

# The Virginia Tech – U.S. Forest Service

## June 2016

### Housing Commentary: Section I



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# Summary

In June, aggregate housing data was mostly positive; with only total starts and housing permits declining year-over-year. Single-family spending has decreased four consecutive months; multifamily three of five; and remodeling two of five. Completions and new single-family sales were the “Stars” of June. Reported construction spending was disappointing as well, as total residential and single-family expenditures declined month-over-month. Regionally, data were mixed across all sectors. From the depths of 2009, housing has improved; yet, most sectors of the housing market remain well less than their respective historical averages.

Further review of new single-family sales reveals interesting dichotomies: lower priced tier house sales declined month-over-month and higher priced tier homes growth was stellar. Houses in the lower tiers (\$150,000 and \$200,000) declined by -12.5% to -50.0%, respectively and houses in the \$500,000-749,000 category soared 100.0%. While there was not a month-over-month change in the \$750,000 sales category, sales did increase 100% year-over-year. On a percentage basis, the \$750,000 and greater class was double the  $\leq$  \$150,000 class in June. Further, the percentage share of new single-family houses sold, \$400,000 and under, has decreased from 92.4% to 67.3% since 2002. This suggests that there is ample room for improvement in the single-family starter house sector.

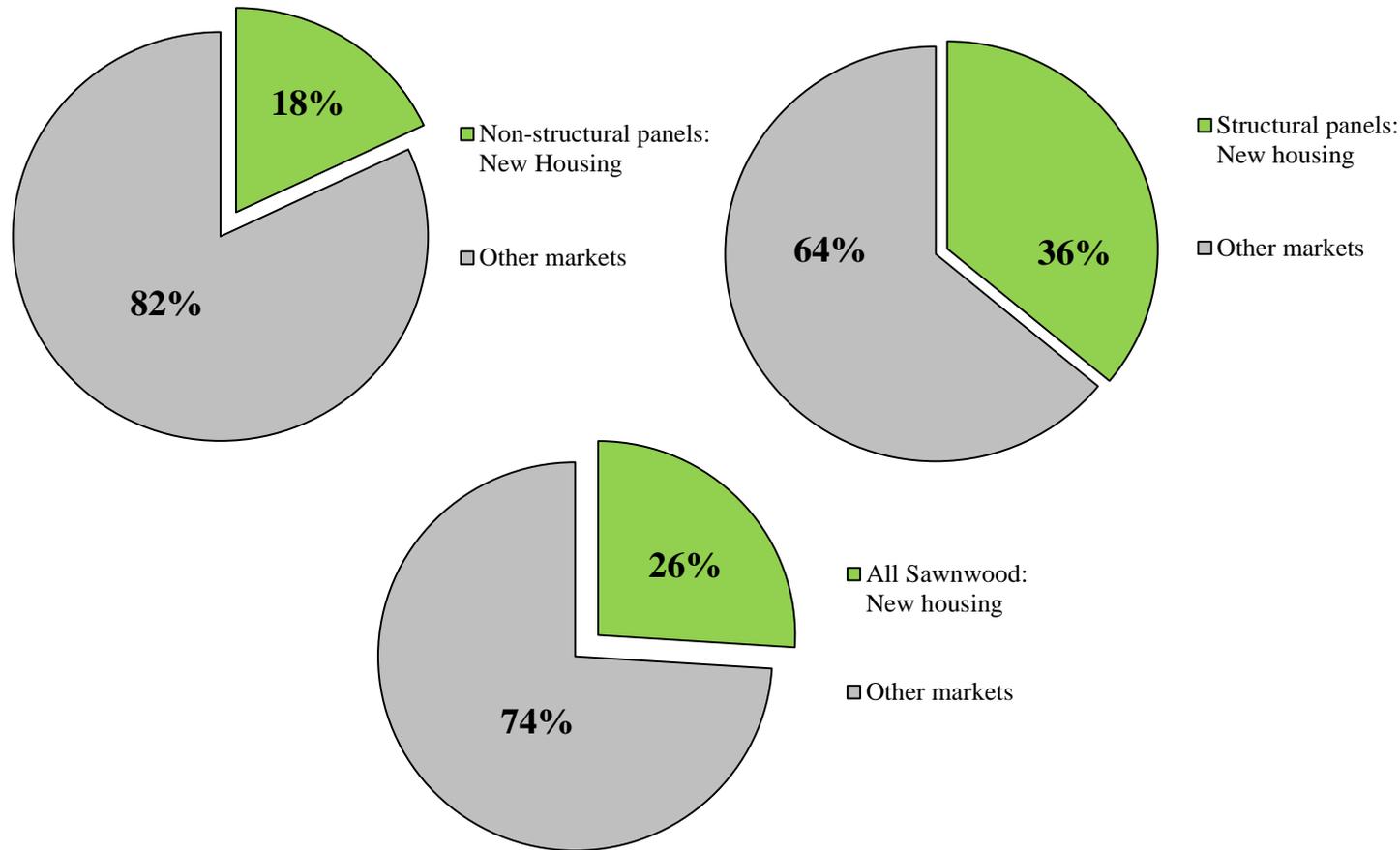
This month’s commentary contains relevant housing data; data exploration; new and existing single-family housing; home ownership and household formations; economics and also includes several slides addressing demographics and home ownership. Section I contains data and commentary and Section II includes Federal Reserve analysis; private indicators; and demographic commentary. We hope you find this commentary beneficial.

# June 2016 Housing Scorecard

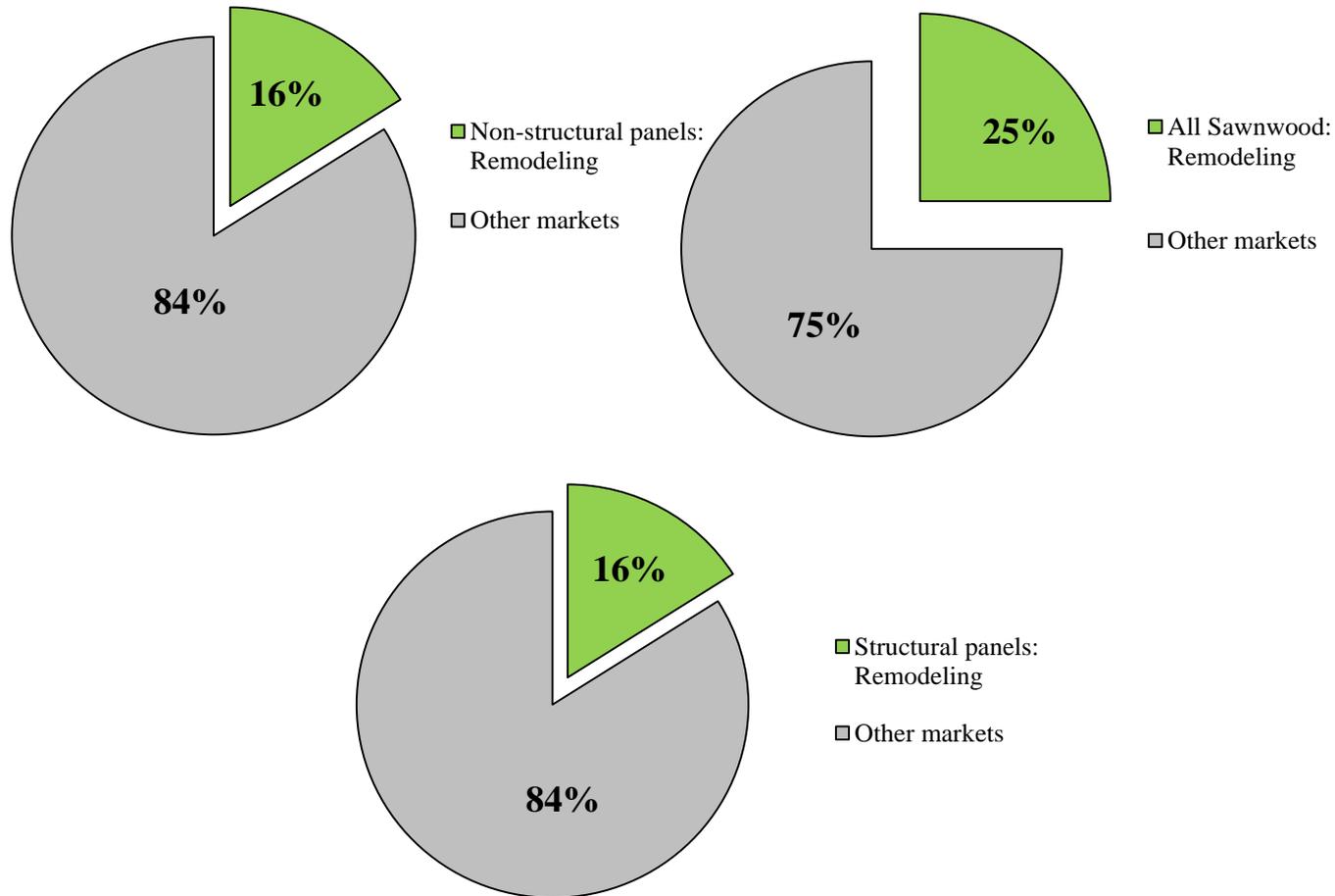
	M/M	Y/Y
Housing Starts	△ 4.8%	▽ 2.0%
Single-Family Starts	△ 4.4%	△ 13.4%
Housing Permits	△ 1.5%	▽ 13.6%
Single-Family Permits	△ 1.0%	△ 5.1%
Housing Completions	△ 12.3%	△ 18.7%
New Single-Family House Sales	△ 3.5%	△ 25.4%
Existing House Sales <sup>1</sup>	△ 1.1%	△ 3.0%
Private Residential Construction Spending	△ 0.1%	△ 2.6%
Single-Family Construction Spending	▽ 0.4%	△ 4.8%

M/M = month-over-month; Y/Y = year-over-year; NC = no change

# New Construction's Percentage of Wood Products Consumption



# Repair and Remodeling's Percentage of Wood Products Consumption



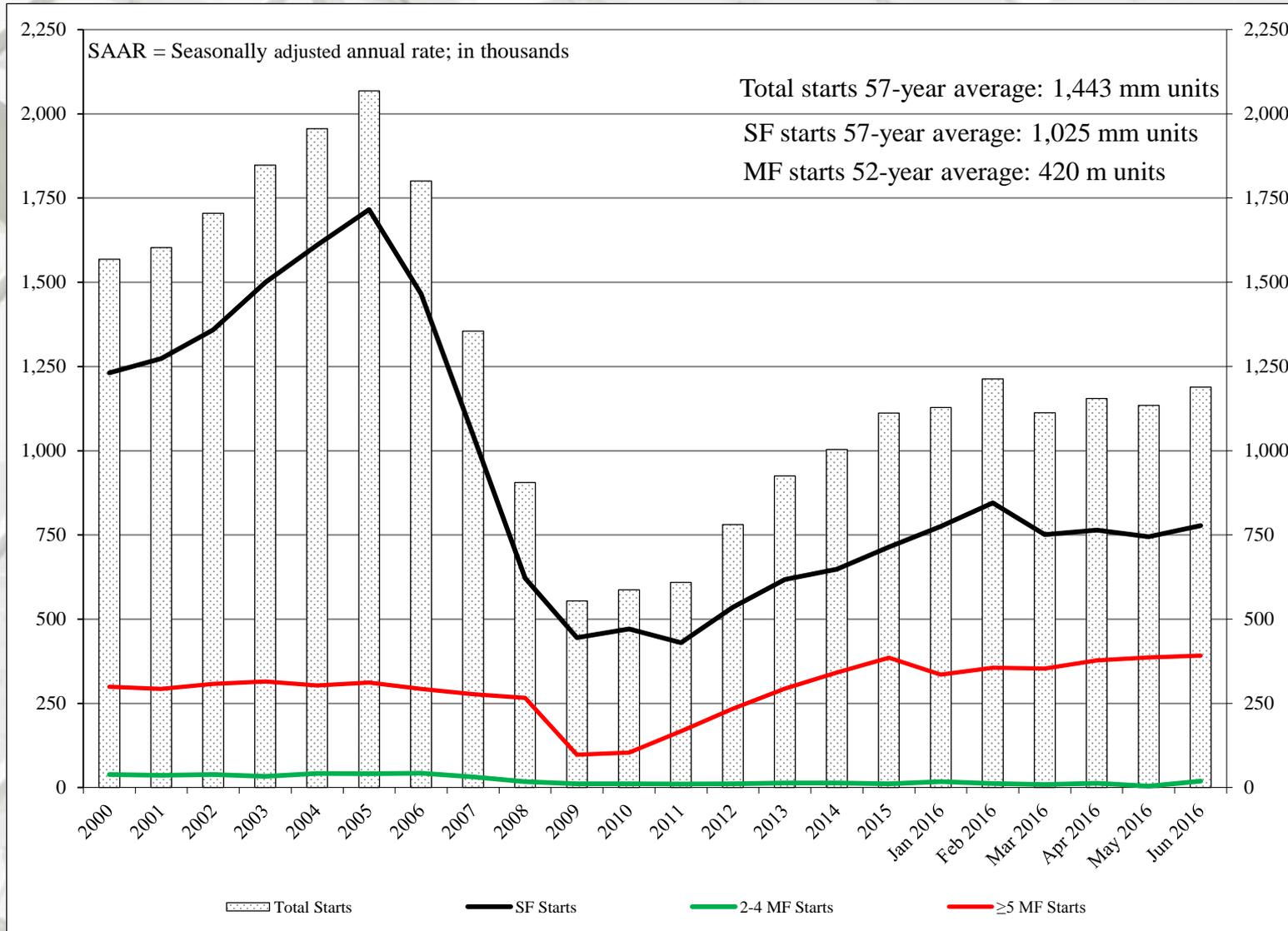
# New Housing Starts

	<b>Total Starts*</b>	<b>Single-Family (SF) Starts</b>	<b>Multifamily (MF) 2-4 unit** Starts</b>	<b>MF ≥ 5 unit Starts</b>
June	1,189,000	778,000	19,000	392,000
May	1,135,000	745,000	4,000	386,000
2015	1,213,000	686,000	14,000	513,000
M/M change	4.8%	4.4%	375.0%	1.6%
Y/Y change	-2.0%	13.4%	35.7%	-23.6%

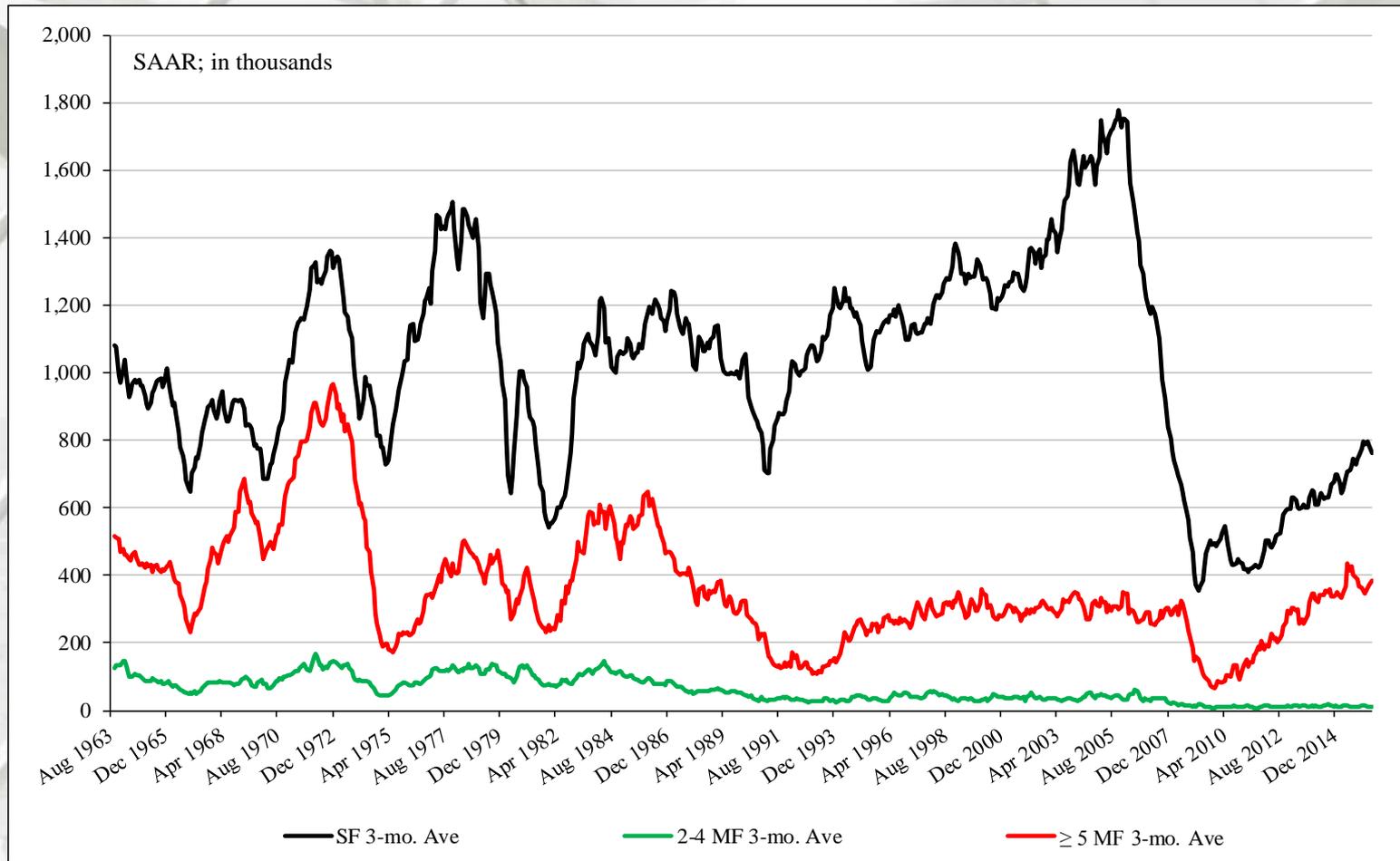
\* All start data are presented at a seasonally adjusted annual rate (SAAR).

\*\* US DOC does not report 2 to 4 multifamily starts directly, this is an estimation ((Total starts – (SF + 5 unit MF)).

# Total Housing Starts



# SF & MF Housing Starts: Three-month Rolling Average



# New Housing Starts by Region

	NE Total	NE SF	NE MF**
June	117,000	75,000	42,000
May	80,000	57,000	23,000
2015	224,000	43,000	181,000
M/M change	46.3%	31.6%	82.6%
Y/Y change	-47.8%	74.4%	-76.8%

	MW Total	MW SF	MW MF
June	184,000	118,000	66,000
May	194,000	110,000	84,000
2015	146,000	98,000	48,000
M/M change	-5.2%	7.3%	-21.4%
Y/Y change	26.0%	20.4%	37.5%

All data are SAAR; NE = Northeast and MW = Midwest.

\*\* US DOC does not report multifamily starts directly, this is an estimation (Total starts – SF starts).

# New Housing Starts by Region

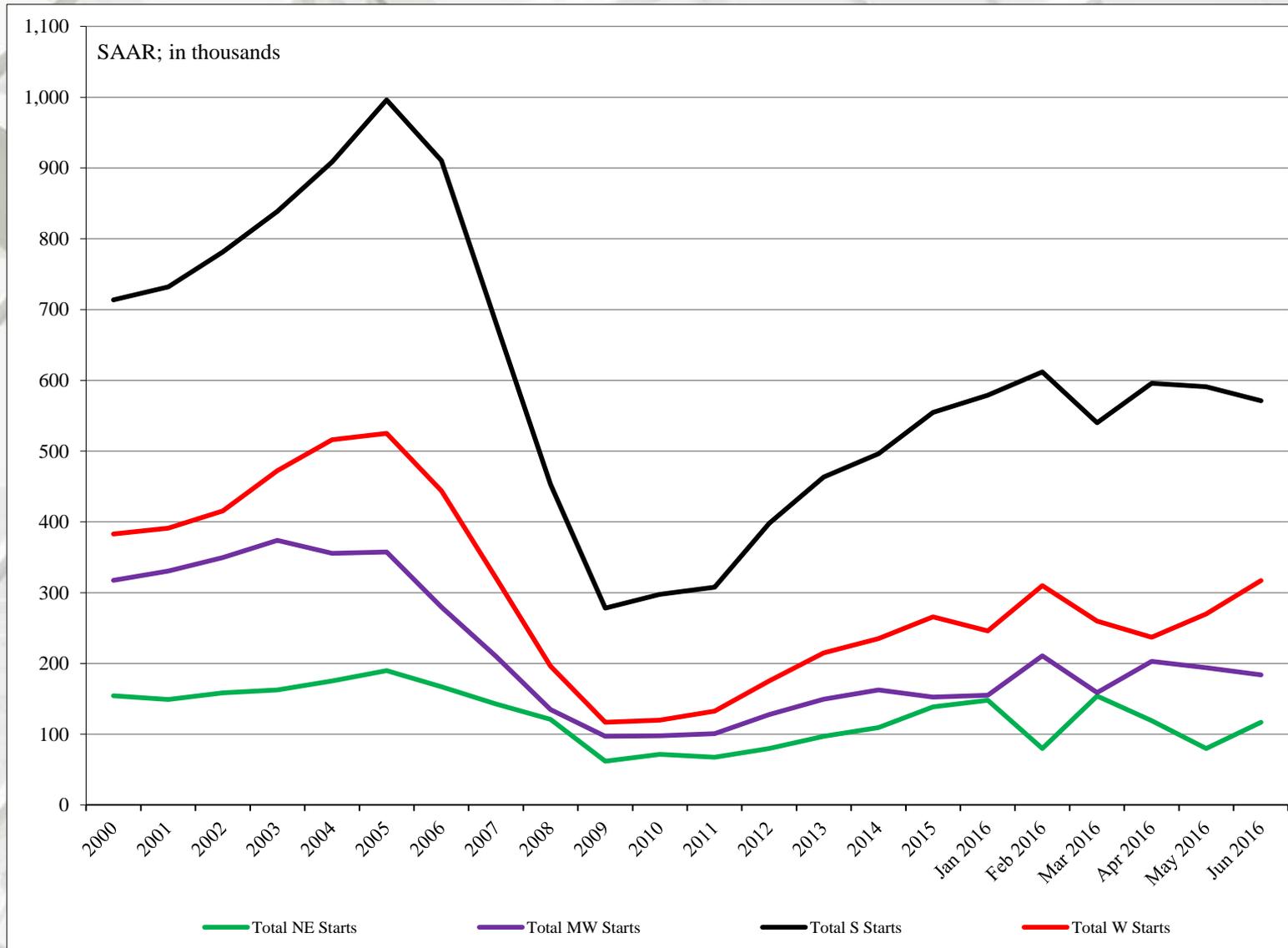
	<b>S Total</b>	<b>S SF</b>	<b>S MF**</b>
June	571,000	417,000	154,000
May	591,000	415,000	176,000
2015	552,000	389,000	163,000
M/M change	-3.4%	0.5%	-12.5%
Y/Y change	3.4%	7.2%	-5.5%

	<b>W Total</b>	<b>W SF</b>	<b>W MF</b>
June	317,000	168,000	149,000
May	270,000	163,000	107,000
2015	291,000	156,000	135,000
M/M change	17.4%	3.1%	39.3%
Y/Y change	8.9%	7.7%	10.4%

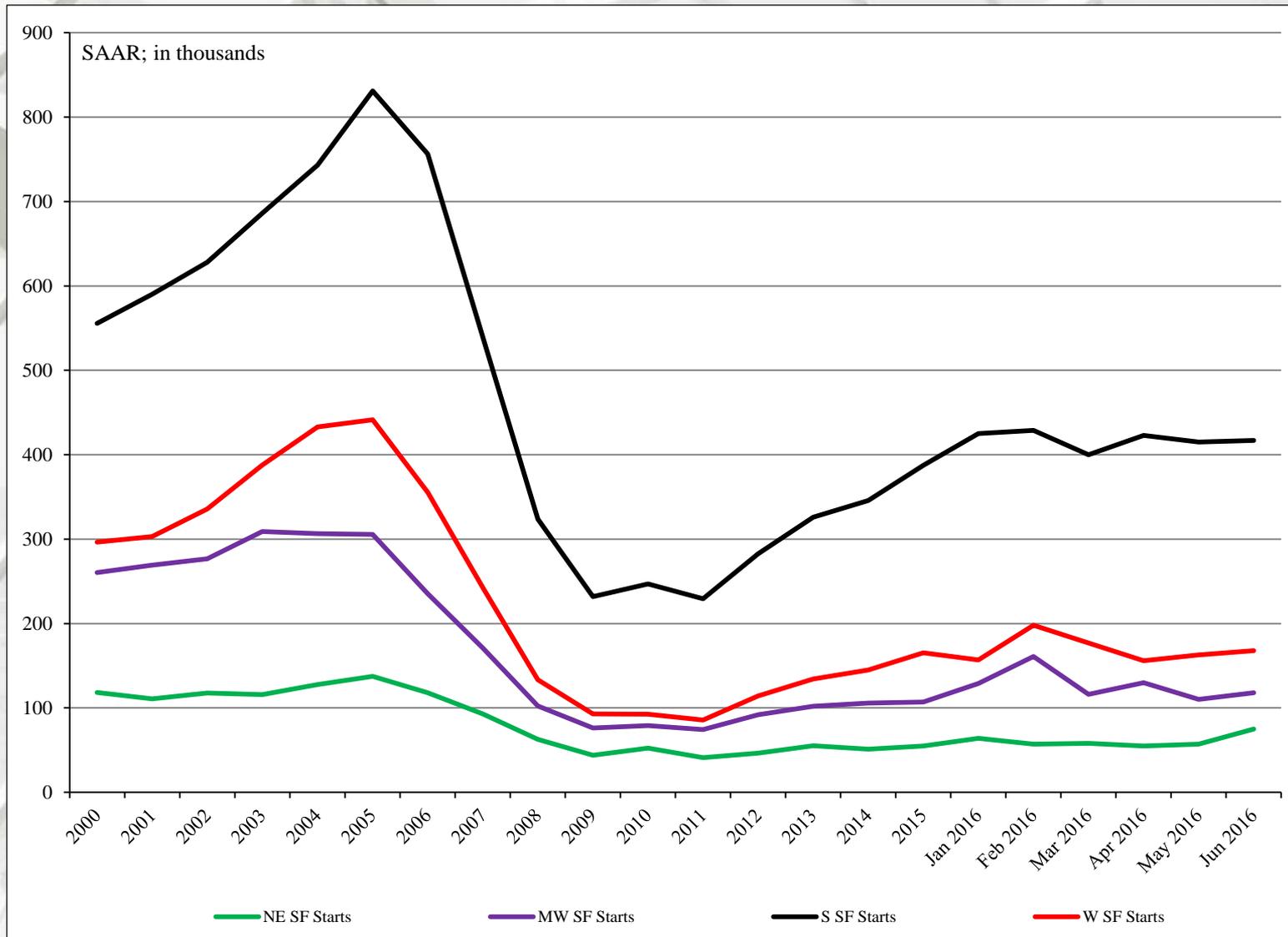
All data are SAAR; S = South and W = West.

\*\* US DOC does not report multifamily starts directly, this is an estimation (Total starts – SF starts).

# Total Housing Starts by Region

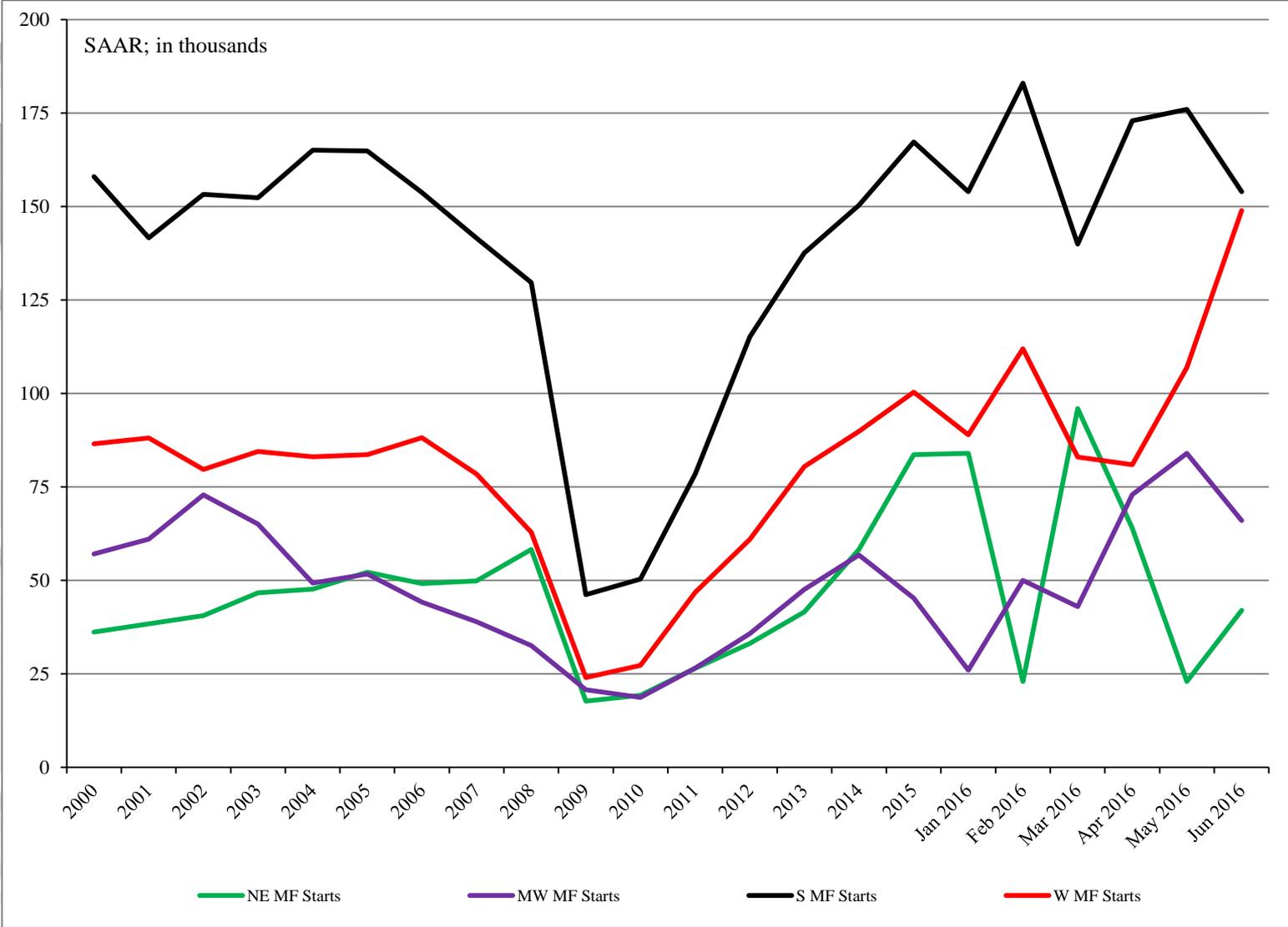


# SF Housing Starts by Region



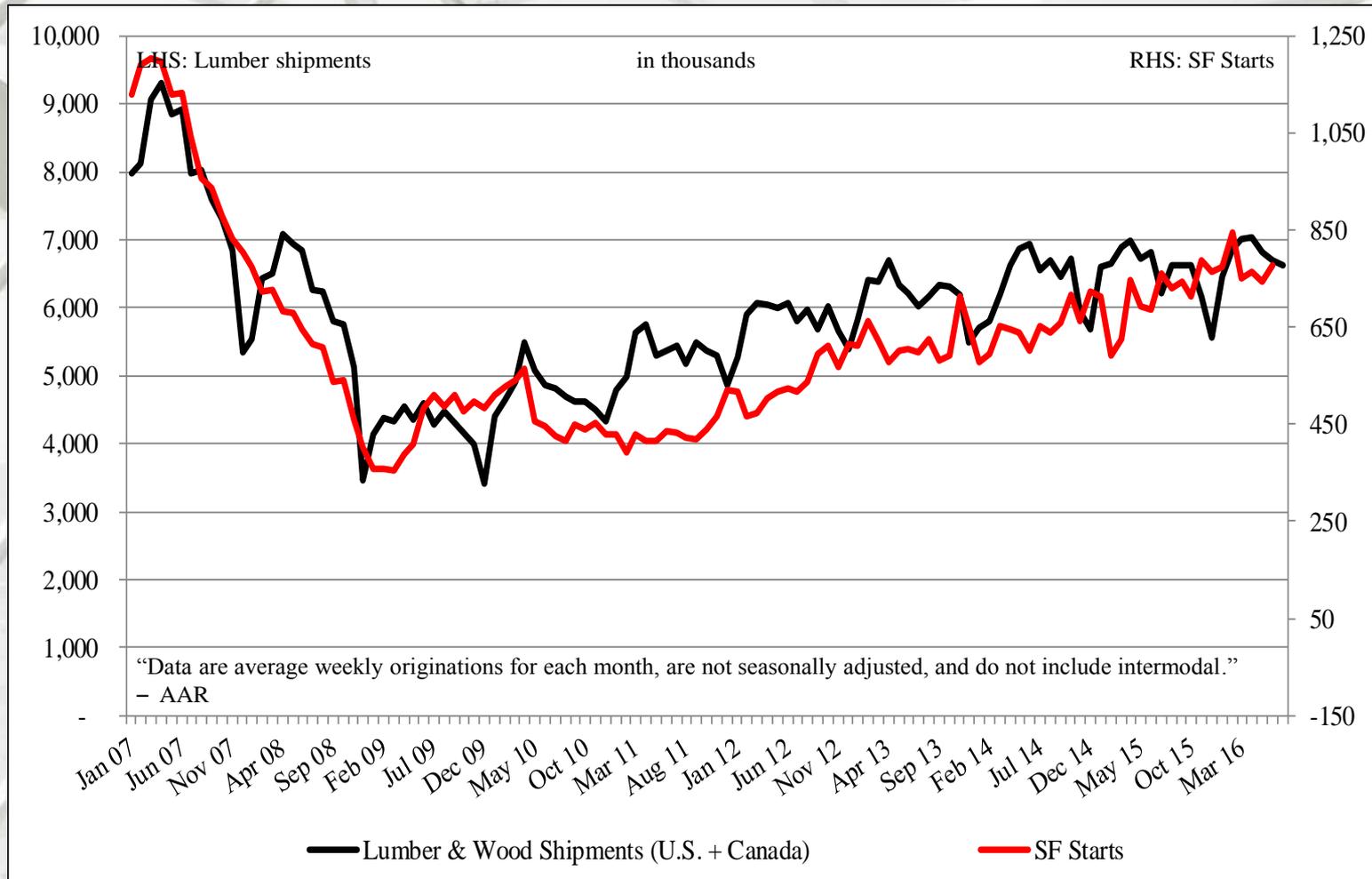
Source: <http://www.census.gov/construction/nrc/pdf/newresconst.pdf>; 7/19/16

# MF Housing Starts by Region

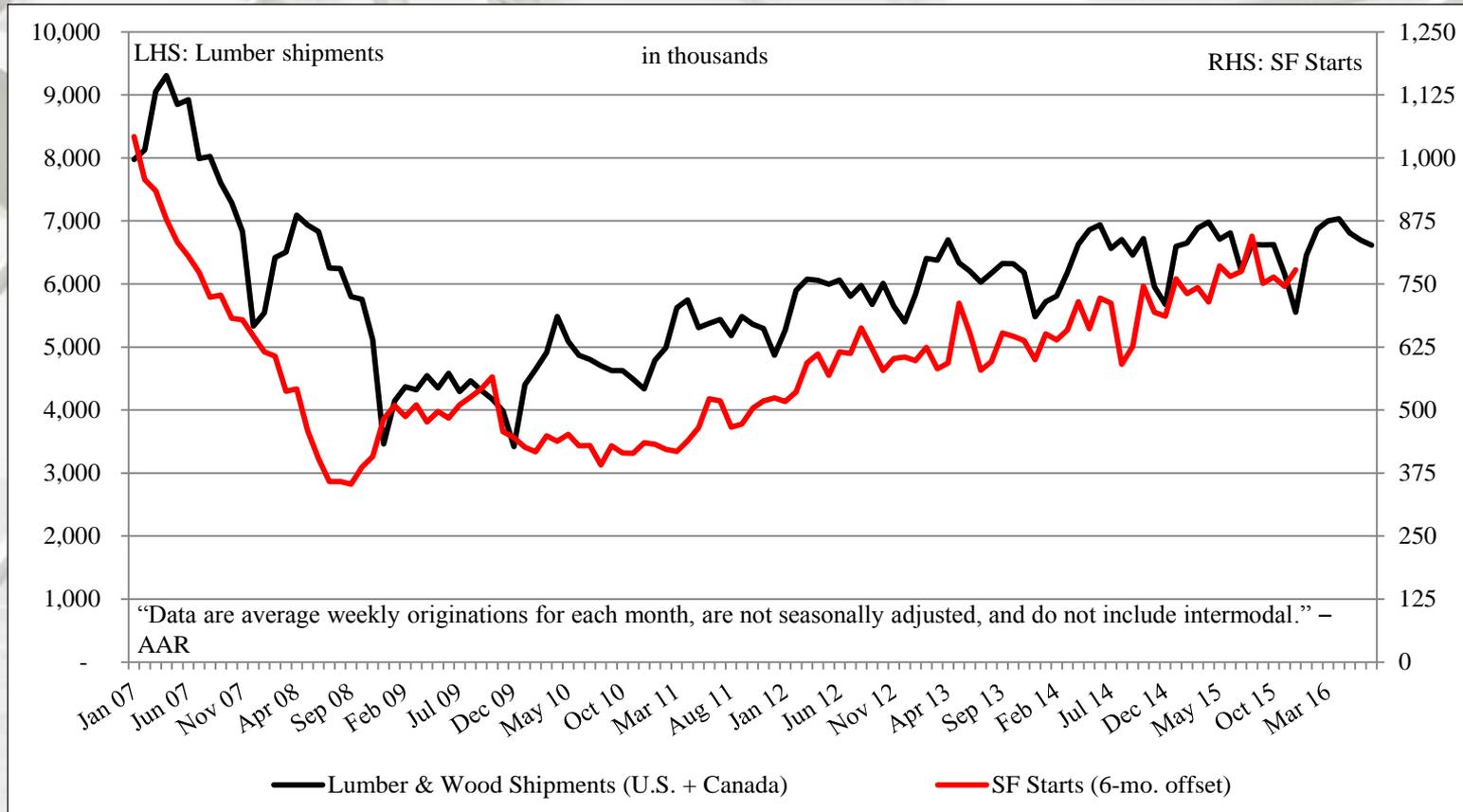


Source: <http://www.census.gov/construction/nrc/pdf/newresconst.pdf>; 7/19/16

# Railroad Lumber & Wood Shipments vs. U.S. SF Housing Starts



# Railroad Lumber & Wood Shipments vs. U.S. SF Housing Starts: 6-month Offset



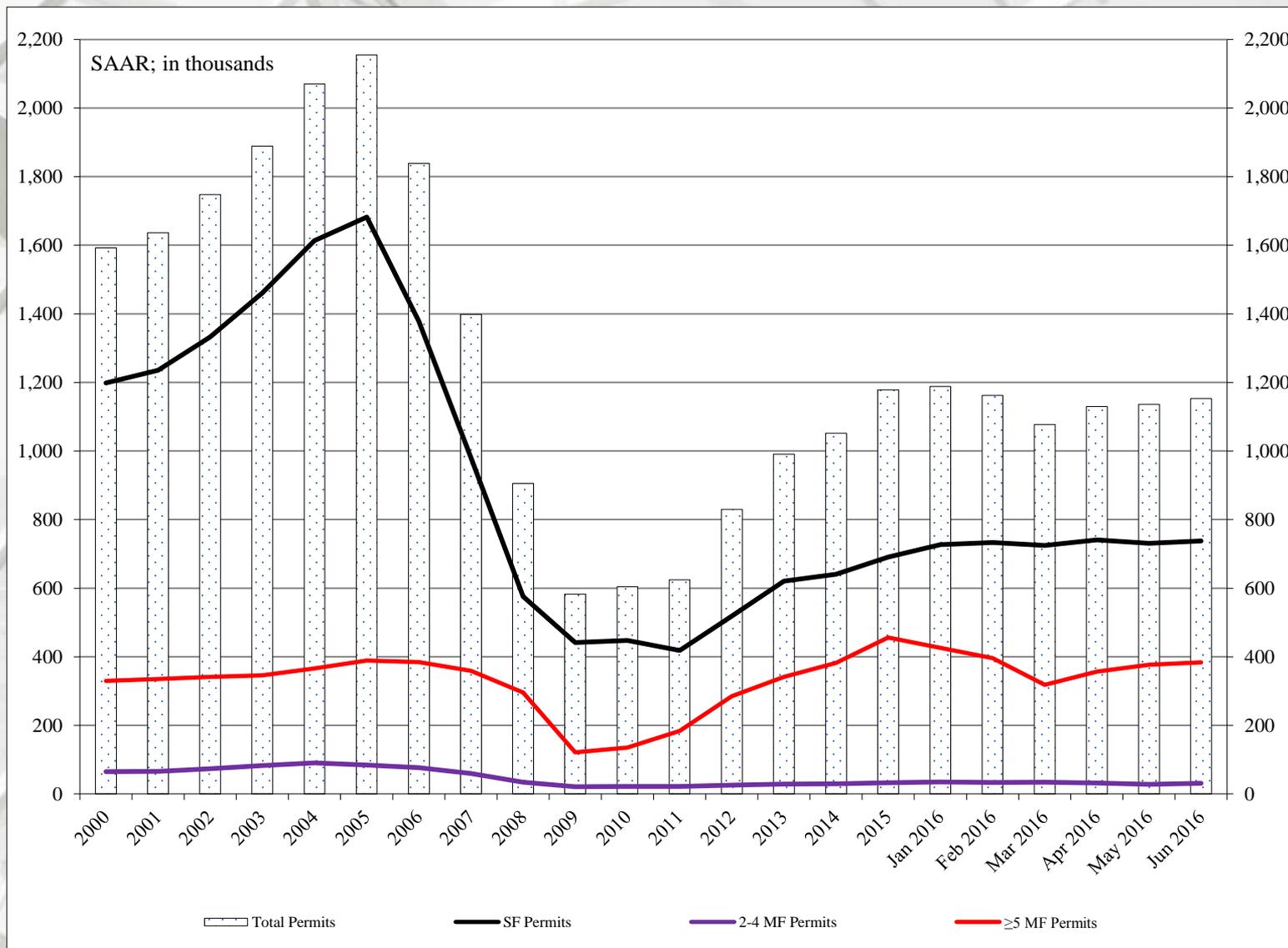
In this graph, January 2007 lumber shipments are contrasted with June 2007 starts, and continuing through June 2016 starts. The purpose is to discover if lumber shipments relate to future single-family starts. Also, it is realized that lumber and wood products are trucked; however, to our knowledge comprehensive trucking data is not available.

# New Housing Permits

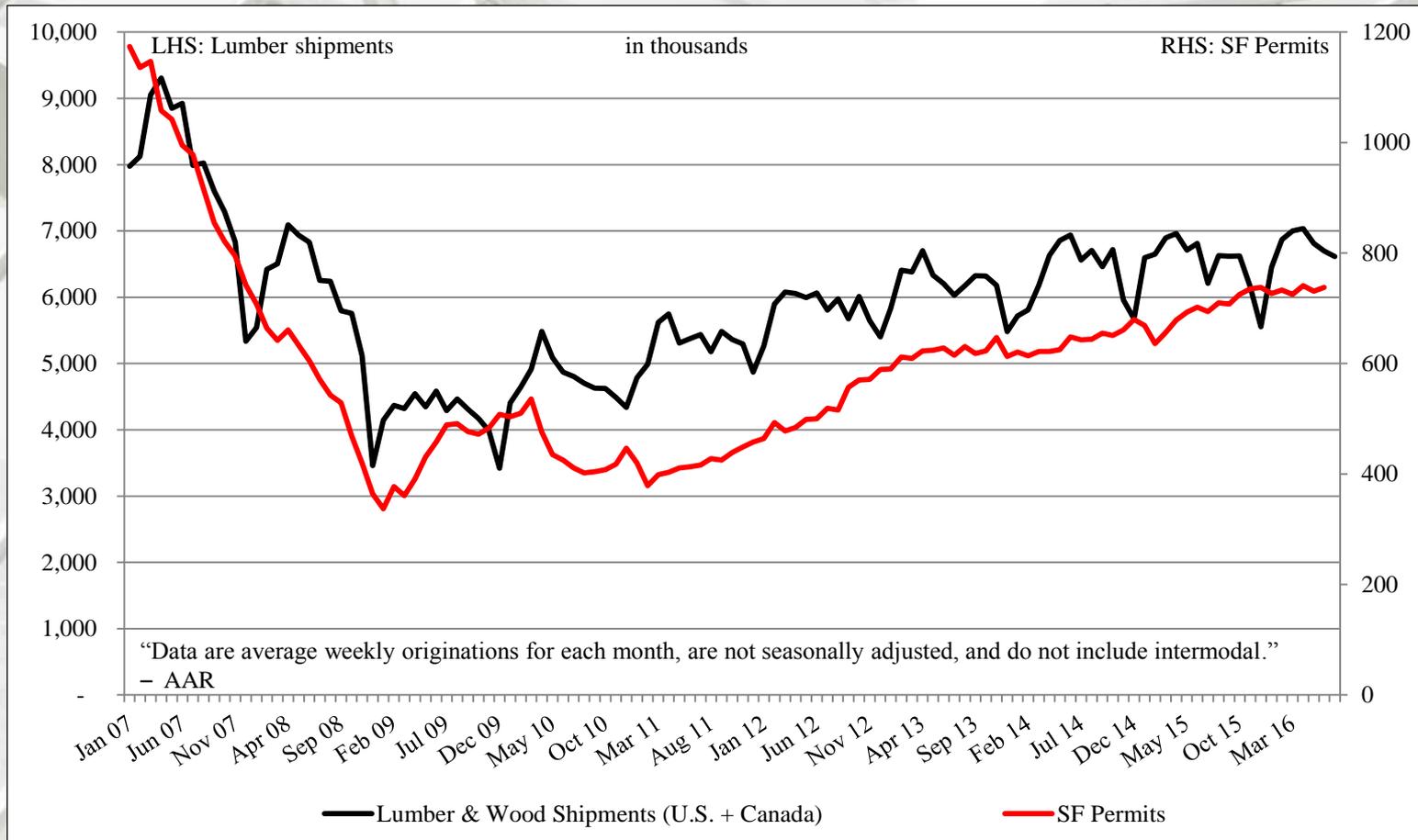
	Total Permits*	SF Permits	MF 2-4 unit Permits	MF ≥ 5 unit Permits
June	1,153,000	738,000	31,000	384,000
May	1,136,000	731,000	28,000	377,000
2015	1,334,000	702,000	34,000	598,000
M/M change	1.5%	1.0%	10.7%	1.9%
Y/Y change	-13.6%	5.1%	-8.8%	-35.8%

\* All permit data are presented at a seasonally adjusted annual rate (SAAR).

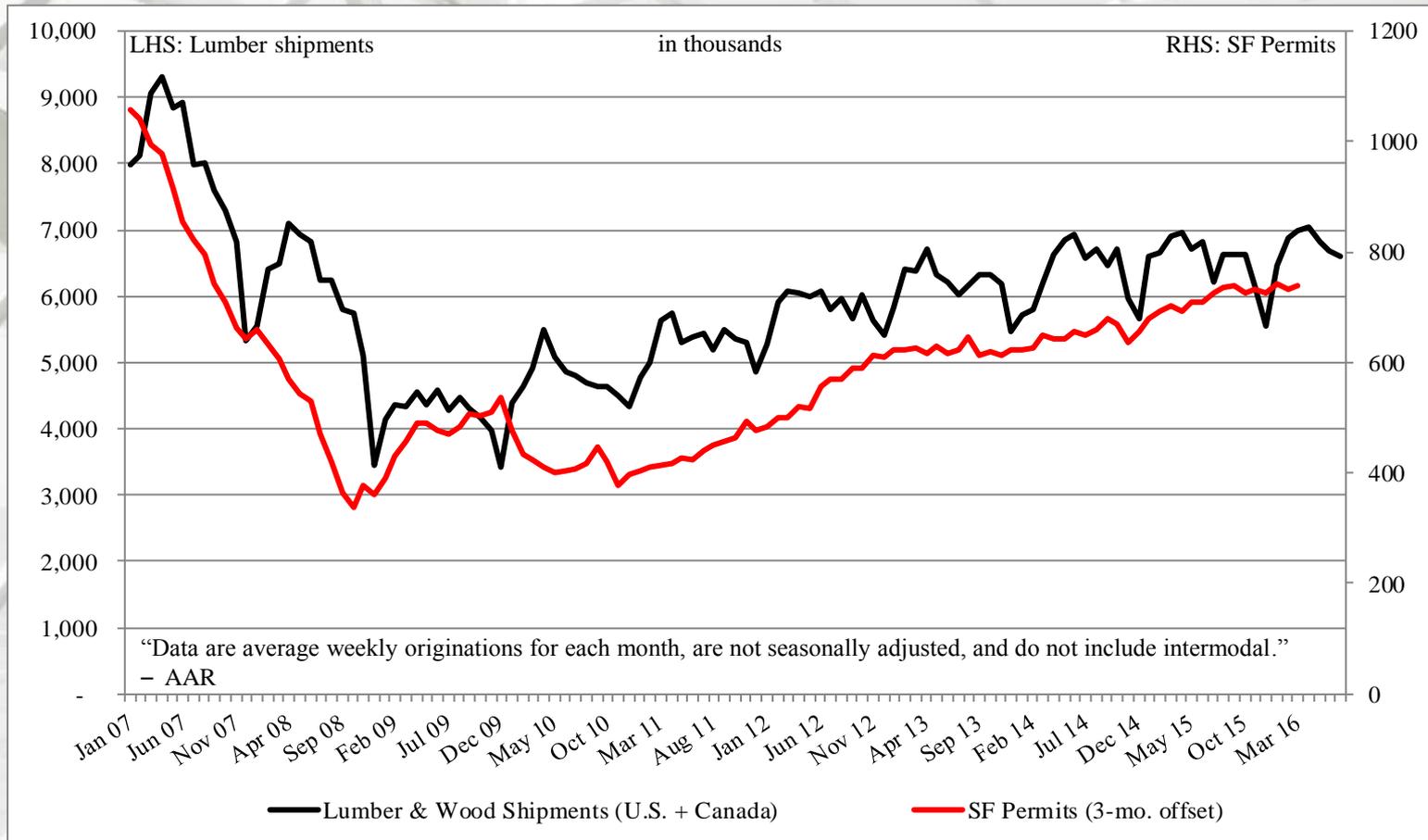
# Total New Housing Permits



# Railroad Lumber & Wood Shipments vs. U.S. SF Housing Permits



# Railroad Lumber & Wood Shipments vs. U.S. SF Housing Permits: 3-month Offset



In this graph, January 2007 lumber shipments are contrasted with March 2007 permits, and continuing through June 2016 permits. The purpose is to discover if lumber shipments relate to future single-family building permits. Also, it is realized that lumber and wood products are trucked; however, to our knowledge comprehensive trucking data is not available.

# New Housing Permits by Region

	<b>NE Total</b>	<b>NE SF</b>	<b>NE MF</b>
June	105,000	58,000	47,000
May	96,000	51,000	45,000
2015	278,000	53,000	234,000
M/M change	9.4%	13.7%	4.4%
Y/Y change	-62.2%	9.4%	-79.9%

	<b>MW Total</b>	<b>MW SF</b>	<b>MW MF</b>
June	172,000	112,000	60,000
May	177,000	112,000	65,000
2015	174,000	108,000	65,000
M/M change	-2.8%	0.0%	-7.7%
Y/Y change	-1.1%	3.7%	-7.7%

\* All data are SAAR.

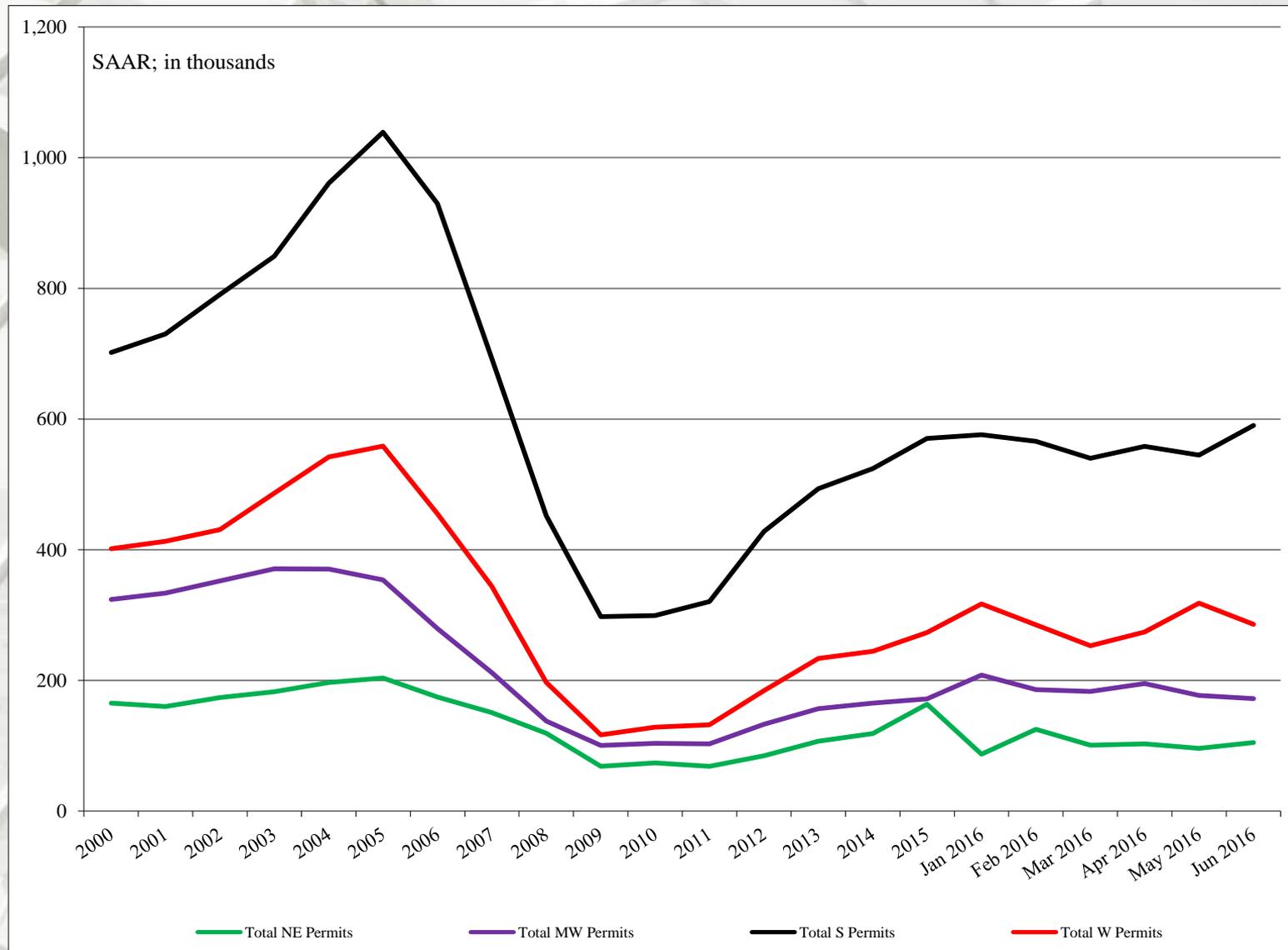
# New Housing Permits by Region

	<b>S Total</b>	<b>S SF</b>	<b>S MF</b>
June	590,000	398,000	192,000
May	545,000	399,000	146,000
2015	591,000	381,000	210,000
M/M change	8.3%	-0.3%	31.5%
Y/Y change	-0.2%	4.5%	-8.6%

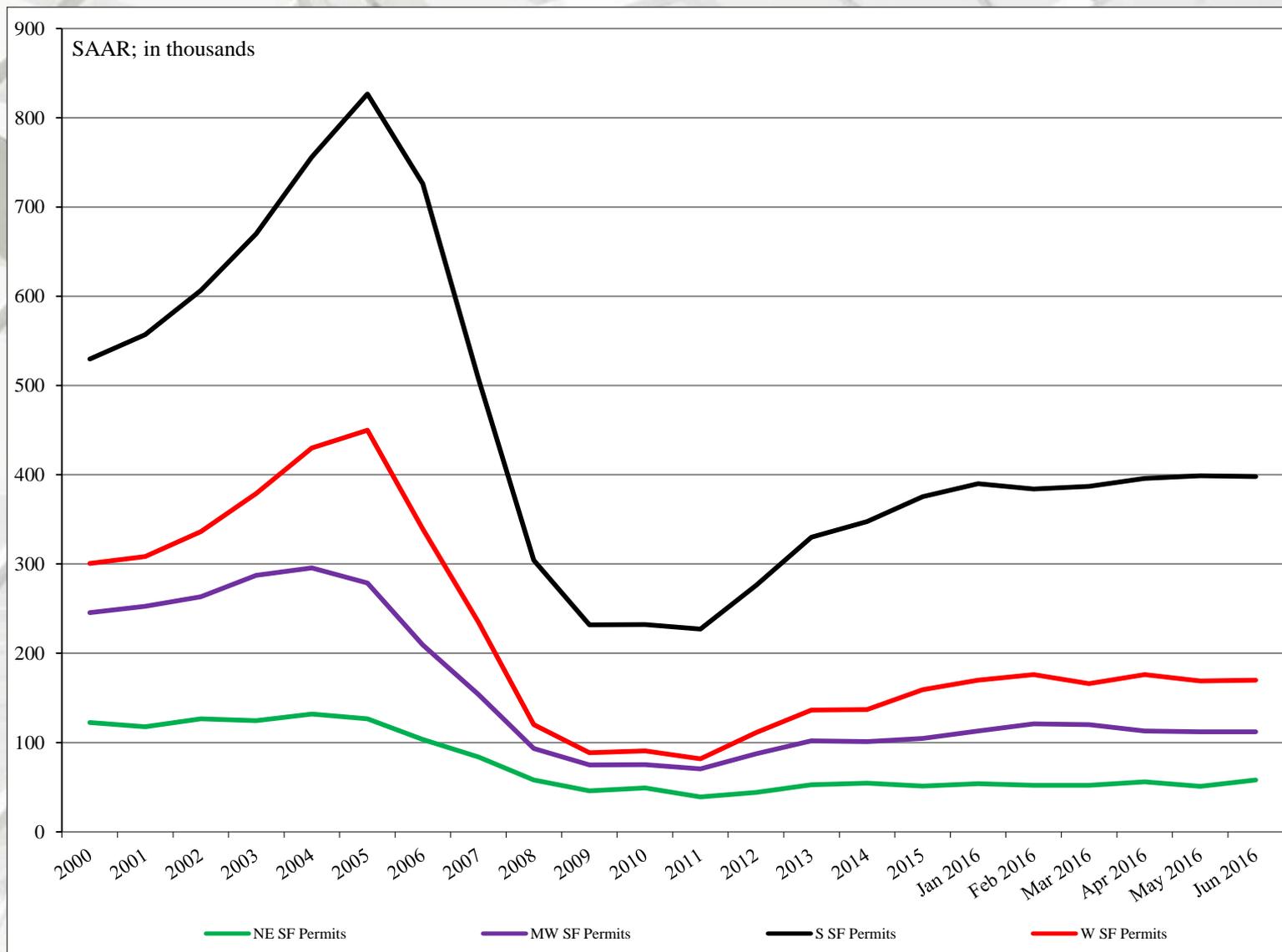
	<b>W Total</b>	<b>W SF</b>	<b>W MF</b>
June	286,000	170,000	116,000
May	318,000	169,000	149,000
2015	291,000	160,000	136,000
M/M change	-10.1%	0.6%	-22.1%
Y/Y change	-1.7%	6.3%	-14.7%

\* All data are SAAR.

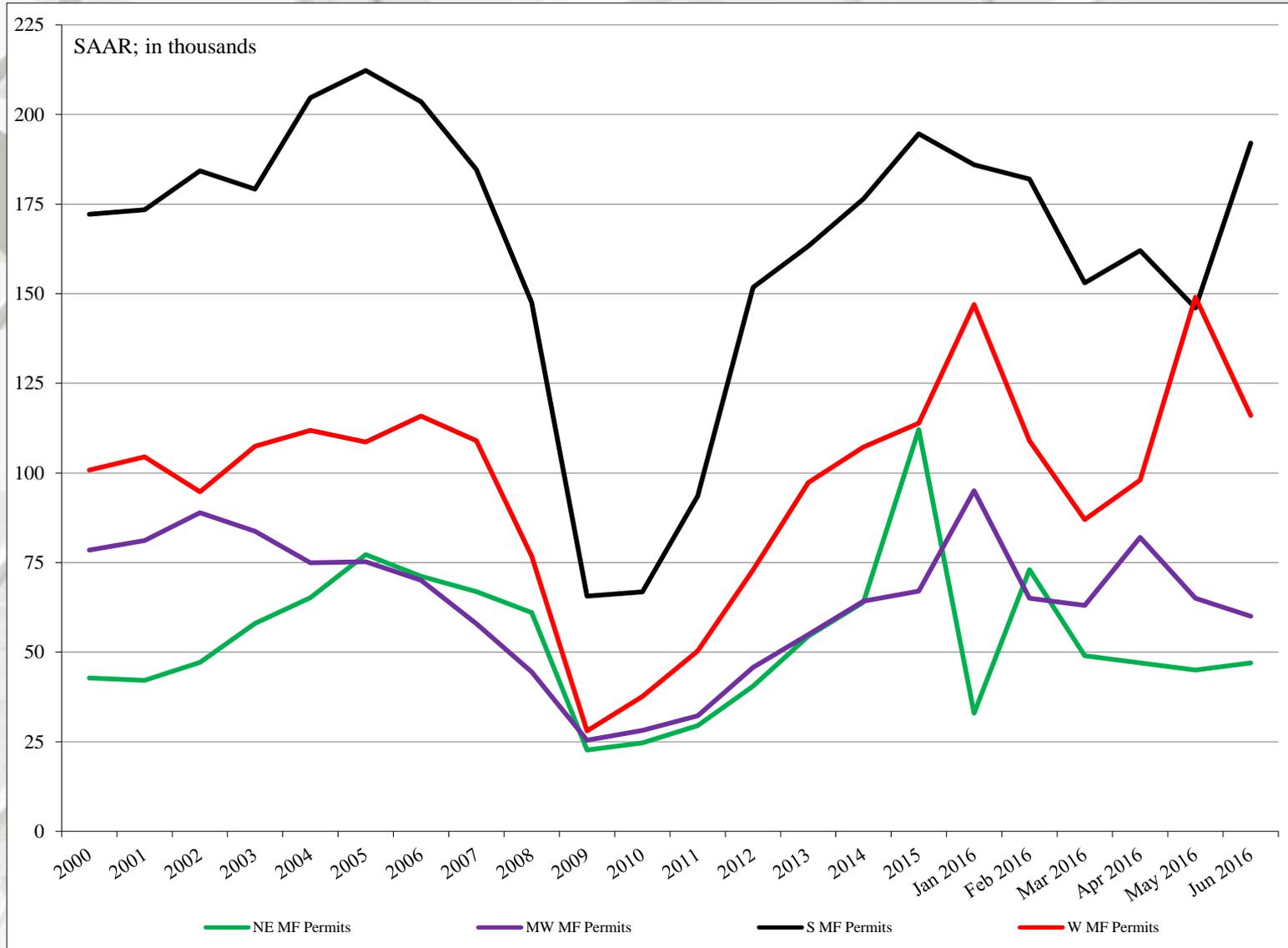
# Total Housing Permits by Region



# SF Housing Permits by Region



# MF Housing Permits by Region



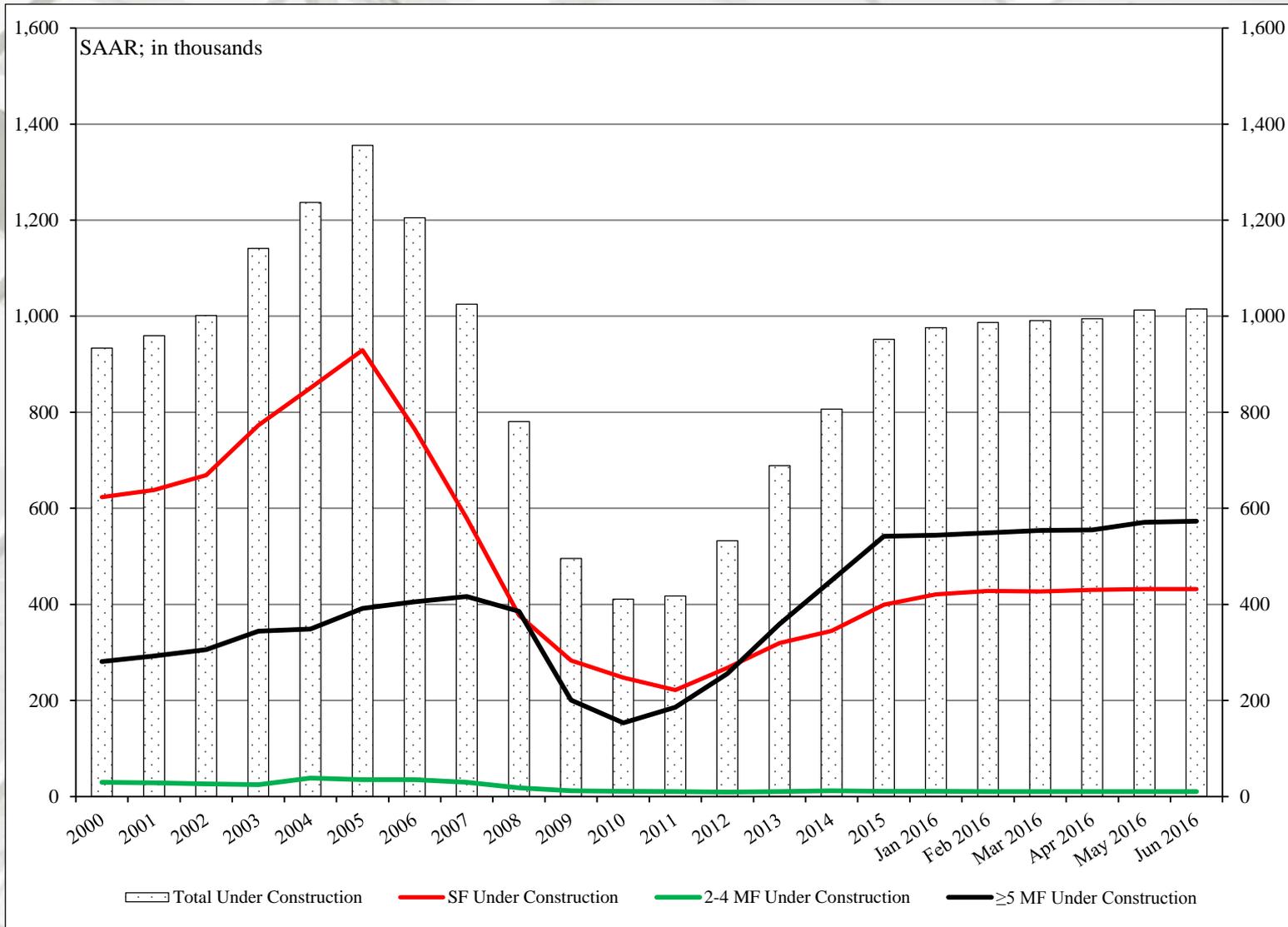
# New Housing Under Construction

	Total Under Construction*	SF Under Construction	MF 2-4 unit** Under Construction	MF ≥ 5 unit Under Construction
June	1,015,000	432,000	10,000	573,000
May	1,013,000	432,000	10,000	571,000
2015	891,000	375,000	12,000	504,000
M/M change	0.2%	0.0%	0.0%	0.4%
Y/Y change	13.9%	15.2%	-16.7%	13.7%

All housing under construction data are presented at a seasonally adjusted annual rate (SAAR).

\*\* US DOC does not report 2-4 multifamily units under construction directly, this is an estimation ((Total under construction – (SF + 5 unit MF)).

# Total Housing Under Construction



# New Housing Under Construction by Region

	<b>NE Total</b>	<b>NE SF</b>	<b>NE MF**</b>
June	187,000	50,000	137,000
May	189,000	50,000	139,000
2015	157,000	43,000	114,000
M/M change	-1.1%	0.0%	-1.4%
Y/Y change	19.1%	16.3%	20.2%

	<b>MW Total</b>	<b>MW SF</b>	<b>MW MF</b>
June	138,000	71,000	67,000
May	139,000	73,000	66,000
2015	128,000	63,000	65,000
M/M change	-0.7%	-2.7%	1.5%
Y/Y change	7.8%	12.7%	3.1%

All data are SAAR; NE = Northeast and MW = Midwest.

\*\* US DOC does not report multifamily units under construction directly, this is an estimation  
(Total under construction – SF under construction).

# New Housing Under Construction by Region

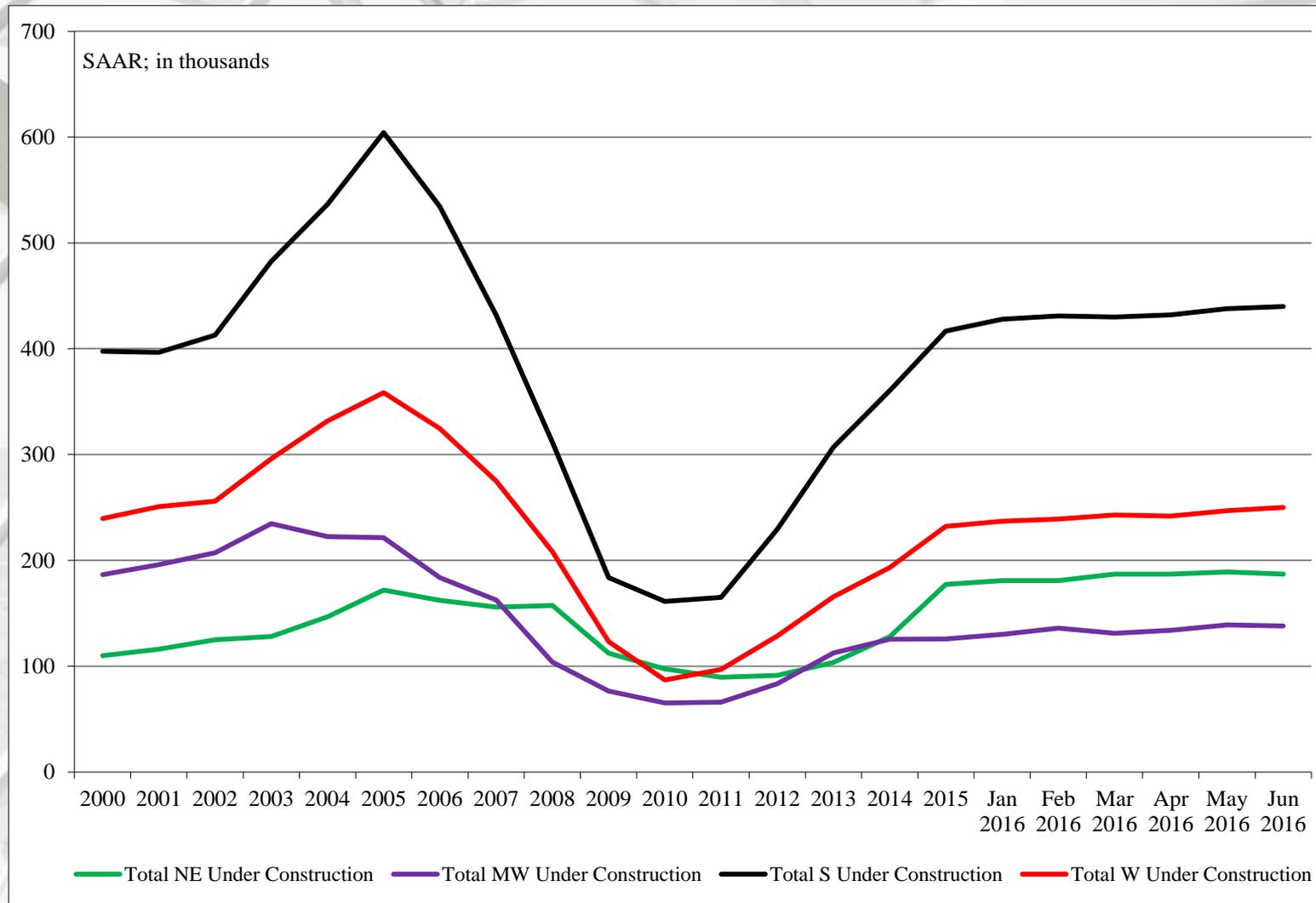
	<b>S Total</b>	<b>S SF</b>	<b>S MF**</b>
June	440,000	215,000	225,000
May	438,000	213,000	225,000
2015	382,000	183,000	199,000
M/M change	0.5%	0.9%	0.0%
Y/Y change	15.2%	17.5%	13.1%

	<b>W Total</b>	<b>W SF</b>	<b>W MF</b>
June	250,000	96,000	154,000
May	247,000	96,000	151,000
2015	224,000	86,000	138,000
M/M change	1.2%	0.0%	2.0%
Y/Y change	11.6%	11.6%	11.6%

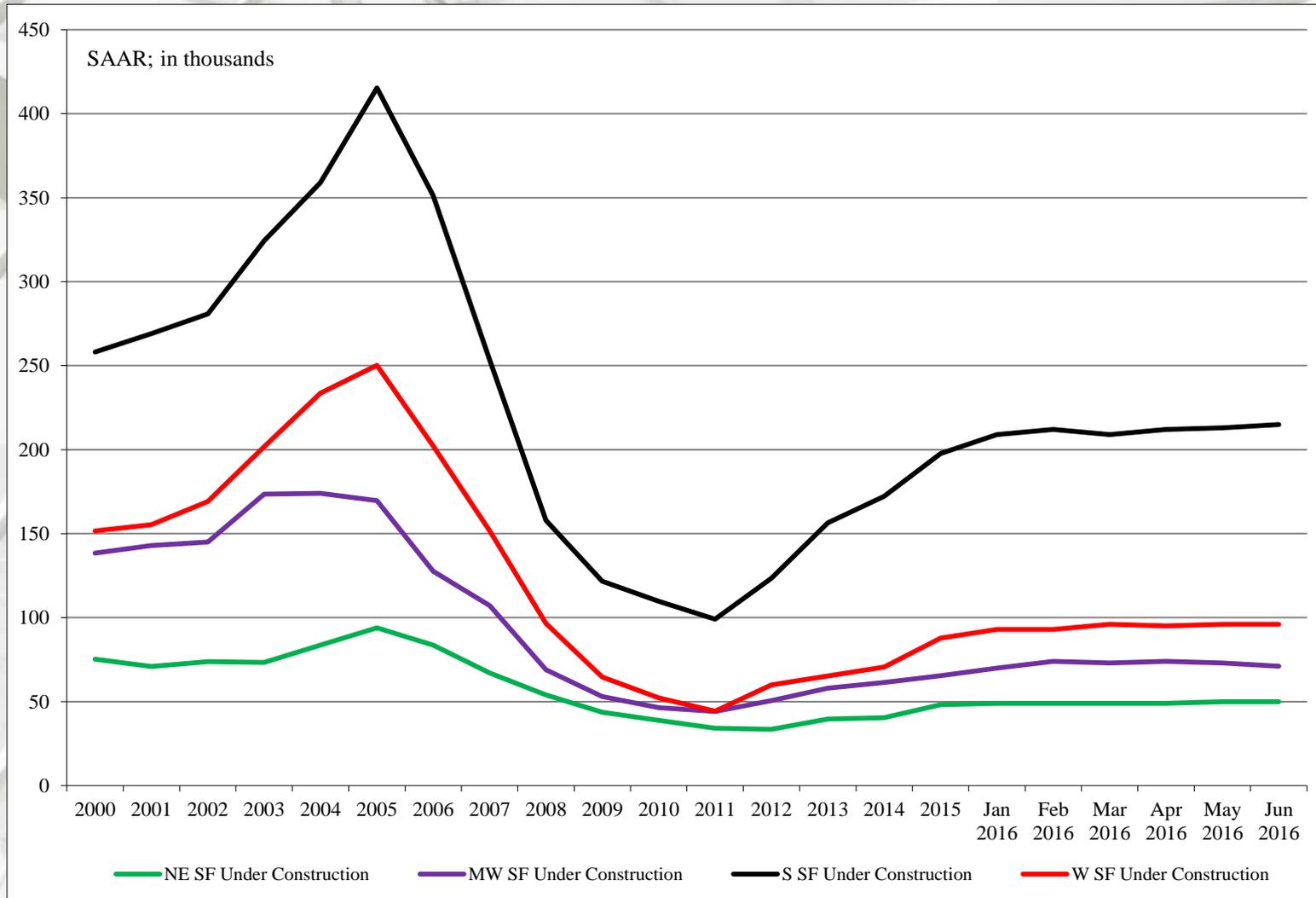
All data are SAAR; S = South and W = West.

\*\* US DOC does not report multifamily units under construction directly, this is an estimation  
(Total under construction – SF under construction).

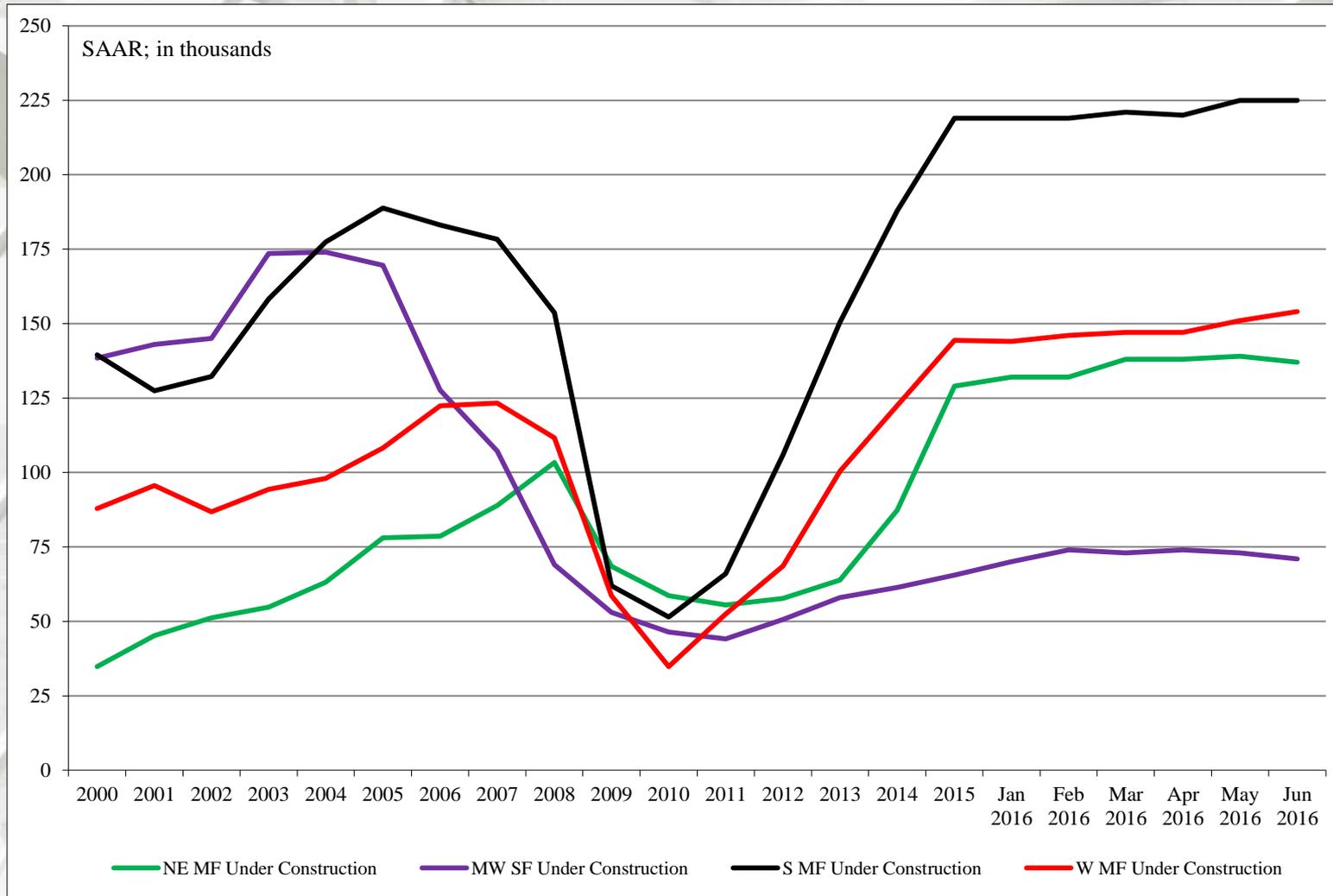
# Total Housing Under Construction by Region



# SF Housing Under Construction by Region



# MF Housing Under Construction by Region



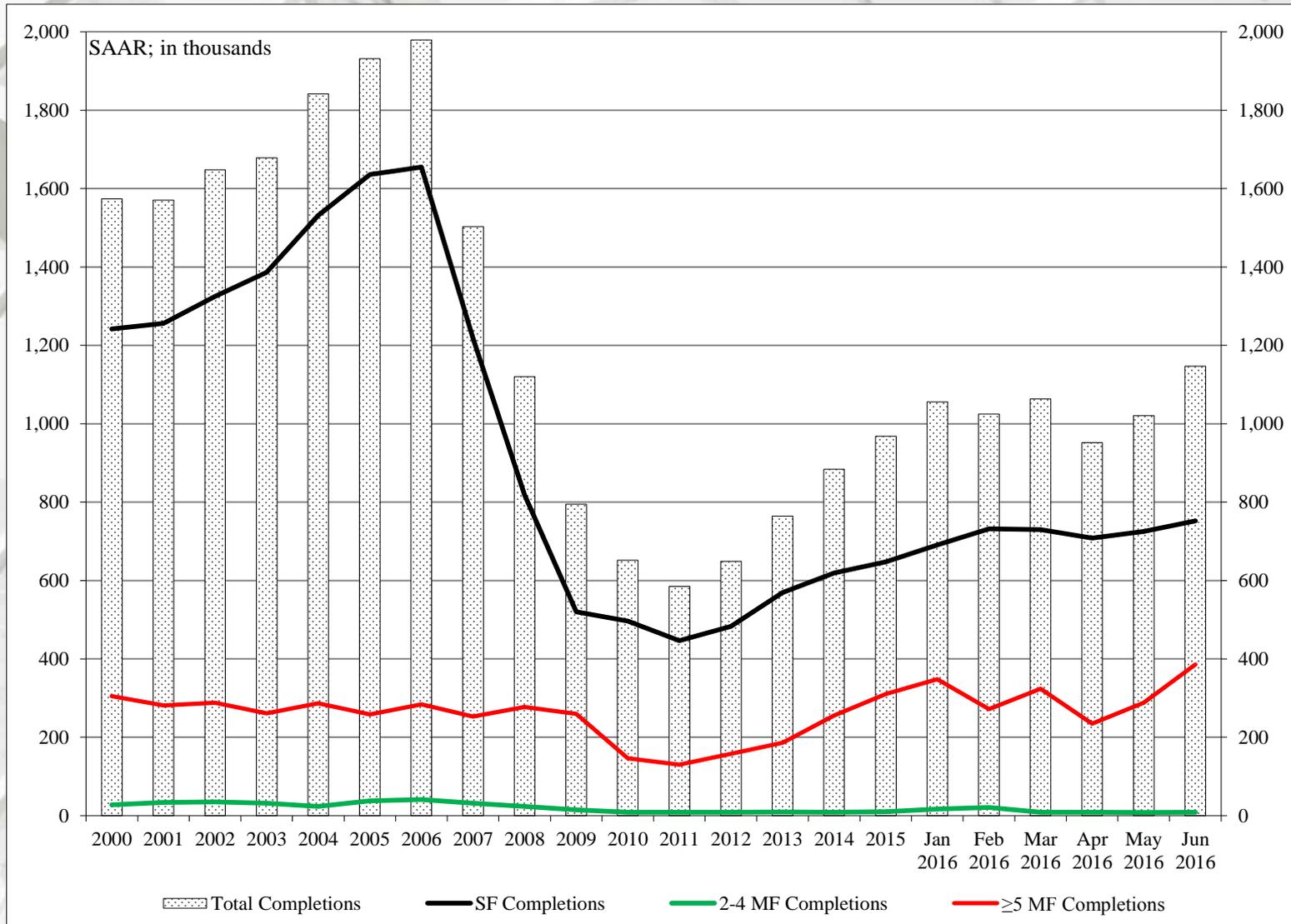
# New Housing Completions

	Total Completions*	SF Completions	MF 2-4 unit**	MF ≥ 5 unit Completions
June	1,147,000	752,000	9,000	386,000
May	1,021,000	725,000	8,000	288,000
2015	966,000	638,000	9,000	319,000
M/M change	12.3%	3.7%	12.5%	34.0%
Y/Y change	18.7%	17.9%	0.0%	21.0%

All completion data are presented at a seasonally adjusted annual rate (SAAR).

\*\* US DOC does not report multifamily completions directly, this is an estimation ((Total completions – (SF + 5 unit MF)).

# Total Housing Completions



Source: <http://www.census.gov/construction/nrc/pdf/newresconst.pdf>; 7/19/16

# New Housing Completions by Region

	<b>NE Total</b>	<b>NE SF</b>	<b>NE MF**</b>
June	129,000	63,000	66,000
May	68,000	46,000	22,000
2015	69,000	40,000	29,000
M/M change	89.7%	37.0%	200.0%
Y/Y change	87.0%	57.5%	127.6%

	<b>MW Total</b>	<b>MW SF</b>	<b>MW MF</b>
June	194,000	143,000	51,000
May	177,000	126,000	51,000
2015	150,000	100,000	50,000
M/M change	9.6%	13.5%	0.0%
Y/Y change	29.3%	43.0%	2.0%

All data are SAAR; NE = Northeast and MW = Midwest.

\*\* US DOC does not report multifamily completions directly, this is an estimation (Total completions – SF completions).

# New Housing Completions by Region

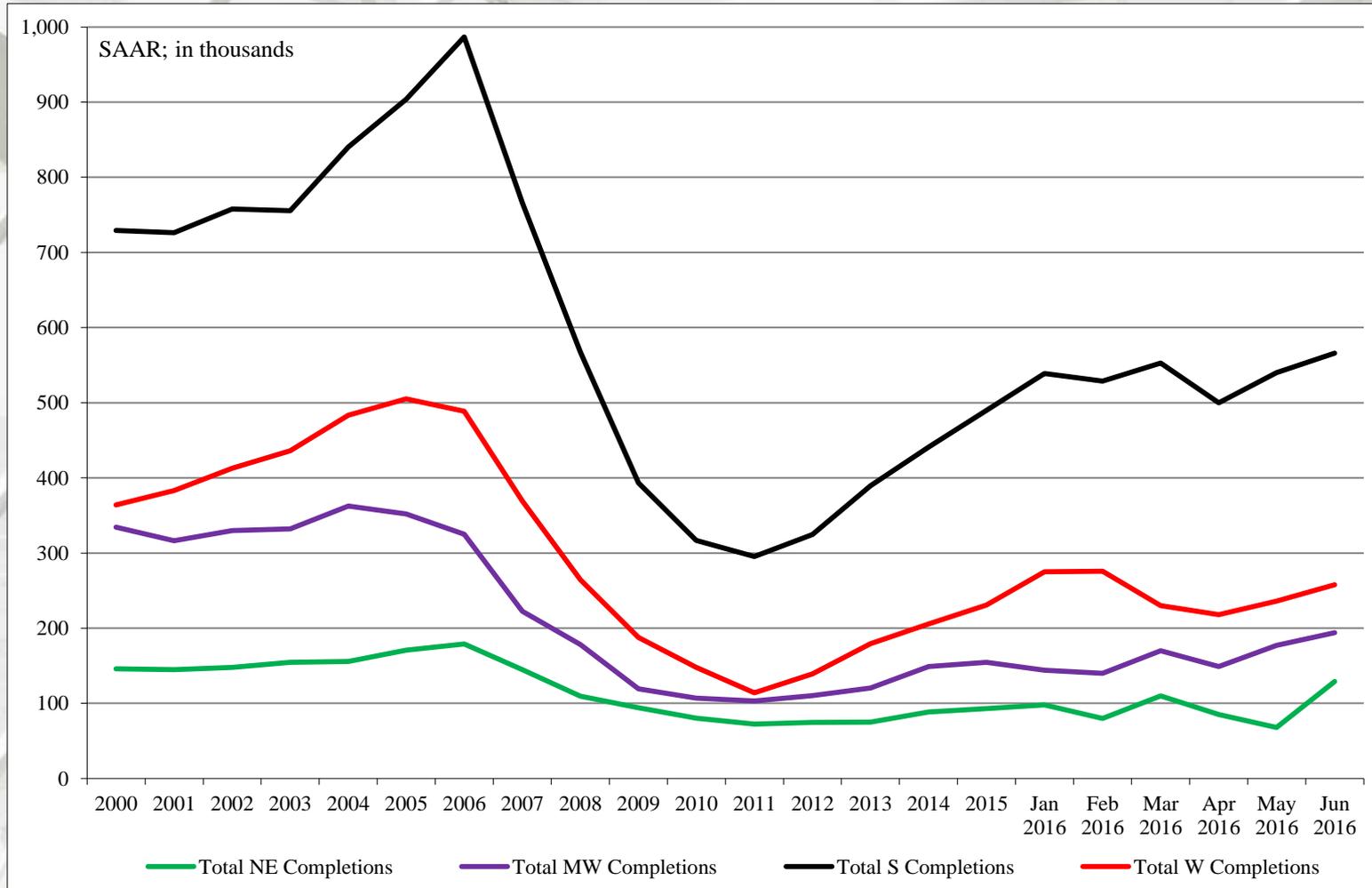
	<b>S Total</b>	<b>S SF</b>	<b>S MF**</b>
June	566,000	384,000	182,000
May	540,000	397,000	143,000
2015	530,000	340,000	190,000
M/M change	4.8%	-3.3%	27.3%
Y/Y change	6.8%	12.9%	-4.2%

	<b>W Total</b>	<b>W SF</b>	<b>W MF</b>
June	258,000	162,000	96,000
May	236,000	156,000	80,000
2015	217,000	158,000	59,000
M/M change	9.3%	3.8%	20.0%
Y/Y change	18.9%	2.5%	62.7%

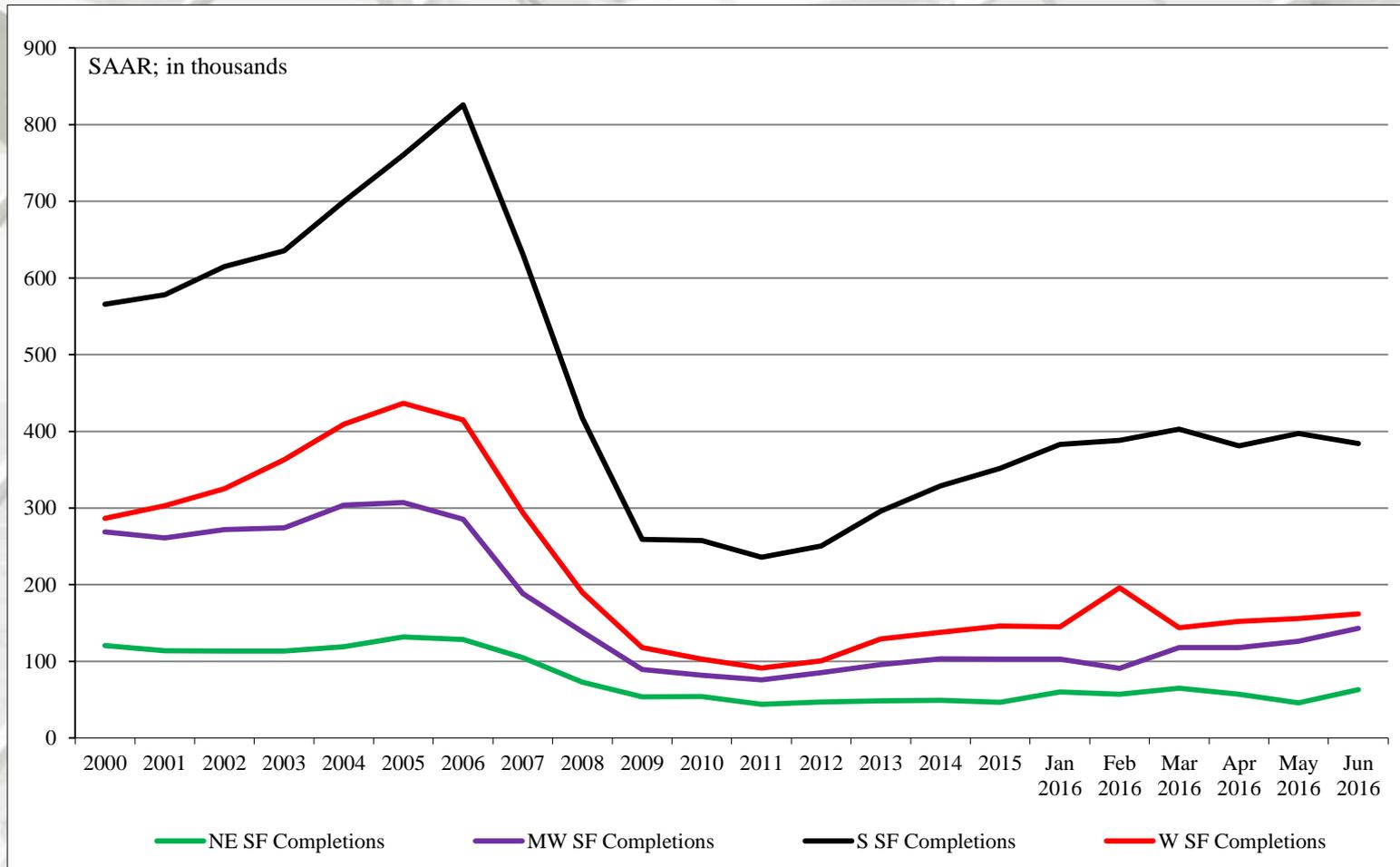
All data are SAAR; S = South and W = West.

\*\* US DOC does not report multi-family completions directly, this is an estimation (Total completions – SF completions).

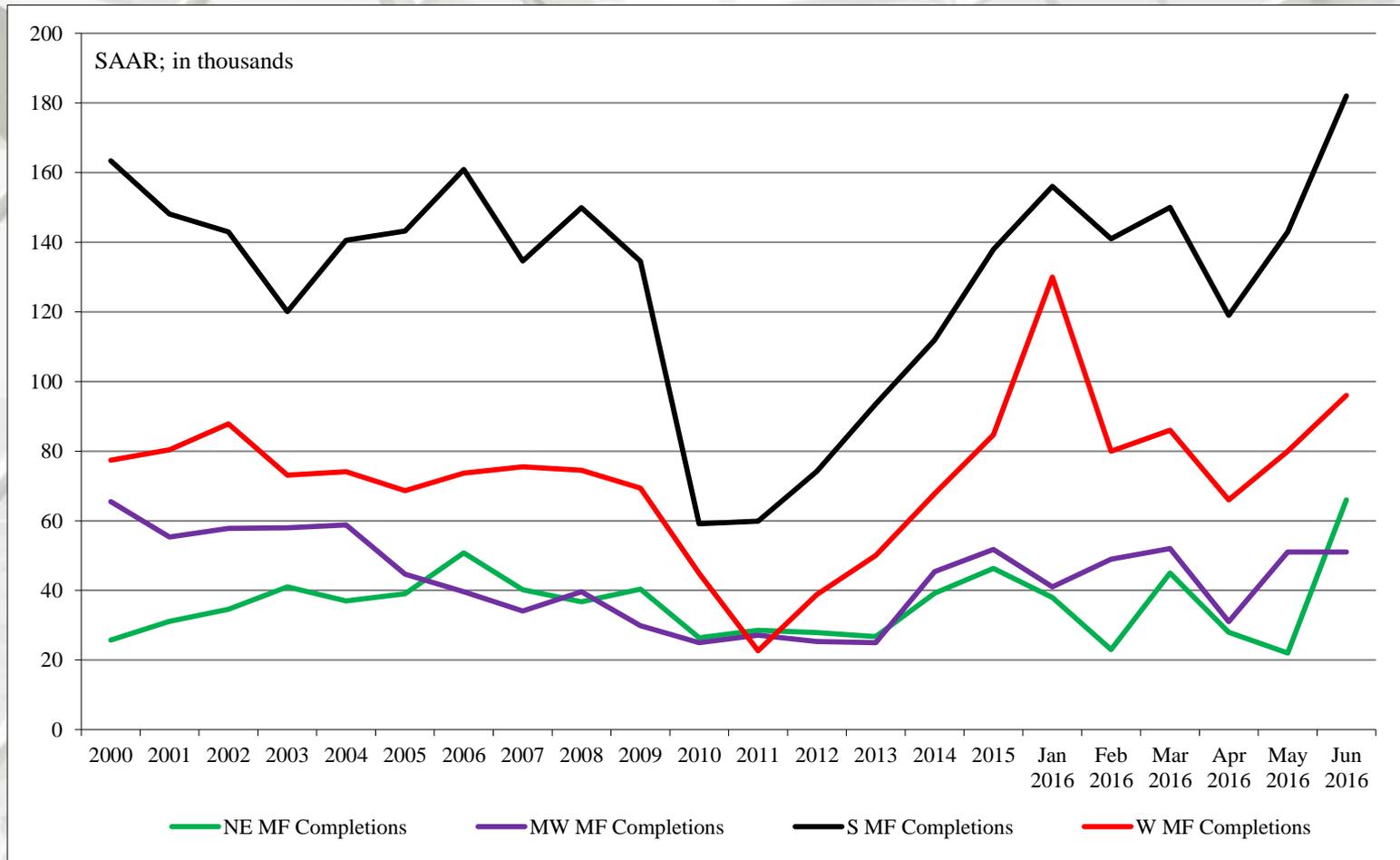
# Total Housing Completions by Region



# SF Housing Completions by Region



# MF Housing Completions by Region

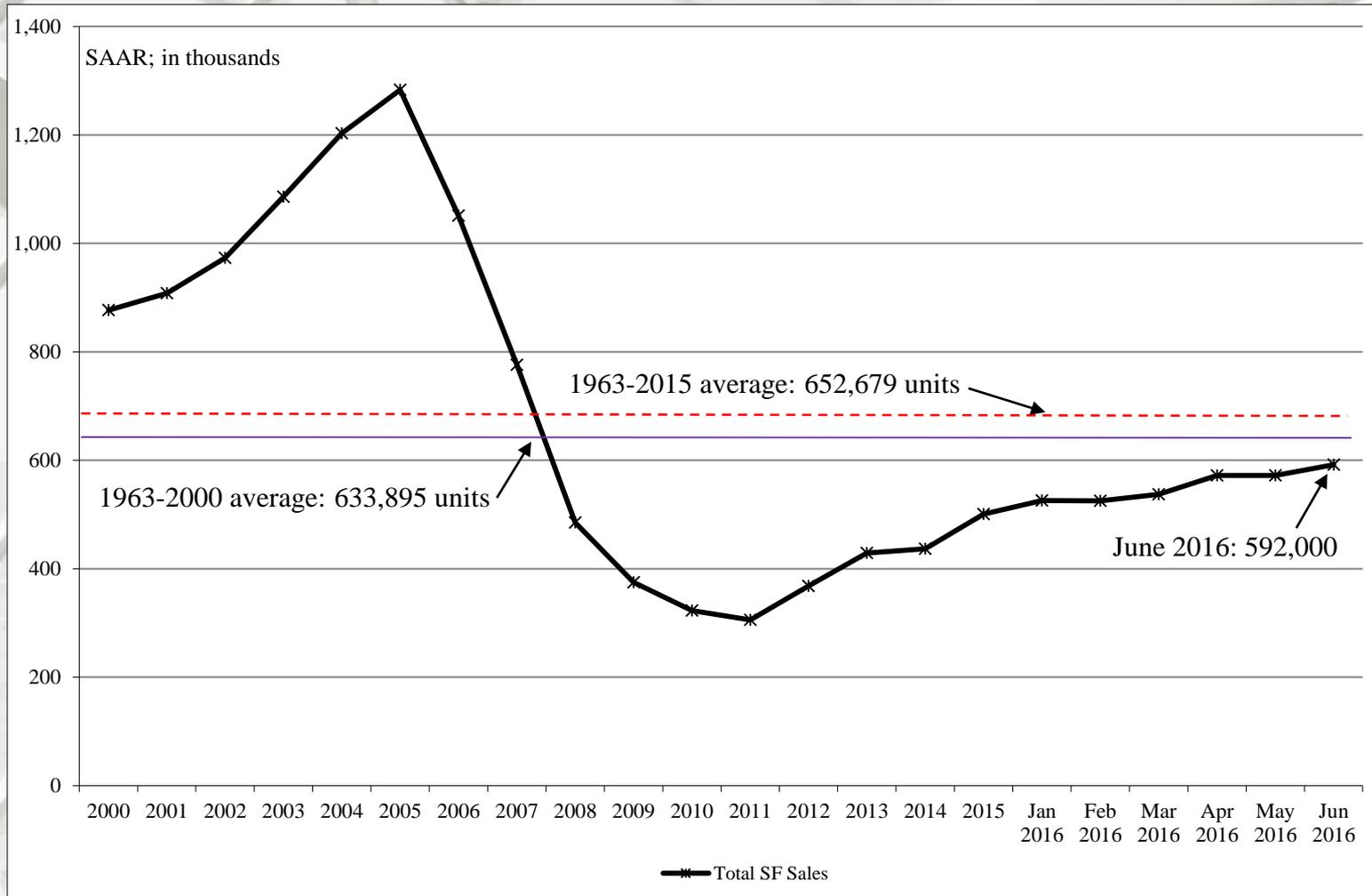


# New Single-Family House Sales

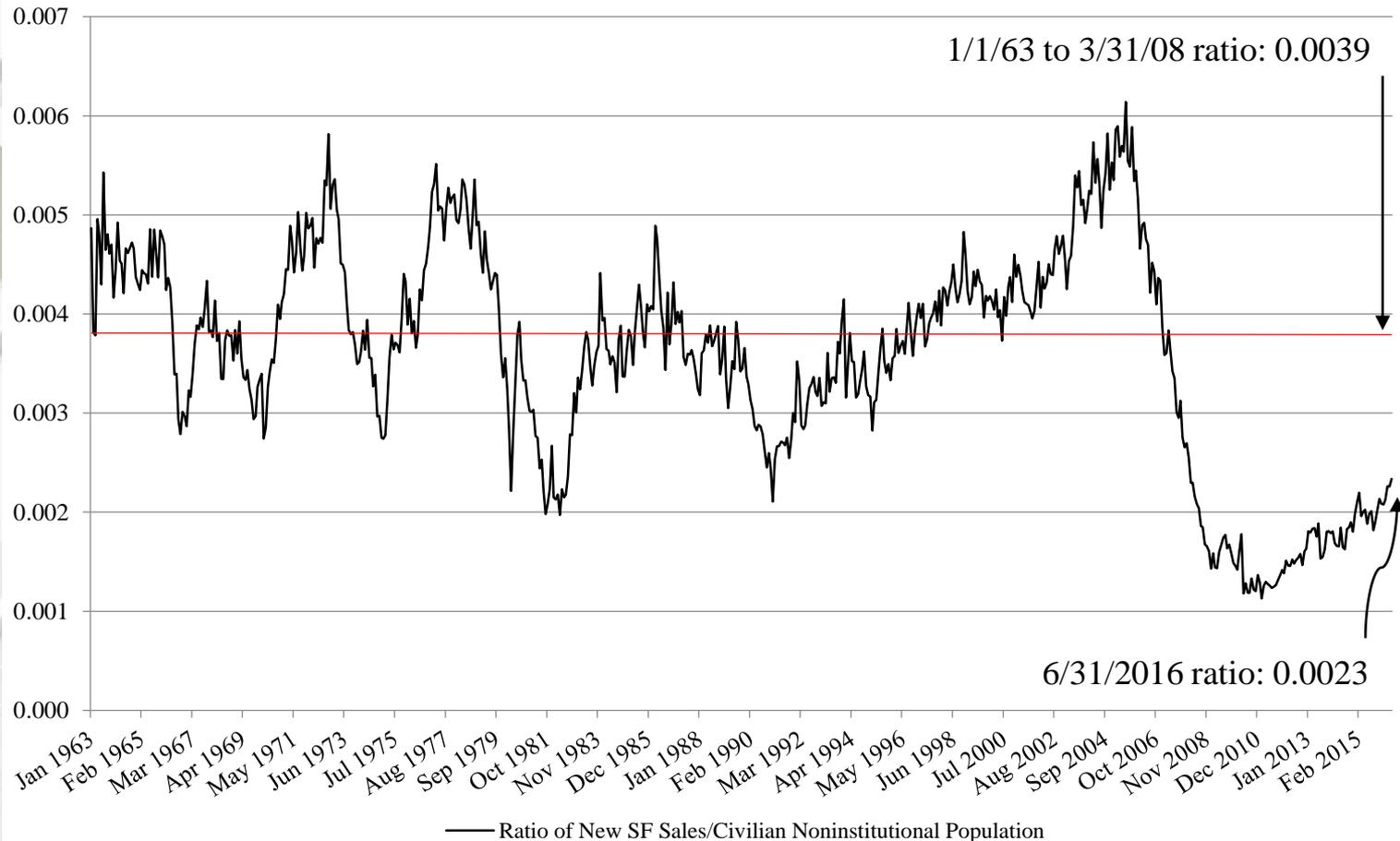
	<b>New SF Sales*</b>	<b>Median Price</b>	<b>Mean Price</b>	<b>Month's Supply</b>
June	592,000	\$306,700	\$358,200	4.9
May	572,000	\$288,800	\$351,400	5.1
2015	472,000	\$289,200	\$329,300	5.5
M/M change	3.5%	6.2%	1.9%	-3.9%
Y/Y change	25.4%	6.1%	8.8%	-10.9%

\* All sale data are presented at a seasonally adjusted annual rate (SAAR).

# New SF House Sales



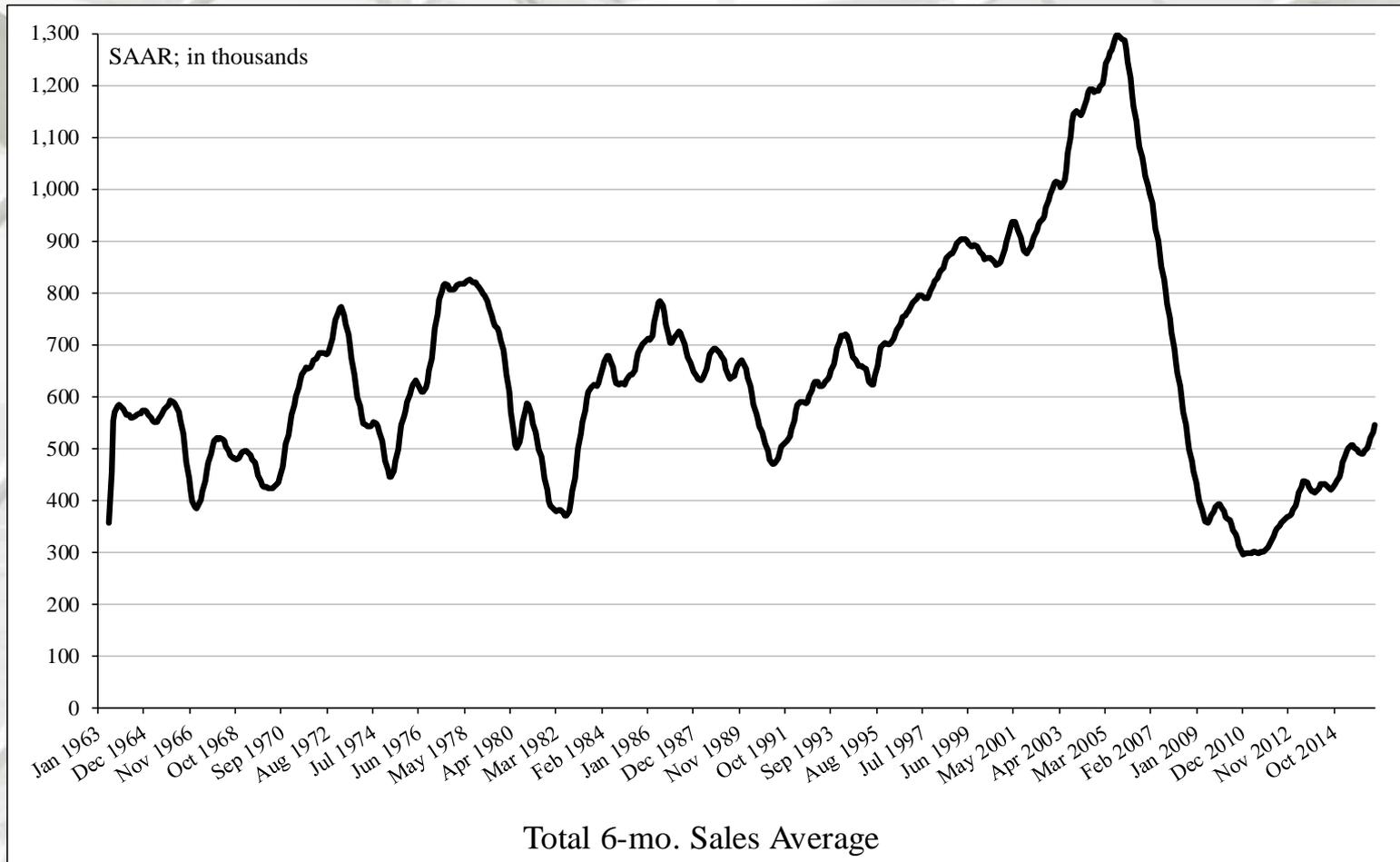
# New SF House Sales



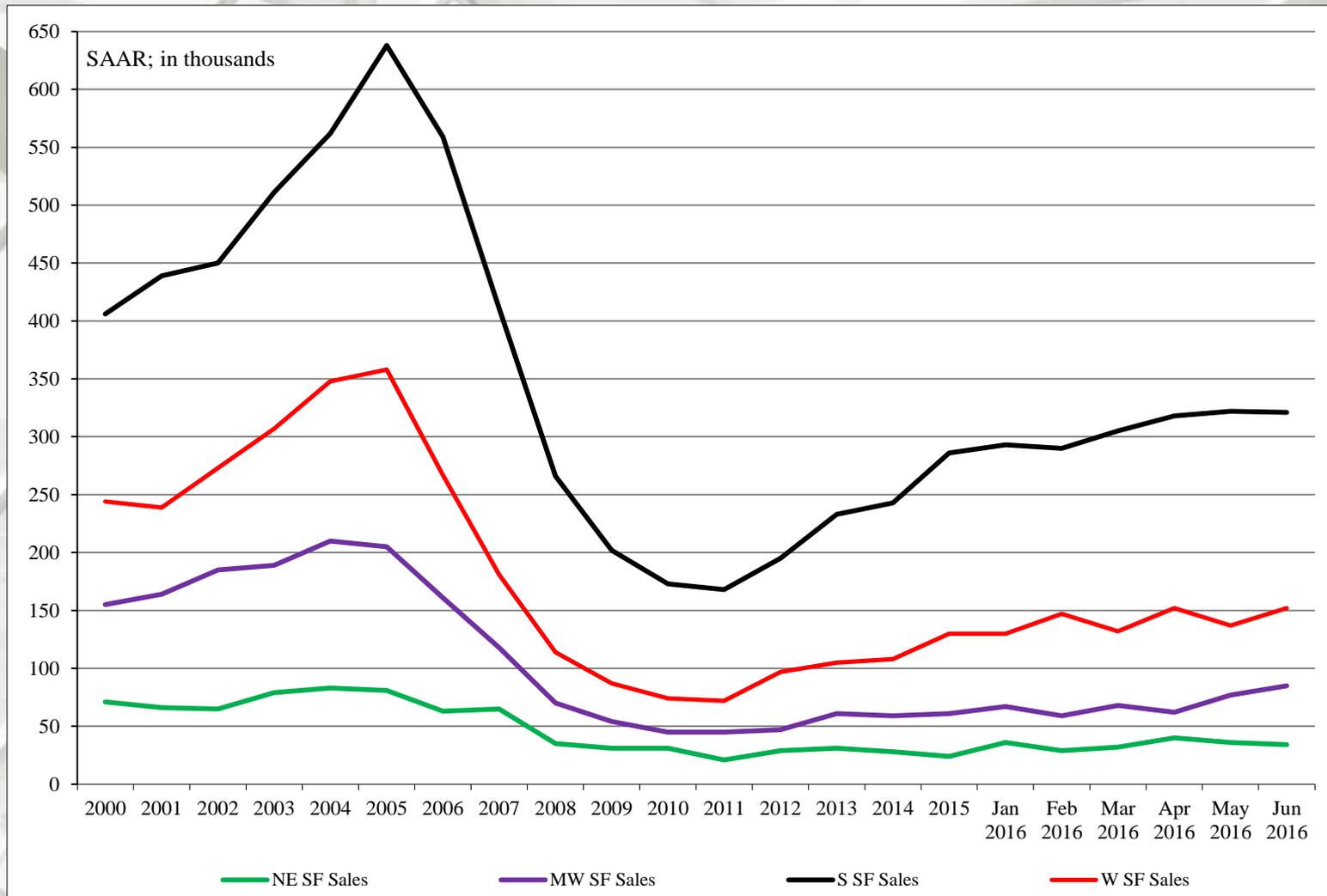
## New SF sales adjusted for the US population

From January 1963 to December 2007, the long-term ratio of new house sales to the US population was 0.0039 – in June it was 0.0023 – no change from May. From a population viewpoint, construction is less than what is necessary for changes in population (i.e., under-building).

# New SF House Sales: Six-month Rolling Average



# New SF House Sales by Region



# New SF House Sales by Region and Price Category

	NE SF Sales	MW SF Sales	S SF Sales	W SF Sales
June	34,000	85,000	321,000	152,000
May	36,000	77,000	322,000	137,000
2015	26,000	59,000	265,000	122,000
M/M change	-5.6%	10.4%	-0.3%	10.9%
Y/Y change	30.8%	44.1%	21.1%	24.6%

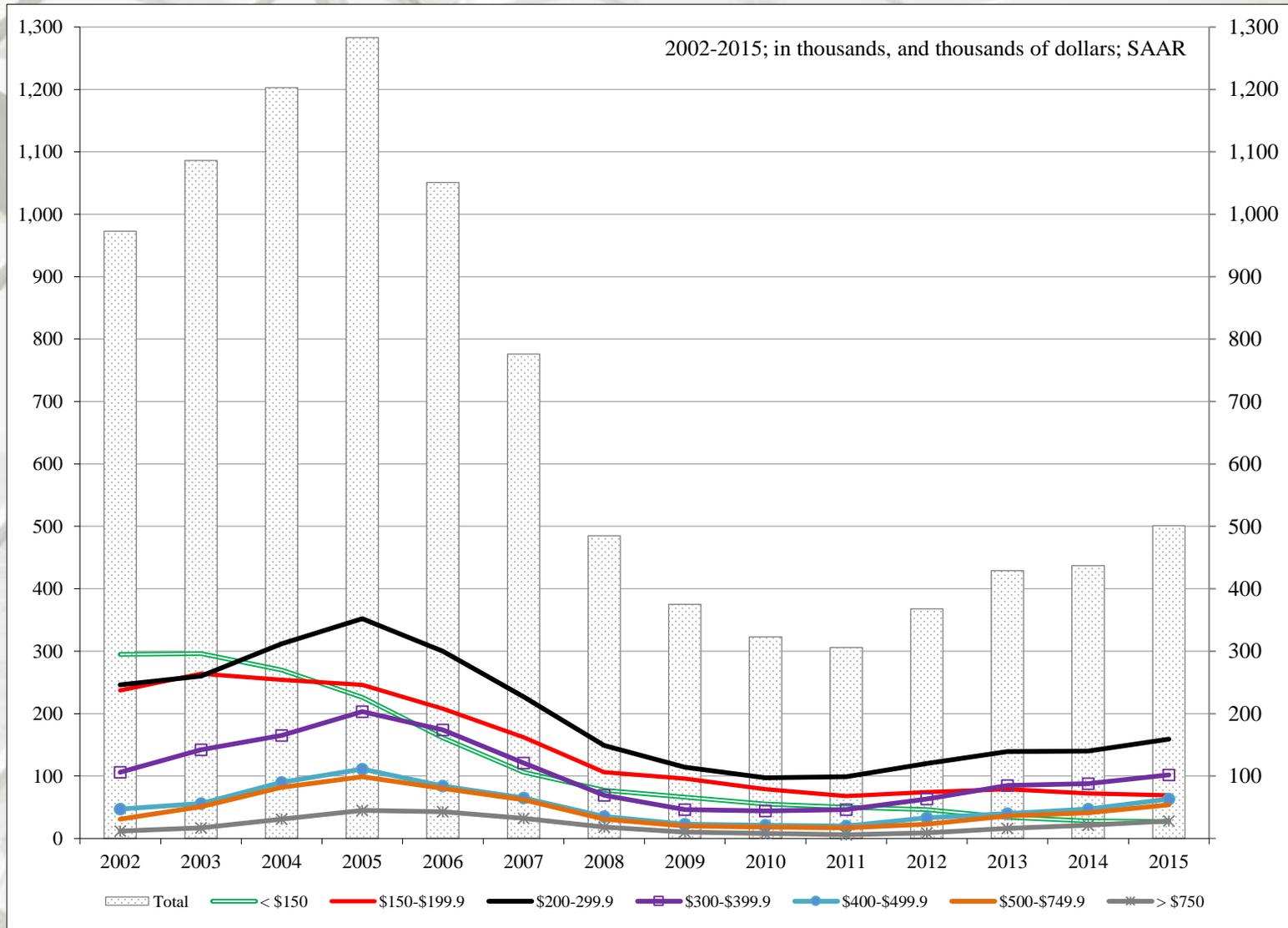
	< \$150m	\$150 - \$199.9m	\$200 - \$299.9m	\$300 - \$399.9m	\$400 - \$499.9m	\$500 - \$749.9m	> \$750m
June <sup>1,2</sup>	1,000	7,000	18,000	11,000	10,000	6,000	2,000
May	2,000	8,000	18,000	12,000	5,000	6,000	2,000
2015	1,000	6,000	16,000	10,000	6,000	4,000	1,000
M/M change	-50.0%	-12.5%	0.0%	-8.3%	100.0%	0.0%	0.0%
Y/Y change	100.0%	33.3%	12.5%	20.0%	-16.7%	50.0%	100.0%

All data are SAAR.

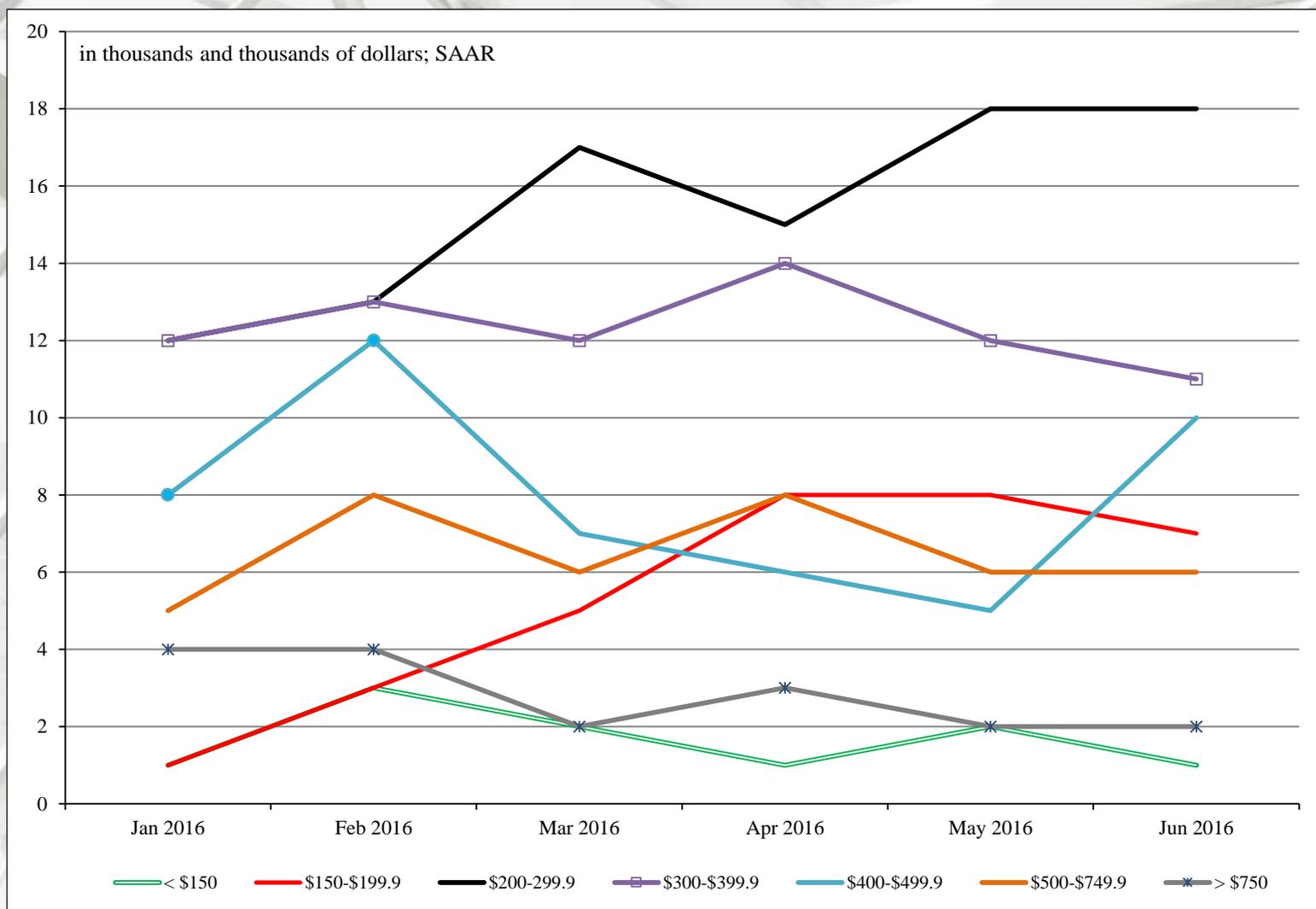
<sup>1</sup> Houses for which sales price were not reported have been distributed proportionally to those for which sales price was reported;

<sup>2</sup> Detail may not add to total because of rounding.

# New SF House Sales by Price Category

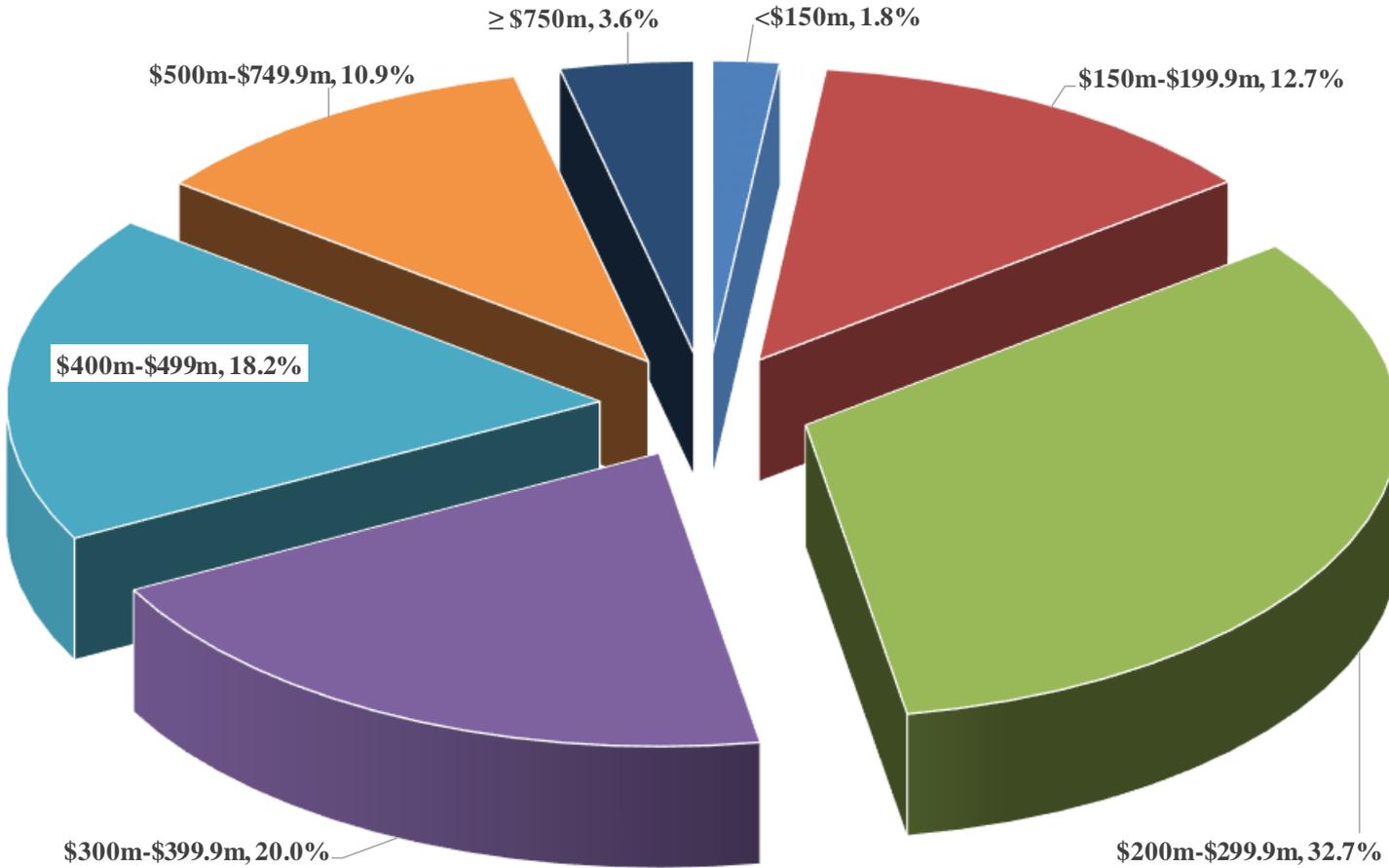


# New SF House Sales by Price Category

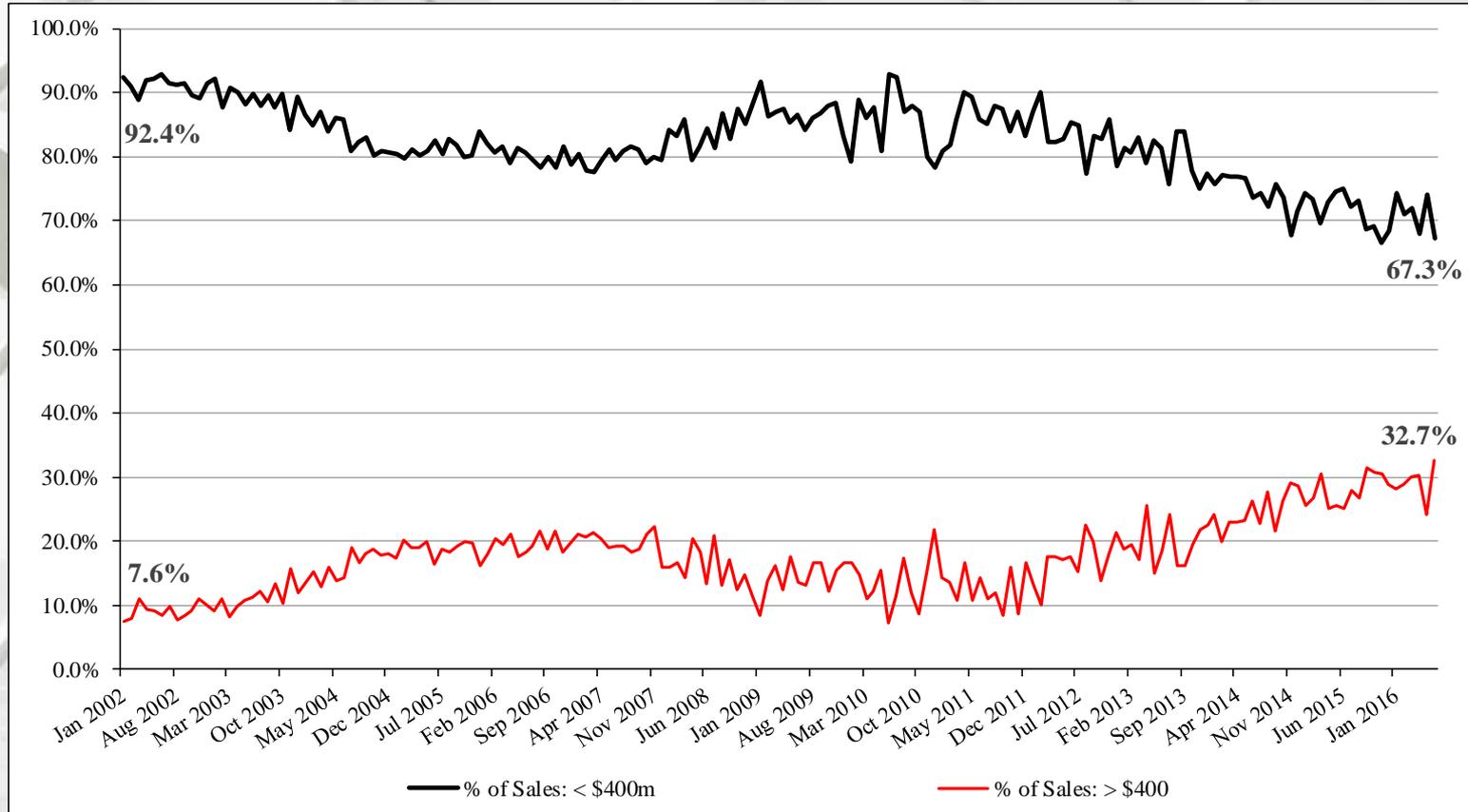


# New SF House Sales

June SF Sales



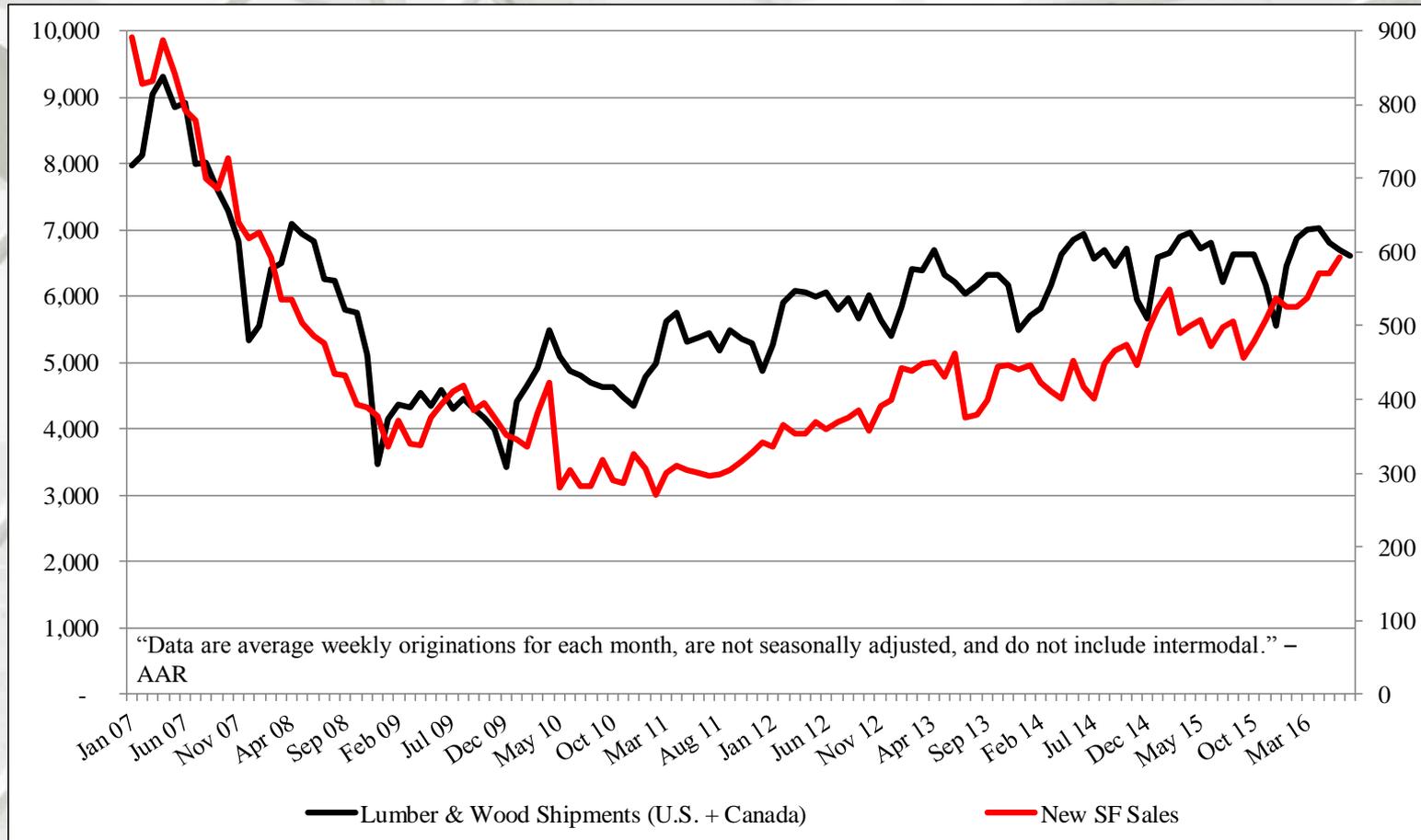
# New SF House Sales



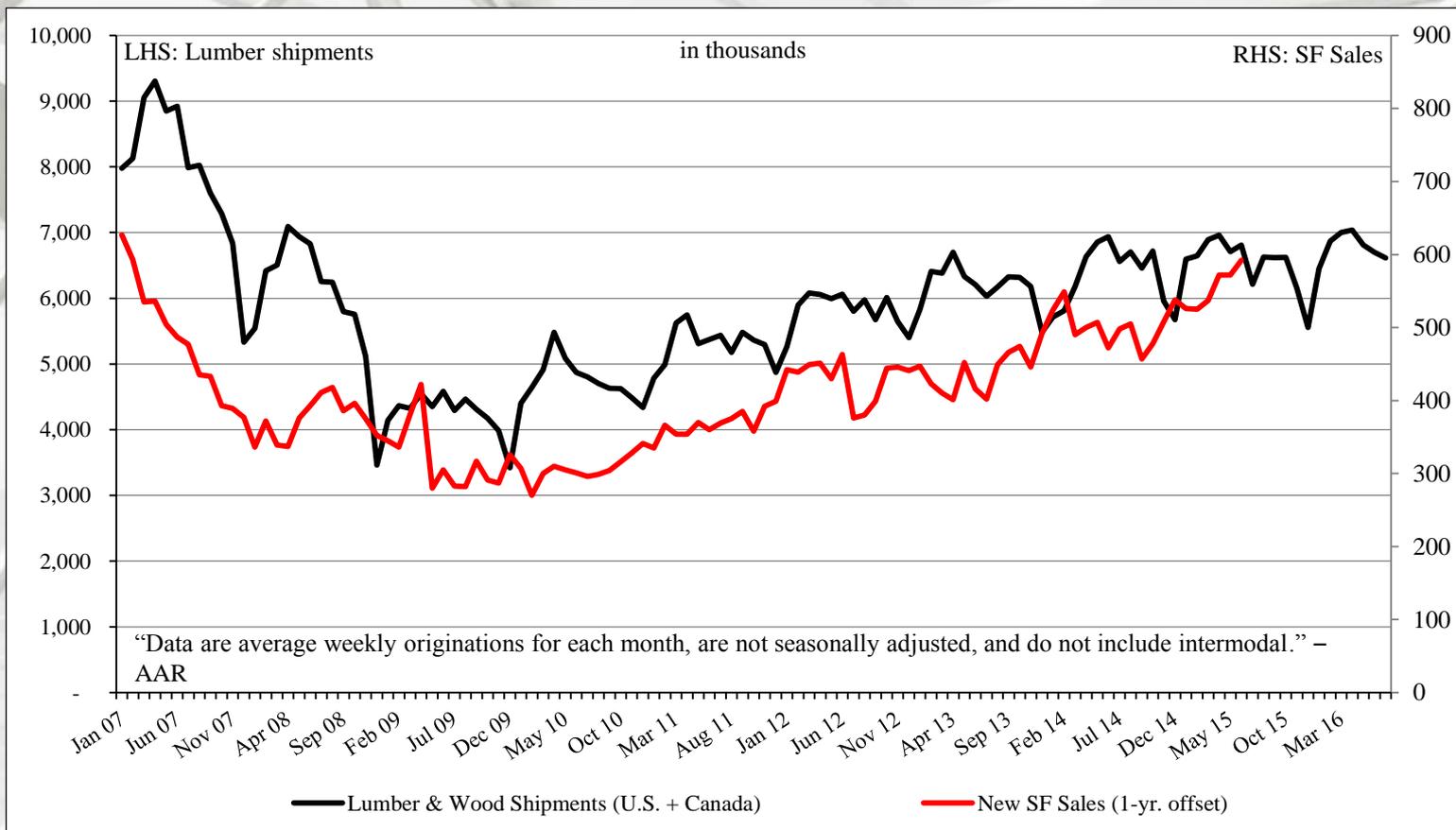
## New SF Sales by Percent: 2002 – June 2016

The increasing sales share of \$400 thousand plus SF houses is presented above. Since 2011, the upper priced houses have and are garnering a greater percentage of sales. Several reasons are offered by industry analysts; 1) builders can realize a profit on higher priced houses; 2) historically low interest rates have indirectly resulted in increasing house prices; and 3) purchasers of upper end houses fared better financially coming out of the Great Recession.

# Railroad Lumber & Wood Shipments vs. U.S. New SF House Sales



# Railroad Lumber & Wood Shipments vs. U.S. New SF House Sales: 1-year offset



In this graph, initially January 2007 lumber shipments are contrasted with January 2008 new SF sales through June 2016 new sales. The purpose is to discover if lumber shipments relate to future new SF house sales. Also, it is realized that lumber and wood products are trucked; however, to our knowledge comprehensive trucking data is not available.

# June 2016 Construction Spending

**2016 June Total Private Residential Construction:  
\$445.9 billion (SAAR)**

0.1% more than the revised May estimate of \$445.5 billion (SAAR)  
2.6% greater than the June 2015 estimate of \$434.4 billion (SAAR)

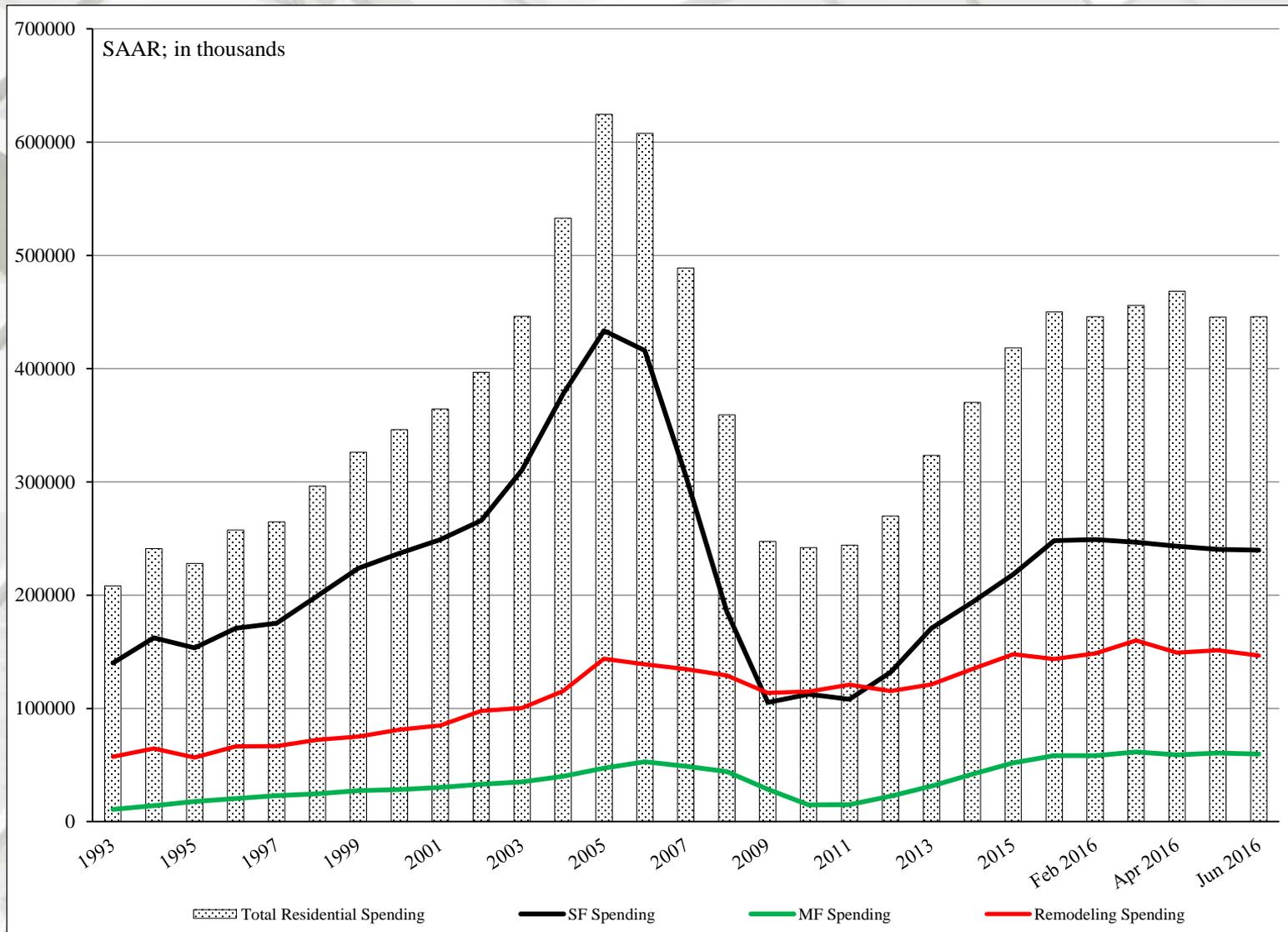
June SF construction: \$239.6 billion (SAAR)  
-0.4% less than May: \$240.5 billion (SAAR)  
4.8% greater than June 2015: \$228.6 billion (SAAR)

June MF construction: \$59.7 billion (SAAR)  
-1.5% less than May: \$60.6 billion (SAAR)  
16.4% greater than June 2015: \$51.3 billion (SAAR)

June Improvement<sup>C</sup> construction: \$146.5 billion (SAAR)  
-3.1% less than May: \$151.2 billion (SAAR)  
-5.2% less than June 2015: \$154.5 billion (SAAR)

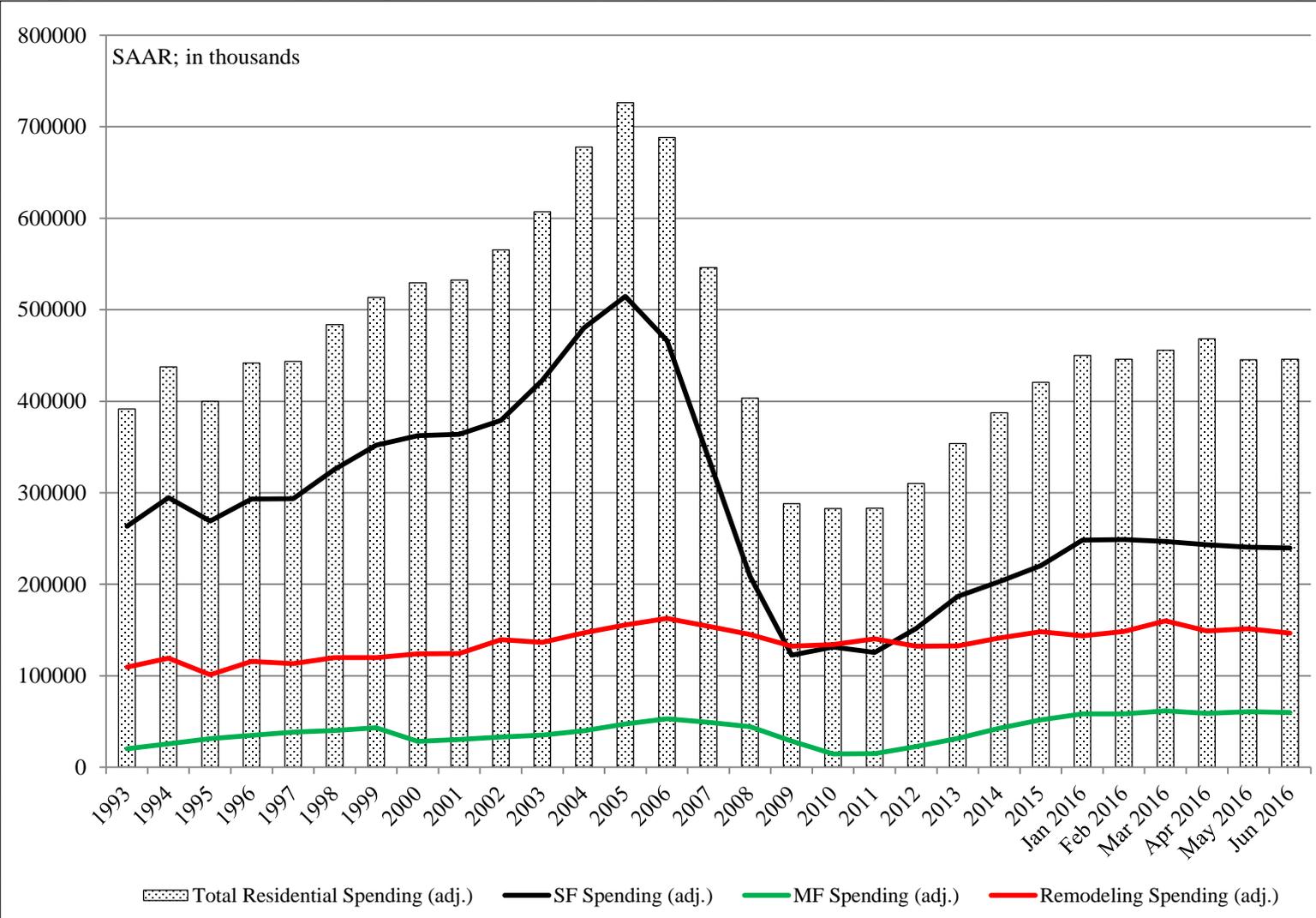
<sup>C</sup> The US DOC does not report improvement spending directly, this is an estimation:  
((Total Private Spending – (SF spending + MF spending)).  
All data are SAARs and reported in nominal US\$.

# Construction Spending (nominal): 1993-2016



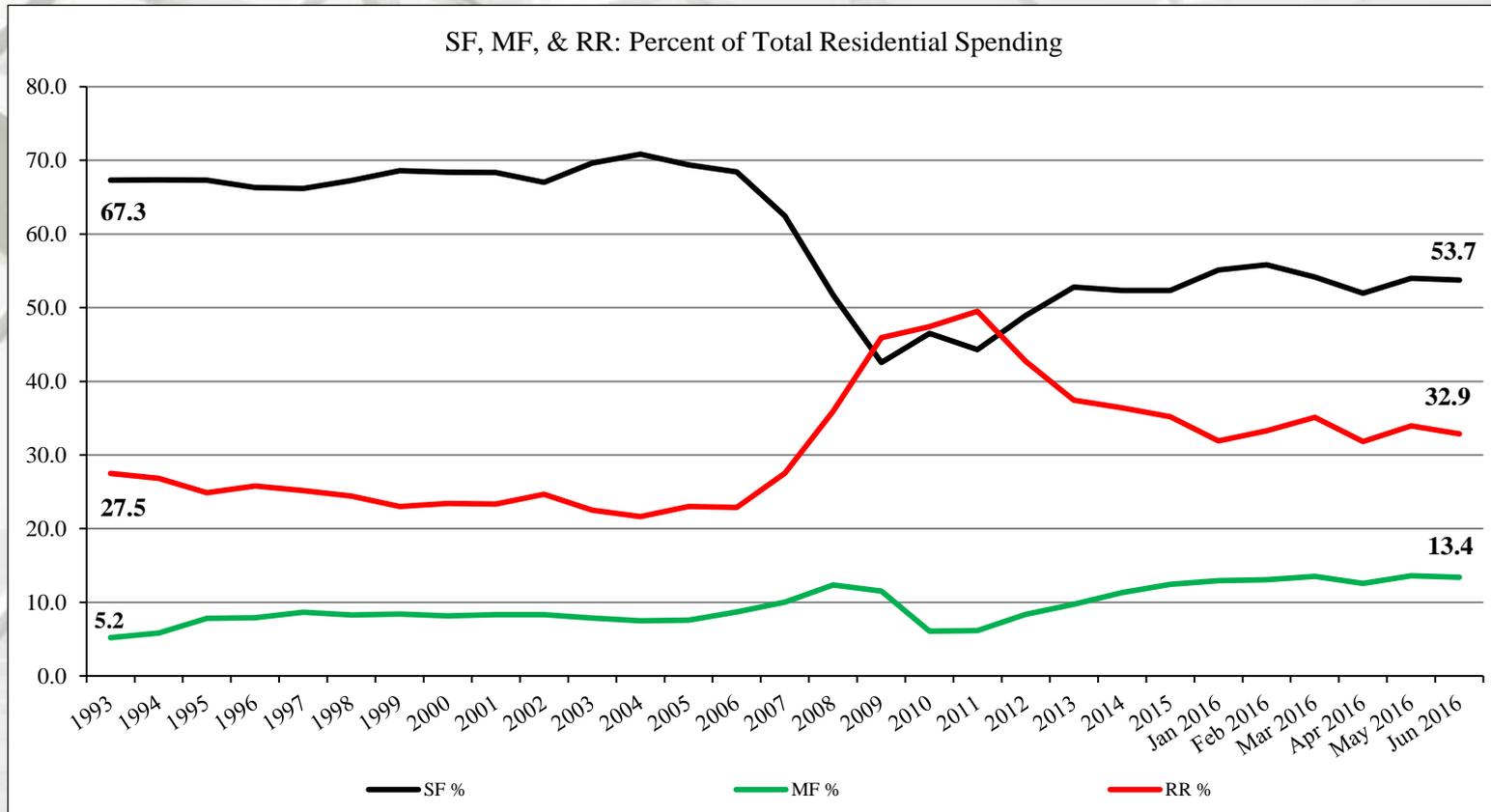
Reported in nominal US\$.

# Construction Spending (adjusted): 1993-2016\*



Reported in adjusted US\$: 1993 – 2015 (adjusted for inflation, BEA Table 1.1.9); \*January-June 2016 reported in nominal US\$.

# Construction Spending Shares: 1993 to June 2016

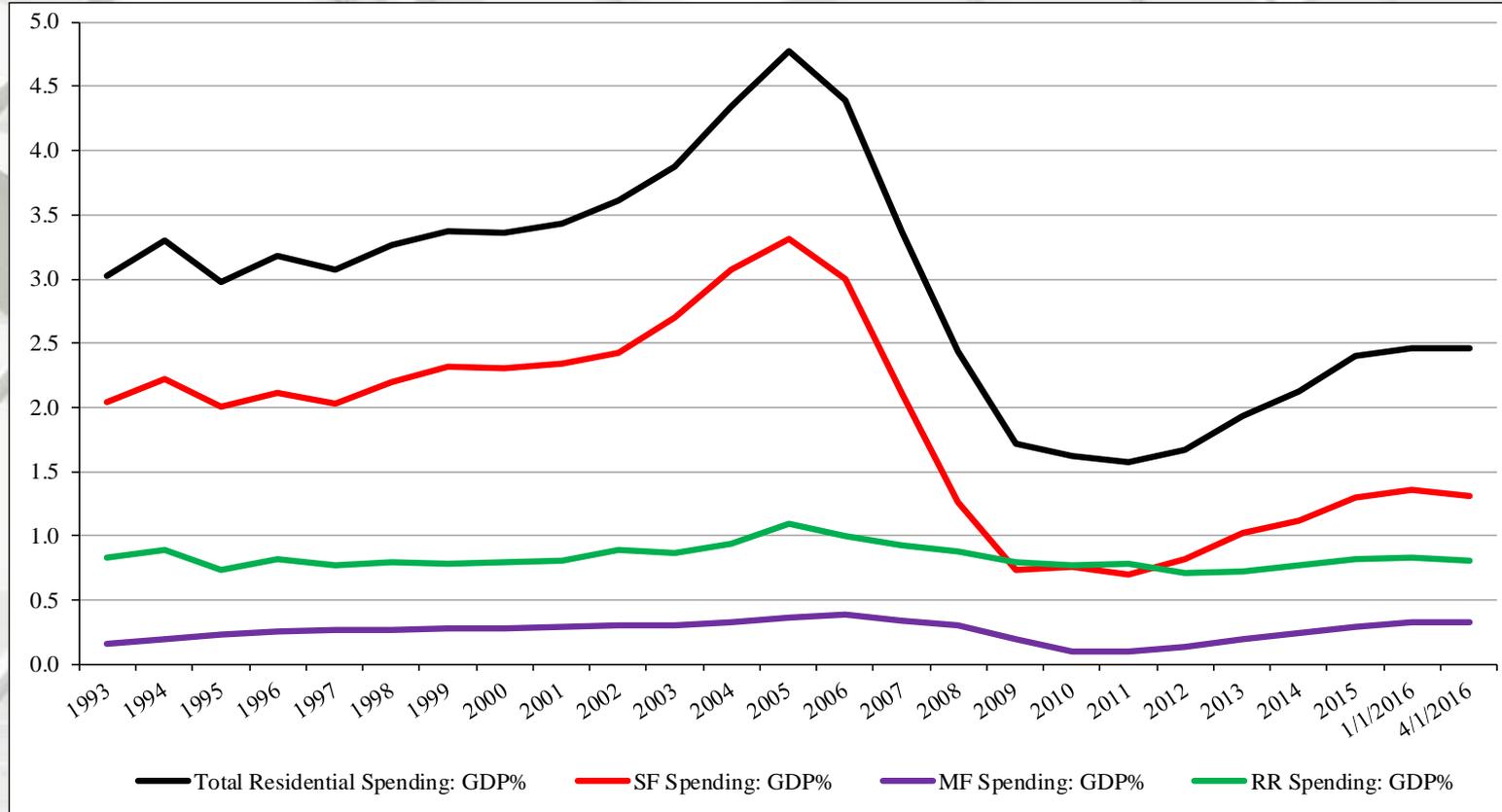


## Total Residential Spending: 1993 through 2006

SF spending average: 69.2 %  
 MF spending average: 7.5 %;  
 RR spending average: 23.3 % (SAAR).

Note: 1993 to 2015 (adjusted for inflation, BEA Table 1.1.9); January-June 2016 reported in nominal US\$.

# Residential Spending: Percent of GDP

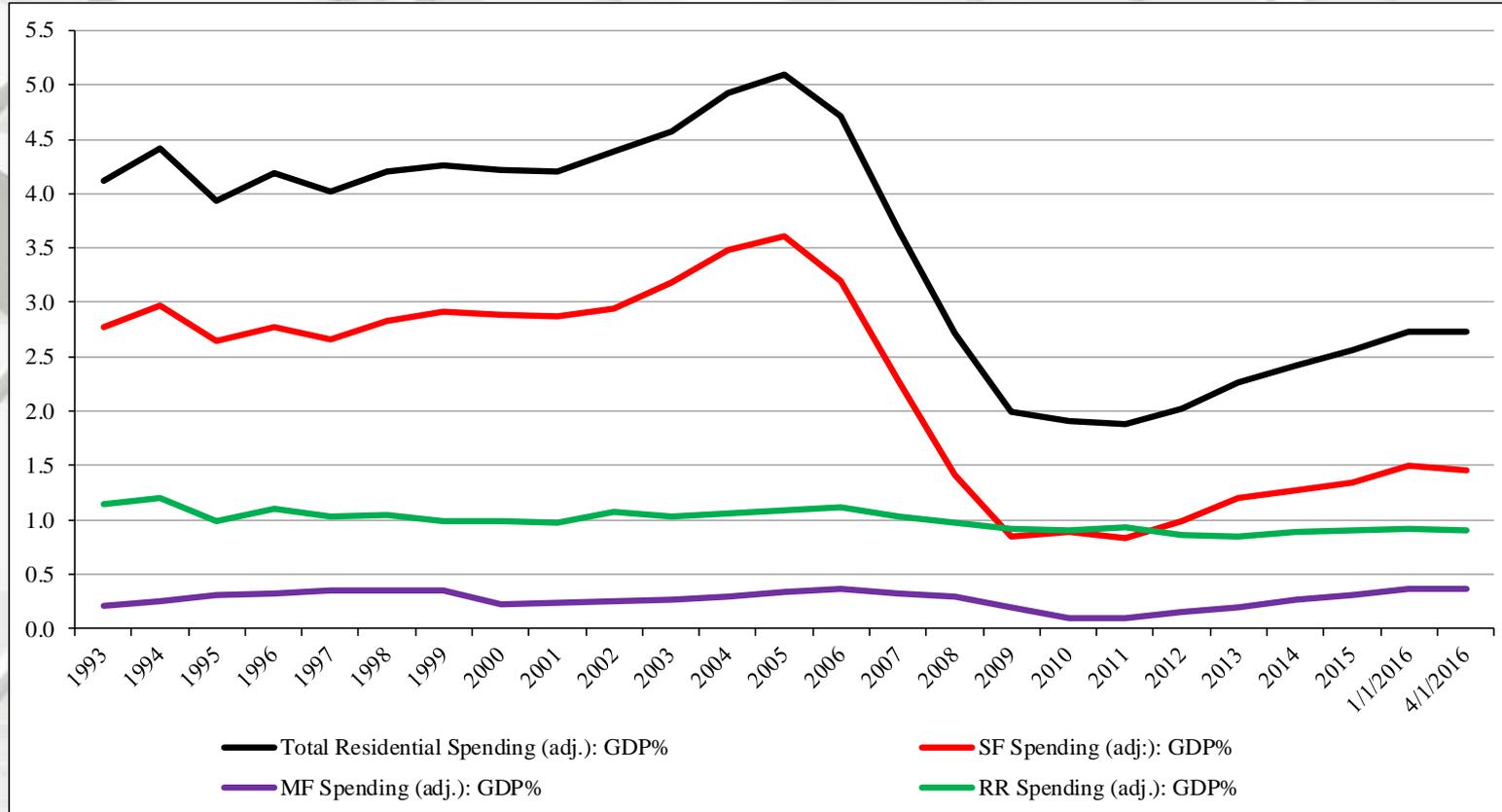


## Total Residential Spending, Percent of GDP (nominal): 1993 through Q2 2016

Using Department of Census-Construction data and Gross Domestic Product (GDP) (billions of dollars, SAAR) one can assess new housing constructions percentage contribution to GDP. In nominal terms, 2016 construction spending remains less than 1993 levels. This estimate does not include associated costs such as the National Association of Homebuilders uses in their calculations.

Note: 1993 to 2015 and Q1 & Q2 2016 reported in nominal US\$.

# Residential Spending: Percent of GDP



## Total Residential Spending, Percent of GDP (adjusted): 1993 through Q2 2016

Using Department of Census-Construction inflation adjusted spending data and Real Gross Domestic Product (GDP) (billions of chained 2009 dollars, SAAR) one can assess new housing constructions percentage contribution to GDP. In inflation adjusted dollars, 2016 construction spending is well less than 1993 levels. This estimate does not include associated costs such as the National Association of Homebuilders uses in their calculations.

Note: 1993 to 2015 and Q1 & Q2 2016 reported in nominal US\$.

# Existing House Sales

## National Association of Realtors (NAR®)

June 2016 sales: 5.570 million houses sold (SAAR)

Distressed house sales: 6% of total sales –  
(5% foreclosures and 1% short-sales);  
6% in May and 8% in June 2015.

All-cash sales: 22% and 22% in May,  
and 22% (June 2015).

Individual investors still purchase a considerable portion of  
“all cash” sale houses – 11% in June;  
13% in May and 12% in June 2015.  
64% of investors paid cash in June.

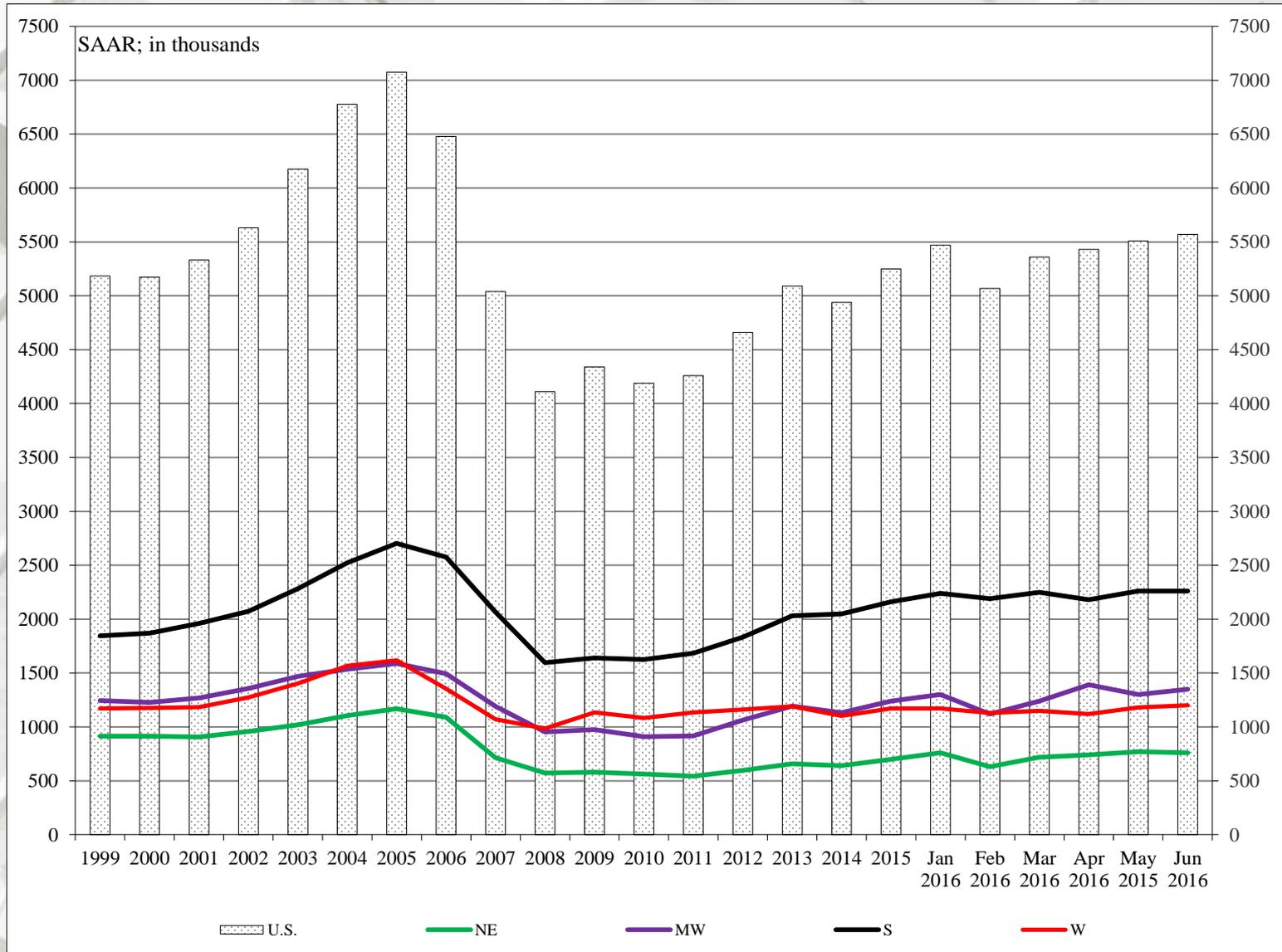
# Existing House Sales

	Existing Sales*	Median Price	Mean Price	Month's Supply
June	5,570,000	\$247,700	\$292,100	4.7
May	5,510,000	\$238,900	\$280,900	4.6
2015	5,410,000	\$236,300	\$280,200	5.0
M/M change	1.1%	3.7%	4.0%	-2.1%
Y/Y change	3.0%	4.8%	4.2%	-8.0%

	NE Sales	MW Sales	S Sales	W Sales
June	760,000	1,350,000	2,260,000	1,200,000
May	770,000	1,300,000	2,260,000	1,180,000
2015	720,000	1,290,000	2,190,000	1,210,000
M/M change	-1.3%	3.8%	0.0%	1.7%
Y/Y change	5.6%	4.7%	3.2%	-0.8%

\* All sales data: SAAR

# Total Existing House Sales



# First-Time Purchasers

## **National Association of Realtors (NAR®)**

33% of sales in June – 30% in May and 30% in June 2015.

## **American Enterprise Institute International Center on Housing Risk**

“First-time buyers accounted for 59.1 percent of primary owner-occupied home purchase mortgages with a government guarantee, up from 58.7 percent in June 2015.”

“Credit is readily available for first-time buyers, and standards have continued loosening for both first-time and repeat buyers over the past year. The first-time buyer NMRI stood at 15.97% in June, up 0.22 percentage point from a year earlier, and well above the Repeat Primary Homebuyer NMRI of 10.00%.” – Edward Pinto, Codirector, American Enterprise Institute, International Center on Housing Risk (AEI-ICHR)

“An increasing share of home buyers are taking out mortgages with burdensome monthly payments. Indeed, more than a quarter of recent government-guaranteed home purchase loans had a debt-to-income ratio that exceeded the limit set by the Qualified Mortgage rules in the wake of the financial crisis.” – Stephen Oliner, Codirector, AEI-ICHR

## **Urban Institute**

“The first time homebuyer share of GSE purchase loans declined slightly in April 2016 to 45.1 percent, still high relative to the past few years. The FHA has always been more focused on first-time homebuyers. Its first-time homebuyer share, which traditionally hovers around 80 percent, rose to 83 percent in April 2016. The bottom table shows that based on mortgages originated in April 2016, the average first-time homebuyer was more likely than an average repeat buyer to take out a smaller loan and have a lower credit score and higher LTV and DTI, thus requiring a higher interest rate.” – Laurie Goodman, Center Co-Director, Housing Finance Policy, Urban Institute

# Overall United States House Sales

Week of	Weekly	4-Week Avg.
7/3/16	-14.0%	-3.6%
7/10/16	21.9%	1.1%
7/17/16	2.2%	1.7%
7/24/16	-0.8%	2.1%

## Appraisal volume shows true impact of Brexit

### Surge in mortgage apps misleading

“Appraisal volume is an indicator of market strength and has some advantages over mortgage applications. Fallout is less for appraisals since they are ordered later in the mortgage process after credit worthiness is determined and there are few multiple-orders.” – Brena Swanson, Digital Reporter, HousingWire.com

“It appears that the Brexit ‘surge’ was little more than a trickle. While applications shot up and down, the appraisal starts fluctuations were more modest, indicating that much of the application surge did not run the course to become a mortgage.

Borrowers are not risking not getting a good rate or rejection with a single lender. This is exaggerated when there is a spike or drop in rates and time could be an issue to lock in rates.” – Kevin Golden, Director of Analytics, a la mode

# SF Housing

## Own-to-Rent: The Foreclosure Crisis and Single-Family Home Rentals

- “After holding stable for the better part of two decades, the share of single-family homes that are rentals has increased sharply since 2005.
- The increase in the share of single-family homes that are rented has been most prominent in the Southwest United States.
- Metro areas that experienced more foreclosures during the housing bust have seen a larger increase in the share of single-family homes that are rented.

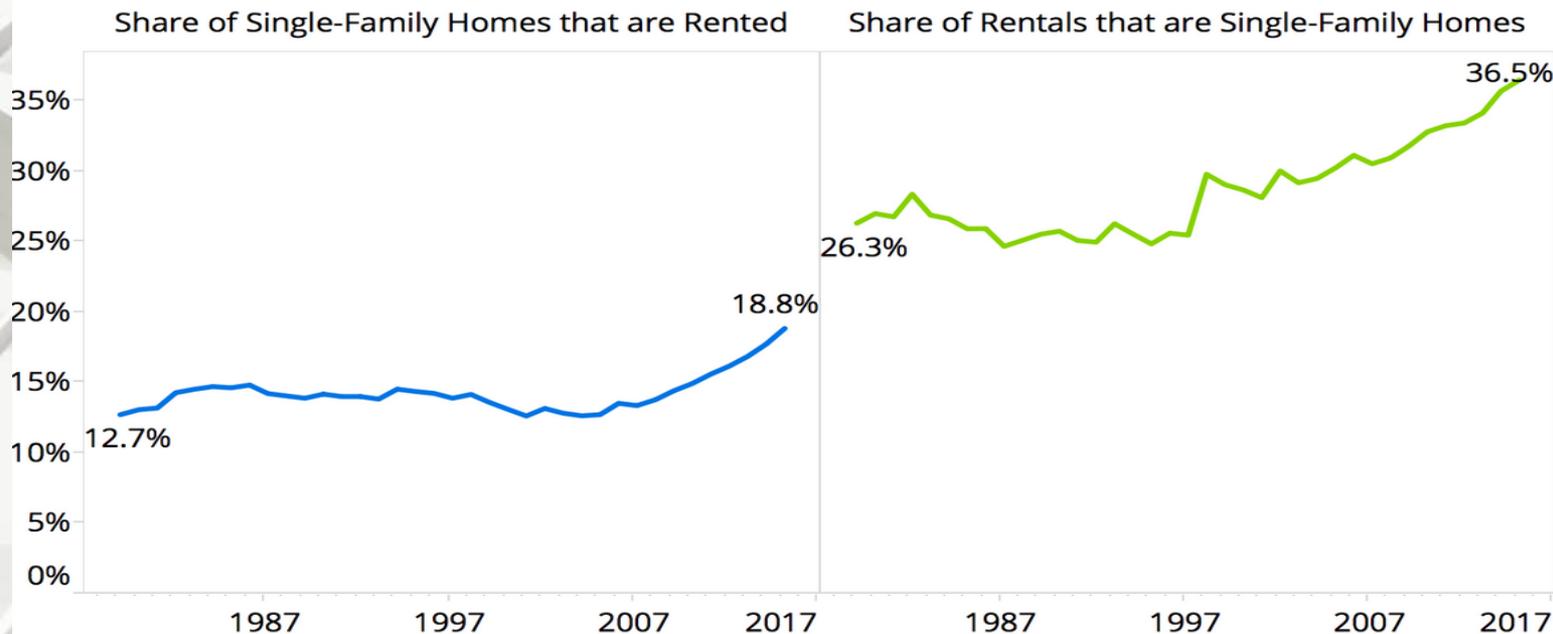
Once strongly associated with homeownership, a growing share of single-family homes [are now being rented](#). And by extension, more of the country’s rental market is now composed of single-family homes.

For much of the 1980s and 1990s, the share of single-family homes that were rented hovered between 12 percent and 15 percent, with the share falling modestly during the housing boom years. But since the housing bust, the share has skyrocketed: The share of single-family homes that are rented increased from 13.4 percent in early 2007 to 18.8 percent by early 2015.

Similarly, for much of the 1980s and 1990s single-family homes accounted for roughly one-quarter of the country’s rental market. On the eve of the housing bust, in spring 2007, single-family homes were 30.5 percent of all rental units. By spring 2015, they were 36.5 percent of all rental units (figure 1).” – Aaron Terrazas, Senior Economist, Zillow

# SF Housing

**Figure 1: Single-Family Homes and the Rental Market**

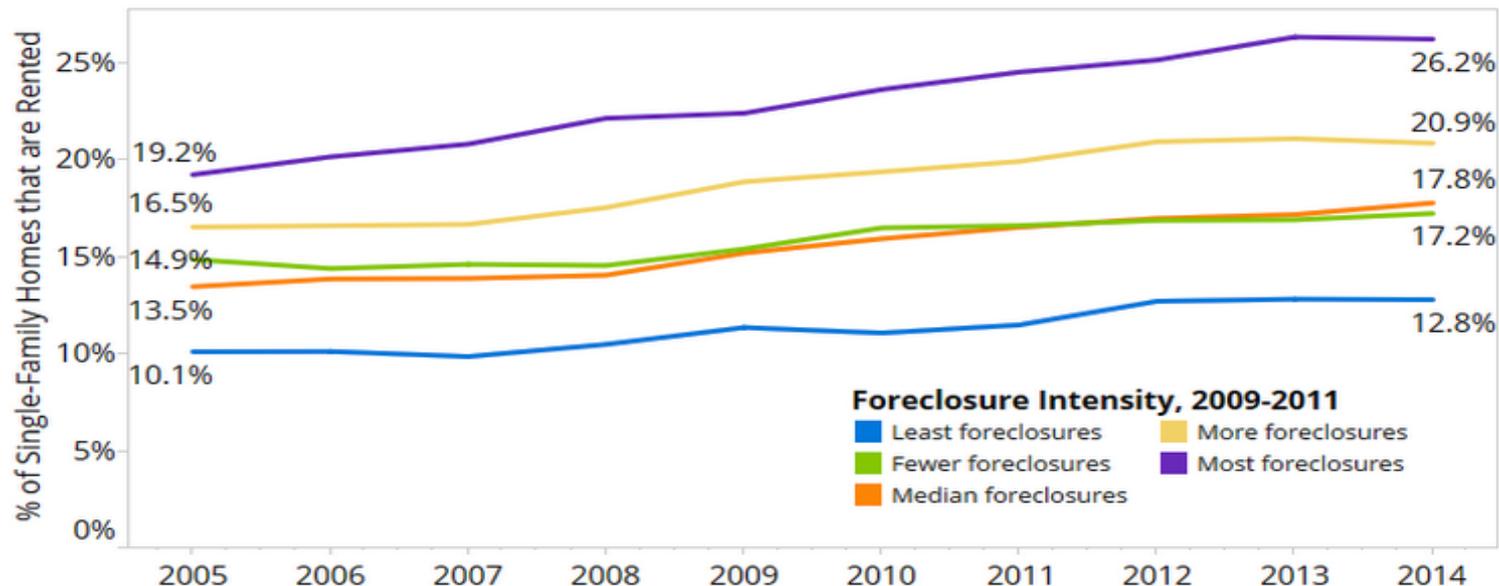


Source: Zillow analysis of U.S. Census Bureau, Current Population Survey, March Supplement, 1979-2015, made available by the University of Minnesota, IPUMS-USA.

“Given that Southwestern markets were hit very hard by the housing bust, it makes sense those markets saw a big increase in rented single-family homes. After being foreclosed upon, millions of families in need of a place to live turned to [renting the same kind of single-family homes they had previously owned prior to foreclosure](#). During the years following the housing bust, investors purchased foreclosed homes and converted them to rentals in many communities to meet this demand.” – Aaron Terrazas, Senior Economist, Zillow

# SF Housing

**Figure 2:** Share of Single-Family Homes that are Rented, Average Across Metros by Foreclosure Intensity between 2009 and 2011

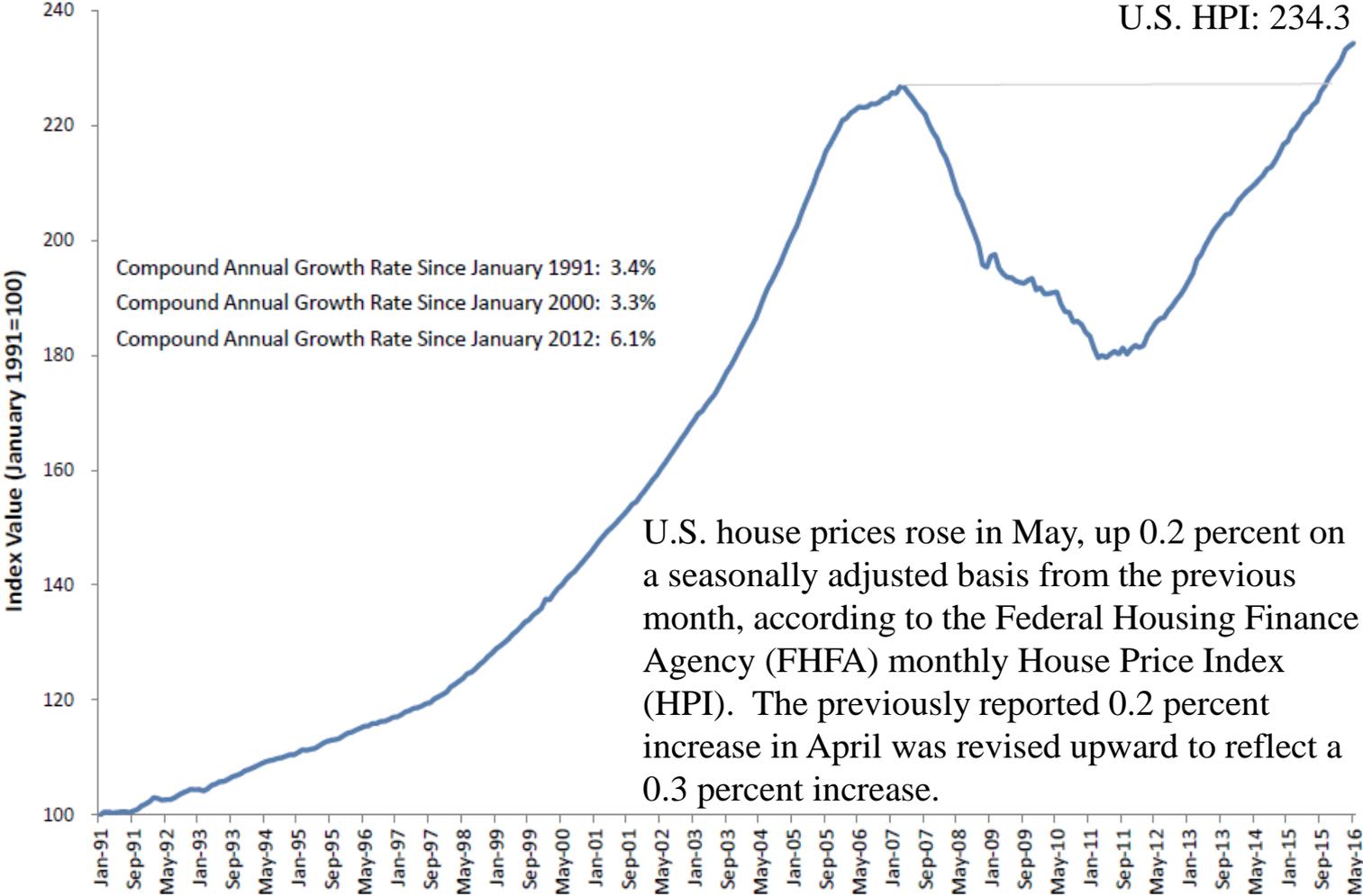


Source: Zillow analysis of U.S. Census Bureau, American Community Survey, 2005 to 2014, made available by the University of Minnesota, IPUMS-USA and Zillow foreclosure data.

“Our research shows that the share of single-family homes that are rentals has increased more in the metros with the most foreclosure activity (figure 2). We ranked metros by the intensity of foreclosures between 2009 and 2011, then took the average of the share of single-family homes in those metros that are rentals. In the metros with the most foreclosure activity, the share of single family homes that are rentals increased 7 percentage points from 19.2 percent in 2005 to 26.2 percent in 2014. In the metros with the least foreclosure activity, the share of single-family homes that are rentals increased by 2.7 percentage points, from 10.1 percent to 12.8 percent.” – Aaron Terrazas, Senior Economist, Zillow

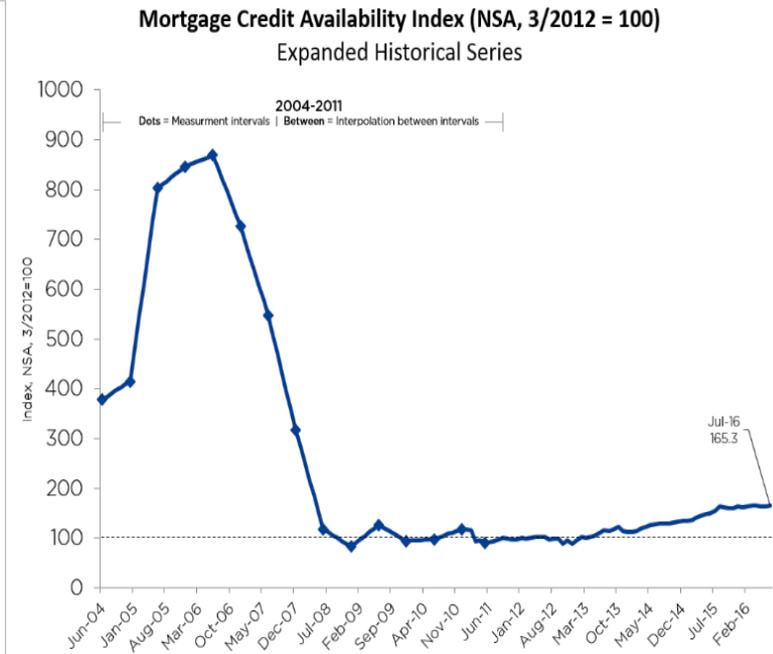
# Federal Housing Finance Agency

Monthly House Price Index for U.S.  
Purchase-Only, Seasonally Adjusted Index, January 1991 - Present



Source: FHFA

# Mortgage Credit Availability



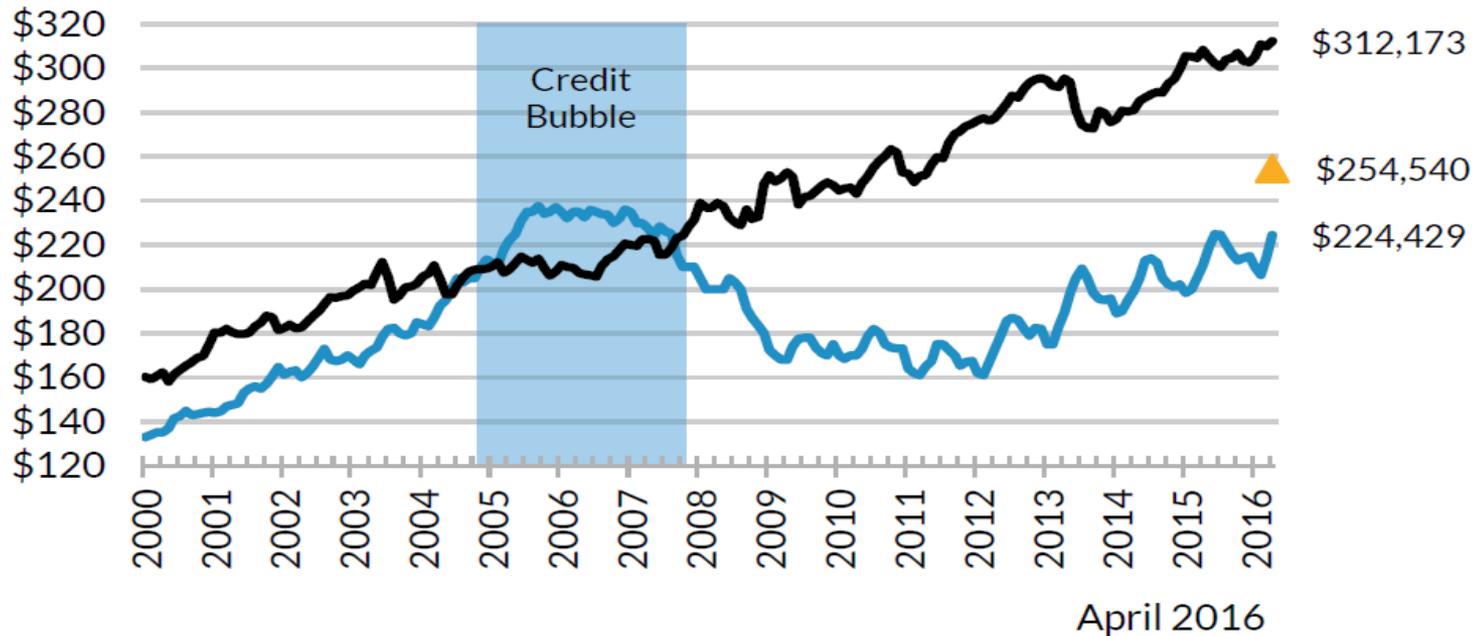
## Mortgage Credit Availability increases in July

“Mortgage credit availability increased in July according to the Mortgage Credit Availability Index (MCAI), a report from the Mortgage Bankers Association (MBA) which analyzes data from Ellie Mae's AllRegs<sup>®</sup> Market Clarity<sup>®</sup> business information tool. The MCAI increased 1.0 percent to 165.3 in July. A decline in the MCAI indicates that lending standards are tightening, while increases in the index are indicative of loosening credit. The index was benchmarked to 100 in March 2012. Of the four component indices, the Jumbo and Government MCAIs saw the greatest increase in availability (both up 1.3 percent) over the month followed by the Conventional MCAI (up 0.7 percent), and the Conforming MCAI (up 0.1 percent).” – Lynn Fisher, Vice President of Research and Economics, Mortgage Bankers Association (MBA)

# Housing Affordability

— Median sales price  
▲ Max affordable price at 6.0% rate  
— Max affordable price

Housing Prices (\$ thousands)



## National Housing Affordability Over Time

“Home prices are still very affordable by historical standards, despite increases over the last four years. Even if interest rates rose to 6 percent, affordability would be at the long term historical average.” – Laurie Goodman, Center Co-Director, Housing Finance Policy, Urban Institute

# Summary

## **In summary:**

In aggregate, housing data improved in June 2016 – particularly in the upper priced tier new single-family houses. All subsectors of residential construction spending were negative in June (monthly basis). Existing sales again increased marginally – yet they are greater than the early 2000s.

Housing, in the majority of categories, continues to be less than their historical averages. The new SF housing sector is where the majority of forest products are used and this housing sector has room for improvement.

## **Pros:**

- 1) Historically low interest rates are still in effect;
- 2) As a result, housing affordability is good for most of – but not all of the U.S.;
- 3) Household formations improved in 2016; yet, 100% of the formations were in renter-occupied households (owner-occupied decreased by 22,000) (occupied housing data from the Current Population/Housing Vacancy surveys);
- 4) Select builders are beginning to focus on entry-level houses.

## **Cons:**

- 1) Lot availability and building regulations (according to several sources);
- 2) Mortgage credit availability;
- 3) Changing attitudes towards SF ownership and as stated by some – “gentrification”;
- 4) Job creation is improving and consistent but some economists question the quantity and types of jobs being created;
- 5) Stagnant real median household incomes;
- 6) Global uncertainty?

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