

2017 Dodge Construction

# Outlook

**DODGE** DATA &  
ANALYTICS

**Cliff Brewis**

Vice President Operations

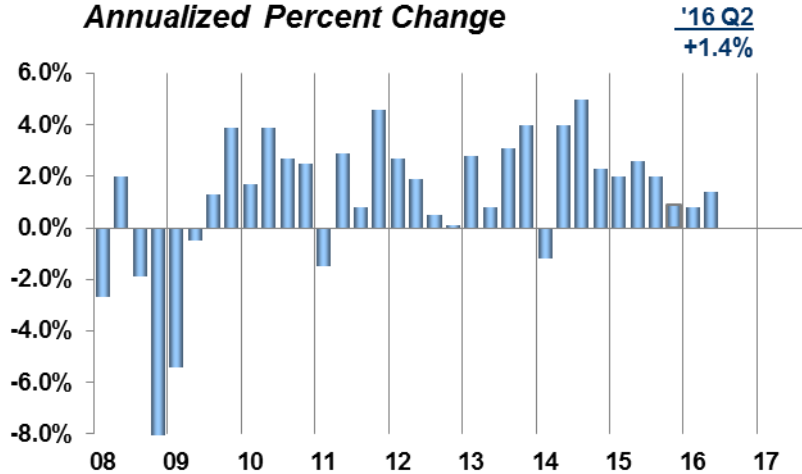
Dodge Data & Analytics

# U.S. Macroeconomic Outlook

*The U.S. economy decelerated during the second half of 2015. GDP in 2016 Q1 up only 0.8%, followed by up 1.4% in 2016 Q2. Second half of year expected to strengthen slightly.*

## Real GDP Growth - Quarterly

*Annualized Percent Change*



## GDP Pattern:

**History**

**Forecast**

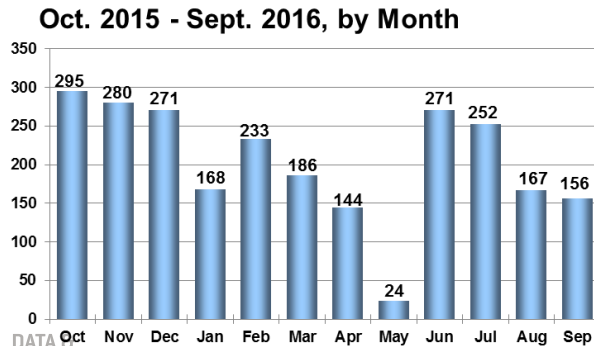
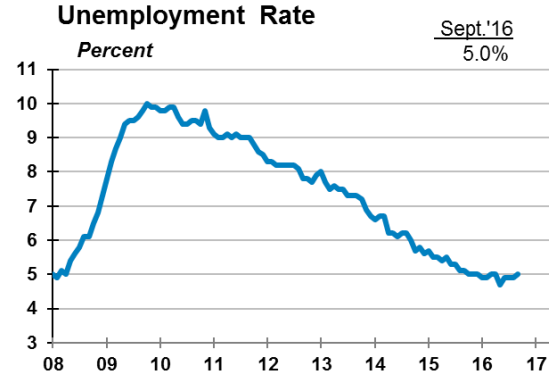
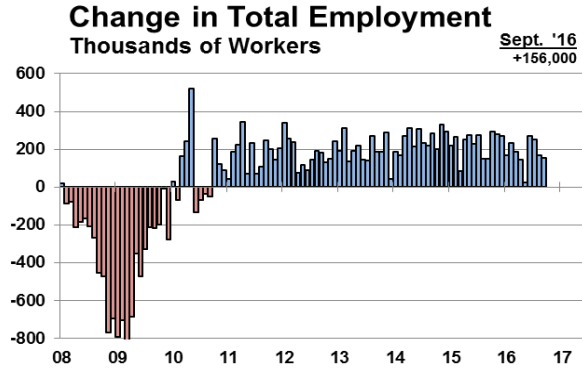
<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>2017</u>
+1.7%	+2.4%	+2.6%	+1.5%	+2.4%

## Shape of Recovery:

- Subdued - periods of moderate growth followed by deceleration.
- Areas of concern -
  - U.S. firms cautious about investment.
  - Weak global economic growth.
  - Brexit vote

# U.S. Macroeconomic Outlook

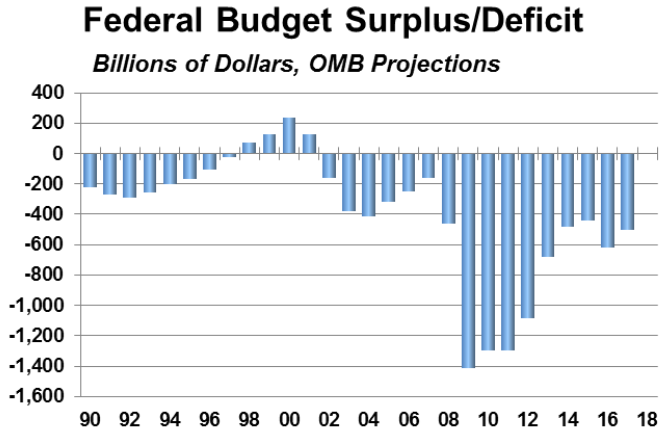
*For consumption to continue employment growth should slow gradually, coupled with an increase in wages.*



- Jobs lost from Feb.'08 to Feb. '10: 8.7 Million.
- Job creation so far in 2010-2016:  
15.0 million. Unemployment rate at 5.0%
- Job growth. in Jan.'13- Dec. '13: 193,000 /mo.  
in Jan.'14- Dec. '14: 251,000 /mo.  
in Jan.'15- Dec. '15: 229,000 /mo.  
in Jan.'16- Sept.'16: 178,000 /mo.

# U.S. Macroeconomic Outlook

*December 2015 showed passage of new 5-year federal transportation bill (FAST Act) and fiscal 2016 federal appropriations.*



## Fixing America's Surface Transportation (FAST) Act Enacted on December 4.

- \$305 billion over a five-year period – highways, \$230 bil.; public transit, \$61 bil., Amtrak, \$10 bil., safety programs, \$5 bil.

## Fiscal 2016 Federal Appropriations

- Raises federal-aid obligation ceiling 5% to \$42.4 billion
- Raises Federal Transit Admin.'s budget 8% to \$11.8 billion.
- FAA Airport Improvement grants held at \$3.4 billion
- GSA's construction account tripled to \$1.6 billion
- VA major construction account doubled to \$1.2 billion
- Corps of Engineers civil works acct. raised 10% to \$6 billion.
- EPA aid to clean water SRF's cut 4%, drinking water SRF's cut 5%

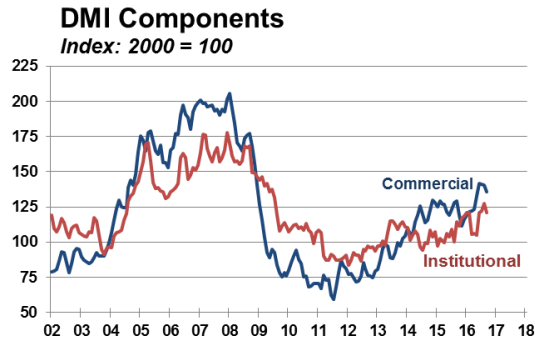
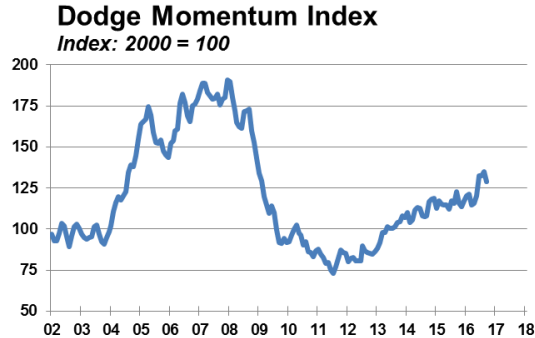
**For Fiscal 2017 Appropriations, continuing resolution in effect through Dec. 9.**

**Water Resources Development Act (\$9 bil. +) – will it be approved?**

**Infrastructure plans – Clinton and Trump**

# U.S. Construction – Dodge Momentum Index

*The Dodge Momentum Index - a measure of projects in planning - offers insight on what lies ahead. Strong increases in 2016 through August. DMI retreated in September.*

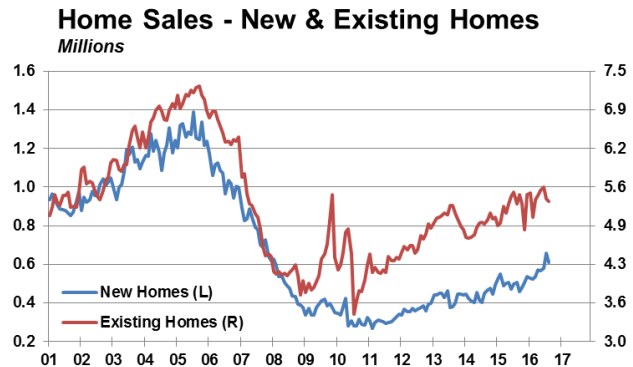
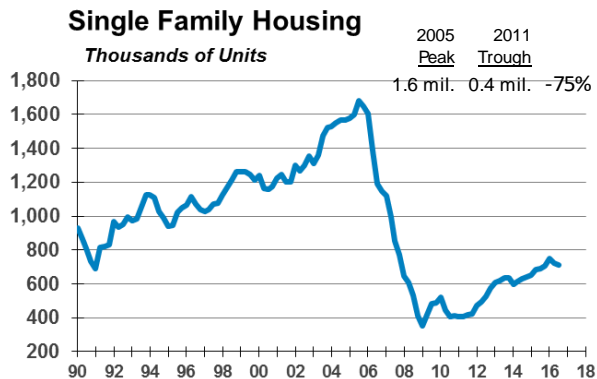


The Dodge Momentum Index (DMI) tracks the first (or initial) reports for nonresidential building projects at the planning stage.

- The DMI bottomed out in July 2011, and has been trending upward since then.
- The initial increases were shown by the commercial component – leveled off in 2014, Then renewed growth in 2015-16. Institutional building picked up in 2013, then leveled off in 2014-15, renewed growth in 2016,
- Strong increases in 2016 for both commercial and institutional components through August.

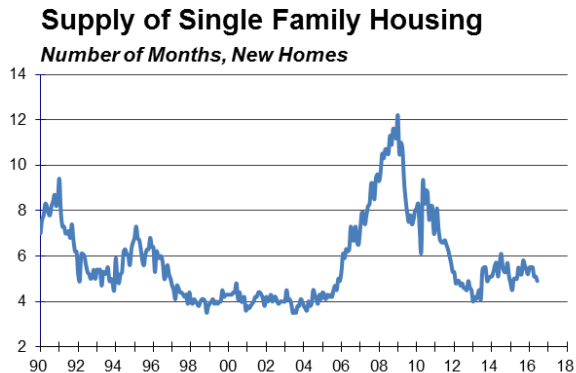
# U.S. Single Family Housing

*Single family housing construction is failing behind in meeting demand from households formations.*



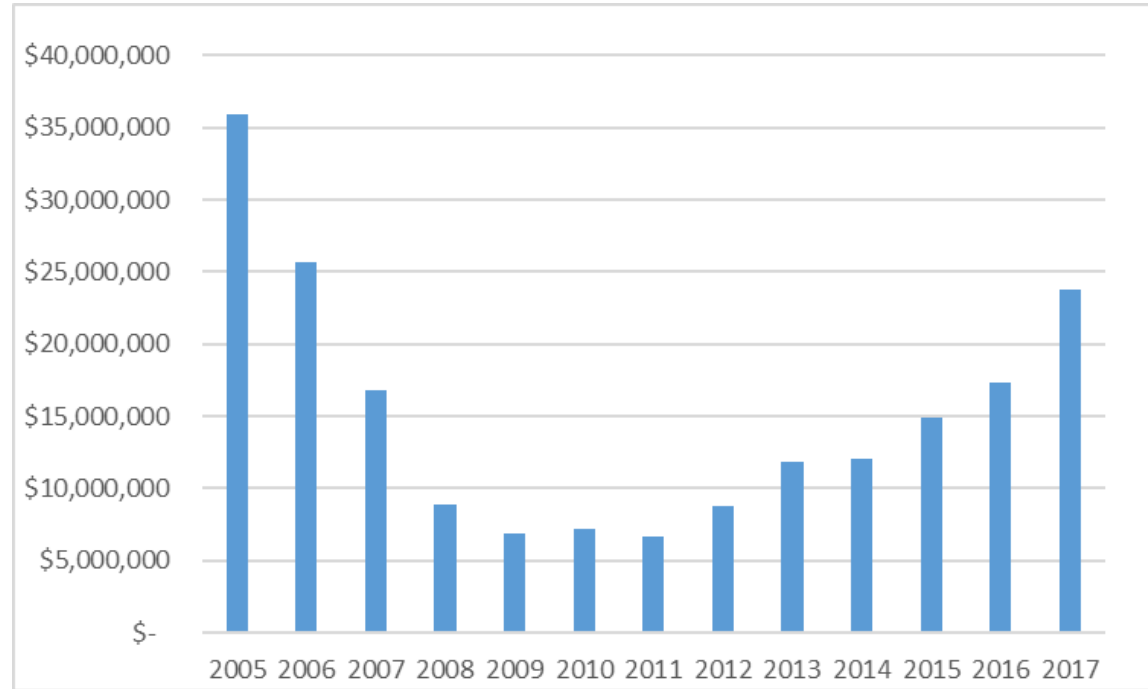
## Single Family Housing

<b>2013</b>	<b>624,000 units</b>	<b>+21%</b>
<b>2014</b>	<b>619,000 units</b>	<b>-1%</b>
<b>2015</b>	<b>683,000 units</b>	<b>+10%</b>
<b>2016</b>	<b>730,000 units</b>	<b>+7%</b>
<b>2017</b>	<b>795,000 units</b>	<b>+9%</b>



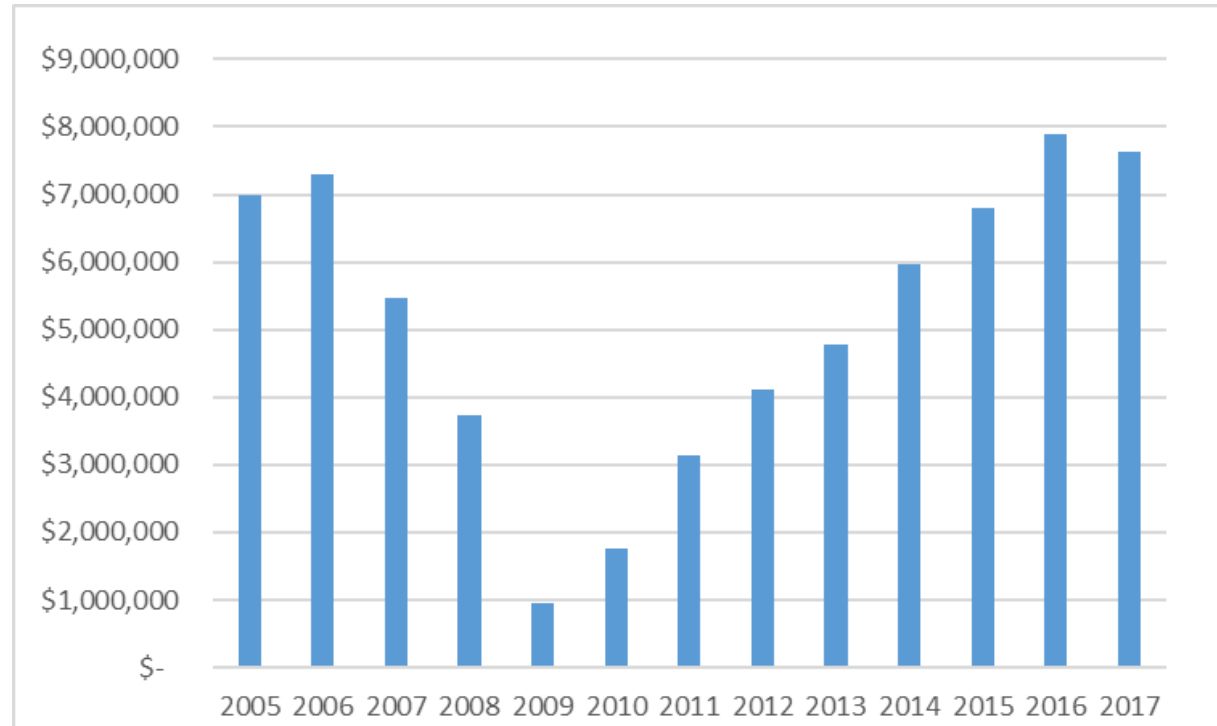
# California: Single Family Housing

*Positive factors should help single family housing to strengthen –*



# California: Multifamily Housing

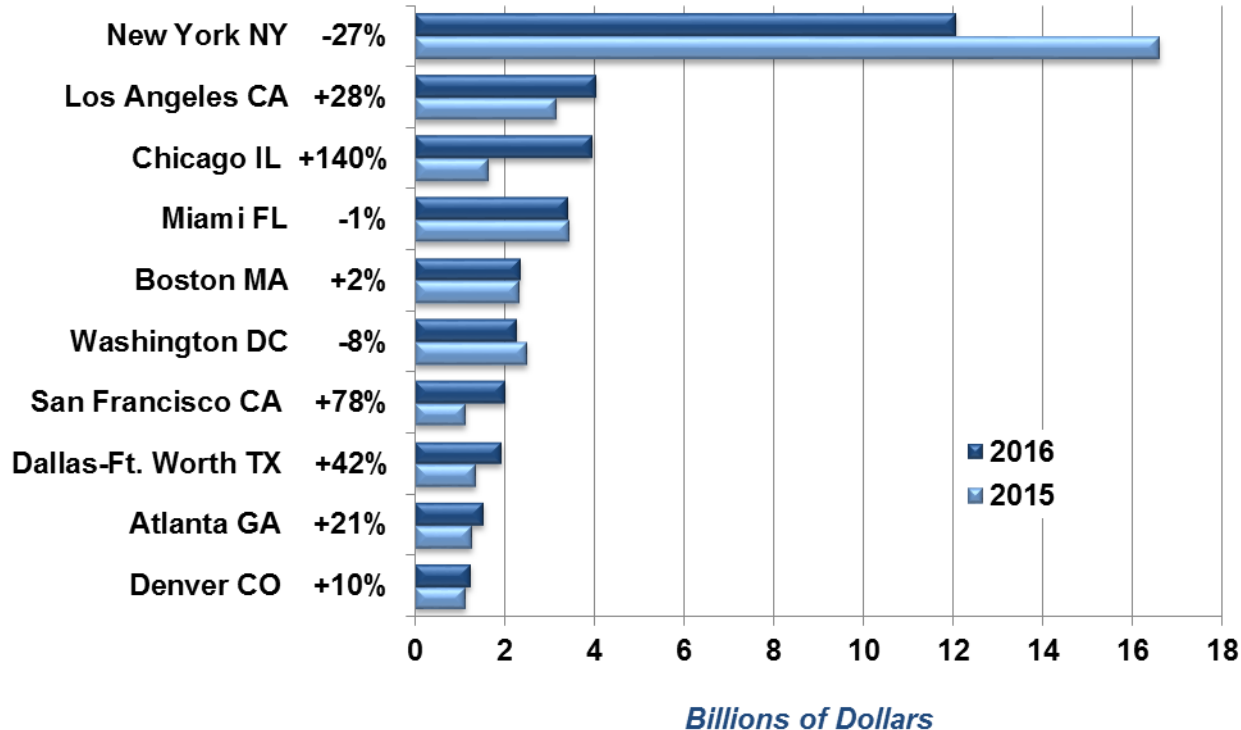
*Showing signs of peaking.*





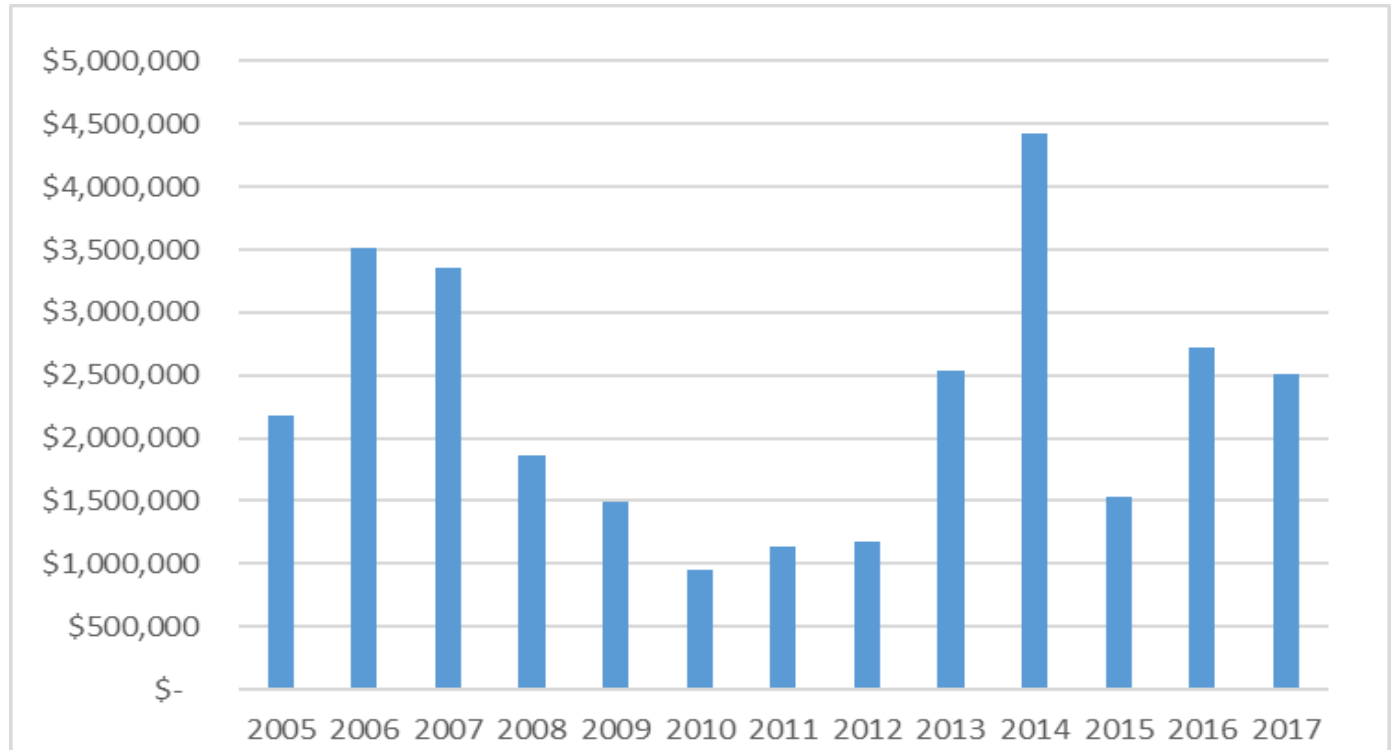
# U.S. Multifamily Housing

*Top 10 Metropolitan Areas - 9 months year-to-date, 2016 vs. 2015. Based on dollars.*



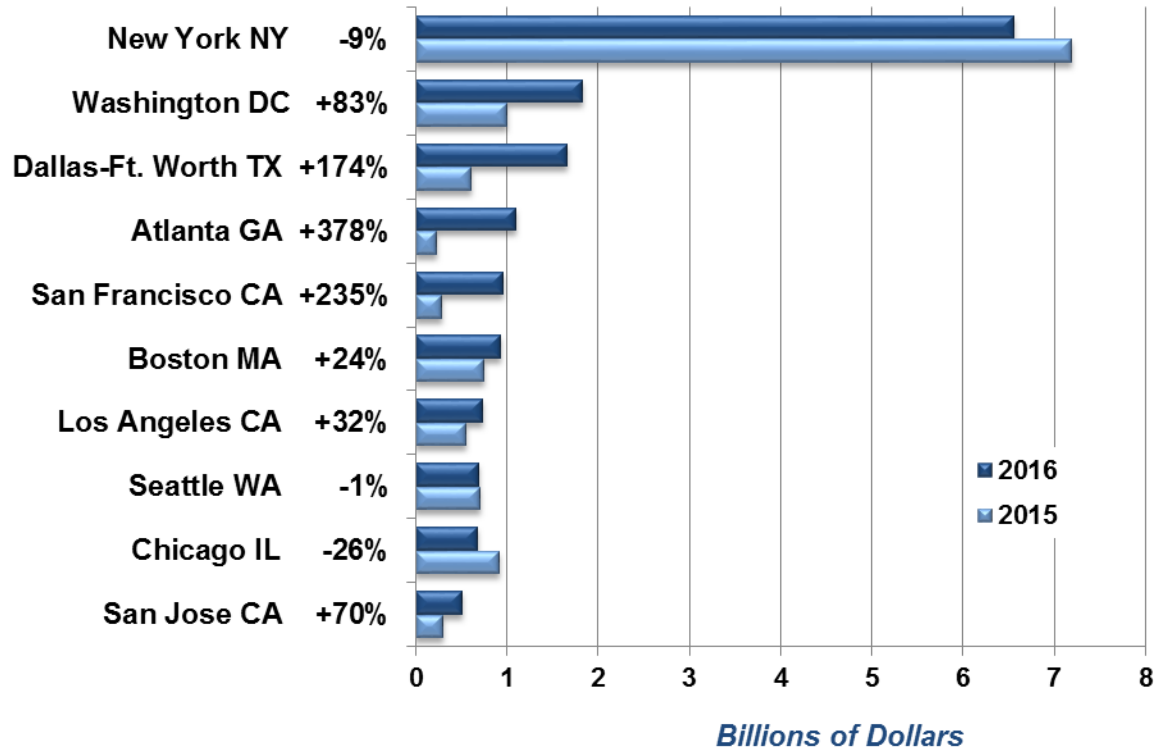
# California: Office Buildings

*Behaving differently than offices have historically.*



# U.S. Commercial – Office Buildings

*Top 10 Metropolitan Areas - 9 months year-to-date, 2016 vs. 2015. Based on dollars.*

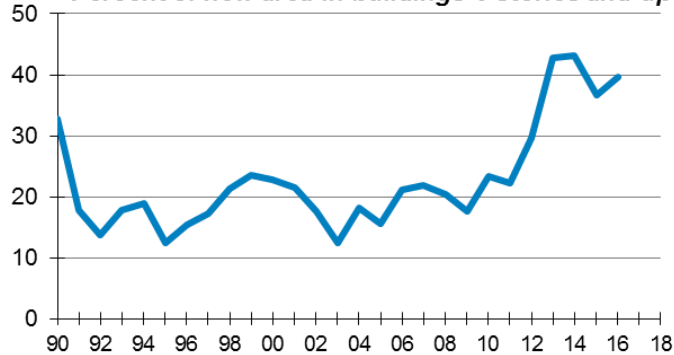


# U.S. Commercial – Office Buildings

*Other office characteristics – office high-rise percent and alterations.*

## High Rise - % of New Office Area

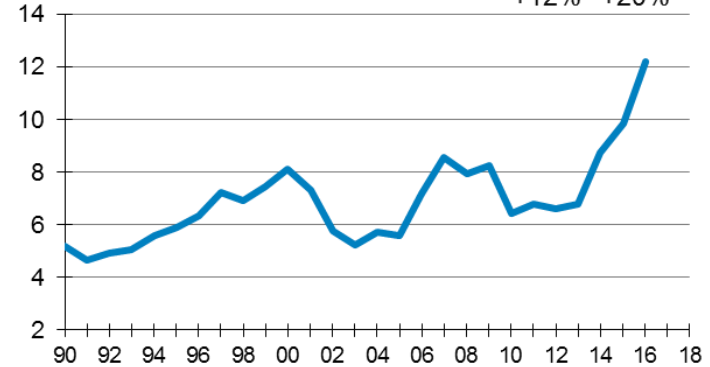
*Percent of new area in buildings 6 stories and up*



## Office Alterations

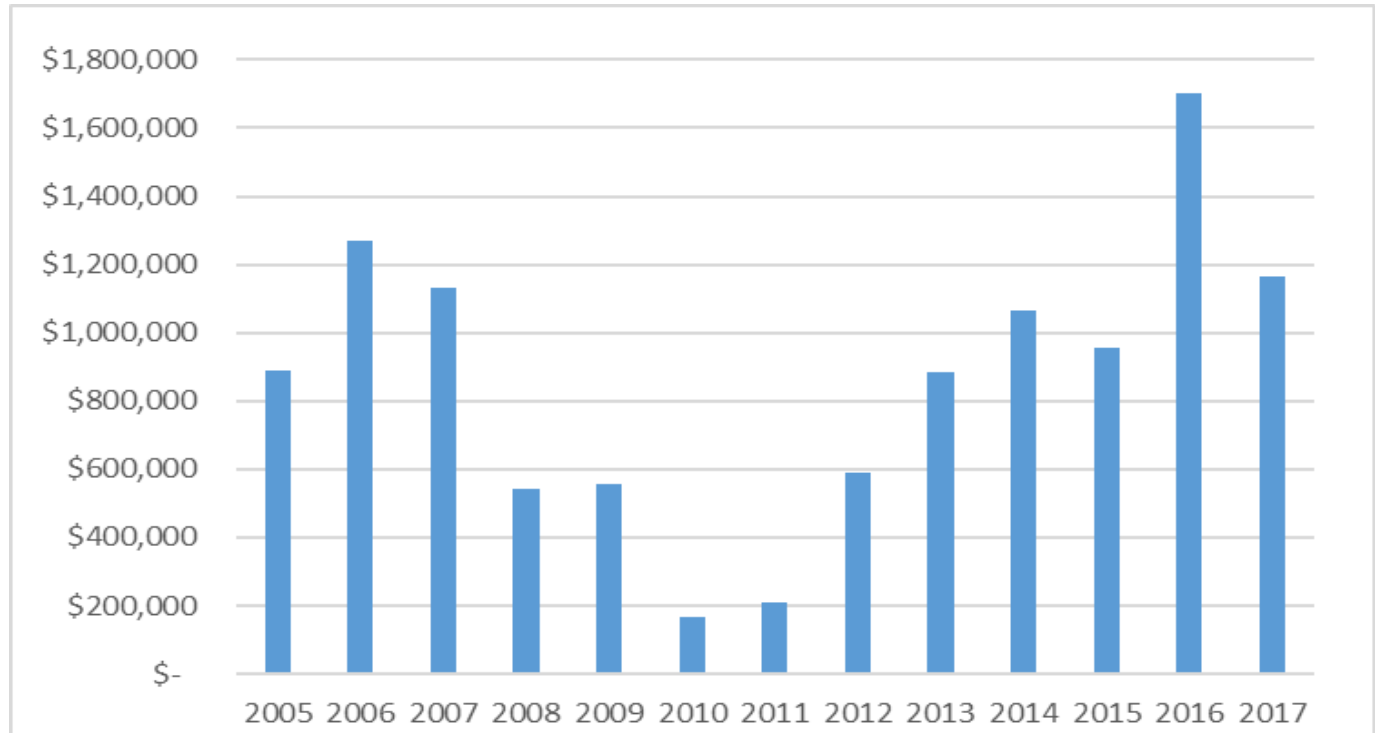
*Billions of Dollars*

2015 2016  
+12% +20%



# California: Hotels

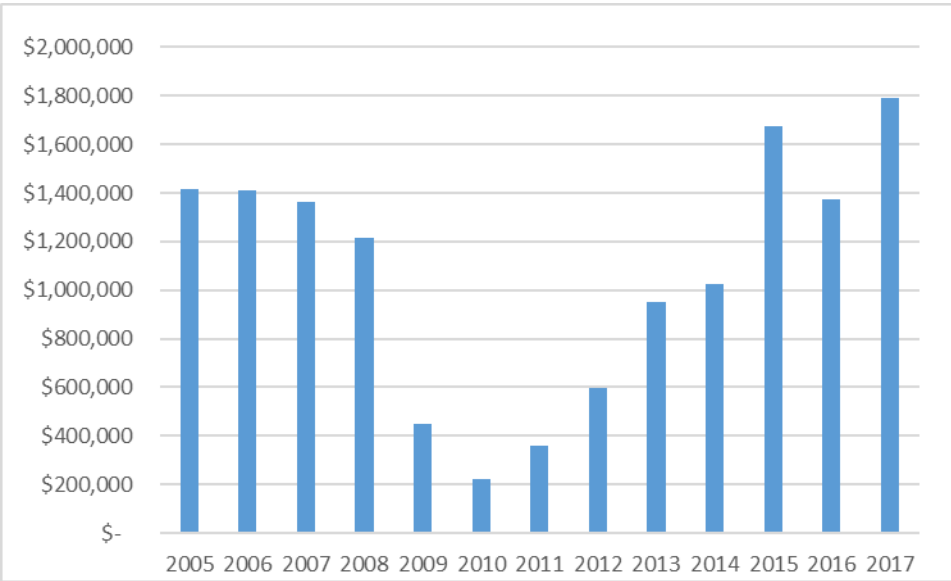
*A decline that is NOT really a decline.*



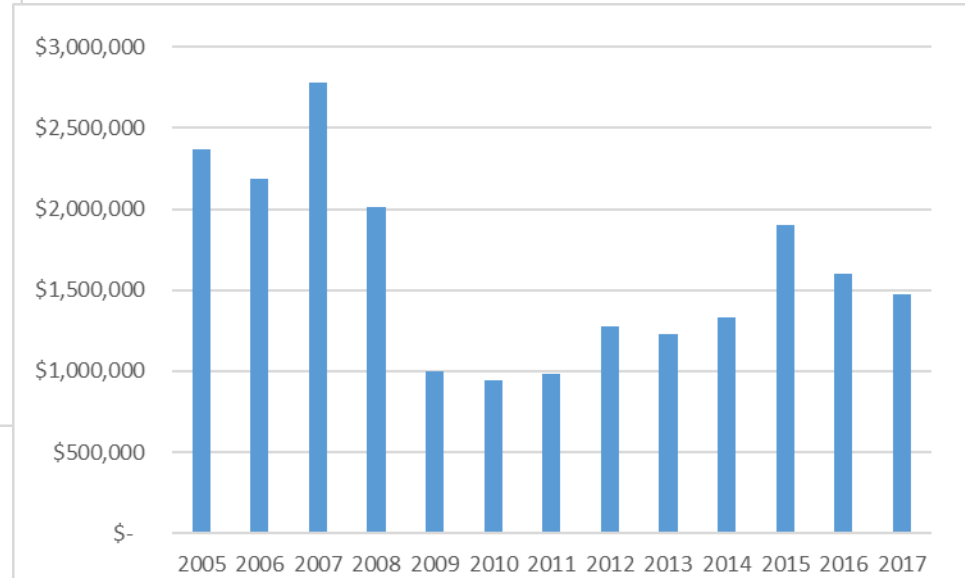
# California: Warehouse & Retail

*Related sectors impacted by new economic circumstances.*

## Warehouse

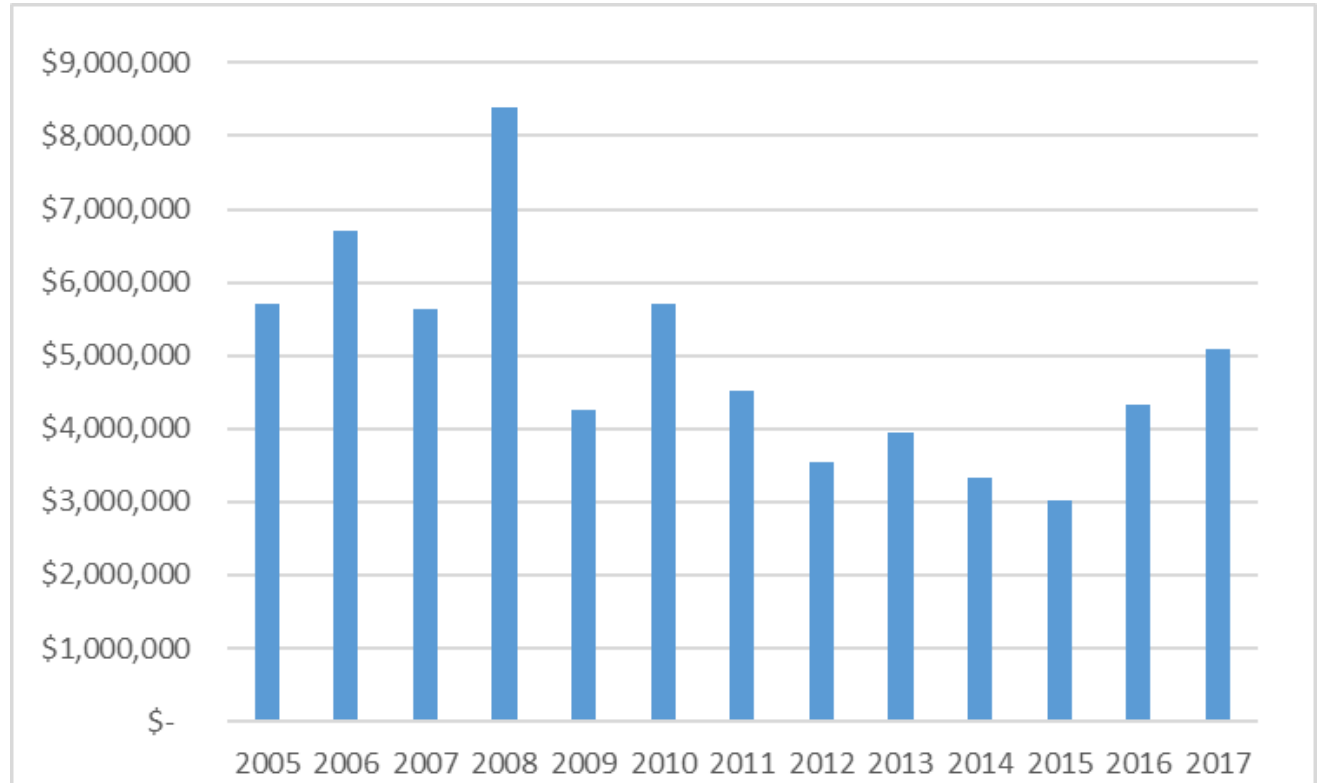


## Retail



# California: Education

*May exceed expectations if \$9 billion bond measure is passed*

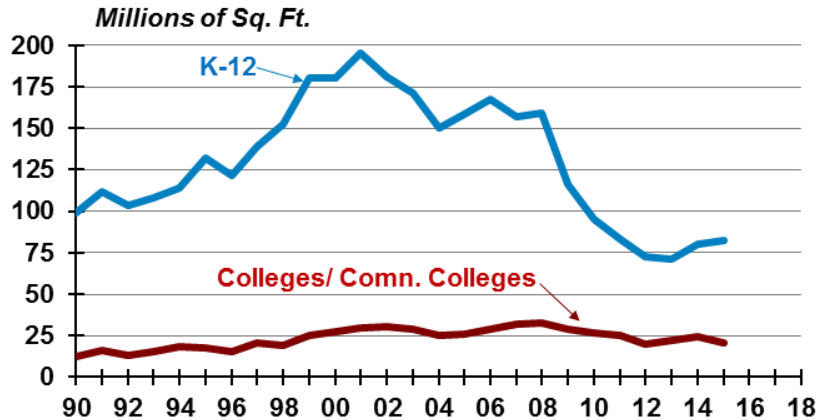


# U.S. Institutional – Educational Buildings

*K-12 school construction larger and more volatile than colleges/universities.*

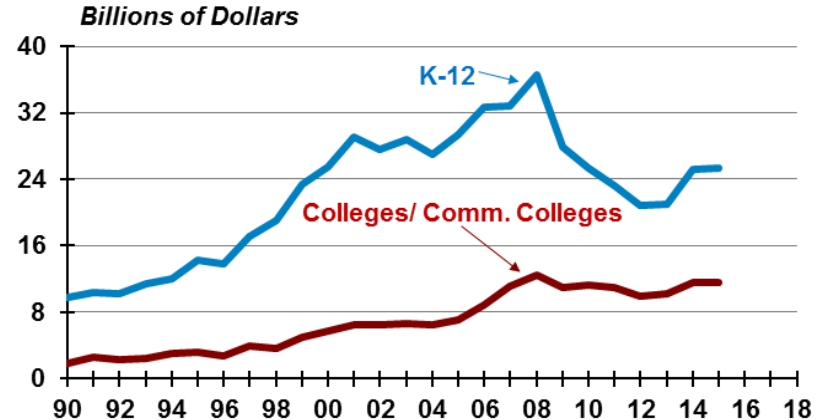
*Much of the recent upturn so far has come from K-12 projects*

## Educational Buildings -- Segments



In 2015, sq. ft. for K-12 school construction was 4.0 times the size of Colleges/Universities/Community Colleges.

## Educational Buildings -- Segments

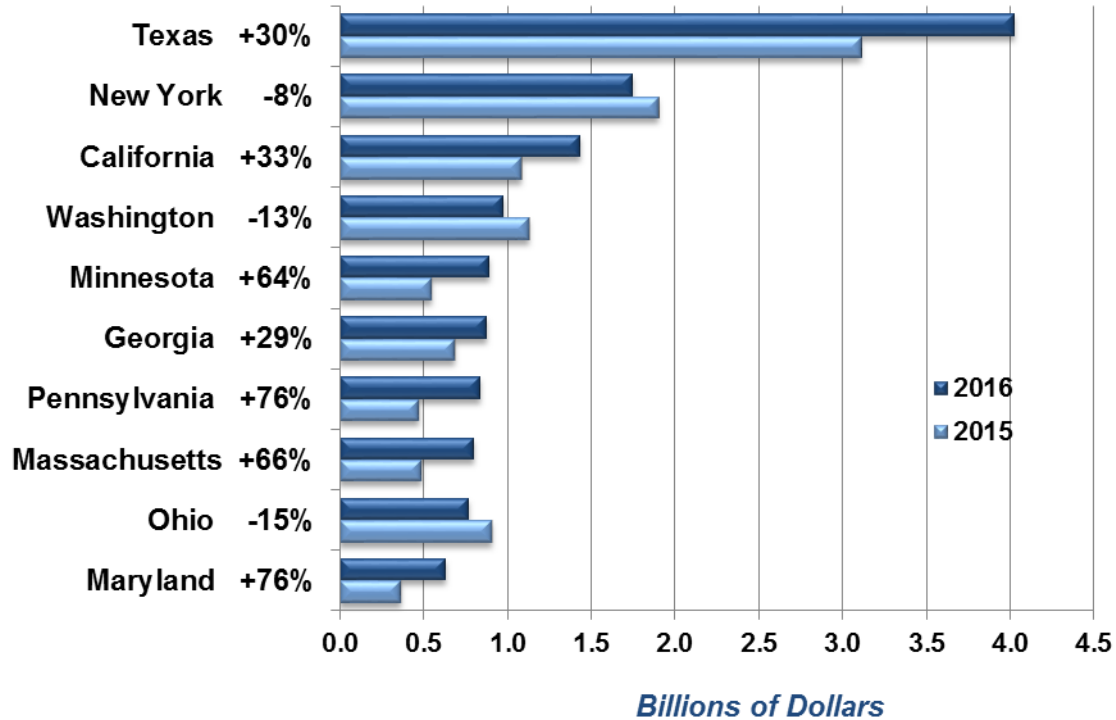


In 2015, dollars for K-12 school construction were 2.2 times the size of Colleges/Universities/Community Colleges.



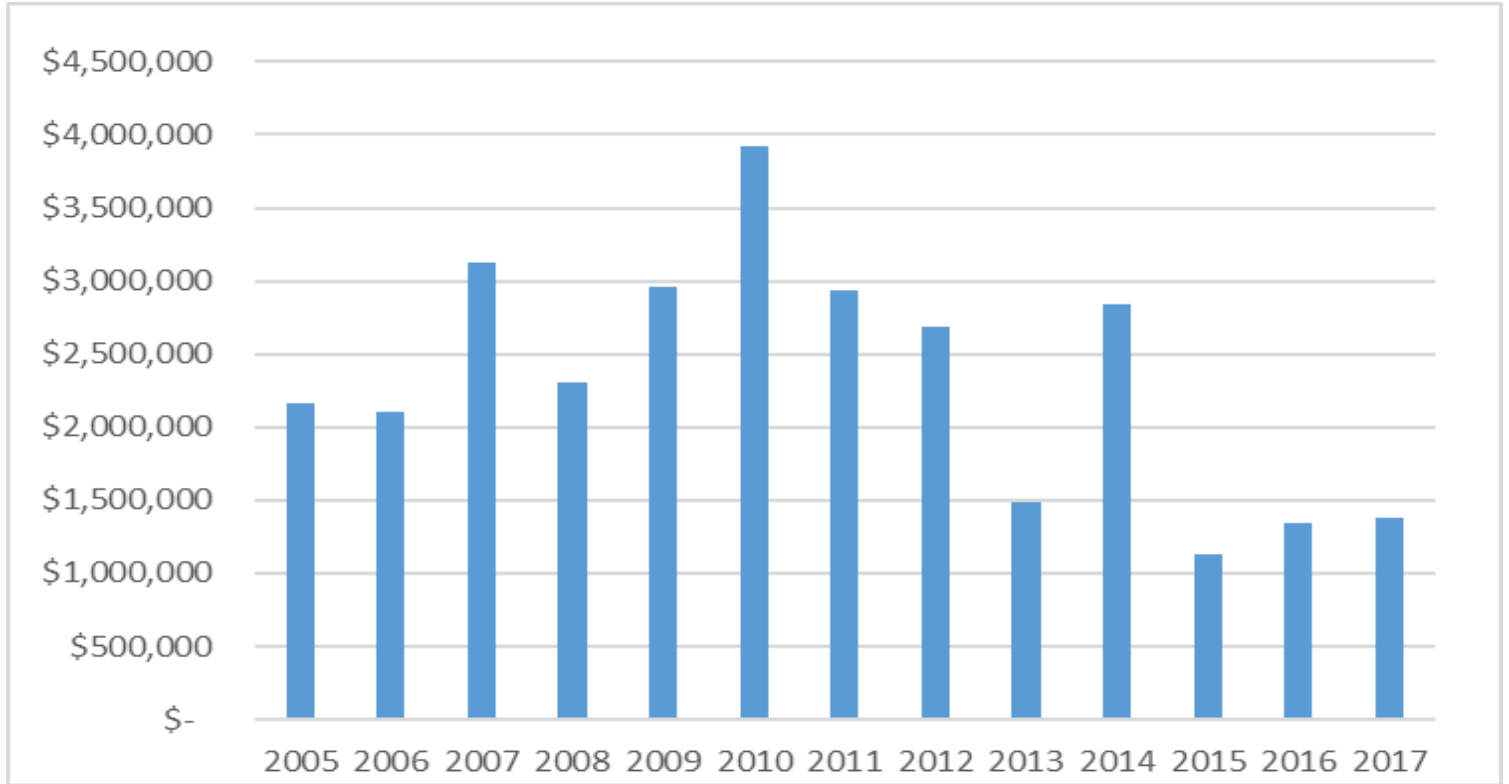
# U.S. Institutional – Educational Buildings

*Top 10 States K-12 School Construction - 9 months year-to-date, 2016 vs. 2015. Based on dollars.*



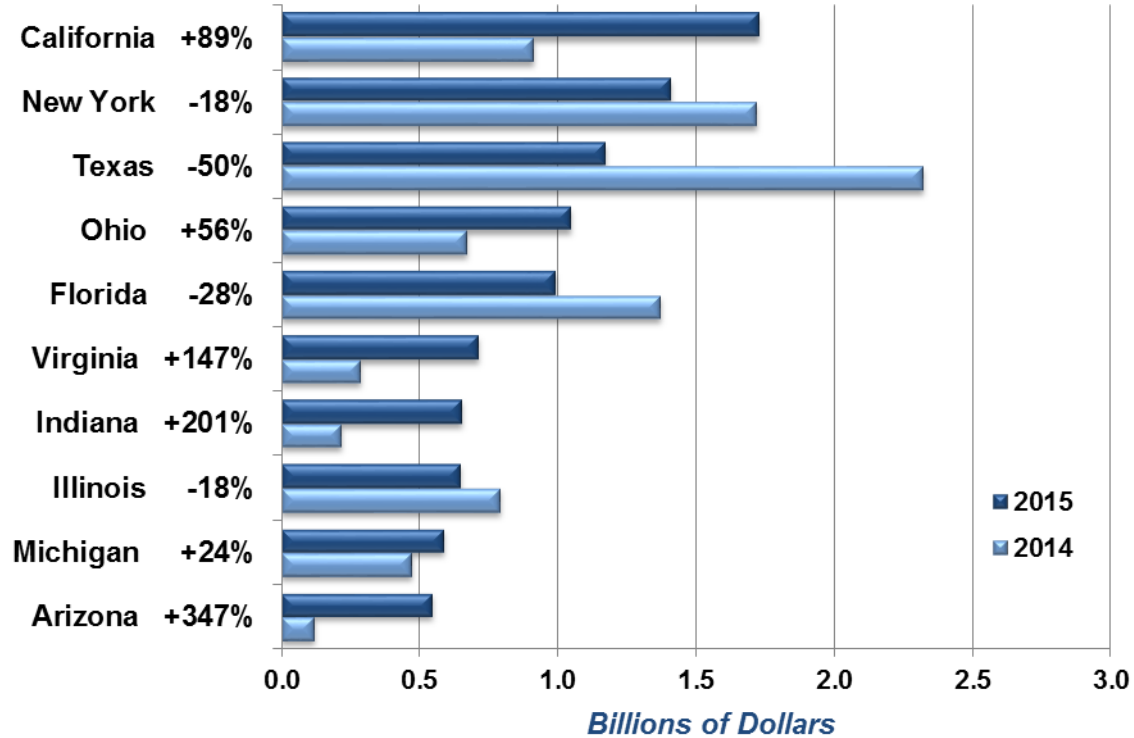
# California: Healthcare

*Will there be more uncertainty about ACA?*



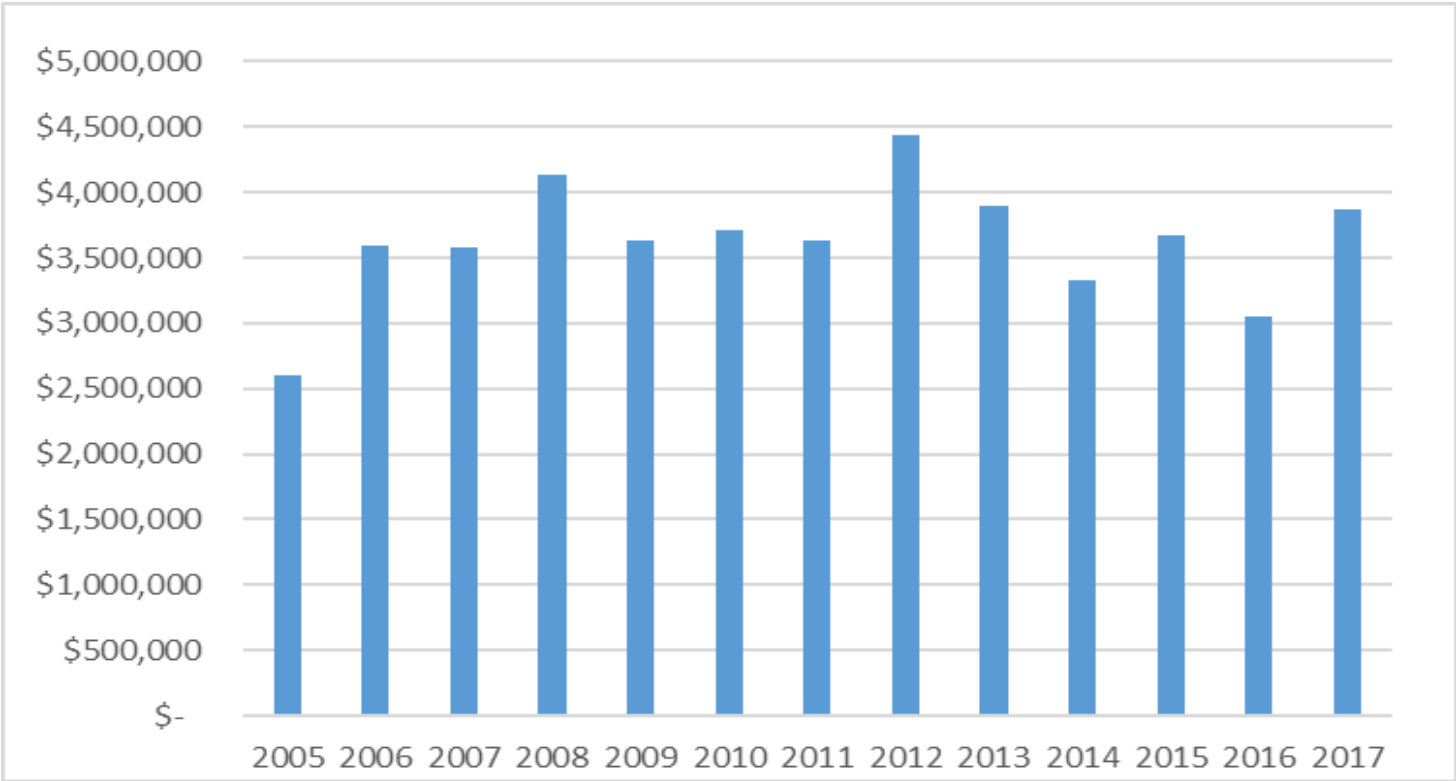
# U.S. Institutional – Healthcare Facilities

*Top 10 States – 9 months year-to-date, 2016 vs. 2015. Based on dollars.*



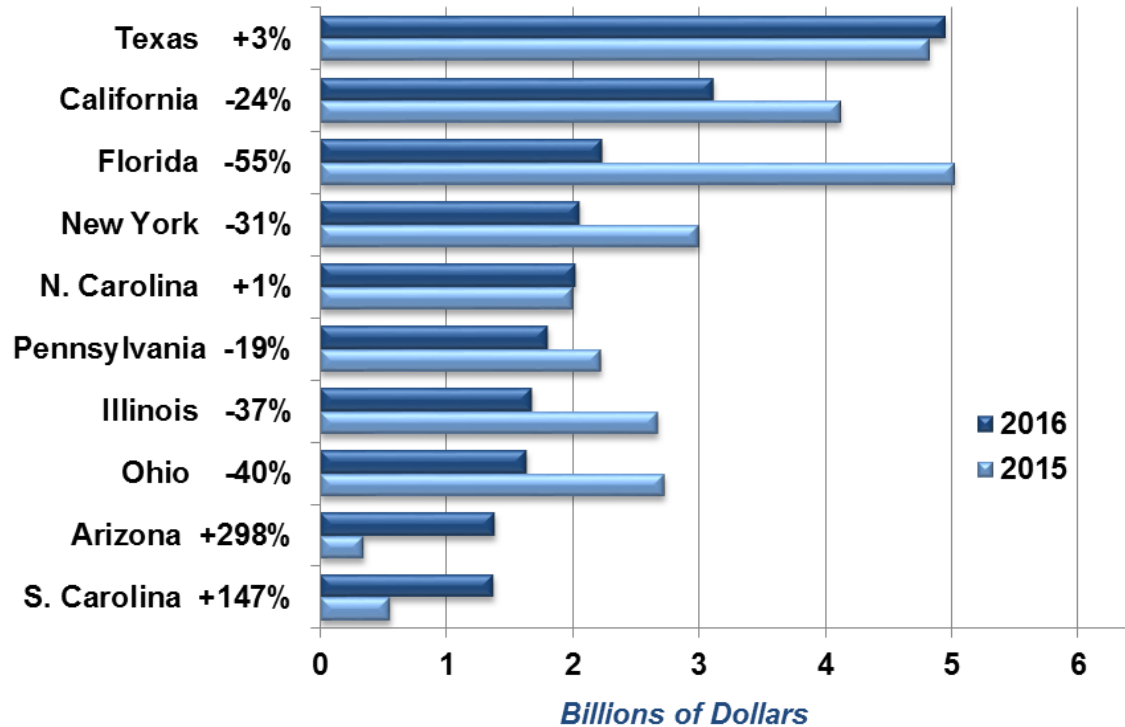
# California: Highways

*Infrastructure expenditures will almost surely increase.*



# U.S. Public Works – Highways and Bridges

*Top 10 States – 9 Months year-to-date, 2016 vs. 2015. Based on dollars.*



# California: Total Construction

*Thousands of Dollars*

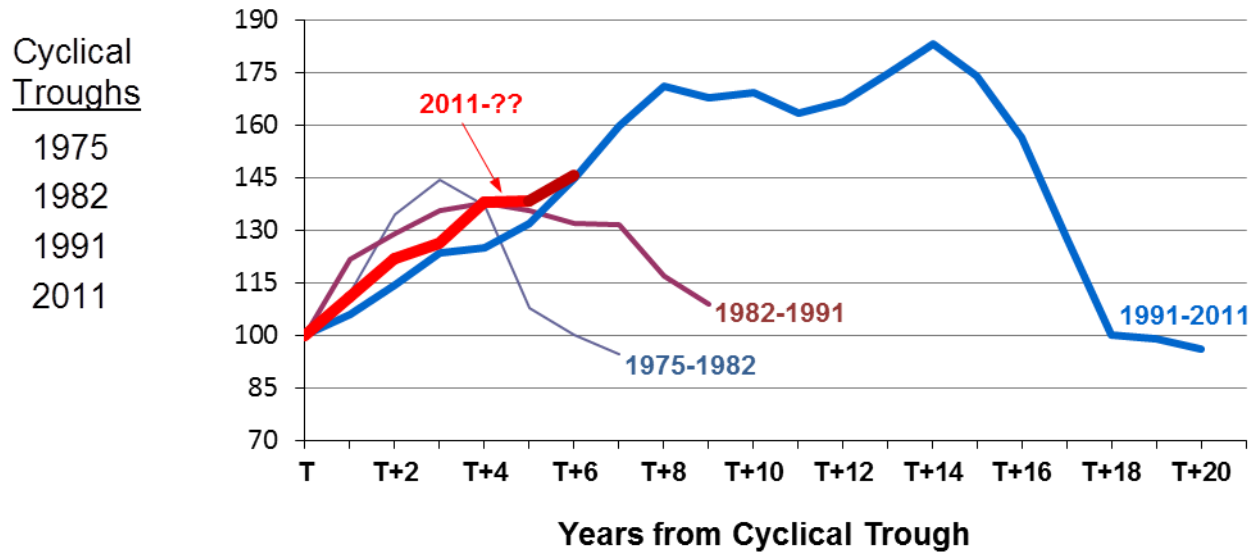
	2012	2013	2014	2015	2016	2017
APTMT	\$ 4,122,774	\$ 4,769,538	\$ 5,974,720	\$ 6,788,834	\$ 7,881,158	\$ 7,632,885
		15.7%	25.3%	13.6%	16.1%	-3.2%
EDUC	\$ 3,536,681	\$ 3,938,303	\$ 3,340,103	\$ 3,016,624	\$ 4,316,183	\$ 5,096,038
		11.4%	-15.2%	-9.7%	43.1%	18.1%
HEALTH	\$ 2,690,257	\$ 1,485,494	\$ 2,845,530	\$ 1,129,465	\$ 1,339,719	\$ 1,373,928
		-44.8%	91.6%	-60.3%	18.6%	2.6%
HIGHWAY	\$ 4,435,391	\$ 3,892,664	\$ 3,333,754	\$ 3,664,540	\$ 3,053,130	\$ 3,864,502
		-12.2%	-14.4%	9.9%	-16.7%	26.6%
HOTEL	\$ 590,871	\$ 882,453	\$ 1,065,559	\$ 954,730	\$ 1,703,851	\$ 1,162,903
		49.3%	20.7%	-10.4%	78.5%	-31.7%
MFG	\$ 169,768	\$ 204,108	\$ 130,613	\$ 646,433	\$ 411,014	\$ 589,941
		20.2%	-36.0%	394.9%	-36.4%	43.5%
OFFICE	\$ 1,170,132	\$ 2,540,719	\$ 4,418,771	\$ 1,531,075	\$ 2,726,863	\$ 2,502,930
		117.1%	73.9%	-65.4%	78.1%	-8.2%
ONEFAM	\$ 8,818,854	\$ 11,878,704	\$ 12,047,863	\$ 14,923,055	\$ 17,380,228	\$ 23,730,608
		34.7%	1.4%	23.9%	16.5%	36.5%
PUB	\$ 1,229,051	\$ 1,253,769	\$ 1,929,226	\$ 1,148,053	\$ 1,183,677	\$ 1,328,452
		2.0%	53.9%	-40.5%	3.1%	12.2%
RETAIL	\$ 1,272,382	\$ 1,227,453	\$ 1,334,541	\$ 1,898,824	\$ 1,601,148	\$ 1,473,626
		-3.5%	8.7%	42.3%	-15.7%	-8.0%
WARENM	\$ 595,263	\$ 950,035	\$ 1,026,402	\$ 1,673,767	\$ 1,373,858	\$ 1,789,611
		59.6%	8.0%	63.1%	-17.9%	30.3%
TOTAL	\$ 46,798,901	\$ 50,608,101	\$ 52,103,778	\$ 56,320,826	\$ 59,625,700	\$ 63,454,634
		8.1%	3.0%	8.1%	5.9%	6.4%

# U.S. Construction Market Outlook

## *Points of Perspective*

### Total Construction Activity by Cycle

Cyclical Trough (T)=100, Based on Constant Dollars





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