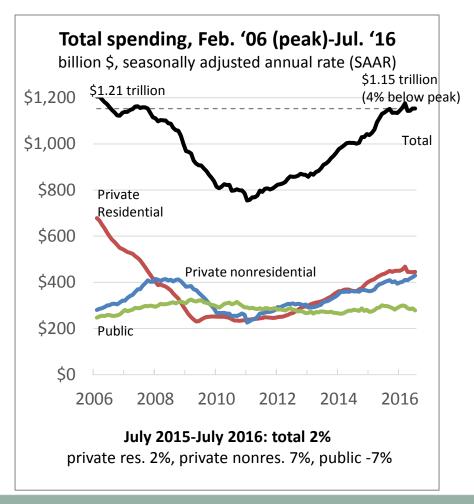
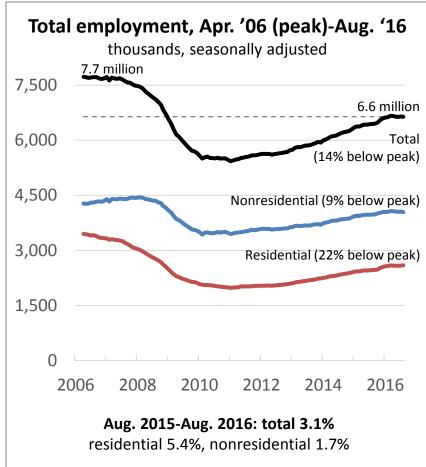


Quality Projects.

Construction spending & employment, 2006-16





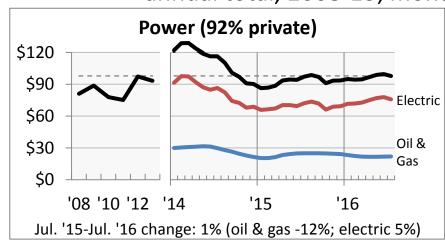
Nonresidential segments: 2014-15 change, 2016-17 forecast

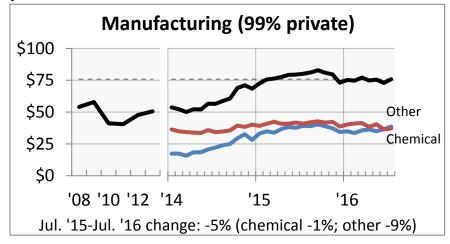
	2015 vs. 2014	<u>JanJuly</u> <u>'16 vs. '15</u>	2016 forecast	2017 forecast
Nonresidential total (public+private)	<u>7</u> %	<u>5%</u>	<u>4-10%</u>	<u>2-6%</u>
Power (incl. oil & gas field structures, pipelines)	-16	6	5-10	5-10
Highway and street	6	2	2-5	2-5
Educational	5	5	3-6	2-5
Manufacturing	33	-3	-8 to -4	<0
Commercial (retail, warehouse, farm)	6	11	7-12	0-5
Office	18	22	17-22	5-10
Transportation	8	-2	-3 to 3	0-5
Health care	5	2	1-5	3-8
Sewage and waste disposal	5	-5	-5 to 0	
Lodging	30	26	15-30	<0
Otheramusement; communication; religious;				
public safety; conservation; water: 11% of total	9	0	-2 to 4	

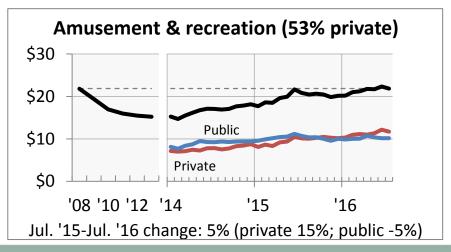


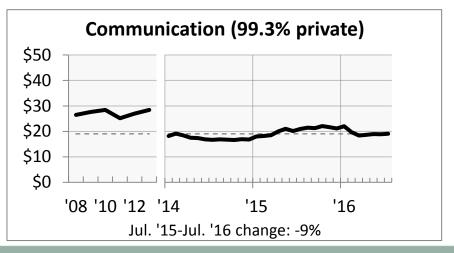
Construction spending: industrial, heavy

annual total, 2008-13; monthly, SAAR, 1/14-7/16; billion \$







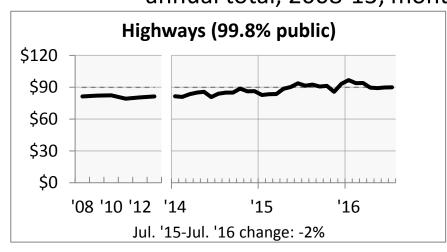


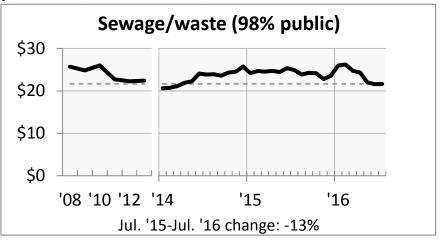
Key points: power, mfg., recreation

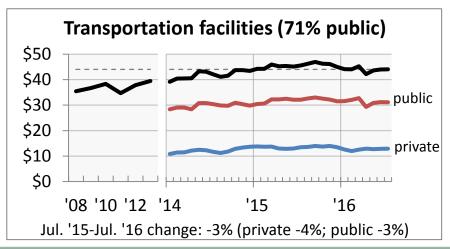
- Solar, wind power are growing again; expect more gas-fired plants, natural gas pipelines into '18
- Mfg decline led by completion/delay of chemical plants (ethane crackers, petrochemicals, LNG) and transportation equipment (cars, trucks, jets, railcars)
- Amusement & recreation spending is very "lumpy"—a few big stadiums at irregular intervals; but funding for local, state, federal parks keeps eroding

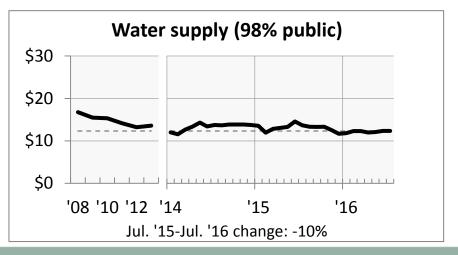
Construction spending: public works

annual total, 2008-13; monthly, SAAR, 1/14-7/16; billion \$











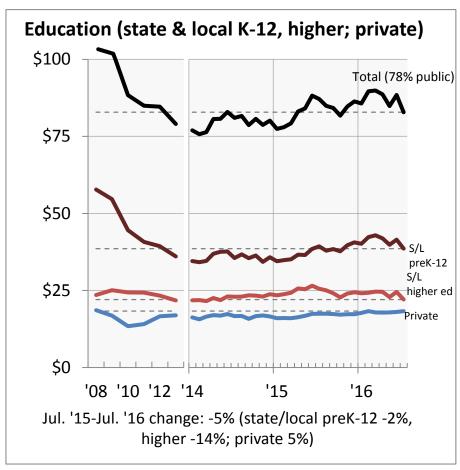
Key points: roads, transportation, sewer/water

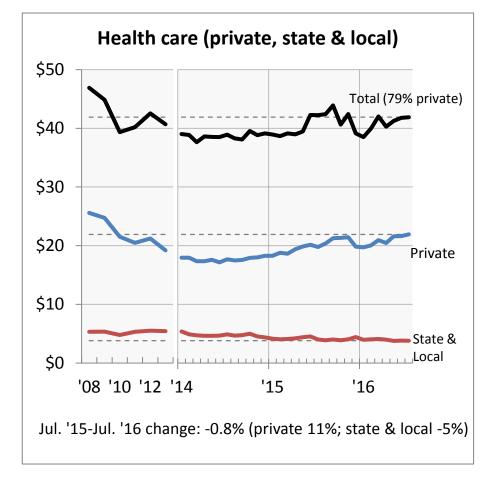
- Highway funds benefit from more travel, hence fuel purchases; gradual pick-up in state funding & P3s
- Railroads slashing investment; little net change for public airport, port, transit construction
- Eastern & Midwestern cities under orders to make long-term upgrades to sewer systems that should boost spending; water utilities hurt by drought, conservation but may get money for lead abatement



Construction spending: institutional (private + state/local)

annual total, 2008-13; monthly, SAAR, 1/14-7/16; billion \$





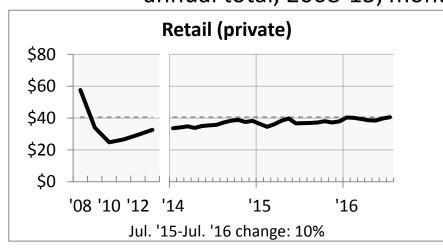
Key points: education & health care

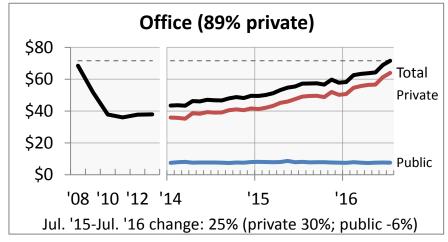
- PreK-12 enrollment is flat; more children staying in cities and filling underused or charter schools, so construction no longer matches population growth
- Higher-ed enrollment is shrinking, so colleges need fewer dorms & classrooms; apts. (multifamily) replacing dorms (educational construction)
- Hospitals face more competition from standalone urgent care, outpatient surgery, clinics in stores; more investment in small facilities, short stays

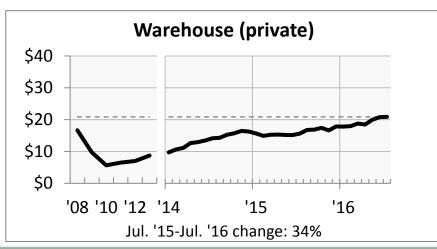


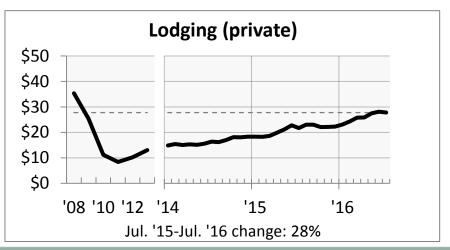
Construction spending: developer-financed

annual total, 2008-13; monthly, SAAR, 1/14-7/16; billion \$









Key points: retail, warehouse, office, hotel

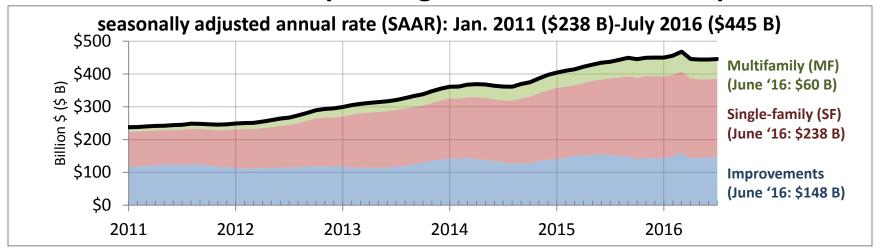
- Retail now tied to mixed-use buildings & renovations, not standalone stores or shopping centers; consumer pivot to online buying will continue
- Warehouse market still benefiting from e-commerce; may heat up if Panama Canal leads to distribution shifts
- Employment sets records each month but office space per employee keeps shrinking; growth mainly in cities & renovations, not suburban office parks
- Hotel construction likely to drop as revenue per available room slows

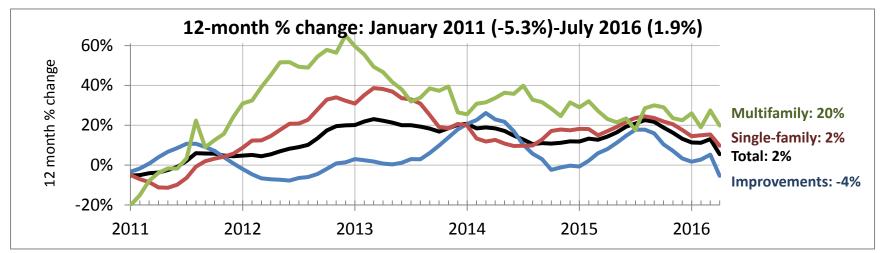


Major locations for data centers



Private residential spending: MF continues to outpace SF



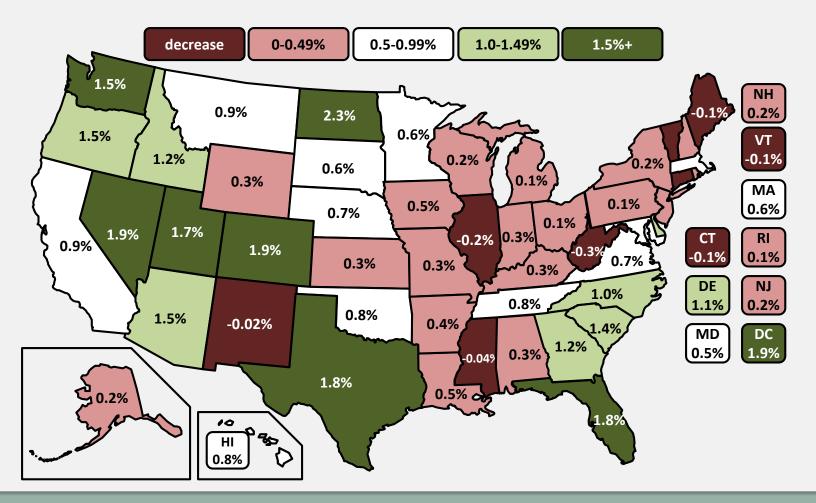


2016 residential spending forecast: 4-11%; **2017**: 5-10%

- SF: 6-11%; ongoing job gains add to demand; student debt, fears of lockin, limited supply will cap growth
- MF: 10-15%; growth is slowing but should last through 2017
 - low vacancies, high rent growth encourage investors
 - millennials show continued preference for cities
 - nearly all MF construction is rental, not condo
- Improvements: 0-10%; Census data is not reliable and shows only a loose relationship to SF spending
- 2017: SF 6-11% again; MF slows to 5-10%; improvements 0-10% again

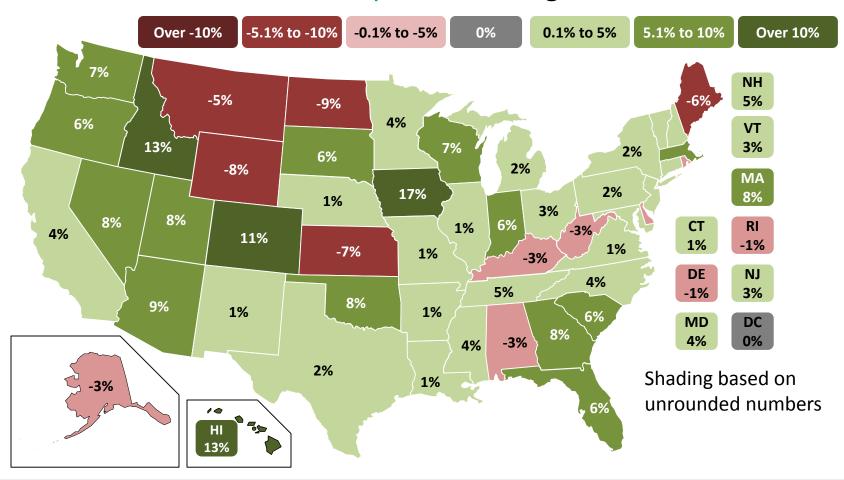


Population change by state, July 2014-July 2015 (U.S.: 0.79%)



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

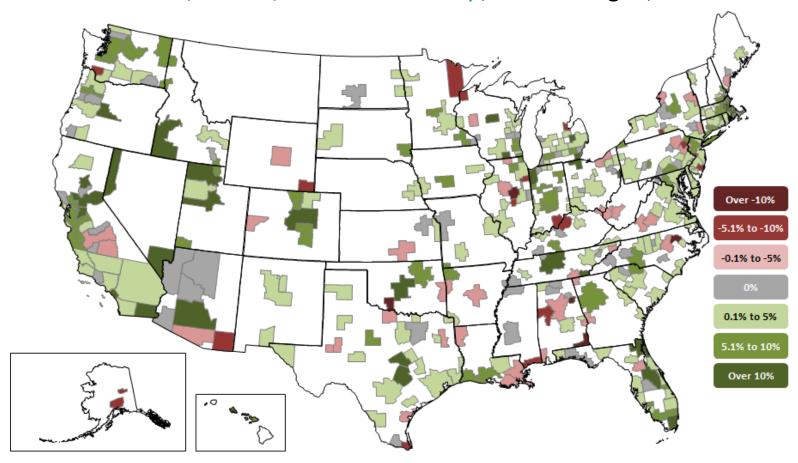
7/15 to 7/16: **39** states up, DC unchanged, **11** down



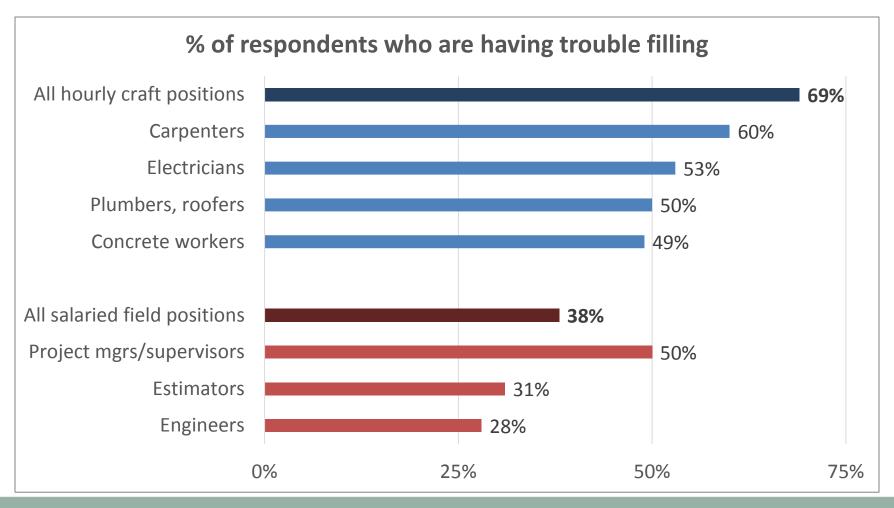


Metro construction employment change

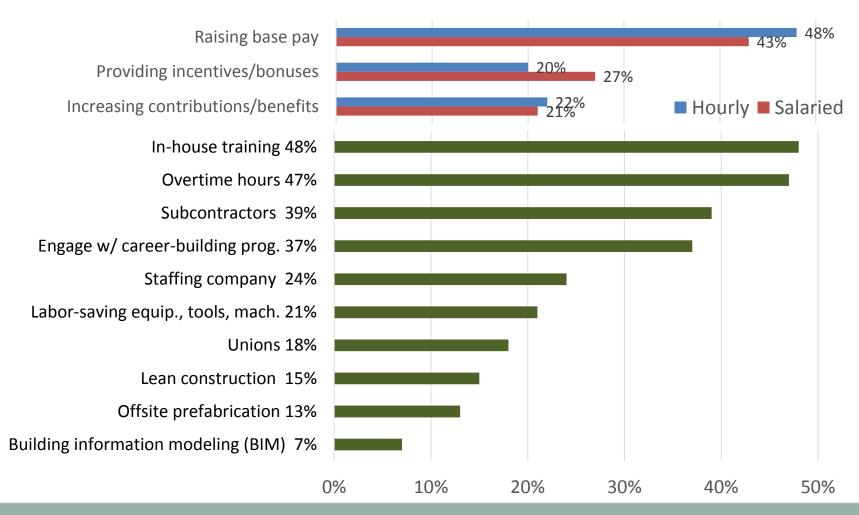
7/15 to 7/16: 239 metros up, 59 unchanged, 60 down



Hardest positions to fill



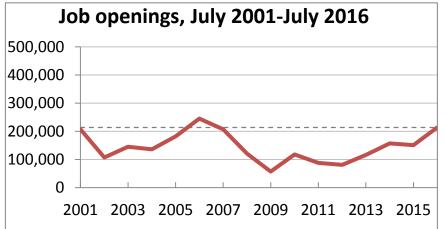
How contractors are coping with worker shortages

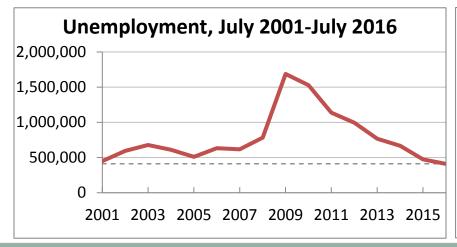


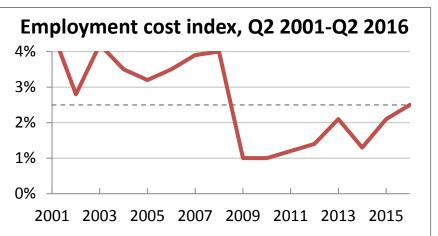


Construction workforce indicators (not seasonally adjusted)



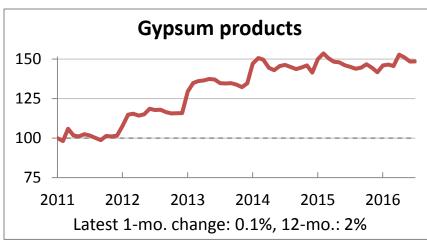


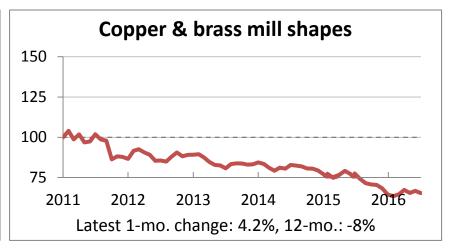


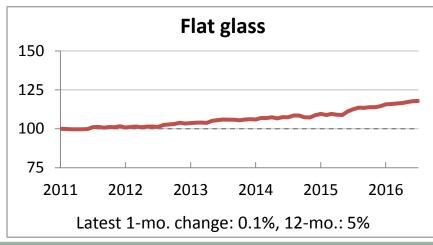


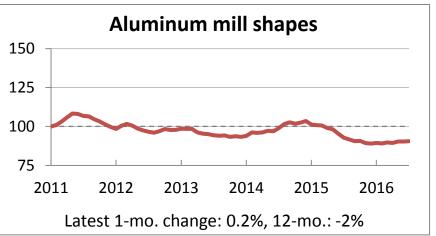


Producer price indexes for key inputs, 1/11-7/16 (Jan. 2011=100)



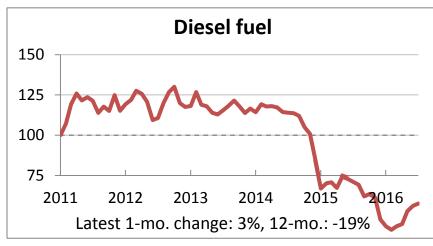


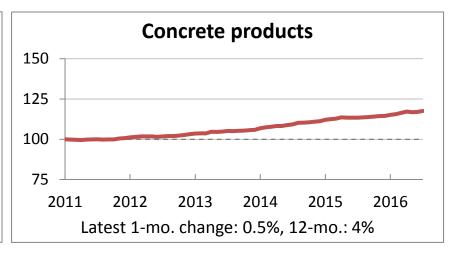


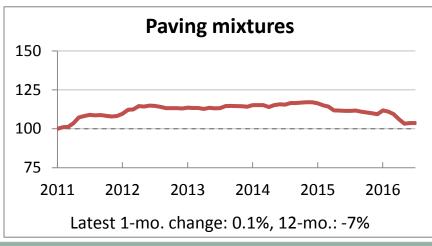


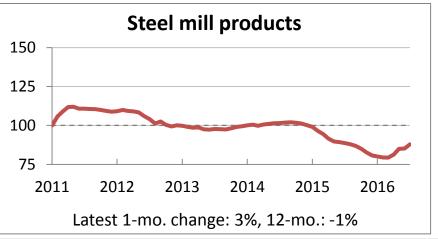


Producer price indexes for key inputs, 1/11-6/16 (Jan. 2011=100)











2015 summary, 2016-17 forecast

		2016	
	2015	yr-to-	<u>forecast</u>
	actual	date	2016 2017
Total spending	11%	6%	3-9% 2-7%
Private – residential	17%	7%	4-11% 5-10%
nonresidential	8%	9%	4-10% 2-7%
Public	5%	0%	0-3% 1-5%
Goods & serv. inputs PPI	-2%	-1%	0-2% 0-2%
Employment cost index	2.2%	2.5%	2.5-3.5% 3-4%

AGC economic resources

(email simonsonk@agc.org)

- The Data DIGest: weekly 1-page email (subscribe at http://store.agc.org)
- monthly press releases: spending; PPI; national, state, metro employment
- state and metro data, fact sheets:
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- WebEd 11/17 with Kermit Baker (AIA),
 Alex Carrick (ConstructConnect)

