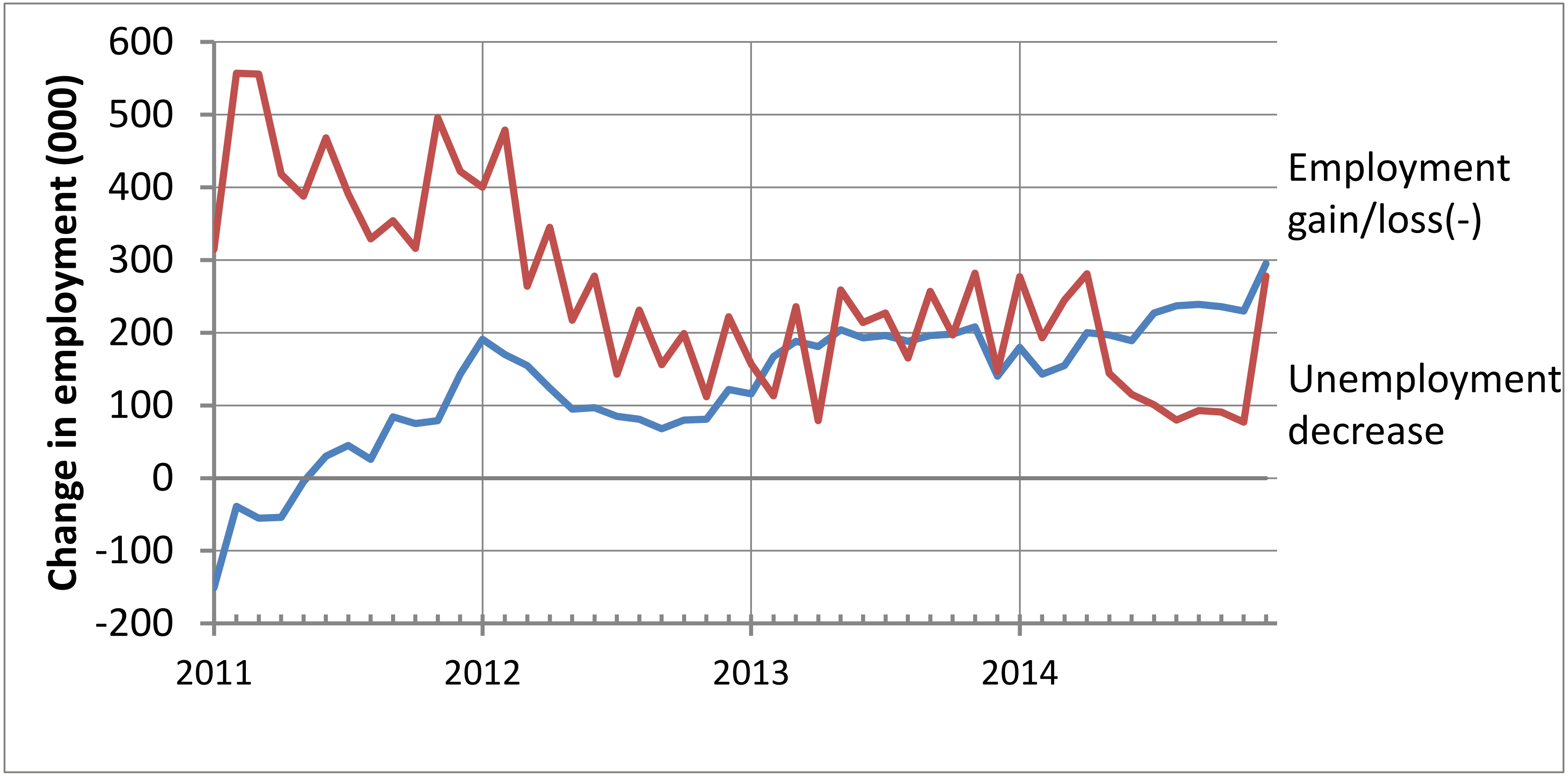
- Construction unemployment fell sharply in past 4 years
- But industry employment rose much less
- Thus, workers left for other sectors, school, retirement





Source: Author, from BLS

12-month change in construction employment and unemployment, Jan. 2011-2014 (not seas. adjusted)



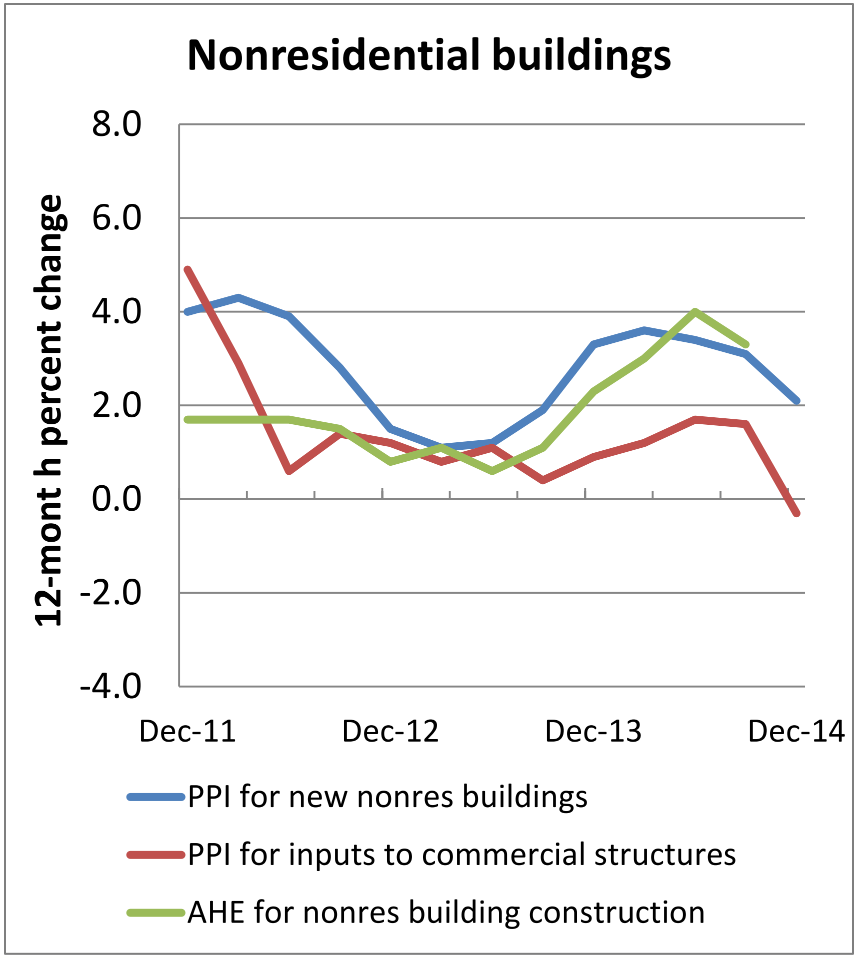
Hardest positions to fill

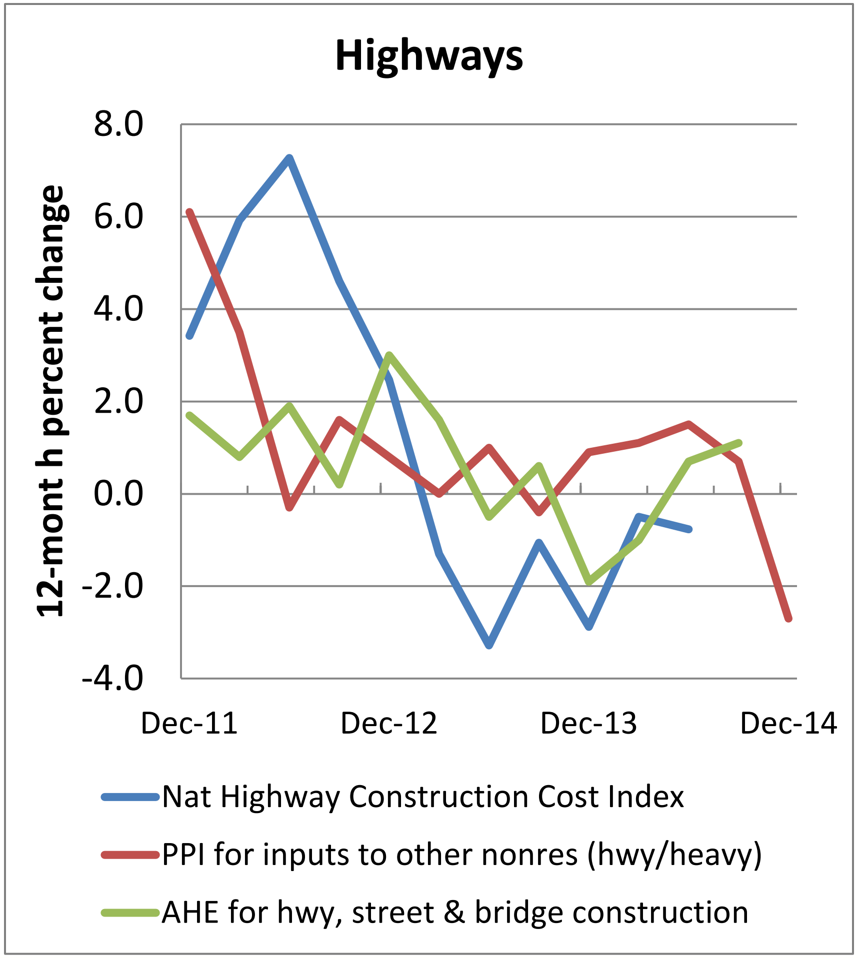
(% of respondents who are having trouble filling)

Craft	**83%**
Carpenters	66
Roofers	64
Equipment operators	59
Plumbers	54
Electricians	52
Professional	**61%**
Project managers/supervisors	48
Estimators	32

Source: AGC Member Survey, Sept. 2014

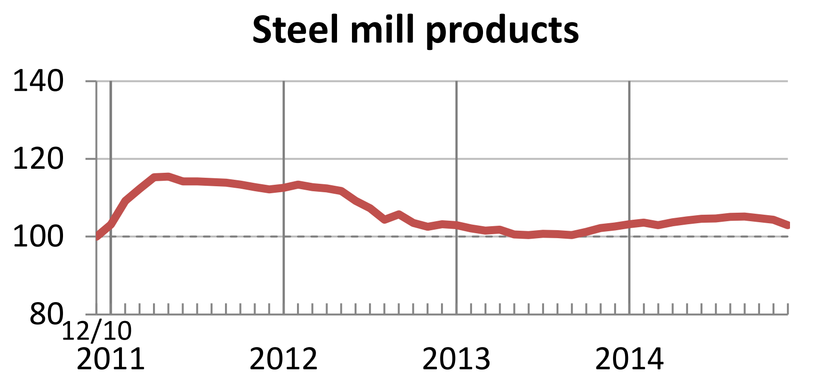
Construction prices, materials costs, average hourly earnings (AHE)



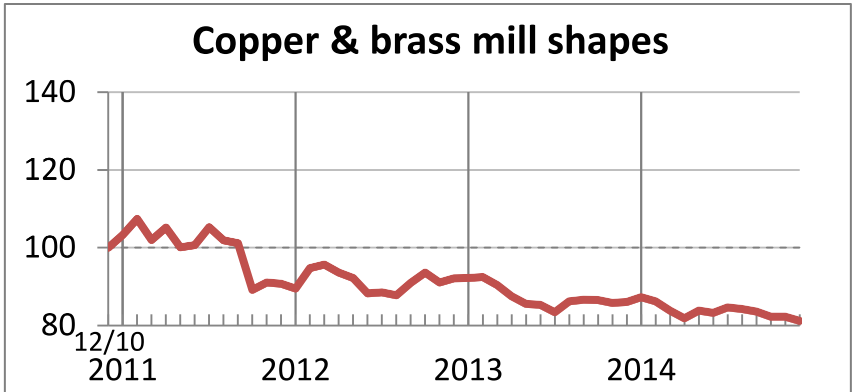


Source: Bureau of Labor Statistics: PPI, AHE; Federal Highway Administration: National Highway Construction Cost Index

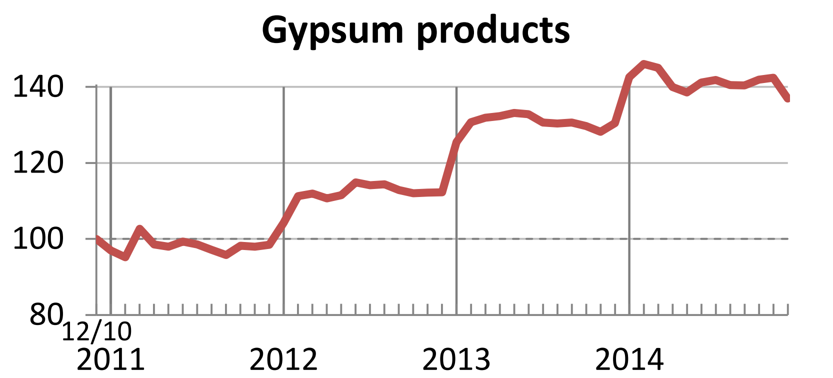
Producer price indexes for key inputs, 12/10-12/14 (Dec. 2010=100)



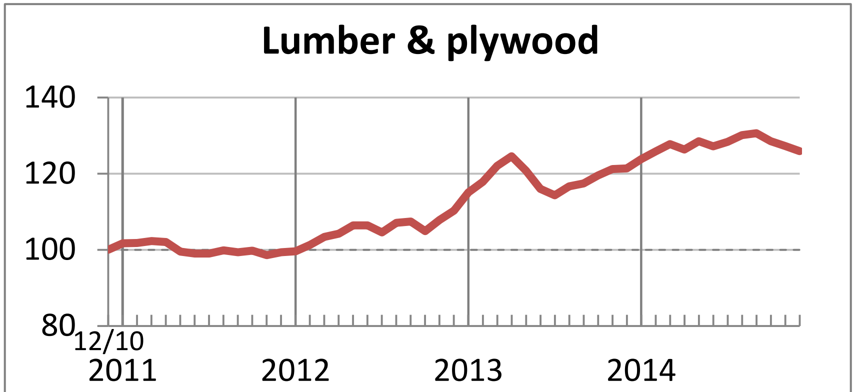
Latest 1-mo. change: -1.3%, 12-mo.: 0.4%



Latest 1-mo. change: -1.3%, 12-mo.: -5%



Latest 1-mo. change: -3.8%, 12-mo.: 5%

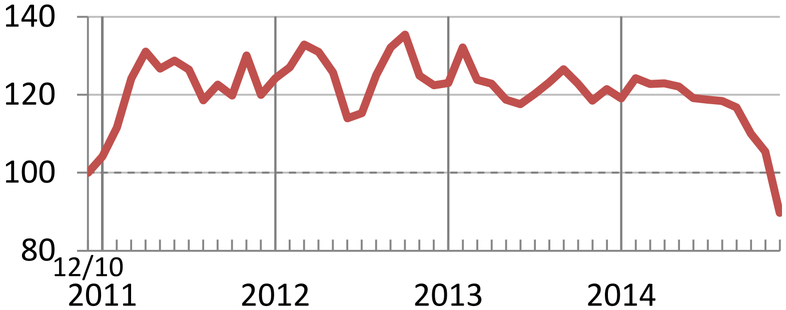


Latest 1-mo. change: -1.0%, 12-mo.: 3%

Source: Author, based on BLS producer price index reports

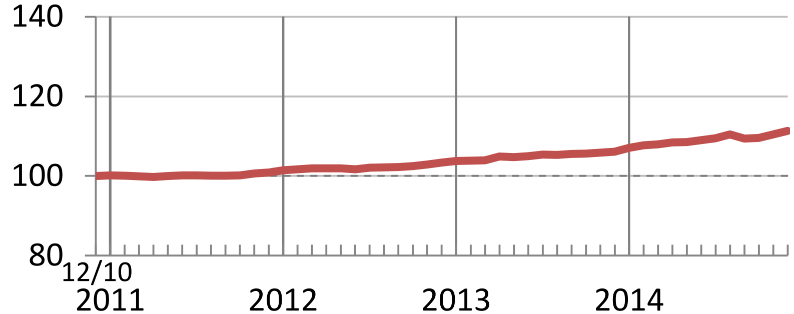
Producer price indexes for key inputs, 12/10-12/14 (Dec. 2010=100)

Diesel fuel



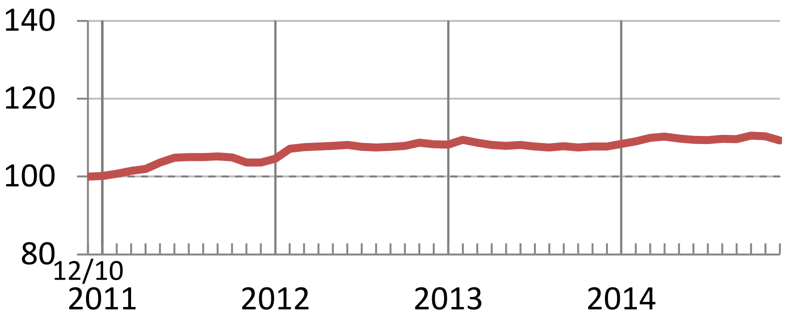
Latest 1-mo. change: -14.9%, 12-mo.: -26%

Concrete products



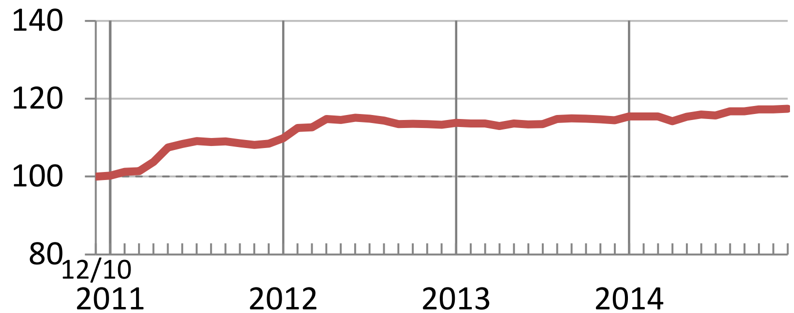
Latest 1-mo. change: 0.9%, 12-mo.: 5%

Plastic construction products



Latest 1-mo. change: -1.0%, 12-mo.: 1%

Asphalt paving mixtures & blocks



Latest 1-mo. change: 0.2%, 12-mo.: 3%

Source: Author, based on BLS producer price index reports

AGC members' expectations for 2015

Net % who expect dollar volume of projects to be higher

33%	Retail/warehouse/lodging	15%	Higher education
26%	Manufacturing	13%	Other transportation
25%	Private office	8%	K-12 school
24%	Water/sewer; also Energy	5%	Public building
20%	Hospital	-6%	Marine construction
17%	Power	-16%	Direct federal construction
16%	Highway		

Source: AGC Construction Outlook Survey, Jan. 2015 (912 total responses)

Trends: 2015-2017

- Total construction spending: +6% to +10% per year
  - less SF housing, retail; flat public spending
  - new drivers: shale-based gas & oil; Panama Canal widening; more elderly & kids, fewer young adults
- Materials costs: -1 to +3% (similar to CPI); rare spikes
- Labor costs: +2.5% to + 5%
- Labor supply: widespread shortages possible due to retirements, competition from other sectors, fewer vets

Source: Author

Summary for 2013, 2014, 2015-17 forecast

	2013 actual	2014 actual	2015-17 annual average forecast
Total spending	6%	6%	6-10%
Private – residential	20%	4%	1-10%
– nonresidential	1%	11%	1-10%
Public	-3%	2%	near 0
Materials PPI	1.3%	-0.9%	0-3%; rare spikes
Employment cost index	2.0%	1.8%	2.5-5%

Source: 2013-14: Census, BLS; 2014-17: Author's ests.

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
- webinars, surveys

Data DIGest

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

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 15% 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, -33% (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