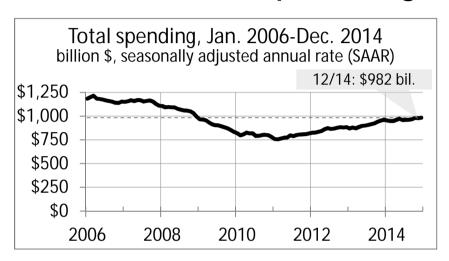


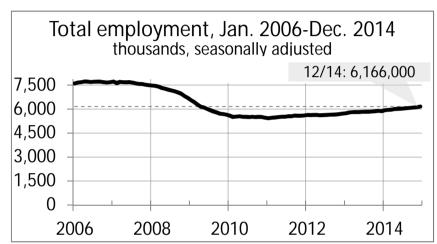
Quality People. Quality Projects.

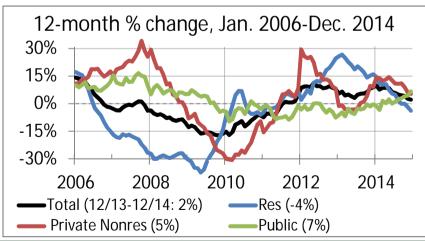
Labor & Materials Outlook

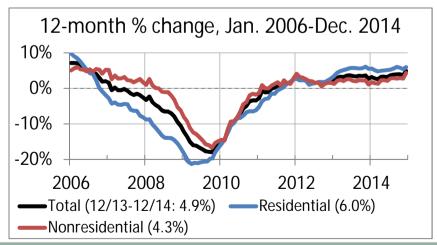
AGC of Vermont Montpelier, February 26, 2015 Ken Simonson Chief Economist, AGC of America simonsonk@agc.org

Construction spending & employment, 2006-14











Construction is growing, but unevenly

3 trends helping many sectors and regions:

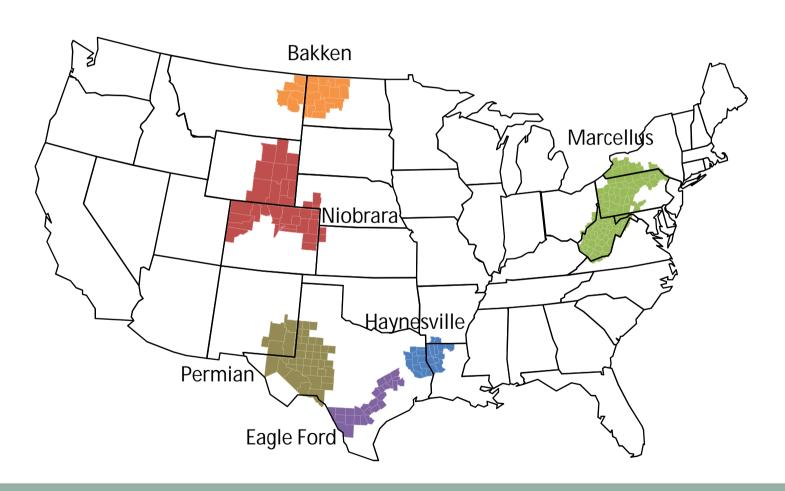
- 'Shale gale'—continuing despite oil price plunge
- Panama Canal expansion
- Residential revival, especially multifamily

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



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



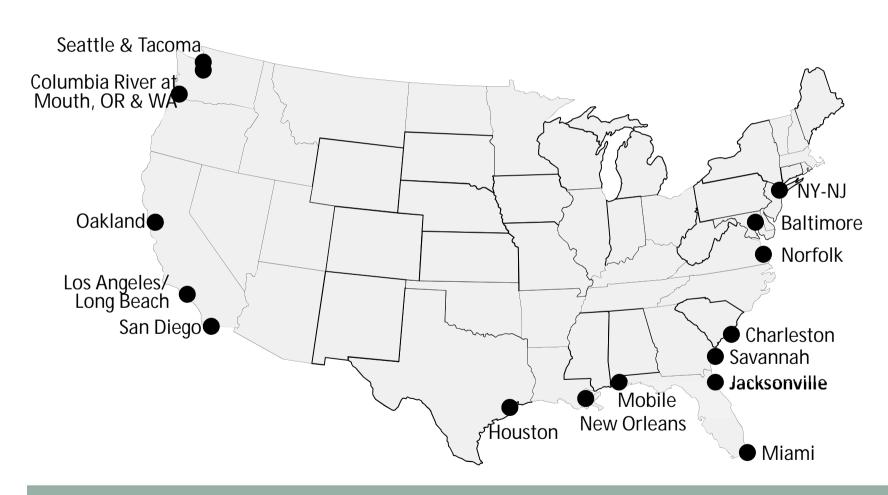


Shale's direct and indirect impacts on construction

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



U.S. ports affected by Panama Canal expansion



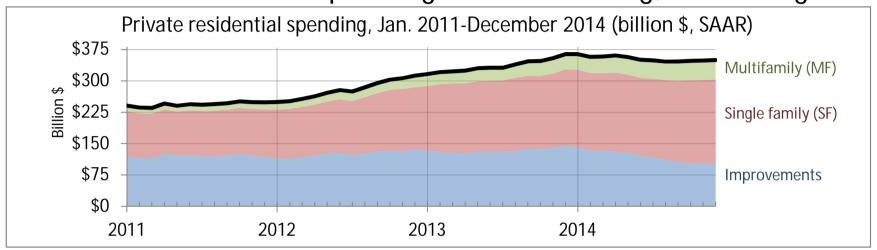


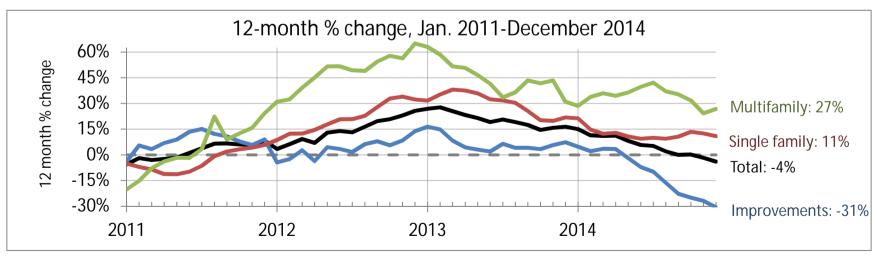
Panama Canal expansion's impacts on construction

- 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: MF still soaring, SF slowing





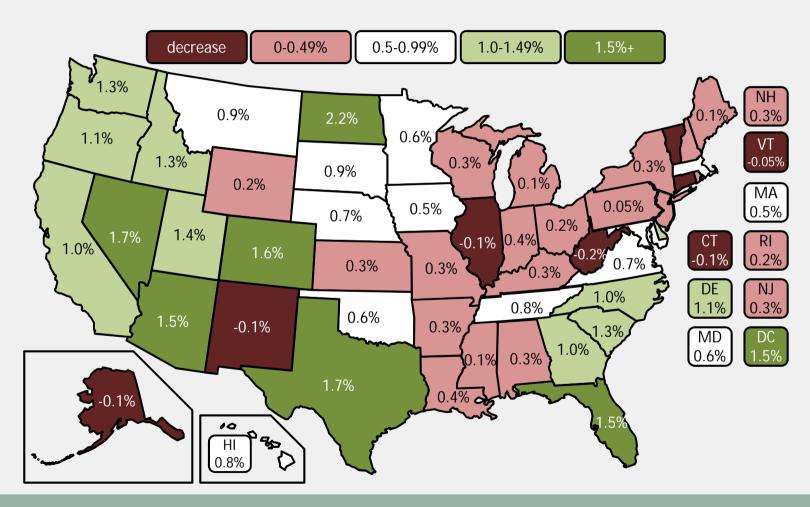


Housing outlook

- 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



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



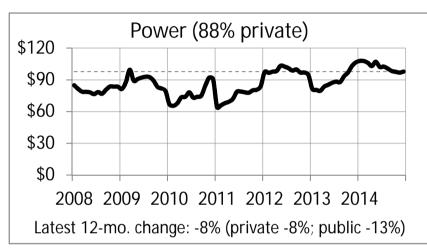


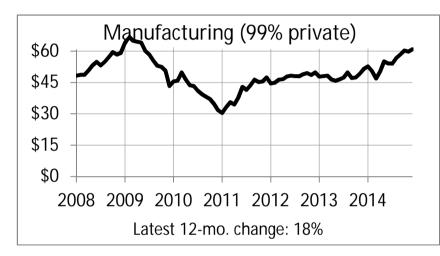
Nonresidential segments: 2014 total & 2015 forecast

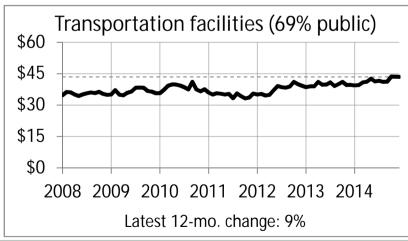
	<u>2014 total</u>	2014 vs. 2013	2015 forecast
Nonresidential	\$606 billion	7 %	4-8%
Power (incl. oil & gas structures, pipelines)	101	12	10+
Highway and street	85	4	0 to -5
Educational	78	1	0 to 5
Commercial (retail, warehouse, farm)	57	12	0 to 5
Manufacturing	55	15	10+
Office	45	19	5+
Transportation	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	

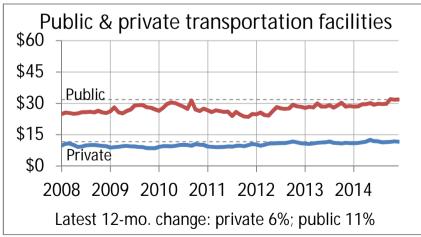


Construction spending: industrial, heavy (billion \$, SAAR)



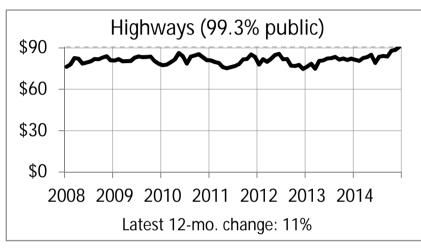


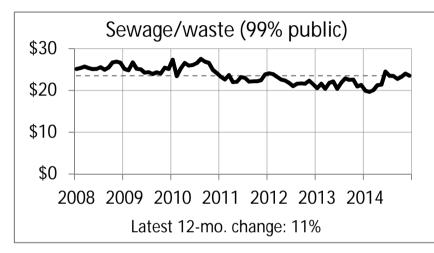


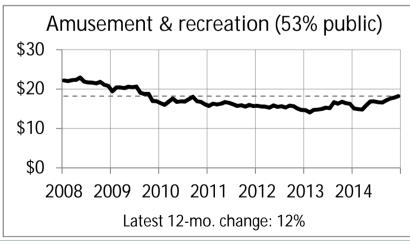


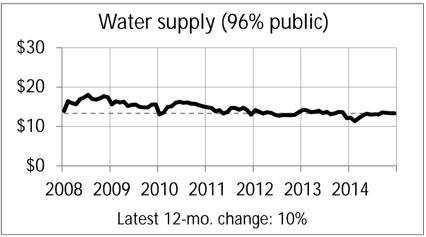


Construction spending: public works (billion \$, SAAR)



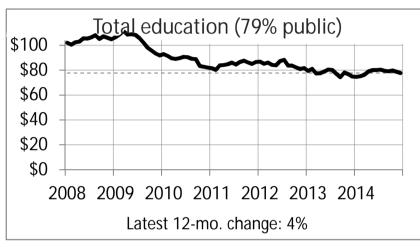


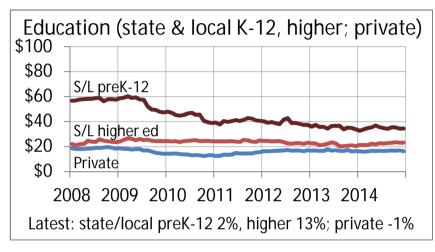


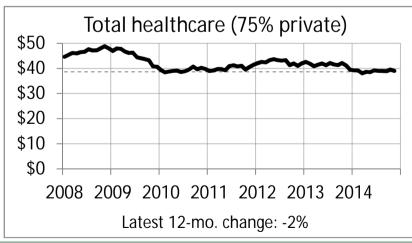


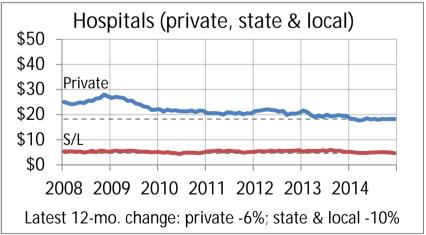


Construction spending: institutional (private + state/local)



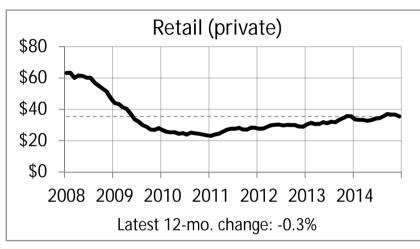


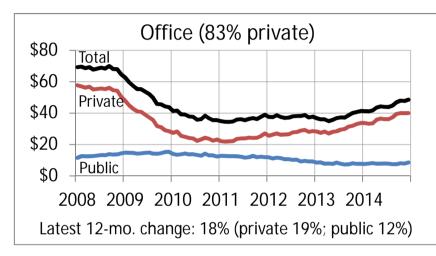


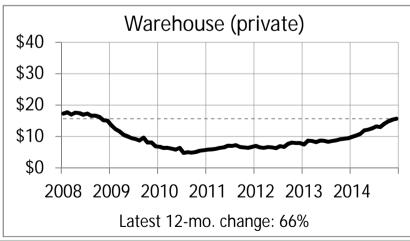


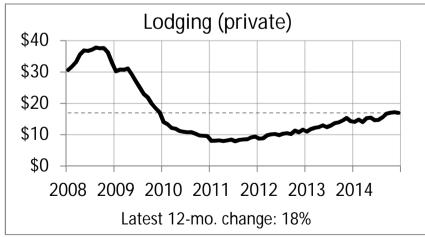


Construction spending: developer-financed (billion \$, SAAR)









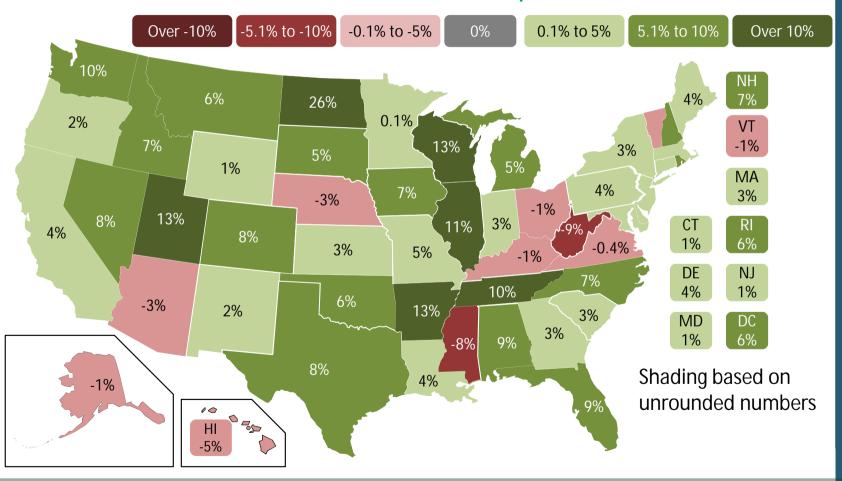


Major locations for data centers



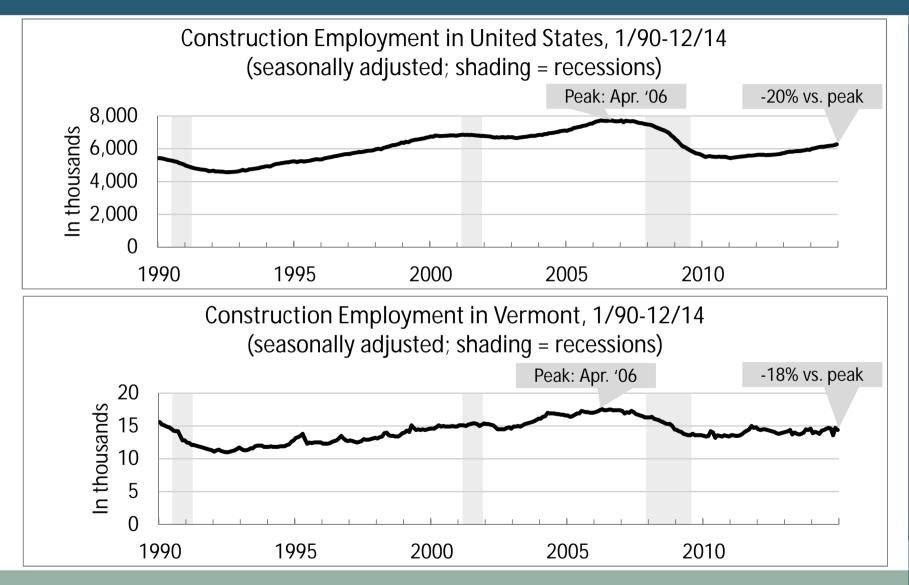


State construction employment change (U.S.: 4.9%) 12/13 to 12/14: 40 states + DC up, 10 down

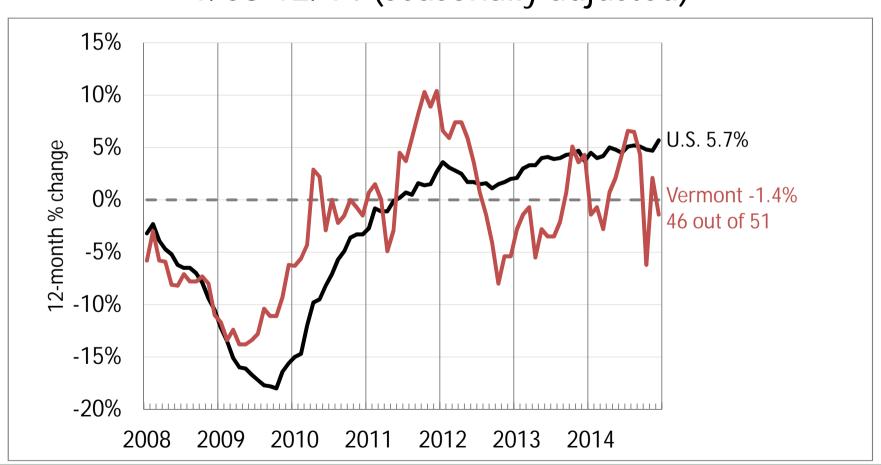








Construction Employment Change from Year Ago 1/08-12/14 (seasonally adjusted)





Change in construction employment, 12/13-12/14 not seasonally adjusted (NSA)

Metro area or division	12-mo. empl. change (NSA)	Rank (out of 339)
Statewide* (Const/mining/logging)	-1%	
Burlington-South Burlington, NECTA*	10%	53

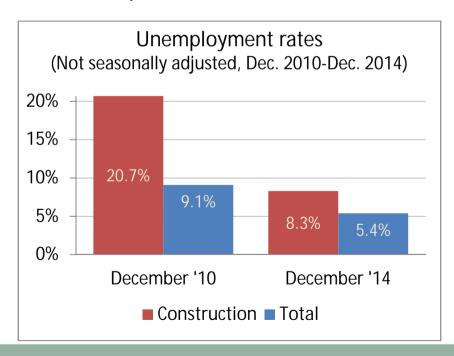
NECTA: New England City and Town Area (equivalent of metropolitan statistical area)

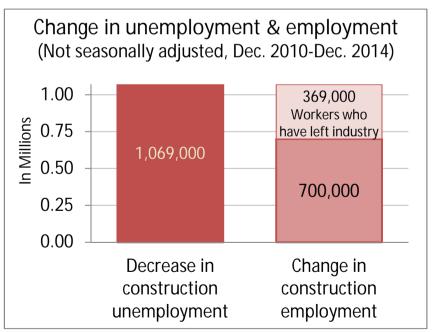
*The Bureau of Labor Statistics reports employment for construction, mining and logging combined for most metro areas and some states in which mining and logging have few employers. To allow comparisons between states and their metros, the table shows combined employment change.



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

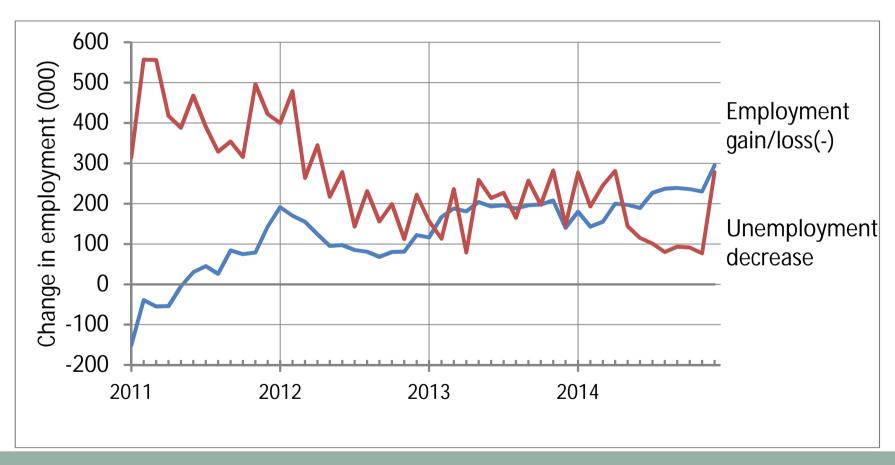
- Construction unemployment fell sharply in past 4 years
- But industry employment rose much less
- Thus, workers left for other sectors, school, retirement







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





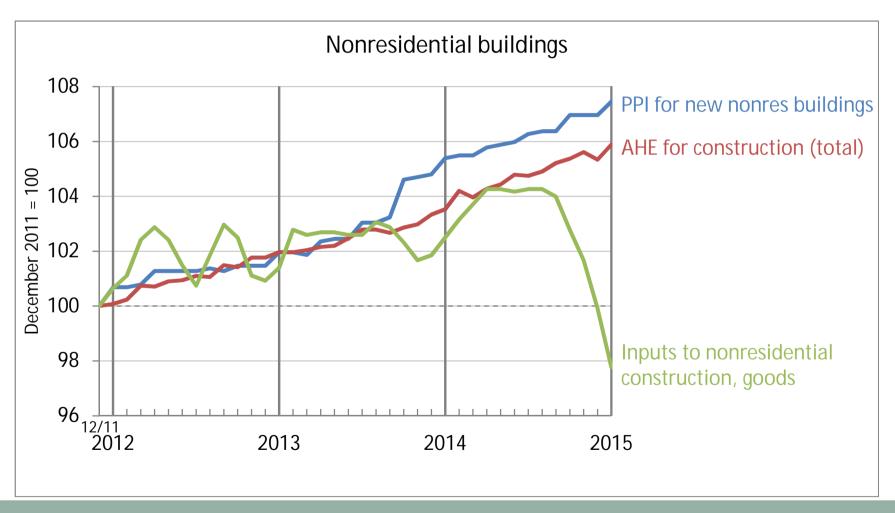
Hardest positions to fill

(% of respondents who are having trouble filling)

0 61	
Craft	83%
Carpenters	66
Roofers	64
Equipment operators	59
Plumbers	54
Electricians	52
Professional	61%
Project	
managers/supervisors	48
Estimators	32

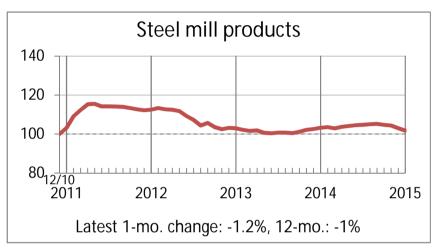


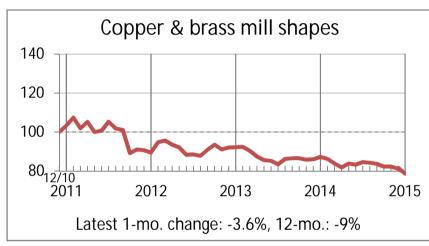
Construction prices, materials costs, average hourly earnings (AHE)

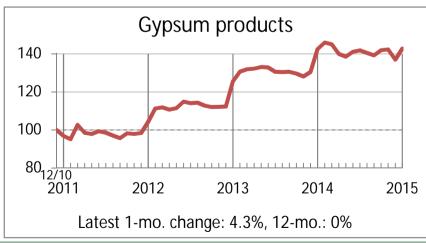


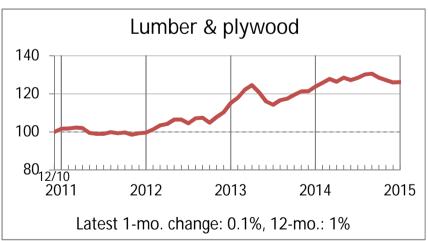


Producer price indexes for key inputs, 12/10-1/15 (Dec. 2010=100)



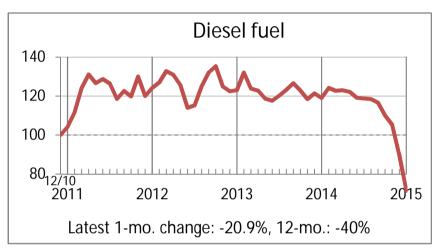


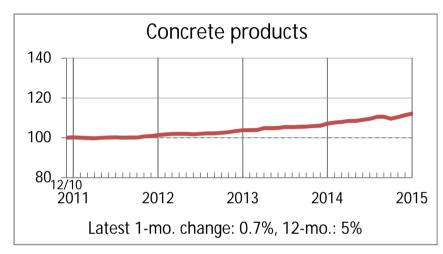


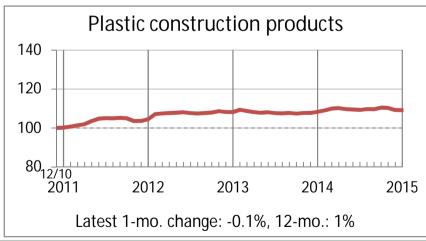


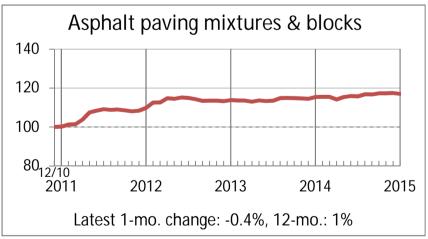


Producer price indexes for key inputs, 12/10-1/15 (Dec. 2010=100)











16% Highway

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



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



Summary for 2013, 2014, 2015-17 forecast

			2015-17
			annual
	2013	2014	average
	actual	actual	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%
Private – residential – nonresidential Public Materials PPI	6% 20% 1% -3% 1.3%	6% 4% 11% 2% -0.9%	6-10% 1-10% 1-10% near 0 0-3%; rare spike



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



